



BUTTE COUNTY FOREST ADVISORY COMMITTEE

December 16, 2019—5:00 P.M. Meeting

ITEM NO.

- 1.00 Call to order – Butte County Public Works Facility, 44 Bellarmine Ct, Chico, CA
- 2.00 Pledge of allegiance to the Flag of the United States of America
- 2.01 **Roll Call – Members:** Nick Repanich, Teri Faulkner, Trish Puterbaugh, Dan Taverner, Peggy Moak
Alternates: Vance Severin, Bob Gage, Frank Stewart, **Carolyn Denero (voting Alt)**
Invited Guests: Holly Jorgensen, Sacramento River Watershed Program Director (applicant for Watershed/Environmental Alt); Russell Nickerson, (District Ranger, Almanor Ranger District, Lassen National Forest); David Brillenz (District Ranger, Feather River Ranger District (FRRD), Plumas National Forest); Clay Davis (NEPA Planner, FRRD); Brett Sanders (Congressman LaMalfa’s Representative); Dennis Schmidt, Director of Public Works; Dan Efsaeff, Director, Paradise Recreation and Park District.
- 2.02 Self-introduction of Forest Advisory Committee Members, Alternates, Guests, and Public – 5 Min.
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- 3.00 **Consent Agenda**
- 3.01 Review and approve minutes of 11-25-2019 – 5 Min.
- 4.00 **Agenda**
- 4.01 Poe Relicensing: Bardees Bar Trail Feasibility Study (Peggy Moak) ACTION REQUESTED: Review the proposal and make recommendation for Comment Letter to PG&E.
- 4.02 California Board of Forestry Vegetation Treatment Program Environmental Impact Report Update – 10 Minutes
- 4.03 Forest Projects Review – Current Quarter: Discussion & required FAC action for USFS projects affecting Butte County residents’ forest management, recreational, environmental, socio-economic interests(Chair)
- Lassen NF Almanor Ranger District- Russell Nickerson (District Ranger): Report and Q & A on prescribed fire plans, pending, proposed and modified projects, SOPA and Non-SOPA – 15 Min
 - Plumas NF Feather River Ranger District, David Brillenz, District Ranger or Clay Davis (District Planner): Report and Q & A on pending, proposed and modified projects, SOPA and Non-SOPA and Collaborator’s Meeting Update – 15 Min.
- 4.04 FAC Presentation to the Board – 5 years of action (Peggy Moak) 10 Min
- 4.05 New Business–Considerations for upcoming meetings: Next meeting is January 27, 2020 - Chico, 5:00 PM
- CED Presentation - January
CA Mechatronics Center FRoomba!! (Nick R.)
 - Radio ‘Communication, Access to evacuation routes, traffic studies, in the event of wildfire (CalFire, PW, BCFSC, Nick R.)
 - South Feather Water & Sewer District - Recreation and Water Projects
 - Fish & Wildlife
- 4.06 Public Comment (THE COMMITTEE IS PROHIBITED BY STATE LAW FROM TAKING ACTION ON ANY ITEM PRESENTED IF IT IS NOT LISTED ON THE AGENDA.)

EXECUTIVE SUMMARY

This Program Environmental Impact Report (PEIR) evaluates the environmental impacts of the proposed California Vegetation Treatment Program (CalVTP). It has been prepared according to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.) under the direction of the California Board of Forestry and Fire Protection (Board) and in cooperation with the California Department of Forestry and Fire Protection (CAL FIRE). The Board is the CEQA lead agency. CAL FIRE, a CEQA responsible agency for implementing the CalVTP, has the primary responsibility for preventing and suppressing fires within the State Responsibility Area (SRA) (PRC Sections 4113 and 4125). Additionally, many local, regional, and state agencies with land ownership or land management responsibilities in the SRA could implement proposed CalVTP vegetation treatments and use this PEIR for CEQA compliance.

This summary is provided in accordance with State CEQA Guidelines Section 15123. It presents (1) a summary description of the proposed CalVTP, (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 (4) a discussion of the areas of controversy and issues to be resolved associated with the proposed program, and (5) a description of the intended uses of this PEIR.

INTRODUCTION

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 have been manifested on the landscape. Wildfire risk levels have been exacerbated by the location of developed land uses and communities in the high hazard areas. In the last several decades, more than 75 percent of forested areas and other woody vegetation types burned less frequently than historic averages, resulting in the buildup of fire fuel (CAL FIRE 2017). 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). Numerous communities are located in the wildland-urban interface (WUI) within very high fire hazard severity zones (VHFHSZs). A survey by media firm, McClatchy, overlaying the hazard zone maps onto 2010 census data, identified 75 towns and cities with populations over 1,000 that were entirely or almost entirely (at least 90 percent) within VHFHSZs (Reese 2019).

These conditions have resulted in the largest, most destructive, and deadliest wildfires on record in California history, all occurring in 2018 and a growing total number of fires and acreage burned. Since 2010, the number of wildfires occurring annually has been increasing, as has the number of acres burned. Much of this increase in acreage, especially in 2017 and 2018, is the result of record-setting fires primarily driven by wind, such as the Thomas and Northern California wildfires (2017) and the Camp and the Mendocino Complex fires (2018). However, destructive fires primarily driven by wind are a small proportion of the thousands of fires that occur every year that do not reach catastrophic levels. Fires driven by topography and those that move more slowly through the landscape, as well as primarily wind-driven fires that have slowed, are those that might be further slowed or stopped entirely by a vegetation treatment implemented under the CalVTP.

The proposed CalVTP directs implementation of vegetation treatments within the SRA to serve as one component of the state's range of actions to reduce the risk of loss of lives and property, reduce fire suppression costs, and protect natural resources as well as other assets at risk from wildfire. The Board acknowledges that vegetation treatments,

alone, will not solve the wildfire crisis. The state's response to the wildfire crisis involves multi-faceted strategies. The Board also acknowledges that, given the current severity of fire hazards in the SRA, vegetation treatments may not be able to slow or halt extreme wind-driven fires. However, most fires that occur within the state are not highly wind driven and the proposed vegetation treatments can help slow and suppress them. Vegetation treatments can also play a valuable role in containing the more extreme fires, when weather conditions shift, wind subsides, and fire intensity decreases.

SUMMARY DESCRIPTION OF THE CalVTP

The Board is mandated to regulate forestry activities within the SRA and develop policies and regulations that contribute to fire prevention and recovery efforts (PRC Section 740). The Board's proposed discretionary action needing CEQA compliance is approval of the CalVTP. After approval, implementation of the CalVTP would consist of vegetation treatment activities carried out by CAL FIRE on private or public land, by public agencies and organizations funded by ~~CAL FIRE~~ grants from CAL FIRE or other state or local agencies, or potentially by public agencies that own and/or manage land within the treatable landscape.

This CalVTP PEIR addresses the following:

- ▶ Expansion of CAL FIRE's vegetation treatment activities to reach a total treatment acreage target of approximately 250,000 acres per year to contribute to the achievement of the 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 both to current activity (recently averaging approximately 33,000 acres per year) and to the level proposed in the 2017 VTP Draft PEIR (i.e., 60,000 acres per year).
- ▶ A project-specific implementation approach for streamlining CEQA review of later site-specific, vegetation treatment projects consistent with the CalVTP and this PEIR, in accordance with procedures described in State CEQA Guidelines Section 15168. The streamlined CEQA review approach would document how a project's environmental effects are covered and which feasible mitigation measures from the CalVTP PEIR are incorporated. This would include evaluation of whether later activities and impacts of site-specific vegetation treatment projects are within the scope of the CalVTP and the PEIR. A "within the scope" finding for later activities would facilitate an increase in the pace and scale of project approvals in a manner that includes environmental protections in compliance with CEQA. Where later vegetation treatment projects do not qualify for a "within the scope" finding, additional CEQA documentation would be prepared.

Program Objectives

The statement of objectives below describes the underlying purposes of the CalVTP and expresses the role of vegetation treatment in implementing state policies and plans for wildfire risk reduction, greenhouse gas (GHG) reduction, and management of natural and working lands. The objectives of the CalVTP are to:

1. serve as the vegetation management component of the state's range of actions underway to reduce risks to life, property, and natural resources by managing the amount and continuity of hazardous vegetative fuels that promote wildland fire consistent with *California's 2018 Strategic Fire Plan* (Board and CAL FIRE 2018);
2. substantially increase the pace and scale of vegetation treatments to contribute to achieving a statewide total of at least 500,000 acres per year on non-federal lands, consistent with the former Governor's EO B-52-18, which results in a CalVTP target up to 250,000 acres per year after considering other types and areas of vegetation treatments;
3. increase the use of prescribed burning as a vegetation treatment tool, consistent with the provisions of Senate Bill 1260, Statutes of 2018, and PRC Section 4483(a);
4. contribute to meeting California's GHG emission goals by managing forests and other natural and working lands as a net carbon sink, consistent with the *California Forest Carbon Plan* (Forest Climate Action Team 2018),

California's 2017 Climate Change Scoping Plan (CARB 2017), Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada (Little Hoover Commission 2018), and California 2030 Natural and Working Lands Climate Change Implementation Plan (CalEPA et al. 2019); and

5. improve ecosystem health in fire-adapted habitats by safely mimicking the effects of a natural fire regime, considering historic fire return intervals, climate change, and land use constraints.

Treatable Landscape

Appropriate areas within which to implement proposed vegetation treatments were identified by first dividing the SRA into vegetation types from the California Wildlife Habitat Relationship (CWHR) system and excluding those vegetation types with negligible wildfire risks (e.g., wet meadow, estuarine). Agricultural CWHR vegetation types were also excluded because agricultural land is generally outside the SRA.

Using this method, 20.3 million acres within the 31 million-acre SRA were identified that may be appropriate for vegetation treatments as part of the CalVTP; this area is called the "treatable landscape" in this PEIR. The proposed target of 250,000 annual acres of treatment would occur within the 20.3 million acres of treatable landscape.

Proposed Vegetation Treatments

Vegetation treatment at the landscape scale is focused on reducing the likelihood of a ground fire increasing in intensity and helping fire responders more easily contain a fire. This is accomplished by modifying fire behavior through strategic removal or modification of vegetation (Finney and Cohen 2003; Graham et al. 2004). By implementing the proposed treatment types, the CalVTP would strategically modify portions of the landscape to reduce losses from and improve resiliency to wildfire. The following treatment types are proposed:

- ▶ **Wildland-Urban Interface Fuel Reduction:** Located in WUI-designated areas, fuel reduction would generally consist of strategic removal of vegetation to prevent or slow the spread of non-wind driven wildfire between structures and wildlands, and vice versa.
- ▶ **Fuel Breaks:** In strategic locations, fuel breaks create zones of vegetation removal and ongoing maintenance, often in a linear layout, that support fire suppression by providing responders with a staging area or access to a remote landscape for fire control actions. While fuel breaks can passively interrupt the path of a fire or halt or slow its progress, this is not the primary goal of constructing fuel breaks.
- ▶ **Ecological Restoration:** Generally outside of the WUI in areas that have departed from the natural fire regime as a result of fire exclusion, ecological restoration would focus on restoring ecosystem processes, conditions, and resiliency by moderating uncharacteristic wildland fuel conditions to reflect historic vegetative composition, structure, and habitat values.

The WUI fuel reduction, fuel break, and ecological restoration treatment types would be implemented using various treatment "activities" that may be applied singularly or in combination:

- ▶ **Prescribed Burning:** Includes pile burning (prescribed burning of piles of vegetative material to reduce fuel and/or remove biomass following treatment) and broadcast burning (prescribed burning to reduce fuels over a larger area or restore fire resiliency in target fire-adapted plant communities; would be conducted under specific conditions related to fuels, weather, and other variables).
- ▶ **Mechanical Treatment:** Use of motorized equipment to cut, uproot, crush/compact, or chop existing vegetation
- ▶ **Manual Treatment:** Use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous or woody species
- ▶ **Prescribed Herbivory:** Use of domestic livestock to reduce a target plant population thereby reducing fire fuels or competition of desired plant species
- ▶ **Herbicides:** Chemical application designed to inhibit growth of target plant species

Standard Project Requirements

Standard project requirements (SPRs) are presented as part of the proposed program to avoid and minimize environmental impacts and comply with applicable laws and regulations. SPRs will be incorporated into later vegetation treatments under the CalVTP as a standard part of treatment design and implementation. For the purposes of this PEIR, SPRs are intended to be implemented and enforced in the same way as mitigation measures consistent with Section 15126.4 of the State CEQA Guidelines. SPRs are the product of coordinated interagency efforts to integrate environmental protection into a comprehensive approach to reduce wildfire risk statewide through vegetation treatment. These SPRs provide the benefit of being mutually supported and predictable, such that they would be implemented consistently to achieve environmental protection.

ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

This PEIR has been prepared to evaluate the physical environmental effects of the proposed CalVTP. Table ES-1, presented at the end of this chapter, provides a summary of the environmental impacts potentially resulting from implementation of the proposed CalVTP. 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 CalVTP would result in less-than-significant impacts or impacts that could be reduced to less than significant with implementation of feasible mitigation measures. In some cases, however, even though the forecasted outcomes would be less than significant or potentially beneficial, because of uncertainty related to future predictions, the PEIR notes for CEQA purposes of good-faith disclosure that the impacts may be significant and unavoidable notwithstanding the expected less than significant or potentially beneficial predictions. Uncertainties relate to: predicting future wildfire occurrence and severity after treatments, evolving research and development related to carbon sequestration rates, ongoing tribal consultation, and the solid organic waste processing industry trends for handling woody biomass. Below is a summary listing of potentially significant and unavoidable impacts; it is important to review the impact discussions in Chapters 3 and 4 of this PEIR to understand the full context of the impact significance determinations.

Implementation of the CalVTP 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 AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type
- ▶ Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources

Impacts Forecasted to Be Less Than Significant or Beneficial, But Noted as Potentially Significant and Unavoidable Because of Future Uncertainties

- ▶ Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities That Would Exceed CAAQS or NAAQS
- ▶ Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk
- ▶ Impact AQ-6: Expose People to Objectionable Odors from Smoke during Prescribed Burning

- ▶ Impact BIO-2: Substantially Affect Special-Status Wildlife (Bumble Bee) Species Either Directly or Through Habitat Modifications
- ▶ ~~Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource~~
- ▶ Impact GHG-2: Generate GHG Emissions through Treatment Activities
- ▶ Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP
- ▶ Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity

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 CalVTP.

ALTERNATIVES TO THE PROPOSED CalVTP

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 PEIR 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 meet these evaluation criteria are evaluated in the PEIR, and are listed as follows:

- ▶ **No Program Alternative**, which assumes vegetation treatments would continue to be implemented through existing plans, policies, and operations;
- ▶ **Alternative A: Reduced Scale of Treatments**, which would treat up to 60,000 acres per year with a combination of WUI fuel reduction, fuel break, and ecological restoration projects across the entire treatable landscape;
- ▶ **Alternative B: WUI Fuel Reduction Only**, which would seek to treat approximately 250,000 acres per year entirely within the WUI, encompassing approximately 10.1 million acres of the treatable landscape;
- ▶ **Alternative C: Modified WUI Fuel Reduction and Fuel Breaks**, which would seek to treat approximately 250,000 acres per year through WUI fuel reduction and fuel breaks without the use of prescribed burning in chaparral and coastal sage scrub vegetation types;
- ▶ **Alternative D: No Prescribed Burning Treatments**, which would seek to treat approximately 250,000 acres per year with a combination of WUI fuel reduction, fuel break, and ecological restoration projects without the use of prescribed burning; and
- ▶ **Alternative E: No Herbicide Treatments**, which would seek to treat approximately 250,000 acres per year with a combination of WUI fuel reduction, fuel break, and ecological restoration projects without the use of herbicides.

Those alternatives that do not meet the criteria identified above for detailed evaluation and are dismissed from further consideration in the PEIR are listed as follows:

- ▶ Non-Vegetation Management Alternatives;
- ▶ Defensible Space Focus;
- ▶ Electric Utility Focus;
- ▶ Alternatives Evaluated in the 2017 Draft VTP PEIR; and
- ▶ Alternatives Dismissed in the 2017 Draft VTP PEIR:
 - reduced acreage,
 - Highly Constrained – WUI and VHFHSZ,
 - Limiting Treatment to Areas with High Incidence of Wildfires,
 - High Acres in the WUI Only,

- Focusing on Areas of Historical Use of Treatments,
- 1,000 Foot WUI and Fuel Break Maintenance Only, and
- Fire Return Interval Departure.

