

EXECUTIVE SUMMARY

This Program Timberland Environmental Impact Report (PTEIR or Tahoe PTEIR) evaluates the environmental impacts of a proposed program to increase the pace and scale of forest management activities that reduce wildfire risk to communities and improve forest health in and adjacent to the Wildland Urban Interface (WUI) on the California side of the Lake Tahoe Basin (the proposed program). It has been prepared according to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq. [14 CCR Section 15000 et seq.]), Z'berg-Nejedly Forest Practice Act (FPA; Public Resources Code [PRC] Section 4511 et seq.), and the California Forest Practice Rules (CFPR; California Code of Regulations [CCR] Title 14 Section 1092.01) under the direction of the California Department of Forestry and Fire Protection (CAL FIRE). CAL FIRE is the CEQA lead agency. Members of the Tahoe Fire and Fuels Team (TFFT) including the California Tahoe Conservancy (Conservancy), Lake Valley Fire Protection District, and North Tahoe Fire Protection District are CEQA responsible agencies that would implement later activities under the Tahoe PTEIR. These responsible agencies collaborated with CAL FIRE in the preparation of this PTEIR.

This summary is provided in accordance with State CEQA Guidelines Section 15123. It presents (1) a summary description of the proposed program, (2) a synopsis of significant environmental impacts and feasible mitigation measures (Table ES-1), (3) an overview of the alternatives evaluated and a conclusion regarding identification of an environmentally superior alternative, and (4) a discussion of the areas of controversy and issues to be resolved associated with the proposed program.

BACKGROUND

California is experiencing a wildfire crisis. As noted in a report of the Governor's Wildfire Strike Force (2019):

Climate change has created a new wildfire reality for California. The state's fire season is now almost year round. More than 25 million acres of California wildlands are classified as under very high or extreme fire threat. Approximately 25 percent of the state's population – 11 million people – lives in that high-risk area.

The effects of climate change and decades of fire suppression are evident on the landscape. Wildfire risk levels have been exacerbated by the location of developed land uses and communities in the high hazard areas. Drought conditions, low snowpack accumulation, and extreme temperature highs have also been prevalent in the last decade and are expected to worsen as climate change continues to alter landscapes and local climates (NOAA 2018, IPCC 2018). Many of the communities on the California side of the Tahoe Basin are within very high fire hazard severity zones and are at risk from catastrophic wildfire.

The TFFT has worked for years to create fire-adapted communities, restore forest resilience, and achieve other objectives consistent with the Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy (TFFT 2014) and the Tahoe Basin Community Wildfire Protection Plan (TFFT 2015) within the California portion of the Lake Tahoe Basin. The TFFT, in coordination with other agencies and organizations, have achieved significant results - treating thousands of acres to reduce wildfire risk in the WUI surrounding Tahoe's communities. However, significant portions of the WUI and nearby forested lands still require fuel reduction treatments, and long-term management is necessary to maintain fire-resiliency throughout the WUI. To address these challenges, the TFFT has developed the proposed program to accelerate the pace and scale of forest management activities that reduce wildfire risk to communities and improve forest health in and adjacent to the WUI on the California side of the Lake Tahoe Basin. A substantial challenge to increasing the pace and scale of forest management treatments is the project-by-project approach that has historically been used to comply with CEQA, FPA, and other regulatory requirements. This approach can lead to inefficiencies, delays, excess costs, and inconsistencies in environmental analysis and mitigation approaches. CAL FIRE, in close coordination with other TFFT agencies, has prepared this PTEIR to more efficiently and comprehensively evaluate the effects of forest management. Through its tiered, checklist-based approach to future CEQA and FPA compliance, this PTEIR is intended to offer significant advantages by providing for a more efficient, consistent, and comprehensive environmental review of later forest treatment activities.

While several PTEIRs have been completed in California, this Tahoe PTEIR is tailored to the regulatory environment of the Lake Tahoe Basin. This PTEIR is unique in that it includes a mix of public and private lands, and it covers both timber operations for commercial purposes that are regulated by the FPA and noncommercial fuel reduction projects subject to CEQA.

Relationship to the California Vegetation Treatment Program

The California Board of Forestry and Fire Protection has developed the California Vegetation Treatment Program (CalVTP), which is a statewide vegetation treatment program. The CalVTP defines vegetation treatment activities and associated environmental protections that would occur for projects within the State Responsibility Area (SRA) to reduce wildfire risks as one component of the range of actions being implemented by the state to respond to California's wildfire crisis. The CalVTP is an important part of the state's approach to addressing the wildfire crisis with an increase in the pace and scale of vegetation treatment to reduce wildfire risk.

