PROJECT-SPECIFIC ANALYSIS AND ADDENDUM TO THE CALVTP PROGRAM EIR

Crane Mills Vegetation Treatment Project

Prepared for:

Resource Conservation District
of Tehama County

January 2024

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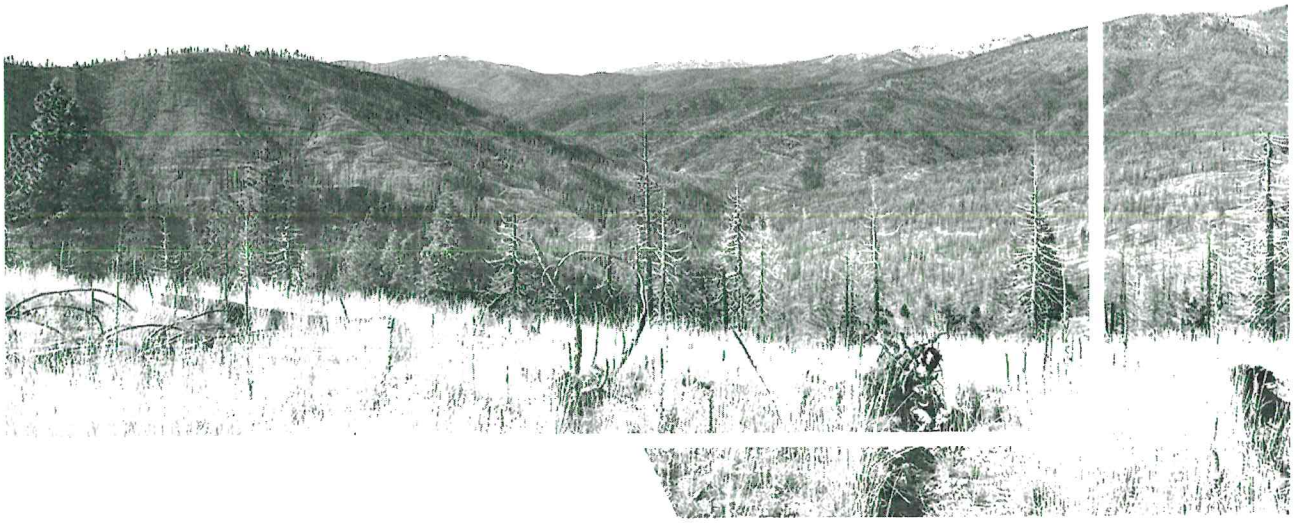

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LIST OF ABBREVIATIONS

Board	California Board of Forestry and Fire Protection
CalEPA	California Environmental Protection Agency
CalVTP	California Vegetation Treatment Program
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWHR	California Wildlife Habitat Relationships
DPR	California Department of Pesticide Regulation
DPS	Distinct Population Segment
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
EVEG	Existing Vegetation
GHG	greenhouse gas
HCP	habitat conservation plans
I-5	Interstate 5
LRA	Local Responsibility Area
MMRP	mitigation monitoring and reporting program
NAH	Native American Heritage Commission
NCCP	natural community conservation plans
NEIC	Northeast Information Center
NP9E	Nonylphenol 9 Ethoxylates
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory

PM	particulate matter
Program EIR	Program Environmental Impact Report
PSA	Project-Specific Analysis
RCDTC	Resource Conservation District of Tehama County
SPRs	standard project requirements
SR	State Routes
SRA	State Responsibility Area
USFS	US Forest Service
USFS	US Forest Service
USGS	US Geological Survey
VMT	vehicle miles traveled

1 INTRODUCTION

1.1 PROJECT OVERVIEW AND DOCUMENT PURPOSE

The California Board of Forestry and Fire Protection (Board) certified the Program Environmental Impact Report (Program EIR) for the California Vegetation Treatment Program (CalVTP) in December 2019. The Program EIR evaluates the potential environmental effects of implementing vegetation treatments throughout qualifying areas of the State Responsibility Area (SRA) and small portions of the Local Responsibility Area (LRA) in California. This document is a Project-Specific Analysis (PSA) and Addendum to the Program EIR (PSA/Addendum). The PSA process was designed during Program EIR preparation for use by many state agencies, special districts, and local agencies to help increase the pace and scale of vegetation treatment by employing California Environmental Quality Act (CEQA) efficiency tools (i.e., a within-the-scope finding based on the PSA). An Addendum to the Program EIR is another CEQA tool for efficient environmental review designed to address those project components that are not within the scope of the Program EIR but do not cause new or substantially more severe significant effects. This document is a joint PSA/Addendum.

To facilitate an increase in the pace and scale of vegetation treatment, the Board is supporting the preparation of PSAs to create a library of example projects that help guide state and local agencies in preparing their own PSAs under the CalVTP Program EIR, as well as to achieve CEQA compliance for the proposed project. This PSA/Addendum serves as one of the Board's examples for other agencies seeking to use the CalVTP Program EIR.

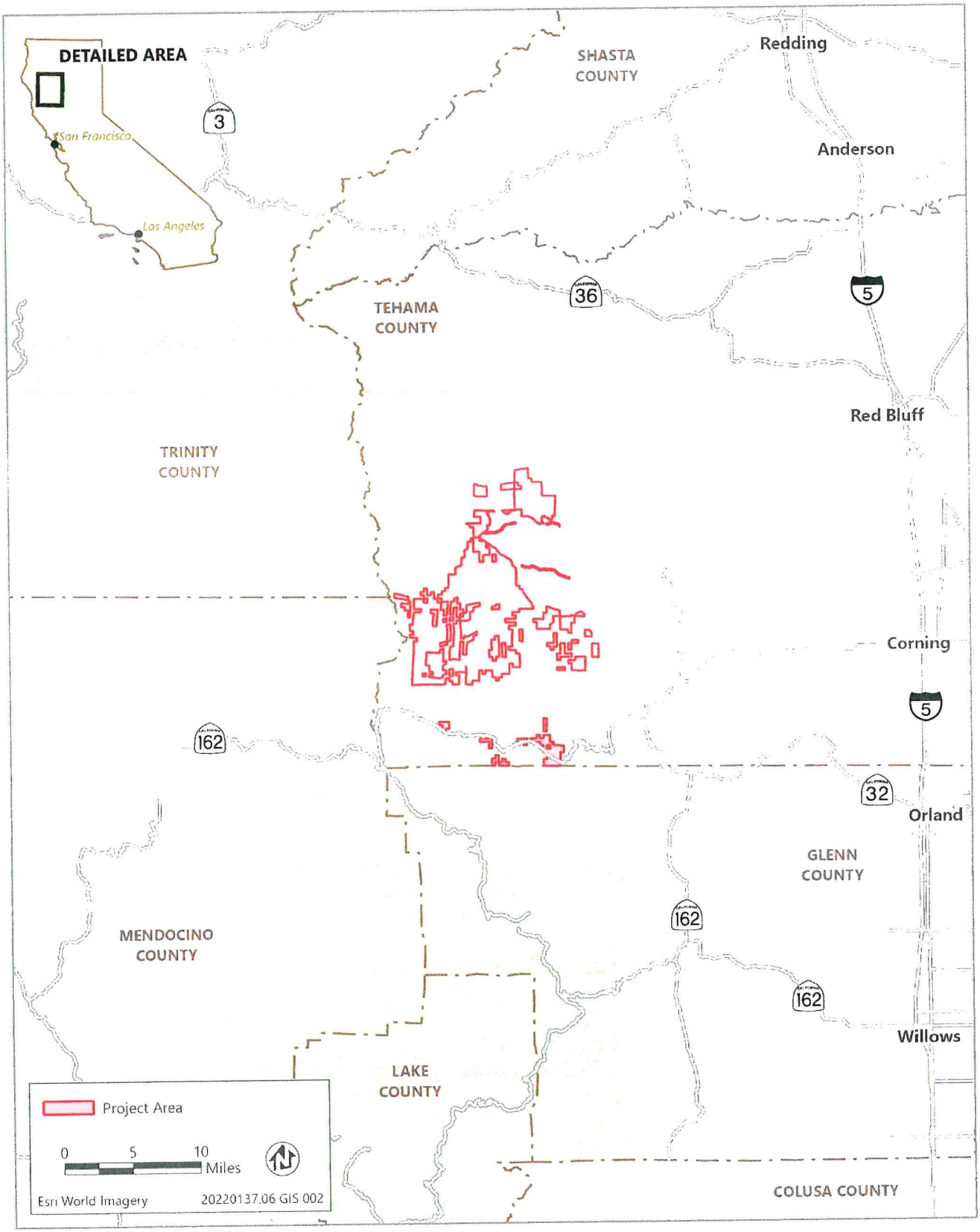
1.1.1 Proposed Project

The proposed project consists of vegetation treatments on up to 47,314 acres for wildfire risk reduction and forest health improvement on private land in western Tehama County, California (Figure 1-1). The owner of the land is Crane Mills, a natural resources company headquartered in Corning, CA. The land is managed by Crane Mills' staff of professional foresters and land managers. The proposed treatment types (i.e., shaded fuel breaks and ecological restoration) and the treatment activities (i.e., manual treatments, mechanical treatments, prescribed burning, herbicide application, and prescribed herbivory) are consistent with those evaluated in the CalVTP Program EIR. Maintenance treatments would involve the same vegetation treatment types and activities used in the initial treatments. Crane Mills performs commercial timber harvest on its property pursuant to approved Timber Harvest Plans. This proposed vegetation treatment is an independent project designed to reduce wildfire risk and promote ecological restoration following the August Complex fire and does not involve or depend on timber removal for commercial purposes.

1.1.2 Agency Roles

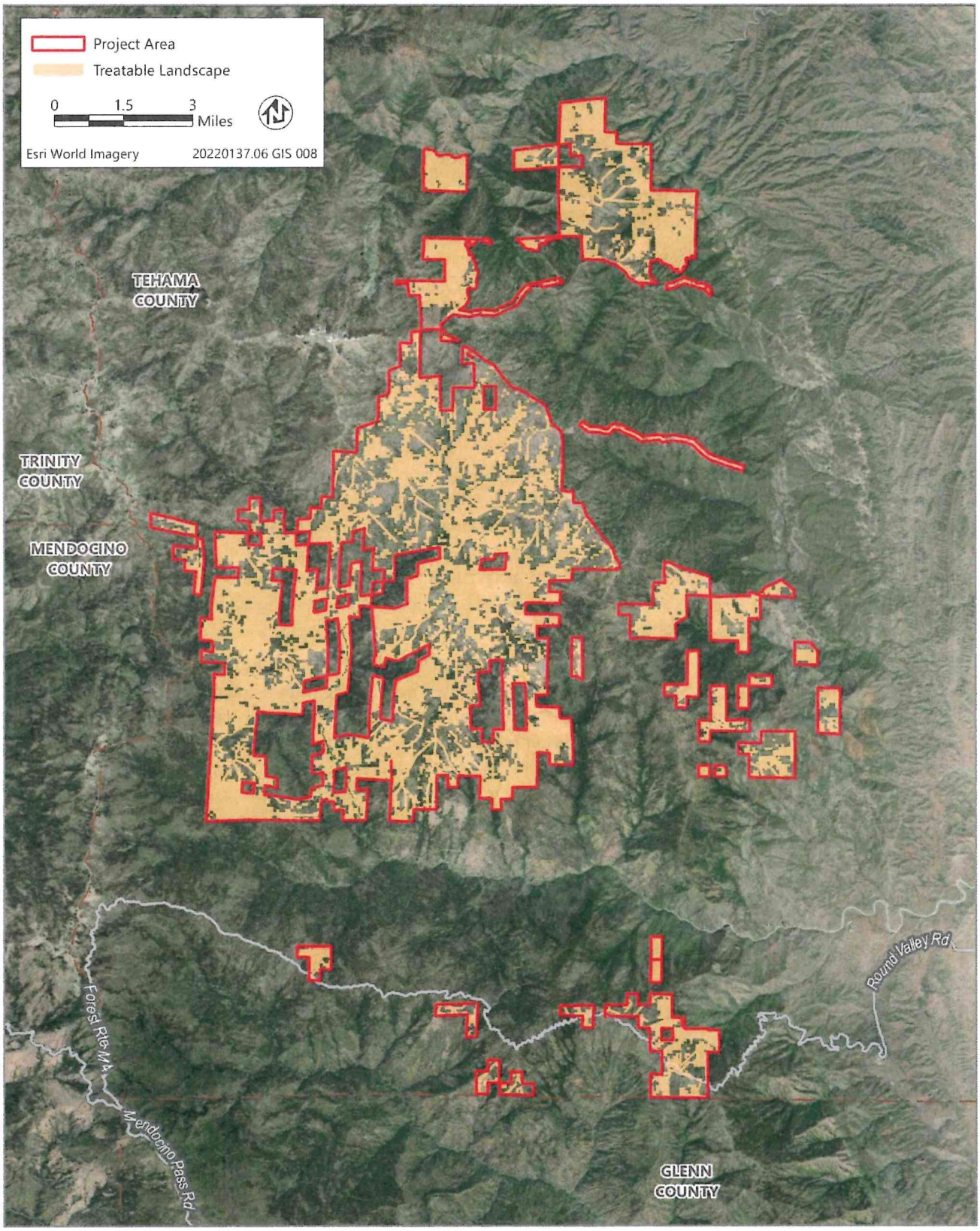
For the purposes of the CalVTP Program EIR and this PSA/Addendum, a project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. This document is being prepared for the Resource Conservation District of Tehama County (RCDTC) to comply with CEQA for the implementation of vegetation treatments that require a discretionary action by a state or local agency. RCDTC is the project proponent and CEQA lead agency.

RCDTC would enter a partnership with Crane Mills to implement the proposed treatments. The partnership may entail the provision of resources to Crane Mills by RCDTC, including funding, staffing, and technical input. In this PSA/Addendum, Crane Mills is referred to as the "implementing entity," reflecting its role as the implementer of treatments on its land.



Source: Adapted by Ascent in 2023.

Figure 1-1 Regional Location



Source: Adapted by Ascent in 2023.

Figure 1-2 CalVTP Treatable Landscape within the Crane Mills Vegetation Treatment Project

1.1.3 Purpose of This PSA/Addendum

This document serves as a PSA to evaluate whether the proposed treatments would be within the scope of the CalVTP Program EIR. As stated above, the treatment types and treatment activities are consistent with the CalVTP. Among the other criteria for determining whether a treatment project is within the scope of the CalVTP Program EIR is whether it is within the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the Program EIR). If a proposed vegetation treatment project is covered by the evaluation of environmental effects in the Program EIR, it may be approved using a finding that the project is within the scope of the Program EIR for its CEQA compliance, consistent with CEQA Guidelines Section 15168(c)(2).

An Addendum to an Environmental Impact Report (EIR) is appropriate when a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts, consistent with CEQA Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168. In this case, there are revisions or changes to the project purposed after the certification of the Program EIR, namely the inclusion of areas outside of and adjacent to the CalVTP treatable landscape and revisions to the CalVTP standard project requirements (SPRs).

The PSA checklist (refer to Chapter 4, "Project-Specific Analysis/Addendum") contains the criteria to support an Addendum to the Program EIR for the inclusion of the treatment areas outside the CalVTP treatable landscape and the revisions to the CalVTP SPRs. The checklist evaluates each resource in terms of whether the later treatment 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 Program EIR or would result in any new impacts that were not covered in the Program EIR. If a new impact arises, the checklist analysis would provide substantial evidence about whether it would be a significant or potentially significant impact. If the new impact would not be significant, it could be addressed in the PSA/Addendum.

This document serves as both a PSA and an Addendum to the CalVTP Program EIR for RCDTC review and analysis under CEQA regarding the proposed Crane Mills Vegetation Treatment Project within and outside the treatable landscape covered by the Program EIR, including the proposed SPR revisions. It provides environmental information supported by substantial evidence to RCDTC in its consideration of approving grant funding allocations and implementation of the work by Crane Mills. The project-specific mitigation monitoring and reporting program (MMRP), which identifies the CalVTP SPRs and mitigation measures applicable to the proposed project is presented in Attachment A. The SPRs identified in the MMRP have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

PROPOSED PROJECT REVISIONS

Project Area Outside the CalVTP Treatable Landscape

One of the criteria for determining whether a treatment project is within the scope of the CalVTP Program EIR is confirming if the project area is within the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the Program EIR). Most of the project area is within the CalVTP treatable landscape, but portions of the project area extend outside of it. In total, the project area outside the CalVTP treatable landscape encompasses approximately 18,309 acres of the 47,314-acre project area and is comprised of small sections dispersed throughout the project area (refer to Chapter 2, "Project Description"). These acres scattered outside of the mapped CalVTP treatable landscape are attributable to the digital expression of the CalVTP treatable landscape; the digital map of the CalVTP treatable landscape had a pixelated resolution, so using desktop applications to apply buffers around geographic and topographic features and to demarcate fire-response jurisdictional boundaries (i.e., SRA and LRA) resulted in treatable landscape areas that are shown on maps to be disjoined, scattered, and inheld while surrounded by the treatable landscape. If the areas of the proposed project outside of the CalVTP treatable landscape have essentially the same or similar landscape conditions as the adjacent areas within the treatable landscape, the environmental analysis in the Program EIR would be applicable to the adjacent areas.

Proposed Revisions to CalVTP SPRs

While the proposed treatment types and treatment activities are consistent with the CalVTP, RCDTC has determined that certain requirements of CalVTP SPRs would be infeasible or would benefit from clarification to confirm feasibility. In addition, the language as originally written is not warranted to maintain the impact significance conclusions in the Program EIR due to site-specific circumstances. If implemented as presented in the Program EIR, the SPRs would prevent RCDTC and Crane Mills from meeting treatment objectives. Because SPRs are part of the CalVTP and are incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation, revisions (beyond clarifying edits) would constitute a variation from the Program EIR's description of later project activities.

The proposed revisions to five SPRs are described below. RCDTC reviewed the proposed changes and determined they would not result in any new or substantially more severe significant impacts on any of the resources evaluated in the Program EIR and described in this PSA/Addendum. Evidence to explain this conclusion is presented under each applicable resource, as described below.

SPR AD-4: Public Notifications for Prescribed Burning

SPR AD-4, as presented in the Program EIR, includes a requirement that at least three days before the commencement of prescribed burning operations, the project proponent would publish a public interest notification in a local newspaper or other widely distributed media source describing the activity, timing, and contact information related to the prescribed burn. This is not feasible because the Crane Mills project is in a portion of Tehama County which does not have an active local daily newspaper circulation, nor does Crane Mills or the RCDTC have an active social media presence. Crane Mills would notify the public of prescribed burning treatment activities with signs posted at entrances to trails and would notify US Forest Service (USFS) of the prescribed burning treatment. Crane Mills would also request that USFS issue a press release regarding the proposed timing of the prescribed burn.

Potential impacts resulting from revisions to SPR AD-4 are discussed below under Section 4.1 "Aesthetics" and Section 4.3 "Air Quality." As explained in these sections, the proposed revisions to SPR AQ-4 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts on other resources would not occur from these revisions as SPR AD-4 is not required to reduce environmental effects to any other resources from implementation of the project. The proposed revisions to SPR AD-4 are shown in underline and strikethrough in the MMRP (Attachment A).

SPR AQ-4 Minimize Dust

SPR AQ-4, as presented in the Program EIR, includes measures that the project proponent must implement to minimize dust. One of the measures limits vehicles and equipment traveling on unpaved areas to 15 miles per hour.

Crane Mills' established speed guideline for vehicles and equipment traveling on unpaved roadways is 25 miles per hour. RCDTC proposes to limit vehicle and equipment speeds to 25 miles per hour on unpaved roadways consistent with current practice, which has been demonstrated based on Crane Mills experience to limit fugitive dust on project area roadways. However, if fugitive dust is visibly occurring, Crane Mills would further limit vehicle and equipment speeds to 15 miles per hour or implement road watering to limit dust. This would help to prevent unnecessarily slowing down project implementation while maintaining the overall intent of SPR AQ-4 to avoid the creation of fugitive dust as a result of unpaved roadway travel.

Potential impacts resulting from revisions to SPR AQ-4 are discussed below under Section 4.3 "Air Quality," Section 4.5 "Biological Resources," and Section 4.6 "Geology, Soils, Paleontology and Mineral Resources." As explained in these sections, the proposed revisions to SPR AQ-4 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts on other resources would not occur as a result of these revisions, because SPR AQ-4 is not required to reduce environmental effects to any other resources from implementation of the project. The proposed revisions to SPR AQ-4 are shown in underline and strikethrough in the MMRP (Attachment A).

SPR AQ-6 Prescribed Burn Safety Procedures

SPR AQ-6, as presented in the Program EIR, requires non-California Department of Forestry and Fire Protection crews to implement all safety procedures required of California Department of Forestry and Fire Protection (CAL FIRE) crews. This includes implementation of an approved Incident Action Plan (IAP) and outlines the elements required in the IAP.

Instead of implementing the same procedures required of all CAL FIRE crews, to maintain personnel and public safety consistent with Crane Mills's current prescribed burn practices, Crane Mills would prepare IAPs that include elements appropriate for the size and scope of the burn. IAP elements may include 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.

Potential impacts resulting from revisions to SPR AQ-6 are discussed below under Section 4.3, "Air Quality." As explained in this section, the proposed revisions to SPR AQ-6 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts on air quality would remain consistent because an IAP would be prepared that is appropriate for the size and scope of the burn. In addition, prescribed burn safety procedures would be implemented pursuant to the CAL FIRE Burn Permit (Form LE-5), the Smoke Management Plan (as required by SPR AQ-2), and while reporting to the Prescribed Fire Information Reporting System. Impacts on other resources would not occur as a result of these revisions because SPR AQ-6 is not required to reduce environmental effects to any other resources from implementation of the project. The proposed revisions to SPR AQ-6 are shown in underline and strikethrough in the MMRP (Attachment A).

SPR GEO-6 Minimize Burn Pile Size

SPR GEO-6, as presented in the Program EIR, requires that burn piles do not exceed 20 feet in length, width, or diameter, unless on landings, road surfaces, or on contour to minimize the spatial extent of soil damage caused by burning. In portions of the project area that previously burned, standing dead trees that exceed 20 feet in length pose a safety hazard. RCDTC proposes to remove these using mechanized equipment and stacking them for burning. In burned areas, many trees designated for removal exceed 20 feet in length, and it would be infeasible to comply with a burn pile size limit of 20 feet in length or width. Due to the size of these standing dead trees, a burn pile size of up to 40 feet is proposed in areas affected by the previous fire. As originally proposed, SPR GEO-6 aims to avoid adverse impacts caused by pile burning in large areas. However, in these previously burned areas, the baseline conditions are characterized by soils affected by the recent wildfire. Therefore, allowing larger burn piles inside the burn perimeter of previous wildfires would maintain the intent of SPR GEO-6, and would not constitute an increased impact on soils as a result of pile burning.

Potential impacts resulting from revisions to SPR GEO-6 are discussed below under Section 4.6, "Geology, Soils, Paleontology, and Mineral Resources" and Section 4.10 "Hydrology and Water Quality." As explained in this section, the proposed revisions to SPR GEO-6 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts on other resources would not occur as a result of these revisions, because the proposed revisions to SPR GEO-6 apply only to areas which previously burned. The proposed revisions to SPR GEO-6 are shown in underline and strikethrough in the MMRP (Attachment A).

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife

SPR BIO-9 addresses requirements to prevent the spread of invasive plants. This SPR requires that for all heavy equipment and vehicles, Crane Mills would pressure wash, rinse, brush, or appropriately decontaminate equipment at a designated weed-cleaning station before entering from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. In addition, the SPR requires that a qualified RPF or biological technician would 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 before use in the project area. This language has been modified to add clarity: the Program EIR requires that these measures apply to the treatment area and are applicable to the "project area" in the Crane Mills MMRP (Attachment A). This revision provides clarity and consistency with the language from the Project Overview (Section 1.1) and would not result in a change in the implementation of the SPR. Furthermore, SPR BIO-9 in the Program EIR requires that significant infestations of invasive plant species are identified during reconnaissance-level surveys and targeted for removal during treatment activities. This language has been revised to clarify that "significant infestations of invasive plant species" are infestations rated as moderate or high invasives by Cal-IPC or designated as noxious weeds by the California Department of Food and Agriculture. This revision provides added clarification consistent with the intent of the original Program EIR and would not result in a change in the implementation of the SPR.

Potential impacts resulting from revisions to SPR BIO-9 are discussed below under Section 4.5, "Biological Resources." As explained in this section, the proposed revisions to SPR BIO-9 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts on other resources would not occur as a result of these revisions because SPR BIO-9 is not required to reduce environmental effects to any other resources from implementation of the project. The proposed revisions to SPR BIO-9 are shown in underline and strikethrough in the MMRP (Attachment A).

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2 PROJECT DESCRIPTION

The CalVTP treatment types that would be implemented are shaded fuel breaks and ecological restoration (Figure 2-1). The proposed CalVTP treatment activities that would be used to implement the treatments are manual vegetation treatments, mechanical vegetation treatments, prescribed burning (consisting of pile burning and broadcast burning), targeted herbicide application, and prescribed herbivory.

The project area would total 47,314 acres. Certain site-specific landscape conditions and implementation factors would preclude treatment within limited parts of the project area because of expected or unforeseen restrictions, such as operational considerations (e.g., steep slopes, road limitations), economic feasibility, or the presence of sensitive resources, including cultural sites, special-status species, or sensitive habitats. For the purposes of this PSA/Addendum, the term "project area" refers to the entire area within the project boundaries, and the term "treatment area" refers to discrete locations within the project area where treatments would be implemented.

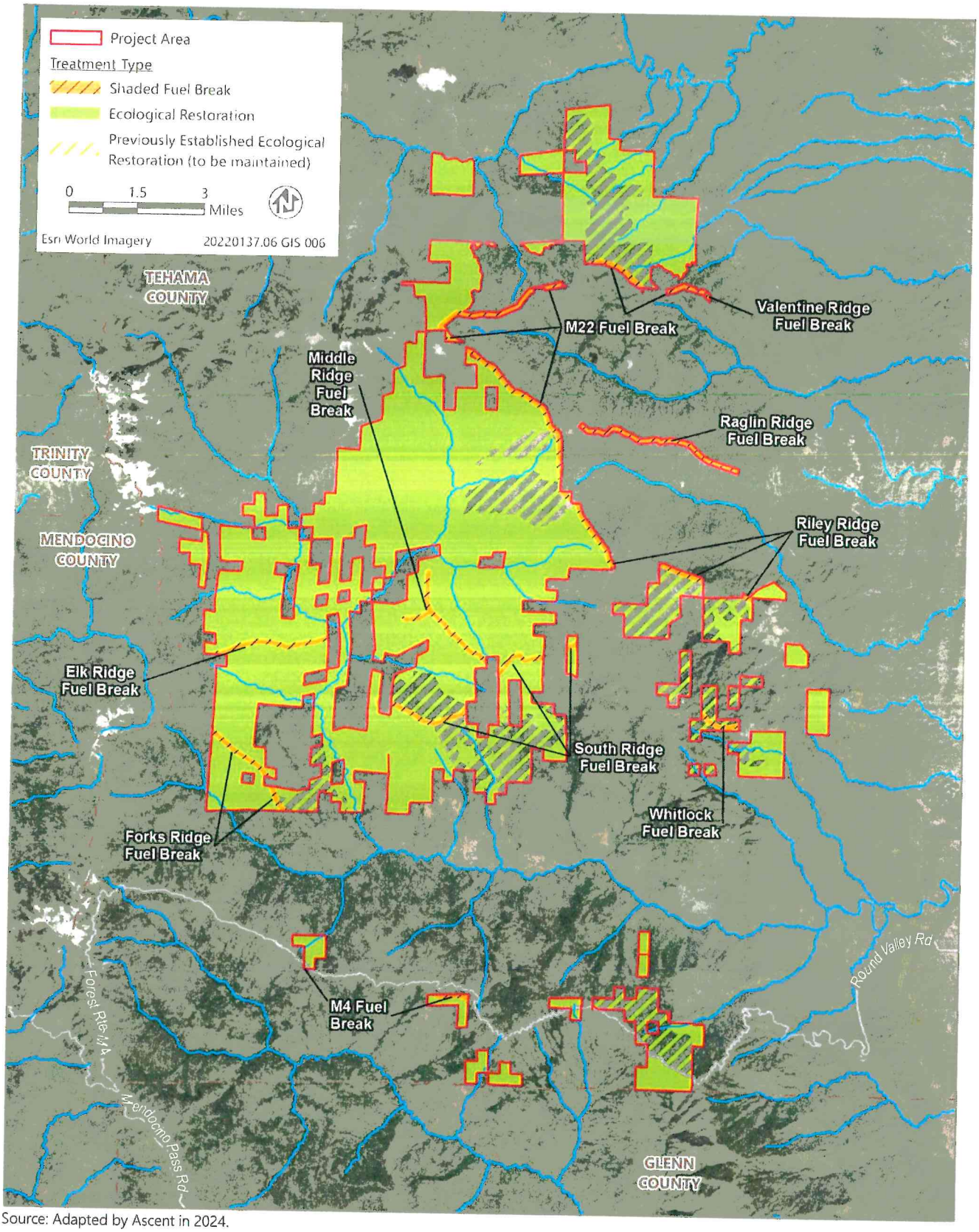
Crane Mills is working collaboratively with the USFS to create continuous, cohesive fuels reduction outcomes for the region. These include fuel breaks that cross back and forth between Crane Mills and the Mendocino National Forest and treatment areas extending from Crane Mills property into the National Forest System (Figure 2-2). For this reason, some of the proposed fuel breaks appear to be disjointed in PSA/Addendum maps (refer to Figure 2-1). Only the parts of these collaborative projects that occur on Crane Mills land are included in the CalVTP project and evaluated in this PSA/Addendum. USFS would conduct the required National Environmental Policy Act review for the treatments occurring on federal land.

2.1 SITE DESCRIPTION

The project area encompasses approximately 47,314 acres west of Corning in western Tehama County, California. Elevation in the project area ranges from approximately 2,800 feet to 6,400 feet. The project area is privately owned commercial timber land that has been subject to timber harvests since the 1940s with sustainable harvest entries occurring about every 20-25 years. Harvest is conducted with ground-based equipment on about 80 percent of the area; cable systems are used on the remaining 20 percent of the property.

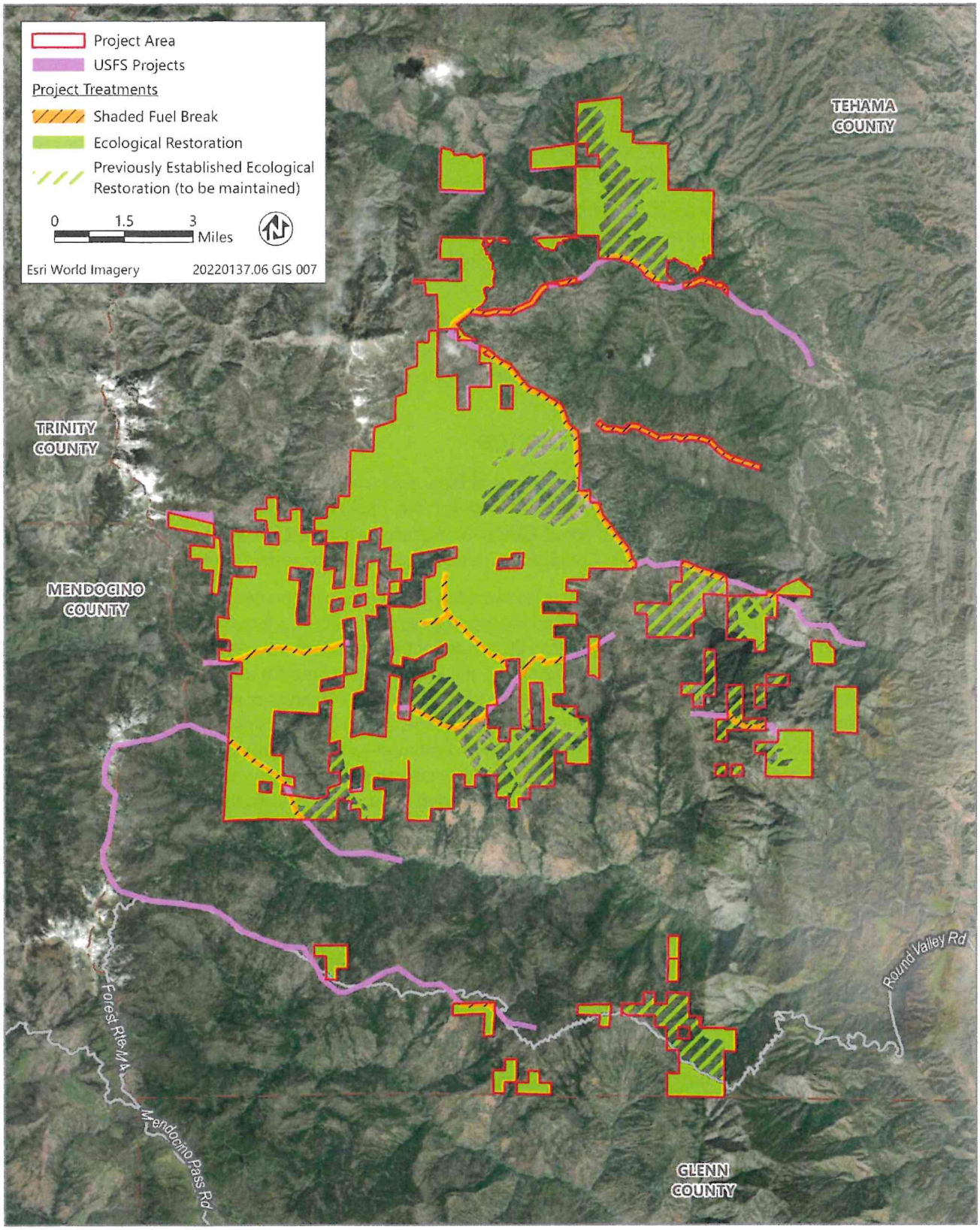
The eastern portion of the property is on the western edge of the geologic formation called Great Valley Sequence, but most of the property is located on uplifted, wrinkled Franciscan formation, characterized by steep mid-slope terrain, incised watercourses, and gentle ridges. Soils are the Great Valley Series, Sheet Iron Series and Josephine Series with other inclusions (NRCS 2023). Topography is generally moderate on the ridges and midslope benches, with slopes ranging from flat to about 35 percent. Slopes increase from 35 percent to over 65 percent mid slope near watercourses. The slope of approximately 60 percent of the project area is less than 45 percent.

The forested land in the project area generally begins at an elevation of 3,800 feet. Forests consist of North Coast Range, interior mixed conifer forest, made up of ponderosa pine (*Pinus ponderosa),* sugar pine (*Pinus lambertiana*), Douglas-fir (*Pseudotsuga menziesii*), white fir (*Abies concolor*), and incense cedar (*Calocedrus decurrens*). Associated hardwood species include black oak (*Quercus kelloggii*) and canyon live oak (*Quercus chrysolepis),* with a small amount of mountain dogwood (*Cornus nutallii*) in the upland understory; big leaf maple (*Acer macrophyllum*) and white alder (*Alnus rhombifolia*) generally occur near watercourses. Red fir (*Abies magnifica*) occurs generally above 6,000 feet in elevation. Associated shrubs and forbs also occur, but tanoak (*Lithocarpus densiflorus*) is absent. Ponderosa pine and incense cedar dominate south and southwest facing slopes while Douglas-fir and sugar pine tend to occur on north and east facing slopes and generally above 4,000 feet. White fir generally manifests in stands above 4,500 feet. Occasional, discrete areas of oak woodland also occur including canyon live oak and interior live oak (*Quercus wislizeni*), and gray pine (*Pinus sabiniana*).



Source: Adapted by Ascent in 2024.

Figure 2-1 **Proposed Project Treatments**



Source: Adapted by Ascent in 2024.

Figure 2-2 Proposed Project Treatments and Collaborative Mendocino National Forest Projects

Although most of the Crane Mills property is forested, grassland openings are dispersed within the forest generally below 3,000 feet in elevation. There are occurrences of mafic soils derived from serpentine and other metamorphosed rock (NRCS 2023), primarily on the lower elevations near the eastern edges of the property. The species mix on serpentine soils is typically made up of manzanita (*Arctostaphylos* spp.), chamise (*Adenostoma fasciculatum)*, occasional incense cedar, gray pine and ponderosa pine, and limited live oak (Calflora 2023). Soils derived from ultramafic rock like serpentine tend to be high in nickel, magnesium and other metals, with high pH and low productivity such that they are not generally classified as productive timberland (NRCS 2023).

Seasonal and perennial watercourses are present in the project area and support diverse riparian habitat communities (Figure 2-2). Fish bearing watercourses with local fish populations occur although several natural barriers upstream of "The Gorge" on Thomes Creek, a natural barrier below the southeastern edge of the property, prevent fish migration from the Sacramento River system (RCDTC 2006).

There are active landslides on the property and in the general vicinity. These appear to be well defined, mass-movement features that vary in size from less than 1 acre to some that encompass multiple acres such that a feature may dominate a specific locale. Evidence of recent movement is apparent at many of these features (Gauthier 2014).

2.1.1 Recent Wildfire Disturbance

On August 16 and 17, 2020, a lightning storm caused several fires on Crane Mills lands and in the surrounding vicinity. By September 9, 2020, at least four fires merged into a "complex" fire, called the August Complex, which when extinguished in November 2020, had burned about 1,032,648 acres, making it the largest fire complex in California history (CAL FIRE 2020). To date, the August Complex fire remains California's largest wildfire.

During several weeks of active wildfire, over 47,000 acres owned by Crane Mills were burned and affected by associated suppression efforts. In the project area, the fire created varying degrees of disturbance. It burned severely on south and west facing upland slopes where, in general, more than 80 percent of the vegetation was heavily burned and the understory was consumed. On north- and east-facing slopes, the fire generally burned in a mosaic of intensities, creating areas of total vegetation mortality ranging from about 3–80 acres, intermixed with areas of partial and low mortality of comparable size. The exception to that was on Fish Ridge, Snake Ridge, and the eastern side of Boswell Ridge where the backfire set on September 8, 2020 burned with high intensity on both north and south-facing slopes with a tree mortality rate of 95–100 percent. Fire intensity appears to have been influenced by local topography, fuel density, and aspect. Notably, where the fire burned uphill, irrespective of aspect, it tended to burn intensely resulting in high rates of vegetation mortality near and on ridges. In deep, shadowed watercourse canyons, the fire tended to burn at low intensity.