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 the basic program objectives but 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 B: WUI Fuel Reduction Only and Alternative D: No Prescribed Burning Treatments, would result in fewer potentially significant impacts for some resources and exacerbate impacts for other resources, but would not achieve the basic program objectives to the same extent as 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 D would become the environmentally superior alternative, because it would avoid a significant and unavoidable air quality impact of the proposed program related to short-term exposure of people to toxic air contaminants during prescribed burning.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The NOP for the CalVTP PEIR was distributed on January 30, 2019, to responsible agencies, interested parties, and organizations, as well as private organizations and individuals that may have an interest in the project. The Board held public scoping meetings on February 11 and 19, and on March 18, 2019 to provide information on the proposed CalVTP and solicit public input on the scope and content of the PEIR.

The following environmental concerns and issues were expressed most frequently during the scoping process:

- ▶ Efficacy of wildland vegetation treatments at reducing fire risk in communities, including from wind-driven fires
- ▶ Air quality and public health impacts from prescribed burning
- ▶ Impacts on climate change and carbon sequestration from removal of vegetation by vegetation treatments as well as wildfire
- ▶ Cumulative impacts on chaparral and coastal sage scrub vegetation from vegetation treatments, prescribed burning, and wildfires
- ▶ Impacts on biological resources from treatment activities
- ▶ The process for environmental review of later treatment activities under the CalVTP
- ▶ Suggestions for alternatives to the CalVTP

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

~~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 PEIR 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.

INTENDED USES OF THIS PEIR

According to the State CEQA Guidelines (Section 15064[f][1]), preparation of an EIR is required whenever a project may result in a significant environmental impact. This document functions as a Program EIR in accordance with State CEQA Guidelines Section 15168(c) for streamlining later activities. According to Section 15168 of the State CEQA Guidelines, a Program EIR may be prepared on a series of actions that can be characterized as one large project and are related to, among other things, the issuance of general criteria to govern the conduct of a continuing program or individual activities carried out under the same authorizing statutory or regulatory authority, and having generally similar environmental effects that can be mitigated in similar ways.

For the purposes of this PEIR a "project proponent" is be a public agency providing funding for vegetation treatment or with land ownership, land management, or other regulatory responsibility in the treatable landscape and seeking to implement vegetation treatments consistent with this PEIR for CEQA compliance CAL FIRE or another public agency funded by CAL FIRE grants or with land ownership and/or management responsibilities in the treatable landscape that is seeking to implement vegetation treatments consistent with the CalVTP, using the PEIR for CEQA compliance. CAL FIRE or other project proponents must evaluate the later activities associated with each vegetation treatment project to determine whether such activities have been analyzed in this PEIR. Such evaluations must ascertain whether these future vegetation treatment projects are consistent with the activities contained in the CalVTP and would have effects that were analyzed in the PEIR. If the project proponent finds that the impacts were analyzed in the PEIR and no new or substantially more severe significant effects could occur or no new mitigation measures would be required for a subsequent treatment project, the project can be found to be within the scope of this PEIR. In this circumstance, no additional CEQA documentation would need to be prepared or publicly circulated (State CEQA Guidelines Section 15168[c][2] and [4]). The documentation used to substantiate the "within the scope" finding would provide the substantial evidence required to reach that conclusion. For the CalVTP, this documentation would be completion of the Project-specific Analysis checklist and provision of supporting studies (see Appendix PD-3 of this PEIR). The project proponent may act on the proposed later activity using this documentation and the PEIR for CEQA compliance purposes. If the later activity is approved, the project proponent would file a Notice of Determination.

Under this CEQA compliance approach, a project proponent must incorporate all standard project requirements relevant to the proposed activity and all feasible mitigation measures from the PEIR into the later activity, as needed, to address significant or potentially significant effects on the environment. A "within the scope" finding for later activities would facilitate an increase in the pace and scale of project approvals in a manner that includes environmental protections. If a proposed project is not within the scope of this CalVTP PEIR, then the project proponent may serve as a lead agency in the preparation of additional environmental documentation that accompanies the PEIR for CEQA compliance or in the conduct of a separate, independent CEQA review and documentation process. If a later EIR is prepared, it could be limited in its scope to the new or substantially more severe significant impact and could require additional CEQA documentation, as directed by State CEQA Guidelines Sections 15162, 15163, and 15168. Pursuant to State CEQA Guidelines Section 15168(d), a later negative declaration could be prepared if the new impact would be less than significant or mitigated negative declaration could be prepared if the new impact could be clearly mitigated to less than significant. If a new or substantially more severe significant effect could not be clearly mitigated to less than significant, an EIR would be prepared that would focus on the new or substantially more severe significant impact(s).

Table ES-1 Summary of 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			
Aesthetics and Visual Resources			
<p>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</p> <p>Varying degrees of temporary degradation of public views would result during active implementation of vegetation treatment activities under the proposed CalVTP. Herbicide application and prescribed herbivory would occur intermittently and move throughout a project area. These types of activities would not block any views, dominate a viewshed, or significantly disrupt views from a scenic vista or state scenic highway. Equipment and vehicles associated with manual and mechanical treatments and prescribed burning could be visible to public viewers at scenic vistas, along a state scenic highway, or other public view points. However, activities would be temporary, lasting from 1 week to 6 months, and implementation of SPR AES-2 would avoid and minimize visual impacts from the presence of treatment equipment. In addition, smoke from prescribed burns would not result in substantial short-term aesthetic impacts, because burning would temporary, lasting up to 1 week but typically only 1 day, and project proponents would be required to prepare and adhere to a smoke management plan (SMP) (SPR AQ-2) and a Burn Plan (SPR AQ-3) which prescribe the conditions under which prescribed burning can occur to reduce the generation and visibility of smoke. Therefore, this impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types</p> <p>Long-term effects to aesthetics would occur from implementing WUI fuel reduction, ecological restoration, and shaded fuel break treatment types in the treatable landscape. Because ecological restoration would be designed to improve habitat quality and create a landscape appearance closer to native conditions, it would result in long-term beneficial visual impacts. WUI fuel reduction activities would reduce vegetation near communities. However, it would not be significantly noticeable because sufficient vegetation would remain and could aid in the visual transition from wildlands to urban environment. Prescribed burning in the grass</p>	LTS	No mitigation is required.	LTS

Table ES-1 Summary of 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
<p>fuel type would result in the most substantial visual change as grasses would turn a dark charcoal/black color directly following prescribed burning. However, grasses would regrow during the next growing season(s), and wildfire and prescribed burning currently occur within the treatable landscape, thus burned vegetation of all types is occasionally visible. Requirements from SPR AD-4 and SPR REC-1 would be incorporated into prescribed burning projects and ensure notification to the public prior to the commencement of burning operations.</p> <p>In the case of shaded fuel breaks, because not all of the existing vegetation would be cleared, and large trees would remain, vividness, intactness, and unity of views would remain, and their presence would not substantially affect views from a scenic vista or from a state scenic highway. Requirements from SPR AES-1 and SPR AES-3 would be incorporated into vegetation treatments to break up or screen linear edges of a clearing and screen views from public view points as feasible. Therefore, these treatment types would not result in a long-term or substantial degradation of a scenic vista, substantially damage resources in a state scenic highway, or degrade the existing visual character and quality of a site. This impact would be less than significant.</p>				
<p>Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type</p> <p>Implementation of non-shaded fuel breaks would remove all of the vegetation within a treatment area and could be visible from scenic vistas, state scenic highways, or other public view points. Because non-shaded fuel breaks remove all vegetation, this treatment type could lead to a long-term adverse visual change in the landscape by resulting in a contrasting linear element in an otherwise natural environment. This change would constitute substantial degradation of a scenic vista or the visual character and quality of public views, or substantial damage to scenic resources within a state scenic highway to the extent a non-shaded fuel break is visible to the public. This would be a potentially significant impact.</p>	PS	<p>Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks</p> <p>The project proponent will conduct a visual reconnaissance of the treatment area prior to implementing non-shaded fuel breaks to observe the surrounding landscape and determine if public viewing locations, including scenic vistas, public trails, and state scenic highways, have views of the proposed treatment area. If none are identified, the non-shaded fuel break may be implemented without additional visual mitigation</p> <p>If the project proponent identifies public viewing points, including heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of a proposed non-shaded fuel break treatment area, the project proponent will, prior to implementation, attempt to identify any feasible change in location of the fuel break to reduce its visibility from public viewpoints. If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent will implement, where</p>	SU	

Table ES-1 Summary of 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
<p>feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives. With the shaded fuel break, the project proponent will thin and feather adjacent vegetation to break up the linear edges of the fuel break and strategically preserve vegetation at the edge of the fuel break, as feasible, to help screen public views and minimize the contrast between the fuel break and surrounding vegetation.</p>				
Agricultural and Forestry Resources				
<p>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</p> <p>The WUI fuel reduction, ecological restoration and non-shaded fuel break treatment types would inherently retain some vegetation within treatment areas. Establishing a non-shaded fuel break would require complete removal of vegetation within the limited area of the fuel break. Untreated vegetation surrounding the fuel break within forest land would remain intact. Although, treatment activities would alter forest land through vegetation removal, the area would generally support 10 percent of native tree cover thereby maintaining consistency with the definition of forest land as defined by PRC Section 12220(g). Treatment activities under the CalVTP would not result in the loss of forest land or conversion of forest land to a non-forest use. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS	
Air Quality				
<p>Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors during Treatment Activities that Would Exceed CAAQS or NAAQS and Conflict with Regional Air Quality Plans</p> <p>Emissions of criteria air pollutants and precursors generated by mechanical and manual treatments, prescribed herbivory, herbicide application, and prescribed burns under the CalVTP would likely exceed air district-established mass emission thresholds and, therefore, result in, or contribute to, the nonattainment status with respect to the NAAQS and CAAQS in one or more air basins. In addition, treatment activity-related emissions could result in, or contribute to, localized exceedances of NAAQS and CAAQS for CO, PM₁₀, and PM_{2.5} in areas where people reside and</p>	PS	<p>Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques</p> <p>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.</p>	SU	

Table ES-1 Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation	
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<p>work, thereby also conflicting with the air quality planning efforts of regional air districts, including those that comprise the SIP. This could result in health complications experienced by receptors, which, if it occurred, would be a potentially significant impact.</p>		<p>Techniques for reducing emissions may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ▶ 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: <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. ▶ 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. 		

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Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk Because of the short duration of treatment activities and because treatment activity would not take place near the same people for an extended period of time, diesel PM generated by treatment activities would not expose any person to an incremental increase in cancer risk greater than 10 in one million or a Hazard Index of 1.0 or greater. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk Treatment activities implemented under the CalVTP could involve ground disturbing activities in areas where NOA is present. However, multiple SPRs would limit exposure of people to NOA-containing fugitive dust emissions generated by treatment activities implemented under the CalVTP. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk Prescribed burns conducted under the CalVTP could result in the short-term exposure of people to concentrations of TACs and associated levels of acute health risk with a Hazard Index greater than 1.0. This would be a potentially significant impact.	PS	Additional measures are not feasible.	SU
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust While the use of diesel-powered equipment during treatment activities performed under the CalVTP could result in temporary emissions of odorous diesel exhaust, it is not anticipated that this the levels of diesel exhaust would be excessive, nor would it affect a substantial number of people. This would be a less-than-significant impact.	LTS	No mitigation is required.	LTS
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning Prescribed burns conducted under the CalVTP could result in the short-term exposure of a substantial number of people to odorous smoke. This would be a potentially significant impact.	PS	Additional measures are not feasible.	SU

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Archaeological, Historical, and Tribal Cultural Resources				
<p>Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources Vegetation treatment under the CalVTP could occur on lands that contain built historical resources. Implementation of SPRs CUL-1, CUL-76, and CUL-87, would avoid any substantial adverse change to any built historical resources. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS	
<p>Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources Vegetation treatment under the CalVTP could occur on lands that contain resources that may qualify as unique archaeological resources or subsurface historical resources. The CalVTP primarily involves treatment activities that either require no soil disturbance or very shallow soil disturbance; however, it is possible that unique archaeological or subsurface historical resources would be disturbed during treatment activities. SPRs CUL-1 through CUL-5 and SPR CUL-87 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 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 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 applicable 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>	SU	
<p>Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource The Board sent letters to 12 Native American tribes on February 9, 2019, notifying each that the PEIR was being prepared under CEQA, as required by PRC 21080.3.1. Four tribes requested initiation of tribal consultation. Tribal consultation is</p>	PS/LTS	<p>Mitigation Measure CUL-3: Complete Tribal Consultation (PRC Section 21080.3.1) and Avoid Potential Effects on Tribal Cultural Resources The Board of Forestry and Fire Protection will complete tribal consultation pursuant to PRC Section 21080.3.1</p>	SU/LTS	

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<p>ongoing, but not yet complete and could result in the identification of tribal cultural resources as described under has been completed with these tribes pursuant to PRC Section 21074. No tribal cultural resources may be were identified within the treatable landscape during consultation. Implementation of SPRs CUL-1 through CUL-6 and SPR CUL-8, would avoid any substantial adverse change to tribal cultural resources, and could be affected by treatments implemented under the proposed CalVTP. This impact would be a potentially significant impact <u>less than significant</u>.</p>		<p>If no tribal cultural resource is identified during consultation, no further mitigation is required.</p> <p>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:</p> <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. 	
<p>Impact CUL-4: Disturb Human Remains Prehistoric or historic-era marked or un-marked human interments <u>and cremated remains</u> are present throughout California, including the treatable landscape. Ground-disturbing vegetation treatment activities could uncover previously unknown human remains. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 would avoid disturbance. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
Biological Resources			
<p>Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications Vegetation 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-7, and BIO-9 require 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</p>	PS	<p>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</p>	LTSM

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<p>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>		<p>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 species without posing a risk, especially if the listed plants are dormant at the time of application. <u>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.</u> 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. <u>No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants.</u> 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.</p> <p>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. <u>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.</u> If it is</p>		

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				<p>determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.</p> <p>Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</p> <p>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:</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 treatment method being used, and environmental conditions and terrain. <u>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.</u> ▶ 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- 	

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				<p>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.</p> <p>► <u>No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer.</u></p> <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 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. <u>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.</u> If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.</p> <p>Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants</p>	

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				<p>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. <u>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.</u> 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 <u>in perpetuity</u>, 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 <u>by the project proponent</u> 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, 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>	

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				<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: ▶ 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 <u>and that compensatory plant populations will be preserved in perpetuity.</u></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> <p>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</p>	

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		substantially reduce the number or restrict the range of listed plant species, then the treatment will not qualify as within the scope of this PEIR. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.		
<p>Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications Treatment activities implemented under the proposed CalVTP, including prescribed burning, mechanical treatment, manual treatment, prescribed herbivory, and herbicide treatment, could result in direct or indirect adverse effects to several 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, vegetation 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>		<p>Significance before mitigation, mitigation measures, and significance after mitigation are listed for each wildlife species group</p>		
<p>Tree-Nesting and Cavity-Nesting Wildlife</p>	PS	<p>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 2 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</p>	LTSM	

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		<p>determined by a qualified RPF or biologist <u>using the most current and commonly-accepted science and considering published agency guidance</u>; OR</p> <p>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/<u>NOAA Fisheries</u> 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.</p> <ul style="list-style-type: none"> ▶ 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. <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> ▶ The project proponent will design treatment activities to maintain the habitat function, by implementing the following: <ul style="list-style-type: none"> ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; <u>dens</u>; tree snags; large raptor nests [including inactive nests]; downed woody debris; <u>food sources</u>). 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 <u>and the most current, commonly accepted science</u>. ▪ 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 		

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		<p>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.</p> <ul style="list-style-type: none"> ▶ 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 consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c. <p>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</p> <p>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.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <ul style="list-style-type: none"> ▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals: <p>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 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</p>		

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				<p>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. <u>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).</u></p> <ul style="list-style-type: none"> No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician may <u>will</u> be required to monitor <u>the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment if the treatment activity has the potential to result in mortality, injury, or disturbance. 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.</u> 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 	

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				<p>project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.</p> <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> ▶ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: <ul style="list-style-type: none"> ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, 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 <u>and the most current, commonly accepted science</u>. ▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. ▶ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function. <p>A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA</p>	