Only a small portion of the program area for the Tahoe PTEIR, generally land owned by the Conservancy, is within the SRA. Those components of the Tahoe PTEIR could rely on the CalVTP Program Environmental Impact Report (PEIR) to cover the environmental review requirements for later treatment activities identified in the Tahoe PTEIR that are located within the SRA. However, the CalVTP does not cover activities within Local Responsibility Areas (LRA) or the sale of timber from fuel reduction projects, which are elements of this PTEIR. This PTEIR incorporates similar SPRs to protect the environment as the CalVTP, but modifies those requirements to address the Tahoe Basin environment and regional regulatory requirements, which include the regulations of the Tahoe Regional Planning Agency (TRPA), the Lahontan Regional Water Quality Control Board, and FPRs that apply to the Tahoe Basin.

SUMMARY DESCRIPTION OF THE PROPOSED PROGRAM

The proposed program subject to environmental review in this PTEIR involves an increase in the pace and scale of wildfire risk reduction activities. This includes mechanical and manual forest thinning, prescribed burning, and hauling and utilization of forest products from within and adjacent to the WUI on the California side of the Lake Tahoe Basin. After approval of the PTEIR, implementation of the proposed program would consist of later treatment activities carried out by CAL FIRE, the Conservancy, local fire districts, or other public agencies or landowners with land ownership or stewardship responsibilities within the program area.

The Tahoe PTEIR addresses the following:

- ▶ Expansion of forest management treatments on 17,490 acres of the California side of the Tahoe Basin to treat an estimated average of 900 – 1,300 acres each year to contribute to the achievement of the target 500,000 annual acres of treatment on non-federal lands expressed in Executive Order (EO) B-52-18, signed by former Governor Jerry Brown in May 2018. The expanded target would be a substantial increase compared to current treatment activity (recently averaging 503 acres per year).
- ▶ A project-specific implementation approach for streamlining CEQA and FPA review of later site-specific, treatment activities consistent with the proposed program, in accordance with CEQA procedures described in State CEQA Guidelines Section 15168 and FPA procedures described in 14 CCR Section 1092.01. Using a project consistency checklist (Appendix A), the streamlined CEQA and FPA review approach would document how a project's environmental effects are covered and which Standard Project Requirements (SPRs), California Forest Practice Rules (CFPRs), and feasible mitigation measures from the Tahoe PTEIR are incorporated. This would include evaluation of whether later treatment activities and associated impacts are within the scope of the proposed program and the Tahoe PTEIR. If the activities are determined to be within the scope of the Tahoe PTEIR, the project proponent agency may approve the activities using the Tahoe PTEIR without an additional environmental document (in accordance with Section 15168 of the State CEQA Guidelines for program EIRs) and/or may adopt a Program Timber Harvest Plan (PTHP), which is a streamlined Timber Harvest Plan (THP) that incorporates analysis from the Tahoe PTEIR (14 CCR 1092.01). Later site-specific treatment activities would still need to secure applicable permits from the Tahoe Regional Planning Agency, California Department of Fish and Wildlife (CDFW), local air districts, and/or Lahontan Regional Water Quality Control Board.

Program Objectives

The following program objectives describe the underlying purposes of the proposed program:

- ▶ reduce the risk of catastrophic wildfires that could damage Lake Tahoe Basin forests, watersheds, habitats, and communities;
- ▶ increase Lake Tahoe Basin forest resilience to effects of climate change, including prolonged drought, pest and disease outbreaks, and increased tree mortality;
- ▶ protect and restore meadow and riparian ecosystems, and forest habitat quality in the Lake Tahoe Basin;
- ▶ develop and implement all-lands fuel reduction, forest health improvement, and restoration projects that deliver multiple community and ecosystem service benefits; and
- ▶ increase the pace and scale of fuel reduction projects to assist in achieving the goals of Executive Order B-52-18.

Program Area

Forest management and fuel reduction activities analyzed in this PTEIR would occur within a program area located on private, local jurisdiction, federal, and Conservancy lands both in the WUI and select contiguous areas of general forest outside of the WUI throughout the California side of the Tahoe Basin (see Figure 2-1 in Chapter 2, "Program Description"). The program area covers approximately 17,490 acres in the City of South Lake Tahoe and in unincorporated areas of El Dorado and Placer Counties, including, but not limited to: Meyers, Cascade properties near Cascade Lake, Tahoma, Homewood, Alpine Peaks, Tahoe City, Dollar Point, Carnelian Bay, Tahoe Vista, and Kings Beach.

Proposed Forest Management Treatments

The proposed program consists of an ongoing series of forest treatment activities for the primary purpose of forest fuel reduction. The program includes numerous forest treatment activities to reduce the risk of wildfire including mechanical thinning, manual/hand thinning, prescribed understory burning, pile burning, and the sale and transport of merchantable timber. To provide revenue to support the wildfire risk reduction and forest habitat enhancement treatments, forest products with commercial value (e.g., timber, biomass, mulch) may be removed and sold or bartered as an accessory activity.