The overall result is a high degree of variability in fire intensity that, in turn, led to a high degree of variability in the level of ecosystem damage. Areas of 100 percent tree mortality occur next to areas of little mortality. Reestablishing forest cover and a healthy ecosystem would require flexible approaches and techniques over time. Almost 40,000 acres require forest rehabilitation and restoration. In the years following the fire, vigorous resprouting by hardwood and shrub species has occurred and post-fire pioneer species have also been established. The resulting vegetation is very dense in some areas, particularly in the understory.

Crane Mills has previously rehabilitated lands and conducted reforestation efforts using a mixture of seedling species appropriate for the area. In general, the seedling species mix has been approximately 40 percent ponderosa pine, 40 percent Douglas fir, and the remaining 20 percent a combination of white fir, incense cedar, and sugar pine. The same species mix is expected to be added during future reforestation efforts.

2.2 PROPOSED TREATMENT TYPES

The Crane Mills Vegetation Treatment Project involves shaded fuel breaks and ecological restoration treatments. Each treatment type is described in more detail below and is consistent with the treatment types described in the CalVTP. Refer to Figure 2-1 for the location of each treatment type. Table 2-1 provides a summary of the proposed treatment types and associated treatment areas.

Table 2-1 Proposed CalVTP Treatment Types and Activities

Treatment Type	Treatment Description	Treatment Activities	Treatment Size (acres)[1]
Shaded fuel break	Shaded fuel breaks will reduce wildfire risk and aid in fire control	Manual vegetation treatment, mechanical vegetation treatment, pile burning, broadcast burning, herbicide application, and prescribed herbivory	2,165
Ecological Restoration (New)	Rehabilitation of forestland damaged by wildfire; removal of dead trees and shrubs, reestablishment of conifer forests; thinning forests for fuel reduction and increased fire resilience	Manual vegetation treatment, mechanical vegetation treatment, pile burning, broadcast burning, herbicide application, and prescribed herbivory	35,661
Ecological Restoration (Previously Established)	Maintenance of previously restored and treated areas.	Manual vegetation treatment, mechanical vegetation treatment, pile burning, broadcast burning, herbicide application, and prescribed herbivory	9,488
		Total Project Area	**47,314** [1]

[1] Up to 47,314 acres may be treated, however, site-specific landscape conditions and implementation factors would preclude treatment within limited parts of the project area because of expected or unforeseen restrictions, such as operational considerations (e.g., steep slopes, road limitations), economic feasibility, or the presence of sensitive resources, including cultural sites, special-status species, or sensitive habitats.

2.2.1 Shaded Fuel Breaks

Fuel breaks are zones where vegetation (fire fuel) is modified in strategic locations, often in a linear layout following ridges or other logical fire suppression locations. This reduces wildfire risk and supports fire-response personnel by providing a staging area or access to a remote landscape for fire control actions. Fuel breaks also reduce fire intensity by managing regrowth in the long term. In addition, fuel breaks may also provide safe emergency egress during wildfires.

10 shaded fuel breaks would be implemented on up to approximately 2,165 total acres of the project area with maximum widths ranging from 100–500 feet. Four of the ten fuel breaks were hastily constructed during the August Complex fire suppression efforts and exhibit variable size and extent; they would be formally established into shaded fuel breaks. These include Middle Ridge Fuel Break, M22 Fuel Break, Raglin Ridge Fuel Break, and Riley Ridge Fuel Break. For the purposes of the analysis, all the fuel breaks are new and up to 500 feet wide. All the proposed fuel breaks are shown on Figure 2-2 above.

The proposed fuel breaks would be created using manual treatments, mechanical treatments, prescribed broadcast burning, pile burning, targeted herbicide application, and prescribed herbivory. Understory fuel not removed by manual or mechanical treatments may be treated with herbicides shortly after establishing the fuel breaks. Fuel breaks require retreatment over time to maintain the desired fuel levels and prevent dense regrowth. To maintain the fuel breaks, a combination of targeted herbicide application, prescribed broadcast burning, and prescribed herbivory would supplement manual and mechanical treatments to prevent and manage grass, shrub, and tree regrowth.

To accomplish the desired outcome in forested areas, trees and shrubs would be removed mechanically and/or manually to establish spacing between vegetation, both vertically and horizontally. Fire resilient tree species, generally consisting of ponderosa pine, sugar pine, and incense cedar, would be retained when feasible in shaded fuel breaks to improve wildfire resilience and maintain habitat function. Ponderosa pine is considered one of the most fire-resilient conifers in the western United States, especially when the forest is managed to promote wildfire resilience and trees reach maturity (Fitzgerald 2005). Sugar pine is reported to be very resistant to low to moderate severity fires partially due to thick, fire-resistant bark and an open canopy (Arno and Hammerly 1977; Atzet and Wheeler 1982). Mature incense cedars are protected from low severity surface fires due to their thick bark (Keeley 2018; Skinner and Taylor 2018). By retaining overstory vegetation in the fuel break, the resulting shade would reduce growth rates of the understory vegetation by blocking sunlight. Shade also keeps the microclimate cooler and relative humidity higher for longer periods of time. This promotes higher water retention in the vegetation, making it more

resistant to wildfire. Retained trees would also block rain and reduce raindrop-caused soil displacement and suppress establishment of some invasive plant species that are intolerant of shade.

2.2.2 Ecological Restoration

Ecological restoration treatment seeks to improve overall forest, woodland, and grassland health and provide watershed benefits by supporting native habitat structure that is resilient to future natural disturbances and climate scenarios. A healthy, functioning natural landscape would help reduce the impacts of climate change by sequestering carbon, protecting aquatic resources, and providing important habitat for native wildlife. Moreover, a healthy natural landscape can reduce the risk of wildfire to surrounding human communities and protect the rich cultural landscape. The objective of ecological restoration under the proposed project is to rehabilitate forest cover in areas that were substantially damaged by the August Complex fire in 2020. In addition, the project would prepare the landscape for greater fire resilience, protect and restore natural ecological function, restore a more historical and natural fire return interval on the landscape, improve native habitats, and recreate healthy forest and woodland conditions. Specific restoration objectives are to promote forest health and resiliency to disturbance; reduce nonnative and invasive species that occupy treatment areas, particularly those affected by wildfire; reforest burned areas with ecologically appropriate species; reduce vegetation in the overstocked understory; increase the average height of vegetation to the bottom of live crowns; and increase the spacing between canopy trees.

Ecological restoration treatments would take place on approximately 45,149 acres of the project area; about 9,488 acres of this land have been previously established and would be maintained by the project. Treatment activities that would be used to implement new areas of ecological restoration include mechanical treatments, manual treatments, broadcast burning, pile burning, herbicide application, and prescribed herbivory. Mechanical methods would be limited to slopes less than 45 percent. Treatment would target invasive species (e.g., non-native bromes [*Bromus* spp.]); reduce vegetation in the overstocked understory; increase the average distance to the bottom of live crowns; and increase the spacing between canopy trees. Treatments would vary slightly depending on the vegetation type being treated and specific prescriptions would be developed by a qualified registered professional forester (RPF) to maintain tree age class diversity and a sufficient number of young understory trees to facilitate forest regeneration and long-term maintenance of habitat function. Maintenance of previously established areas would primarily include herbicide application and hand thinning but could include any of the initial treatment activities.

Ecological restoration treatments would be conducted in several vegetation types including oak woodland, mixed conifer, ponderosa pine, and ponderosa pine - Douglas-fir alliance types. Species preference (tree species that would be retained) would vary, but in general, it would include gray pine and live oak in the oak woodland type, and sugar pine, ponderosa pine, incense cedar, Douglas-fir, white fir, and California black oak elsewhere. Within riparian areas there would be retention of at least 75 percent of the overstory including alders and big leaf maple, and 50 percent of the understory canopy of native riparian vegetation.

Treatments would retain vegetation along watercourses to maintain habitat function for special-status wildlife, as well as hardwood or softwood snags or downed large woody debris at locations where these special-status species may occur. In addition, ecological restoration treatments would retain:

- hardwoods greater than 14 inches diameter at breast height (DBH) (e.g., black oak, big-leaf maple) up to 5 percent of residual basal area including hardwoods greater than 14 inches DBH with basal hollows or other complex structural features;
- up to four snags per acre that are greater than 14 inches DBH and more than 100 feet from structures and roads; and
- downed woody debris larger than 18 inches diameter and 12 feet long.

With the desired outcome, habitat function would be maintained and improved. Additionally, forest species diversity would be more heterogeneous to better reflect historic conditions of North Coast mixed conifer forests and other vegetation communities present in the project area, promoting fire resilience. Treatment would improve soil and

watershed processes by reducing sources of ground-level fuels (the understory) that can lead to excessive adverse heat-related soil impacts when fire occurs under those conditions.

2.3 PROPOSED TREATMENT ACTIVITIES

The proposed vegetation treatment activities are mechanical treatments, manual treatments, prescribed burning, herbicide application, and prescribed herbivory (Table 2-2). Each of these treatment activities is described in more detail below and is consistent with the treatment activities described in the CalVTP.

Treatment activities could occur during any time of year, although the nesting bird season (February 1 – August 31 or extended limited operating period for raptors as determined by a qualified RPF or biologist) would be avoided when feasible. All treatment activities would occur Monday through Sunday between 2:00 a.m. and 7:00 p.m. or when relative humidity is above 20 percent to increase fire safety during treatments.

Table 2-2 Proposed CalVTP Treatment Activities

CalVTP Treatment Activity	Equipment Used for Treatments	Typical Duration of Treatments	Maximum Treatment Size (acres)
Manual Treatment	Chainsaws, hand saws, hand lopping tools, shovels, Pulaski hoes, McLeod fire tools, weed wrenches, weed whips, machetes, pruning shears	3 to 6 months	19,085
Mechanical Treatment	Tracked tree cutting, tracked masticators, wheeled skidders, wheeled masticating machines, feller-bunchers, skid steers, excavators, bulldozers, track or wheel mounted chippers	1 week to 6 months	30,963
Prescription Burning – Broadcast Burning	Hand tools, drip torch, tractor, water tender, excavator, bulldozer, feller/buncher	1 day to 1 week	3,048
Prescription Burning – Pile Burning or portable biomass processing technologies	Hand tools, drip torch, tractor, water tender, excavator, bulldozer, feller/buncher, biomass processing technologies	1 day to 1 month	28,714[1]
Herbicide Application	Batch truck, passenger vehicle, back-pack spray equipment, and ATV-mounted spray equipment	1 day to 1 month	47,314
Prescribed herbivory	Livestock, wildlife-friendly temporary fencing, herding animals (i.e., dogs), related vehicles, watering site, mineral block	1 week to 4 months	47,314

[1] Pursuant to SPR GEO-6, pile burning would not occupy more than 15 percent of the total treatment area, or a cumulative 7,140 acres.

2.3.1 Manual Vegetation Treatment

Manual vegetation treatments are proposed on up to 19,085 acres of the project area. Manual treatment would be the treatment activity conducted near watercourses and on slopes over 45 percent. Elsewhere, manual treatment may be used as needed to prepare the area for other treatment activities, such as mechanical treatment, prescribed burning, or herbicide treatment. Manual treatments would be implemented with hand crews of approximately eight to 20 members using hand tools and hand-operated power tools (including chainsaws, hand saws, brush cutters, and loppers) to cut, clear, and prune trees, herbaceous vegetation, and woody shrubs and increase tree spacing. Manual treatment may also include planting desirable species by hand (hand planting). Depending on conditions, up to eight manual crews may operate at the same time across the project area. Typically, treatments would require 3–6 months to complete, depending on the treatment size, steepness of terrain, and type and density of vegetation. Manual treatment activities may occur within 100 feet of Class I or II streams to improve habitat and reduce undesirable wildfire hazards. Manual treatment within 100 feet of Class I or II streams would occur outside of bird nesting season, if feasible.

Cut vegetation would be left on-site by lopping or chipping and scattering on the landscape. In some areas, removed vegetation would be piled for later pile burning or it would be hauled off-site. The same general guidelines for tree and vegetation removal and retention would be followed as described above for Ecological Restoration.

Proposed manual treatment activities are:

- hand pulling of invasive plants;
- planting saplings or reseeding in burned areas;
- thinning trees with chainsaws, loppers, or pruners; and
- cutting shrubs to restore characteristic densities for the vegetation community present.

2.3.2 Mechanical Vegetation Treatment

Mechanical vegetation treatments are proposed on up to 30,963 acres of the project area. Mechanical treatments may include mechanical tree removal (i.e., felling and skidding), mowing, masticating, and piling. Mechanical treatments would require between one and nine crew members per crew. Depending on conditions, multiple mechanical crews may operate at the same time across the project area. Typically, one mechanical crew would use feller-bunchers, wheeled skidding and masticating machines, skid steers, excavators, bulldozers, track or wheel mounted chippers, and/or track mounted masticators to implement treatments. Treatments would require several days to several months to complete (e.g., one week to six months). Equipment would be operated on appropriate slopes subject to operational restrictions near sensitive resources (e.g., watercourses). Mechanical treatments would occur on slopes up to 45 percent.

The overall vegetation retention standards described under "Ecological Restoration" would apply to mechanical treatment activities. Cut vegetation would be left on-site by lopping or chipping and scattering on the landscape, piled for later pile burning, or chipped and hauled to a disposal location such as Shasta-SRM Anderson (to be converted to energy) or the Tehama Landfill. To reduce soil impacts and erosion, brush rakes would be used to pile residual surface fuels, shrubs, and overstocked understory hardwoods and conifers, as appropriate.

2.3.3 Prescribed Burning

Prescribed burning is proposed on up to 31,762 acres of the project area. Prescribed burning consists of two general types, pile burning and broadcast burning. Both types of prescribed burning would be used to implement the project.

Pile burning activities could feasibly occur on up to 28,714 acres of the project area but the actual acreage of burn piles would be much less. Pursuant to SPR GEO-6, actual pile burning would not occupy more than 15 percent of the total treatment area, or a cumulative 7,140 acres, during consecutive pile burning treatments. Pile burning involves igniting biomass piles constructed either manually or mechanically. Biomass from manual and mechanical treatment would be piled using equipment (e.g., skid steer, tractor, feller/buncher, bulldozer, or excavator) or hand crews and left on-site to dry out before burning. If mechanical equipment is used, bulldozers equipped with a brush rake or excavators with grapples would be used to reduce soil displacement and create dirt-free piles for burning. Pile burning requires a nearby water source and fewer crew members than broadcast burning (2–10 crew members). Multiple piles would be burned at once with multiple crews operating. A handheld drip torch would be used to ignite burn piles. Pile burning would take place under the overstory or in areas with little to no live overstory, including areas that have experienced previous wildfire or vegetation treatment. In addition, portable biomass processing technologies (e.g., air curtain burners) may be used. They are designed to consume biomass quickly and efficiently with a substantial reduction in smoke compared to pile burning (refer to additional information in Section 4 under 4.3, "Air Quality," and 4.7, "Greenhouse Gas Emissions"). Mitigation Measure GHG-2 in the CalVTP Program EIR requires project proponents to implement feasible methods, including the use of air curtain burners or other portable biomass processing technologies, to reduce the greenhouse gas (GHG) emissions from pile burning. See Section 2.3.5, "Biomass Disposal," for additional information.

Broadcast burning would use low-intensity, ground-level fire across a specific area to manage vegetation and would occur on up to 3,048 acres of the project area. Broadcast burning would be used to promote forest health and native flora and reduce biomass and fuel loading in forest vegetation that has not burned recently. It would also promote a more natural, sustainable, and wildfire-resilient landscape. Pretreatment of vegetation using mechanical and manual treatment methods, targeted herbicide application, or prescribed herbivory would occur in areas proposed for broadcast burning. The goal of broadcast burning is to consume targeted, ground-level vegetation and forest litter fuels. Broadcast burning usually is low-intensity, so not all fuel is consumed, and significant portions of the groundcover and understory typically remain in a mosaic pattern. Understory broadcast burning would be implemented using patterned lighting techniques during appropriate conditions and under the supervision of a qualified "burn boss." Generally, appropriate conditions are those that occur during periods of high humidity and moderate-to-high fuel moisture content and/or in advance of an incoming wet weather event. Broadcast burning requires the construction of control lines using manual or mechanical methods. Control lines are linear lengths of bare soil that help stop the horizontal progression of a fire. Dense patches of vegetation may be trimmed or removed manually or mechanically in advance of burning. Vegetation could also be pretreated with herbicides to kill the aboveground plant parts and cause them to dry out so they would be better consumed by fire. Prescribed broadcast burning would require between 10 and 50 crew members, depending on the size and site characteristics of the burn unit. Typically, each burn would last 1 day to 1 week.

All burning would be implemented in fall, winter, or spring and 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.

2.3.4 Herbicide Application

Targeted herbicide application may occur in limited treatments anywhere within the 47,314-acre project area. Actual treated acres would be highly dependent on crew size, ground conditions, and topography. Herbicide application operations would comply with all US Environmental Protection Agency (EPA) label directions, as well as California Environmental Protection Agency (CalEPA) and California Department of Pesticide Regulation (DPR) label standards. All herbicide application would be performed by certified and licensed pesticide applicators in accordance with all local, state, and federal regulations. Only targeted, ground-level application would occur; there would be no aerial spraying of herbicides. Several herbicide application methods would be used, including paint-on stems, backpack hand-applicator, or hack and squirt.

Herbicide treatments would typically require a multiple-person crew(s) ranging from 3–16 people, a batch truck, a passenger vehicle to transport crew, backpack sprayers, and all-terrain vehicles to move materials to treatment sites. All-terrain vehicles would only be driven on established roads and skid trails. Ground-based application would occur in late summer or fall, approximately 9–15 months following vegetation cutting. However, hack and squirt application may occur at least three months before cutting of hardwoods. Stump treatment immediately following cutting of hardwoods may also be implemented. Herbicide treatments would occur over the course of one day to one month and would cover approximately 5–20 acres per day depending on crew size.

The application method chosen for a specific site would depend on the written recommendations of an independent Pest Control Advisor licensed by DPR. The application of herbicides would be widely used in the project area to help maintain a manageable understory for fuel breaks and to reduce fuel connectivity.

To restore characteristic herbaceous species composition for the vegetation community, pre-emergent herbicides may also be used. Herbicide application would reduce the spread of invasive species such as bromes and restore characteristic shrub densities.

Herbicides that may be applied include those listed below. The listed compounds are consistent with those considered for use in the CalVTP Program EIR:

- Clopyralid (monoethanolamine salt);
- Glyphosate (isopropylamine salt, potassium salt, dimethylamine salt & diammonium salt);

- Velpar (hexazinone);
- Imazapyr (isopropylamine salt);
- Sulfometuron methyl;
- Triclopyr (butoxyethyl ester & triethylamine salt);
- Nonylphenol 9 Ethoxylates (NP9E); and
- Cleantraxx (penoxsulam & oxyfluorfen).

2.3.5 Prescribed Herbivory

Prescribed Herbivory

Prescribed herbivory may occur in limited treatments anywhere within the 47,314-acre project area. The actual acreage treated by prescribed herbivory will be much lower depending on topography, crew availability, and other factors. Prescribed herbivory (also known as "targeted grazing") is the use of domestic livestock, in this case sheep, goats, and cattle, to accomplish specific and measurable vegetation management objectives. Prescribed grazing would be used as a means of pre-treatment or site preparation before planting for reforestation purposes, or for developing or maintaining fuel breaks. Objectives may include reducing the need for herbicide treatment; removing herbaceous biomass (e.g., fine fuel loads) and woody biomass; reducing populations of specific plant species; slowing the re-establishment of shrubs on ungrazed, burned, or mechanically thinned sites; and improving plant community structure for wildlife habitat value. Cattle grazing is an existing activity that is ongoing in some of the treatment areas for the purposes of cattle production. Existing cattle grazing activity is not addressed in the proposed project or analysis, and existing activities would not change based on this PSA/Addendum.

Prescribed herbivory treatments would typically require a crew of two to three dedicated livestock herders on site at all times, supported by two RPFs who visit the site regularly, for a total of 2-5 staff on site for each prescribed herbivory treatment. Equipment would include livestock (e.g., goats, sheep, or cattle), wildlife-friendly temporary fencing, herding animals (i.e., dogs), related vehicles, and water supplies. Prescribed herbivory treatments typically last at least one week and may occur for up to four months, depending on the time needed for the grazing to accomplish treatment goals. A herder, temporary portable fencing (e.g., woven wire mesh or electric wire fence), mineral block, and/or a watering site may be required to keep the grazing animals within the desired area. Herds may be moved as often as every 1 to 7 days. Control of livestock movement and prevention of the impacts of overgrazing is critical for the successful use of this treatment activity.

Livestock are selected according to site conditions and the types of vegetation that need to be managed. Sheep prefer to graze on forbs and grasses and will also browse on shrubs. Sheep's herding instinct allows for prescribed herbivory to occur without the installation and maintenance of fences, but requires that a shepherd and trained, professional dogs are present. Sheep grazing requires that drinking water sources be present, which would be provided through hauled water tanks or on-site developed livestock water sources (troughs). Goats prefer to browse on woody vegetation (e.g., tree leaves, twigs, vines, shrubs) and will eat materials up to 6 feet above the ground. Goat grazing is preferable in areas of steeper terrain or areas with woody vegetation where other grazing animals are less suited for the topographic or vegetative conditions. However, goat grazing typically uses portable electric fences to help control the herd and the outcome of their grazing. Measures need to be taken during goat grazing to prevent girdling of small trees that can result from the goats browsing on tree bark. Cattle are best suited to the treatment of herbaceous plants, especially grasses, and in larger areas. Cattle require substantial water sources and durable fencing for management. Proper fencing is necessary to protect steep slopes and water features, because cattle can cause erosion and damage to water resources.

Prescribed herbivory is nonselective and therefore is not recommended for sensitive habitat areas or areas potentially containing special-status plant species or cultural resources areas. Prescribed herbivory is effective at reducing flashy fuels and brush intrusion. Any prescribed herbivory in forested habitat that targets understory materials would include protection measures for selected native understory vegetation to prevent girdling, trampling, and browsing

on special-status species. Forest understory vegetation would be maintained in ecological restoration areas consistent with the understory descriptions in the Manual of California Vegetation (Sawyer et al. 2009). All prescribed herbivory would be within seasonally appropriate periods based on vegetation type and excluded from certain areas to protect sensitive species. Prescribed herbivory would generally not be implemented in riparian woodlands and may only be used along the margins of these areas. Prescribed herbivory would maintain exclusion zones consistent with CalVTP Program EIR specifications (e.g., SPR HYD-3 and Mitigation Measure BIO-4) around aquatic habitats to minimize potential impacts on these areas from prescribed herbivory activities.

2.3.6 Biomass Disposal

The vegetative biomass generated by the proposed project would be disposed of by several methods:

- Pile burning (which may be used to dispose of cut, chipped, and masticated materials);
- broadcast burning;
- hauling off-site to a biomass facility as an energy or waste product;
- lopping and scattering within treatment boundaries;
- leaving unburned piles for wildlife habitat;
- chipping and scattering chips onto the ground as mulch, not exceeding 4 inches in depth; or
- processed using specialized, portable biomass processing technologies, such as air curtain burners, pyrolysis/carbonization, or a gasifier.

Invasive plant and noxious weed biomass would be treated on-site to eliminate seeds and propagules or would be disposed of off-site at an appropriate waste collection facility to prevent reestablishment or spread. Invasive plants and noxious weeds would not be chipped and spread, scattered, or mulched on-site.

BIOMASS PROCESSING TECHNOLOGIES

Direct Combustion - Air Curtain Burners

Air curtain burners use direct combustion to process biomass. Combustion is an exothermic (heat-producing) reaction between oxygen and the hydrocarbon in biomass. The biomass is converted into heat, water, carbon ash, and CO_2. They are operated by depositing biomass in the firebox, an open top metal container, within which the biomass is set alight. The air curtain filter (i.e., fast-moving curtain of air) is drawn over the firebox while a blower circulates the air and smoke within the firebox, subjecting it to repeated cycles of burning in the flames. The blower creates a high temperature vortex inside the chamber to accelerate biomass combustion, more completely combust the material, and keep most pollutants from escaping the firebox into the atmosphere. The air curtain at the top of the firebox acts as a filter to reduce any particulate matter (PM) emissions from the resulting exhaust.

Air curtain burners would be set up on existing roads, landings, or other disturbed areas. Air curtain burners would be used in locations that meet the qualifications for their safe use. An example of a small air curtain burner that may be used is the BurnBoss T24. This unit is towable with a standard heavy-duty pickup truck. The size is less approximately 20 feet long, eight feet wide, and six feet tall. A small US EPA Tier 4 diesel engine powers the air curtain fan. The BurnBoss T24 consumes 5-10 cubic yards of biomass per hour and up to a third of a gallon of diesel fuel per hour. Larger air curtain burners may be used as well.

Pyrolysis/Carbonization

Pyrolysis (or carbonization) can be performed in a variety of ways, from simple oxygen-depriving designs, such as an Oregon kiln, which can process up to several cubic yards at time, to modular and portable carbonation units, to more complex large-scale pyrolysis chamber systems in a fixed location that can process hundreds of tons of biomass per day (these would not be used as a component of the proposed project). Pyrolysis involves the conversion of biomass into hydrocarbon liquids, gases, or solids (or all three) in the total absence of oxygen at temperatures ranging from

400–900 degrees Celsius. Only smaller-scale, portable carbonators would be used as part of the proposed project. An example of a carbonator that may be used is the Tigercat 6050 Carbonator. This portable facility is approximately 40 feet long, 12 feet wide, and 12 feet tall. Several Tigercat 6050 Carbonators may be used at one central location near several treatment areas.

Gasifier

Gasification is defined as a high-temperature conversion of carbonaceous materials (biomass) into a combustible gas mixture under reducing conditions. Through gasification biomass can be converted into gaseous fuels intermediate (producer gas and syngas) that can be used for heating, industrial processes, electricity generation, and liquid fuel production. The catalyst required for gasification typically consists of air, oxygen, steam, or a mixture of those three. The key benefits of using biomass as an energy source include the fact that the components, when released, do not constitute a net carbon contribution back into the atmosphere as well as the reduction on the dependence of non-renewable or imported fuel sources.

In the future, RCDTC or Crane Mills may obtain a gasifier to process woody biomass. Suitable processing locations near existing electrical infrastructure would allow electricity generated to be directed into the electrical grid. The electricity generated could also be stored in batteries for future use by RCDTC or Crane Mills. Current advancements in electrifying equipment used for fuels management activities could result in the power generated charging the equipment performing the work associated with the project.

2.4 TREATMENT MAINTENANCE

Maintenance treatments in the areas initially treated by the proposed project would be conducted to periodically manage vegetative regrowth and control invasive species. Maintenance would use the same treatment activities as the initial treatments: manual treatments, mechanical treatments, prescribed burning, targeted herbicide application, and prescribed herbivory. Maintenance treatments would occur as needed and would generally treat smaller acreages and use less equipment than the initial treatments. The interval between initial treatments and subsequent maintenance would be based on-site monitoring for the effectiveness of the initial treatment, available funding, and other factors. Maintenance cycles would be dependent on regrowth conditions and vegetation type and would differ by location.

Maintenance prescriptions would be developed with consideration of the location's vegetation type and its natural fire return interval (i.e., time since last burn is greater than the average fire return interval for the habitat type). Retreatment activities would generally occur when the project area is outside of its natural fire return interval. These intervals vary by vegetation type and disturbance intensity. Northern California mixed evergreen forest vegetation types require a minimum of five years to recover after a surface or low-severity fire, a 15-years minimum recovery after a mixed-severity fire, and a 100-year minimum recovery following a stand-replacing event (Tollefson 2008). California montane and subalpine grassland vegetation require 0–20 years to recover, depending on conditions (USFS 2019).

Manual treatments, such as hand pulling of invasive plants or hand thinning, could still occur within the natural fire return interval; however, major vegetation disturbance activities that change the composition of the vegetation community and prevent recovery (i.e., mastication, broadcast burning) would not occur. Long-term maintenance objectives include the return of low-intensity, prescribed broadcast burning and maintenance of vegetation at a natural fire return interval.

While implementing a maintenance treatment, Crane Mills would 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 would be evaluated as conditions or circumstances potentially change. If environmental conditions evolve or project approaches change to the degree that the project proponent finds new or substantially more severe impacts may occur, RCDTC and Crane Mills would 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 PSA/Addendum would be updated 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, a reconnaissance survey may be conducted to verify conditions are substantially similar to those anticipated in the PSA/Addendum. Updated information would be documented.

3 ENVIRONMENTAL CHECKLIST

VEGETATION TREATMENT PROJECT INFORMATION

1. **Project Title:** Crane Mills Vegetation Treatment Project
2. **CalVTP I.D. Number:** 2023-37
3. **Implementing Entity's Name and Address:** Crane Mills
   22938 South Ave
   Corning, CA 96021
4. **Contact Person Information and Phone Number:** Frank Barron, Chief Forester/RPF 2007
   530.824.5427
   frank.barron@cranemills.com
5. **Project Proponent Name and Address:** Resource Conservation District of Tehama County
   P.O. Box 1232
   Red Bluff, CA 96080
6. **Contact Person Information and Phone Number:** Seronica Biggs, District Forester/RPF 3221
   530.727.9983
   sbiggs@tehamacountyrcd.org
7. **Project Location:** The project is located approximately 25-35 miles west and northwest of Corning, in Tehama County, California.
8. **Total Area to Be Treated (acres)** Up to 47,314 acres
9. **Description of Project**:

   a. Initial Treatment

   Initial treatments would include manual and mechanical treatments, prescribed burning, targeted herbicide application, and prescribed herbivory. See Chapter 2, "Project Description," for additional details.

   Treatment Types

   ☐ Wildland-Urban Interface Fuel Reduction

   ☒ Fuel Break

   ☒ Ecological Restoration

   Treatment Activities

   ☒ Prescribed Burning (Broadcast), 3,048 acres

   ☒ Prescribed Burning (Pile Burning), 7,140 acres

   ☒ Mechanical Treatment, 30,963 acres

   ☒ Manual Treatment, 19,085 acres

   ☒ Prescribed Herbivory, 47,314 acres

   ☒ Herbicide Application, 47,314 acres

   Fuel Type

   ☒ Grass Fuel Type

   ☒ Shrub Fuel Type

☒ Tree Fuel Type

b. Treatment Maintenance

Maintenance treatments would involve the same treatment activities as the initial treatments (i.e., mechanical treatment, manual treatment, prescribed burning, targeted herbicide application, and prescribed herbivory). See Section 2.4, "Treatment Maintenance," above for additional details.

Treatment Types

☐ Wildland-Urban Interface Fuel Reduction

☒ Fuel Break

☒ Ecological Restoration

Treatment Activities

☒ Prescribed Burning (Broadcast), 3,048 acres

☒ Prescribed Burning (Pile Burning), 7,140 acres

☒ Mechanical Treatment, 30,963 acres

☒ Manual Treatment, 47,314 acres

☒ Prescribed Herbivory, 47,314 acres

☒ Herbicide Application, 47,314 acres

Fuel Type

☒ Grass Fuel Type

☒ Shrub Fuel Type

☒ Tree Fuel Type

Use of the PSA for Treatment Maintenance

See Section 2.4 "Treatment Maintenance" above

10. Regional Setting and Surrounding Land Uses:

The project area is situated in western Tehama County, about 25-35 miles west and northwest of Corning, CA. The project area is mostly surrounded by USFS lands and some other private lands. Surrounding land uses include national forest land, private timberland, recreation areas, grazing, and wilderness.

11. Other Public Agencies Whose Approval Is Required: (e.g., permits)

Pesticide application permit from Tehama County Agricultural Commissioner

Smoke management plan for Tehama County Air Pollution Control District

Burn permits from Tehama County Air Pollution Control District

Burn permits from CAL FIRE, when required

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 has 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.

12. Native American Consultation.

Pursuant to SPR CUL-2, letters were sent via certified mail to Native American tribes in Tehama County during the week of December 18, 2023. Letters were sent to Dennis Ramirez, Chairperson, Mechoopda Indian Tribe; Kyle McHenry, Cultural Director, Mechoopda Indian Tribe; Guy Taylor, Mooretown Rancheria of Maidu Indians; Benjamin Clark, Chairperson, Mooretown Rancheria of Maidu Indians; Bill Laverne, THPO, Paskenta Band of Nomlaki Indians; Andrew Alejandre, Chairperson, Paskenta Band of Nomlaki Indians; Jack Potter, Chairperson, Redding Rancheria; and Roy Hall, Chairperson, Shasta Nation. Refer to Section 4.4, "Archaeological, Historical, and Tribal Cultural Resources" for more information about Native American consultation for this project.

DETERMINATION

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

☒ I find that the effects of the proposed project (a) have been covered in the CalVTP Program EIR, and (b) all applicable Standard Project Requirements and mitigation measures identified in the CalVTP Program EIR will be implemented. The proposed project is, therefore, **WITHIN THE SCOPE** of the CalVTP Program EIR. **NO ADDITIONAL CEQA DOCUMENTATION** is required.

☒ I find that the presence of proposed project areas outside the CalVTP treatable landscape and proposed revisions to SPRs will 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 and revisions to SPRs 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, an **ADDENDUM** is adopted to address the project areas outside the geographic extent presented in the Program EIR and revisions to SPRs.

☐ I find that the proposed project will have effects that were not covered in the CalVTP Program EIR. These effects are less than significant without any mitigation beyond what is already required pursuant to the CalVTP Program EIR. A **NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project will have effects that were not covered in the CalVTP Program EIR or will have effects that are substantially more severe than those covered in the CalVTP Program EIR. Although these effects may be significant in the absence of additional mitigation beyond the CalVTP Program EIR's measures, revisions to the proposed project or additional mitigation measures have been agreed to by the project partners 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 Program EIR and/or (b) substantially more severe than those covered in the CalVTP Program EIR. Because one or more effects may be significant and cannot be clearly mitigated to less than significant, an **ENVIRONMENTAL IMPACT REPORT** will be prepared.

Tricia P Hamelberg
Signature

1/8/2025
Date

TRICIA P. HAMELBERG
Printed Name

RCDTC BOARD PRESIDENT
Title

RESOURCE CONSERVATION DISTRICT OF TEHAMA COUNTY
Agency

4 PROJECT-SPECIFIC ANALYSIS/ADDENDUM

4.1 AESTHETICS AND VISUAL RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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-2 AQ-2 AQ-3 REC-1	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 Wildland-Urban Interface Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25	Yes	AD-3 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 Nonshaded Fuel Break Treatment Type	SU	Impact AES-3, pp. 3.2-25 – 3.2-27	No	--	--	--	--	--

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT AES-1

Initial treatments and ongoing maintenance treatments would include manual treatment, mechanical treatment, prescribed burning, targeted ground application of herbicides, and prescribed herbivory. The potential for these treatment activities to result in short-term degradation of the visual character of a treatment area was examined in the Program EIR. The nearest eligible state scenic highways are State Routes (SR) 3 and 36, northwest of the project area. However, both SR 3 and 36 are more than 30 miles northwest of, and would not provide public views of, the project area (Caltrans 2024).

The proposed treatments would occur on private land owned by Crane Mills, which is not open to public access or recreation. However, public trails and campgrounds are located adjacent to the project Area. Public viewpoints of the project area are available from public recreation trails (e.g. Valley View Mountain Trail, Ides Cove Trail, Mount Linn Loop, and South Yolla Bolly Trail) and recreation areas (e.g. Sugar Spring Campground, Sugarfoot Glade Campground, Kinglsey Glade Campground, Three Prong Campground, Whitlock Campground, Green Springs Campground, and Toomes Campground) (Alltrails 2024, Trailforks 2024).

The 2020 August Complex Fire burned over 47,000 acres of land owned by Crane Mills and likely degraded views from scenic viewpoints in the area due to burn scars and dead vegetation left on the land. In other portions of the project area that were not burned by the August Complex Fire, vegetation is very dense, particularly in the understory, and the topography is varied, which would reduce the visibility of treatments from public viewpoints. Manual and mechanical treatments would remove shrubs and trees smaller than 14 inches DBH, leaving overstory vegetation in much of the project area. Although in the short-term after treatment, the absence of treated vegetation could be noticeable, mature vegetation would remain to provide partial screening of treatment areas. However, equipment, crews, and smoke from prescribed burning could be visible from public viewpoints during operations. Per SPR AD-4, public notification prior to prescribed burning would occur, and a smoke management plan (SPR AQ-2) and burn plan (SPR AQ-3) would be prepared to help reduce excess smoke by requiring certain conditions be met prior to burning.

The potential for these treatment activities to result in short-term degradation of the visual character of a treatment area was examined in the Program EIR. Although portions of the project area are visible from public viewpoints, the presence of dense vegetation would substantially reduce the visibility of treatments from those public viewpoints. The potential for the project to result in short-term substantial degradation of the visual character of the project area is within the scope of the Program EIR. 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 would also be the same, as described above. SPRs applicable to this impact are AD-3, AD-4, AES-2, AQ-2, AQ-3, and REC-1.

RCDTC proposes to revise SPR AD-4 for feasibility and clarity. Revisions to SPR AD-4 stipulate that Crane Mills would notify the public of prescribed burning treatment activities with signs posted at trail entrances. In addition, Crane Mills would notify USFS of the prescribed burning treatment and request that USFS issue a press release regarding the proposed timing of the prescribed burning. SPR AD-4 as originally written requires that details regarding prescribed burning are published in a local newspaper, or other widely distributed media source, three days prior to prescribed burning; this language has been removed from the SPR for the Crane Mills project because it is infeasible due to the lack of local daily newspaper circulation or social media presence in the region. All other elements of SPR AD-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AD-4 and would maintain the overall requirements of public notification for prescribed burning. For the reasons described, proposed revisions to SPR AD-4 would not result in a substantially more severe significant effect related to degradation of a scenic vista or visual character of public views than what was covered in the Program EIR.