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NI = No impact	LTS = Less than significant	PS = Potentially significant	LTSM = Less than significant with mitigation	SU = Significant and unavoidable	
				<p>because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the <u>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.</u> If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. <u>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.</u></p> <p>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</p> <p>If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.</p>	

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				<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 <u>existing</u> habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding or removing perching structures, removing existing perching structures, or removing <u>existing</u> movement barriers or other <u>existing</u> 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 <u>it and that compensatory habitat will be preserved in perpetuity.</u> 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 habitat. <p>Review requirements are as follows:</p> <ul style="list-style-type: none"> ▶ <u>The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order</u> 	

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				<p><u>to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.</u></p> <ul style="list-style-type: none"> ▶ For species listed under ESA or CESA or a California Fully Protected Species, the project proponent will submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries 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 these requirements are equally or more effective than the mitigation identified above.</p> <p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>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:</p> <ul style="list-style-type: none"> ▶ Reference the <i>Manual of California Vegetation</i>, Appendix 2, Table A2, <i>Fire Characteristics</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. ▶ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive 	

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				<p>natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.</p> <ul style="list-style-type: none"> ▶ 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 <u>relative</u> 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 <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). ▶ Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory. <p><u>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</u></p>	

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				<p><u>necessary to meet CalVTP program objectives, including, but not limited to, protection 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).</u></p> <p>A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. <u>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.</u> If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.</p>	

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NI = No impact	LTS = Less than significant	PS = Potentially significant	LTSM = Less than significant with mitigation	SU = Significant and unavoidable
		<p>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>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:</p> <ul style="list-style-type: none"> ▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: <ul style="list-style-type: none"> ▪ restoring sensitive natural community or oak woodland functions and acreage within the treatment area; ▪ restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or ▪ preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it <u>and that compensatory habitat will be preserved in perpetuity.</u> 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 or <u>enhanced</u> habitat.</p> <p><u>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.</u></p> <p>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p> <p>If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following:</p> <ul style="list-style-type: none"> ▶ Compensate for unavoidable losses of riparian habitat acreage and function by: <ul style="list-style-type: none"> ▪ restoring riparian habitat functions and acreage within the treatment area; ▪ restoring degraded riparian habitat outside of the treatment area; ▪ purchasing riparian habitat credits at a CDFW-approved mitigation bank; or ▪ preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> 1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it <u>and that compensatory plant populations will be preserved in perpetuity.</u> 2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a 	

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		<p>description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored <u>or enhanced</u> habitat.</p> <p><u>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.</u></p> <p>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.</p>		
Shrub-Nesting Wildlife	PS	<p>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)</p> <p>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</p> <p>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</p> <p>Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)</p> <p>If elderberry shrubs within the documented range of valley elderberry longhorn beetle are identified during review and surveys for SPR BIO-1, and valley elderberry longhorn beetle or likely occupied suitable elderberry habitat (e.g., within riparian, within historic riparian, containing exit holes) is confirmed to be present during protocol-level surveys following the protocol outlined in USFWS <i>Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle</i> (USFWS 2017) per SPR BIO-10, the following protective measures will be implemented to avoid and minimize impacts to valley elderberry longhorn beetle:</p> <ul style="list-style-type: none"> ▶ If elderberry shrubs are 165 feet or more from the treatment area, and treatment activities would not encroach within this distance, direct or indirect impacts are not expected and further mitigation is not required. 	LTSM	

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		<p>▶ If elderberry shrubs are located within 165 feet of the treatment area, the following measures will be implemented:</p> <ul style="list-style-type: none"> ▪ A minimum avoidance area of at least 20 feet from the dripline of each elderberry plant will be fenced or flagged and maintained to avoid direct impacts (e.g., damage to root system) that could damage or kill the plant, with the exception of the following activities: <ul style="list-style-type: none"> - Manual trimming of elderberry shrubs will only occur between November and February and will avoid removal of any branches or stems that are greater than or equal to 1 inch in diameter to avoid and minimize adverse effects on valley elderberry longhorn beetle. - Manual or mechanical vegetation treatment within the drip-line of any elderberry shrub will be limited to the season when adults are not active (August - February), will be limited to methods that do not cause ground disturbance, and will avoid damaging the elderberry. ▪ A qualified RPF, or biologist, <u>or biological technician</u> familiar with valley elderberry longhorn beetle and its life history will monitor the work area to ensure <u>verify</u> the avoidance and minimization measures are implemented. <u>The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to valley elderberry longhorn beetle.</u> <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of VELB or degradation of occupied habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p>		
Ground-Nesting Wildlife	PS	<p>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)</p>	LTSM	

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		Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat		
Burrowing or Denning Wildlife	PS	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) Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat	LTSM	
Insects and Other Terrestrial Invertebrates	PS	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) Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)	SU	

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				<p>Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)</p> <p>Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)</p> <p>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:</p> <ul style="list-style-type: none"> ▶ 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 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, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained. <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination.</p>	

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				<p>If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly <u>species</u> would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. <u>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), and the substantial evidence will be included in the PSA.</u> If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p>	

Table ES-1 Summary of 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	

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

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

Table ES-1 Summary of 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	
				<p>Mitigation Measure BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)</p> <p>If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures will be implemented:</p> <ul style="list-style-type: none"> ▶ To avoid and minimize impacts to Mount Hermon June beetle and Zayante band-winged grasshopper, treatment activities will not occur within "Sandhills" habitat in Santa Cruz County, the only suitable habitat for these species. ▶ To avoid and minimize impacts to Casey's June beetle, Delhi Sands flower-loving fly (<i>Rhaphiomidas terminates abdominalis</i>), Delta green ground beetle (<i>Elaphrus viridis</i>), Morro shoulderband snail, Ohlone tiger beetle (<i>Cicindela ohlone</i>), and Trinity bristle snail, treatment activities will not occur within habitat in the range of these species that is deemed suitable by a qualified RPF or biologist with familiarity of the species. <p>If the project proponent cannot implement the measures above to avoid mortality, injury or disturbance to listed beetles, flies, grasshoppers, and snails, or degradation of suitable habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)</p> <p>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:</p> <ul style="list-style-type: none"> ▶ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. 	

Table ES-1 Summary of 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	
				<ul style="list-style-type: none"> ▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). ▶ 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). <p>CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be</p>	

Table ES-1 Summary of 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
		<p>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.</p> <p>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 <u>species</u> 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. <u>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.</u> If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.</p> <p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p>	
Bats	PS	<p>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)</p> <p>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</p> <p>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</p> <p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</p>	LTSM

Table ES-1 Summary of 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
		Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat	
Ungulates	PS	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) Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) Mitigation Measure BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory) The project proponent will implement the following measure if treatment activities are planned within the range of desert bighorn sheep, peninsular bighorn sheep, Sierra Nevada bighorn sheep, or pronghorn: <ul style="list-style-type: none"> ▶ Prescribed herbivory activities will be prohibited within a 14-mile buffer around suitable habitat for any species of bighorn sheep within the range of these species consistent with the more stringent recommendations in the Recovery Plan for Sierra Nevada bighorn sheep (USFWS 2007). ▶ Prescribed herbivory activities will be avoided within the range of pronghorn where feasible (where this range does not overlap with the range of any species of bighorn sheep). Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat	LTSM
Fish and Aquatic Invertebrates	LTS (in rivers, streams, lakes)	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)	LTS (in rivers, streams, lakes)

Table ES-1 Summary of 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
	PS (in wetlands, vernal pools)	<p>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</p> <p>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</p> <p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p> <p>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</p> <p>Impacts to wetlands will be avoided using the following measures:</p> <ul style="list-style-type: none"> ▪ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. ▪ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures). ▪ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. 	LTSM (in wetlands, vernal pools)

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NI = No impact	LTS = Less than significant	PS = Potentially significant	LTSM = Less than significant with Mitigation SU = Significant and unavoidable
		<ul style="list-style-type: none"> ▪ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▪ Within this buffer, 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: <ul style="list-style-type: none"> ▪ No special-status species are present in the wetland habitat ▪ The wetland habitat function would be maintained. ▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present ▪ Fire containment lines and pile burning are prohibited within the buffer. ▪ <u>No fire ignition (and associated use of accelerants) will occur within the wetland buffer.</u> 	
<p>Amphibians and Reptiles</p>	<p>LTS (in rivers, streams, lakes)</p> <p>PS (in wetlands, vernal pools, associated riparian)</p>	<p>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)</p> <p>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</p> <p>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</p> <p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p> <p>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</p>	<p>LTS (in rivers, streams, lakes)</p> <p>LTSM (in wetlands, vernal pools, associated riparian)</p>

Table ES-1 Summary of 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			
<p>Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function</p> <p>Vegetation treatment activities could result in loss or degradation of sensitive habitats, including designated sensitive natural communities, riparian habitats, and oak woodlands. Implementation of SPRs BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-8, BIO-9, and HYD-4 require that potential sensitive natural communities and other sensitive habitats be identified and protected prior to implementing treatments. Implementation of SPR BIO-5 would avoid environmental effects of type conversion in chaparral and coastal sage scrub habitats. While SPRs would minimize impacts, treatment activities could still result in a loss of acreage of sensitive natural communities and habitats, eliminate sensitive natural communities or habitats from a treatment area, or reduce the habitat value or function of sensitive natural communities and habitats. Many riparian, chaparral, and coastal sage scrub habitats are also designated sensitive natural communities and are considered ESHAs in the coastal zone. Sensitive natural communities (vegetation alliances with state or global rarity ranks 1, 2, or 3) are also considered ESHAs in the coastal zone. Loss or degradation of sensitive natural communities and sensitive habitats would be a potentially significant impact.</p>	PS	<p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</p> <p>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p>	LTSM
<p>Impact BIO-4: Substantially Affect State or Federally Protected Wetlands</p> <p>Treatment activities proposed under the CalVTP could occur on lands that contain state or federally protected wetlands; these activities could remove wetland vegetation and alter wetland hydrology or topography resulting in loss or degradation of wetland function. Implementation of SPRs BIO-1 and HYD-4 require that potential wetlands be identified and protected prior to implementing treatments. While implementation of SPRs would minimize impacts, treatment activities could inadvertently destroy or adversely modify protected wetlands resulting in loss of these resources. Additionally, prescribed burning would result in direct removal of wetland vegetation that could adversely modify wetland functions and reduce wetland values. If this occurred, it would be a potentially significant impact.</p>	PS	<p>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</p>	LTSM

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<p>Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries</p> <p>Vegetation treatment activities implemented under the CalVTP could be located in areas used as wildlife movement corridors or nurseries. Treatment-related noise and disturbance could lead to temporary changes in migration or movement patterns, and fencing for prescribed herbivory could potentially injure or impede moving wildlife. Wildlife nursery sites could be disturbed or essential nursery habitat components could be degraded by vegetation treatment activities. SPRs BIO-1, BIO-4, BIO-5, BIO-10, BIO-11, HYD-1, and HYD-4 require identification of nursery sites prior to treatment activities, actions to prevent degradation of aquatic and riparian corridors, and installation of wildlife-friendly fencing to avoid entanglement during wildlife movement. 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 project 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>	PS	<p>Mitigation Measure BIO-5: 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-10:</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 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 <u>effectiveness of the non-disturbance buffer around the nursery site</u> by a qualified RPF, <u>biologist</u>, 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. <u>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.</u> 	LTSM
<p>Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife, Including Nesting Birds</p> <p>Vegetation treatments conducted under the CalVTP would occur in habitats that support common native bird, mammal, reptile, amphibian, and invertebrate species. Treatment activities could disturb breeding; remove or damage active nests, dens, and other breeding sites; kill or injure individuals; and temporarily reduce breeding productivity of these species. Because treatments would be implemented within relatively small proportions of the extensive ranges of common species, and suitable habitat would remain available to these species across the broader landscape surrounding treatment areas, the magnitude of these potential losses would not substantially reduce the overall abundance of any</p>	LTS	No mitigation is required.	LTS

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<p>common wildlife species. Additionally, implementation of SPRs BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 would limit the loss or degradation of some high-quality breeding habitats for special-status wildlife that would also benefit common species, <u>and implementation of SPR BIO-12 would protect common nesting birds, including raptors.</u> Therefore, treatment activities would not substantially reduce the population size of or availability of suitable breeding habitat for any common wildlife species, including nesting birds. This impact would be less than significant.</p>			
<p>Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources 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. Additionally, SPR AD-3 (Consistency with Local Plans, Policies, and Ordinances) requires that the project proponent design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans), policies, and ordinances to the extent the project is subject to them. Therefore, the CalVTP would result in no impact related to potential conflict with local policies or ordinances protecting biological resources.</p>	NI	No mitigation is required.	NI
<p>Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan Several HCPs and NCCPs have been adopted or are being planned for areas within the treatable landscape. Consistency of discretionary projects with an adopted HCP, NCCP, or other conservation plan is a legal requirement; and, the design, approval, and permitting of vegetation treatment projects under the CalVTP within an area covered by an adopted conservation plan would comply with that requirement. Therefore, approved treatment activities would result in no impact related to potential conflict with the provisions of adopted HCPs, NCCPs, or other approved local, regional, or state habitat conservation plans.</p>	NI	No mitigation is required.	NI
Geology, Soils, Paleontology, and Mineral Resources			
<p>Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil Treatment activities implemented under the proposed CalVTP may involve the disturbance of soils as well as the reduction in vegetative cover, which has the potential to substantially increase rates of erosion and loss of topsoil. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance</p>	LTS	No mitigation is required.	LTS

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which could lead to substantial erosion or loss of topsoil especially in areas of steep slopes. In general, it is highly likely that mechanical treatments (relative to other treatment activities) would be utilized for all treatment types in tree fuel types as well as for WUI fuel reduction treatments in shrub fuel types. Additionally, prescribed burning can increase risk of water repellency (Robichaud et al. 2010) and breakdown of soil structure, which can lead to significant increases in erosion. There is a high likelihood that prescribed burning would be utilized most for ecological restoration treatments in grass fuel types, a moderate likelihood it would be utilized to implement fuel break and ecological restoration treatments in tree fuel types, and a moderate likelihood it would be utilized for fuel break treatments in shrub fuel types. The CalVTP would reduce the amount of vegetation in all treated areas, which has the potential to expose soil to wind and water erosion. Implementation of SPRs GEO-1 through GEO-8 will avoid and minimize the risk of substantial erosion and loss of topsoil. This impact would be less than significant.			
Impact GEO-2: Increase Risk of Landslide Removal of vegetation during treatments activities implemented under the CalVTP could affect the root structure in treated areas such that the stability of slopes and soils could decrease, which would increase the risk of landslide. Additionally, by removing vegetation, the soil water content could increase due to lack of uptake and transpiration by the vegetation. Higher soil water content could potentially destabilize slopes and increase the risk of landslide. Landslide risk would increase in areas with steeper slopes and where previous landslide has occurred. Implementation of SPRs GEO-3, GEO-4, GEO-7, and GEO-8 would avoid or minimize the risk of landslide resulting from CalVTP treatments. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Greenhouse Gas Emissions			
Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs The CalVTP would be consistent with applicable plans, policies, and regulations aimed at reducing GHG emissions, including <i>California's 2017 Climate Change Scoping Plan</i> , the <i>California Forest Carbon Plan</i> , and <i>Draft California 2030 Natural and Working Lands Climate Change Implementation Plan</i> . The purpose of the CalVTP is to	LTS	No mitigation is required.	LTS

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reduce wildfire risk, which is could reduce GHG emissions and increase carbon sequestration over the long term. This impact would be less than significant.			
<p>Impact GHG-2: Generate GHG Emissions through Treatment Activities Direct GHG emissions from the proposed increase in annual treatment activities conducted under the CalVTP would be substantial, recognizing planned levels of treatment would increase from 33,000 acres to 250,000 acres per year. At the full target rate of 250,000 acres per year, GHG emissions from treatments would amount to an estimated 4,051 MMTCO₂e 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 CalVTP 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, emissions, and carbon sequestration rates, which are highly variable depending 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 potential future impacts in light of uncertainties, this GHG impact is classified as 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>	PS	<p>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 <i>National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire</i> (NWCG 2018):</p> <ul style="list-style-type: none"> ▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ▶ reduce the total area burned through mosaic burning; ▶ burn when fuels have a higher fuel moisture content; ▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and ▶ schedule burns before new fuels appear. <p><u>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity.</u></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>	SU