Treatment methods included in the proposed program include the following, which are described in greater detail in Section 2.3, "Proposed Forest Management Treatments" in Chapter 2, "Program Description":

- ▶ **Manual treatments:** In manual treatment operations, a crew would fell trees using chainsaws and limb the log directly at the stump. Through this process, the logs, tree limbs, and slash are either immediately piled into burn piles, chipped (with the chip either spread on site or removed) or scattered throughout the treatment area.
- ▶ **Mechanical treatments:** With mechanical treatments, a forestry contractor or Licensed Timber Operator (LTO) would implement silvicultural prescriptions with ground-based mechanical equipment. Equipment that could be used for mechanical treatments include chain saws, harvesters, forwarders, skid steers, excavators, dozers and dozer transport, loaders, tow chippers, track chippers, masticators, feller/bunchers, and rubber-tired skidders.
- ▶ **Prescribed burning:** Prescribed burning uses controlled fire to achieve management objectives. The proposed program involves pile burning and understory burning techniques. Pile burning is a method used to dispose of forest fuels that have removed during a manual or mechanical treatment. Pile burning is often a component of manual treatments, where hand crews cut hazardous fuels and pile them for burning. Understory burning is used to reduce fuels over a larger area or restore fire resiliency in target fire-adapted plant communities. In this method of treatment, the understory of the forest would be burned using fire with a control line along the perimeter of a treatment site to prevent the unintentional spread of fire beyond the treatment site.

RETREATMENTS

Retreatments would be an ongoing component of the proposed program and would include follow-up treatments to address re-growth of vegetation and maintain the wildfire risk reduction benefits in the treatment sites. It is estimated that retreatments would typically occur approximately 10-15 years after the initial treatment.

BIOMASS DISPOSAL

Implementation of the proposed program would result in an increase in biomass removal from treatment areas throughout the program area compared to existing conditions. The biomass disposal approach or approaches for each later treatment activity would depend on the project goals, location, size, existing vegetation conditions, market conditions, and other factors. It is estimated that biomass generated by the proposed program would be disposed of as sawlogs, firewood, other forest products, through burning, biomass energy generation, and onsite decomposition.

Standard Project Requirements and Forest Practice Rules

SPRs are mandatory parts of the proposed program that avoid and minimize environmental impacts and comply with applicable laws and regulations. SPRs would be incorporated into all proposed treatment activities under the Tahoe PTEIR as a standard part of treatment design and implementation. The SPRs would be incorporated into the project design, in contract specifications, and/or in instructions to all personnel involved in implementing treatments. The SPRs include applicable CFPR requirements (PRC Section 4527(a)), as well as additional measures that apply to all projects. The SPRs do not include alternate standards that would apply instead of operational standards identified in the CFPR. The SPRs are included as Appendix B of this PTEIR.

ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

This PTEIR has been prepared to evaluate the physical environmental effects of the proposed program. Table ES-1, presented at the end of this chapter, provides a summary of the significant and potentially significant environmental impacts that could result from implementation of the proposed program. The table identifies the level of significance of the impact before mitigation, mitigation measures proposed for the program, and the level of significance of the impact after implementation of the mitigation measures.

Significant and Unavoidable Impacts

The majority of qualifying treatments under the proposed program would result in less-than-significant impacts or impacts that could be reduced to less than significant with implementation of feasible mitigation measures. With respect to vehicle miles travelled (VMT) and emissions of greenhouse gases (GHG) and air pollutants, the PTEIR notes for CEQA purposes of good-faith disclosure that the impacts may be significant and unavoidable. However, the analysis of these impacts is conservative because it does not speculate on the reduced VMT and emissions that would result from fewer, smaller, and less severe wildfires. To the extent that the program successfully reduces the extent and severity of wildfires, it could result in less total VMT and emissions than disclosed in this PTEIR. Below is a summary listing of potentially significant and unavoidable impacts; it is important to review the impact discussions in Chapters 3 and 5 of this PTEIR to understand the full context of the impact significance determinations.

Implementation of the proposed program could result in the following potentially significant and unavoidable environmental impacts after implementation of feasible mitigation measures:

Impacts Forecasted to Be Significant and Unavoidable

- ▶ Impact 3.5-1: Potential to Generate Emissions that Would Contribute to an Exceedance of CAAQS or NAAQS in the LTAB
- ▶ Impact 3.10-2: Potential to Generate GHG Emissions through Treatment Activities

- ▶ Impact 3.15-2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) Regarding Vehicle Miles Traveled

Cumulative impacts for the issues listed above would also be significant and unavoidable (considerable contributions to a cumulatively significant impact) as a result of implementation of the proposed program.