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.

IMPACT AES-2

Initial vegetation treatments and ongoing maintenance treatments would include ecological restoration and shaded fuel break treatment types. The potential for ecological restoration and shaded fuel break treatment types to result in long-term degradation of the visual character of an area was examined in the Program EIR. The nearest eligible state scenic highways are SR 3 and SR 36, northwest of the project area. However, both SR 3 and SR 36 are more than 30 miles northwest and do not provide public views of the project area. Public viewpoints of the treatment areas include public trails and recreation locations adjacent to the project area. Treatment would target invasive species (e.g., bromes [Bromus spp.]) ; reduce vegetation in the overstocked understory; increase the average distance to the bottom of live crowns; and increase the spacing between canopy trees. Moreover, manual and mechanical treatments would remove trees and shrubs to establish spacing between vegetation, both vertically and horizontally. Mature vegetation (i.e., above 14 inches DBH) would remain to provide partial screening of treatment areas. In addition, the visual character of the project area has been previously disturbed by the August Complex Fire in 2020.

The potential for the project to result in long-term substantial degradation of the visual character of the project area is within the scope of the Program EIR because the proposed treatment activities are consistent with those analyzed in the Program EIR. 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 Program EIR. However, within the boundary of the project area, the existing visual character is essentially the same in- and outside of the treatable landscape, and the long-term aesthetic impact is the same, as described above. SPRs applicable to the proposed treatments are AD-3, AES-1, and AES-3. 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.

IMPACT AES-3

This impact does not apply to the project because nonshaded fuel breaks are not proposed.

NEW AESTHETIC AND VISUAL RESOURCE IMPACTS

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP Program EIR. 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 Program EIR (refer to Section 3.2.1, "Environmental Setting," and Section 3.2.2, "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 and revisions to SPRs constitute a change to the SPRs presented in the Program EIR. However, within the boundary of the project area, the existing environmental conditions pertinent to aesthetics and visual resources 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, the impacts of the proposed project are consistent with those covered in the Program EIR. The inclusion of areas outside of the CalVTP treatable landscape and revisions to SPRs would not give rise to any new significant impacts. Therefore, new aesthetic and visual resource impacts would not occur.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	AD-3	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT AG-1

Vegetation treatment activities implemented within the project area would include manual treatment, mechanical treatment, prescribed burning, targeted herbicide application, and prescribed herbivory to conduct shaded fuel break and ecological restoration objectives. The project area includes forested land consisting of hardwoods, conifers, and snags, and is currently managed for commercial timber operations.

Shaded fuel breaks would be implemented on 2,165 acres of the project area. In areas where shaded fuel breaks are proposed, trees would be thinned, and some shrubs would be removed mechanically and/or manually to establish spacing between vegetation both vertically and horizontally. Fire resilient trees species (i.e., ponderosa pine, sugar pine, incense cedar) would be retained in shaded fuel breaks when feasible to improve wildfire resilience and maintain habitat function. The proposed new ecological restoration treatment would rehabilitate forested areas damaged by the 2020 August Complex wildfire by implementing removal of dead trees and shrubs, reestablishing conifer forests, and thinning forests for fuel reduction and increased fire resilience. In addition, select hardwoods greater than 14 inches DBH would be retained (see Section 2.2.2 for additional ecological restoration vegetation retention details). These treatments would not result in the loss of forest land or conversion of forestland into non-forest use because treatment is designed to maintain habitat function, restore areas damaged by wildfire, and promote wildfire resilience of the existing forestland.

The potential for these treatment types and treatment activities to result in the loss of forestland or conversion of forestland to non-forest use was examined in the Program EIR. The treatment types and activities described above would occur in forested lands. Consistent with the Program EIR, the vegetation remaining after treatments would meet the definition of forestland as defined in PRC Section 12220(g), which defines "forestland" as land that can support 10-percent native tree cover of any species under natural conditions. 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 composition of forested land as defined in PRC Section 12220(g) is essentially the same within and outside the treatable landscape; therefore, the impact to forest land is also the same, as described above. SPR AD-3 is applicable to this impact. The potential for the project to result in the loss or conversion of forestland is within the scope of the Program EIR. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW AGRICULTURE AND FORESTRY RESOURCE IMPACTS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP Program EIR. The site-specific characteristics of the proposed project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.3.1, "Environmental Setting," and Section 3.3.2, "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 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. The inclusion of areas outside of the CalVTP treatable landscape would not give rise to new significant impacts not addressed in the Program EIR. Therefore, no new impacts related to agriculture and forestry resources would occur that are not covered in the Program EIR.

4.3 AIR QUALITY

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	PSU	Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1	Yes	AD-4 AQ-1 AQ-2 AQ-3 AQ-4 AQ-5 AQ-6	AQ-1	PSU	No	Yes
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	LTS	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	Impact AQ-3, pp. 3.4-34 – 3.4-35	Yes	AQ-1 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	Impact AQ-4, pp. 3.4-35 – 3.4-37	Yes	AD-4 AQ-1 AQ-2 AQ-6	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	Impact AQ-6; pp. 3.4-38	Yes	AD-4 AQ-1 AQ-2 AQ-6	NA	PSU	No	Yes

Notes: LTS = less than significant; PSU = potentially significant and unavoidable; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

Tehama County is in the jurisdiction of the Tehama County Air Pollution Control District (TCAPCD). Pursuant to SPR AQ-1, the implementing entity would comply with the applicable air quality requirements of the TCAPCD. Pursuant to SPR AQ-2, the implementing entity would also prepare a smoke management plan and submit it to TCAPCD prior to implementing any prescribed burning treatment. In addition, the implementing entity would prepare a burn plan as required by SPR AQ-3, which would include fire behavior modeling. Also, SPR AQ-6 requires the implementation of an IAP, which may include burn dates, burn hours, weather limitations, specific burn prescription, communication plan, medical plan, traffic plan, and other special instructions required by TCAPCD for all proposed prescribed burning.

IMPACT AQ-1

Use of vehicles, mechanical equipment, and prescribed burning during initial and ongoing maintenance treatments would result in emissions of criteria pollutants that could exceed California Ambient Air Quality Standard (CAAQS) or National Ambient Air Quality Standard (NAAQS) thresholds. The project would be implemented by existing staff; therefore, the project would not result in a substantial increase in worker vehicle trips and associated emissions of criteria pollutants. The potential for emissions of criteria pollutants to exceed CAAQS or NAAQS thresholds was examined in the Program EIR.

Emissions of criteria air pollutants from the proposed project are within the scope of the Program EIR because the associated equipment and duration of use are consistent with those analyzed in the Program EIR. Emission reduction techniques included in Mitigation Measure AQ-1 would be implemented, to the extent feasible. Crane Mills primarily uses new and efficient forestry equipment (mostly 2016 or later) compliant with current regulatory standards which helps to reduce the emissions of criterial air pollutants from equipment use. While the project's emissions of criteria pollutants are not expected to exceed CAAQS or NAAQS thresholds, because the project would generate emissions, it would contribute to the environmental significance conclusion in the Program EIR; therefore, for the purposes of CEQA compliance, this PSA/Addendum notes the impact as potentially significant and unavoidable.

Crane Mills may use portable biomass processing technologies in place of pile burning, pursuant to Mitigation Measure GHG-2. Evaluation of criteria air pollutant emissions from these technologies conducted by Ascent (2022) indicates that smoke and criteria air pollutant emissions can be substantially reduced, compared to open pile burning. Use of an air curtain burner, carbonator, and gasifier substantially reduce reactive organic gas (ROG) and PM emissions when compared to pile burning, ranging between a 71 and 100 percent reduction. For nitrogen oxides (NO_X) reductions, air curtains and carbonation are estimated to reduce NO_X emissions by at least 73 and 93 percent, respectively. NO_X reductions are only marginally lower for biomass processed through gasification with a 3 percent reduction compared to pile burning (Ascent 2022). Based on available information about emissions from specialized biomass processing technologies, these technologies would substantially reduce generation of PM, toxic air contaminants (TACs), and in some scenarios greenhouse gas emissions, compared to open pile burning. Impact AQ-1 is still recognized as potentially significant and unavoidable because of uncertainties in the extent the biomass processing technologies would be used.

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 Program EIR. However, within the boundary of the project area, the air quality conditions and air basins 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. SPRs applicable to this impact are AD-4, and AQ-1 through AQ-6. RCDTC proposes to revise SPRs AQ-4, AQ-6, and AD-4.

SPR AQ-4 would be revised to limit vehicle and equipment speeds on unpaved roadways to 25 miles per hour, unless fugitive dust emissions are visibly occurring (then vehicle speeds would be reduced to no more than 15 miles per hour). All other elements of SPR AQ-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AQ-4 and would maintain the overall requirements of avoiding and minimizing the creation of

fugitive dust through treatment vehicle use of unpaved roadways and vehicles tracking out dust, silt, or mud onto public roadways. In addition, Crane Mills would wet unpaved areas if road use creates excessive fugitive dust, as required by SPR AQ-4. For the reasons described, proposed revisions to SPR AQ-4 would not result in a substantially more severe significant effect related to emissions of criteria air pollutants than what was covered in the Program EIR.

RCDTC proposes to revise requirements under SPR AQ-6 for prescribed burning activities such that IAPs would be prepared that include elements appropriate for the size and scope of the burn to ensure personnel and public safety. IAP elements may include 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 proposed revisions to SPR AQ-6 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts to air quality would remain consistent because an IAP would be prepared that is appropriate for the size and scope of the burn. Additionally, prescribed burn safety procedures would be required pursuant to the CAL FIRE Burn Permit (Form LE-5), the Smoke Management Plan (as required by SPR AQ-2), and while reporting to the Prescribed Fire Information Reporting System. For these reasons, revisions to SPR AQ-6 would not result in substantially more severe effects related to emissions of criteria air pollutants than what was covered in the Program EIR.

Pursuant to SPR AD-4, Crane Mills would notify the public of prescribed burning treatment activities with signs posted at trail entrances. In addition, Crane Mills would notify USFS of the prescribed burning treatment and request that USFS issue a press release regarding the proposed timing of the prescribed burning. SPR AD-4 as originally written requires that details regarding prescribed burning are published in a local newspaper or other widely distributed media source three days prior to prescribed burning; this language has been removed from the SPR for the Crane Mills project because it is infeasible due to the lack of local daily newspaper circulation or social media presence. All other elements of SPR AD-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AD-4 and would maintain the overall requirements of public notification for prescribed burning. For the reasons described, proposed revisions to SPRs AQ-6, AQ-4, and AD-4 would not result in a substantially more severe significant effect related to emissions of criteria pollutants than what was covered in the Program EIR.

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.

IMPACT AQ-2

Use of mechanical equipment during initial and ongoing maintenance treatments could expose people, such as hikers and recreationalists using trails and campgrounds near the project area, to diesel PM emissions. However, treatment activities would not take place near the same people for an extended period such that prolonged exposure would occur. The potential to expose people to diesel PM emissions was examined in the Program EIR. Diesel PM emissions from the proposed treatments are within the scope of the Program EIR because the exposure potential is the same as analyzed in the Program EIR. The types and amount of equipment that would be used, as well as the duration of use, during proposed treatments are also consistent with those analyzed 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 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 the same, as described above. SPRs applicable to this impact are AQ-1, HAZ-1, NOI-4, and NOI-5. 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.

IMPACT AQ-3

Ground disturbing treatment activities (e.g., use of vehicles and mechanical equipment) have the potential to result in emissions of naturally occurring asbestos (NOA)-containing fugitive dust if NOA is present in soils. The potential to expose people to NOA-containing fugitive dust emissions was examined in the Program EIR. Most of the treatment

areas are not located on soil types where NOA would be present; however, portions of the project area are underlain by serpentine soils (See Section 4.6, "Geology, Soils, Paleontology, and Mineral Resources"; USGS 2011) and serpentine soils were observed during the reconnaissance-level survey for biological resources. 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 TCAPCD.

Potential NOA exposure from the proposed treatments is within the scope of the activities and impacts addressed in the Program EIR because the treatment activities and intensity of ground disturbance are consistent with what was analyzed 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 NOA exposure impact is also the same. SPRs applicable to this impact are AQ-1, AQ-4, and AQ-5.

RCDTC proposes to revise SPR AQ-4 to limit vehicle and equipment speeds on unpaved roadways to 25 miles per hour, unless fugitive dust emissions are visibly occurring (then vehicle speeds would be reduced to no more than 15 miles per hour). All other elements of SPR AQ-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AQ-4 and would maintain the overall requirements of avoiding and minimizing the creation of fugitive dust through treatment vehicle use of unpaved roadways and vehicles tracking out dust, silt, or mud onto public roadways. In addition, Crane Mills would wet unpaved areas if road use creates excessive fugitive dust, as required by SPR AQ-4. RCDTC proposes to revise requirements under SPR AQ-6 for prescribed burning activities such that IAPs would be prepared that include elements appropriate for the size and scope of the burn to ensure personnel and public safety. IAP elements may include 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 proposed revisions to SPR AQ-6 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts to air quality would remain consistent because an IAP would be prepared that is appropriate for the size and scope of the burn. Additionally, prescribed burn safety procedures would be required pursuant to the CAL FIRE Burn Permit (Form LE-5), the Smoke Management Plan (as required by SPR AQ-2), and while reporting to the Prescribed Fire Information Reporting System. Impacts on other resources would not occur as a result of these revisions, because SPR AQ-6 is not required to reduce environmental effects to any other resources from implementation of the project. For the reasons described, proposed revisions to SPR AQ-4 and AQ-6 would not result in a substantially more severe significant effect related to emissions of naturally occurring asbestos-containing fugitive dust than what was covered in the Program EIR.

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.

IMPACT AQ-4

Prescribed burning during initial and ongoing maintenance treatments could expose people to toxic air contaminants (TACs). This was examined in the Program EIR. SPRs applicable to prescribed burning are designed to minimize the risk of exposing people to smoke, which includes TACs; however, prescribed burning during initial and ongoing maintenance treatments could still expose people to TACs. This potential exposure risk was examined as an impact in the Program EIR and found to be significant and unavoidable after the application of the SPRs and all feasible mitigation measures. Unpredictable changes in weather can occur during prescribed burns resulting in short-term exposure of people to concentrations of TAC and associated levels of acute health risk with a Hazard Index greater than 1.0. The duration and parameters of the proposed prescribed burns are within the scope of the activities addressed in the Program EIR. Within the TCAPCD, air quality conditions are consistent with those analyzed in the Program EIR for Tehama County. Therefore, the potential for exposure to toxic air contaminants is also within the scope of 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 air quality conditions and air basins 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. SPRs applicable to this impact are AD-4, AQ-1, AQ-2, and AQ-6.

In addition, RCDTC proposes to revise SPR AD-4. Crane Mills would notify the public of prescribed burning treatment activities with signs posted at trail entrances. In addition, Crane Mills would notify USFS of the prescribed burning treatment and request that USFS issue a press release regarding the proposed timing of the prescribed burning. SPR AD-4 as originally written requires that details regarding prescribed burning are published in a local newspaper or other widely distributed media source three days prior to prescribed burning; this language has been removed from the SPR for the Crane Mills project because it is infeasible due to the lack of local daily newspaper circulation or social media presence. All other elements of SPR AD-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AD-4 and would maintain the overall requirements of public notification for prescribed burning. RCDTC proposes to revise requirements under SPR AQ-6 for prescribed burning activities such that IAPs would be prepared that include elements appropriate for the size and scope of the burn to ensure personnel and public safety. IAP elements may include 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 proposed revisions to SPR AQ-6 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts to air quality would remain consistent because an IAP would be prepared that is appropriate for the size and scope of the burn. Additionally, prescribed burn safety procedures would be required pursuant to the CAL FIRE Burn Permit (Form LE-5), the Smoke Management Plan (as required by SPR AQ-2), and while reporting to the Prescribed Fire Information Reporting System. Impacts on other resources would not occur as a result of these revisions, because SPR AQ-6 is not required to reduce environmental effects to any other resources from implementation of the project. The proposed revisions to SPR AQ-6 are shown in underline and strikethrough in the MMRP (Attachment A). For the reasons described, proposed revisions to SPR AD-4 and AQ-6 would not result in a substantially more severe significant effect related to exposing people to toxic air contaminants than what was covered in the Program EIR.

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 Program EIR. 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.

IMPACT AQ-5

Use of diesel-powered equipment during vegetation treatments could expose people to objectionable odors from diesel exhaust. The potential to expose people to objectionable odors from diesel exhaust was examined in the Program EIR. Consistent with the Program EIR, 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. This impact is within the scope of the Program EIR because the equipment that would be used and the duration of use under the proposed project are consistent with what was analyzed 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 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 the same, as described above. SPRs applicable to this impact are AQ-1, HAZ-1, NOI-4, and NOI-5. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT AQ-6

Prescribed burning during initial and ongoing maintenance treatments could expose people to objectionable odors. SPRs applicable to prescribed burning are designed to minimize the risk of exposing people to smoke, which includes objectionable odors; however, prescribed burning during initial and ongoing maintenance treatments could still expose people to objectionable odors. Use of diesel-powered equipment during vegetation treatments could also

expose people to objectionable odors from diesel exhaust. Consistent with the Program EIR, 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. The potential to expose people to objectionable odors was examined in the Program EIR and was found to be significant and unavoidable after the application of all feasible mitigation measures because short-term exposure to odorous smoke emissions from unpredictable weather changes could occur. This impact is within the scope of the Program EIR because the equipment that would be used and the duration of use under the proposed project are consistent with what was analyzed 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 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 the same, as described above. SPRs applicable to this impact are AD-4, AQ-1, AQ-2, and AQ-6.

RCDTC proposes to revise requirements under SPR AQ-6 for prescribed burning activities such that IAPs would be prepared that include elements appropriate for the size and scope of the burn to ensure personnel and public safety. IAP elements may include 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 proposed revisions to SPR AQ-6 would not result in any new or substantially more severe significant impacts than were analyzed in the Program EIR. Impacts on air quality would remain consistent because an IAP would be prepared that is appropriate for the size and scope of the burn. Additionally, prescribed burn safety procedures would be required pursuant to the CAL FIRE Burn Permit (Form LE-5), the Smoke Management Plan (as required by SPR AQ-2), and while reporting to the Prescribed Fire Information Reporting System. Impacts on other resources would not occur as a result of these revisions, because SPR AQ-6 is not required to reduce environmental effects to any other resources from implementation of the project. RCDTC proposes to revise SPR AD-4. Crane Mills would notify the public of prescribed burning treatment activities with signs posted at trail entrances. In addition, Crane Mills would notify USFS of the prescribed burning treatment and request that USFS issue a press release regarding the proposed timing of the prescribed burning. SPR AD-4 as originally written requires that details regarding prescribed burning are published in a local newspaper or other widely distributed media source three days prior to prescribed burning; this language has been removed from the SPR for the Crane Mills project because it is infeasible due to the lack of local daily newspaper circulation or social media presence. All other elements of SPR AD-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AD-4 and would maintain the overall requirements of public notification for prescribed burning. For the reasons described, proposed revisions to SPR AD-4 and AQ-6 would not result in a substantially more severe significant effect related to exposing people to objectionable odors than what was covered in the Program EIR.

All feasible measures to prevent and minimize smoke odors, as well as exposure to smoke odors, are included in SPRs. No additional mitigation measures are feasible, and this impact would remain potentially significant and unavoidable, as explained in the Program EIR. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW AIR QUALITY IMPACTS

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP Program EIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.2.1, "Environmental Setting," and Section 3.2.2, "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 and revisions to SPRs constitute a change to the SPRs presented in the Program EIR. However, within the boundary of the project area, the existing environmental conditions pertinent to air quality 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, are consistent with those covered in the Program EIR. The inclusion of areas outside of the CalVTP treatable landscape and revisions to SPRs would not give rise to any new significant impacts related to air quality.

4.4 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	AD-3 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	AD-3 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	AD-3 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	Yes	AD-3	NA	LTS	No	Yes

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.	☐	☐	☐

Discussion

Consistent with SPR CUL-1, a records search of the approximately 47,314-acre project area was conducted at the Northeast Information Center (NEIC) on November 21, 2023 (NEIC File No.: NE23-493). The records search revealed 18 previously recorded cultural resources; 10 precontact archaeological sites, three historic-era archaeological sites, two multicomponent archaeological sites containing both historic and prehistoric elements, one multicomponent site

with both historic-era archaeology and standing structures, and two multicomponent sites with prehistoric and historic-era archaeological elements and standing structures. One of the historic features, Bodkin Cabin (P-52-000932) has been evaluated as appearing eligible for the National Register of Historic Places.

Consistent with SPR CUL-2, an updated Native American contact list was obtained from the Native American Heritage Commission (NAHC). On December 21, 2023, letters or emails inviting the tribes to consult were mailed to the eight tribal representatives indicated by NAHC. A December 7, 2023, search of NAHC's sacred lands database returned negative results.

Mooretown Rancheria responded in a letter dated January 4, 2024, and stated that they are not aware of any known cultural resources in the project site. A response was also received from the Paskenta Band of Nomlaki Indians in a letter dated January 9, 2024, who requested formal consultation with the lead agency. An email was sent on January 25, 2024, to the Paskenta Band of Nomlaki Indians to arrange a meeting. To date the Paskenta Band of Nomlaki Indians has not responded to the January 25th email. Consultation is ongoing.

IMPACT CUL-1

Proposed treatment activities include prescribed burning and mechanical treatments, which could damage historical resources. The NEIC records search revealed one built-environment feature (Bodkin Cabin P-52-000932) which has been evaluated as appearing eligible for NRHP-listing; therefore, it is a resource under CEQA. While the cabin is not on Crane Mills property, a portion of the identified site is on the property; therefore, associated features or structures could be located within the treatment area. Consistent with SPR CUL-7, the Bodkin Cabin, which consists of a cabin and the associated structures, would be avoided by all project activities. Additional 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, and these structures would 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 Program EIR. This impact is within the scope of the Program EIR because treatment activities and the intensity of associated ground disturbance are consistent with those analyzed 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 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 on historical resources is also the same, as described above. SPRs applicable to this impact are AD-3, CUL1, CUL-7, and CUL-8. 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.

IMPACT CUL-2

Vegetation treatment would include prescribed burning and mechanical treatments using heavy equipment that could churn up the surface of the ground as vegetation is removed; these activities may result in damage to known or previously unknown archaeological resources. The NEIC records search revealed 18 previously recorded archaeological sites, consisting of precontact sites (lithic scatters, rock tools, bedrock milling features, hearths/pits, habitation debris), historic-era archaeological sites (foundations and structure pads, wells and cisterns, dams and trash scatters), and multicomponent sites containing both historic and prehistoric elements. None of these sites have been evaluated for eligibility for listing in the CRHR. Therefore, it is not known whether the sites are considered resources under CEQA. A survey would be conducted before treatment pursuant to SPR CUL-4 to identify any previously unrecorded archeological resources and identified resources would 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 Program EIR. This impact was identified as significant and unavoidable in the Program EIR 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 proposed treatment project, SPRs and Mitigation Measure CUL-2 would require identification and protection of resources. 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, because the project could result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources, it could contribute to the environmental significance conclusion in the Program EIR; therefore, for purposes of CEQA compliance, this PSA/Addendum notes the impact as potentially significant and unavoidable.

This impact is within the scope of the Program EIR because treatment activities and intensity of ground disturbance of the treatment project are consistent with those analyzed 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 potential for discovery of archaeological resources outside the treatable landscape is essentially the same as within the treatable landscape; therefore, the potential impact on unique archaeological resources or subsurface historical resources is also the same, as described above. SPRs applicable to this impact include AD-3, CUL-1 through CUL-5 and CUL-8. Mitigation Measure CUL-2 would also apply to the proposed project to protect any inadvertent discovery. 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.

IMPACT CUL-3

Native American tribes in Tehama County were contacted during the week of December 18, 2023 and included Dennis Ramirez, Chairperson, Mechoopda Indian Tribe; Kyle McHenry, Cultural Director, Mechoopda Indian Tribe; Guy Taylor, Mooretown Rancheria of Maidu Indians; Benjamin Clark, Chairperson, Mooretown Rancheria of Maidu Indians; Laverne Bill, THPO, Paskenta Band of Nomlaki Indians; Andrew Alejandre, Chairperson, Paskenta Band of Nomlaki Indians; Jack Potter, Chairperson, Redding Rancheria; and Roy Hall, Chairperson, Shasta Nation. Responses were received from the Paskenta Band of Nomlaki Indians and Mooretown Rancheria of Maidu Indians. In their response, Mooretown Rancheria of Maidu Indians stated that they are not aware of any known cultural resources in the project site. The Paskenta Band of Nomlaki Indians requested formal consultation with the lead agency. An email was sent on January 25, 2024, to the Paskenta Band of Nomlaki Indians to arrange a meeting. To date a response has not yet been received and the consultation is ongoing.

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 Program EIR. This impact is within the scope of the Program EIR because the intensity of ground disturbance of the treatments is consistent with that analyzed in the Program EIR. As explained in the Program EIR, 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 Program EIR. 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 on tribal cultural resources is also the same, as described above. SPRs applicable to this impact include AD-3, CUL-1 through CUL-6 and CUL-8. 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.

IMPACT CUL-4

Vegetation treatment activities would include mechanical treatments using heavy equipment; these treatments may use skid steers, excavators, and dozers, which could uncover human remains. The NEIC 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 Program EIR. This impact is within the scope of the Program EIR because the treatment activities and

intensity of ground disturbance are consistent with those analyzed in the Program EIR. Additionally, consistent with the Program EIR, 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 Program EIR. However, within the boundary of the project area, the potential for uncovering human remains during implementation of the treatment project outside the treatable landscape is essentially the same as within the treatable landscape ; therefore, the impact related to disturbance of human remains is also the same, as described above. SPR AD-3 is applicable to this impact. 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.

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 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. The inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts related to archaeological, historical, or tribal cultural resources.

4.5 BIOLOGICAL RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	LTSM	Impact BIO-1, pp 3.6-131 – 3.6-138	Yes	AQ-3 AQ-4 AQ-5 BIO-1 BIO-2 BIO-7 BIO-9 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HYD-5	BIO-1a BIO-1b	LTSM	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTSM (all wildlife species except bumble bees) PSU (bumble bees)	Impact BIO-2, pp 3.6-138 – 3.6-184	Yes	BIO-1 BIO-2 BIO-3 BIO-4 BIO-5 BIO-10 HAZ-5 HAZ-6 HYD-1 HYD-3 HYD-4 HYD-5	BIO-2a BIO-2b BIO-2e BIO-2g BIO-3a BIO-3b BIO-3c BIO-4	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	LTSM	Impact BIO-3, pp 3.6-186 – 3.6-191	Yes	BIO-1 BIO-2 BIO-3 BIO-4 BIO-5 BIO-6 BIO-9 HYD-4 HYD-5	BIO-3a BIO-3b BIO-3c	LTSM	No	Yes
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTSM	Impact BIO-4, pp 3.6-191 – 3.6-192	Yes	BIO-1 HYD-1 HYD-3 HYD-4	BIO-4	LTSM	No	Yes
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTSM	Impact BIO-5, pp 3.6-192 – 3.6-196	Yes	BIO-1 BIO-4 BIO-5 BIO-10 BIO-11	BIO-5	LTSM	No	Yes

Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
				HYD-1 HYD-4				
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife, Including Nesting Birds	LTS	Impact BIO-6, pp 3.6-197 – 3.6-198	Yes	BIO-1 BIO-2 BIO-3 BIO-4 BIO-5 BIO-12	NA	LTS	No	Yes
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	NI	Impact BIO-7, pp 3.6-198 – 3.6-199	Yes	AD-3	NA	NI	No	Yes
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	NI	Impact BIO-8, pp 3.6-199 – 3.6-200	No	None	NA	--	--	--

Notes: LTS = less than significant; LTSM = less than significant with mitigation; NI = no impact; PSU = potentially significant and unavoidable; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact; None = there are SPRs and/or MMs identified in the Program EIR 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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[Identify new impact here, if applicable; add rows as needed.]	☐	☐	☐

Discussion

Pursuant to SPR BIO-1, Ascent biologists conducted a data review of project-specific biological resources, including habitat and vegetation types, special-status plants, special-status wildlife, and sensitive habitats (e.g., sensitive natural communities, wetlands) with potential to occur in the project area. USFS Existing Vegetation (EVEG) mapping was used to identify the habitat/vegetation types including mature forest within the project area. The EVEG mapping occurred prior to the August Complex Fire and does not reflect the current habitat distribution within the project area. There is no available post fire mapping for a more current distribution of vegetation types within the project area. Based on the SPR BIO-1 survey, the acreage per habitat type has shifted to more barren habitat due to areas that burned with high-severity during the fire.

The project area is located within the Northern California Coast Range ecoregion. The project area ranges in elevation from approximately 2,800 feet to 6,400 feet. Habitat types within the project area and total acreage of each type are presented in Table 4.5-1. Habitat types were classified according to the California Wildlife Habitat Relationships (CWHR) classification system.

Table 4.5-1 Habitat Types in the Project Area

Habitat Type	Fuel Break Acreage	Ecological Restoration Acreage	Total Acreage
Forest/Woodland			
Klamath Mixed Conifer	1,532.3	31,227.3	32,759.6
Montane Hardwood	34.9	4,344.0	4,378.9
Montane Hardwood-Conifer	4.7	2,751.7	2,756.4
White Fir	165.3	1,567.2	1,732.5
Ponderosa Pine	72.5	739.8	812.2
Red Fir	12.6	258.1	270.7
Douglas-Fir	—	211.5	211.5
Blue Oak-Foothill Pine	—	171.3	171.3
Jeffrey Pine	2.6	18.0	20.6
Klamath Mixed Conifer	—	7.9	7.9
Coastal Oak Woodland	—	4.2	4.2
Closed-Cone Pine-Cypress	—	3.5	3.5
Subalpine Conifer	—	1.0	1.0
Forest/Woodland Total	—	—	***43,130.4***
Shrub/Scrub			
Montane Chaparral	127.8	1,802.1	1,929.9
Mixed Chaparral	56.5	1,266.4	1,322.9
Chamise-Redshank Chaparral	—	55.3	55.3
Alpine Dwarf-Shrub	—	12.8	12.8
Shrub/Scrub Total	—	—	***3,321.0***
Herbaceous			
Perennial Grassland	138.8	161.0	299.8
Annual Grassland	0.3	254.3	254.6
Herbaceous Total	—	—	***554.4***
Riparian/Wetland/Water			
Montane Riparian	0.3	41.5	41.8
Wet Meadow	—	2.9	2.9
Riverine	—	1.9	1.9
Lacustrine	—	0.8	0.8
Wetland/Riparian Total	—	—	***47.4***
Developed/Disturbed/Barren[1]			
Barren	16.4	240.1	256.5
Urban	—	3.9	3.9
Developed/Disturbed/Barren Total	—	—	***260.4***
		All Habitat Types Total	**47,313.5**

[1] Most urban and barren habitats would not be targeted for treatment; however, due to the scale of the habitat mapping, some areas mapped as urban or barren may contain habitats that would be treated (e.g., forested areas close to urban development).

EVEG mapping, which this table is based on, occurred prior to the August Complex Fire and does not reflect the current habitat distribution within the project area. There is no available post fire mapping for a more current distribution of vegetation types within the project area.

Source: USFS EVEG vegetation data, compiled by Ascent in 2024.

A list of special-status plant and wildlife species with potential to occur in the project area and vicinity was compiled by reviewing the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database records for the US Geological Survey (USGS) quadrangles containing and surrounding the project area (24 quadrangles total; CNDDB 2023; CNPS 2023) and Appendix BIO-3 (Table 10a, Table 10b, and Table 19) in the Program EIR (Volume II) for special-status plants and wildlife that could occur in the Northern California Coast Ranges ecoregion. A list of sensitive natural communities with potential to occur in the project area was compiled by completing a CNDDB search of the USGS quadrangles containing and surrounding the project area (CNDDB 2023) and reviewing Table 3.6-18 (pages 3.6-70 – 3.6-71) in the Program EIR (Volume II) for sensitive natural communities that could occur in the Northern California Coast Ranges ecoregion in the habitat types mapped in the project area.

Ascent conducted reconnaissance surveys on November 7 and 8, 2023, to identify and document sensitive resources (e.g., aquatic habitat, riparian habitat, sensitive natural communities) and to assess the suitability of habitat in the project area for special-status plant and wildlife species. Mapped habitat types were verified where possible and incidental wildlife observations were recorded.

Based on implementation of SPR BIO-1 (including review of occurrence data, species ranges, habitat requirements for each species, results of reconnaissance-level surveys, and habitat present within the project area as assessed during reconnaissance surveys) a list of all special-status species with potential to occur near the proposed project was assembled (Attachment B). These species are discussed in detail under Impact BIO-1 (special-status plants) and Impact BIO-2 (special-status wildlife).

IMPACT BIO-1

Initial vegetation treatments and ongoing maintenance treatments could result in direct or indirect adverse effects on the 31 special-status plant species with suitable habitat in the project area (Attachment B), if present within treatment areas. Potential impacts resulting from maintenance activities would be generally the same as those resulting from initial vegetation treatments because the same treatment activities would occur. However, treatment frequency and intensity can determine whether effects on certain plant species are beneficial or adverse. Initial treatment that reduces overgrowth, opens the tree canopy to allow more light penetration, or removes invasive competitors can be beneficial for special-status plant populations; however, repeated treatments at too frequent intervals can have adverse effects on those same special-status plants. The potential for treatment activities to result in adverse effects on special-status plants was examined in the Program EIR.

SPR BIO-7 would apply to all treatment activities, including maintenance treatments, and protocol-level surveys for special-status plants would be conducted pursuant to *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018a) before implementing treatments in any habitat potentially suitable for special-status plants. Pursuant to SPR BIO-7, surveys would not be required for those special-status plants not listed under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA) if the target special-status plant species is an herbaceous annual species, stump-sprouting species, or geophyte species. The specific treatments may be carried out during the dormant season for that species or when the species has completed its annual life cycle, provided the treatment would not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment, or destroy seedbanks, stumps, or roots, rhizomes, bulbs and other underground parts of special-status plants. This would require that either surveys are conducted to determine presence or absence of special-status plants, or treatments in habitat potentially suitable for these special-status plants is restricted to the dormant season for these species. If surveys are not conducted to determine presence or absence of special-status plants, treatments would also be limited to activities that do not cause disturbance below the soil surface (i.e., manual treatments, herbicide application, prescribed broadcast burning). In some portions of the project area where mechanical vegetation treatment is desirable, the presence of habitat for special-status plants may unnecessarily or infeasibly constrain treatment implementation. In this case, surveys could be conducted to determine presence or absence and, depending on the results, may provide greater flexibility with timing and types of treatments that may be implemented.

Fourteen of the 31 special-status plant species that may occur within the project area are herbaceous annual species or geophytes, and are not listed under CESA or ESA, as indicated in Attachment B. Impacts on these species would be avoided by implementing non-ground-disturbing treatment activities (i.e., manual treatments, herbicide application, prescribed broadcast burning) during the dormant season (i.e., when the plant has no aboveground parts). This would typically occur after seed set and before germination. Typically, germination would occur after the first significant rainfall (approximately 0.5 inches) and cold snap, which generally takes place between October–December (Levine et. al 2008). Ground-disturbing treatment activities (i.e., mechanical treatments) and pile burning may result in impacts on these plant species even when dormant and would not be conducted without prior implementation of SPR BIO-7. If non-ground-disturbing treatments cannot be completed in the dormant season and would be implemented during the growing period of these annual and geophyte species, protocol surveys (per SPR BIO-7) and avoidance of any identified plants (per Mitigation Measures BIO-1a and BIO-1b) must be applied, as described below. Fifteen of the 31 special-status plant species that have potential to occur within the project area are perennial or moss species and could not be avoided in the same manner as herbaceous annual species or geophytes; therefore, protocol-level surveys under SPR BIO-7 would be necessary to identify and avoid these species prior to implementing treatment activities regardless of the timing of treatments. Pursuant to SPR HYD-3, prescribed herbivory treatments would be excluded within 50 feet of environmentally sensitive areas such as waterbodies, wetlands, or riparian areas using temporary fencing and/or active herding. Although these measures would avoid and minimize many adverse effects on special-status plants typically associated with wet areas, it is reasonable to expect that all habitat potentially suitable for these seven species cannot be avoided and establishing WLPZs and protective buffers would not fully prevent impacts on the species. Where avoidance of special-status plant habitats would not be feasible, SPR BIO-7 would be implemented.

Where protocol-level surveys are required (per SPR BIO-7) and special-status plants are identified during these surveys, Mitigation Measures BIO-1a and BIO-1b 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 the species. Within this buffer, no treatment activities would occur unless a qualified RPF or biologist determines, based on substantial evidence, that the species would benefit from treatment in the occupied habitat area. For example, some special-status plants may benefit from select manual treatment or herbicide to control intruding invasive vegetation, and other plants may benefit from the introduction of prescribed broadcast burning. In the case of plants listed under CESA or ESA, the determination of beneficial effects would need to be made in consultation with CDFW and/or USFWS. If treatments are determined to be beneficial and would be implemented in areas occupied by special-status plants, per the specific conditions described under 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 would be carried out by a qualified RPF or botanist. Therefore, habitat function for special-status plants would be maintained because initial treatment activities and ongoing maintenance would be designed to ensure that treatments retain habitat conditions suitable for the special-status plant species such that these plants persist. If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided, then Mitigation Measure BIO-1c would apply and compensatory mitigation would be required.