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Energy Resources			
<p>Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy Energy would be consumed under the proposed CalVTP in the form of fossil fuel (e.g., diesel and other petroleum fuels) combustion in the engines of vehicles and equipment, which would be used by workers accessing treatment areas and during implementation of treatment activities. Consistent with the CalVTP's purpose of reducing wildfire risk and to the extent it would decrease intensity of wildfires, implementation of treatment activities would also reduce the intensity of fire response. With less intense wildfire response and its relatively inefficient consumption of energy, fuel and energy consumption for wildfire response would decrease, as well. Thus, impacts related to consumption of energy resources would be less than significant.</p>	LTS	No mitigation is required.	LTS
Hazardous Materials, Public Health and Safety			
<p>Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials Treatment activities proposed under the CalVTP would require the use of various types of equipment and vehicles, which need fuels, oils, and lubricants to operate. The use, transport, and disposal of these substances could result in an accidental upset or health hazard if released into the environment. SPR HAZ-1 would be implemented during treatment activities under the CalVTP; it requires that all equipment be properly maintained per manufacturer's specifications, requires regular inspection of all equipment for leaks, and requires that any equipment found leaking is required to be promptly removed from a treatment site. This SPR would minimize leaks and the potential for resultant contamination to enter the environment. Furthermore, several federal and state laws regulate the use, transport, storage, and disposal of hazardous materials, including the HWCA, DTSC's Unified Program, and OSHA and EPA regulations, which all project proponents would be required to comply with. <u>Accelerants would be used to implement prescribed burns; however, fire ignition (including use of accelerants) would not occur in the protection zones for watercourses (SPR HYD-4); therefore, water quality would not be affected.</u> Although implementation of the CalVTP would increase the pace and scale of treatments and thus increase the use of hazardous materials in the treatable landscape, no new or more severe significant</p>	LTS	No mitigation is required.	LTS

Table ES-1 Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
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hazards to the public would be created from implementation of the CalVTP. This impact would be less than significant .			
<p>Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides Herbicide application under the CalVTP would require increased transportation, use, storage, and disposal of various herbicides, which could result in risks related to human exposure when applied in areas in close proximity to the public. Under normal conditions, compliance with all laws, regulations, and herbicide label instructions, along with proper personal protective equipment (PPE), would prevent significant risks related to human exposure to herbicides. However, potentially adverse effects could occur if a large spill were to occur or should spraying from equipment on vehicles occur in close proximity to public areas. Several SPRs have been incorporated into the program to minimize the potential for significant health risks (SPR HAZ-5 through 9). These SPRs require project proponents to prepare a SPRP prior to beginning 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 (SPR HAZ-5); comply with all herbicide application regulations to protect the safety of workers and the public during the transport, use, storage, and disposal of herbicides (SPR HAZ-6); triple rinse herbicide containers with clean water at an approved site and dispose of rinsate per 3 CCR Section 6684 and dispose of all herbicides following label requirements and waste disposal regulations to avoid direct contamination to a water body or watershed (SPR HAZ-7); employ techniques during herbicide application to minimize drift (SPR HAZ-8); and include signage indicating that herbicide application is occurring or has occurred where members of the public could be present within 500 feet of areas receiving herbicide treatments (SPR HAZ-9). Although implementation of the CalVTP would increase the pace and scale of treatments and thus increase the use of herbicides in the treatable landscape, no new or more severe significant hazards to the public would be created from implementation of the CalVTP. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites Soil disturbance by mechanical treatments and prescribed burning have the potential to expose workers, the public, and the environment to risks associated</p>	PS	<p>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</p>	LTSM

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<p>with existing hazardous materials if present within treatment areas. Treatment activities would typically occur in undeveloped areas, which are unlikely to contain hazardous materials; however, there is a risk that contamination could exist. Disturbance of contaminated sites could result in the exposure of the public and environment to health hazards from existing hazardous materials. This impact is potentially significant.</p>		<p>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.</p>	
Hydrology and Water Quality			
<p>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</p> <p>Implementation of the CalVTP includes prescribed broadcast burning and pile burning in tree, shrub, and grass fuel types across the state. Prescribed broadcast burning would include fire behavior modeling and burning would be conducted when fuel moisture and environmental conditions allow for effective fuel reduction while reducing the risk of high severity burns. The patchwork of low and moderate intensity fire in a prescribed burn would preserve vegetated islands to capture runoff and sediment and buffers would be preserved to act as buffers around watercourses. Compared to forested and grassland environments, prescribed fire in chaparral and shrublands is more likely to result in severe burns and increased sediment loading. However, the proposed program would utilize prescribed burning in these vegetation types only when it is consistent with the natural fire return interval or when the project proponent clearly demonstrates that habitat function would be protected. Because the CalVTP includes SPRs incorporating best management practices to protect water quality, the potential for prescribed burns implemented under the CalVTP to adversely affect water quality would be less than significant.</p>	LTS	No mitigation is required.	LTS

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<p>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</p> <p>The proposed CalVTP includes manual and mechanical treatment activities to reduce wildfire risk within the treatable landscape. All qualifying manual and mechanical treatments implemented under the CalVTP would integrate SPRs into treatment design to protect watercourses, limit equipment use on wet soils or steep slopes, stabilize highly disturbed areas, prevent concentration of runoff in non-shaded fuel breaks, and prevent spill or leaks from equipment. Implementation of SPRs would avoid and minimize the risk of substantial degradation to surface or groundwater quality from manual or mechanical treatment activities; this impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>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</p> <p>The proposed program includes the use of prescribed herbivory to reduce fuels. Qualifying treatments under the proposed CalVTP would incorporate livestock management best practices in SPR HYD-3 which exclude grazing animals from sensitive areas, provide alternative water sources, and move animals when erosion is observed. For these reasons, the risk of substantial degradation to surface or groundwater quality from prescribed herbivory would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>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</p> <p>The CalVTP would ensure that herbicides are applied according to the manufacturer’s label directions and consistent with program SPRs which limit herbicide use in sensitive areas or under conditions that could lead to misapplication and require each project to be prepared to respond to a spill. Because qualifying projects would integrate these protective measures into treatment design, risk of substantial degradation to surface or groundwater quality</p>	LTS	No mitigation is required.	LTS

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from herbicide application would be avoided and minimized; this impact would be less than significant.			
<p>Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area Treatments implemented under the CalVTP would include ground disturbing activities that could intersect existing drainage infrastructure at treatment sites. As discussed in Impacts HYD-1 through HYD-4, prescribed burning, prescribed herbivory, and most forms of mechanical vegetation removal would have minor effects on site drainage. Non-shaded fuel breaks constructed along roadways could intersect existing roadway drainage systems. SPR HYD-6 requires that all projects avoid disturbance of existing drainage systems and maintain pre-treatment drainage conditions. Therefore, qualifying treatments implemented under the CalVTP would not substantially alter the existing drainage pattern of a treatment site or area. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
Land Use and Planning, Population and Housing			
<p>Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation The proposed CalVTP would implement vegetation treatment on lands owned and managed by various entities, including state agencies, private owners, special districts, non-profit organizations, cities, and counties. For projects on state lands, a land management agency would develop the project consistent with its land management plan. For projects subject to local plans, policies, or regulations, CAL FIRE would voluntarily seek to operate consistently with local governance to the extent feasible. In general, all project proponents will design and implement treatments in a manner that is consistent with applicable local plans (e.g., general plans), policies, and ordinances to the extent the project is subject to them, as required SPR AD-3. <u>Treatment activities that would occur within the coastal zone would be required to comply with the California Coastal Act or a certified LCP (as applicable), including obtaining a coastal development permit, when necessary pursuant to the provisions of SPR AD-9.</u> Furthermore, the environmental impacts of the proposed CalVTP are addressed throughout this PEIR and mitigation is identified to reduce significant effects, thereby avoiding a conflict with a land use plan, policy, or regulation that was adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS

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<p>Impact LU-2: Induce Substantial Unplanned Population Growth The increase in the pace and scale of vegetation treatments under the proposed CalVTP would result in additional demand for employees to implement treatments across the state within and near the treatable landscape. Implementation of the proposed CalVTP would result in an average of approximately five additional employees within each CAL FIRE unit (21 units). Other state agencies, such as CSP and CDFW, could also generate demand for some additional employees, although at a lower rate than the employment increase anticipated for CAL FIRE. Other project proponents may employ or contract workers permanently or seasonally to perform treatments. The increase in employee demand would be spread throughout the state and there would not be any specific areas that would experience a substantial increase in demand for vegetation treatment employees. Thus, implementation of the proposed CalVTP would not induce substantial unplanned population growth in any one area to cause a need for new housing, roads, or infrastructure. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
Noise			
<p>Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation Vegetation treatment activities implemented under the CalVTP would adhere to the SPRs that require consistency with local noise policies and ordinances to the extent the project is subject to them, limit vegetation treatment activities to daytime hours, ensure proper notification of nearby sensitive receptors, and locate treatment activities and staging areas away from sensitive receptors to minimize noise exposure. Additionally, any increase in noise exposure at nearby receptors would be temporary and periodic. Therefore, implementation of the CalVTP would not result in the exposure of noise-sensitive receptors to a substantial temporary increase in ambient noise levels. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities Because vegetation treatment activities under the CalVTP would be required to adhere to SPR NOI-1, which limits vegetation treatment activities to daytime hours, SENLs generated by associated haul truck trips would not have the potential to result in sleep disturbance during noise-sensitive evening and nighttime hours. For</p>	LTS	No mitigation is required.	LTS

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this reason, implementation of the CalVTP would not result in a substantial temporary increase in SENL’s during vegetation treatment activities. This impact would be less than significant.			
Recreation			
<p>Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas Implementation of treatment activities within the treatable landscape could result in potential conflicts with recreationists and recreation areas. Conflicts include access restrictions or nuisance impacts during treatment activities including degradation of views, dust emissions, and increased traffic that disrupt the recreational experience. Implementation of SPRs would avoid and minimize disruptions to recreation. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
Transportation			
<p>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 Vegetation treatments implemented under the CalVTP would adhere to the SPRs that require consistency with local traffic operations policies and standards to the extent the project is subject to them, and would require that a TMP be prepared to manage and minimize potential temporary traffic operations effects resulting from individual vegetation treatment projects. Additionally, effects related to traffic operations during vegetation treatments under the CalVTP would be localized and temporary. Therefore, temporary traffic operations impacts would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses Implementation of the CalVTP would not require the construction or alteration of any roadways, and qualifying vegetation treatment projects under the CalVTP would adhere to SPRs that manage and minimize potential hazards due to smoke generated during prescribe burns. The project proponent would prepare and implement a TMP to avoid and minimize temporary transportation impacts. Therefore, vegetation treatment activities would not substantially increase hazards due to a design feature or incompatible uses. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS

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<p>Impact TRAN-3: Result In a Net Increase in VMT for the Proposed CalVTP Under the proposed CalVTP, the scale of treatment activities would substantially increase to achieve the annual treatment target of approximately 250,000 acres. With the increase in treatment acreage, the VMT generated by treatment activities in comparison to existing conditions would also increase because many more individual treatment projects would be implemented. A key goal of the CalVTP is to decrease the occurrence and severity of wildfires. Reduced occurrence and severity of wildfires would result in a reduction in response activity and trips, which would be reasonably expected to decrease in VMT over the long term, compared to conditions without the CalVTP. However, it is not feasible to predicting changes in wildfire occurrence and severity 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 PEIR classifies this impact as potentially significant, because VMT generated by vegetation treatments under the CalVTP would increase in comparison to existing conditions, notwithstanding the potential VMT-reducing effects of reduced wildfire response.</p>	PS	Additional measures are not feasible.	SU
<p>Public Services, Utilities, and Service Systems</p>			
<p>Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs Implementation of treatment activities within the treatable landscape would require on-site water supplies for fire suppression during prescribed burning activities and for dust control during vegetation removal within non-shaded fuel breaks. Water needed to implement treatments would be minimal. Also, treatment activities would occur over a large geographic area which would disperse pressure on local water providers. Therefore, the increase in demand for water attributable to implementation of the CalVTP would be negligible and would not discernably affect the availability of water supply. This impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity The increase in pace and scale of vegetation treatments under the CalVTP would result in an associated increase in the volume of solid organic waste generated during treatment. The volume of biomass transported offsite to existing biomass power plants, wood product processing facilities, and/or composting facilities for</p>	PS	Additional measures are not feasible.	SU

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processing would also increase. Although additional infrastructure for the processing of organic materials is expected to be developed in the near future in California in response to waste management statutes, expanded in-state market for wood products, and increasing demand for alternative energy sources, it is too speculative to assume that this growth would occur consistent with the increased pace and scale of vegetation treatments. Therefore, implementation of the CalVTP may generate solid organic waste in excess of infrastructure capacity. Thus, to meet CEQA’s mandate of good faith disclosure and to not risk understating potential future impacts in light of the uncertainties, this PEIR classifies this impact as potentially significant, notwithstanding the possibility that capacity could increase with the scale of treatments such that it would not be exceeded for most or all individual treatments.			
<p>Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste Implementation of the CalVTP would divert solid organic waste generated from treatment activities from solid waste facilities to biomass power plant, wood product processing facility, and/or composting for processing. This would decrease the amount of waste transported to solid waste facilities consistent with AB 939 and SB 1383. Therefore, the impact would be less than significant.</p>	LTS	No mitigation is required.	LTS
<p>Wildlife/Wildfire</p>			
<p>Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire Vegetation treatment activities under the CalVTP could result in temporary risks associated with uncontrolled fire from prescribed burning, as well as from the use of vehicles and heavy machinery in the treatable landscape as each can increase the risk of an accidental wildfire ignition. However, several SPRs would be implemented to reduce the risk of uncontrolled spread of fire from treatment activities. Machine-powered hand tools would have federal- or state-approved spark arrestors (SPR HAZ-2); vegetation treatment crews would carry one fire extinguisher per chainsaw and one long-handle shovel and one axe or pulaski (SPR HAZ-3); and smoking would only be permitted in designated smoking areas with barren or cleared mineral soil to at least 3 feet in diameter (SPR HAZ-4). In addition, given the extensive preparation and planning prior to a prescribed burn</p>	LTS	No mitigation is required.	LTS

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(e.g., preparation of a SMP and Burn Plan), active monitoring and maintenance during a prescribed burn, and implementation of stringent safety protocols, prescription burning would not substantially exacerbate fire risk that could result in the uncontrolled spread of wildfire. Furthermore, one of the main objectives of the proposed CalVTP is reduce the frequency and severity of future uncontrolled wildfire. This impact would be less than significant.			
<p>Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides</p> <p>The proposed CalVTP does not include new housing nor would it result in substantial unplanned population growth. Therefore, it would not place people or structures in an area with risks related to post-wildfire flooding or landslides. Prescribed burning implemented under the proposed CalVTP would be low severity and typically retain substantial vegetation, thereby maintaining stability of the soil. In addition, SPRs GEO-3, GEO-4, GEO-5, GEO-8, and SPR AQ-3 would be incorporated into qualifying projects under the CalVTP to stabilize disturbed soils from treatments to minimize erosion (SPR GEO-3), inspect treatment areas for evidence of erosion after prior to the rainy season and following the first large rainfall event (SPR GEO-4), drain stormwater via water breaks to reduce stormwater runoff (SPR GEO-5), minimize soil burn severity during prescribed burns which would help to retain vegetation to stabilize the soil (SPR AQ-3), and require that a registered professional forester or licensed geologist evaluate treatment areas for potential issues with instability and modify treatments to account for instability issues (SPR GEO-8). Therefore, prescribed burning under the CalVTP would not expose people or structures to substantial risks from post-prescribed burning landslides or flooding. Furthermore, one of the primary purposes of the CalVTP is to reduce the frequency and severity of wildfire. Therefore, the intended wildfire risk reduction achieved with implementation of the CalVTP could also result in a reduction in the associated post-wildfire risk of landslides and flooding. The impact would be less than significant.</p>	LTS	No mitigation is required.	LTS

Poe Reach Trail Feasibility Study



Butte County Resource Conservation District
150 Chuck Yeager Way, Suite A
Oroville, CA 95965



November 2019

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Rock pinch point in trail- notice the historical dry-stack rock work and proximity to North Fork Feather River



Background

As part of the Federal Energy Regulatory Commission (FERC) re-licensing process for operation and maintenance of the Poe Hydroelectric Project (no. 2107) Pacific Gas and Electric Company (PG&E) conducted a trail feasibility assessment for the Poe Reach Trail. The feasibility study is to look at improving an existing abandoned trail between Bardees Bar and the Poe powerhouse road (Poe Reach Trail).