ALTERNATIVES TO THE PROPOSED PROGRAM

Agencies, organizations, and individuals provided suggestions for alternatives during interagency consultation and review of the Notice of Preparation (NOP). Alternatives were evaluated for consideration in the PTEIR if they were determined to: (1) accomplish all or most of the project objectives, (2) be potentially feasible (from economic, legal, regulatory, and technological standpoints), and (3) avoid or substantially lessen any significant effects of the proposed program. Alternatives that best meet these evaluation criteria are evaluated in Chapter 6, "Alternatives," in this PTEIR and are listed as follows:

- ▶ **Alternative A: No-Program**, which would include continuation of current fuel reduction efforts within the program area and treat an average of 503 acres each year. There would be no understory burning with implementation of this alternative. It would reflect a slower pace and smaller scale of treatment activities compared to the proposed program;
- ▶ **Alternative B: Fire Suppression Only**, which would include active fire suppression but no active fuels treatment activities;
- ▶ **Alternative C: Manual and Mechanical Treatment Focus**, which would treat an estimated 1,800 acres per year and include a treatment approach that emphasizes mechanical and manual thinning, with limited pile burning and no understory burning; and
- ▶ **Alternative D: Limited Thinning Intensity and Expanded Prescribed Burning**, which would treat an estimated 1,250 acres per year and include a treatment approach with less manual and mechanical thinning, and greater use of understory burning.

Environmentally Superior Alternative

With each alternative, there would be environmental tradeoffs; that is, impacts on certain resource areas from an alternative would increase while others would decrease relative to the proposed program. Additionally, each alternative would result in significant and unavoidable impacts. The proposed program would achieve all of the basic program objectives. However, it would result in potentially significant impacts and require the application of mitigation to reduce some, but not all, of the significant impacts to a less-than-significant level. The alternatives, particularly Alternative C: Manual and Mechanical Treatment Focus, and Alternative D: Limited Intensity and Expanded Prescribed Burning, would achieve the basic program objectives to a similar extent as the proposed program; however, these alternatives would result in some environmental effects that would be more severe than the proposed program. Alternative A: No-Program would not be as effective in meeting the program objectives as the proposed program, such as increasing the pace and scale of fuel reduction projects to assist in achieving the goals of Executive Order B-52-18, but would continue to implement fuel treatment projects and reduce the severity of some of the environmental effects of the proposed program.

In light of these tradeoffs among the alternatives and the proposed program, none of the alternatives clearly stands out as environmentally superior. Identification of the environmentally superior alternative is, therefore, not an objective choice based on quantifiable criteria, but rather, an exercise of discretion in balancing environmental priorities among potential impacts in relation to the extent to which the alternative would meet the program objectives. If the key criterion for identifying the environmentally superior alternative is avoiding significant and unavoidable impacts and priority is given to issues related to human health, Alternative A would become the environmentally superior alternative, because it would reduce air quality impacts of the proposed program related to short-term exposure of people to toxic air contaminants during prescribed burning. If the key criterion for identifying the environmentally superior alternative is achieving program objectives and reducing risks of high-severity wildfire, then the proposed program would be the environmentally superior alternative.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The NOP for this PTEIR was distributed on June 13, 2019, to responsible agencies, interested parties, and organizations, as well as private organizations and individuals that may have an interest in the project. CAL FIRE held public scoping meetings on June 13 and June 28, 2019 to provide information on the proposed program and solicit public input on the scope and content of the PTEIR.

Comments were received during the scoping process that expressed support for the proposed program, but the following environmental concerns and issues were also expressed:

- ▶ Impacts on biological resources from treatment activities
- ▶ Suggestions for the restoration component of the proposed program
- ▶ Incorporation of mitigation measures and best management practices in proposed program activities

These issues are addressed in this PTEIR. A summary of comments received on the NOP and the location where each is addressed in the PTEIR are presented in Appendix C.

Tribal consultation is ongoing pursuant to PRC Section 21080.3 regarding the potential for effects on tribal cultural resources. The consultation process may identify potentially affected tribal cultural resources or result in refinements to mitigation measures. To account for this uncertainty while consultation is actively underway, this PTEIR identifies impacts on tribal cultural resources as potentially significant, notwithstanding the likelihood that consultation may result in an agreement among the parties to measures that mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource.