Seven species – serpentine rockcress (*Boechera serpenticola*), three-fingered morning-glory (*Calystegia collina* ssp. *tridactylosa*), Klamath sedge (*Carex klamathensis*), dwarf soaproot (*Chlorogalum pomeridianum* var. *minus*), Stebbins' harmonia (*Harmonia stebbinsii*), Tehama County western flax (*Hesperolinon tehamense*), and Mt. Tedoc leptosiphon (*Leptosiphon nuttallii* ssp. *howellii*) – are broad to strict endemics to serpentine soils, having 85 percent to all of the species' known occurrences on serpentine soils (Stafford 2020). These species are known to occur or may be present within treatment areas that contain serpentine soils. Seven species – Jepson's milk-vetch (*Astragalus rattanii* var. *jepsonianus*), big-scale balsamroot (*Balsamorhiza macrolepis*), Indian Valley brodiaea (*Brodiaea rosea*), Oregon fireweed (*Epilobium oreganum*), adobe-lily (*Fritillaria pluriflora*), Colusa layia (*Layia septentrionalis*), and Sanhedrin Mountain stonecrop (*Sedum sanhedrinum*) – have a weak to strong affinity for serpentine soils, having 50 to 85 percent of known occurrences on serpentine soils. These species are known to occur or may be present within treatment areas that contain serpentine soils. Serpentine soils have been mapped in the eastern section of the project area. Ground disturbing treatment activities (i.e., mechanical treatments) and pile burning would not occur within any

areas containing these soils pursuant to SPR AQ-5. Areas with serpentine soils requiring avoidance of ground disturbance would be delineated using maps prepared by the Natural Resources Conservation Service (NRCS) in the *Distribution of Ultramafic Soils* (NRCS 2014), or by conducting site-specific surveys for serpentine soils. Site-specific surveys would be conducted by a qualified RPF or soil scientist and would include updated mapping of serpentine soils within the project area as well as documentation of diagnostic features of serpentine soils such as the presence of serpentinite rock fragments and changes in the density, diversity, and productivity of vegetation. Non-ground-disturbing treatment activities (i.e., manual treatments, herbicide application, broadcast burning) could occur on serpentine soils; therefore, protocol surveys (per SPR BIO-7) and avoidance of any identified plants (per Mitigation Measures BIO-1a and BIO-1b) must be implemented on serpentine soils.

Seven special-status plant species have been identified previously and are known to occur within the project area: dwarf soaproot, big-scale balsamroot, Konocti manzanita (*Arctostaphylos manzanita* ssp. *elegans*), Sanhedrin Mountain stonecrop, scabrid alpine tarplant (*Anisocarpus scabridus*), Snow Mountain willowherb (*Epilobium nivium*), and Tehama County western flax. If surveys pursuant to SPR BIO-7 determine these species are still present, implementation of Mitigation Measure BIO-1b would be required to avoid loss of individual plants. For the annual and geophytic species, treatments may be conducted within this buffer outside of the growing season (e.g., after species has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the underground parts of special-status plants or destroy the seedbank. For the perennial species, this would require establishing a no-disturbance buffer around the area occupied by the 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 would 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 would be sufficient to avoid loss or damage, or that a larger buffer is necessary to sufficiently protect plants from the treatment activity.

Pursuant to Mitigation Measure BIO-1b, impacts on special-status plants must be avoided unless it is determined that the plants would benefit and habitat function would improve from treatment activities. Konocti manzanita is a special-status plant with a CRPR of 1B.3 that is known to occur in the project area. Konocti manzanita is an obligate seeder, meaning that this species has no ability to resprout from the base of a dead stem and thus are entirely dependent on seed germination (Keeley 2008; Anacker et al. 2011). Individual Konocti manzanita plants would typically die following even low severity fire, but this species has seeds that require fire for adequate germination and seedling establishment. Plants take about 4 to 5 years to produce seed but may take longer (12 plus years) in areas of substantial postfire browsing of seedlings. The fire return interval for this species is 30 to 125 years with an average of 50 years in chaparral vegetation communities. The fire return interval within woodland and forested vegetation communities is 5 to 30 years. (Abrahamson 2014). Prescribed broadcast burning conducted in areas within the normal fire return interval (i.e., excluding areas within the August Complex Fire) for Konocti manzanita could benefit this species by stimulating seed germination to help sustain populations in the future. Additional prescribed burn maintenance treatments in known Konocti manzanita areas would not occur for a minimum of 30 years in chaparral vegetation communities and a minimum 7 years in woodland and forested vegetation communities, which reflects the habitat's average historic fire return interval, allowing timing for plants to establish and produce seed.

Broadcast burn methods within Konocti manzanita's fire return interval are expected to benefit these populations because burns would facilitate the natural reproductive strategy of these obligate seeders. In some areas with heavy existing fuel loads, to make fuel conditions safe for broadcast burning, initial treatment would include manual or mechanical treatment followed by pile burning to process the biomass. Although there is some uncertainty regarding the effects of pile burning on the underground seed bank of manzanita chaparral habitat areas, the seeds of Konocti manzanita could potentially be damaged by pile burn treatment. While research on the effects of pile burning on seed banks in chaparral ecosystems is limited, in pine forest ecosystems, most seeds have been documented to lose viability within areas of pile burning except for a small number of seeds from exotic and ruderal species (Korb et. al., 2004). The seed bank beneath a pile burn would be exposed to high temperatures for relatively long durations during burning, compared to a broadcast burn. Konocti manzanita seeds in the seed bank under burn piles may reach temperatures that exceed the lethal threshold of 140 degrees Celsius (Abrahamson 2014). Therefore, strategies to minimize damage to the seed bank beneath burn piles would be employed, pursuant to Mitigation Measure BIO-1b. These strategies would be designed by a qualified RPF, biologist, or botanist based on site-specific conditions and

may include placing burn piles away from manzanita individuals (i.e., 50 feet or greater), placing burn piles in previously disturbed areas (e.g., roads), minimizing the number of burn piles, burning piles in the same location, or extinguishing burn piles after 8 hours of burning (Busse et. al., 2013). With implementation of these strategies, adverse impacts on the seed bank would be minimized.

Pursuant to Mitigation Measure BIO-1b, impacts on special-status plants must be avoided unless it is determined that the plants would benefit and habitat function would improve from treatment activities. Jepson's dodder (*Cuscuta jepsonii*) and oval-leaved viburnum (*Viburnum ellipticum*) are special-status plant species with CRPR of 1B.2 and 2B.3 and may occur in the project area. Jepson's dodder is a parasitic annual plant species with the host plant species of mahala mat (*Ceanothus prostrates*) that occurs in openings in pine and mixed conifer forests of the lower montane zone. Oval-leaved viburnum occurs in chaparral and lower montane coniferous forests. The habitats that both mahala mat and oval-leaved viburnum occupy contain fire-adapted plant communities - the canopy openings created by recurring fires benefit mahala mat and oval-leaved viburnum (Kierstead 2022a, 2022b). Manual and mechanical treatment activities that open the canopy and prescribed broadcast burning within the normal fire return interval of suitable habitat could benefit the oval-leaved viburnum and mahala mat which in turn would benefit Jepson's dodder.

In addition, pursuant to SPR HYD-5, nontarget vegetation and special-status species would be protected from herbicides. Only ground-level application would occur (no aerial spraying). Only herbicides labeled for use in aquatic environments would be used when working in areas where there is a possibility the herbicide could come into direct contact with water. Herbicides would be applied by hand and only during low-flow periods or when seasonal streams are dry. Herbicides, aquatic and terrestrial, would not be used within Watercourse and Lake Protection Zones (WLPZs) or equipment limitation zones (established per SPR HYD-5).

Conclusion

The potential for treatment activities to result in adverse effects on special-status plants was examined in the Program EIR. This impact on special-status plants is within the scope of the Program EIR because the treatment activities and intensity of disturbance resulting from treatment activities are consistent with those analyzed 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 and habitat characteristics present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape); therefore, the potential impact on special-status plants is also the same, as described above.

SPRs that apply to this impact are AQ-3, AQ-4, AQ-5, BIO-1, BIO-2, BIO-7, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, and HYD-5. Biological resource mitigation measures that apply to project impacts under Impact BIO-1 are Mitigation Measure BIO-1a and BIO-1b.

RCDTC proposes to revise SPRs AQ-4 and BIO-9. SPR AQ-4 would be revised to limit vehicle and equipment speeds on unpaved roadways to 25 miles per hour, unless fugitive dust emissions are visibly occurring (then vehicle speeds would be reduced to no more than 15 miles per hour). All other elements of SPR AQ-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AQ-4 and would maintain the overall requirements of avoiding and minimizing the creation of fugitive dust through treatment vehicle use of unpaved roadways and vehicles tracking out dust, silt, or mud onto public roadways. In addition, Crane Mills would wet unpaved areas if road use creates excessive fugitive dust, as required by SPR AQ-4. For the reasons described, proposed revisions to SPR AQ-4 would not result in a substantially more severe significant effect related to special-status plants than what was covered in the Program EIR. RCDTC also proposes to revise SPR BIO-9, which is applicable to this project. SPR BIO-9 would be revised to clarify that vehicle cleaning standards apply to the project area. This revision provides added clarification and consistency with definitions presented in the Project Overview (Section 1.1) and would not result in a change in implementation of the SPR from the original intent of the Program EIR. Additionally, RCDTC proposes to revise SPR BIO-9 to clarify that "significant infestations of invasive plant species" are those rated as moderate or high invasives by Cal-IPC or designated as noxious weeds by the California Department of Food and Agriculture. This revision also provides added clarification consistent with the intent of the Program EIR and

would not result in a change in the implementation of the SPR. Changes to SPRs AQ-4 and BIO-9 would not result in a substantially more severe significant effect related to special-status plants than what was covered in the program EIR.

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.

IMPACT BIO-2

Initial vegetation treatments and follow-up maintenance treatments could result in direct or indirect adverse effects on special-status wildlife species and habitat suitable for these species within a treatment area, as described in the following sections. Potential impacts resulting from maintenance treatments would generally be the same as those resulting from initial vegetation treatments because the same activities would occur; however, maintenance treatments would generally treat smaller acreages and use less equipment than the initial treatments.

California Red-Legged Frog

California red-legged frog (*Rana draytonii*) is documented to occur in western Tehama County to the northeast of the project area (CNDDB 2023). The eastern portions of the project area (e.g., Valentine Ridge, eastern Log Spring Ridge, Raglin Ridge, South Fork of South Fork Elder Creek) are within the range of the species (CNDDB 2024). Aquatic breeding habitat potentially suitable for California red-legged frog is present in perennial streams (e.g., South Fork of South Fork Elder Creek) with deep pools in portions of the project area within the species' range. Aquatic nonbreeding habitat suitable for California red-legged frog is also potentially present (e.g., streams without deep pools, ephemeral drainages). Studies have demonstrated that California red-legged frogs remain close to aquatic habitat during the nonbreeding season and typically do not move more than a few hundred feet into upland habitats (Bulger et al. 2003; Fellers and Kleeman 2007). While California red-legged frogs generally remain close to breeding habitat during the nonbreeding season, adults and juveniles are known to travel through upland habitat (e.g., riparian, woodland, grassland) to move between breeding and nonbreeding sites (e.g., other ponds, deep pools in streams, moist and cool riparian understory, burrows) for access to refugia and foraging habitat, or to disperse to new breeding locations. Movements through upland habitat are generally made during the wet season (i.e., October through March) and these movements are often made at night. California red-legged frogs typically move up to approximately 1 mile over the course of a wet season; however, during migration, California red-legged frogs may travel long distances from aquatic habitat and typically travel in straight lines irrespective of vegetation types. They have been documented to move greater than 1.7 miles between aquatic habitat sites (Bulger et al. 2003). Upland habitat surrounding aquatic habitat, and dispersal habitat for the species is also present within the project area.

Pursuant to SPR BIO-1, if it is determined that adverse effects on California red-legged frog can be clearly avoided by physically staying out of habitat suitable for the species, or by conducting treatments outside of the season when California red-legged frogs are present, then no further action would be required. Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II streams would be implemented and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III watercourses (e.g., ephemeral drainages). Also pursuant to SPR HYD-4, pile burning and ignitions of broadcast burns would be conducted outside of the WLPZs. Wetland delineations would be conducted to determine if wetland, spring, and seep habitats are present within a treatment area. Where aquatic habitats are delineated, no-disturbance buffers of at least 25 feet would be implemented (refer to Impact BIO-4 below). While treatments would not occur within aquatic habitat, SPR HYD-4 prohibits heavy equipment operation, equipment fueling, placement of burn piles, and fire ignition within WLPZs. Additionally, pursuant to SPR HYD-3, prescribed herbivory treatments would be excluded within 50 feet of areas identified as environmentally sensitive areas such as waterbodies, wetlands, or riparian areas using temporary fencing or active herding. However, injury or death of California red-legged frog from prescribed burning, mechanical treatment, manual tree and snag removal, herbicide application, or prescribed herbivory would not be completely avoided because the species is known to occur farther than 150 feet from aquatic habitat year-round. In addition, manual tree and snag removal, and mechanical treatments (using boom operated masticators from outside of the WLPZ) may be implemented within WLPZs, which may result in adverse effects on California red-legged frogs. Therefore, per SPR BIO-1, all adverse effects cannot be clearly avoided, and SPR BIO-10 would apply.

The potential for initial treatment activities and ongoing maintenance treatments to result in adverse effects on California red-legged frog was examined in the Program EIR.

Pursuant to SPR BIO-10, protocol-level surveys following the guidelines provided by USFWS (2005) would be conducted prior to manual, mechanical, prescribed burning, herbicide application, and prescribed herbivory treatments, or presence of California red-legged frog would be assumed within suitable habitat in the portions of the project area that are within the range of the species. If California red-legged frogs are detected during SPR BIO-10 surveys, or presence is assumed within the project area, Mitigation Measure BIO-2a would be required.

Within the portions of project area that are within the range of California red-legged frog, under Mitigation Measure BIO-2a, pretreatment surveys and biological monitoring for manual, mechanical, prescribed burning, herbicide application, and prescribed herbivory treatment activities would be required within 300 feet of Class I or Class II watercourses and other sensitive habitat areas (e.g., wet intermittent watercourses, wet seeps) that provide aquatic habitat within 1.7 miles of California red-legged frog breeding habitat during the wet season (October 1 through April 1) or within 24 hours following a rain event greater than one quarter inch. Surveys and monitoring would be performed year-round prior to manual, mechanical, prescribed burning, herbicide application, and prescribed herbivory treatment activities within 30 feet of Class I or Class II watercourses and within or adjacent to other sensitive habitat areas (e.g., wet Class III watercourses, wet seeps) that provide suitable aquatic habitat. If California red-legged frogs are detected in a treatment area, a no-disturbance buffer of 100 feet would be implemented around the individual, USFWS would be contacted, and the animal allowed to leave on its own. Also, burn piles within 300 feet of breeding habitat would be inspected prior to ignition. In addition, within 1.7 miles of California red-legged frog breeding habitat, all mechanized equipment, including track chippers, and herbicide treatments would shut down within 300 feet of Class I, Class II watercourses and other sensitive habitat areas (e.g., wet intermittent watercourses, wet seeps) for 24 hours following any precipitation event of 0.20 inch to less than 1 inch' 48 hours following any precipitation event 1 inch to less than 2 inches; and 72 hours following any precipitation event greater or equal to 2 inches.

Habitat function for California red-legged frog would be maintained because impacts on oak woodland habitat would be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3). Mitigation Measure BIO-4 would further reduce potential impacts by requiring protection of state and federally protected wetlands, which include aquatic habitat for California red-legged frog (see Impact BIO-4). Furthermore, impacts from herbicide treatments would be avoided or minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. Also, habitat function for California red-legged frogs would be maintained because initial treatment activities and ongoing maintenance treatments would not occur within aquatic habitat, and treatments within WLPZs would be limited pursuant to SPR HYD-4 (e.g., no mechanical treatment, retention of at least 75 percent surface cover within the WLPZ, no fire ignition). Additionally, pursuant to SPR BIO-4, at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within riparian corridors would be maintained. Up to four snags greater than 14 inches DBH and downed woody debris larger than 18 inches in diameter and 12 feet long would be retained (see Section 2.1.2, "Treatment Activities"). Pursuant to Mitigation Measure BIO-2a, if California red-legged frog is found during pre-treatment surveys or enters a treatment area during treatment activities, the specific habitat features used by the frog when detected would be evaluated by a qualified RPF or biologist for habitat retention and prioritized for use in meeting the retention standards for the project. These retention standards would maintain habitat for California red-legged frogs.

Pursuant to Mitigation Measure BIO-2a, and because this species is listed under ESA, RCDTC must notify USFWS about its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained after treatments. For the reasons summarized above, RCDTC determined that implementation of treatments would maintain habitat function for California red-legged frog and contacted USFWS to seek technical input on this determination, as required. On July 3, 2024, RCDTC contacted Nora Papian and Megan Cook at USFWS describing the measures that would be taken to avoid mortality, injury, and disturbance to California red-legged frogs and to maintain habitat function in compliance with Mitigation Measure BIO-2a. This was forwarded to John Peters, Fish and Wildlife Biologist for the Arcata USFWS office. Responses received on September 19, 2024 from the USFWS indicated that the measures were generally sufficient to protect federally listed wildlife species and additional recommended actions for consideration by the RCDTC would be sent in the future. At the time of the final

PSA/Addendum these recommended actions had not been received; however, the RCDTC would consider any recommended actions provided by the USFWS for inclusion into the project following approval of the PSA/Addendum.

This impact of the proposed project on California red-legged frog is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Foothill Yellow-Legged Frog

Aquatic habitat potentially suitable for foothill yellow-legged frog (*Rana boylii*) North Coast Distinct Population Segment (DPS) is present within Class I and Class II watercourses in the project area, and the species has been documented to occur within and adjacent to the project area on Thomes Creek and Flood Creek (Attachment B). Foothill yellow-legged frog is known to occur within upland habitat up to approximately 200 feet away, but typically no more than 50 to 70 feet away, from aquatic habitat (CDFW 2018b). The documented occurrences of foothill yellow-legged frogs at greater distances from aquatic habitat are from locations (i.e., north coastal California) that are wetter than most of the project area; therefore, foothill yellow-legged frog is likely to occur within 50 to 75 feet of Class I and Class II watercourses that contain suitable habitat within the project area.

Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II streams would be implemented, which prohibits pile burning, and applies limits on other activities (e.g., movement of mechanical equipment) that could result in injury or mortality of foothill yellow-legged frog. Additionally, pursuant to SPR HYD-3, prescribed herbivory treatments would be excluded within 50 feet of areas identified as environmentally sensitive areas such as waterbodies, wetlands, or riparian areas using temporary fencing or active herding. However, these measures may not result in full avoidance of foothill yellow-legged frogs if mechanical treatment activities (using boom operated masticators from outside of the WLPZ) or manual tree and snag removal are implemented within the WLPZ. In addition, where the slope dictates that the WLPZ would be less than 75 feet from top of bank, frogs may occur outside of the WLPZ, and manual, mechanical, pile burning, and prescribed herbivory treatment may result in injury or mortality of frogs. The potential for treatment activities, including maintenance treatments, to result in adverse effects on foothill yellow-legged frog was examined in the Program EIR.

Per SPR BIO-1, to fully avoid habitat potentially suitable for foothill yellow-legged frog, a 75-foot no-disturbance buffer would be implemented prior to commencement of treatment activities. This would be done by flagging along perennial streams (Class I and Class II watercourses) with habitat suitable for foothill yellow-legged frog within and adjacent to the project area. If the 75-foot no-disturbance buffer is determined to be infeasible for individual treatment areas, then SPR BIO-10 would apply, and focused visual encounter surveys for foothill yellow-legged frog would be conducted by a qualified RPF or biologist within 75 feet of aquatic habitat suitable for the species prior to treatment activities. If foothill yellow-legged frogs are not detected within the treatment area during focused surveys, then no mitigation for the species would be required. If foothill yellow-legged frogs are identified during focused surveys, Mitigation Measure BIO-2b would be implemented.

Under Mitigation Measure BIO-2b, pre-activity surveys, biological monitoring, temporary work stoppages, and other measures to avoid injury to or mortality of foothill yellow-legged frog would be implemented.

Habitat function for foothill yellow-legged frog would be maintained because initial treatments and ongoing maintenance treatments would not occur within aquatic habitat, treatments within WLPZs would be limited (e.g., retention of at least 75 percent surface cover) (SPR HYD-4), and operations would be prohibited within 30 feet of a watercourse channel. Mitigation Measure BIO-4 would further reduce potential impacts by requiring protection of state and federally protected wetlands, which include aquatic habitat for foothill yellow-legged frog (see Impact BIO-4). Furthermore, impacts from herbicide treatments would be avoided or minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. Also, pursuant to SPR BIO-4, at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within riparian corridors would be maintained.

This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Northwestern Pond Turtle

Aquatic habitat potentially suitable for northwestern pond turtle (*Actinemys marmorata*, previously western pond turtle, *Emys marmorata*) is present within larger streams (e.g., Thomes Creek) in lower elevation (below approximately 5,000 feet) portions of the project area, and this species could use upland habitat near these features. Northwestern pond turtles may nest in upland habitat up to approximately 1,500 feet from aquatic habitat; however, most nests occur within 330 feet of water (Holland 1994). Nests are found in areas with low growing or sparse vegetation, open canopy in clay or silt/sandy soils (Attachment B), and on east-facing (Reese and Welsh 1997) or south-facing areas that are less than 25 percent slope (Buskirk 2002). Due to the steep slopes in the project area near watercourses, nests are not anticipated to occur greater than 330 feet from aquatic habitat. This species is proposed for federal threatened status under the ESA with proposed the 4(d) rule (USFWS 2023), which would provide certain exceptions to take prohibitions in the ESA for projects that have beneficial or negligible impacts to the northwestern pond turtle, including wildfire suppression and management projects such as the Crane Mills VTP.

Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II watercourses would be implemented, and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and Class IV (e.g., ephemeral drainages) watercourses. Additionally, pursuant to SPR HYD-3, prescribed herbivory treatments would be excluded within 50 feet of areas identified as environmentally sensitive areas such as waterbodies, wetlands, or riparian areas using temporary fencing or active herding. However, these measures may not avoid injury or mortality of northwestern pond turtles or loss of nests from proposed treatment activities because the species may occur further than 150 feet from Class I and Class II watercourses year-round. In addition, mechanical treatments (using boom operated masticators from outside of the WLPZ), tree planting, or manual tree and snag removal may be implemented within the WLPZ. Therefore, per SPR BIO-1, all adverse effects cannot be clearly avoided from manual, mechanical, prescribed burning, and prescribed herbivory treatment within 330 feet of aquatic habitat. If it is not feasible to avoid these treatments within 330 feet of aquatic habitat, SPR BIO-10 would apply. The potential for initial treatment activities and ongoing maintenance treatments to result in adverse effects on northwestern pond turtles was examined in the Program EIR.

Pursuant to SPR BIO-10, focused visual encounter surveys for northwestern pond turtle would be conducted by a qualified RPF or biologist within aquatic and upland nesting habitat areas suitable for the species before treatment activities that could potentially result in injury or mortality of northwestern pond turtles or loss of nests (i.e., pile burning, mechanical treatments, manual tree and snag removal). If northwestern pond turtles are identified during focused surveys, Mitigation Measure BIO-2b for this species would be implemented.

If work occurs before the northwestern pond turtle is listed under the ESA, or if this species is listed with the proposed 4(d) ruling, Mitigation Measure BIO-2b would apply to northwestern pond turtle. Under Mitigation Measure BIO-2b, flagging areas for avoidance, relocation of individual animals by a qualified RPF or biologist with a valid CDFW scientific collecting permit, and/or other measures recommended by a qualified RPF or biologist as necessary to avoid injury to or mortality of northwestern pond turtles would be required. If this species is listed under the ESA and the proposed 4(d) rule exceptions are not included, Crane Mills would review the project-specific implementation measures in the MMRP to determine if the measures are sufficient to avoid mortality, injury, or disturbance of northwestern pond turtles.

Habitat function for northwestern pond turtle would be maintained because initial treatment activities and ongoing maintenance treatments would not occur within aquatic habitat, and pursuant to SPR HYD-4, treatments within WLPZs would be limited (e.g., retention of at least 75 percent surface cover). Mitigation Measure BIO-4 would further reduce potential impacts by requiring protection of state and federally protected wetlands, which include aquatic habitat for northwestern pond turtle (see Impact BIO-4). Furthermore, impacts from herbicide treatments would be avoided and minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. Also, pursuant to SPR BIO-4, at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within riparian corridors would be maintained. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Northern Spotted Owl

Northern spotted owl (*Strix occidentalis caurina*) has been documented to nest in multiple locations throughout the project area and vicinity (CNDDB 2023). Many of these nest locations were in stands that burned with high intensity during the August Complex Fire and are no longer suitable for nesting by northern spotted owl. However, portions of the project area and vicinity that burned at lower intensity, or did not burn at all, still contain suitable nesting habitat, and spotted owls have been detected in these areas post fire (CNDDB 2023).

Treatment activities that include the use of heavy equipment, multiple vehicles, or loud hand tools like chainsaws (i.e., loud and continuous noise), could result in disturbance of nesting northern spotted owls in adjacent suitable habitat, if these activities occur during the sensitive nesting season (February 1 – July 31) (USFWS 2020a). Treatment activities that would degrade or remove habitat for northern spotted owl could result in disturbance of nesting owls if these activities occur from February 1–August 31. The potential for treatment activities to result in adverse effects on special-status birds was examined in the Program EIR.

Pursuant to SPR BIO-1 and because northern spotted owl nesting occurrences are located within and adjacent to the project area, a qualified RPF or biologist would determine if nesting habitat occurs within 0.25 miles of the treatment area. In addition, the qualified RPF or biologist would review northern spotted owl occurrence data in the CNDDB, and contact USFS biologists from Mendicino National Forest to obtain any recent survey and occurrence data for northern spotted owl that have not been made publicly available on national forest lands, to determine whether a documented northern spotted owl nesting occurrence is present within 0.25 mile of the treatment area.

If present, potential impacts on the documented nesting occurrence resulting from loud and continuous noise would be avoided by implementing a limited operating period within 0.25 mile of the occurrence during the northern spotted owl nesting season (February 1–August 31) for prescribed burning activities, mechanical treatments, and manual tree and snag removal. Potential impacts resulting from treatments within 0.25 mile of nest or roost habitat suitable for northern spotted owl would be avoided by implementing a limited operating period within 0.25 mile of this habitat if it is expected to be degraded or removed from February 1–August 31. Herbicide application would not result in adverse effects on nesting spotted owls in adjacent habitat because this activity would not involve the use of loud equipment or tools or visual disturbance stimuli (e.g., crews would include between 3 and 16 people).

If implementing the limited operating period (i.e., February 1–July 31 or February 1–August 31) in treatment areas within 0.25 mile of northern spotted owl nests or habitat, as described above, is determined to be infeasible, then SPR BIO-10 would apply. Protocol-level surveys for northern spotted owl would be conducted by a qualified RPF or biologist within a 0.25-mile buffer surrounding the treatment area in habitat suitable for the species before implementation of treatment activities. Surveys for northern spotted owl would be conducted pursuant to the *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls* (USFWS 2012), or the Crane Mills Northern Spotted Owl Resource Plan (NSORP) as approved by CAL FIRE and CDFW.

If nesting northern spotted owls are not identified during protocol-level surveys, then further mitigation for the species would not be required. If nesting northern spotted owls are identified during protocol-level surveys, Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2a, a no-disturbance buffer of 0.25 mile would be established around active northern spotted owl nests and no treatment activities would occur within this buffer.

Habitat function for northern spotted owl would be maintained because ecological restoration treatments, which make up the vast majority of the project area (35,661 acres), would retain live hardwoods greater than 14 inches DBH up to 5 percent of residual basal area including hardwoods with basal hollows or other complex structural features. Up to four snags per acre that are greater than 14 inches DBH and downed woody debris larger than 18 inches diameter and 12 feet long would also be retained. In addition, pursuant to Mitigation Measure BIO-2a, the project would follow the habitat retention standards in *Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California, Attachment B: Take Avoidance Analysis- Interior* (USFWS 2019) or the Crane Mills Northern Spotted Owl Resource as approved by CAL FIRE and CDFW.

Although, the USFWS defers to CAL FIRE for review of northern spotted owl on timber harvest projects (USFWS 2019), Mitigation Measure BIO-2a requires that the RCDTC and Crane Mills notify the USFWS and CDFW regarding its determination that implementation of treatments would maintain habitat function for northern spotted owl. RCDTC and

Crane Mills contacted CDFW and USFWS to seek technical input on the project and notify the agencies of this determination, on July 3, 2024. The notification described the measures that would be taken to avoid mortality, injury, and disturbance to northern spotted owl and to maintain habitat function in compliance with Mitigation Measure BIO-2a. Kate Belleville, Environmental Scientist with the Northern Region of CDFW responded on July 23, 2024 indicating that CDFW has no comments, questions, or concerns with the Crane Mills project. John Peters, Fish and Wildlife Biologist for the Arcata USFWS office responded on September 19, 2024 and indicated that the measures were generally sufficient to protect federally listed wildlife species and additional recommended actions for consideration by the RCDTC would be sent in the future. At the time of the final PSA/Addendum these recommended actions had not been received; however, the RCDTC would consider any recommended actions provided by the USFWS for inclusion into the project following approval of the PSA/Addendum. Therefore, no refinements to the measures in Mitigation Measure BIO-2a were made to the PSA and Addendum based on CDFW or USFWS input.

This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Other Special-Status Birds

Other special-status bird species have potential to occur or are known to occur in the project area: American goshawk (*Accipiter gentilis*), golden eagle (*Aquila chrysaetos*), loggerhead shrike (*Lanius ludovicianus*), olive-sided flycatcher (*Contopus cooperi*), white-tailed kite (*Elanus leucurus*), and yellow-warbler (*Setophaga petechia*) (Attachment B).

Treatment activities involving manual, mechanical, prescribed burning, herbicide application, and prescribed herbivory treatment conducted during the nesting bird season (February 1–August 31) could result in direct loss of active nests if trees or shrubs containing nests are disturbed, removed, or burned. For nests within vegetation that would not be removed, treatment activities including manual treatments, mechanical treatments, prescribed burning, herbicide application, and prescribed herbivory, could result in disturbance to active nests from auditory and visual stimuli (e.g., heavy equipment, chainsaws, vehicles, personnel) potentially resulting in abandonment and loss of eggs or chicks. The potential for treatment activities to result in adverse effects on special-status birds was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on habitat suitable for nesting special-status birds can be clearly mitigated by physically avoiding habitat suitable for the species or conducting treatments outside of a season of sensitivity (e.g., nesting bird season), then no further measures would be required. Adverse effects on nesting special-status birds would be clearly avoided for treatments that occur outside of the nesting bird season (February 1–August 31).

If conducting some treatments outside of the nesting bird season is determined to be infeasible, then SPR BIO-10 would apply, and focused nesting bird surveys for American goshawk, golden eagle, loggerhead shrike, olive-sided flycatcher, white-tailed kite, and yellow warbler would be conducted by a qualified RPF or biologist before implementation of treatment activities within habitat suitable for these species. Established survey protocols would be followed for American goshawk (USFS 2006). Like northern spotted owl, American goshawk is associated with mature forest habitats that may be present within USFS land adjacent to the project area that was subject to low intensity burn during the August Complex Fire. Prior to implementing SPR BIO-10 for this species, Crane Mills would contact USFS biologists from Mendicino National Forest to obtain any recent survey and occurrence data for American goshawk on USFS lands adjacent to the project area that have not been made publicly available (e.g., in the CNDDB).

If no active special-status 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 (for golden eagle and white-tailed kite) and BIO-2b (for American goshawk, loggerhead shrike, olive-sided flycatcher, and yellow warbler) would be implemented.

Under Mitigation Measures BIO-2a or BIO-2b, a no-disturbance buffer of at least 1 mile would be established around active golden eagle nests, 0.25 mile for American goshawk and white-tailed kite, and at least 100 feet around the nests of other special-status birds. No treatment activities would occur within these buffers until the chicks have fledged as determined by a qualified RPF or biologist. 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 retain hardwoods with basal holes or complex structural features greater than 14 inches DBH up to five percent of residual basal area, which would be the most likely features to be used by these species due to the cover provided by larger trees. Additionally, up to four snags greater than 14 inches DBH would be retained per acre in ecological restoration treatment areas. Furthermore, treatments within riparian habitat (which may provide nesting habitat for special-status bird species, including yellow warbler) that is included within a WLPZ would be limited pursuant to SPR HYD-3 (e.g., prescribed herbivory treatments would be excluded from environmentally sensitive areas using temporary fencing or active herding) and SPR HYD-4 (e.g., no mechanical treatment, retention of at least 75 percent surface cover). On July 3, 2024, RCDTC and Crane Mills notified CDFW by email describing the measures that would be taken to avoid mortality, injury, and disturbance to golden eagle and white-tailed kite, and to maintain habitat function in compliance with Mitigation Measure BIO-2a. No refinements to measures resulted from this consultation.

This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Special-Status Fish

Naturally occurring barriers to fish passage downstream of the project area on Thomes Creek and Elder Creek prevent the anadromous Central Valley Spring Run Chinook salmon evolutionary significant unit (*Oncorhynchus tshawytscha*) and the Central Valley DPS of steelhead (*Oncorhynchus mykiss irideus)* from migrating into most of the project area. Chinook salmon are documented to spawn within South Fork Cottonwood Creek downstream from the project area, although habitat is marginal (CNDDB 2023), and steelhead are documented to spawn in South Fork Cottonwood Creek and portions of Red Bank Creek (CNDDB 2023). The portions of these creeks that flow within and along the northern portion of the project area lack barriers to fish passage and the species may be present in these creeks and tributaries where perennial water is present and flow is sufficient to maintain water temperatures suitable for these species. The potential for initial treatment activities and ongoing maintenance treatments to result in adverse effects on special-status fish was examined in the Program EIR.

Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II watercourses would be implemented. SPR HYD-4 prohibits operating heavy equipment, crossing watercourses unless dry, equipment fueling, placement of burn piles, and fire ignition within the WLPZ. In addition, SPRs HAZ-5, HAZ-6, and HYD-5, would apply to herbicide application treatments and would require a spill response plan, compliance with all herbicide application regulations, location of mixing sites away from waterways, restriction of application during precipitation events, and other measures. Additionally, pursuant to SPR HYD-3, prescribed herbivory treatments would be excluded within 50 feet of areas identified as environmentally sensitive areas such as waterbodies, wetlands, or riparian areas using temporary fencing or active herding. These measures would reduce the likelihood that contaminated runoff due to treatment activities would reach the habitat for special-status fish. Adverse effects on special-status fish would be clearly avoided through implementation of SPR HAZ-5, SPR HAZ-6, SPR HYD-4, and SPR HYD-5. Therefore, pursuant to SPR BIO-1, further mitigation would not be required.

Habitat function for special-status fish would be maintained because initial treatment activities and ongoing maintenance treatments would not occur within aquatic habitat and treatments within WLPZs adjacent to the project area would be limited pursuant to SPR HYD-4 (e.g., entry of mechanical equipment, retention of at least 75 percent surface cover). In addition, pursuant to SPR BIO-4, vegetation removal that could reduce stream shading and increase stream temperatures would be avoided. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Monarch Butterfly

The project area is outside of overwintering range of monarch butterfly (*Danaus plexippus*); however, it is within the breeding range of the species and contains open woodland and chaparral in lower elevation portions of the project area where milkweed (*Asclepias* spp.) hostplants have been documented to occur (Crane Mills 2023). Manual treatment (other than tree planting), mechanical treatment, prescribed burning, herbicide application, and prescribed herbivory could result in temporary removal of floral resources, including monarch host plants (i.e., milkweed), or in direct mortality of

monarch butterflies. The potential for treatment activities to result in adverse effects on monarch butterflies was examined in the Program EIR.

Treatments would occur in habitat that may provide foraging or breeding functions for monarchs (i.e., locally native milkweed). Monarch foraging habitat and habitat suitable for milkweed would largely be present in grasslands in the project area, and grassland habitat comprises approximately 554.4 acres or 1.1 percent of the total project area (Table 4.5-1). Removal of milkweed would not be targeted during prescribed herbivory treatments and livestock may avoid eating milkweed because the plants are unpalatable and contain glycosides, which are toxic to cattle, goats, and sheep (Hall et al. 2020). Therefore, direct loss of monarch eggs or larvae during prescribed herbivory treatments would be limited. Per SPR BIO-1, if it is determined that adverse effects on monarch butterflies can be clearly avoided by conducting broadcast burning, mechanical treatments, manual treatments (other than tree planting), and herbicide application outside of the season of sensitivity or physically avoiding habitat for these species, then implementation of additional measures would not be required. Adverse effects on monarch butterflies would be clearly avoided during broadcast burning, mechanical treatments, manual treatments, and herbicide application that occur outside of the monarch breeding season (April 1–October 31) (Xerces 2019). This period may be adjusted by a qualified biologist or RPF to reflect local timing of monarch breeding, as recommended by Xerces Society (2019). If broadcast burning, mechanical treatments, manual treatments (other than tree planting), and herbicide application occur within monarch butterfly habitat during the breeding season, then implementation of SPR BIO-10 would be required before treatment could occur. Pursuant to SPR BIO-10, presence of monarch butterflies would be assumed or focused surveys for monarchs would be conducted before implementation of treatment activities.

If focused surveys are conducted and monarch butterflies are not detected, then further mitigation for the species would not be required. If monarch butterflies are detected during focused surveys, or are assumed to be present, then Mitigation Measure BIO- BIO-2e would be implemented. Under Mitigation Measure BIO-2e, focused surveys for monarch butterfly hostplants would be required, and hostplants would be retained during the sensitive season where feasible.

Habitat function for monarch butterflies would be maintained because initial treatments and ongoing maintenance treatments would retain host plants for the species where feasible and all habitat suitable for monarch butterflies in the project area would not be treated in any one year (i.e., treatments in the project area would occur over the course of several years). This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Special-Status Bumble Bees

Crotch bumble bee (*Bombus crotchii*) and western bumble bee (*Bombus occidentalis*) have the potential to occur in the project area (Attachment B). Crotch bumble bee and western bumble bee have seen declines across the historical range of these species; however, the project area is in the current range of both species (CDFW 2023a). Crotch bumble bee has been documented to occur historically (1978) within the project region near Paskenta (CNDDB 2023); however, while the project is within the range of western bumble bee, this species has not been documented to occur in the project region (CNDDB 2023). This lack of documented occurrences does not rule out the potential for the species to occur because bumble bees may be underreported in databases.