Butte County Resource Conservation District (BCRCD) was retained by PG&E to complete the feasibility of Poe Reach Trail. BCRCD has extensive experience in conducting trail studies, project management, environmental surveys/ document writing, and trail grant acquisition/ management. As part of this feasibility study BCRCD agreed to complete the following tasks:

Task 1. Reconnaissance Field Investigation BCRCD staff will evaluate existing conditions along the abandoned trails between Bardees Bar Road and the Poe Powerhouse Road to identify and characterize the current trail conditions and alternatives. The current trail and identified alternatives will be 1) mapped by BCRCD using digital mapping software applications, 2) inventoried and characterized, and 3) prioritized in relation to recreational value, potential for resource impacts, cost for environmental analysis/ development, long-term operation/maintenance costs, ownership/land rights, safety, and access.

Task 2. Field Inspection Findings and Recommendations Report A summary of field investigation findings and alternatives will be compiled containing a narrative description of site conditions, a site map, photographs, and recommendations. Multiple recommended conceptual level design alternatives will be provided with preliminary cost estimates. Recommendations will be compatible with USFS Trail Management Objectives format. As part of this summary, the BCRCD

will communicate with the private landowner about his long-term goals for his property and potential for recreational trail easement or fee title acquisition. This process will also involve consultation with the USFS Feather River Ranger District about this feasibility study and/or NEPA as well as any associated federal compliance requirements (Endangered Species Act, National Historic Preservation Act, etcetera). The report will also suggest potential opportunities for assistance for project funding and easement/ land acquisition.

Bardee's Bar Trail

The Poe Trail Feasibility Study is focused on the analysis of the existing and proposed trail segments that would connect Bardees Bar Road to Poe Powerhouse Road. In the process of developing the feasibility study for Poe Reach Trail we also reviewed the *Bardee's Bar Trail Assessment* that was developed in September of 2006 by North Fork Associates which evaluated an abandoned roadway heading up-stream (North) from Bardees Bar Road and connects to State Hwy 70 at mile post 40.34 -road is approximately 7,531 ft in length. Based on the findings of the 2006 report which presented a high cost, low recreational value and low estimated use, available resources were allocated to focus on the Poe Reach Trail which has a much higher recreational value and expected usage.

Project Setting

The Poe Reach Trail is located along the North Fork of the Feather River Trail approximately 21 miles from Oroville, CA via CA Highway 70. The trail ranges in elevation range of 1000 ft - 1500 ft. The current alignment traverses along the west side of North Fork of the Feather and connects Bardees Bar Road to Powerhouse Road. Current land ownership is a combination of Plumas National Forest- Feather River District, PG&E and two additional private landowners. The site vegetation is a combination of mixed oak woodland and chaparral. In addition to the trail, there is also infrastructure associated with the energy transmission and a Northern Pacific rail line on the East side of the river.

The northern two miles of the trail was burned in November of 2018 as part of the Camp Fire. There is a number of standing dead trees and associate vegetation regrowth. The vegetation regrowth in the next few years will likely be accelerated post fire. In addition to regrowth, it is to be expected with winds and winter rains that some of the standing dead trees are likely to fall in the coming years which could make access difficult and elevate associated construction/ maintenance costs.

Although we will refer to the existing/ proposed trail as Poe Reach Trail it is important to understand under that currently this trail does not exist on the ground as a recreational trail. The proposed alignment has great potential to be a high-quality recreational experience but will need multiple realignments and upgrades. In the current state the trail is not suitable for public access and crosses private property.

Methodology

BCRCD staff conducted mapping, research and three site visits to the project area. Before the first site visit mapping was conducted to identify the existing environmental settings, land uses, hydrology, geology, access and land ownership. This The first visit focused on mapping the existing trail where the following two visits worked to identify alternatives to the existing trail alignment and trailheads. The field staff utilized GPS and other survey equipment.

In addition, BCRCD retained the services of a professional trails contractor, Casa di Tera, which is a member of the Professional Trail Builders Association (PTBA) and has extensive experience in trail planning and construction. Casa di Terra advised RCD staff on some technical aspects of the project.

The mapping of the existing trail was completed by hiking the trail with a GPS unit, capturing notes on an existing trail/ environmental conditions, measuring stream crossings, measuring trail slope, and identifying positive/ negative control points.

The second and third site visits focused on identifying alternatives to the existing alignment that would improve the recreational experience, reduce environmental impacts and create a more sustainable trail alignment. These visits also focused on the potential for trailhead locations. A number of the reroutes were identified and flagged but there will need to be a layout -detailed corridor flagging- process before environmental analysis and construction.

Existing Trail Conditions

The existing trail alignment is a combination of historic mining trails that were constructed and utilized to access mine sites along the river reach and more recent construction by the public to provide connectivity between the historic sections of trail to create a continuous trail.

Trails that were originally constructed for resource extraction can serve as durable alignments for recreational trails because the builders often did the heavy lifting of removing rock control points - places where solid rock was removed to construct the trail- and utilized the specialized skill of dry stack stone work. However in many cases these types of trails utilize fall line alignments -steep and over grade- and often have stream crossings that are unsustainable and impact natural resources.

Trails that are built by the public -non trail professional- often pose issues for sustainable use and management. In most cases these types of trails are not suitable for managed recreational use and long term lead to increased impacts on natural/ cultural resources. Issues like steep grades, narrow tread, inadequate stream crossings, half trail bench construction, lack of signage, trail features not built to approved specifications, lack of corridor clearing, inadequate trail heads, etc. lead to long term issues for both the trail user, land manager, and natural environment.

The existing Poe Reach Trail is approximately 3.4 miles in length and is a combination of historic mining trails and more recently publicly constructed connector segments that complete a mostly continuous trail. However in the current state the trail is not suitable for public recreational access. Some of the historic segment feature dry stack stonework and trail bench that was constructed through solid rock. The public constructed segments of trail that link the existing historic segments are also mixed in terms of viability. Many of the newer sections force a steeper grade, are narrow, were hand-built utilizing half bench, and did not address stream crossings. Many of the existing trail segments would need reconstruction before public access would be suitable. Currently, all of the stream crossings would need upgrading to allow for safe crossings and reduced impacts with the addition of causeways and bridges. There are also several segments where the trail alignment was identified but was not constructed.

Trailheads

The current trailheads for the existing trail provide no established parking other than undersized roadside pullouts. Not having sufficient parking for a trail can create safety and natural resources issues for both users and land managers. Trailheads need to provide a safe place to park and information that guides the user about the expectations of the trail experience

Break-down of existing viable trail as compared to new construction needed

Existing trail that is suitable for recreational use	20%
Trail construction needed to complete trail	80%

Opportunities

Enhanced Recreation for Butte County Area

Butte County has a long history of outdoor recreation and many people move or chose to remain in, the area for the recreational opportunities and way of life. Trails based recreation has a strong tie to the economy of the county and many trail users desire additional high-quality recreational trails in the area

(*Butte County Trails Plan -A Framework for Collaboration, BCRC, 2018*). The Poe Reach Trail would be a valued recreational opportunity for residents and visitors alike. Also by providing a high-quality trail experience, it can go along way to deter negative use of the area.

The public accessible lands and roads in the project area are currently used for recreational driving, hunting, fishing access, mountain biking, off-highway vehicles (OHV), and whitewater paddling. With the addition of future whitewater recreational releases of Poe Reach it is expected that the recreation use will continue to increase. With the addition of the trail, it would greatly enhance the.

Access for Monitoring

One of the added values for the Poe Reach trail is that it will allow scientists from various agencies to more easily monitor the aquatic environment and ecosystem health of the North Fork of the Feather River.

Watershed Protection

Trails that are well designed and constructed can help limit associated natural resource impacts that are often associated with unsustainable trails. It is also important to preserve lands for resource conservation within key watershed. The existing trail connects through two privately owned parcels. If these parcels could be acquire and the trail constructed it would protect the lands within these private parcels for recreational access and natural resource protection.

Wildland Fire Protection

The North Fork of the Feather River has been impacted by multiple wildfires Due to the topography and geographical location the watershed consistently sees higher wind speeds that can quickly spread wildfire across the landscape. Trails can provide wildland fire fighters safer and faster access for suppression. Thinning out vegetation in the trail prism increase the speed and safety factor and also creates an improved experience for the recreational trail users as well.

Location and Loop Opportunities

With the lower elevation range of the Poe Reach Trail it will be possible to access and utilize the trail most of the year. Many trails in the higher elevations of Butte County above the snow line don't allow for winter recreation access.

Many trail users prefer trails that offer loop opportunities. The Poe Reach trail could be utilized as a loop option by utilizing the road access. Users could also shuttle the trail by leaving a vehicle at each end which would provide the opportunity to enjoy the entire duration of the trail without having to include the road portions. The majority of trail uses will likely park on one end -with the south end being most utilized due to shorter drive and improved road access- of the trail and hike out-and-back.

Challenges

Private Lands

Private lands with an unwilling landowner can be a deal-breaker when it comes to trail development. Even landowners that do not access a property or have no long-term vision for the property can be leery of allowing public access and granting an easement. California law clearly states that a landowner is protected from recreational use liability, but many landowners are still cautious of allowing public access.

Studies have shown that having trails or trail access on or near a property increase the value of that property. Also, if a landowner does not have any legal access to their property a trail can provide access that they would not otherwise have.

The construction of the Poe Reach Trail would require easements or acquisition from two private property landowners in order to complete the trail. Easements can be an attractive route as it would allow the landowner to retain ownership while allowing access. Easements can be a complicated process and can only be held by specific organizations like a Resource Conservation District, Agency or Landtrust. Although easements are less costly in many cases than fee title it is ultimately the landowners' decision to enter into an easement. Once an easement is placed on the property for recreational access it stands in perpetuity regardless of a future sale of the property.

With the Poe Reach Trail traversing two properties that border the North Fork of the Feather River these are properties worth protecting from development or environmental impacts. Having the trail lets people also enjoy the beauty and natural resources of the area.

If the landowners were not willing to provide an recreational easement for the trail it would be feasible to construct two loop options (north and south) that do not rely on access to the private property segments. The two loop alternatives were not highly developed in the field work or cost estimate and would need additional ground truthing to verify alignment, feasibility and cost

The North loop would utilize trail segments 1-3 (**see figure 2e: map of segments**) and work to climb back toward the Bardees Bar Road on contour and connect back into the trail on segment 1.

The South loop would utilize trail segment 5 and would create a loop that would connect back into the trail close to the South Trailhead.

Alternative	Approximate Distance	Approximate Cost
North Loop	4,000 ft	\$56,400.00
South Loop	5,280 ft	\$46,000

*return trail cost is in addition to associated trail segments that would need to be constructed

Trailheads

The current informal trailhead locations are not suitable for parking or recreational trailhead access. Trailheads are expensive to build but are a vital resource to the overall trail experience and safety.

Maintenance

Many agencies and land managers are reluctant to provide new recreational trails due to the cost and reduced capacity of maintaining them. Any new trail that is constructed needs to have a long term plan and mechanism for trail maintenance. Many USFS Districts have had no trail crew staffing or only a few staff to maintain many miles of trail which often leads to a lack of maintenance which overtime makes a trail impassable or a hazard to users. Many ranger districts utilized fire staffing to help maintain trails in the offseason but with the fire season getting longer this opportunity has been reduced.

Groups like the CCC and volunteer groups that focus on trail maintenance are sometimes the only source of labor available to land managers. If the Poe Reach Trail is developed it will be important to have established funds and coordination with a group that can adopt the trail and provides regular maintenance.

Road Condition and Access

The access to the Poe Reach Trail relies on two natural surface roads (Bardees Bar Road and Powerhouse Road). These roads are low in the watershed and not frequently maintained or upgraded. With a mid-slope road that has a number of stream crossings washouts can present a challenge to access. If one of the two access roads was to have a failure it could create long term trail access and maintenance challenges.

Project Funding Assistance

Although trail project funding assistance grants are limited and highly competitive, they are a potential resource for submental funding but often require a match element. In addition, having volunteer assistance with trail construction on a project can serve as match for a grant.

There is also organizations that focus on land conservation which might be a possible route to assist with acquisition, easement or associated monitoring of the two private properties that are needed for trail access.

Recommendations

Trail Design

The USFS trail classes are general categories reflecting trail development scale, ranging from 1 (minimally developed) to 5 (fully developed). The class identification for a trail provides its development scale, representing its intended design and managed standards. For every class of trail there are defined attributes: tread and flow, obstacles, constructed features and elements, signs, and typical recreation environs and experience.

For the Poe Reach Trail we are basing our cost estimates and recommendations based on the utilization of USFS Class 3- Developed trail standards for development and management. This standard will allow a 4' width constructed bench. In addition, the new trail was designed on a 5% target grade to limit erosion and provide a recreational experience for a wider range of user fitness levels. With the recommended alignment and trailhead locations it is estimated that the proposed trail will be 3.6 miles in length.

Trail Usage

With the trail being constructed with a 4' width trail bench to USFS class 3 specifications it would likely be a good fit as a non-motorized multi use trail. Even with increased trailhead parking capacity it will still not be able to accommodate equestrian trailer parking needs. Although the trail does provide a loop option it is likely that most users will do an out-and-back option from the North or South trailhead.

Construction

In addition to constructing new sustainable alignments where needed, the construction process will rebuild several of the existing trail segments to allow for an improved recreational experience, reduce natural resource impacts and reduce the maintenance demand. The utilization of specialized mechanized equipment for construction it will allow a builder to construct a more durable tread bench in a shorter amount of time. As part of the trail bench construction compaction should be utilized to assure durability of the tread. It is also recommended that the trail construction take place only when soil moisture is suitable for adequate compaction -likely in the winter and spring.

Trailheads

In order to accommodate recreational use, provide a safer trail experience and limit resource damage it is recommended that the current trail heads be relocated (**Attachment 2, b and c**)

The North Trailhead (Bardees Bar Road) should be moved up-road by 200' to allow for a larger parking/trailhead area to be constructed. Even with an improved trailhead it is only estimated that the new site will be able to accommodate four passenger size cars.

On the South End (Powerhouse Road) the current trailhead would require the trail to traverse a slope that has seen a recent road failure and associated landslide above. It is recommended that the South trailhead be relocated up road to a broad switchback (currently being utilized as a log deck). This location also has a rock fill area that could accommodate additional parking expansion if not being utilized for PG&E operations.

Reroutes

Due to the current condition and alignment of the trail existing trail it is recommended that several sections be rerouted to improve trail sustainability and recreational trail user experience. **Attachment 2a** shows the variation of the proposed reroute trail from existing. The major reroutes consist of the north and south end as we as two reroutes in the in the two major drainages.

River Access Spur Trails

Having additional river access is a big draw and helps connect the trail users with the North Fork Feather River ecosystem. In addition, with hot summer temperatures the ability to access the river from the trail is a necessity. As part of the trail construction we have planned for two spur trails that will access the North Fork Feather (**Attachment 2a**). Care must to be taken when constructing trail in aquatic environments and below the high water mark. Having hardened spur trails to access the river will help mitigate unauthorized trails that often cause resource damage and develop when no planned access is provided.

Crossings

Due to the proximity of the trail within the watershed, there are a large number of stream crossings that the proposed trail will have to cross. In order to limit the impact on aquatic organisms and reduce sediment loading associated with the trail construction and use it is recommended that bridges be utilized on all streams. On some class 3 streams, it may be appropriate to utilize armored crossings but this would be dependent on biological evaluations of each crossing.

Trail bridges are expensive and take time to build. With the trail residing in a high fire probability area, the use of stone masonry bridges should be considered (see attachment 1, figure 12. Utilizing stone for bridges also reduces the long term maintenance and inspection costs of a wooden bridge while also matching the aesthetic of the dry stack portions of the historical trail.

Phased Construction

The Poe Reach Trail project could be constructed as a phased approach to accommodate land acquisition challenges, contractor availability, weather conditions, available funding and environmental assessment. With designated trailheads on each end the trail could be built from either side to one of the two identified spur locations (**Attachment 2a**). This approach would still allow for access but would accommodate a longer construction schedule.