Table ES-1 Summary of Significant Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
NI = No impact LTS = Less than significant PS = Potentially significant LTSM = Less than significant with Mitigation SU = Significant and unavoidable			
3.3 Aesthetics			
<p>Impact 3.3-2: Have a Substantial Adverse Effect on Scenic Views from Lake Tahoe Implementation of the proposed program would result in the presence of fewer trees and less dense forests within the program area. This would increase viewing distances in treated areas, bringing greater visibility to distant objects or structures. Later treatment activities located near the most visually sensitive portions of the shoreline could potentially remove vegetation that screens structures or other human-made features that would otherwise be visible from Lake Tahoe, resulting in the degradation of the quality of scenic views from Lake Tahoe. This would be a potentially significant impact.</p> <p>With implementation of Mitigation Measure 3.3-2, treatment activities would retain screening of existing structures and infrastructure in Visually Sensitive and Natural Dominated Shorelines to the extent feasible, which would reduce this impact to a less-than-significant level.</p>	PS	<p>Mitigation 3.3-2: Retain Screening of Existing Structures and Infrastructure in Visually Sensitive and Natural Dominated Shorelines Later treatment activities implemented through the proposed program shall consult with a landscape architect, TRPA Scenic Specialist, or other qualified scenic resources specialist to identify site-specific vegetative screening recommendations that relate to maintaining visual screening of existing structures or infrastructure (e.g., utility lines, roadways, retaining walls) within 300 feet of the shoreline that could be visible from Lake Tahoe. The project proponent shall maintain trees, understory vegetation, and/or patches of dense vegetation that completely or partially screen the structures or infrastructure from view from Lake Tahoe to the extent feasible while meeting program objectives. The project proponent shall flag or otherwise mark screening vegetation for retention before initiating treatments in the vicinity of structures or infrastructure within 300 feet of the Lake Tahoe shoreline in Visually Sensitive or Natural Dominated shorelines.</p>	LTS
<p>Impact 3.3-3: Have a Substantial Adverse Effect on Views from Scenic Roadways Implementation of the proposed program would result in the presence of fewer trees and less dense vegetation within the program area. This would increase viewing distances in treated areas, bringing greater visibility to distant objects or structures. Later treatment activities located near scenic roadways in rural areas could potentially remove vegetation that screens development resulting in greater visibility of structures and the degradation of the scenic quality. This would be a potentially significant impact.</p> <p>Implementation of Mitigation Measure 3.3-3 would require the retention of vegetative screening of existing structures along the most visually sensitive roadway segments. This would reduce the impact to a less than significant level.</p>	PS	<p>Mitigation 3.3-3: Retain Screening of Existing Structures in Rural Roadway Corridors Later treatment activities that propose to remove vegetation within 300 feet of a TRPA-designated rural roadway travel unit, and which would affect 500 linear feet or more of the roadway travel unit shall consult with a landscape architect, TRPA Scenic Specialist, or other qualified scenic resources specialist to identify site-specific vegetative screening recommendations. The recommendations shall identify opportunities to maintain strategically-placed visual screening of existing structures within 300 feet of the rural scenic roadway unit, while still meeting project objectives related to public safety and wildfire risk reduction. The project proponent shall incorporate feasible recommendations from the consultation to maintain selected trees, understory vegetation, patches of dense vegetation that completely or partially screen the structures from view from scenic roadways, and/or other site specific measures to the extent feasible while meeting project public safety and wildfire risk reduction objectives. Recommendations shall consider prioritizing retention of less flammable vegetation, breaking up continuous patches of vegetation that pose a wildfire risk while retaining strategically placed patches of vegetation to screen development, and the potential for replanting less flammable vegetation for screening in targeted areas where flammable vegetation must be removed. The project proponent shall flag or otherwise mark screening vegetation</p>	LTS

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		for retention before initiating treatments in the vicinity of structures in rural roadway corridors areas that are within 300 feet of scenic roadways.	
3.5 Air Quality			
<p>Impact 3.5-1: Potential to Generate Emissions that Would Contribute to an Exceedance of CAAQS or NAAQS in the LTAB</p> <p>Emissions of criteria air pollutants and precursors generated by treatment activities implemented under the program would likely exceed PCAPCD- and EDCAQMD-established mass emission thresholds and, therefore, result in, or contribute to, ambient concentrations in the LTAB that exceed the NAAQS and CAAQS. These exceedances could result in adverse health effects to receptors and conflict with air quality planning efforts in the LTAB. This would be a significant impact.</p>	S	<p>Mitigation Measure 3.51a: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques</p> <p>Where feasible, off-road equipment utilized in later treatment activities under the program shall implement emission reduction techniques to reduce exhaust emissions. It is acknowledged that because of cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques would not be feasible. The project proponents will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible.</p> <p>Techniques for reducing emissions may include the following:</p> <ul style="list-style-type: none"> ▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must adhere to the following criteria: <ul style="list-style-type: none"> ▪ 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 ▪ 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. ▶ Substitute electric equipment for diesel-powered equipment. ▶ Encourage or, if feasible, require workers to carpool to work sites, and/or use public transportation for their commutes. ▶ Equip off-road equipment, diesel trucks, and generators with Best Available Control Technology for emission reductions of NOX and particulate matter. <p>Mitigation Measure 3.5-1b: Encourage Alternative Burning Techniques and Non-Burning Biomass Disposal</p> <p>Later treatment activities that involve pile burning shall pursue alternative burning techniques and/or alternative means of biomass disposal that do not involve</p>	SU