Bumble bees have three basic habitat requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. Portions of the project area may contain sufficient floral resources to support nest colonies and may contain suitable overwintering habitat (overwintering habitat for Crotch bumble bee and western bumble bee is poorly understood, as discussed in more detail below). These species generally nest underground and may use abandoned rodent burrows and similar features within flying distance to sufficient floral resources to establish nest colonies. Solitary queens may overwinter under leaf litter or in small cavities approximately an inch into loose soil. The flight season for Crotch bumble bee queens is from February to March, the period where the colony is most active is April through August, and the gyne (i.e., young queens) flight season is September through October (CDFW 2023a). The flight season for western bumble bee queens is from February to March, the period where the colony is most active is April through September, and the gyne (i.e., young queens) flight season is October through November (CDFW 2023a).

The flight season for workers and males is when the colony is active. Crotch bumble bees and western bumble bees are generalist foragers that feed from open flowers with short corollas (Xerces 2018). Prescribed burning, manual treatments, mechanical treatments, herbicide application, and prescribed herbivory within habitat suitable for these species could result in temporary removal of floral resources, as well as injury and mortality through inadvertent destruction of bumble bee nest colonies or overwintering sites. Treatments in meadows, grasslands, chaparral, and oak woodlands that provide foraging and nesting habitat are expected to occur. In addition, mechanical treatments would occur within suitable overwintering habitat (e.g., areas under trees with insulating litter). The potential for treatment activities to result in adverse effects on special-status bumble bees was examined in the Program EIR.

In the Program EIR, Mitigation Measure BIO-2g was proposed as a feasible set of actions to reduce potentially significant impacts on special-status bumble bees. This would require avoidance of prescribed burning and application of herbicide treatment during the flight/nesting season and retention of suitable habitat in the range of these species, or compensation for unavoidable loss of special-status bumble bees or habitat function. Recognizing the difficulty in detecting overwintering and nesting bumble bees and determining the occurrence and severity of impacts, very limited information about nesting and overwintering behaviors, and the statewide scope of potential effects analyzed, for purposes of good faith and full disclosure under CEQA, this impact was designated in the Program EIR as potentially significant and unavoidable. However, addressing this potential effect at a project-specific level may result in a different significance conclusion if evidence supports it.

Per SPR BIO-1, because prescribed burning, mechanical treatments, and herbicide application would occur within habitat types that are suitable for these species (meadows, grasslands, oak woodlands, chaparral, and surrounding forested areas) impacts cannot be avoided and implementation of SPR BIO-10 would be required prior to treatment activities. Under SPR BIO-10, a habitat evaluation for special-status bumble bees would be conducted based on the recommendations within *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023a). If the habitat evaluation determines that habitat for these species is present within a treatment area, focused surveys for Crotch bumble bee and western bumble bee would be conducted following the recommendations in CDFW 2023a. In lieu of conducting focused surveys (e.g., if conducting a valid survey is not feasible), the potential presence of Crotch bumble bee and western bumble bee in the project area may be assumed. This survey guidance does not provide survey methods for determining the presence of overwintering bumble bees because overwintering habitat is not well understood (CDFW 2023a).

If special-status bumble bees are detected, then Mitigation Measure BIO-2g would be implemented and a no-disturbance buffer would be established around active nests. No treatments would occur within that buffer. If presence of special-status bumble bees is assumed within habitat suitable for these species as determined pursuant to SPR BIO-10, then Mitigation Measure BIO-2g would apply and prescribed burning, mechanical treatments, and herbicide application would be avoided during the colony active season (April through August for Crotch bumble bee and April through September for western bumble bee). Furthermore, Mitigation Measure BIO-2g includes additional measures to avoid mortality, injury, or disturbance to Crotch bumble bees and western bumble bees. These measures include conducting treatments in a patchy pattern to retain floral resources for active colonies and to provide refuge for overwintering bumble bees. Additional project-specific implementation has been added to Mitigation Measure BIO-2g based on feedback from CDFW, including restrictions on herbicide application techniques, specific guidance for chipped debris and burn pile placement, guidance for broadcast burning, and division of the project area such that the entirety of overwintering or colony habitat is not treated in a single year. With implementation of these measures, the potential for impacts to Crotch bumble bee and western bumble bee would be reduced to less-than-significant.

With implementation of Mitigation Measure BIO-2g and applicable SPRs, habitat function for Crotch bumble bee and western bumble bee would be maintained during and after treatment activities. Treatments would be designed and implemented in a patchy pattern to retain floral resources and provide refuge for overwintering bumble bees. Treatment activities in ecological restoration treatment areas would retain select logs and snags that provide wildlife habitat; some of these features may provide suitable nesting or overwintering sites for Crotch bumble bee and western bumble bee. The proposed vegetation treatments would not cause any conversion or loss of natural land cover or permanent soil disturbance that could remove availability of potential underground nesting or overwintering sites over the long term.

RCDTC and Crane Mills notified CDFW by email on July 3, 2024 to seek technical input on measures and the determination that habitat function would be maintained for Crotch bumble bee and western bumble bee. No changes to the proposed project-specific implementation under mitigation measure BIO-2g were made based on this consultation.

With implementation of Mitigation Measure BIO-2g and applicable SPRs, the impact of the project on habitat function for Crotch bumble bee and western bumble bee would be less than significant with mitigation. These potential effects would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

American Badger

Habitat potentially suitable for American badger (*Taxidea taxus*) is limited to grassland and open chaparral and woodlands in lower elevation portions of the project area (Attachment B). Treatment activities, including pile burning and mechanical treatments, could result in direct loss of active dens and potential loss of young, if present in treatment areas. Manual treatments (including tree and snag removal), broadcast burning, and herbicide application would likely not result in adverse effects on American badger dens because personnel would conduct these activities on foot; the likelihood of a den being inadvertently crushed or otherwise destroyed (i.e., burned by low intensity broadcast burning) would be very low. While the likelihood of a badger den being crushed by livestock would be low due to the size and depth of the burrows, the density of goats or sheep used for prescribed herbivory, the presence of humans and the associated herding and watch dogs, could result in interruption of feeding and potential loss of young during the American badger maternity season (February 15 through July 1; Bylo et al. 2014). This impact from prescribed herbivory would not likely occur from cattle grazing because the intensity human presence is low when compared to goats and sheep, and American badgers frequently burrow within rangelands where cattle are present. The potential for treatment activities to result in adverse effects on American badger was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on American badger can be clearly avoided by conducting treatments outside of a season of sensitivity or physically avoiding habitat for these species, then mitigation would not be required. However, because American badgers may use a den year-round (i.e., there is no season of sensitivity), and because den collapse would result in injury or mortality to badgers, implementation of SPR BIO-10 would be required before pile burning and mechanical treatments. Under SPR BIO-10, focused surveys would be conducted for American badger dens within habitat suitable for the species (i.e., grasslands, open chaparral and woodlands) by a qualified RPF or biologist prior to the start of pile burning and mechanical treatments. If American badger dens are not detected during focused surveys, then further mitigation for the species would not be required. If American badger dens are detected during focused surveys, Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2b, a no-disturbance buffer would be established around the den, the size of which would be determined by the qualified RPF or biologist and no treatment activities would occur within this buffer until the den is no longer occupied as determined by the qualified RPF or biologist.

Habitat function for American badger would be maintained because habitat suitable for the species within the lower elevation portions of the project area (i.e., grassland, open chaparral and woodlands) would be maintained or enhanced by increasing spacing and reducing shrub density. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Fisher

Fisher (*Pekania pennanti*) have been documented to occur near Valentine Ridge (CNDDB 2023), and an individual fisher was observed in the central portion of the project area during the SPR BIO-1 survey (Attachment B). Habitat suitable for fisher includes stands with high canopy closure, large trees and snags, large woody debris, large hardwoods, and multiple canopy layers. While habitat suitable for fisher was present in many portions of the project area before the August Complex Fire, habitat for the species only remains where the fire burned at low to moderate intensity. Fisher den habitat includes cavities within live trees or snags, rock piles, or woody debris piles, and fishers typically choose the largest feature within an area for denning. Some removal of habitat features that provide den sites suitable for fisher would be avoided. Live hardwoods greater than 14 inches DBH would be retained up to 5 percent of residual basal area including hardwoods greater than 14 inches DBH with basal hollows or other complex

structural features. Up to four snags per acre that are greater than 14 inches DBH and downed woody debris larger than 18 inches diameter and 12 feet long would also be retained. In addition, rock piles would not be subject to treatment activities.

Despite the retention standards above, trees and snags greater than 14 inches DBH may be removed, which could result in the destruction of fisher den sites. Outside of the breeding season, fishers would likely flee due to the presence of equipment, vehicles, or personnel, which would reduce the risk of their injury or mortality. Herbicide application and prescribed herbivory would not result in adverse effects on fisher dens because personnel would conduct these activities on foot, and the treatment would not result in the removal of potential den sites. However, prescribed burning, mechanical treatments, and manual snag and tree removal conducted during the fisher maternity season (i.e., the period during which young would be present in a den, approximately March 1–June 30) and within forest habitats suitable for fisher could result in destruction of active dens, or disturbance to active dens potentially resulting in abandonment and loss of young-not yet capable of fleeing. The potential for treatment activities, including maintenance treatments, to result in adverse effects on fisher was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on fisher can be clearly avoided by conducting treatments outside of a season of sensitivity (e.g., maternity season), then mitigation would not be required. Adverse effects on fishers would be clearly avoided for mechanical treatments and manual tree and snag removal that would occur outside of the fisher maternity season (March 1–June 30) and implementation of prescribed burning outside of March 1 through May 1 (USFWS 2020b). If conducting prescribed burning, mechanical treatments, and manual snag and tree removal outside of the fisher maternity season is determined to be infeasible, then SPR BIO-10 would apply. Presence of fishers would be assumed, or focused surveys for fishers would be conducted within those treatment areas prior to implementation of prescribed burning, mechanical treatments, and manual tree and snag removal.

Focused surveys (conducted by a qualified RPF or biologist) for fisher would include an initial denning habitat assessment, and if denning habitat is present, the use of trail cameras, track plates, or other non-invasive survey methods to determine whether fishers are present within the treatment area, or presence of the species may be assumed. If baited trail cameras are used, the qualified RPF or biologist should obtain any required permits. If focused surveys are conducted and denning habitat is not present or fishers are not detected, then further mitigation for the species would not be required. If fishers are detected during focused surveys, or presence is assumed then Mitigation Measure BIO-2b would be implemented.

Under Mitigation Measure BIO-2b, the presence of an active den site would be assumed, and a limited operating period would be applied that would prohibit mechanical treatments and manual tree and snag removal from March 1 to June 30, and prescribed burning from March 1 through May 1. Alternatively, surveys of potential den sites would be conducted by a qualified RPF or biologist to determine if an active den is located within a treatment area. If an active den is identified, a no-disturbance buffer would be established at a minimum distance of 100 feet or larger as determined by the qualified RPF or biologist based on the treatment activities, topographical and vegetative screening, and existing disturbance in the area. No treatment activities would occur within this buffer until the den is no longer occupied as determined by the qualified RPF or biologist.

Habitat function for fisher would be maintained because ecological restoration treatments, which make up most of the project area (35,661 acres) would retain live hardwoods greater than 14 inches DBH up to five percent of residual basal area including hardwoods with basal hollows or other complex structural features. Up to four snags per acre that are greater than 14 inches DBH and downed woody debris larger than 18 inches diameter and 12 feet long would also be retained. Additionally, rocky areas would not be targeted for vegetation treatment. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Special-Status Bats

Habitat potentially suitable for special-status bat species—pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*)—is present within forest habitat and rock outcrops in the project area (Attachment B). Per SPR BIO-1, if it is determined that adverse effects on special-status bats can be clearly avoided by conducting prescribed burning, mechanical treatments, and manual tree and snag removal 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 prescribed burning, mechanical treatments, and manual tree and snag removal outside of the bat maternity season (April 1–August 31; Caltrans 2004).

Prescribed burning, mechanical treatments, and manual tree and snag removal conducted within habitat suitable for bat roosting during the bat maternity season (April 1–August 31) could disturb active bat roosts from auditory and visual stimuli (e.g., heavy equipment, chain saws, vehicles, personnel) or smoke (e.g., prescribed burning) potentially resulting in abandonment of the roost and loss of young. Herbicide treatments, prescribed herbivory, and other manual treatments (e.g., tree planting) would be limited to ground-based methods, such as using a backpack sprayer; thus, these treatments would not result in substantial disturbance to special-status bat roosts because crews would range from 3–16 people. Although passenger vehicles and all-terrain vehicles would be utilized to transport crews to treatment areas, these vehicles would be limited to existing roads where special-status bat roosts would be less likely to occur or where there is existing disturbance from road use. The potential for treatment activities to result in adverse effects on special-status bats was examined in the Program EIR.

If prescribed burning, mechanical treatments, or manual tree and snag removal would occur during the bat maternity season, then SPR BIO-10 would apply, and focused surveys for these species would be conducted by a qualified RPF or biologist within habitat suitable for these species prior to initiation of treatment activities. If special-status bat roosts are identified during focused surveys, Mitigation Measure BIO-2b for special-status bats would be implemented.

Under Mitigation Measure BIO-2b, a no-disturbance buffer of 250 feet would be established around active pallid bat and Townsend's big-eared bat roosts and prescribed burning, mechanical treatments, and manual tree and snag removal would not occur within this buffer until the roost is no longer occupied as determined by the qualified RPF or biologist.

Habitat function for special-status bats would be maintained because ecological restoration treatments, which make up most of the project area (35,661 acres), would retain live hardwoods greater than 14 inches DBH up to 5 percent of residual basal area including hardwoods with basal hollows or other complex structural features. In addition, up to four snags per acre that are greater than 14 inches DBH would be retained. These larger trees and snags are the most likely structures for bat roosting, other than rock outcrops, which would also be maintained. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Northern California Ringtail

Northern California ringtail (*Bassariscus astutus raptor*) is primarily nocturnal, and typically occurs in riparian areas, forests (including stands of various ages), and shrub habitats (Attachment B). Potential denning habitat includes rock outcrops, crevices, snags, large hardwoods, large conifers, and areas of dense shrubs. Some removal of habitat features that provide den sites suitable for ringtail would be avoided. Live hardwoods greater than 14 inches DBH would be retained up to five percent of residual basal area including hardwoods greater than 14 inches DBH with basal hollows or other complex structural features. Up to four snags per acre that are greater than 14 inches DBH and downed woody debris larger than 18 inches in diameter and 12 feet long would also be retained. In addition, rock piles would not be subject to treatment activities. Despite these retention standards, some trees and snags greater than 14 inches DBH and areas of dense shrubs would be removed, which could result in ringtail injury or mortality. The potential for treatment activities, including maintenance treatments, to result in adverse effects on ringtail was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on ringtail can be clearly avoided by conducting treatments outside of a season of sensitivity (i.e., maternity season), then mitigation would not be required. Outside of the breeding season, resting ringtails would likely flee due to the presence of equipment, vehicles, or personnel, which would reduce the risk of their injury or mortality. Manual treatments, other than tree and snag removal, herbicide application, and prescribed herbivory would not result in adverse effects on ringtail dens because personnel would conduct these activities on foot, and the likelihood of a den being inadvertently destroyed would be very low. However, prescribed burning, mechanical treatments, and manual tree and snag removal conducted within habitat suitable for ringtail during the maternity season (i.e., the period during which young would be present in a den, approximately April 15–June 30) could result in destruction of active dens potentially resulting in injury or mortality of female ringtails, which are less

likely to flee from maternity dens, and loss of young not yet capable of fleeing. Adverse effects on ringtail would be clearly avoided for prescribed burning, mechanical treatments, and manual tree and snag removal in habitat suitable for ringtail that would occur outside of the ringtail maternity season (April 15–June 30) under SPR BIO-1.

If conducting prescribed burning, mechanical treatments, and manual tree and snag removal treatments within habitat suitable for ringtail outside of the ringtail maternity season is determined to be infeasible for certain treatment areas, then SPR BIO-10 would apply. Presence of ringtail would be assumed, or focused surveys for ringtail would be conducted within suitable habitats in the treatment area before implementation of prescribed burning, mechanical treatments, or manual tree and snag removal. Surveys for ringtail would include the use of trail cameras, track plates, or other non-invasive survey methods to determine whether ringtails are present within the treatment area and would be conducted by a qualified RPF or biologist with any required permits. If focused surveys are conducted, and ringtails are not detected, then further mitigation for the species would not be required. If ringtails are detected during focused surveys, Mitigation Measure BIO-2a would be implemented. Under Mitigation Measure BIO-2a, surveys for ringtail dens would be conducted, and if active dens are found, a 0.25-acre no-disturbance buffer would be established around the den. The size of this buffer may be adjusted through consultation with CDFW. No treatment activities would occur within this buffer until the den is no longer occupied as determined by the qualified RPF or biologist.

If the presence of ringtail within the treatment area is assumed, then implementation of avoidance and minimization measures would be required pursuant to Mitigation Measure BIO-2a before and during implementation of broadcast burning and mechanical treatments in habitats suitable for ringtail between April 15 and June 30. Avoidance and minimization measures would include, but not be limited to, pre-treatment den surveys, daily sweeps of the treatment area, and biological monitoring.

Habitat function for ringtail would be maintained because ecological restoration treatments, which make up most of the project area (35,661 acres), would retain live hardwoods greater than 14 inches DBH up to five percent of residual basal area including hardwoods with basal hollows or other complex structural features. Up to four snags per acre that are greater than 14 inches DBH and downed woody debris larger than 18 inches diameter and 12 feet long would also be retained. Additionally, rocky areas would not be targeted for vegetation treatment. On July 3, 2024, RCDTC and Crane Mills notified CDFW by email describing the measures that would be taken to avoid mortality, injury, and disturbance to ringtail and to maintain habitat function in compliance with Mitigation Measure BIO-2a. No changes to the measures detailed in the MMRP resulted from this consultation include.

This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Conclusion

The potential for treatment activities to result in adverse effects on special-status wildlife was examined in the Program EIR. This project's impact on special-status wildlife is within the scope of the Program EIR because the treatment activities, intensity of disturbance resulting from treatment activities, and potential effects on special-status wildlife are consistent with those analyzed 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 and habitat characteristics present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape); therefore, the potential impact on special-status wildlife is also the same, as described above. SPRs that apply to project impacts under Impact BIO-2 are SPR BIO-1 through SPR BIO-5, SPR BIO-10, SPR HAZ-5, SPR HAZ-6, SPR HYD-3, SPR HYD-4, and SPR HYD-5. Biological resource mitigation measures that apply to this impact are Mitigation Measure BIO-2a, Mitigation Measure BIO-2b, Mitigation Measure BIO-2e, Mitigation Measure BIO-2g, Mitigation Measure BIO-3a through Mitigation Measure BIO-3c, and Mitigation Measure BIO-4. 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.

IMPACT BIO-3

Initial vegetation treatments and ongoing maintenance treatments could result in direct or indirect adverse effects on sensitive habitats, including riparian habitat and sensitive natural communities as defined by CDFW (CDFW 2023b). Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed; however, retreatment at too great a frequency could result in additional adverse effects. The potential for treatment activities, including maintenance treatments, to adversely affect sensitive habitats was examined in the Program EIR.

Based on review of the habitat types in the project area by EVEG mapping prior to the August Complex Fire, the results of the reconnaissance-level survey conducted pursuant to SPR BIO-1, species ranges, and occurrence data, 23 sensitive habitats (i.e., natural communities with a rarity rank of S1, S2, or S3) may be present within the project area. The sensitive natural communities, the associated rarity rank, and the habitat type within which the communities may occur are presented in Table 4.5-2. In addition, several oak woodland and forest types (I.e., blue oak, interior live oak, canyon live oak, California black oak, and Oregon oak), which are sensitive habitats pursuant to the Oak Woodlands Conservation Act and PRC Section 21083.4, may occur in the project area.

During the reconnaissance-level survey conducted pursuant to SPR BIO-1, several species associated with these sensitive natural communities were observed, including incense cedar (*Calocedrus decurrens*), California buckeye (*Aesculus californica*), and big leaf maple (*Acer macrophyllum*). Additionally, several genera associated with these sensitive natural communities were observed, including alder (*Alnus* spp.), willow (*Salix* spp.), sedge (*Carex* spp.), rush (*Juncus* spp.), and manzanita (*Arctostaphylos* spp.). While all dominant species associated with sensitive natural communities included in Table 4.5-2 were not observed during the reconnaissance-level survey, these communities may be present. As a result, before application of treatment activities, SPR BIO-3 would be implemented and a qualified RPF or biologist would identify sensitive natural communities in the project area to the alliance level pursuant to *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018a) and using the Manual of California Vegetation (including updated natural communities data at http://vegetation.cnps.org/).

Table 4.5-2 Sensitive Natural Communities Documented or with Potential to Occur in the Project Area

Sensitive Natural Community[1]	Rarity Rank[2]	CWHR Type
Bigleaf maple forest and woodland+	S3	Douglas-Fir, Montane Hardwood-Conifer, Montane Hardwood
California bay forest	S3	Coastal Oak Woodland, Montane Hardwood
California buckeye grove+	S3	Montane Hardwood
Canyon live oak - Interior live oak chaparral+	S3S4	Mixed Chaparral
Common monkey flower - thistle - hedgenettle seeps	S3	Wet Meadow
Douglas-fir – incense cedar forest and woodland+	S3	Douglas-Fir, Sierran Mixed Conifer
Frangula californica – Rhododendron occidentale – Salix breweri	S3	Valley Foothill Riparian
Goodding's willow - red willow riparian woodland and forest	S3	Fresh Emergent Wetland, Valley Foothill Riparian
Green leaf manzanita - Pinemat manzanita chaparral	S3S4	Montane Chaparral
Hoary, Common, and Stanford Manzanita Chaparral+	S3	Mixed Chaparral
Idaho fescue - California oatgrass grassland	S3	Perennial Grassland
Incense cedar forest+	S3	Sierran Mixed Conifer
Iris-leaf rush seeps	S2?	Fresh Emergent Wetland, Wet Meadow
Mountain alder thicket+	S3	Montane Riparian
Needle grass - Melic grass grassland	S3S4	Perennial Grassland
Onion - twistflower - dwarf-flax serpentinite rock outcrop	S2S3	Barren
Oregon white oak woodland and forest	S3	Montane Hardwood
Torrent sedge patch	S3	Montane Riparian, Valley Foothill Riparian

Sensitive Natural Community[1]	Rarity Rank[2]	CWHR Type
Soft and western rush - Sedge marshes	S3S4	Fresh Emergent Wetland, Wet Meadow
Ultramafic cypress woodland	S3	Closed-Cone Pine-Cypress
Woodland sedge fens	S2?	Wet Meadow
Water sedge and lakeshore sedge meadows	S3	Wet Meadow
Wild grape shrubland	S3	Montane Riparian, Valley Foothill Riparian

[1] These are designated sensitive natural communities with a state rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable).

[2] A question mark (?) denotes an inexact numeric rank because there are insufficient samples over the full expected range of the type, but existing information points to this rank.

\+ Species observed or alliance expected to occur based on reconnaissance survey.

Source: Manual of California Vegetation (CNPS 2024). Compiled by Ascent in 2024.

Riparian habitats are present within the project area. Riparian-associated species observed in the project area during the reconnaissance-level survey included alder, willow, sedge, and rush. EVEG data for the project area includes 41.8 acres of montane riparian habitat, 2.9 acres of wet meadow habitat, 1.9 acres of riverine habitat, and 0.8 acres of lacustrine habitat (Table 4.5-1). Under SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II streams and lakes would be implemented for all treatment activities, which would limit the extent of treatment activities within riparian habitat. While these SPRs would reduce potential impacts on riparian habitat, the extent of riparian habitat within the treatment area has not been mapped and riparian habitat may be present outside of the areas encompassed within WLPZs. As a result, before application of treatment activities, SPR BIO-3 would be implemented to identify and map the extent of riparian habitat within a treatment area. As required under SPR BIO-4, treatments in riparian habitats would retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation and would be limited to removal of uncharacteristic fuel loads (e.g., dead or dying vegetation, invasive plants). Additionally, SPR HYD-3 would apply, which would require that environmentally sensitive areas including waterbodies and riparian areas are identified and excluded from prescribed herbivory treatment by a buffer of 50 feet. Pursuant to SPR HYD-4, driving equipment and vehicles, equipment servicing and fueling, placement of burn piles, and fire ignition would be prohibited within the WLPZ. Herbicides, aquatic and terrestrial, would not be utilized within WLPZs of Class I and II watercourses (established per SPR HYD-5). In addition, before conducting any treatments in riparian habitat, the project proponent would notify CDFW pursuant to California Fish and Game Code 1602, when required.

Wetland delineations would be conducted to identify and map the extent of wetland habitats within treatment areas. Where wetland or other aquatic habitats are delineated, no-disturbance buffers of at least 25 feet would be established (per Mitigation Measure BIO-4, refer to Impact BIO-4 below). Therefore, there would be no impacts to sensitive natural communities associated with wetland habitats.

Crane Mills would avoid impacts on sensitive natural communities and oak woodlands by avoiding treatments in these communities. However, if avoiding treatment activities within identified sensitive natural communities or oak woodlands would preclude achieving treatment objectives, then Mitigation Measure BIO-3a would apply in these areas so that the characteristics that qualify the communities as sensitive (e.g., dominant canopy species, canopy relative percentage of dominant species, species composition) are retained post-treatment to the extent feasible. Under Mitigation Measure BIO-3a, a qualified RPF or biologist would determine the natural fire regime, condition class, and fire return interval for each sensitive natural community and oak woodland type. Initial and maintenance treatment activities in sensitive natural communities and oak woodlands would be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function. If habitat function of sensitive natural communities or oak woodlands would not be maintained through implementation of Mitigation Measure BIO-3a, then Mitigation Measure BIO-3b and Mitigation Measure BIO-3c would apply, and unavoidable losses of these resources would be compensated through restoration or preservation of these vegetation types within or outside of the project areas.

Montane chaparral, mixed chaparral and chamise-redshank chaparral are present within the project area. As required by SPR BIO-5, treatments implemented in chaparral would be designed to avoid type conversion of chaparral vegetation

and to maintain chaparral habitat function. This would include identifying the chaparral vegetation types to the alliance level, determining appropriate treatment prescriptions based on current fire return interval departure and condition class of the chaparral vegetation alliances on-site, retaining at least 35 percent relative final density of mature chaparral vegetation in ecological treatments, and retaining a mix of middle to older aged shrubs to maintain heterogeneity and provide nurse plants for seeding. The project proponent would demonstrate with substantial evidence that the habitat function of the specific chaparral vegetation types (i.e., alliances) present would be maintained or enhanced by the treatments applied. Ecological restoration treatments would not be implemented in stands of chaparral vegetation that are within their natural fire return interval unless the project proponent demonstrates with substantial evidence that the habitat function of the chaparral vegetation alliances would be improved.

Hoary, common, and Stanford manzanita chaparral is a sensitive natural community with a state rarity rank of S3 and is likely present in the project area. Konocti manzanita, which is known to occur within the project area, is a subspecies of common manzanita (*Arctostaphylos manzanita*). As mentioned under Impact BIO-1, Konocti manzanita is an obligate seeder and has a natural fire return interval of 30 to 100 years. If this community is confirmed to be present in the project area during surveys conducted under SPR BIO-3, then treatments in these areas would be designed to retain mature nurse shrubs and a mixture of shrubs in all age classes to allow for reseeding and regeneration of the characteristic shrub species. Prescribed burning or replicate treatments would only occur within the natural fire return interval of 30 to 100 years.

The potential for treatment activities to result in adverse effects on sensitive habitats, as described above, was examined in the Program EIR. This impact on sensitive habitats is within the scope of the Program EIR because the treatment activities and intensity of disturbance from implementing treatments would be consistent with those analyzed 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, the existing environmental conditions and habitat characteristics present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape); therefore, the potential impact on sensitive habitats is also the same. SPRs that apply to this impact are BIO-1 through BIO-6, BIO-9, HYD-3, HYD-4, and HYD-5. The mitigation measures that apply to this impact are Mitigation Measure BIO-3a, Mitigation Measure BIO-3b, and Mitigation Measure BIO-3c.

RCDTC also proposes to revise SPR BIO-9, which is applicable to this project. SPR BIO-9 would be revised to clarify that vehicle cleaning standards apply to the project area. This revision provides added clarification and consistency with definitions presented in the Project Overview (Section 1.1) and would not result in a change in implementation of the SPR from the intent of the Program EIR. Further, RCDTC proposes to revise SPR BIO-9 to clarify that "significant infestations of invasive plant species" are those rated as moderate or high invasives by Cal-IPC or designated as noxious weeds by the California Department of Food and Agriculture. This revision also provides added clarification consistent with the intent of the original Program EIR and would not result in a change in the implementation of the SPR. Changes to SPR BIO-9 would not result in a substantially more severe significant effect related to riparian habitat or other sensitive natural communities than what was covered in the program EIR.

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.

IMPACT BIO-4

Initial vegetation treatments and ongoing maintenance treatments could result in direct or indirect adverse effects on state or federally protected wetlands. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. The potential for treatment activities to result in adverse effects on state or federally protected wetlands was examined in the Program EIR.

Aquatic habitats that have been mapped in the project area by the National Wetlands Inventory (NWI) consist of freshwater emergent wetlands (34.9 acres), freshwater forested/shrub wetlands (3.89 acres), freshwater ponds (0.24 acres), and riverine features (399.72 acres). Resources mapped in the NWI database are identified primarily through

aerial imagery and are not ground verified. During the reconnaissance-level survey, riverine features were observed in the project area including Thomes Creek, Fish Creek, Griffin Creek, Snake Creek, Croney Creek, Sugarfoot Creek, Auger Creek, Bowers Creek, and other unnamed streams. Lining the banks of some of the riverine features were freshwater emergent and freshwater forested/shrub wetlands.

Additional wetlands may be present throughout the project area that have not been identified or mapped as well as ponds smaller than 1 acre (i.e., not considered a lake under Forest Practice Rules), seasonal wetlands, springs, and seeps. Pursuant to SPR HYD-4, a WLPZ of 50–100 feet adjacent to Class II streams and 75–150 feet adjacent to Class I streams within the treatment area would be implemented, and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and Class IV streams for all treatment activities. Establishment of WLPZs would result in avoidance of all stream and pond habitat during treatments. Additionally, SPR HYD-3 provides water quality protections specific to prescribed herbivory, and requires that environmentally sensitive areas, including waterbodies, wetlands, and riparian areas, are identified in the treatment prescription and excluded from prescribed herbivory treatment areas using temporary fencing or active herding. A buffer of approximately 50 feet would be maintained between sensitive and actively grazed areas. Water would be provided for grazing animals in the form of an on-site stock pond or a portable water source located outside of the environmentally sensitive areas, and the prescribed herbivory treatment prescriptions would be designed to protect soil stability. In addition, Mitigation Measure BIO-4 would apply to all treatment activities and would require that prior to beginning treatment in a treatment area, a qualified RPF or biologist would delineate the boundaries of wetland features; establish an appropriate buffer (with a minimum of 25 feet) around seasonal wetlands, springs, seeps, and other wetlands; and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). A larger buffer may be required if wetlands or other aquatic habitats contain habitat potentially suitable for special-status plants or special-status wildlife (e.g., watershield, water howelia, California red-legged frog, foothill yellow-legged frog, northwestern pond turtle, special-status fish; see Impact BIO-1 and Impact BIO-2). Containment lines for prescribed burns would be installed or created outside of springs, seeps, streams, or other aquatic habitats identified through NWI mapping, CARI mapping, and during Mitigation Measure BIO-4 surveys.

The potential for treatment activities to adversely affect state or federally protected wetlands was examined in the Program EIR. This impact on wetlands is within the scope of the Program EIR because the treatment activities and intensity of disturbance resulting from treatment activities would be consistent with those analyzed 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, because the existing environmental conditions and habitat characteristics present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape) the potential impact on wetlands is also the same, as described above. SPRs that apply to this impact are BIO-1, HYD-1, HYD-3, and HYD-4. The biological resource mitigation measure that applies to this impact is Mitigation Measure BIO-4. 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.

IMPACT BIO-5

Initial vegetation treatments and ongoing maintenance treatments could result in direct or indirect adverse effects on wildlife movement corridors and nurseries. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. The potential for treatment activities to result in adverse effects on wildlife movement corridors and nurseries was examined in the Program EIR.

No essential connectivity areas are mapped in the project area (CDFW 2014). However, based on the reconnaissance level-survey of project-specific biological resources (SPR BIO-1) and a review of the USGS California Hydrologic Unit Data, NWI data, and the Tehama County Watershed Assessment (RCDTC 2006), many major streams cross the project area that may be used by wildlife for movement or nursery habitat. From north to south, major waterways in the project area include the South Fork Cottonwood Creek, Elkhorn Creek, Thomes Creek, Croney Creek, Cold Spring Creek, Snake Creek, Elder Creek, Hensley Creek, Fish Creek, Willow Creek, Flood Creek, and McLure Creek. Smaller tributaries that

cross the project area include Red Bank Creek, Brush Creek, Buck Creek, Sulphur Creek, Alder Creek, Basin Creek, Griffin Creek, Buttermilk Creek, Cary Pasture Creek, Sugarfoot Creek, Digger Creek, Howard Creek, Auger Creek, Grindstone Creek, Hamilton Creek, Zumwalt Creek, Beaver Creek, Bowers Creek, and Scott Creek. Common wildlife species may use creeks and their associated riparian corridors for breeding or movement.

Portions of the project area are in a series of natural landscape blocks associated with forested habitat along the eastern edge of the South Yolla Bolly Mountains and Mendocino National Forest (CDFW 2024). Other portions of the project area are outside of mapped natural landscape blocks but contain natural habitat that is likely used as a wildlife movement corridor to some degree. Patches of forested USFS property are interspersed on all sides and in the center of the project area. In addition, the project area is surrounded by Mendocino National Forest to the west and south, Rancho Tehama Reserve to the east, and the Yolla Bolly-Middle Eel Wilderness Area to the north.

Existing roads are located within and near the project area. The size and traffic levels of the roads are inconsistent but roads could be subject to ongoing disturbances (e.g., vehicle traffic, human activity). There is some level of wildlife habitat fragmentation due to historic land uses (e.g., timber harvest) in the project area. While habitat directly adjacent to roads would not be optimal habitat, wildlife may move through these areas or use some habitats for cover or as nursery sites, especially in relatively undeveloped areas.

Treatment types would include shaded fuel breaks that would retain some forest canopy and ecological restoration treatments designed to support native habitat structures and increase forest resilience. In ecological restoration treatment areas, treatments would retain hardwoods greater than 14 inches DBH (e.g., black oak, big-leaf maple) or up to 5 percent of residual basal area including hardwoods greater than 14 inches DBH with basal hollows or other complex structural features; up to four snags per acre that are greater than 14 inches DBH and more than 100 feet from structures and roads; and downed woody debris larger than 18 inches diameter and 12 feet long. In shaded fuel break areas, fire resilient tree species (i.e., ponderosa pine, sugar pine, incense cedar) would be retained when feasible to improve wildfire resilience and maintain habitat function.

Pursuant to SPR HYD-4, a WLPZ of 50–150 feet adjacent to all Class I and Class II streams and lakes within the project area would be implemented. This would limit the extent of treatment activities within riparian habitat (e.g., no mechanical treatment, retention of at least 75 percent surface cover, no fire ignition) that may function as a wildlife movement corridor. SPR HYD-1 requires compliance with water quality regulations, which would protect aquatic and riparian habitat by avoiding erosion and associated sedimentation that could degrade aquatic nursery sites or sensitive riparian habitat. Pursuant to SPR BIO-3, BIO-4, and BIO-5, treatments in sensitive natural communities, riparian habitat, and chaparral habitat would be designed to maintain habitat function of these communities. In addition, implementation of proposed treatments would not result in any conversion of land cover or create new barriers to wildlife movements within (locally) or across (regionally) the project area. With implementation of SPRs, habitat function within the project area would be maintained and there would not be a substantial change in the existing conditions that facilitate wildlife movement. If during surveys conducted pursuant to SPR BIO-10 wildlife nursery sites (e.g., heron rookeries, deer fawning areas, common bat roosts) are detected, Mitigation Measure BIO-5 would apply to all treatment activities and a no-disturbance buffer would be established around these features, the size of which would be determined by a qualified RPF or biologist.

The potential for treatment activities to result in adverse effects on wildlife movement corridors and nurseries was examined in the Program EIR. This impact is within the scope of the Program EIR because the treatment activities and extent of expected disturbance related to implementing treatment activities are consistent with those analyzed 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, because the existing environmental conditions and habitat characteristics present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape) the potential impact on wildlife movement corridors is also the same, as described above. SPRs that apply to this impact are SPR BIO-1, BIO-4, BIO-5, BIO-10, BIO-11, HYD-1, and HYD-4. The biological resource mitigation measure that applies to this impact is Mitigation Measure BIO-5. 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.

IMPACT BIO-6

The project is within the Tehama West Watershed, within which common wildlife including black bear (*Ursus americanus*), coyote (*Canis latrans)*, black-tailed deer (*Odocoielus hemionus*), and native waterfowl such as mallard (*Anas platyrhynchos*), bufflehead (*Bucephala albeola*), and gadwall (*Mareca strepera*) are known to be present (RCDTC 2006). Initial treatments and ongoing maintenance treatments could result in direct or indirect adverse effects resulting in reduction of habitat or abundance of common wildlife, including nesting birds. Nesting habitat suitable for birds is present throughout the project area. All of the proposed treatment activities conducted during the nesting bird season (February 1–August 31) could result in direct loss of active nests or disturbance to active nests from auditory and visual stimuli (e.g., heavy equipment, chainsaws, vehicles, personnel) potentially resulting in abandonment and loss of eggs or chicks. The potential for treatment activities to result in the reduction of habitat or abundance of common wildlife, including nesting birds, was examined in the Program EIR.