Cost Estimate and Conclusion

Cost Estimate

The provided cost estimate was developed based on looking at all the elements involved in the planning, construction and maintenance of the project. The estimate breaks out the various costs by category and associated costs. The costs for trail construction utilize per linear foot cost for the tread work that is broken into segments and an additional per item cost for specialty elements like switch backs, rock work, bridges, etc. The estimates were based on the “high” end to accommodate higher material or labor costs. Below is a summary of the costs but a breakdown can be found in **Attachment 3**.

Description/ Task	Cost
Planning/ Acquisition	\$ 207,400
Construction	\$378,464
Project Management	\$60,000
Total	\$645,864

Conclusion

While there are a number of difficult challenges associated with the construction and maintenance of the Poe Reach Trail the backdrop is stunning and allows for a valuable recreational trail experience that provides amazing vistas and access to the North Fork of the Feather River. Currently there are a limited number of managed recreational trails in a county where new recreational opportunities can serve as a catalyst for economic growth and improvement in the quality of life for Butte County residents.

In addition, with much of the Poe Reach Hydro infrastructure, on the east side of the North Fork Feather, being subterranean and Highway 70 running upslope from the trail it allows for a largely intact view of the natural environment from the west side which is uncommon on other reaches of the North Fork Feather. It is only when the train passes that you even notice the tracks and to some users this proximity to the Union Pacific line is a bonus.



Figure 1: Historic section of trail.

Figure 2: Rock pinch point on segment 2 – from bottom. This section will require 200 ft of mortar stone work back by concrete and anchored into wall. Lies below high water mark.



Figure 3: Rock pinch point from above. Care will be taken to preserve section of historic dry stack wall.



Figure 4: Section 1 departing from Bardees Bar Road is new construction and will need extensive stone processing to construct.

Figure 5: North end trail head off Bardees Bar Road will be upgraded to allow for more space and drainage. Trail kiosk will also be placed at trailhead to provide users with trail information.



Figure 6: Spring flow. This site will require a bridge. There are 12 bridges sites that have been identified on the trail.



Figure 7: Whitewater kayakers on Poe Reach Section (class III-IV). Including a trail will increase recreational draw.

Figure 8: Example of historic/ existing trail. The trail bench will need to be constructed and increased to 4' to accommodate recreational use. Wider corridor will also for vegetation management and fire suppression access.



Figure 9: Trail will have 2 spur trails that will allow trail users to access the North Fork Feather.



Figure 10: Trailhead on south end. Large landing in switchback can accommodate 6-8 vehicles. Rock fill site just down hill could serve as additional parking area. Trailhead will feature a kiosk.

Figure 11: Example of a switchback constructed utilizing stone work. Switchbacks that are constructed with stone are durable, will have less maintenance issues overtime, and match the current historical aesthetic.



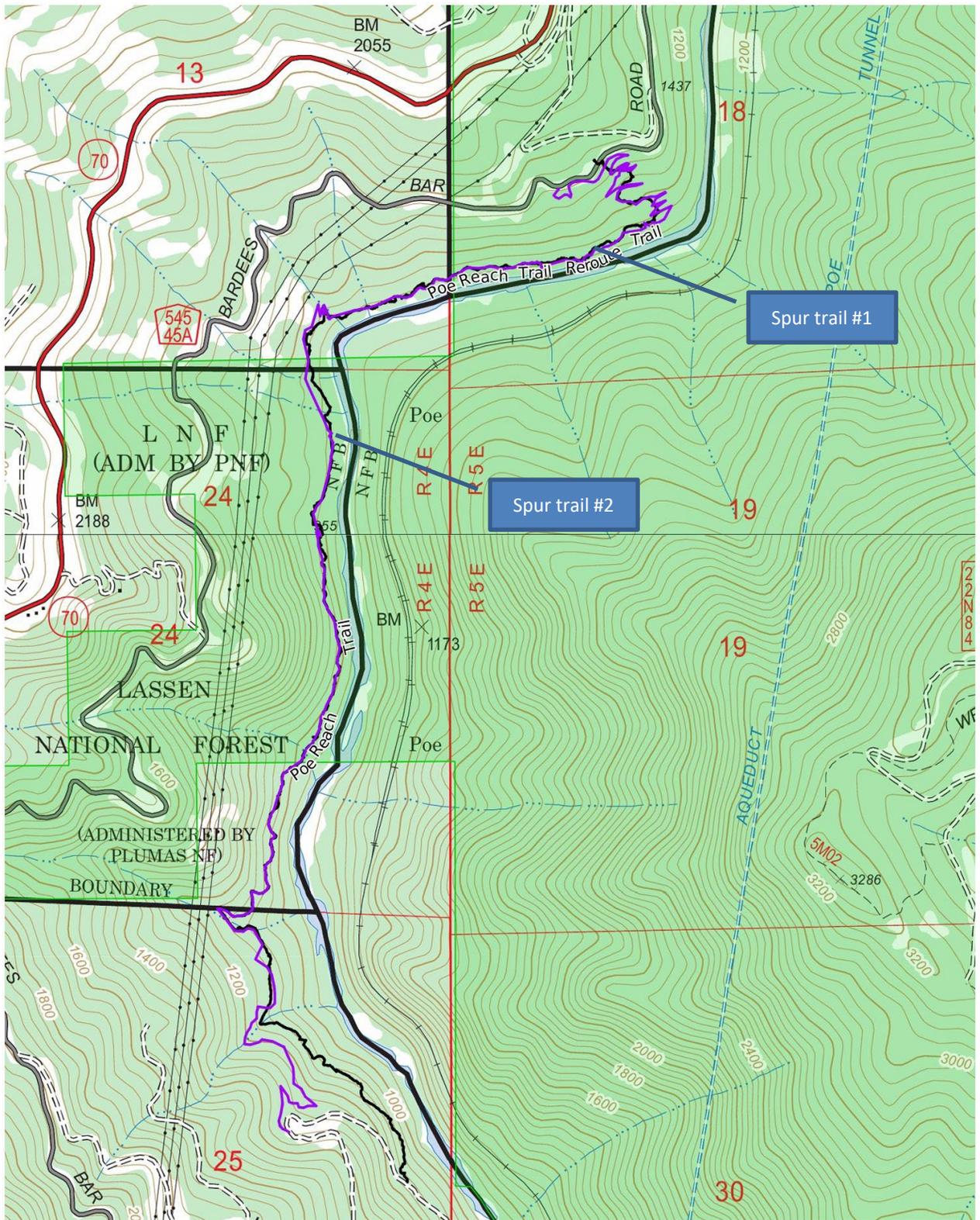
Figure 12: Example of stone mortar bridge. This type of bridge would require less maintenance than traditional wood bridge, would be fire resistant and match current historical dry stack aesthetic.

Attachment: 1d Site Photos

Poe Reach Feasibility Study

Butte County Resource Conservation District





Attachment: 2a Map -Overview
 Poe Reach Feasibility Study
 Butte County Resource Conservation District



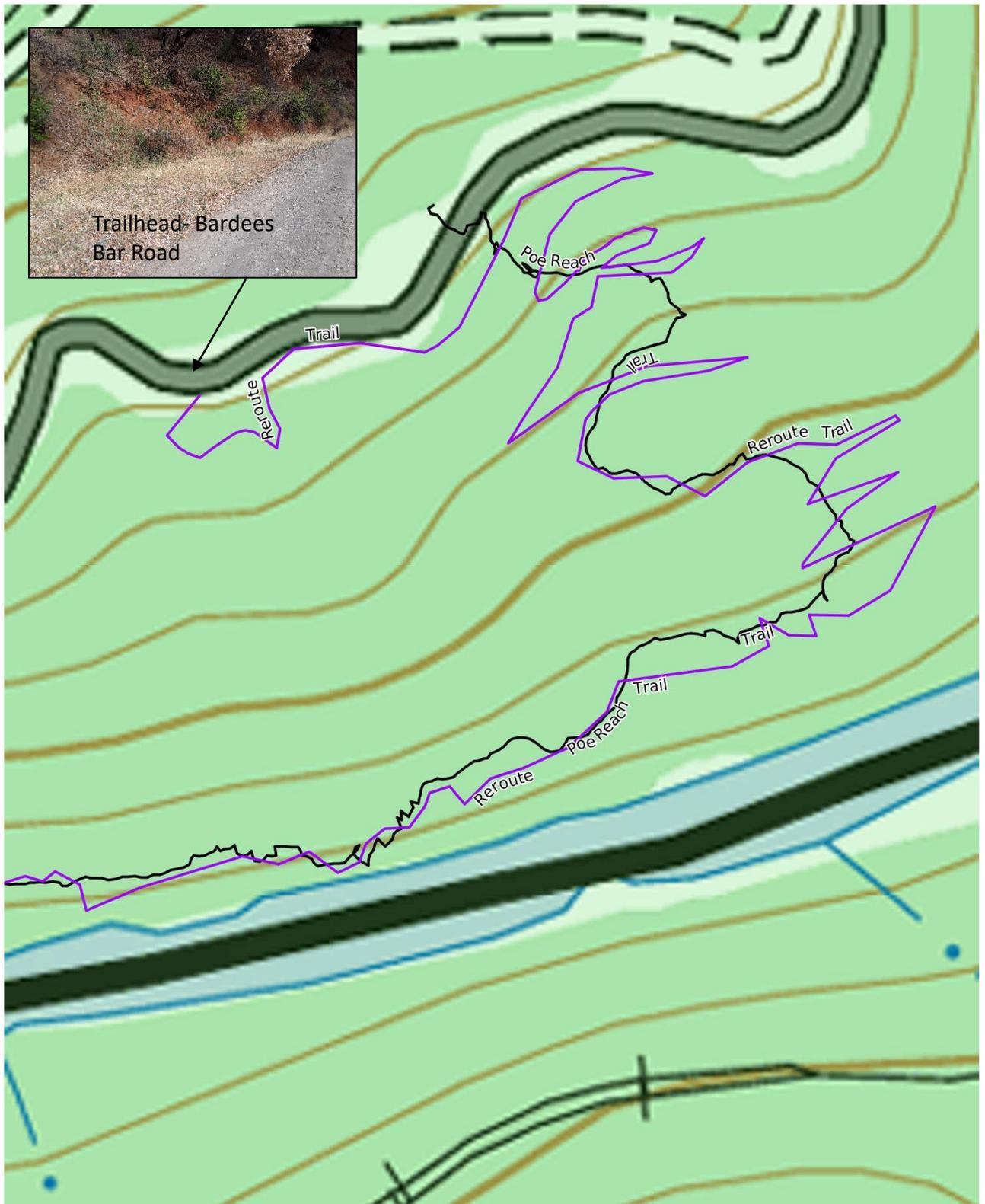


Figure: 2b Maps – Segment 1 (North- trailhead)
 Poe Reach Feasibility Study
 Butte County Resource Conservation District

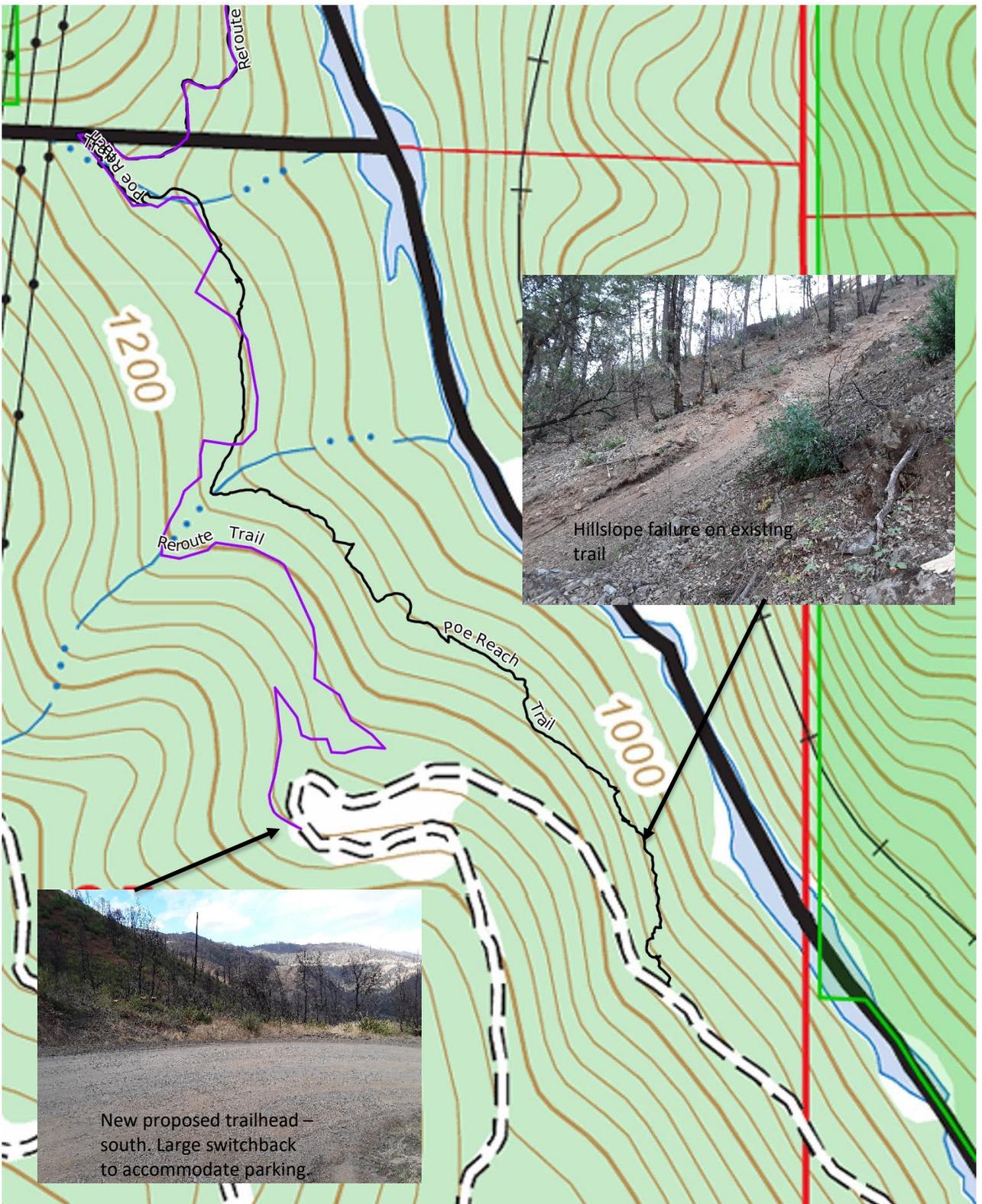


Figure: 2c Maps – Segment 5
 Poe Reach Feasibility Study
 Butte County Resource Conservation District