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		burning, as feasible. It is recognized that because of site access, cost, or other factors there may be circumstances where implementation of certain alternative burning techniques or non-burning disposal methods would not be feasible. Potential alternative burning techniques could include: <ul style="list-style-type: none"> ▶ Use of air curtain burners, also referred to as Air Curtain Incinerators, FireBoxes, or Trench Burners. These devices produce an “air curtain” over the top of burning biomass, which traps and reburns smoke at high temperatures. Air Curtain burners have been shown to achieve an approximately 23-fold reduction in PM_{2.5} emissions compared to pile burns (Susott et al. 2002). ▶ Development and use of portable biomass energy generators, which can more efficiently burn biomass while generating electrical power that can be stored in a battery or used to directly power a facility. ▶ Consider conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere, in part by extinguishing the burn pile before the smoldering stage (UCCE Sonoma County 2019). 	
3.6 Biological Resources			
<p>Impact 3.6-1: Potential to Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications</p> <p>Later treatment activities could result in direct removal or destruction, or indirect death or reduced vigor of special-status plants through habitat modifications. Implementation of SPRs BIO-1, BIO-2, BIO-6, and BIO-7 requires special-status plants to be identified prior to treatment activities, Worker Environmental Awareness Program (WEAP) training for workers, and actions to prevent the spread of invasive plants that could threaten special-status plant populations. While SPRs would minimize impacts, treatment activities could inadvertently damage or destroy special-status plants and adversely modify their habitat resulting in reduced growth and reproduction or death and loss of special-status plant occurrences. This would be a potentially significant impact.</p>	PS	<p>Mitigation Measure 3.6-1a: Avoid Loss of Special-Status Plants</p> <p>If special-status plant species are determined to be present through application of SPR BIO-1 and SPR BIO-6, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat:</p> <ul style="list-style-type: none"> ▶ 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 	LTS

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		<p>treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape.</p> <ul style="list-style-type: none"> ▶ 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 treatments proposed in locations 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. <p>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 3.5-1b will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the 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</p>	

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				<p>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 Project Consistency Checklist. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.</p> <p>Mitigation Measure 3.6-1b: Compensate for Unavoidable Loss of Special-Status Plants If significant impacts on special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measure 3.5-1a, 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.</p> <p>The first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead:</p> <ul style="list-style-type: none"> ▶ 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. <p>If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage,</p>	

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		<p>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:</p> <ul style="list-style-type: none"> ▶ 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: <ul style="list-style-type: none"> ▪ 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. <p>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.</p> <p>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.</p> <p>If mitigation includes restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.</p>	

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		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 PTEIR. 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.	
<p>Impact 3.6-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications</p> <p>Later treatment activities implemented under the proposed Tahoe PTEIR, including prescribed burning, mechanical treatment, and manual treatment could result in direct or indirect adverse effects to special-status wildlife species. SPRs require pre-treatment surveys to identify special-status wildlife and habitats and avoidance and protection of certain sensitive habitats. While implementation of SPRs would minimize impacts, later treatment activities would still remove vegetation and disturb the ground surface, which could result in the disturbance to or loss of individuals, reduced breeding productivity of affected species, or loss of habitat function. The loss of special-status wildlife species and habitat function would be a potentially significant impact.</p>	PS	<p>Mitigation Measure 3.6-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Federally and State-Listed Wildlife Species</p> <p>If wildlife species listed under ESA or CESA (e.g., willow flycatcher, Sierra Nevada yellow-legged frog) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-8), the project proponent will avoid adverse effects on the species by implementing the following.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <ul style="list-style-type: none"> ▶ The project proponent will implement one of the following two measures to avoid mortality, injury, or disturbance of individuals: <ol style="list-style-type: none"> 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, in consultation with CDFW and/or TRPA (depending on the potentially affected species), using 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 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. 	LTS

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		<p>▶ 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 3.5-2c.</p> <p><u>Maintain Habitat Function</u></p> <p>▶ The project proponent will design treatment activities to maintain the habitat function, by implementing the following:</p> <ul style="list-style-type: none"> ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-8, 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. 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-8 that federally or state-listed wildlife with specific requirements for dense vegetation cover (e.g., willow flycatcher) are present within a treatment area, then vegetation 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 habitat function is maintained. <p>▶ 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, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure 3.6-2c.</p> <p>Mitigation Measure 3.6-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species</p> <p>If other special-status wildlife species (i.e., species not listed under CESA or ESA, but meeting the definition of special status as stated in Section 3.5.3 of the PTEIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or</p>	

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				<p>focused or protocol-level surveys (conducted pursuant to SPR BIO-8), the project proponent will avoid or minimize adverse effects to the species by implementing the following.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <p>The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:</p> <ul style="list-style-type: none"> ▶ For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, bat roosts, burrows). Buffer size will be determined by a qualified RPF or biologist, in consultation with CDFW and/or TRPA (depending on the potentially affected species), using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 500 feet for special-status birds and 100 feet for other special-status wildlife species, 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 these minimum standards around 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 Project Consistency Checklist. ▶ 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, roost, 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 	

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		<p>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.</p> <ul style="list-style-type: none"> ▶ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods. <p><u>Maintain Habitat Function</u> For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following:</p> <ul style="list-style-type: none"> ▶ While performing review and surveys for SPR BIO-1 and SPR BIO-8, 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 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-8 that special-status wildlife with specific requirements for dense canopy or vegetation cover (e.g., northern goshawk, California spotted owl, Sierra Nevada mountain beaver) 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. 	