Common wildlife would benefit from implementation of SPR BIO-1 because this SPR requires that the project area be reviewed for potentially sensitive resources, including sensitive habitats and wildlife nursery sites. Pursuant to SPR BIO-2, all crew members and contractors would receive training prior to beginning work, which would describe the SPRs and mitigation measures designed to protect sensitive resources including common wildlife. The training would include guidance on when to stop work and what to do when wildlife is encountered during treatment activities. SPR BIO-3 requires surveys for sensitive natural communities and other sensitive habitats, which provide essential habitat for many common wildlife species. Implementation of SPR BIO-4 would require that the project is designed to avoid loss or degradation of riparian habitat function, which also serves as essential breeding and dispersal habitat for many common wildlife species. Common wildlife species which occupy chaparral and coastal sage scrub ecosystems would benefit from the implementation of SPR BIO-5, which requires that the project is designed to avoid type conversion and maintain habitat function in these native habitat types. SPR BIO-12 would also apply, and for treatments implemented during the nesting bird season, a survey for common nesting birds would be conducted within the project area by a qualified RPF or biologist before treatment activities begin. If no active bird nests are observed during focused surveys, then additional mitigation would not be required. If active nests of common birds or raptors are observed during focused surveys, disturbance to the nests would be avoided by establishing an appropriate buffer around the nests, modifying treatments to avoid disturbance to the nests, or deferring treatment until the nests are no longer active as determined by a qualified RPF or biologist.

The potential for adverse effects on common wildlife, including nesting birds, is within the scope of the Program EIR because the treatment activities and extent of expected disturbance related to implementing treatment activities would be consistent with those analyzed 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, because the existing environmental conditions and habitat characteristics present in areas outside the treatable landscape are essentially the same as those within the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape), the potential impact on common wildlife, including nesting birds, is also the same, as described above. SPRs that apply to this impact are SPR BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, and BIO-12. 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.

IMPACT BIO-7

The applicable local policy or ordinance relevant to biological resources is the Tehama County Code of Ordinances. The Tehama County Fire Hazard Abatement Ordinance (Chapter 9.05) contains modified firebreak requirements (Chapter 9.05, Article 2, Section 9.05.060) that may be established by the enforcing officer (i.e., the executive officer of the fire protection agency having jurisdiction, any person designated by the aforementioned executive officer, and any person employed by the County of Tehama and appointed to the position of code enforcement officer, as established by Tehama County Resolution Number 125-1991) to mitigate erosion potential on steep slopes; prevent destruction of unique wildlife habitat, endangered species, vernal pools, or watercourses; or for other environmental factors. The SPRs included throughout this PSA/Addendum that would be implemented by Crane Mills are consistent

with the requirements of the Tehama County Fire Hazard Abatement Ordinance. With implementation of SPRs and mitigation measures described in Impacts BIO-1 through BIO-6 above, project implementation would not conflict with local ordinances.

The potential for treatment activities to conflict with local policies or ordinances was examined in the Program EIR. The potential for the treatment project to conflict is within the scope of the Program EIR because vegetation treatment projects implemented under the CalVTP that are subject to local policies or ordinances would be required to comply with any applicable county, city, or other local policies, ordinances, and permitting procedures related to protection of biological resources, per SPR AD-3. 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 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 SPR that applies to this impact is SPR AD-3. 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.

IMPACT BIO-8

Implementation of the initial vegetation treatments and ongoing maintenance treatments would not result in a conflict with adopted habitat conservation plans (HCP) or natural community conservation plans (NCCP) because the project area is not within the plan area of any adopted HCP or NCCP.

NEW BIOLOGICAL RESOURCE IMPACTS

The proposed treatments are 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 and revisions to SPRs constitute a change to the SPRs presented in the Program EIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to biological resources outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are also consistent with those considered in the Program EIR. The inclusion of areas outside of the CalVTP treatable landscape and revisions to the SPRs would not give rise to any new significant impacts related to biological resources not addressed in the Program EIR.

4.6 GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	AD-3 AQ-3 AQ-4 GEO-1 GEO-2 GEO-3 GEO-4 GEO-5 GEO-6 GEO-7 GEO-8 HYD-4	NA	LTS	No	Yes
Impact GEO-2: Increase Risk of Landslide	LTS	Impact GEO-2, pp. 3.7-29 – 3.7-30	Yes	AD-3 AQ-3 GEO-3 GEO-4 GEO-7 GEO-8	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

The project area is located along the northeast edge of the Northern California Coast Range and falls within the Coast Range Geologic Province. The Coast Range Province is characterized by north and northwest-trending mountain ranges with extensive shearing, serpentine deposits, and scattered alluvial deposits. Historic timber harvesting and mining have occurred in the region since the 1800's, and land use has historically affected the soils, hydrology, and geology (RCDTC 2006). Slow-moving landslides have been known to occur in the project area (USGS 2024). Portions of the eastern edge of the project overlap known serpentine mineral deposits which may contain asbestos (USGS 2011).

The project area is comprised primarily of marine sedimentary and metasedimentary deposits that were established during the Cretaceous-Jurassic era, with scattered Pleistocene-Holocene alluvium deposits. On the eastern side of the

project area, the coast range thrust subduction fault runs north to south and along its eastern (expanding upper plate) edge, there are deposits of Mesozoic-era, ultramafic, serpentine rocks deposited in a north-to-south oriented streak. In the center and west side of the project area, several anticlinal folds are present. Steep slopes are common on ridgetops and above stream channels throughout the project area (California Geological Survey 2015).

IMPACT GEO-1

Vegetation treatments would include shaded fuel breaks and ecological restoration through use of manual vegetation treatments, mechanical vegetation treatments, prescribed burning (pile burning and broadcast burning), targeted ground application of herbicides, and prescribed herbivory. 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 Program EIR. 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 Program EIR because the use and type of equipment, extent of vegetation removal, and intensity of prescribed burning are consistent with those analyzed 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 of the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact related to soil erosion is also the same, as described above. SPRs applicable to this impact are SPR AD-3, AQ-3, AQ-4, GEO-1 through GEO-8, and HYD-4.

RCDTC proposes to revise SPRs AQ-4 and GEO-6. RCDTC also proposes to revise SPR AQ-4, which is applicable to this impact. SPR AQ-4 would be revised to limit vehicle and equipment speeds on unpaved roadways to 25 miles per hour, unless fugitive dust emissions are visibly occurring (then vehicle speeds would be reduced to no more than 15 miles per hour). All other elements of SPR AQ-4 would remain the same as presented in the Program EIR. These revisions are consistent with the purpose of SPR AQ-4 and would maintain the overall requirements of avoiding and minimizing the creation of fugitive dust through treatment vehicle use of unpaved roadways and vehicles tracking out dust, silt, or mud onto public roadways. In addition, Crane Mills would wet unpaved areas if road use creates excessive fugitive dust, as required by SPR AQ-4. For the reasons described, proposed revisions to SPR AQ-4 would not result in a substantially more severe significant effect related to erosion or loss of topsoil than what was covered in the Program EIR.

In addition, RCDTC proposes to revise SPR GEO-6, which is applicable to this impact. SPR GEO-6, as presented in the Program EIR, requires that burn piles do not exceed 20 feet in length, width, or diameter, unless on landings, road surfaces, or on contour to minimize the spatial extent of soil damage caused by burning. In burned areas, trees for removal exceed 20 feet in length, and it would be infeasible to comply with a burn pile size limit of 20 feet in length or width. Due to the size and hazardous condition of these standing dead trees, a burn pile size of up to 40 feet is proposed in areas affected by the previous fire. As originally proposed, SPR GEO-6 aims to avoid adverse impacts caused by pile burning in large areas. However, in these previously burned areas, the baseline conditions are characterized by soils affected by the recent wildfire. Therefore, increasing the size of burn piles in areas previously impacted by wildfire would not constitute an increased impact on the soils as a result of pile burning. For the reasons described, proposed revisions to SPRs AQ-4, and GEO-6 would not result in a substantially more severe significant effect related to erosion or loss of topsoil than what was covered in the Program EIR.

Impacts related to soil erosion resulting from the proposed project would not constitute a new or substantially more severe significant impact than what was covered in the Program EIR.

IMPACT GEO-2

Treatment activities would include manual vegetation treatments, mechanical vegetation treatments, prescribed burning (pile burning and broadcast burning), targeted ground application of herbicides, and prescribed herbivory. Four areas with known landslide activity are identified within the project area. Three are located along Thomes Creek and the fourth is located near the intersection of Fish Creek and Berry Creek (USGS 2024). These are characterized as "West Coast Slow Moving" landslides (USGS 2024). Given the history of landslides in the region as well as the variable topography, 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 Program EIR. 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 (i.e., slopes greater than 50 percent). SPR GEO-8 would require that an RPF or licensed geologist evaluate steep slopes for unstable areas/soils and identify measures to avoid landslides, erosion, or loss of topsoil during treatment activities. Furthermore, because the treatments would reduce overall wildfire risk, they would also decrease post-wildfire landslide risks. This impact is within the scope of the Program EIR because the extent of vegetation removal, intensity of prescribed burning, and characteristics of the geographical terrain are consistent with those analyzed 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 range of slopes and landslide conditions present in the areas outside of the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact related to landslide risk is also the same, as described above. SPRs applicable to this impact are SPR AD-3, AQ-3, GEO-3, GEO-4, GEO-7, and GEO-8. Impacts related to landslide risk resulting from the proposed project would not constitute new or substantially more severe significant impact than what was covered in the Program EIR.

NEW GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCE IMPACTS

The proposed treatments are 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 3.7.1, "Environmental Setting," and Section 3.7.2, "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 and revisions to SPRs constitute a change to the SPRs presented in the Program EIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to geology, soils, paleontology, and mineral resources 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. The inclusion of areas outside of the CalVTP treatable landscape and revisions to SPRs would not give rise to any new significant impacts related to geology, soils, paleontology, or mineral resources that are not covered in the Program EIR.

4.7 GREENHOUSE GAS EMISSIONS

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	AD-3	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	AD-3 AQ-3	GHG-2	PSU	No	Yes

Notes: LTS = less than significant; PSU = potentially significant and unavoidable; SU = significant and unavoidable NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New GHG Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
	☐	☐	☐

Discussion

IMPACT GHG-1

Use of vehicles and mechanical equipment and prescribed burning during initial and ongoing 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 Program EIR. Consistent with the Program EIR, although GHG emissions would occur from equipment and vehicles used to implement treatments, the purpose of the proposed project is to reduce wildfire risk, which could reduce GHG emissions and increase carbon sequestration over the long term. This impact is within the scope of the Program EIR because the proposed activities, as well as the associated equipment, duration of use, and resultant GHG emissions, are consistent with those analyzed 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 same plans, policies, and regulations adopted to reduce GHG emissions apply to the areas outside the treatable landscape, as to areas within the treatable landscape; therefore, the GHG impact is also the same, as described above. SPR AD-3 is applicable to the project; however, SPR GHG-1 is not applicable because the project is not a registered offset project under the Board's Assembly Bill 1504 Carbon Inventory Process. 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.

IMPACT GHG-2

Use of vehicles and mechanical equipment and prescribed burning during initial and ongoing maintenance treatments would result in GHG emissions. The potential for treatments under the CalVTP to generate GHG emissions was examined in the Program EIR. This impact is within the scope of the Program EIR 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 Program EIR. Mitigation Measure GHG-2 would be implemented to the extent feasible to reduce GHG emissions associated with prescribed burning. However, emissions generated by the proposed treatments 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 Program EIR. Mitigation Measure GHG-2 would be implemented by using specialized portable biomass processing technologies (i.e., air curtain burners, carbonation, and gasification) when feasible to reduce GHG emissions associated with prescribed burning (pile burning). Although use of biomass processing technologies would substantially reduce GHG emissions, 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 Program EIR. SPR AD-3 and AQ-3 are also applicable to this project. 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 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 the same, as described above.

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.

NEW IMPACTS RELATED TO GHG EMISSIONS

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP Program EIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.2.1, "Environmental Setting," and Section 3.2.2, "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 conditions pertinent to GHG emissions outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are consistent with those covered in the Program EIR. The inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impact related to GHG emissions.

4.8 ENERGY RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Energy Resource Impacts: Would the treatment result in other impacts to energy resources that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT ENG-1

Use of vehicles, mechanical equipment, and some manual equipment (e.g., chainsaws) during initial treatment and treatment maintenance activities would result in energy consumption through fossil fuels. The use of fossil fuels for equipment and vehicles was examined in the Program EIR. The consumption of energy during implementation of the treatment project is within the scope of the Program EIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed 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, the existing energy consumption is essentially the same within and outside the treatable landscape; therefore, the energy impact is also the same, as described above. No SPRs are applicable to this impact. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than covered in the Program EIR.

NEW ENERGY RESOURCE IMPACTS

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP Program EIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.2.1, "Environmental Setting," and Section 3.2.2, "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 conditions pertinent to energy resources 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, consistent with those covered in the Program EIR. No new impacts related to energy resources would occur.

4.9 HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered In the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	AD-3 HAZ-1 HAZ-2 HAZ-3 HAZ-4 HYD-4	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	Yes	AD-3 HAZ-2 HAZ-3 HAZ-4 HAZ-5 HAZ-6 HAZ-7 HAZ-8 HAZ-9	NA	LTS	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	Yes	AD-3 HAZ-2 HAZ-3 HAZ-4	HAZ-3	LTSM	No	Yes

Notes: LTS = less than significant; LTSM = less than significant with mitigation; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact; None = there are SPRs and/or MMs identified in the Program EIR 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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT HAZ-1

Initial vegetation treatments and ongoing maintenance treatments would include manual treatments, mechanical treatments, prescribed burning, targeted ground application of herbicides, and prescribed herbivory. These treatment activities would require the use of fuels and related accelerants, which are hazardous materials. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was examined in the

Program EIR. This impact is within the scope of the Program EIR because the types of treatments, associated equipment and types of hazardous materials that would be used are consistent with those analyzed 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, the exposure potential and regulatory conditions are essentially the same within and outside the treatable landscape; therefore, the hazard material impact is also the same, as described above. SPR AD-3, HAZ-1 through HAZ-4, and HYD-4 are applicable to the project. 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.

IMPACT HAZ-2

Initial vegetation treatments and ongoing maintenance treatments would include the application of herbicides using ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems. No aerial spraying of herbicides would occur. The potential for treatment activities to cause a significant health hazard from the use of herbicides was examined in the Program EIR. This impact is within the scope of the Program EIR because the types of herbicides (i.e., clopyralid, glyphosate, velpar, imazapyr, sulfomenturon, triclopyr, nonylphenol 9 ethoxylates, cleantraxx) and application methods that would be used, which are limited to ground-based applications, are consistent with those analyzed in the Program EIR. In addition, herbicides would be applied by licensed applicators in compliance with all laws, regulations, and herbicide label instructions, consistent with herbicide use described 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 exposure potential is essentially the same within and outside the treatable landscape; therefore, the hazardous materials impact is also the same, as described above. SPRs AD-3 and HAZ-2 through HAZ-9 are applicable to the project. 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.

IMPACT HAZ-3

Initial vegetation treatments and ongoing maintenance treatments would include soil disturbance and prescribed burning, which could expose workers or the environment to hazardous materials if a contaminated site is present within the project area. The potential for workers implementing treatment activities to encounter contamination that could expose them or the environment to hazardous materials was examined in the Program EIR. This impact was identified as potentially significant in the Program EIR because hazardous materials could be present within treatment sites, and soil disturbance or burning in those areas could expose people or the environment. As directed by Mitigation Measure HAZ-3, database searches for hazardous materials sites within the project area have been conducted, and no hazardous materials sites were identified within 0.25 mile of the project area (DTSC 2024; CalEPA 2024; SWRCB 2024). Therefore, this impact is less than significant with mitigation.

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 Program EIR. However, within the boundary of the project area, 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; therefore, the hazardous materials impact is also the same, as described above. SPRs AD-3 and HAZ-2 through HAZ-4 are applicable to the project; however, no additional mitigation is required. 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.

NEW HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY IMPACTS

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP Program EIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.2.1, "Environmental Setting," and

Section 3.2.2, "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 conditions pertinent to hazardous materials and public health and safety outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No new impacts related to hazardous materials or public health and safety would occur.

4.10 HYDROLOGY AND WATER QUALITY

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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-4 BIO-5 GEO-4 GEO-6 HYD-2 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 GEO-2 GEO-3 GEO-4 GEO-5 GEO-7 GEO-8 HYD-1 HYD-2 HYD-4 HYD-5 HAZ-1 HAZ-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	Yes	HYD-3 GEO-1 GEO-3 GEO-4 GEO-7	NA	LTS	No	Yes
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 Through the Ground Application of Herbicides	LTS	Impact HYD-4, pp. 3.11-30 – 3.11-31	Yes	AD-3 BIO-4 HAZ-5 HAZ-7 HYD-2 HYD-5	NA	LTS	No	Yes

Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	LTS	Impact HYD-5, p. 3.11-31	Yes	AD-3 GEO-5 HYD-2 HYD-4 HYD-6	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

The project area falls entirely within the Tehama West watershed, primarily within the Thomes Creek-Sacramento River hydrologic unit. Far northern portions of the project area are within the Cottonwood Creek and Paynes Creek-Sacramento River hydrologic unit, and portions of the southern extent of the project area are within the Upper Stony hydrologic unit. Water sources in the project area drain eastward to the Sacramento River. From north to south, major hydrologic features in the project vicinity include the South Fork Cottonwood Creek, Elkhorn Creek, Thomes Creek, Croney Creek, Cold Spring Creek, Snake Creek, Elder Creek, Hensley Creek, Fish Creek, Willow Creek, Flood Creek, and McLure Creek. Smaller tributaries that cross the project area include Red Bank Creek, Brush Creek, Buck Creek, Sulphur Creek, Alder Creek, Basin Creek, Griffin Creek, Buttermilk Creek, Cary Pasture Creek, Sugarfoot Creek, Digger Creek, Howard Creek, Auger Creek, Grindstone Creek, Hamilton Creek, Zumwalt Creek, Beaver Creek, Bowers Creek, and Scott Creek.

The Tehama West watershed is characterized by rugged coniferous forest with variable annual snow and rainfall. Slopes range between flat to over 65 percent mid slope near watercourses; watershed streams show rapid response to storms with fluctuating levels of waterflow. Stream channels in the project area are often characterized by steep-walled canyons converging into steep gorges, and some stream channels have cut terraces adjacent to the stream producing a broad, stepped landscape. Thomes Creek is one of the fastest eroding watersheds draining into the Sacramento Valley, and contributes more sediment to the Sacramento River than other creeks of similar size in the Sacramento River drainage (RCDTC 2006).

The project area is owned and managed by Crane Mills for agricultural production of timber. Thomes Creek, Fish Creek, and Willow Creek provide critical habitat for steelhead (California Central Valley DPS), and Chinook salmon (Central Valley spring-run ESU; see section 4.5, "Biological Resources" for discussion of special-status fish species; NMFS 2024).

Several of the impacts below (i.e., HYD-1 through HYD-4) evaluate compliance with water quality standards or waste discharge requirements. All include implementation of SPR HYD-1, which requires compliance with such water quality regulations. The State Water Resources Control Board is requiring all projects using the CalVTP Program EIR 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 Program EIR. The General Order requires Crane Mills to comply with any applicable Basin Plan prohibitions.

IMPACT HYD-1

Initial vegetation treatments and ongoing maintenance treatments would include prescribed burning. Ash and debris from treatment areas could be washed by runoff into adjacent drainages and streams. Although most treatment areas would avoid streams and watercourses, WLPZs ranging from 50 to 150 feet would be implemented for Class I and Class II streams that are within treatment areas pursuant to SPR HYD-4. The potential for prescribed burning activities to cause runoff and violate water quality regulations or degrade water quality was examined in the Program EIR. This impact is within the scope of the Program EIR because the use of low intensity prescribed burns and associated impacts to water quality are consistent with those analyzed 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 surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from prescribed burning is also the same, as described above. SPRs applicable to this impact are AD-3, AQ-3, BIO-4, BIO-5, GEO-4, GEO-6, HYD-2, and HYD-4.

RCDTC proposes to revise SPR GEO-6, which is applicable to this impact. SPR GEO-6, as presented in the Program EIR, requires that burn piles do not exceed 20 feet in length, width, or diameter, unless on landings, road surfaces, or on contour to minimize the spatial extent of soil damage caused by burning. In burned areas, trees for removal exceed 20 feet in length, and it would be infeasible to comply with a burn pile size limit of 20 feet long or wide. Due to the size and hazardous condition of these standing dead trees, a burn pile size of up to 40 feet is proposed in areas affected by the previous fire. As originally proposed, SPR GEO-6 aims to avoid adverse impacts caused by pile burning in large areas. However, in these previously burned areas, the baseline conditions are characterized by soils affected by the recent wildfire. Therefore, increasing the size of burn piles in areas previously impacted by wildfire would not constitute an increased impact on the soils as a result of pile burning. For the reasons described, proposed revisions to SPR GEO-6 would not result in a substantially more severe significant effect related to prescribed burning and water quality than what was covered in the Program EIR.

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.

IMPACT HYD-2

Initial treatment would include mechanical and manual treatment activities. Although most treatments would avoid streams and watercourses, WLPZs ranging from 50–150 feet would be implemented for any watercourses that are within treatment areas pursuant to SPR HYD-4. The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the Program EIR.

This impact is within the scope of the Program EIR because the use of heavy equipment and hand-held tools to remove vegetation and associated impacts to water quality are consistent with those analyzed 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 surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from manual and mechanical treatments is also the same, as described above. SPRs applicable to this impact are AD-3, BIO-1, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-7, GEO-8, HYD-1, HYD-2, HYD-4, HYD-5, HAZ-1, and HAZ-5. 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.

IMPACT HYD-3

Initial and maintenance treatment would include prescribed herbivory. Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas, would be identified and excluded from prescribed herbivory using temporary fencing or active herding; a buffer of approximately 50 feet would be maintained between sensitive and

actively grazed areas as required by SPR HYD-3. Additionally, WLPZs ranging from 50 to 150 feet would be implemented for any watercourses that are within treatment areas pursuant to SPR HYD-4. The potential for prescribed herbivory to cause violation of water quality regulations or degrade water quality was examined in the Program EIR. This impact is within the scope of the Program EIR because the use of grazing animals (e.g., sheep, goats, or cattle) and the grazing intensity to manage and remove vegetation are consistent with those analyzed 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 surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from prescribed herbivory treatments is also the same, as described above. SPRs applicable to this treatment are HYD-3, GEO-1, GEO-3, GEO-4, and GEO-7. 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.

IMPACT HYD-4

Initial vegetation treatments and ongoing maintenance treatments would include the use of herbicides to help maintain a manageable understory for fuel breaks, to reduce fuel connectivity, to reduce the spread of invasive species, and to restore characteristic shrub densities for the vegetation community. Herbicide application would be limited to ground-based methods, such as paint-on stems, backpack hand-applicator, or hack and squirt. All herbicide application would comply with EPA and California Department of Pesticide Regulation label standards. The potential for the use of herbicides to violate water quality regulations or degrade water quality was examined in the Program EIR.

This impact is within the scope of the Program EIR because the types of herbicides and proposed methods of use and associated impacts to water quality are consistent with those analyzed 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, surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from use of herbicides is also the same, as described above. SPRs applicable to this impact are AD-3, BIO-4, HAZ-5, HAZ-7, HYD-2, and HYD-5. 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.

IMPACT HYD-5

Initial vegetation treatments and ongoing maintenance treatments could cause ground disturbance and erosion, which could directly or indirectly modify existing drainage patterns. The potential for treatment activities to substantially alter the existing drainage pattern of a project treatment site was examined in the Program EIR. This impact to site drainage is within the scope of the Program EIR because the types of treatments and treatment intensity are consistent with those analyzed 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, 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-2, HYD-4, and HYD-6. 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.

NEW HYDROLOGY AND WATER QUALITY IMPACTS

The proposed treatments are 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 3.11.1, "Environmental Setting," and Section 3.11.2, "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 and revisions to SPRs constitute a change to the SPRs presented in the Program EIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to hydrology and water quality 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. The inclusion of areas outside of the CalVTP treatable landscape and revisions to SPRs would not give rise to any new significant impacts. Therefore, No new impacts related to hydrology and water quality would occur.

4.11 LAND USE AND PLANNING, POPULATION AND HOUSING

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT LU-1

Initial and maintenance treatment activities would occur within Tehama County on land owned by Crane Mills. Most of the project area is zoned Timber Production, with some small portions zoned Agriculture/Upland District (Tehama County 2024a). As noted in Section 4.12, "Noise," below, the treatment project is exempt from the Tehama County Noise Ordinance. The potential for vegetation treatment activities to cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation was examined in the Program EIR.

This impact is within the scope of the Program EIR because the treatment types and activities are consistent with those analyzed in the Program EIR. Crane Mills would adhere to SPR AD-3 and no conflicts with County ordinances or any other land use plan, policy, or regulation would occur. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent considered in the Program EIR. However, land uses in the project area are essentially the same within and outside the treatable landscape; therefore, the land use impact is also the same, as described above. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than covered in the Program EIR.

IMPACT LU-2

The potential for initial vegetation treatments and ongoing maintenance treatments to result in substantial unplanned population growth as a result of increases in demand for employees was examined in the Program EIR. Impacts associated with short-term increases in the demand for workers during implementation of the treatment projects are within the scope of the Program EIR because the number of workers is similar to the crew sizes analyzed in the Program EIR for the types of treatments proposed (i.e., project involves eight to 20 crew members and up to eight crews for manual treatments, one to nine crew members and up to four crews for mechanical treatments, two to 10 crew members for pile burning, 10–50 crew members for broadcast burning, 3–16 crew members for herbicide treatments, and 2-4 crew members for prescribed herbivory treatments). The proposed project would not require the hiring of a substantial number of new employees because Crane Mills would use existing staff to conduct treatments when feasible. Therefore, substantial unplanned population growth would not occur. 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, 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 the same, as described above. No SPRs are applicable to this impact. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than covered in the Program EIR.

NEW LAND USE AND PLANNING, POPULATION AND HOUSING IMPACTS

The proposed project is consistent with the treatment types and activities considered in the CalVTP Program EIR. 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 Program EIR (refer to Section 3.12.1, "Environmental Setting," and Section 3.12.2, "Regulatory Setting," in Volume II of the Final Program EIR). Including land in the proposed project area that is outside the treatable landscape constitutes a change to the geographic extent presented in the Program EIR. However, within the boundary of the project area, the existing conditions that are pertinent to land use, planning, population, and housing 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 new impacts related to land use and planning, population and housing would occur.

4.12 NOISE

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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 NO1-2 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 Single-Event Noise Levels During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12	Yes	NOI-1	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT NOI-1

Initial vegetation treatments and ongoing maintenance treatments would require the use of heavy, noise-generating equipment. Manual, mechanical, and prescribed burning treatment activities occurring adjacent to sensitive land uses could temporarily expose those receptors to noise levels that exceed local standards. Herbicide application and prescribed herbivory treatments typically do not involve heavy machinery or loud noise-producing equipment, and therefore would be unlikely to result in exposing sensitive receptors to excessive noise. The potential for a substantial short-term increase in ambient noise levels from the use of heavy equipment was examined in the Program EIR. This impact is within the scope of the Program EIR because the number and types of equipment proposed, and equipment use being temporary and sporadic, are consistent with the assumptions analyzed in the Program EIR. The proposed treatments would not require the use of helicopters, which was the loudest type of equipment, and therefore the most severe noise impact, evaluated in the Program EIR.

Tehama County's Noise Ordinance (Code of Ordinances, Section 17.77.040) notes that noise sources associated with agricultural and timber management operations in zones permitting agricultural and timber management uses are

exempt from the Tehama County's Noise Ordinance (Tehama County 2024b). Because the project area is zoned for timber production, the project is exempt.

As discussed in the Program EIR, noise levels generated by individual equipment range from 75–87.9 dB at 50 feet from the noise source (75–85 dB at 50 feet from the noise source for projects without the use of helicopters), with the loudest type of equipment being a chainsaw. Though multiple pieces of equipment would be operated simultaneously to implement a treatment, they 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 and chippers. Treatments would also be dispersed throughout the 47,314-acre project area, distributed across distinct locations, 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 would not generate a substantial temporary increase in ambient noise levels near the project in excess of local standards. There are no sensitive receptors located within the project area. However, there are recreational uses (i.e., trails and campgrounds) in the immediate vicinity (i.e., within 1,500 feet of proposed treatments). Per SPR NOI-6, established recreational areas within 1,500 feet of the project would be notified prior to mechanical 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 Program EIR. 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 Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT NOI-2

Initial vegetation treatments and ongoing maintenance treatments would involve large trucks hauling heavy equipment to the project area. These haul truck trips would be dispersed on area roadways providing access to the project area including, but not limited to, Interstate 5 (I-5), Paskenta Road, Round Valley Road, Toomes Camp Road, and Eagle Peak Lookout Road. Vehicle traffic on area highways is not expected to generate a noticeable rise in traffic-related noise because it would be dispersed, infrequent, and not a substantial increase over existing conditions.

Haul truck trips on the local roadways could pass by residential receptors and the event of each truck passing by could increase the Single-Event Noise Level. However, this would be limited due to the very rural nature of the project area. The potential for a substantial short-term increase in Single-Event Noise Level was examined in the Program EIR. This impact is within the scope of the Program EIR because the number and types of equipment proposed are consistent with those analyzed 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 exposure potential is essentially the same within and outside the treatable landscape; therefore, the noise impact is also the same, as described above. SPR NOI-1 is applicable to the project. 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.

NEW NOISE IMPACTS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP Program EIR. 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 Program EIR (refer to Section 3.13.1, "Environmental Setting," and Section 3.13.2, "Regulatory Setting," in Volume II of the Final Program EIR). Including land from outside the CalVTP treatable landscape in the proposed treatment areas 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 noise outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No new impacts related to noise would occur.

4.13 RECREATION

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	None	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact; None = there are SPRs and/or MMs identified in the Program EIR 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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

The project area is located within Tehama County, which has many recreational resources (Tehama County 2009). Several trails including Valley View Mountain Trail, Ides Cove Trail and Mount Linn Loop Trail are located within and near the project area, as well as several campgrounds including Sugar Spring Campground, Sugarfoot Glade Campground, Kingsley Glade Campground, Three Prong Campground, Whitlock Campground, Green Springs Campground, and Toomes Campground (AllTrails 2024, Trailforks 2024).

IMPACT REC-1

Vegetation treatment activities have the potential to disrupt recreational activities near the project area by degrading the experience of recreationists through the creation of noise, dust, degradation of scenic views, or increased haul truck trips. The potential for vegetation treatment activities to disrupt recreation activities was examined in the Program EIR. Nuisance impacts related to noise, air quality/dust, aesthetics, and transportation would be avoided or minimized as explained in the discussion for those respective resource areas throughout this PSA/Addendum.

This impact is within the scope of the Program EIR because the availability of recreational resources and the treatment activities and intensity are consistent with those analyzed 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, the availability of recreational resources within the project area is essentially the same within and outside the treatable landscape; therefore, the impact on recreation is also the same, as described above. No SPRs are applicable to this impact. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than covered in the Program EIR.

NEW RECREATION IMPACTS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP Program EIR. 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 Program EIR (refer to Section 3.13.1, "Environmental Setting," and Section 3.13.2, "Regulatory Setting," in Volume II of the Final Program EIR). Including land from outside the CalVTP treatable landscape in the proposed treatment areas 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 recreation outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No new impacts related to recreation would occur.

4.14 TRANSPORTATION

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
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	Impact TRAN-1, pp. 3.15-9 – 3.15-10	Yes	AD-3 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	NA	PSU	No	Yes

Notes: LTS = less than significant; PSU = potentially significant and unavoidable; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT TRAN-1

Initial vegetation treatments and ongoing maintenance treatments would temporarily increase vehicular traffic along various public and private roadways throughout the project area. The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the Program EIR. The proposed treatments would be short term, and temporary increases in traffic related to treatments are within the scope of the Program EIR because the associated treatment duration and limited number of vehicles (i.e., heavy equipment transport, crew vehicles for crew members) are consistent with those analyzed in the Program EIR. In addition, the proposed treatments would not all occur simultaneously, and increases in vehicle trips associated with the treatments would be dispersed on multiple roadways throughout the 47,314-acre project 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 Program EIR. However, within the boundary of the project area, the existing transportation conditions (e.g., roadways and road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact is also the same, as described above. The SPRs applicable to this treatment are AD-3 and TRAN-1. 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.

IMPACT TRAN-2

Initial vegetation treatments and ongoing maintenance treatments would not require the construction or alteration of any roadways. However, the proposed treatments would include prescribed burning, which would produce smoke that could potentially affect visibility along nearby roadways such that a transportation hazard could occur. The potential for smoke to affect visibility along roadways during implementation of the treatment projects was examined in the Program EIR. This impact is within the scope of the activities and impacts addressed in the Program EIR because the burn duration (i.e., 1 day to 1 week) is consistent with that analyzed 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 transportation conditions (e.g., roadways and road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact is also the same, as described above. SPRs applicable to this treatment are AD-3, HYD-2, and TRAN-1. 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.

IMPACT TRAN-3

Treatments could temporarily increase vehicle miles traveled (VMT) above baseline conditions because the proposed project would require vehicle trips to transport crew members and equipment to the treatment areas. The project would be implemented by existing staff; therefore, the project would not result in a substantial increase in worker vehicle trips. This impact was identified as potentially significant and unavoidable in the Program EIR because implementation of the CalVTP would result in a net increase in VMT. However, as noted under Impact TRAN-3 in the Program EIR, individual vegetation treatment projects under the CalVTP are reasonably expected to generate fewer than 110 trips per day, which would cause a less-than-significant transportation impact for specific later activities, as described in the Technical Advisory on Evaluating Transportation Impacts, published by the Governor's Office of Planning and Research (OPR 2018).

Treatments are expected to require between 1–50 crew members per day depending on the treatment. The potential for an increase in VMT on affected roadways during implementation of the treatment projects was examined in the Program EIR. The increase in vehicle trips over existing conditions would be small, temporary, and dispersed over multiple roadways throughout the 47,314-acre project area. A temporary increase in VMT is within the scope of the activities and impacts addressed in the Program EIR because the number and duration of increased vehicle trips attributable to the project are consistent with those analyzed in the Program EIR. The proposed project would contribute to the cumulative increase in VMT attributable to implementation of the CalVTP. For these reasons, and as explained in the Program EIR, this impact would remain potentially significant and unavoidable.

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 transportation-related conditions in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact is also the same, as described above. No SPRs are applicable to this project. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW IMPACTS ON TRANSPORTATION

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP Program EIR. 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 Program EIR (refer to Section 3.15.1, "Environmental Setting," and Section 3.15.2, "Regulatory Setting," in Volume II of the Final Program EIR). Including land in the proposed treatment 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 and regulatory conditions pertinent to transportation outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No new impacts related to transportation would occur.

4.15 PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

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

Notes: LTS = less than significant; PSU = potentially significant and unavoidable; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

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 Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
	☐	☐	☐

Discussion

IMPACT UTIL-1

Initial and maintenance treatments would include manual treatments, mechanical treatments, prescribed burning, targeted ground application of herbicides, and prescribed herbivory. Prescribed burning would require an on-site water supply (i.e., water trucks) to be available as a safety precaution if needed to extinguish a burn. The potential increased demand for water was examined in the Program EIR. This impact is within the scope of the activities and impacts addressed in the Program EIR because the size of the area proposed for prescribed burning treatments, amount of water required for prescribed burning, and water source type are consistent with those analyzed 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 water supply impact is also the same, as described above. SPRs applicable to this treatment are UTIL-1, if biomass is hauled off-site. 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.

IMPACT UTIL-2

Initial vegetation treatments and ongoing maintenance treatments would generate biomass as a result of vegetation removal within the treatment areas. Biomass generated by mechanical and manual treatments would primarily be disposed of by pile or broadcast burning. However, chipped or lopped and scattered debris may be left on-site, removed to a biomass facility, processed using portable biomass technology, or piled for wildlife habitat. This impact was identified as potentially significant and unavoidable in the Program EIR because biomass hauled off-site in some parts of the treatable landscape could exceed the capacity of existing infrastructure for handling biomass. For the proposed treatment projects, some plant biomass could be hauled off-site to an appropriate waste collection facility. While the amount of biomass generated is not expected to exceed the capacity of existing local infrastructure in Tehama County, because the project would generate biomass that could be hauled off-site for disposal, it would contribute to the environmental significance conclusion in the Program EIR; therefore, for the purposes of CEQA compliance, this PSA/Addendum notes the impact as potentially significant and unavoidable.

SPR AD-3 is applicable to this impact and SPR UTIL-1 would be applicable to the proposed treatments if biomass is hauled off-site. 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, conditions related to biomass 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. 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.

IMPACT UTIL-3

As discussed above, initial vegetation treatments and ongoing maintenance treatments would generate biomass as a result of vegetation removal within the project area, which would be disposed of primarily through pile and broadcast burning, or using portable biomass processing technology when feasible. However, there is the potential for a small amount to be disposed of off-site at an appropriate waste collection facility. The implementing entity 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 Program EIR. This impact is within the scope of the activities and impacts addressed in the Program EIR because the types and amount of biomass that may need to be hauled off-site are consistent with those analyzed 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 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 AD-3 is applicable to this impact and SPR UTIL-1 would be applicable to the proposed treatments if biomass is hauled off-site. 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.

NEW IMPACTS ON PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP Program EIR. 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 Program EIR (refer to Section 3.15.1, "Environmental Setting," and Section 3.15.2, "Regulatory Setting," in Volume II of the Final Program EIR). Including 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 and regulatory conditions pertinent to public services, utilities, and service systems outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No new impact related to public services, utilities, or service systems would occur.