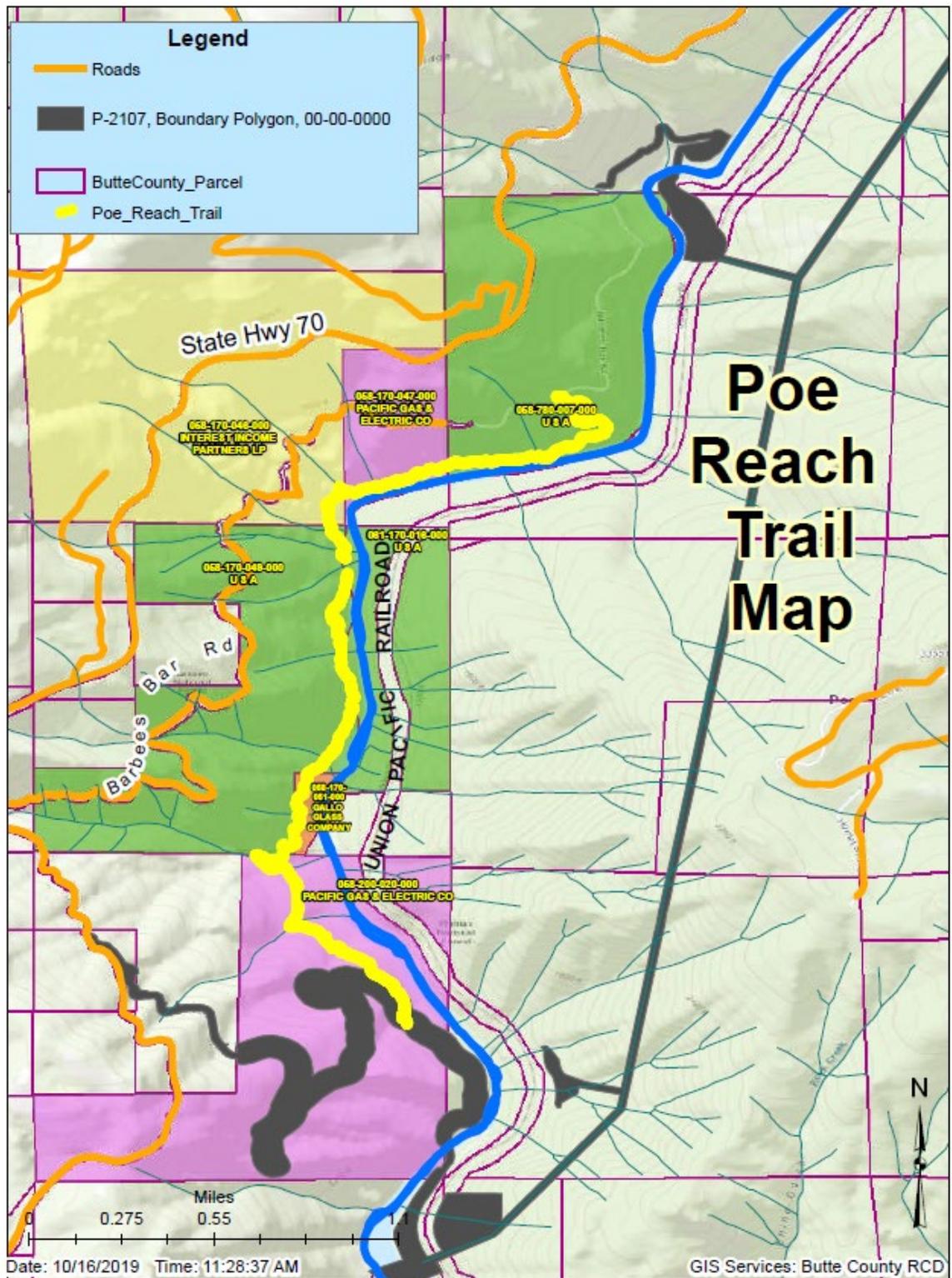


Figure: 2d Map – Private Property with FERC Boundary
 Poe Reach Feasibility Study
 Butte County Resource Conservation District



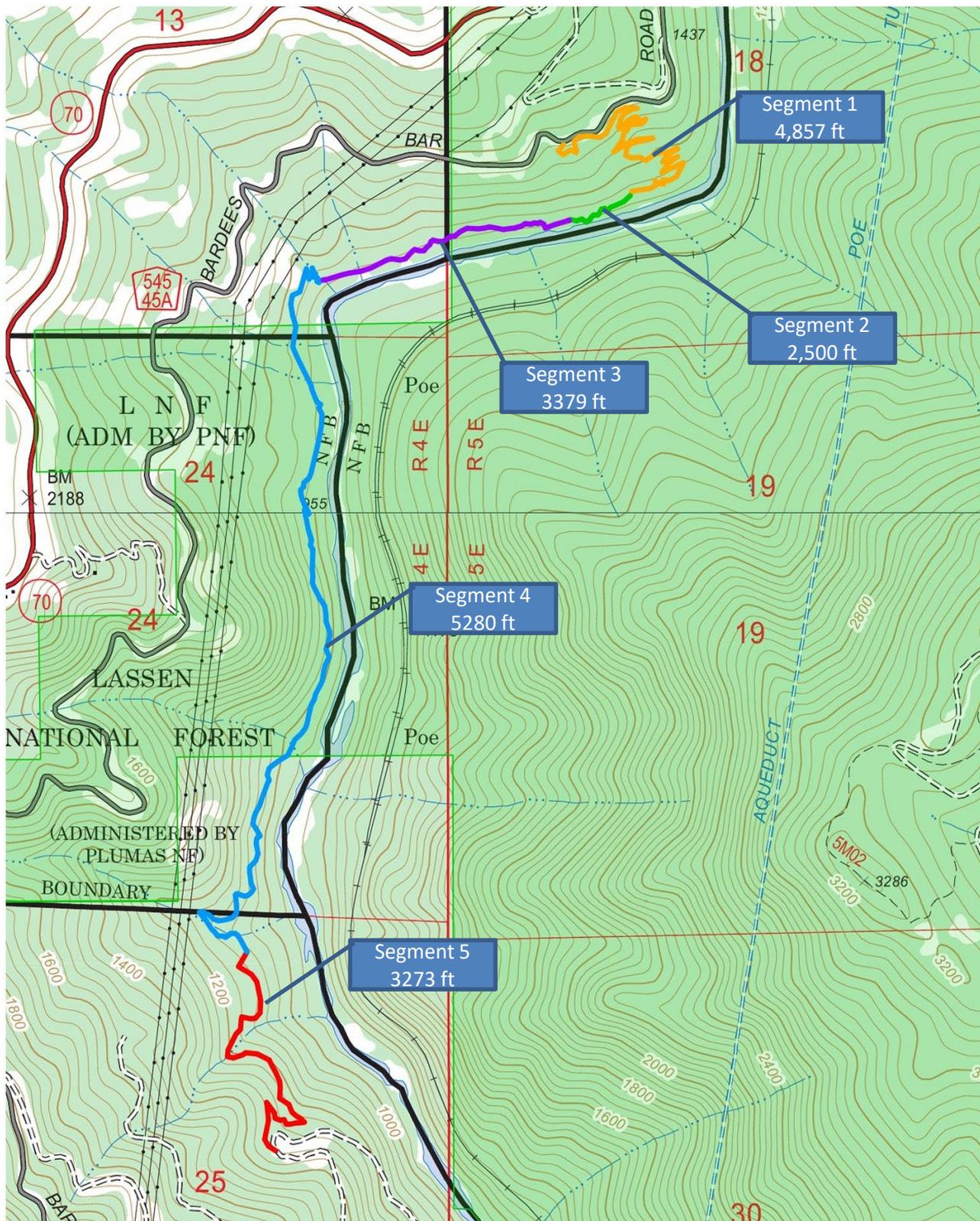


Figure: 2e Maps – Segment Breakdown
 Poe Reach Feasibility Study
 Butte County Resource Conservation District



Description/ Task	Unit Cost	Unit Measurement (ft., item, etc)	# of units	Total
1. Planning and Acquisition				\$207,400.00
Corridor flagging for specialist review	\$1,200.00	day	2	\$2,400.00
NEPA/ Enviro Review (entire project) + permit costs	\$150,000.00	item	1	\$150,000.00
Surveying private parcels	\$7,500.00	item	2	\$15,000.00
Easement Acquisition	\$40,000.00	item	1	\$40,000.00
2. Construction				\$378,464.50
Fine flagging for construction	\$1,200.00	day	3	\$3,600.00
Trail Head - North (Bardees Bar)				
parking lot- enhance upslope drainage, inslope parking and drain, surface rock, site plan, permit	\$25,000.00	item	1	\$25,000.00
trail kiosk at signage 6'x6' 1 panel kiosk	\$2,000.00	item	1	\$2,000.00
Trail Segment 1				
new trail construction/ improve existing	\$4.50	ft	4857	\$21,856.50
switchbacks	\$1,000.00	item	17	\$17,000.00
stone processing -150 ft	\$1,500.00	item	1	\$1,500.00
stone hardened bridge 4'L x3'W	\$10,000.00	item	1	\$10,000.00
trail spur for river access	\$8,000.00	item	1	\$8,000.00
Trail Segment 2				
new trail construction/ improve existing	\$3.00	ft	2500	\$7,500.00
mortar stone work backed by concrete anchored into wall (200 ft)	\$20,000.00	item	1	\$20,000.00
rock prism constructed causeway (200 ft)	\$10,000.00	item	1	\$10,000.00
structural drystack headwall (40 ft)	\$4,000.00	item	1	\$4,000.00
Trail Segment 3				
new trail construction/ improve existing	\$4.00	ft	3379	\$13,516.00
stone hardened bridge 4'L x3'W	\$10,000.00	item	4	\$40,000.00
headwall construction with fill rock on site (200 ft)	\$8,000.00	item	1	\$8,000.00
Trail Segment 4*				
new trail construction/ improve existing	\$5.00	ft	5280	\$26,400.00
switchbacks	\$1,000.00	item	7	\$7,000.00
4'x3' hardened bridge	\$10,000.00	item	3	\$30,000.00
drystack headwall	\$4,000.00	item	1	\$4,000.00
Trail Segment 5				
new trail construction/ improve existing	\$4.00	ft	3273	\$13,092.00
8' x 3' hardened bridge	\$16,000.00	item	3	\$48,000.00
4' x 3' hardened bridge	\$10,000.00	item	1	\$10,000.00
trail spur for river access	\$8,000.00	item	1	\$8,000.00
switchbacks	\$1,000.00	item	8	\$8,000.00
4' x 4' rock cobbling at crossings	\$1,000.00	item	2	\$2,000.00
drill and/ or blast, at bedrock contact 40'	\$8,000.00	item	1	\$8,000.00
Trailhead- South (Powerhouse Road)				
widen parking area and incorporate drainage, site plan, permit	\$20,000.00	item	1	\$20,000.00
trail kiosk at signage 6'x6' 1 panel kiosk	\$2,000.00	item	1	\$2,000.00
3. Project Manager/ Admin	\$80.00	hour	750	\$60,000.00
* if trail segment 4 needs to be rerouted cost would be an additional \$20,000				
			Total	\$645,864.50

Figure: 3a Budget – Breakdown

Poe Reach Feasibility Study

Butte County Resource Conservation District



Trail Maintenance

Trail Maintenance Estimate- Annual				\$3,500.00
Trail brushing and corridor clearing- CCC (annual)	\$1,500.00	day	2	\$3,000.00
Trail Inspection (annual)	\$500.00	day	1	\$500.00

Breakdown by construction task

Description/ Task	Unit Cost	Unit Measurement (ft., item, etc)	# of units	Total
Trail Construction Summary				\$378,464.50
fine flagging for construction	\$1,200.00	day	3	\$3,600.00
Trail Head - Bardees Bar Road (North)	\$27,000.00	item	1	\$27,000.00
Trail Head - Powerhouse Road (South)	\$22,000.00	item	1	\$22,000.00
8' x 3' hardened bridge	\$16,000.00	item	3	\$48,000.00
4' x 3' hardened bridge	\$10,000.00	item	9	\$90,000.00
new trail construction/ improve existing (per foot average)	\$4.27	ft	19289	\$82,364.50
trail spur for river access	\$8,000.00	item	2	\$16,000.00
switchbacks	\$1,000.00	item	32	\$32,000.00
rock work	\$57,500.00	item	1	\$57,500.00
Project Manager/ Admin	\$80.00	hour	750	\$60,000.00
			Total	\$438,464.50

Figure: 3b Budget – Annual Maintenance / Trail Construction
 Poe Reach Feasibility Study
 Butte County Resource Conservation District





Schedule of Proposed Action (SOPA)

10/01/2019 to 12/31/2019

Lassen National Forest

This report contains the best available information at the time of publication. Questions may be directed to the Project Contact.

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest, Forestwide (excluding Projects occurring in more than one Forest)					
R5 - Pacific Southwest Region					
Lassen NF Communication Uses Permit Reissuance Project CE *NEW LISTING*	- Special use management	Developing Proposal Est. Scoping Start 08/2019	Expected:10/2019	11/2019	Nancy Barrera 530-257-2151 nbarrera@fs.fed.us
	Description: Lassen National Forest proposes to issue new special use authorizations for existing communication uses on the Forest, to replace existing or expired authorization terms.				
	Location: UNIT - Lassen National Forest All Units. STATE - California. COUNTY - Lassen. LEGAL - Not Applicable. Antelope Lookout, Keddie Ridge, Turner Mtn., Table Mtn., Hamilton Mtn., West Prospect, Hat Creek, and Morgan Summit.				
Lassen National Forest Motor Vehicle Use Map Update Project EA	- Recreation management	In Progress: Scoping Start 03/05/2019 Est. Comment Period Public Notice 05/2019	Expected:12/2019	01/2020	Leslie Ross 530-252-6622 lross@fs.fed.us
	Description: This project enhances off-highway motorized recreation opportunity by increasing the mileage of existing roads and connectivity of routes, available to off highway vehicles, while providing for public safety and protecting resources.				
	Web Link: http://www.fs.usda.gov/project/?project=55457				
Location: UNIT - Lassen National Forest All Units. STATE - California. COUNTY - Butte, Lassen, Plumas, Shasta, Tehama. LEGAL - Not Applicable. Multiple linear features throughout Lassen National Forest.					
Lassen National Forest Over-Snow Vehicle(OSV) Use Designation EIS	- Recreation management - Road management	In Progress: Objection Period Legal Notice 04/04/2018	Expected:10/2019	10/2019	Chris Obrien 530-252-6698 cjobrien@fs.fed.us
	Description: The Forest Service is evaluating management of OSV use on the Lassen National Forest and is releasing a Revised Draft EIS (RDEIS) for the designation of LNF system roads, trails, and areas where OSV use will be allowed.				
	Web Link: http://www.fs.usda.gov/project/?project=45832				
Location: UNIT - Lassen National Forest All Units. STATE - California. COUNTY - Lassen. LEGAL - Not Applicable. Forest wide existing miles of groomed OSV trails and open cross country areas of the LNF which receive adequate snowfall for OSV use to occur.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest, Occurring in more than one District (excluding Forestwide)			R5 - Pacific Southwest Region		
Hat Creek-Westwood Hazard Reduction Project CE *NEW LISTING*	- Forest products - Vegetation management (other than forest products) - Fuels management	In Progress: Scoping Start 08/22/2019	Expected:12/2019	03/2020	Andrew Orlemann 530.252.6693 andrew.orlemann@usda.gov
	Description: The project involves timber stand improvements designed to reduce hazards associated with PG&E's Hat Creek to Westwood transmission line.				
	Web Link: http://www.fs.usda.gov/project/?project=56660				
Location: UNIT - Hat Creek Ranger District, Eagle Lake Ranger District. STATE - California. COUNTY - Lassen, Shasta. LEGAL - Not Applicable. Township (T) 35 North (N), Range (R) 40 East (E); T35N, R50E; T34N, R50E; T34N, R60E; T33N, R60E; T33N, R70E; T32N, R70E; T32N, R80E; T31N, R80E; T30N, R90E;and T29N, R90E of the Mount Diablo Meridian.					
Southwest Lassen Watershed Improvement Project CE *UPDATED*	- Watershed management	In Progress: Scoping Start 06/20/2018	Expected:10/2019	10/2019	Chris Obrien 530-252-6698 cjobrien@fs.fed.us
	Description: The LNF proposes a limited set of activities that could be implemented to address the purpose and need. The activities can be categorized into two different types: activities at road-stream intersections and rehabilitation of non-NFS routes.				
	Web Link: http://www.fs.usda.gov/project/?project=54111				
Location: UNIT - Almanor Ranger District, Hat Creek Ranger District. STATE - California. COUNTY - Butte, Lassen, Plumas, Shasta, Tehama. LEGAL - Not Applicable. The project area includes Lassen NF lands within Old Cow, Battle, Antelope, Mill, Deer, Big Chico, Butte and upper Feather River watersheds.					

Lassen National Forest Almanor Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Jones Meadow Fuels Reduction CE	- Vegetation management (other than forest products) - Fuels management	Developing Proposal Est. Scoping Start 07/2019	Expected:09/2019	06/2020	Jennifer Erickson 530-258-5141 jlerickson@fs.fed.us
	Description: Project proposes to improve defensibility of the Jones Meadow Community by removing surface fuels & snags to reduce potential fire behavior, reduce hazards to fire fighters, improve stand health & reduce the threat of wildfire in the project area.				
	Location: UNIT - Almanor Ranger District. STATE - California. COUNTY - Butte. LEGAL - T25N, R5E, Section 32. Mount Diablo Meridian. Jones Meadow is 18 mi NE of the town of Paradise and roughly 3 mi from the edge of the 2000 Storrie Fire perimeter. The project is located within the Mt Hope Management Area (47).				