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				<p>► A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function.</p> <p>A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA or may conflict with the TRPA Code after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure 3.5-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though 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 Project Consistency Checklist. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination that a non-listed special-status species would benefit from the treatment.</p>	

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		<p>Mitigation Measure 3.6-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable</p> <p>If the provisions of Mitigation Measure 3.6-2a or 3.6-2b cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.</p> <p>Compensation may include:</p> <ol style="list-style-type: none"> 1. Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS- approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and 2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching structures, or removing existing movement barriers or other existing features that are adversely affecting the species). <p>The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</p> <ol style="list-style-type: none"> 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanisms 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 	

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		<p>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.</p> <p>Review requirements are as follows:</p> <ul style="list-style-type: none"> ▶ 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. ▶ For species listed under ESA or CESA, the project proponent will submit the mitigation plan to CDFW and/or USFWS for review and comment. ▶ For other special-status wildlife species the project proponent may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information. <p>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit, if required), if these requirements are equally or more effective than the mitigation identified above.</p>	
<p>Impact 3.6-6: Potential to Interfere Substantially with Fish and Wildlife Movement Corridors or Impede Use of Nurseries</p> <p>Later treatment activities implemented under the proposed program could be located in areas used as fish and wildlife movement corridors or nurseries. Treatment-related noise and disturbance could lead to temporary changes in migration or movement patterns. Wildlife nursery sites could be disturbed or essential nursery habitat components could be degraded by later treatment activities. SPRs BIO-1, BIO-3, BIO-4, BIO-8, HYD-1, HYD-3, and HYD-4 require identification of nursery sites prior to treatment activities and actions to prevent degradation of aquatic and riparian corridors. Temporary shifts in wildlife movements to avoid or navigate around active treatment sites and associated disturbances would not substantially interfere with movement requirements or migration patterns; and program implementation would not create long-term barriers to local or landscape-level movements. While implementation of SPRs would minimize impacts, nursery sites could still be removed, degraded, or disturbed during treatment activities. This would be a potentially significant impact.</p>	<p>PS</p>	<p>Mitigation Measure 3.6-6: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</p> <p>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-8:</p> <ul style="list-style-type: none"> ▶ Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment. ▶ Establish Avoidance Buffers. The project proponent, in consultation with CDFW and/or TRPA (depending on the potentially affected species), 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 	<p>LTS</p>

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		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.	
3.7 Archaeological, Historical, and Tribal Cultural Resources			
<p>Impact 3.7-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources</p> <p>Later treatment activities could occur on lands that contain resources that may qualify as unique archaeological resources or subsurface historical resources. It is possible that unique archaeological or subsurface historical resources would be disturbed during treatment activities. SPRs CUL-1, CUL-2, CUL-3, CUL-4, CUL-5, and CUL-7 require a records search, pre-field research, an archaeological survey, coordination with Native American groups, worker training to recognize sensitive cultural resources, and avoiding or protecting known resources. Despite implementation of these SPRs, unknown unique archaeological resources or subsurface historical resources could be inadvertently damaged during treatment activities. This would be a potentially significant impact.</p>	PS	<p>Mitigation Measure 3.7-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</p> <p>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 or archaeologically trained resource professional 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 the current “Archaeological Review Procedures for CAL FIRE Projects” or equivalent state or local agency procedures, if applicable. 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.</p>	LTS
<p>Impact 3.7-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource</p> <p>Tribal consultation is ongoing and could result in the identification of tribal cultural resources as described under PRC Section 21074. Tribal cultural resources may be identified within program area during consultation and could be affected by treatments implemented under the proposed PTERI. This would be a potentially significant impact.</p>	PS	<p>Mitigation Measure 3.7-3: Complete Tribal Consultation (PRC Section 21080.3.1) and Avoid Potential Effects on Tribal Cultural Resources</p> <p>CAL FIRE will complete tribal consultation pursuant to PRC Section 21080.3.1.</p> <p>If no tribal cultural resource is identified during consultation, no further mitigation is required.</p>	LTS