4.16 WILDFIRE

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

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Wildfire Impacts: Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
	☐	☐	☐

Discussion

IMPACT WIL-1

Proposed vegetation treatments would include shaded fuel breaks and ecological restoration through use of manual treatments, mechanical treatments, prescribed burning, targeted herbicide application, and prescribed herbivory. Vegetation treatment 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 Program EIR, under "Prescribed Burn Planning and Implementation," implementing a prescribed burn requires extensive planning. This includes 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 prescribed burn, fire containment lines would be established by clearing vegetation surrounding the designated burn area to help prevent the accidental escape of fire. Water trucks 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 Program EIR. Increased wildfire risk associated with the use of heavy equipment in vegetated areas and during prescribed burns is within the scope of the Program EIR because the types of equipment, treatment duration and types of prescribed burn methods proposed as part of the project are consistent with those analyzed 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 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 treatment are AD-3, HAZ-2, HAZ-3, and HAZ-4. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT WIL-2

Vegetation treatment activities include mechanical treatments, manual treatments, prescribed burning, targeted herbicide application, and prescribed herbivory, which could exacerbate fire risk as described in Impact WIL-1 above. The potential for post-fire landslides and flooding was evaluated in the Program EIR. 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 Program EIR because the equipment types, treatment duration, and methods of prescribed burn implementation are consistent with those analyzed 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 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 AD-3, 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.

This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW IMPACTS ON WILDFIRE

The proposed treatments are 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 3.17.1, "Environmental Setting," and Section 3.17.2, "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 wildfire outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are consistent with those covered in the Program EIR. No new impacts related to wildfire would occur.

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Attachment A

Mitigation Monitoring and Reporting Program for the Crane Mills Vegetation Treatment Project

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MITIGATION MONITORING AND REPORTING PROGRAM

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 (Program EIR) 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 Program EIR.

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 Program EIR 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 Program EIR. SPRs and mitigation measures that are referenced more than once in the PSA are not duplicated in the MMRP. Instructions for project-specific guidance to implement certain SPRs and mitigation measures has 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 Program EIR are noted in the table below. In all cases, the additional project-specific implementation instructions and clarifying edits to mitigation measures maintain the SPRs and mitigation measures as equivalent or more effective than those presented in the Program EIR.

ROLES AND RESPONSIBILITIES

The Resource Conservation District of Tehama County (RCDTC) is the project proponent and lead agency under CEQA. The RCDTC will enter into a partnership with Crane Mills to implement the proposed treatments. The RCDTC's Board will approve a resolution establishing the partnership and delegating implementation of the MMRP to Crane Mills. The partnership may entail the provision of resources to Crane Mills including equipment, staffing, and technical input.

Unless otherwise specified herein, Crane Mills (the implementing entity) is responsible for implementing the SPRs and mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. As the CEQA lead agency, the RCDTC delegates responsibility to Crane Mills for ensuring that implementation of mitigation measures occurs in accordance with the MMRP pursuant to Section 15097(a) of the State CEQA Guidelines.

As defined in the CalVTP Program EIR and the PSA/Addendum, the project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. The SPRs and mitigation measures in this MMRP direct the project proponent to implement actions to avoid, minimize and mitigate impacts. As the implementing entity and reflecting delegation by the RCDTC, the "project proponent" as identified in the SPRs and mitigation measures refers to Crane Mills.

REPORTING

Crane Mills shall document and describe the compliance of the project treatment work with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7.

MITIGATION MONITORING AND REPORTING PROGRAM TABLE

The categories identified in the attached MMRP table are described below.

- **SPRs and Mitigation Measures** – This column provides the text of the applicable SPR or adopted mitigation measure.
- **Timing** – This column identifies the time frame in which the SPR or mitigation measure will be implemented.
- **Implementing Entity** – This column identifies the party responsible for implementing the SPR or mitigation measure.
- **Verifying/Monitoring Entity** – This column identifies the party responsible for verifying and monitoring implementation of the SPR or mitigation measure.

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 Program EIR requirements listed below may be performed by individuals of various titles (including 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 of Forestry and Fire Protection 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 regarding the protection of special-status species, and 6) have experience with CDFW's California Natural Diversity Database (CNDDB) 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	Timing	Implementing Entity	Verifying/Monitoring Entity
Administrative Standard Project Requirements			
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.	Prior to treatment	Crane Mills	Crane Mills
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.	Prior to treatment	Crane Mills	Crane Mills
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 be provided with the notice) if they have questions or smoke concerns; 2) notify USFS of the prescribed burning treatment, and request that USFS issue a press release regarding the proposed timing of the prescribed burn 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. **Revisions to the SPR** The above SPR is revised from the original language presented in the CalVTP Program EIR. The original text of this SPR states that the project proponent will "2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information". This language has been removed and replaced with the following: "2) notify USFS of the prescribed burning treatment, and request that USFS issue a press release regarding the proposed timing of the prescribed burn".	At least three days prior to prescribed burn treatment activities	Crane Mills	Crane Mills
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	During treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
project site upon completion of project activities. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
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 treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	One to three days prior to treatment activities	Crane Mills	Crane Mills
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP Program EIR for CEQA compliance, the project proponent will provide the information listed below to the Board of Forestry and Fire Protection (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), or project latitude/longitude; ▶ project size (typically acres); ▶ treatment types and activities; and ▶ contact information for a representative of the project proponent. 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 at least 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). Information on approved projects (PSA complete): ▶ 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) Information on completed projects (following initial treatment): ▶ 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 ▪ Size of treated area (typically acres);	Prior to, during, and following treatment Information on the proposed project (PSA/Addendum in progress) was submitted to the Board on November 1, 2023.	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▪ 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). This SPR applies to all treatment activities and all treatment types, including treatment maintenance. **Revisions to the SPR** The above SPR is revised from the original language presented in the CalVTP Program EIR. Text was added after the list of Information on proposed products (PSA in-progress). The new language is as follows, "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 at least 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)."			
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.	During treatment	Crane Mills	Crane Mills
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.	During treatment	Crane Mills	Crane Mills
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.	During treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	During treatment	Crane Mills	Crane Mills
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.	Prior to prescribed burn treatment activities	Crane Mills	Crane Mills
SPR AQ-3: Create Burn Plan The project proponent will create a burn plan 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. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance. Project-Specific Implementation ▶ The RCDTC requires that all prescribed burning operations are guided by a burn plan prepared by a state certified burn boss. The burn plan will be prepared with input from a state certified burn boss, rather than a certified technician,	Prior to prescribed burn treatment activities; does not apply to pile burning	Crane Mills	Crane Mills
SPR AQ-4: Minimize Dust To minimize dust during treatment activities, the project proponent will implement the following measures: ▶ Limit the speed of vehicles and equipment traveling on unpaved areas to 25 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. If fugitive dust emissions are visibly occurring, vehicle speeds will be limited to 15 miles per hour. ▶ 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	During treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Revisions to the SPR** The above SPR is revised from the original language presented in the CalVTP Program EIR. The original text of this SPR states that the project proponent will "limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour." This language has been removed and replaced with the instruction that the project proponent will "Limit the speed of vehicles and equipment traveling on unpaved areas to 25 miles per hour", with the clarification added that "if fugitive dust emissions are visibly occurring, vehicle speeds will be limited to 15 miles per hour."			
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.	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR AQ-6: Prescribed Burn Safety Procedures An Incident Action Plan (IAP) will be prepared that includes elements that are appropriate for the size and scope of the burn as necessary to ensure personnel and public safety. IAP elements may 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. **Revisions to the SPR** The above SPR is revised from the original language presented in the CalVTP Program EIR. The original text of this SPR states that "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)." This language has been removed, and instead replaced with the following: "An Incident Action Plan (IAP) will be prepared that includes elements that are appropriate for the size and scope of the burn as necessary to ensure personnel and public safety.	During prescribed burn treatment activities	Crane Mills	Crane Mills
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.	Prior to treatment **Record search of project area and 0.25-mile buffer surrounding project area has been conducted; see PSA/Addendum for a summary of results.**	Crane Mills	Crane Mills
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. ▶ 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.	Prior to treatment **Tribes have been contacted and Sacred Lands File (SLF) query completed; see PSA/Addendum for a summary of consultation and SLF results.**	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ 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.	Prior to treatment	Crane Mills	Crane Mills
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.	Prior to treatment	Crane Mills	Crane Mills
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.	Prior to and during treatment	Crane Mills	Crane Mills
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	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	Prior to and during treatment	Crane Mills	Crane Mills
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.	Prior to and during treatment	Crane Mills	Crane Mills
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 Program EIR 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, CNDDB, 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	Prior to treatment **Biological reconnaissance survey occurred on November 7 and 8, 2023**	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 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:			
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: 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). 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. **Project-Specific Guidance to Implement SPR BIO-1** <u>Special-Status Wildlife</u> ▶ To avoid impacts on foothill yellow-legged frog, a no-disturbance buffer of 75 feet will be implemented prior to commencement of treatment activities adjacent to all perennial (i.e., Class I and Class II) watercourses that provide habitat suitable for the species, if feasible. If the 75-foot no-disturbance buffer is determined to be infeasible for certain treatment areas, then SPR BIO-10 will be implemented. ▶ To avoid impacts on northwestern pond turtle, a no-disturbance buffer of 330 feet will be implemented around aquatic habitat suitable for the species into potential upland habitat for mechanical treatment, manual tree and snag removal, and pile burning. Potential upland habitat is defined as areas with low growing or sparce vegetation, and open canopy in clay or silt/sandy soils, and on east-facing (Reese and Welsh 1997) or south-facing areas that are less than 25 percent slope (Buskirk 2002). If the 1330-foot no-disturbance buffer is not feasible for certain treatment areas, then SPR BIO-10 will be implemented. ▶ To avoid impacts on northern spotted owl, the following measures will be implemented:	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▪ To determine whether a documented northern spotted owl nesting occurrence is present within 0.25 mile of a treatment area, a qualified RPF or biologist will review northern spotted owl occurrence data in the CNDDB and the project proponent will contact US Forest Service biologists from Mendocino National Forest to obtain any recent survey and occurrence data for northern spotted owl that have not been made publicly available (e.g., in the CNDDB). ▪ If a documented northern spotted owl nesting occurrence is present, potential impacts from loud and continuous noise on the nesting occurrence will be avoided by implementing a limited operating period for mechanical treatments, manual tree and snag removal, and prescribed burning activities within 0.25 mile of the occurrence during the northern spotted owl nesting season (February 1–July 31). 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 for mechanical treatments, manual treatments, and pile burning activities within 0.25 mile of this habitat during the northern spotted owl nesting season (February 1–August 31), if feasible. If the limited operating period is determined to be infeasible, then SPR BIO-10 will be implemented. ▸ To avoid impacts on other special-status birds (American goshawk, golden eagle, loggerhead shrike, olive-sided flycatcher, white-tailed kite, and yellow warbler) treatments will be conducted outside of the nesting season (February 1–August 31) within nesting habitat suitable for these species. If it is not feasible to avoid certain treatment areas during the nesting bird season, then SPR BIO-10 will be implemented. ▸ To avoid impacts on monarch butterfly, broadcast burning, mechanical treatments, manual treatments (other than tree planting), and herbicide application treatments will be conducted outside of the monarch breeding season within the project area (April 1–October 31). This period may be adjusted by a qualified biologist or RPF to reflect local timing of monarch breeding. If it is not feasible to avoid certain treatment areas during the monarch breeding season, then SPR BIO-10 will be implemented. ▸ To avoid impacts on fisher, manual snag and tree removal, and mechanical treatments within habitat for the species will be conducted outside of the maternity season (March 1–June 30), and prescribed burning will be conducted outside of March 1 to May 1. If it is not feasible to avoid certain treatment areas during the fisher maternity season, then SPR BIO-10 will be implemented. ▸ To avoid impacts on special-status bats, mechanical treatments, manual tree and snag removal, and prescribed burning will be conducted within habitat suitable for bat roosting outside of the bat maternity season (April 1–August 31). If conducting mechanical treatments, manual tree and snag removal, and prescribed burning outside of the bat maternity season is determined to be infeasible for certain treatment areas, then SPR BIO-10 will be implemented. ▸ To avoid impacts on ringtail, prescribed burning, mechanical treatments, and manual tree and snag removal will be conducted within habitat suitable for ringtail outside of the ringtail maternity season (April 15–June 30). If conducting prescribed burning, mechanical treatments, and manual tree and snag removal outside of the ringtail maternity season is determined to be infeasible for certain treatment areas, then SPR BIO-10 will be implemented.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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, 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). This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Guidance to Implement SPR BIO-1** Special-Status Wildlife Because there is no reliable season during which all impacts on California red-legged frog, Crotch bumble bee, western bumble bee, and American badger could be avoided, avoidance of habitat is not feasible for these species, so implementation of SPR BIO-10 would be required.			
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.			
Sensitive Natural Communities and Other Sensitive Habitats			
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:	Prior to treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ 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 *A Manual of California Vegetation* (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. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat 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: ▶ 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. ▶ 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	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. ▶ Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry. ▶ 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. ▶ In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 936.9(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 to 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. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
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 Program EIR 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 Program EIR, 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).	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area. For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will: ▶ 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. These SPR requirements apply to all treatment activities and treatment types, including treatment maintenance. Additional measures will be applied to ecological restoration treatment types: ▶ 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 evidence that the habitat function of chaparral and coastal sage scrub would be improved. ▶ 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 to 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			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. These SPR requirements apply to all treatment activities and only the ecological restoration treatment type, including treatment maintenance. 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 Program EIR, such as geographic context. It is beyond the legal scope of the Program EIR 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 Program EIR.			
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., Ione chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle): ▶ clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; ▶ include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training; ▶ minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; ▶ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination; ▶ clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and ▶ follow the procedures listed in Guidance for Plant Pathogen Prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytoptheras* in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to and during treatments	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR BIO-7: Survey for Special-Status Plants If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. 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. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of the Program EIR, surveys will not be required under the following circumstances: ▶ 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. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatments	Crane Mills	Crane Mills
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 spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): ▶ 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 project treatment	Prior to and during treatments	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 project 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 moderate or high invasives 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 herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, 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 plant materials in a closed container or bag to prevent the spread of propagules during transport; and ▶ 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). This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Revisions to the SPR** The above SPR is revised from the original language presented in the CalVTP Program EIR. The original text of this SPR required that for all heavy equipment and vehicles, Crane Mills would wash equipment at a designated weed-cleaning station before entering from a treatment area with infestations of invasive plants, noxious weeds, or invasive wildlife. This language has been modified to clarify that these measures apply to the entire "project area." The original language also requires that significant infestations of invasive plant species are identified during reconnaissance-level surveys and targeted for removal during treatment activities. This language has been revised to clarify that it applies to "significant infestations of invasive plant species."			
Wildlife			
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	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. 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. This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Guidance to Implement SPR BIO-10** ▶ For prescribed burning, manual tree and snag removal treatments, mechanical treatments, and herbicide application that occur in habitat suitable for California red-legged frog and within the range of the species, protocol surveys will be conducted by a qualified RPF or biologist following the guidelines provided by USFWS (USFWS 2005), or presence of the species will be assumed. If presence is assumed or the species is detected during protocol surveys, Mitigation Measure BIO-2a will be implemented. ▶ For prescribed burning, manual tree and snag removal treatments, mechanical treatments, and herbicide application that occur within 75 feet of Class I and Class II watercourses that provide habitat suitable for foothill yellow legged frog as determined by a qualified RPF or biologist, focused visual encounter surveys for foothill yellow-legged frog will be conducted prior to treatment activities within the 75-foot buffer. If foothill yellow-legged frogs are not detected within the treatment area during focused surveys, then no mitigation for the species would be required. If foothill yellow-legged frogs are identified during focused surveys, Mitigation Measure BIO-2b would be implemented. ▶ For mechanical treatments, manual tree and snag removal, and pile burning, pursuant to SPR BIO-1, to avoid impacts on northwestern pond turtle, focused surveys for northwestern pond turtles will be conducted prior to treatment activities that occur in upland nesting habitat for northwestern pond turtle. Surveys shall include focused surveys of aquatic habitat for individuals, and if individuals are found, further surveys of upland habitat within 330 feet of aquatic habitat will be conducted If northwestern pond turtle nests are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. ▶ If the limited operating period for northern spotted owl is determined to be infeasible, to avoid impacts on the species, protocol-level surveys for northern spotted owl will be conducted by a qualified RPF or biologist within a 0.25-mile buffer surrounding the treatment area prior to implementation of treatment activities. Surveys for northern spotted owl will be conducted pursuant to the *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls* (USFWS 2012), or the Crane Mills Northern Spotted Owl Resource Plan (NSORP) as approved by CAL FIRE and CDFW. If nesting northern spotted owls are identified during protocol-level surveys, Mitigation Measure BIO-2a will be implemented. ▶ If conducting treatment activities outside the sensitive season for nesting birds (pursuant to SPR BIO-1) is determined to be infeasible, to avoid impacts on special-status birds (i.e., American goshawk, golden eagle, loggerhead shrike, olive-sided flycatcher, white-tailed kite, and yellow warbler), focused surveys (i.e., nest			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
searches) for nests of these species will be conducted prior to implementing any treatment activities (other than manual tree planting) during the nesting bird season (February 1–August 31). Prior to conducting focused surveys, the project proponent will contact US Forest Service biologists from Mendicino National Forest to obtain any recent survey and occurrence data for American goshawk that have not been made publicly available (e.g., in the CNDDB). If active special-status bird nests are observed during focused surveys, then mitigation measures BIO-2a (for golden eagle and white-tailed kite) and BIO-2b (for American goshawk, loggerhead shrike, olive-sided flycatcher, and yellow warbler) will be implemented. ▶ If conducting mechanical treatments, manual treatments (other than tree planting), broadcast burning, and herbicide application treatment activities outside the sensitive season for monarch butterflies (pursuant to SPR BIO-1) is determined to be infeasible, focused surveys for monarch butterflies will be conducted prior to these treatment activities, or presence of the species will be assumed. If monarch butterflies are detected during surveys or presence of the species is assumed, then Mitigation Measure BIO-2e will be implemented. ▶ If is not feasible to avoid conducting treatments in habitat types suitable for Crotch bumble bee and western bumble bee (i.e., grassland, oak woodland, chaparral, meadows and surrounding forest) pursuant to SPR BIO-1; therefore, a qualified RPF or biologist will conduct focused habitat assessment for Crotch bumble bees and western bumble bees within these habitat types based on the guidance in the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023). If the habitat assessment determines that habitat suitable for Crotch bumble bee and western bumble bee is present within a treatment area, then focused surveys for Crotch bumble bees and western bumble bees will be conducted based on the CDFW guidance, or presence of these two species will be assumed. If Crotch bumble bees or western bumble bees are detected during focused surveys or presence is assumed, Mitigation Measure BIO-2g will be implemented. ▶ Prior to conducting mechanical treatments and pile burning activities within oak woodland, grassland, or open chaparral habitat suitable for denning by American badger, focused surveys for American badger dens will be conducted by a qualified RPF or biologist no more than 14 days before the start of mechanical treatments and pile burning activities. If American badger dens are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. ▶ If conducting mechanical treatments, manual tree and snag removal, and prescribed burning activities outside the sensitive season for fisher (pursuant to SPR BIO-1) is determined to be infeasible, prior to implementing these treatments within habitat suitable for the species, presence of the species will be assumed or focused surveys for fisher will be conducted. Before using non-invasive survey methods (e.g., trail cameras, track plates) to survey for fisher, a denning habitat assessment will be conducted by a qualified RPF or biologist. If denning habitat is not present in the treatment area or fishers are not detected during focused surveys, then further mitigation for the species will not be required. If presence of fisher is assumed or fisher is detected during focused surveys Mitigation Measure BIO-2b will be implemented. ▶ If conducting mechanical treatments, manual tree and snag removal, and prescribed burning activities outside the sensitive season for special-status bats (pursuant to SPR BIO-1) is determined to be infeasible, to avoid impacts on these species, focal surveys for bat maternity roosts will be conducted prior to treatment activities.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
If bat maternity roosts are not detected during surveys, no further mitigation is required. If bat maternity roosts are detected during surveys, Mitigation Measure BIO-2b will be implemented. ▶ If the limited operating period for ringtail is determined to be infeasible, to avoid impacts on the species, focused surveys for ringtail, including non-invasive survey methods (e.g., trail cameras, track plates), will be conducted prior to implementing mechanical treatments and prescribed burning during the ringtail maternity season (April 15–June 30). If ringtails are not detected during focused surveys, no further mitigation is required. If presence of ringtail is assumed or an active den is identified during focused surveys by a qualified RPF or biologist, Mitigation Measure BIO-2a will be implemented.			
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 Program EIR. The active nesting season will be defined by the qualified RPF or biologist. 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 immediate 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. 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). 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: ▶ **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	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 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. 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: ▶ **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. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements			
SPR GEO-1: Suspend Disturbance during Heavy Precipitation The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause	During mechanical and herbicide treatment activities	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.			
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 from driving 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.	During mechanical treatment activities	Crane Mills	Crane Mills
SPR GEO-3: Stabilize Disturbed Soil Areas The project proponent will stabilize soil disturbed during mechanical treatments, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil on 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, prescribed herbivory, 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 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, prescribed herbivory, and prescribed burn treatment activities that result in exposure of bare soil on over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.	During mechanical and prescribed burn treatment activities that result in exposure of bare soil on over 50 percent or more of the treatment area, to the extent practicable	Crane Mills	Crane Mills
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, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Prior to and during mechanical and prescribed burning treatment activities	Crane Mills	Crane Mills

Standard Project Requirements	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 water breaks cannot effectively disperse surface runoff, including where water breaks 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.	During mechanical, manual, and prescribed burning treatment activities	Crane Mills	Crane Mills
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. Burn piles up to 40 feet in length, width, and diameter may be created in areas recently impacted by wildfire. 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. **Revisions to the SPR** The above SPR is revised from the original language presented in the CalVTP Program EIR. The following sentence has been added to provide additional clarity: "Burn piles up to 40 feet in length, width, and diameter may be created in areas recently impacted by wildfire."	During mechanical, manual, and prescribed burning treatment activities	Crane Mills	Crane Mills
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. (3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	Prior to and during mechanical treatment on slopes greater than 50 percent	Crane Mills	Crane Mills
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.	Prior to and during treatment	Crane Mills	Crane Mills
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.	During manual treatment activities	Crane Mills	Crane Mills
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 hoe consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	During manual treatment activities	Crane Mills	Crane Mills
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.	During treatment	Crane Mills	Crane Mills
SPR HAZ-5: Spill Prevention and Response Plan The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to): ▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; ▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;	Prepare SPRP prior to beginning any herbicide treatment activities; implement measures during herbicide treatment activities	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.			
SPR HAZ-6: Comply with Herbicide Application Regulations The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following: ▶ Be implemented consistent with recommendations prepared annually by a licensed PCA. ▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. ▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. ▶ Be applied by an applicator appropriately licensed by the State. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Prior to and during herbicide treatments	Crane Mills	Crane Mills
SPR HAZ-7: Triple Rinse Herbicide Containers The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	During and following herbicide treatments	Crane Mills	Crane Mills
SPR HAZ-8: Minimize Herbicide Drift to Public Areas The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: ▶ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceed 7 miles per hour (whichever is more conservative); ▶ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▶ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▶ spray nozzles will be kept within 24 inches of vegetation during spraying. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	During herbicide treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR HAZ-9: Notification of Herbicide Use in the Vicinity of Public Areas For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Prior to, during, and 72 hours after herbicide treatment activities occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet	Crane Mills	Crane Mills
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 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 Guidance to Implement SPR HYD-1** Vegetation treatment activities may result in discharges to waters of the state; therefore, compliance with Water Code sections 13260(a)(1) and 13264 are required. The project proponent will use the State Water Board's Vegetation Treatment General Order, which provides a mechanism for Water Code compliance for projects that prepare a CalVTP PSA or PSA/Addendum. The project will be automatically enrolled (through implementation of SPR AD-7) in the State Water Board's Vegetation Treatment General Order. The project's automatic enrollment satisfies the requirements of SPR HYD-1.	During treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	During treatment	Crane Mills	Crane Mills
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: The project proponent will include the following water quality protections for all prescribed herbivory treatments: ▶ Environmentally sensitive areas, such as waterbodies, wetlands, or riparian areas, will be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding. A buffer of approximately 50 feet will be maintained between sensitive and actively grazed areas. ▶ Water will be provided for grazing animals in the form of an on-site stock pond or a portable water source located outside of environmentally sensitive areas. ▶ Treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed. This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.	Prior to and during prescribed herbivory treatments	Crane Mills	Crane Mills
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.	Establish WLPZs during design of treatment project; implement WLPZ protections during treatment	Crane Mills	Crane Mills

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths

Water Class	Class I	Class II	Class III	Class IV
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 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).

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
The following WLPZ protections will be applied for all treatments: ▶ 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. ▶ 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. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR HYD-5: Protect Non-Target Vegetation and Special-status Species from Herbicides The project proponent will implement the following measures when applying herbicides: ▶ Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway. ▶ Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry. ▶ No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZs of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. ▶ No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. ▶ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. ▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceed 7 miles per hour (whichever is more conservative). ▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.	During herbicide treatment activities	Crane Mills	Crane Mills
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 the 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.	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	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Noise Standard Project Requirements			
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 ordinances, 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.	During treatment	Crane Mills	Crane Mills
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.	During treatment	Crane Mills	Crane Mills
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.	During mechanical treatment activities	Crane Mills	Crane Mills
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 feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	During treatment	Crane Mills	Crane Mills
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 treatment types, including treatment maintenance.	During treatment	Crane Mills	Crane Mills
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.	Prior to mechanical treatment activities within 1,500 feet of	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	noise-sensitive receptors		
Transportation Standard Project Requirements			
SPR TRAN-1: Implement Traffic Control during Treatments 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 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.	Contact agency(ies) with jurisdiction over roadways prior to treatment; prepare and implement TMP prior to and during treatment if required	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Public Services and Utilities Standard Project Requirements			
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 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.	Prepare an Organic Waste Disposition Plan prior to mechanical or manual treatment activities if material will be hauled off-site; implement plan during mechanical or manual treatment activities	Crane Mills	Crane Mills
Air Quality			
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not be feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following: ▶ Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. ▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: ■ meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; ■ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; ■ contain no fatty acids or functionalized fatty acid esters; and	During treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. ▶ 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.			
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.	During ground-disturbing activities if any prehistoric or historic-era subsurface archaeological features or deposits are discovered	Crane Mills	Crane Mills
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 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. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant	Prior to and during treatments	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
species without posing a risk, especially if the listed plants are dormant at the time of application. 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 (and associated use of 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.			
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA 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	Prior to and during treatments	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 (and associated use of accelerants) will occur within the special-status plant buffer. 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.** ▶ If special-status plant species are detected during protocol-level surveys, an evaluation of the appropriate treatment design and frequency to maintain habitat function within habitat suitable for special-status plants will be carried out by a qualified RPF, biologist, or botanist. Therefore, habitat function for special-status			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
plants would be maintained because treatment activities and maintenance treatments would be designed to ensure habitat function for the special-status plant species present. Konocti Manzanita The project proponent will avoid effects to Konocti manzanita by implementing the following strategies that are applicable to manual treatments, mechanical treatments, and prescribed burning if feasible: ▶ Chaparral vegetation communities with known Konocti manzanita will be broadcast burned within their natural fire return interval of 30 to 125 years. No maintenance broadcast burning will occur in chaparral vegetation communities with known Konocti manzanita prior to a minimum of 30 years since the last burn. Woodland and forest vegetation communities with known Konocti manzanita have a fire return interval of 5 to 30 years; broadcast burning with known Konocti manzanita will occur within the fire return interval of 7 to 30 years, allowing time for plants to establish and produce seed. No maintenance broadcast burning will occur in woodland and forest vegetation communities with known Konocti manzanita prior to a minimum of 7 years since the last burn. ▶ The recommended buffer may be reduced or eliminated for Konocti manzanita because a qualified biologist reviewed and provided substantial evidence that these species would benefit from prescribed burning treatments conducted within the species' normal fire return interval (See PSA Section 4.5 Impact BIO-1 for an analysis of benefits of prescribed burning on Konocti manzanita). ▪ Konocti manzanita does not require a 50-foot buffer for manual treatments, mechanical treatments, and prescribed broadcast burn treatments. However, individual plants would need to be avoided. ▶ **Manzanita pile burn strategy**: If feasible, pile burning will occur beyond 50 feet of Konocti manzanita plants. If site conditions make the 50-foot buffer infeasible, a qualified RPF, biologist, or botanist will develop and implement a strategy for pile burning in proximity to sensitive manzanitas that avoids or minimizes the damage sufficiently to support retention of the seed bank's natural functions. The goal of this pile burn strategy will be to retain a plentiful seed bank for Konocti manzanita, which is essential for the population to regenerate after a prescribed broadcast burn. Mazanita pile burn strategies may include, but are not limited to, the following: ▪ Piles will be located as far from sensitive manzanita individuals as possible, with preference for placement in areas where the seed bank for sensitive manzanita is likely reduced, such as in an existing road or outside of the boundary of chaparral habitat. • The number of burn piles will be minimized per acre to an appropriate level based on the site conditions (e.g., one to two piles per acre). • When pile burning is phased across several separate burning sessions, new burn piles will be placed in the location of previous burn piles. • Feasible measures will be implemented to minimize soil heating (e.g., burn piles will be extinguished after 8 hours of burning; Busse et. al., 2013).			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
• Post-treatment monitoring will document manzanita survival and regeneration in the areas surrounding burn piles. o Test plots with pile burning followed by broadcast burning will be conducted to document manzanita survival and regeneration in the area. o If monitoring shows rare manzanitas are not regenerating as expected, Crane Mills will consider adoption of adaptive maintenance treatments. ▶ The current available scientific research will be used to develop strategies for pile burning in areas where Konocti manzanita are present. A summary of the manzanita pile burn strategy will be included in the post-project implementation report (referred to by CAL FIRE as a Completion Report) required by SPR AD-7. ▶ If these measures are not feasible and significant impacts remain, Mitigation Measure BIO-1c will apply. Jepson's Dodder and Oval-leaved Viburnum ▶ Exceptions to the "no fire ignitions" are in place for habitats that are observed to contain Jepson's dodder or oval-leaved viburnum that benefit from fire. Burning would occur during the dormant season for Jepson's dodder. **Revisions to the SPR** The above SPR is revised from the original language presented in the CalVTP Program EIR. The original text of this SPR included the following bullet points: ▪ "Konocti manzanita does not require a 50-foot buffer for manual and mechanical treatments where initial treatment is required to safely initiate prescribed broadcast burning, such as for the creation of control lines or to reduce fuel loading prior to prescribed burning. ▪ Konocti manzanita does not require a 50-foot buffer for prescribed broadcast burn treatments." The following text has been included in the revision as a replacement for the removed text: ▪ "Konocti manzanita does not require a 50-foot buffer for manual treatments, mechanical treatments, and prescribed broadcast burn treatments. However, individual plants would need to be avoided."			
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 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	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 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 offsite 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			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 Program EIR. 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.			
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. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> The project proponent will implement one of the following two measures to avoid mortality, injury, or disturbance of individuals: 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. <u>Maintain Habitat Function</u> ▶ The project proponent will design treatment activities to maintain the habitat function, by implementing the following:	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ 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 California gnatcatcher, riparian woodrat) 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 [e.g., 50 percent for coastal California gnatcatcher]) such that 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. Because this measure pertains to species listed under CESA or ESA or are Fully Protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If the lead agency determines after consultation that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c. **Project-Specific Guidance to Implement Mitigation Measure BIO-2a** <u>California red-legged frog</u> ▶ To avoid mortality, injury, or disturbance to California red-legged frog, if presence is assumed or protocol surveys result in detection of California red-legged frog (pursuant to SPR BIO-10), the following will be implemented for prescribed burning; mechanical treatments; manual tree, snag, and shrub removal treatments; and herbicide application treatments within the range of the species: ▪ Within 1.7 miles of California red-legged frog breeding habitat, pre-treatment visual surveys will be performed daily by a qualified RPF, biologist, or biological technician, prior to implementation of treatment activities (i.e., prescribed burning; mechanical treatments; manual tree, snag, and shrub removal; herbicide application) within 300 feet of Class I or Class II watercourses and other sensitive habitat areas (e.g., wet intermittent watercourses, wet seeps), during the wet season (October 1–April 1) or within 24 hours following a rain event greater than one quarter inch. Surveys and monitoring will be performed year-around prior to any activities within 30 feet of Class I or Class II watercourses and within or adjacent to other sensitive habitat areas (e.g., wet Class III watercourses, wet seeps).			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▪ Prior to and within 24 hours of ignition of burn piles, each pile within 300 feet of aquatic breeding habitat that is occupied or assumed to be occupied will be inspected by a qualified RPF, biologist, or biological technician to determine whether California red-legged frogs are present prior to ignition. ▪ If a California red-legged frogs are found during pre-treatment surveys or enter the project site during treatment activities, a no-disturbance buffer of 100 feet will be implemented around the individual unless it is determined by the qualified RPF or biologist that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal leaves on its own. ▪ Within 1.7 miles of California red-legged frog breeding habitat, all mechanized equipment (e.g., track chippers, tracked grinder, slope mower) will shut down within 300 feet of Class I, Class II watercourses and other sensitive habitat areas (e.g., wet intermittent watercourses, wet seeps) for 24 hours following any precipitation event of 0.2 inches to less than 1 inch; 48 hours following any precipitation event 1 inch to less than 2 inches; and 72 hours following any precipitation event greater or equal to 2 inches. Handwork may continue. ▪ If California red-legged frogs are found during pre-treatment surveys or enter the project site during treatment activities, the specific habitat features used by the frog when detected will be evaluated by a qualified RPF or biologist for habitat retention and prioritized for use in meeting the retention standards for the project. <u>Northern spotted owl</u> ▸ To avoid mortality, injury, or disturbance of nesting northern spotted owls, if an active nest is identified during protocol-level surveys (pursuant to SPR BIO-10), a 0.25-mile no-disturbance buffer will be established and no treatment activities will occur within this buffer from February 1–August 31 (for habitat modification) or February 1–July 9 (for loud and continuous noise without habitat modification). ▸ Habitat function of northern spotted owl will be maintained by implementing the habitat retention standards in *Northern Spotted Owl Take Avoidance Analysis and Guidance for Private lands in California, Attachment B: Take Avoidance Analysis- Interior* (USFWS 2019), or the Crane Mills Northern Spotted Owl Resource Plan (NSORP) as approved by CAL FIRE and CDFW <u>Golden eagle</u> ▸ To avoid mortality, injury, or disturbance to golden eagle, if an active nest is detected during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of at least one mile will be established and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist. Trees containing golden eagle nests will not be removed pursuant to the Bald and Golden Eagle Protection Act. <u>White-tailed kite</u> ▸ To avoid mortality, injury, or disturbance to white-tailed kite, if an active nest is detected during focused surveys (pursuant to SPR BIO-10), a 0.25-mile no-disturbance buffer will be established, and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Ringtail ▶ If the limited operating period for ringtail is determined to be infeasible and ringtails are detected during focused surveys implemented under SPR BIO-10, or presence of ringtails is assumed, then the following avoidance and minimization measures will be required: ▪ **Den Surveys**. Within seven days prior to the start of mechanical treatments, manual tree and snag removal and prescribed burning during the ringtail maternity season (April 15–June 30), a qualified RPF or biologist will conduct a den search in the treatment area. The qualified RPF or biologist will search for large trees (i.e., greater than 12 inches diameter at breast height [dbh]) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If found, the qualified RPF or biologist will inspect the cavity using a cell phone with a flash, or other tools (e.g., borescopes) to determine whether ringtails are present. Areas with appropriate den habitat (e.g., large trees), occupied or not, will be marked (i.e., with flagging, spray paint), for inspection during future sweeps (as described below). The qualified RPF or biologist will also search for dens in dense shrub habitat and will note any sightings of fleeing adult ringtails. ▪ **Active Dens**. If active ringtail dens are discovered during a den survey or daily sweep, a 0.25-mile no-disturbance buffer will be implemented around the den, and mechanical treatments, manual tree and snag removal, or prescribed burning will not proceed within the buffer until at least the end of the ringtail maternity season (April 15–June 30). The size of this buffer may be adjusted in consultation with CDFW. The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer will incorporate the den and an area greater than the typical ringtail home range in northern California (Wyatt, pers. comm., 2021). If an active den is discovered, CDFW (R1AInland.Timber@wildlife.ca.gov) will be notified of the den and buffer location. CDFW will be given the opportunity to visit the site and provide technical information on the size and shape of the den buffer. ▪ **Daily Sweeps, Training, and Monitoring**. If active ringtail dens are not discovered, the following measures will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search as well as take of adult ringtails and kits. • **Daily Sweeps**. On the first morning of work for mechanical treatments, manual tree and snag removal, or prescribed burning, a qualified RPF or biologist will conduct a sweep of the area to be treated and will search all habitat suitable for ringtails (i.e., larger trees, dense brush, rock piles) for active dens or adults, including the trees with cavities previously marked by the qualified RPF or biologist. On following days, a trained contractor will search all areas previously marked by the qualified RPF or biologist for active dens (see training requirements below under "Training and Monitoring"). If an active den is discovered during a daily sweep, the qualified RPF or biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 miles will be implemented around the den, and the requirements described above under "Active Dens" will be followed. • **Training and Monitoring**. On the first morning of work for mechanical treatments, manual tree and snag removal, or prescribed burning, the qualified RPF or biologist will provide biological			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
resource training (as required under CalVTP PEIR SPR BIO-2) for all contractors. Along with standard biological resource training, the qualified RPF or biologist will provide additional training specific to ringtail that will include the following elements: o Description of ringtail appearance (i.e., physical features, typical size); o Description of typical ringtail behavior; o Description of denning habitat suitable for ringtail, particularly in the specific treatment area. The approximate location of large trees with cavities that were previously marked will be noted; o Measures required during operations, including daily sweeps of habitat suitable for ringtail where treatment will occur that day (i.e., dense brush habitat, previously marked tree cavities), take avoidance measures, and required increased vigilance when operating in dense brush; o Measures required if a ringtail is spotted (i.e., all work halts until a qualified RPF or biologist can conduct a den search and sweep; if the qualified RPF or biologist observes a ringtail or confirms the contractor's observation, the occurrence will be reported to CDFW at R1AInland.Timber@wildlife.ca.gov); o Measures required if a ringtail den is found (i.e., 0.25-mile no-disturbance buffer and requirements described above under "Active Dens" will be followed); o Definition of and legal consequences for take of ringtail (i.e., $10,000 fine for each take and/or 1 year in jail); and o Requirements for contacting CDFW (R1AInland.Timber@wildlife.ca.gov), which include the following circumstances: ringtails observed during treatment activities (notify within 3 business days); active ringtail den discovered (notify within 24 hours); and take of ringtail occurs (notify within 24 hours).			
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) 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 or minimize adverse effects to the species by implementing the following. Avoid Mortality, Injury, or Disturbance of Individuals ▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals: For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency	Prior to and during treatment	Crane Mills	Crane Mills