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		If the project proponent determines that a treatment may cause a substantial adverse change to a tribal cultural resource, and measures to protect the resource are not otherwise identified in the consultation process, provisions under PRC Section 21084.3(b) describe mitigation measures that may avoid or minimize the significant adverse impacts. Examples include: <ol style="list-style-type: none"> 1. Avoidance and preservation of the resources in place, including, but not limited to, designing the treatment to avoid the resources and protect the cultural and natural context. 2. Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following: <ol style="list-style-type: none"> A. Protecting the cultural character and integrity of the resource. B. Protecting the traditional use of the resource. C. Protecting the confidentiality of the resource. 3. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places. 4. Protecting the resource. 	
3.10 Greenhouse Gas Emissions and Climate Change			
Impact 3.10-2: Potential to Generate GHG Emissions through Treatment Activities Direct GHG emissions from the proposed increase in treatment activities conducted under the proposed program would be substantial, recognizing planned levels of treatment would increase to 1,250 acres per year. At the full target rate of 1,250 acres per year, GHG emissions from treatments would be an estimated 23,298 MTCO ₂ e annually. Consistent with the goals of the proposed fuel treatments to decrease the occurrence of high-severity wildfires and increase the potential rates of carbon sequestration, implementation of the proposed program could result in a cumulative net carbon benefit over the long term, which is the most relevant timeframe and global context of GHG-caused, climate change-related environmental effects. However, there is uncertainty in predicting future wildfire occurrence, related emissions, and carbon sequestration rates, which are highly variable and depend on many factors. Future wildfire intensities and carbon sequestration in treated areas are the subjects of continued scientific research and debate. To meet CEQA's mandate of good faith disclosure and acknowledge	PS	Mitigation Measure 3.10-2: 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): <ul style="list-style-type: none"> ▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ▶ reduce the total area burned through mosaic burning; ▶ burn when fuels have a higher fuel moisture content; ▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, and biomass utilization; and ▶ schedule burns before new fuels appear. 	Potentially SU

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<p>potential future impacts in light of uncertainties, this impact is considered potentially significant, recognizing the reliability of estimates for direct GHG emissions and the uncertainty of the intended net carbon benefits of reduced wildfire intensity and increased carbon sequestration in treated areas.</p>		<p>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and can be spread with compost to increase soil organic matter and soil carbon sequestration. Technologies may also include portable units that perform gasification to produce electricity that can be placed on the grid (e.g., the Powertainer model currently being developed by All Power Labs) or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas for use in electricity generation (e.g., the CM600 made by Biogreen) (All Power Labs 2019; Biogreen 2019).</p> <p>The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.</p>	
3.14 Recreation			
<p>Impact 3.14-2: Result In Adverse Physical Effects On the Environment From New or Expanded Recreational Facilities</p> <p>Implementation of the proposed program would not result in the construction of any new recreational facilities. Treatment activities could remove vegetation that currently serves as a barrier to vehicular access or could include construction of features such as landings, skid trails, or improvements to existing roads that would create new access points for recreational use of motor vehicles and off-highway vehicles (OHVs). These new access points could increase the long-term unmanaged use of motor vehicles and OHVs in the program area. This increase in OHV use and recreation user motor vehicle access could result in adverse physical effects on the environment. This impact would be potentially significant.</p> <p>With implementation of Mitigation Measure 3.13-2, the project implementer would install physical barriers to restrict new access by motor vehicles or OHVs, which would reduce this impact to less than significant.</p>	PS	<p>Mitigation Measure 3.14-2: Install Barriers to Prevent New Motor Vehicle Access</p> <p>To eliminate the potential for new motor vehicle access points into the forest at new landings and skid trails created in the program area, the project implementer (e.g., Licensed Timber Operator, forestry contractor, or public agency field crew, such as the California Conservation Corps, Conservancy Forestry Crews, or Fire District Crews) shall establish physical barriers adjacent to new landings, or skid trails where they access the forest from existing roads or trails to discourage post-treatment motor vehicle access to the project area. The project implementer shall also revegetate and spread mulch and/or slash in the landing area or along skid trails to reduce the visibility of disturbance of the cleared area and expedite restoration. These physical barriers and restoration activities shall be established within 15 days of completion of operations in the treatment unit. The types of physical barriers that could be used include boulders, split rail fencing, or other permanent physical features that are visually compatible with the forest setting.</p>	LTS
3.15 Transportation			
<p>Impact 3.15-2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) Regarding Vehicle Miles Traveled</p> <p>Under the proposed program, the scale of treatment activities would increase to treat approximately 850 acres per year within Planned CWPP Projects plus an</p>	PS	No feasible mitigation is available.	Potentially SU

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
NI = No impact LTS = Less than significant PS = Potentially significant LTSM = Less than significant with Mitigation SU = Significant and unavoidable			
<p>estimated average of 400 acres per year within the Community Fuel Reduction Area. With the increase in treatment acreage, the daily VMT generated by treatment activities in comparison to existing conditions is anticipated to increase by approximately 8,061 VMT because more individual treatment projects would be implemented. A key goal of the proposed program is to reduce the risk of catastrophic wildfires. Reducing the risk of catastrophic wildfires would result in a reduction in fire suppression activity and trips, which would be reasonably expected to decrease VMT over the long term, compared to conditions without the proposed program. However, it is not feasible to predict changes in wildfire occurrence sufficiently to quantify potential changes in fire response VMT. Thus, to meet CEQA’s mandate of good faith disclosure and to not risk understating potential future impacts in light of the uncertainties, this impact would be potentially significant, because VMT generated by later treatment activities under the proposed program would increase in comparison to existing conditions, notwithstanding the potential VMT-reducing effects of reduced wildfire response.</p>			

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