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the 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). ▪ 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. <u>Maintain Habitat Function</u> ▶ For all treatment activities, 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; 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			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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 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. 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. 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 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. **Project-Specific Guidance to Implement Mitigation Measure BIO-2b** ▶ To avoid mortality, injury, or disturbance to foothill yellow-legged frog, if presence is assumed or protocol surveys result in detection of foothill yellow-legged frog (pursuant to SPR BIO-10), the following will be			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
implemented for prescribed burning; mechanical treatments; and manual tree, snag, and shrub removal treatments within suitable habitat for the species: ▪ Daily inspection and monitoring of the day's treatment area within 75 feet of suitable aquatic habitat will be performed by the qualified RPF, biologist, or biological technician. If foothill yellow-legged frog is detected during inspection or monitoring, treatment activities will be halted and a no-disturbance buffer zone of a size that will appropriately avoid foothill yellow-legged frog will be established. Treatment will not occur until the frog has left the area on their own accord, or the individual is moved by the qualified RPF, biologist, or biological technician with the appropriate permits. ▶ To avoid mortality, injury, or disturbance to northwestern pond turtle, if focused surveys result in detection of turtles (pursuant to SPR BIO-10), the following will be implemented prior to prescribed burning, manual snag and tree removal, and mechanical treatments: ▪ Nests will be flagged for avoidance, individual animals relocated by a qualified RPF or biologist with a valid CDFW scientific collecting permit, and/or other measures recommended by a qualified RPF or biologist as necessary to avoid injury to or mortality of northwestern pond turtles. ▪ If this species is listed under ESA and the proposed 4(d) rule exceptions are not included, Crane Mills would review the project-specific implementation measures to determine if the measures are sufficient to avoid mortality, injury, or disturbance of northwestern pond turtles. ▶ To avoid mortality, injury, or disturbance to American goshawk, loggerhead shrike, olive-sided flycatcher, and yellow-warbler, if an active nest is detected during focused surveys (pursuant to SPR BIO-10), a 0.25-mile no-disturbance buffer will be established around active American goshawk nests, and a buffer of 100 feet will be established around active loggerhead shrike, olive-sided flycatcher, and yellow-warbler nests. No treatment activities will occur within these buffers until the chicks have fledged as determined by a qualified RPF or biologist. ▶ To avoid mortality or injury to American badger, if an active den is detected during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer will be established around the den prior to mechanical treatments and pile burning, the size of which would be determined by the qualified RPF or biologist. No treatment activities would occur within this buffer until the den is no longer occupied as determined by the qualified RPF or biologist. ▶ To avoid mortality or injury to fisher, if presence is assumed or focused surveys result in detection of fisher (pursuant to SPR BIO-10), the following will be implemented prior to prescribed burning, manual snag and tree removal, and mechanical treatments. ▪ A limited operating period prohibiting manual tree and snag removal, and mechanical treatments will be applied from March 1 to June 30, and prescribed burning from March 1 through May 1; or ▪ Surveys will be conducted of potential den sites for signs of fisher activity. If an active den is identified, a no-disturbance buffer will be established around the den at a distance that avoids disturbance of the den; this distance would be a minimum of 100 feet or larger as determined by the qualified RPF or			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
biologist based on the treatment activities, topographical and vegetative screening, and existing disturbance in the area. No treatment activities would occur within this buffer until the den is no longer occupied as determined by the qualified RPF or biologist. ▶ To avoid mortality or injury to special-status bats, if special-status bat roosts are detected during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of 250 feet will be established around active pallid bat and Townsend's big-eared bat roosts and mechanical treatments, manual tree and snag removal, and prescribed burning would not occur within this buffer until the roost is no longer occupied as determined by the qualified RPF or biologist.			
Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, then the following measures will be implemented: ▶ Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34). ▶ 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. ▶ Because prescribed herbivory could result in the indiscriminate removal of the host plants for federally listed butterflies, this treatment type will not be used within occupied habitat of any federally listed butterfly species, unless it is known that the host plant is unpalatable to the herbivore. ▶ Treatment areas that are not occupied but are within the range of the federally listed butterfly species will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year. ▶ 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 species, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained. 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. **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 California 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.	Prior to and during treatment	Crane Mills	Crane Mills

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

Butterfly Species	Host Plants
bay checkerspot butterfly	dwarf plantain (*Plantago virginica*), purple owl's clover (*Castilleja exserta*)
Behren's silverspot butterfly	blue violet (*Viola adunca*)
callippe silverspot butterfly	California golden violet (*Viola pedunculata*)
Carson wandering skipper	salt grass (*Distichlis spicata*)
El Segundo blue butterfly	seacliff buckwheat (*Eriogonum parvifolium*)
Hermes copper butterfly	spiny redberry (*Rhamnus crocea*)
Kern primrose sphinx moth	plains evening-primrose (*Camissonia contorta*), field primrose (*Camissonia campestris*)
Laguna Mountains skipper	Cleveland's horkelia (*Horkelia clevelandii*), sticky cinquefoil (*Drymocallis glandulosa*)
Lange's metalmark butterfly	naked-stemmed buckwheat (*Eriogonum nudum*)
lotis blue butterfly	seaside bird's foot trefoil (*Hosackia gracilis*)
Mission blue butterfly	lupine (*Lupinus* spp.)
Myrtle's silverspot butterfly	blue violet
Oregon silverspot butterfly	blue violet
Palos Verdes blue butterfly	Santa Barbara milkvetch (*Astragalus trichopodus*), common deerweed (*Acmispon glaber*)
San Bruno elfin butterfly	broadleaf stonecrop (*Sedum spathulifolium*), manzanita (*Arctostaphylos* spp.), huckleberry (*Vaccinuum* spp.)
Smith's blue butterfly	seacliff buckwheat, seaside buckwheat (*Eriogonum latifolium*)
Quino checkerspot butterfly	dwarf plantain, purple owl's clover

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
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 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. **Project-Specific Implementation** To avoid impacts on monarch butterfly, the following will be implemented: ▶ If monarch butterflies are detected during focused surveys pursuant to SPR BIO-10 or assumed to be present, focused surveys will be conducted for host plants for the species (i.e., milkweed). Host plants detected during focused surveys will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants if feasible (unless, pursuant to SPR BIO-1, activities occur outside of March 15 through October 31, when impacts on monarch butterflies can be avoided).			
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 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: ▶ 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	Prior to and during treatment	Crane Mills	Crane Mills

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
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). ▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September). **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 California 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. **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 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.			

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
Project-Specific Implementation To avoid impacts on Crotch bumble bee and western bumble bee, the following measures will be implemented when SPR BIO-10 results in identification of habitat suitable for the species and the species are detected, or presence of the species is assumed: ▶ If Crotch bumble bees or western bumble bees are detected during focused surveys, a no-disturbance buffer of at least 50 feet will be established around any identified nest colonies, and no treatment activities will occur within this buffer until the nesting colony is no longer occupied as determined by a qualified RPF or biologist. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW. ▶ If surveys for nest colonies are not conducted and presence is assumed, mechanical treatments will not occur during the colony active period (April through August for Crotch bumble bee and April through September for western bumble bee). ▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat during the colony active period (April through August for Crotch bumble bee and April through September for western bumble bee) (CDFW 2023). Herbicide application will not target native flowering plants while blooming, and herbicide application will be conducted with ground-level application only (i.e., paint-on stems, backpack hand-applicator, hypo-hatchet tree injection, or hand placement of pellets). ▶ Prescribed burning and biomass disposal will be designed to avoid bumble bee nest colonies and floral resources: ▪ Chips will not be deeper than approximately 4 inches on or within 5 feet of existing burrows and cavities that are likely for use by special-status bumble bee nest colonies. ▪ Burn piles that remain on site for greater than one year will be surveyed for bumble bee nests prior to burning by a qualified biologist, or they will be burned during the season when bumble bees are less active (October through February). ▪ Broadcast burning in habitat suitable for sensitive bumble bees will be restricted to the winter season prior to emergence of bumble bee floral resources. Generally, prescribed burning will be limited to October 31 – March 31. If conditions in a given year vary and the timing of floral resource emergence is altered by unusual conditions (e.g., heavy rains, extended cold season), the prescribed burning window may be altered with coordination from a qualified bumble bee biologist. Variation from the October 31 – March 31 broadcast burning window will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). ▶ Treatment areas in occupied or suitable colony or overwintering 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 scale will be determined by a qualified RPF or biologist. 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).			

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
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 *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (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. ▶ 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 *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (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. ▶ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). ▶ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break). ▶ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection	Prior to and during treatment	Crane Mills	Crane Mills

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are 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). 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. 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 determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be 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:
▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by:
  ▪ 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:
	Prior to and during treatment	Crane Mills	Crane Mills

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
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 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. 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.			
Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following: ▶ Compensate for unavoidable losses of riparian habitat acreage and function by: ▪ 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: 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 legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.	Prior to and during treatment	Crane Mills	Crane Mills

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
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. 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.			
Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands Impacts to wetlands will be avoided using the following measures: ▶ 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 species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. ▶ 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, herbicide application is prohibited. ▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, 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: ▪ No special-status species are present in the wetland habitat ▪ The wetland habitat function would be maintained.	Prior to and during treatment	Crane Mills	Crane Mills

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
▪ 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 (and associated use of accelerants) will occur within the wetland buffer.			
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: ▶ **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.	Prior to and during treatment	Crane Mills	Crane Mills
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 Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire* (NWCG 2018): ▶ 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, prescribed herbivory, and biomass utilization); and ▶ schedule burns before new fuels appear. 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	Prior to and during prescribed burning treatment	Crane Mills	Crane Mills

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
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.			
Hazardous Materials, Public Health and Safety			
Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites 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 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.	During PSA preparation **Database searches are complete; see PSA/Addendum for results**	Crane Mills	Crane Mills

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Attachment B

Biological Resources

Special-Status Plant Species Known to Occur in the Vicinity of the Project Area and Their Potential for Occurrence in the Project Area

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
red-flowered bird's-foot trefoil *Acmispon rubriflorus*	—	—	1B.1	Valley and foothill grassland, cismontane woodland. Most recent sighting from sterile, red soils-volcanic mudflow deposits. 640–1,610 feet in elevation. Blooms April–June. Annual.	*Not expected to occur.* The project area is above the known elevational range for this species.
scabrid alpine tarplant *Anisocarpus scabridus*	—	—	1B.3	Upper montane coniferous forest. Open stony ridges, metamorphic scree slopes of mountain peaks, and cliffs in or near red fir forest. 5,415–7,545 feet in elevation. Blooms July–August. Perennial.	***Known to occur**. There are known occurrences of scabrid alpine tarplant in the project area in the vicinity of Mt Linn (CNDDB 2023). There may be additional occurrences of scabrid alpine tarplant on suitable habitat within the project area.
Konocti manzanita *Arctostaphylos manzanita* ssp. *elegans*	—	—	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Volcanic soils. 740–6,005 feet in elevation. Blooms January–May. Perennial.	***Known to occur.*** There are known occurrences of Konocti manzanita in the project area along the M2 road near Round Mountain, along Eagle Peak Lookout Road, and along Round Valley Road. (CNDDB 2023). There may be additional occurrences of Konocti manzanita on suitable habitat within the project area.
Jepson's milk-vetch *Astragalus rattanii* var. *jepsonianus*	—	—	1B.2	Ultramafic. Cismontane woodland, valley and foothill grassland, chaparral. Commonly on serpentine in grassland or openings in chaparral. 575–3,295 feet in elevation. Blooms March–June. Annual.	*May occur.* The project area contains grassy open areas in woodland and chaparral habitats on serpentine soil suitable for this species.
Big-scale balsamroot *Balsamorhiza macrolepis*	—	—	1B.2	Ultramafic. Chaparral, valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 115–4,805 feet in elevation. Blooms March–June. Perennial.	***Known to occur.*** There is a known occurrence of big-scale balsamroot in the project area between Raglin Ridge and South Fork Elder Creek (CNDDB 2023). There may be additional occurrences of big-scale balsamroot on suitable habitat within the project area.
serpentine rockcress *Boechera serpenticola*	—	—	1B.2	Ultramafic. Lower montane coniferous forest, upper montane coniferous forest. Serpentine ridges and talus. 3690–6,855 feet in elevation. Blooms March–June. Perennial.	*May occur.* The project area contains ponderosa pine forest on serpentine soil suitable for this species.
rattlesnake fern *Botrypus virginianus*	—	—	2B.2	Wetland. Bogs and fens, lower montane coniferous forest, meadows and seeps, riparian forest. 2345–4,445 feet in elevation. Blooms June–September. Perennial.	*May occur.* The project area contains wetland and riparian habitats suitable for this species.
watershield *Brasenia schreberi*	—	—	2B.3	Wetland. Freshwater marshes and swamps. Aquatic species known from water bodies both natural and artificial in California. 100–7,220 feet in elevation. Blooms June–September. Geophyte.	*May occur.* The project area contains wetland habitats suitable for this species.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Indian Valley brodiaea *Brodiaea rosea*	—	SE	3.1	Ultramafic. Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland. Serpentine soils. 1,100–4,755 feet in elevation. Blooms May–June. Geophyte.	*May occur*. The project area contains chaparral, oak/pine woodlands, and grasslands on serpentine soil suitable for this species.
three-fingered morning-glory *Calystegia collina* ssp. *tridactylosa*	—	—	1B.2	Ultramafic. Chaparral, cismontane woodland. Rocky, gravelly openings in serpentine. 1,985–2,315 feet in elevation. Blooms April–June. Geophyte.	*May occur*. The project area contains chaparral and oak/pine woodlands on serpentine soil suitable for this species.
Klamath sedge *Carex klamathensis*	—	—	1B.2	Ultramafic, wetland. Meadows and seeps, chaparral, cismontane woodland. Serpentine, fens and seeps. 2,985–3,430 feet in elevation. Fruits June-July. Geophyte.	*May occur*. The project area contains wet habitats with serpentine soils suitable for this species.
northern meadow sedge *Carex praticola*	—	—	2B.2	Wetland. Meadows and seeps. Moist to wet meadows. 50–10,500 feet in elevation. Blooms May–July. Perennial.	*May occur*. The project area contains wet meadow and riparian habitats suitable for this species.
dwarf soaproot *Chlorogalum pomeridianum* var. *minus*	—	—	1B.2	Ultramafic. Chaparral. Serpentine. 1,000–3,280 feet in elevation. Blooms May–August. Geophyte.	***Known to occur***. There are known occurrence of dwarf soaproot in the project area on Raglin Ridge along the M2 Road near Round Mountain (CNDDB 2023). There may be additional occurrences of dwarf soaproot on suitable habitat within the project area.
Jepson's dodder *Cuscuta jepsonii*	—	—	1B.2	North coast coniferous forest and lower montane coniferous forest on *Ceanothus prostratus* or *Ceanothus diversifolius*. 395–9,005 feet in elevation. Blooms July–September. Annual vine (parasitic).	*May occur*. The project area contains North Coast and lower montane coniferous forests with *Ceanothus prostratus* host plants that provide habitat suitable for this species.
Snow Mountain willowherb *Epilobium nivium*	—	—	1B.2	Upper montane coniferous forest, chaparral. Crevices of volcanic and metavolcanic rock outcrops and associated talus. 4,595–7,220 feet in elevation. Blooms June–October. Perennial.	***Known to occur***. There is a known occurrence of Snow Mountain willowherb along the M22 Road near Ides Cove (CNDDB 2023). There may be additional occurrences of Snow Mountain willowherb on suitable habitat within the project area.
Oregon fireweed *Epilobium oreganum*	—	—	1B.2	Ultramafic. Bogs, fens, and streamsides in lower and upper montane coniferous forest; at least sometimes on serpentine. 1,640–7,350 feet in elevation. Blooms June–September. Perennial.	*May occur*. The project area contains wetland and riparian habitats suitable for this species.
Tracy's eriastrum *Eriastrum tracyi*	—	SR	3.2	Chaparral, cismontane woodland, valley and foothill grassland. Gravelly shale or clay; often in open areas. 1,035–5,300 feet in elevation. Blooms May–July. Annual.	*May occur*. The project area contains chaparral and woodland habitats suitable for this species.
Stony Creek spurge *Euphorbia ocellata* ssp. *rattanii*	—	—	1B.2	Valley and foothill grassland, chaparral. Sandy or rocky soils. 280–2,625 feet in elevation. Blooms May–October. Annual.	*May occur*. The project area contains chaparral habitat with sandy and rocky soils suitable for this species.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
adobe-lily *Fritillaria pluriflora*	—	—	1B.2	Ultramafic. Chaparral, cismontane woodland, foothill grassland. Usually on clay soils; sometimes serpentine. 150–3,100 feet in elevation. Blooms February–April. Geophyte.	*May occur.* The project area contains woodland and chaparral habitats on serpentine soil suitable for this species.
American manna grass *Glyceria grandis*	—	—	2B.3	Wetland. Bogs and fens, meadows and seeps, marshes and swamps. Wet meadows, ditches, streams, and ponds, in valleys and lower elevations in the mountains. 195–6,710 feet in elevation. Blooms June–August. Geophyte.	*May occur.* The project area contains wetland and riparian habitats suitable for this species.
Stebbins' harmonia *Harmonia stebbinsii*	—	—	1B.2	Ultramafic. Chaparral, lower montane coniferous forest. Serpentine soils; often along roads. 395–5,200 feet in elevation. Blooms May–June. Annual.	*May occur.* The project area contains chaparral and coniferous forests on serpentine soil suitable for this species.
Tehama County western flax *Hesperolinon tehamense*	—	—	1B.3	Ultramafic. Chaparral, cismontane woodland. Serpentine barrens in chaparral. 330–4,100 feet in elevation. Blooms May–July. Annual.	***Known to occur.*** There are known occurrences of Tehama County western flax in the project area on Raglin Ridge along the M2 Road near Round Mountain (CNDDB 2023). There may be additional occurrences of Tehama County western flax on suitable habitat within the project area.
Yolla Bolly Mountains bird's-foot trefoil *Hosackia yollabolliensis*	—	—	1B.2	Upper montane coniferous forest, meadows and seeps. 5,185–7,005 feet in elevation. Blooms June–August. Perennial.	*May occur.* The project area contains open dry slopes in the fir forests suitable for this species.
Water howellia *Howellia aquatilis*	FD	—	2B.2	Wetland. Freshwater marshes and swamps. In clear ponds with other aquatics and surrounded by ponderosa pine forest and sometimes riparian associates. 3,595–4,530 feet in elevation. Blooms June. Annual.	*May occur.* The project area contains wetland habitats suitable for this species.
Rau's jaffueliobryum moss *Jaffueliobryum raui*	—	—	2B.3	Alpine dwarf scrub, chaparral, Mojavean desert scrub, Sonoran desert scrub. Dry openings, rock crevices, carbonate. 1,610–6,890 feet in elevation. Moss.	*May occur.* The project area contains chaparral and dry open habitats suitable for this species.
Colusa layia *Layia septentrionalis*	—	—	1B.2	Ultramafic. Chaparral, cismontane woodland, valley and foothill grassland. Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 50–3,610 feet in elevation. Blooms April–May. Annual.	*May occur.* The project area contains chaparral and woodland habitats on serpentine soil suitable for this species.
Mt. Tedoc leptosiphon *Leptosiphon nuttallii* ssp. *howellii*	—	—	1B.3	Ultramafic. Lower montane coniferous forest. Serpentine soil. 4,005–9,185 feet in elevation. Blooms May–August. Perennial.	*May occur.* The project area contains lower montane coniferous forest habitats suitable for this species.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Stebbins' lewisia *Lewisia stebbinsii*	—	—	1B.2	Ultramafic. Upper and lower montane coniferous forest. Relatively barren exposed ridges and slopes in nutrient poor soils (mostly serpentine). 5,560–6,725 feet in elevation. Blooms May–July. Perennial.	*Not expected to occur.* The project area lacks barren areas on serpentine soils in coniferous forests within the known elevation range for this species.
Anthony Peak lupine *Lupinus antoninus*	—	—	1B.2	Open rocky sites within upper and lower montane coniferous forest. 3,985–7,515 feet in elevation. Blooms May–July. Perennial.	*May occur.* The project area contains open rocky sites within fir forests suitable for this species.
northern adder's-tongue *Ophioglossum pusillum*	—	—	2B.2	Wetland. Marshes and swamps, meadows and seeps. Marsh edges, low pastures, grassy roadside ditches. Also described as in "open swamp." 3,560–6,350 feet in elevation. Blooms July. Geophyte.	*May occur.* The project area contains suitable wetland and riparian habitats for this species.
Tedoc Mountain stonecrop *Sedum rubiginosum*	—	—	1B.2	Ultramafic. Lower and upper montane coniferous forest in openings on rocky, talus, ultramafic, peridotite, or serpentinite substrates. 4,430–4,920 feet in elevation. Blooms June-July. Perennial.	*Not expected to occur.* The project area lacks serpentine soils within the known elevation range for this species.
Sanhedrin Mountain stonecrop *Sedum sanhedrinum*	—	—	1B.2	Ultramafic. Chaparral, upper and lower montane coniferous forest. Openings, rocky, talus, rock crevices, serpentinite, gabbroic, metamorphic. 4,430–4,920 feet in elevation. Blooms May-July. Perennial.	***Known to occur.*** There are known occurrences of Sanhedrin Mountain stonecrop along the M22 Road. (CNDDB 2023). There may be additional occurrences of Sanhedrin Mountain stonecrop on suitable habitat within the project area.
marsh checkerbloom *Sidalcea oregana* ssp. *hydrophila*	—	—	1B.2	Wetland. Meadows and seeps, riparian forest. Wet soil of streambanks, meadows. 3,610–7,545 feet in elevation. Blooms July–August. Perennial.	*May occur.* The project area contains suitable wetland and riparian habitats for this species.
oval-leaved viburnum *Viburnum ellipticum*	—	—	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. 705–4,595 feet in elevation. Blooms May–June. Perennial.	*May occur.* The project area contains chaparral and yellow-pine forest suitable for this species.

Notes: CRPR = California Rare Plant Rank; CEQA = California Environmental Quality Act; CESA = California Endangered Species Act; ESA = Endangered Species Act; NPPA = Native Plant Protection Act

1 Legal Status Definitions

Federal:

FD Federally Delisted

State:

SE State Listed as Endangered (legally protected by CESA)

SR State Listed as Rare (legally protected by NPPA)

California Rare Plant Ranks (CRPR):

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

3 Plants about which needed information is lacking to assign to one of the other ranks

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 Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present because of poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available and there have been nearby recorded occurrences of the species.

Known to occur: The species has been observed within the treatment areas.

Sources: CNDDB 2023; CNPS 2023; CCH2 2023

Special-Status Wildlife Species Known to Occur in the Vicinity of the Project Area and Their Potential for Occurrence in the Project Area

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Amphibians and Reptiles				
California red-legged frog *Rana draytonii*	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	*May occur*: The species is documented to occur historically in western Tehama County (CNDDB 2023; RCDTC 2006). The eastern portions of the project area (e.g., lower Valentine Ridge, eastern Log Spring Ridge, Raglin Ridge, South Fork of South Fork Elder Creek) are within the range of the species (CNDDB 2024a) and aquatic and upland habitat may be present.
Foothill yellow-legged frog (North Coast DPS) *Rana boylii*	—	SSC	Northern Coast Ranges north of San Francisco Bay Estuary, Klamath Mountains, and Cascade Range including watershed subbasins (HU 8) Lower Pit, Battle Creek, Thomes Creek, and Big Chico Creek in Lassen, Shasta, Tehama, and Butte counties. Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	***Known to occur.*** The species has been documented to occur within western Tehama County (RCDTC 2006) and adjacent to the project area on Thomes Creek and Flood Creek (CNDDB 2023), and aquatic habitat potentially suitable for foothill yellow-legged frogs occurs in multiple locations within the project area.
Pacific tailed frog *Ascaphus truei*	—	SSC	Klamath/north coast flowing waters, lower montane coniferous forest, north coast coniferous forest, redwood, and riparian forest. Occurs in montane hardwood-conifer, redwood, Douglas fir and ponderosa pine habitats. Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.	*Not expected to occur*: The species was documented to occur historically in extreme northwestern Tehama County; however, the project is located outside of the range of the species (Thomson 2016).
Northwestern pond turtle *Actinemys marmorata* (Formerly Western pond turtle, *Emys marmorata)*	FPL	SSC	Ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 5,000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 1,500 feet from water for egg-laying; however, most nests occur within 330 feet of slow-moving water (Holland 1994).	*May occur*: The species is documented to occur in western Tehama County (CNDDB 2023; RCDTC 2006). Portions of the project area (below approximately 5,000 feet) are within the elevational range of the species and larger creeks in the project area (e.g., Thomes Creek, Cottonwood Creek) may provide aquatic habitat suitable for the species.
Western spadefoot *Spea hammondii*	FPL	SSC	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pool, and wetlands. Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	*Not expected to occur*: The species is documented to occur within the valley floor of Tehama County (CNDDB 2023; RCDTC 2006); however, the project is located outside of the range of the species (CNDDB 2024b).

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Birds				
American goshawk *Accipiter gentilis*	—	SSC	Nests primarily in conifer forest and aspen stands with high canopy closure (typically greater than 70 percent), relatively high density of large live and dead trees, low density of small trees, and low shrub/sapling and ground cover. Reuses old nests and maintains alternate nest sites. Often nests on gentle to moderate north slopes and near water. Forages in moderately dense, mature forests and younger forests, some openings, and along forest edges. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	***Known to occur.*** The species has been documented to occur along Upper McClure Creek and Doll Ridge (RCDTC 2006) and along Willow Creek drainage within the project area (CNDDB 2023) and may occur in other portions of the project area where enough of the forest canopy remains intact to support habitat for the species.
Bald eagle *Haliaeetus leucocephalus*	FD	SE FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	*Not expected to occur*: The species is documented to occur within the valley floor of Tehama County and winter on Upper Red Bank Creek and Thomes Creek (RCDTC 2006). Foraging habitat is present in lower portions of Thomes Creek and Red Bank Creek outside of the project area; however, foraging and nesting habitat suitable for the species is not anticipated to occur within the project area.
Bank swallow *Riparia riparia*	—	ST	Riparian scrub, riparian woodland. Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	*Not expected to occur*: The species is documented to occur within the valley floor of Tehama County (RCDTC 2006); however, nesting habitat suitable for this species is not anticipated to occur within the project area.
Burrowing owl *Athene cunicularia*	—	SSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	*Not expected to occur*: The species is documented to occur within the valley floor of Tehama County (RCDTC 2006); however, the project area is outside of the breeding and winter range of the species (CNDDB 2024c), and nesting habitat suitable for this species is not anticipated to occur within the project area.
Golden eagle *Aquila chrysaetos*	—	FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	*May occur*: The species has been documented within northern Glenn and eastern Mendicino counties (CNDDB 2023) and in western Tehama County on Upper Red Bank Creek (RCDTC 2006). Large trees potentially suitable for nesting may be present in portions of the project area. In addition, cliffs suitable for nesting are present in the project vicinity and the project area may be used for foraging even if suitable nesting platforms are not available within the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Loggerhead shrike *Lanius ludovicianus*	—	SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	*May occur*: The species is documented to occur within the valley floor of Tehama County in the Paskenta area (RCDTC 2006). The lower elevation portions of the project area are within the range of the species (CNDDB 2024d). Those parts of the project area in the range of the species that burned with high to moderate intensity in the August Complex Fire are open enough to provide nesting and foraging habitat; however, nesting and foraging habitat for this species is not anticipated to occur within most of the project area.
Northern harrier *Circus hudsonius*	—	SSC	Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	*Not expected to occur*: The species is documented to occur within the Red Bank Creek drainage (RCDTC 2006); however, nesting habitat suitable for this species is not anticipated to occur within the project area.
Northern spotted owl *Strix occidentalis caurina*	FT	ST SCC	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.	***Known to occur***. Multiple nesting pairs of northern spotted owls have been documented within the project area (CNDDB 2024d). While the habitat for many of these pairs was burned during the August Complex Fire, additional nesting habitat is present in unburned portions of the project area, and those areas that burned with a low enough intensity to maintain habitat suitability.
Olive-sided flycatcher *Contopus cooperi*	—	SSC	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir, and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain.	*May occur*: The species was documented to occur outside of the project area near Mt. Linn (iNaturalist 2024a) prior to the August Complex Fire, and habitat for the species is present in portions of the project area that burned with moderate to low intensity during the fire.
Swainson's hawk *Buteo swainsoni*	—	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	*Not expected to occur*: The species is documented to occur within the valley floor of Tehama County (RCDTC 2006); however, the project area is outside of the range of the species (CNDDB 2024e), and habitat for the species does not occur within the project area.
Tricolored blackbird *Agelaius tricolor*	—	ST	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	*Not expected to occur*: The species is documented to occur within the valley floor of Tehama County in the Paskenta area (RCDTC 2006); however, the project area is outside of the range of the species (CNDDB 2024f) and habitat for the species is not anticipated to occur within the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT	SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	*Not expected to occur*: The species is documented to occur within the valley floor of Tehama County (RCDTC 2006); however, the project area is outside of the range of the species (CNDDB 2024g) and large riparian corridors that would provide habitat for the species do not occur within the project area.
White-tailed kite *Elanus leucurus*	—	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	*May occur*: The species is documented to occur within the valley floor of Tehama County (RCDTC 2006) The lower elevation portions of the project area are within the range of the species (CNDDB 2024h). Those parts of the project area in the range of the species that burned with moderate intensity in the August Complex Fire are open enough to provide nesting and foraging habitat; however, nesting and foraging habitat for this species is not anticipated to occur within most of the project area.
Yellow warbler *Setophaga petechia*	—	SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	*May occur*: The species has been documented to occur on Cottonwood Creek and Red Bank Creek north and east of the project area (CNDDB 2023; RCDTC 2006). The project area is within the range of the species (CNDDB 2024i), and nesting habitat may be present in portions of the project area that burned with low intensity during the August Complex Fire.
Fish				
Chinook salmon – Central Valley spring-run Evolutionary Significant Unit *Oncorhynchus tshawytscha*	FT	ST	Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps greater than 27 Celsius are lethal to adults. Federal listing refers to populations spawning in Sacramento River and tributaries.	*May occur*: Naturally occurring total barriers to fish passage downstream of the project area on Thomes Creek and Elder Creek prevent this species from occurring in most of the project area. However, the species has been documented to occur along South Fork Cottonwood Creek downstream from the project area (CNDDB 2023). The portions of South Fork Cottonwood Creek and Red Bank Creek that flow within and along the northern portion of the project area, lack barriers to fish passage and the species may be present in these creeks and tributaries where perennial water is present and flow is sufficient to maintain suitable water temps.
Steelhead – Central Valley Distinct Population Segment (DPS) *Oncorhynchus mykiss irideus*	FT	—	Sacramento/San Joaquin flowing waters. Populations in the Sacramento and San Joaquin rivers and their tributaries.	***Known to occur.*** Naturally occurring total barriers to fish passage downstream of the project area on Thomes Creek and Elder Creek prevent this species from occurring in most of the project area. However, the Central Valley DPS of steelhead is documented to occur in portions of South Fork Cottonwood Creek and Red Bank Creek that flow within and along the northern portion of the project area (CNDDB 2023) and the species may also be present in tributaries to these creeks where perennial water is present.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Steelhead – northern California DPS summer-run *Oncorhynchus mykiss irideus*	FT	SE	From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution within range is more limited. Require cool water (less than 23C); holding habitat to withstand higher temps; lower flows in summer/fall; require loose gravels at pool tails for redd construction. Favor cool, clear, fast-flowing riffles, ample riparian cover, undercut banks and diverse	*Not expected to occur*: The project area is outside of the range of this DPS (CNDDB 2024j).
Steelhead – northern California DPS winter-run *Oncorhynchus mykiss irideus*	FT	—	Naturally spawning population of the ocean-maturing winter-run ecotype. From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution throughout range. Adults require high flows of 18–20 cm for passage and loose gravels at pool tails for redd construction. Juveniles favor areas with cool (10-17 Celsius), clear, fast-flowing riffles, ample riparian cover, undercut banks and diverse prey.	*Not expected to occur*: The project area is outside of the range of this DPS (CNDDB 2024j).
Invertebrates				
Crotch bumble bee *Bombus crotchii*	—	SC	Found primarily in California: mediterranean, Pacific coast, western desert, Great Valley, and adjacent foothills through most of southwestern California. Habitat includes open grassland and scrub. Nests underground.	*May occur*: The species was documented to occur historically (1978) outside of the project area north of Paskenta (CNDDB 2023). Lower elevation portions of the project area contain open scrub and grassland habitat potentially suitable for the species.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Monarch *Danaus plexippus*	FPL	—	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Along migration routes and within summer ranges, monarch butterflies require two suites of plants: (1) host plants for monarch caterpillars, which are primarily milkweeds (*Asclepias* spp.) within the family *Apocynaceae* upon which adult monarchs lay eggs; and (2) nectar-producing flowering plants of many other species that provide food for adult butterflies. Having both host and nectar plants available from early spring to late fall and along migration corridors is critical to the survival of migrating pollinators	*May occur.* The project area is outside of the overwintering range of monarch butterfly. However, lower elevation portions of the project area contain some open woodland habitats with floral resources that potentially contain milkweed plants; thus, monarch may forage or breed in the project area.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	—	Riparian scrub. Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	*Not expected to occur*: The species is documented to occur within western Tehama County east of Paskenta (RCDTC 2006). The project area is outside of the documented elevational range of the species (USFWS 2019).
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	—	Valley and foothill grassland, vernal pool, wetland. Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	*Not expected to occur*: The species is documented to occur in western Tehama County (RCDTC 2006). However, vernal pool habitat that would be suitable for this species is not present within the project area.
Vernal pool tadpole shrimp *Lepidurus packardi*	FE	—	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	*Not expected to occur*: The species is documented to occur in western Tehama County (RCDTC 2006). However, vernal pool habitat that would be suitable for this species is not present within the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Western bumble bee *Bombus occidentalis*	—	SC	Once common throughout much of its range, in California, this species is currently largely restricted to high elevation sites in the Sierra Nevada and the northern California coast. Habitat includes open grassy areas, chaparral, scrub, and meadows. Requires suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	*May occur*: Open chaparral scrub and meadow habitat throughout the project area may provide habitat for the species and the project is within the current range of the species (CDFW 2023). While there are no detections of the species within the project region (CNDDB 2023), bumble bees are underrepresented in the CNDDB and the species may be present where no detections have been recorded.
Mammals				
American badger *Taxidea taxus*	—	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	*May occur*: The species is documented to occur within the project region (CNDDB 2023; RCDTC 2006). Habitat for the species is present within lower elevation portions of the project area that support oak woodland and chaparral with open areas for foraging.
Fisher *Pekania pennanti*	—	SSC	North coast coniferous forest, old growth, riparian forest. Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest. Endangered status applies to Southern Sierra DPS.	***Known to occur.*** Fisher is documented to occur near Valentine Ridge (CNDDB 2023), and an individual fisher was observed in the central portion of the project area during the SPR BIO-1 survey for the project.
Humboldt marten *Martes caurina humboldtensis*	FT	SE SSC	North coast coniferous forest, old growth, redwood. Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County. Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	*Not expected to occur*: This sub-species is documented to occur historically both northwest and southwest of the project area (CNDDB 2023). However, the project area is outside of the current range of the species, which is limited to portions of Humboldt, Del Norte, and Siskiyou counties (CDFW 2018) within coast redwood forests.
Northern California ringtail *Bassariscus astutus raptor*	—	FP	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations.	*May occur*: The species has been documented to occur in western Tehama County in the Paskenta area (RCDTC 2006) and in northern Glen County south of the project area (iNaturalist 2024b); and habitat suitable for the species occurs within the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Pallid bat *Antrozous pallidus*	—	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Tree roosting has also been documented in large conifer snags, inside basal hollows of redwoods and giant sequoias, and bole cavities in oaks. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	*May occur*: The species is documented to occur within the project region (CNDDB 2023; RCDTC 2006) and the project is within the range of the species (CNDDB 2024k). Large trees and snags within the project area provide roosting habitat for this species, particularly at lower elevations.
Townsend's big-eared bat *Corynorhinus townsendii*	—	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Requires large cavities for roosting, which may include abandoned buildings and mines, caves, and basal cavities of trees. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	*May occur*: The species is documented to occur within the project region (CNDDB 2023; RCDTC 2006) and the project is within the range of the species (CNDDB 2024l). Large trees and snags within the project area provide roosting habitat for this species.

Notes: CNDDB = California Natural Diversity Database; CEQA = California Environmental Quality Act

1 Legal Status Definitions

Federal:

FE Federally Listed as Endangered (legally protected)
FT Federally Listed as Threatened (legally protected)
FPL Proposed for Listing under the federal Endangered Species Act
FD Delisted from the federal Endangered Species Act

State:

FP Fully Protected (legally protected)
SSC Species of Special Concern (no formal protection other than CEQA consideration)
SE State Listed as Endangered (legally protected)
ST State Listed as Threatened (legally protected)
SC State Candidate for listing (legally protected)

2 Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present because of poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.
May occur: Suitable habitat is available; however, there are little to no other indicators that the species might be present.
Known to occur: Species has been documented within the treatment site.

Sources: CDFW 2023; CNDDB 2023, CNDDB 2024a; CNDDB 2024b; CNDDB 2024c; CNDDB 2024d; CNDDB 2024e; CNDDB 2024f; CNDDB 2024g; CNDDB 2024h; CNDDB 2024i; CNDDB 2024j; CNDDB 2024k; CNDDB 2024l; CDFW 2018; iNaturalist 2024; RCDTC 2006; Thomson 2016; USFWS 2019.

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