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest Almanor Ranger District (excluding Projects occurring in more than one District)		R5 - Pacific Southwest Region			
Robbers Creek Watershed EA *UPDATED*	<ul style="list-style-type: none"> - Wildlife, Fish, Rare plants - Forest products - Vegetation management (other than forest products) - Fuels management - Watershed management 	Developing Proposal Est. Scoping Start 09/2019	Expected:01/2020	08/2020	Coye Burnett 530-258-5197 coye.burnett@usda.gov
	Description: The Robbers Creek Watershed EA project objective is to restore watershed health by implementing treatments that improve the ecological resilience of aspen, meadow, stream and forest habitats.				
	Web Link: http://www.fs.usda.gov/project/?project=56356				
Location: UNIT - Almanor Ranger District. STATE - California. COUNTY - Lassen, Plumas. LEGAL - T29N R8E sec. 1, 2, 12, 13; T29N R9E sec. 6, 7, 18, 19 and 20; T30N R8 sec. 7, 9, 15, 16, 17, 18, 21, 22, 26, 27, 34 and 35; MDM. Located within the Swain Management Area, on the Almanor Ranger District. The southern extent of the project boundary is located 2.5 miles North of Westwood, CA on Hwy A-21 and north to Barnes Flat.					
West Shore Community Restoration Project EA *UPDATED*	<ul style="list-style-type: none"> - Recreation management - Forest products - Vegetation management (other than forest products) - Fuels management - Watershed management - Road management 	In Progress: Scoping Start 05/01/2019 Est. Comment Period Public Notice 01/2020	Expected:06/2020	07/2020	Matthew Cerney 530-258-5104 mcerney@fs.fed.us
	Description: Mixed-conifer forest veg mgt project designed to 1)reduce haz fuels within WUI;2)increase forest health and veg diversity;3)provide an economic benefit to the local community;4)Protect ecosystems and wildlife habitat;5)Improve forest health in RCAs				
	Web Link: http://www.fs.usda.gov/project/?project=56312				
Location: UNIT - Almanor Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T. 27N, R. 8E, Sections 18, 19, 20, and 30; T27N, R7E, Sec. 3, 4, 9, 10, 11, 13, 14, 15, 16, 23, and 24; Mount Diablo Meridian. In Plumas County, CA on the Lassen National Forest adjacent to Lake Almanor's west shore, surrounding the communities of Lake Almanor West and Prattville & the Rocky Point Campground.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest Almanor Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Wilson Fire Salvage Project CE *UPDATED*	- Forest products	Completed	Actual: 07/02/2019	09/2019	Jesse Braley (530) 258-5195 jessedbraley@fs.fed.us
	Description: This project will respond to conditions created by the Wilson Fire, which burned 186 acres on Lassen National Forest land. It includes 132 acres of salvage logging, 104 acres of mechanical site prep and planting, and 3 acres of hand thinning.				
	Web Link: http://www.fs.usda.gov/project/?project=55324				
Location: UNIT - Almanor Ranger District. STATE - California. COUNTY - Plumas, Tehama. LEGAL - Township 29 North, Range 5 East, Sections 22 and 28, Mount Diablo Meridian. Project is located on the Almanor Ranger District on the Lassen National Forest in the footprint of the 2018 Wilson Fire. Main access to the project area is Wilson Lake Road (Tehama County Road TE 769).					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest Eagle Lake Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Acer Vegetation Management Project EA *UPDATED*	- Forest products - Vegetation management (other than forest products) - Fuels management - Watershed management - Road management	Developing Proposal Est. Scoping Start 10/2019	Expected:07/2020	08/2020	Andrew Orlemann 530-252-6693 andrew.orlemann@usda.gov
	Description: Project objectives are fuels reduction, forest health improvement and watershed restoration. Activities include: Plantation thinning & windrow redistribution; fuels thinning; prescribed burning; and transportation management.				
	Location: UNIT - Eagle Lake Ranger District. STATE - California. COUNTY - Lassen. LEGAL - Not Applicable. Lassen National Forest, Eagle Lake Ranger District, Approximately 20 miles northwest of Susanville, Lassen County, California.				

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest	Eagle Lake Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
Confluence Meadow Restoration Project EA *UPDATED*	- Watershed management	In Progress: Comment Period Public Notice 08/20/2019	Expected:01/2020	07/2020	Douglas Peters 530-252-6456 dwpeters@fs.fed.us
	Description: Restore meadow hydrology and habitat by redirecting flow into historic remnant channels along a reach of Pine Creek while filling the degraded channel and ditch to match the floodplain elevation.				
	Web Link: http://www.fs.usda.gov/project/?project=52590				
	Location: UNIT - Eagle Lake Ranger District. STATE - California. COUNTY - Lassen. LEGAL - Not Applicable. Roughly 24 air miles NW of Susanville, Lassen County, CA, in meadow S of Little Harvey mountain and W of Lassen County Rd 105 near the confluence of Pine Creek and Little Harvey Valley tributary.				
Dish Wireless Project CE *UPDATED*	- Special use management	Completed	Actual: 06/24/2019	07/2019	Nancy Barrera 530-257-2151 nbarrera@fs.fed.us
	Description: Issuing a new communications use lease to Dish Network for construction, maintenance and operation of cellular and internet service provider equipment at the Hamilton Mountain Communications Site.				
	Location: UNIT - Eagle Lake Ranger District. STATE - California. COUNTY - Lassen. LEGAL - Not Applicable. Hamilton Mountain Communications Site, T29N,R10E,Sec28 MDBM.				
Dyer Mountain Communication Site Development CE	- Special use management	Developing Proposal Est. Scoping Start 01/2020	Expected:05/2020	05/2021	Nancy Barrera 530-258-5107 nbarrera@fs.fed.us
	Description: Plumas County Sheriff's office propose to construct and develop a communications tower and prefabricated communications vault for the operation and maintenance of emergency radio communication equipment, at the current Dyer Mountain Lookout location.				
	Location: UNIT - Eagle Lake Ranger District. STATE - California. COUNTY - Lassen. LEGAL - T28N,R08E,Section 36. Eagle Lake Ranger District, Dyer Mountain Communication Site. The exact location on the .96 acre parcel of the project will be determined once the historic evaluation is completed.				
Goumaz Sign CE *UPDATED*	- Special use management	Completed	Actual: 08/19/2019	08/2019	Nancy Barrera 530-257-2151 nbarrera@fs.fed.us
	Description: The Forest Service will issue a special use permit to E Clamputs Vitus, Mark Worthington, for the construction and maintenance of a granite sign at the Goumaz Campground entrance. Sign will contain historical information about Philip Goumaz.				
	Location: UNIT - Eagle Lake Ranger District. STATE - California. COUNTY - Lassen. LEGAL - Not Applicable. Goumaz Campground, Eagle Lake Ranger District, Lassen National Forest.				

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest Eagle Lake Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
McKenzie Meadow Restoration Project CE *NEW LISTING*	- Watershed management	In Progress: Scoping Start 09/17/2019	Expected:01/2020	06/2020	Cerena Brewen 530-257-4188 cerena.brewen@usda.gov
	Description: The goal of this project is to enhance meadow habitat by re-connecting the stream to a multiple channel system and increasing stream base elevation.				
	Web Link: http://www.fs.usda.gov/project/?project=56722				
Location: UNIT - Eagle Lake Ranger District. STATE - California. COUNTY - Lassen. LEGAL - Not Applicable. Project area is approximately 26 miles NW of Susanville, CA. It encompasses 61 miles, between McKenzie Cow Camp and Highway 44, where lowest downstream perennial portion of Pine Creek flows.					
North Eagle Lake, Champs Flat, and Lower Pine Creek Allotments Grazing Mgt. Project EA *UPDATED*	- Grazing management	In Progress: Scoping Start 03/06/2018 Est. Comment Period Public Notice 11/2019	Expected:02/2020	05/2020	Kirsten Pasero 530-252-5854 kpasero@fs.fed.us
	Description: Grazing allotment management plans.				
	Web Link: http://www.fs.usda.gov/project/?project=48381				
Location: UNIT - Eagle Lake Ranger District. STATE - California. COUNTY - Lassen. LEGAL - T32N and T33N,R9E and R10E,MDM (West of Eagle Lake, CA; North, East and South of Logan Mtn. area). North half of the Eagle Lake Ranger District.					

Lassen National Forest Hat Creek Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Black Ranch Flood Plain Enhancement Project CE *UPDATED*	- Wildlife, Fish, Rare plants - Forest products - Watershed management - Road management	In Progress: Scoping Start 08/23/2019	Expected:10/2019	11/2019	Shawn Wheelock 530-336-3340 swheelock@fs.fed.us
	Description: This project is designed to enhance the historic flood plain, allow natural flows to resume, and address infrastructure damage and tree mortality caused by flooding.				
	Web Link: http://www.fs.usda.gov/project/?project=55470				
Location: UNIT - Hat Creek Ranger District. STATE - California. COUNTY - Shasta. LEGAL - Not Applicable. Approximately 4 miles northwest of the community of Johnson Park, California, Township 36 north, Range 3 east, Sections 17-19.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest Hat Creek Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Citizens Utility Company Aerial Telephone Line project CE	- Special use management	On Hold	N/A	N/A	Kimberly Ganz 530-336-3383 kganz@fs.fed.us
	Description: Authorize Citizens Communications Co. of CA (Frontier) to install an overhead phone cable from a utility pole on National Forest System Lands to a utility pole on Big Springs Estates. Aerial cable is ~300'long w/aerial phone line 6' below power line.				
	Location: UNIT - Hat Creek Ranger District. STATE - California. COUNTY - Shasta. LEGAL - T32N, R4E, Section 12, NE1/4. The existing utility pole is located ~3 mi SW of Old Station, CA. The pole lies E of SR44/89 and W of Hat Creek near Big Springs Estates Subdivision on the Lassen National Forest in Eastern Shasta Co.				
Crossroads Project CE *UPDATED*	- Forest products - Vegetation management (other than forest products) - Fuels management - Road management	In Progress: Scoping Start 07/31/2019	Expected:11/2019	12/2019	Greg Mayer 530-336-5521 gmayer@fs.fed.us
	Description: The Crossroads Project is designed to improve resilience of stands to future disturbance events, decrease fuel loads, enhance oak woodlands, improve ingress and egress, and refine the transportation system for safe public access and travel.				
	Web Link: http://www.fs.usda.gov/project/?project=55825				
Lake Britton Trail Bridges Project CE *UPDATED*	- Recreation management	Completed	Actual: 07/26/2019	08/2019	Greg Mayer 530-336-5521 gmayer@fs.fed.us
	Description: This project is intended to restore two trail bridges along the Great Shasta Rail Trail at Lake Britton to provide continuous public access for non-motorized trail purposes across the lake and State Route 89.				
	Web Link: http://www.fs.usda.gov/project/?project=53716				
Location: UNIT - Hat Creek Ranger District. STATE - California. COUNTY - Shasta. LEGAL - Not Applicable. Township 36N, Range 3E, section 3 and Township 37N, Range 3E, section 28, MDM in the Hat Creek Ranger District, Lassen National Forest, west of Dusty Campground at Lake Britton.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Lassen National Forest Hat Creek Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
North Digger Creek Restoration Project CE *NEW LISTING*	- Wildlife, Fish, Rare plants - Vegetation management (other than forest products) - Watershed management	Developing Proposal Est. Scoping Start 10/2019	Expected:09/2020	07/2021	Shawn Wheelock 530-336-3340 swheelock@fs.fed.us
	Description: This project is intended to restore a degraded section of North Digger Creek Channel, reduce the sediment entering the Battle Creek watershed, provide effective aquatic organism passage, protect NFS infrastructure, and enhance aspen stands.				
	Web Link: http://www.fs.usda.gov/project/?project=56425				
Location: UNIT - Hat Creek Ranger District. STATE - California. COUNTY - Shasta. LEGAL - Not Applicable. Approximately three miles west of Lassen Volcanic National Park in Township 30 North, Range 3 East, sections 22 and 27, Mount Diablo Meridian.					
Table Mountain Wildfire Protection Project CE *UPDATED*	- Forest products - Fuels management	Completed	Actual: 06/19/2019	08/2019	Crystal Danheiser 530-258-5183 cdanheiser@fs.fed.us
	Description: This project would reduce vegetation density on 70 acres surrounding the Table Mountain Communications Site in order to reduce the risk of wildfire and minimize signal interference to the microwave path that supports critical infrastructure.				
	Web Link: http://www.fs.usda.gov/project/?project=54088				
Location: UNIT - Hat Creek Ranger District. STATE - California. COUNTY - Shasta. LEGAL - Not Applicable. Location: Table Mountain approximately 1.5 miles northeast of the junction of Highways 44 and 89, immediately north of the Lassen Volcanic National Park. Sections 6 and 7 T31N, R4E,MDM.					

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This report contains the best available information at the time of publication. Questions may be directed to the Project Contact.



Schedule of Proposed Action (SOPA)

10/01/2019 to 12/31/2019

Plumas National Forest

This report contains the best available information at the time of publication. Questions may be directed to the Project Contact.

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
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R5 - Pacific Southwest Region, Occurring in more than one Forest (excluding Regionwide)

Beckwourth Peak Recreation Project CE *UPDATED*	- Recreation management	In Progress: Scoping Start 10/04/2017	Expected:12/2019	07/2020	Jeremy Dorsey 707-574-6877 jdorsey02@fs.fed.us
	Description: Objectives are to provide access to Beckwourth Peak area and to provide alternative recreation activities to relieve congestion in heavily-used areas. Propose construction of approximately 20 miles of non-motorized trails around Beckwourth Peak.				
	Web Link: http://www.fs.usda.gov/project/?project=52465				
	Location: UNIT - Sierraville Ranger District, Beckwourth Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Township 22 North, Range 13 East, Sections 13, 14, and 22-24; Township 22 North, Range 14 East, Sections 5-9, 17, and 18; and Township 23 North, Range 14 East, Section 31, MDBM. The project area is located immediately south and east of Portola in Plumas County, California.				

Plumas National Forest, Forestwide (excluding Projects occurring in more than one Forest)

R5 - Pacific Southwest Region

Plumas National Forest Over-Snow Vehicle (OSV) Use Designation EIS *UPDATED*	- Recreation management	In Progress: Objection Period Legal Notice 08/21/2019 Est. FEIS NOA in Federal Register 02/2020	Expected:04/2020	10/2020	Katherine Carpenter 530-283-7742 katherine.carpenter@usda.gov
	Description: Designate over-snow vehicle (OSV) use on National Forest System roads and trails and areas on National Forest System lands as allowed, restricted, or prohibited. Identify trails for snow grooming for OSV use would be conducted.				
	Web Link: http://www.fs.usda.gov/project/?project=47124				
	Location: UNIT - Plumas National Forest All Units. STATE - California. COUNTY - Butte, Lassen, Plumas, Sierra, Yuba. LEGAL - Not Applicable. National Forest System lands administered by the Plumas National Forest (forest-wide).				

Plumas National Forest Beckwourth Ranger District (excluding Projects occurring in more than one District)

R5 - Pacific Southwest Region

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest Beckwourth Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Aurora Rose Mining Project EA *UPDATED*	- Minerals and Geology	Completed	Actual: 06/28/2019	06/2019	Leslie Edlund 530-283-7650 ledlund@fs.fed.us
	Description: Excavation of mineralized rock vein using hand tools such as shovels, picks, hand operated drills. Minor road repairs to .3 miles of 4WD access road including filling in holes and brushing with loppers. Long term camping at the claim while mining.				
	Web Link: http://www.fs.usda.gov/project/?project=54856				
Location: UNIT - Beckwourth Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. The legal location of the project is T26N, R12E, Section 36, MDBM. The project area is southeast of Babcock Peak, off NFS Road 26N53.					
Feather River Inn Water System CE	- Special use management	On Hold	N/A	N/A	Robert Hawkins 916-849-8037 rhhawkins@fs.fed.us
	Description: Re-Issue a 30 year special use authorization to Schomac, Inc. for the Feather River Inn water system. The water system includes two diversion structures, a storage tank, waterlines and road and trail access.				
	Location: UNIT - Beckwourth Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Section 3, T. 22 N., R. 12 E., Mt Diablo Meridian. The water system is located along Bonta Creek just north of the National Forest boundary and the Feather River Inn.				
Haskell Project CE *UPDATED*	- Wildlife, Fish, Rare plants - Forest products - Vegetation management (other than forest products) - Road management	In Progress: Scoping Start 09/05/2018	Expected:08/2019	09/2019	Michael Friend 530-836-7167 mjfriend@fs.fed.us
	Description: Improve forest health and enhance resistance to insect and disease attacks. Proposed activities may include: mechanical thinning, hand thinning, grapple piling, pile burning, underburning, and decommissioning of non-system roads.				
	Web Link: http://www.fs.usda.gov/project/?project=52569				
	Location: UNIT - Beckwourth Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. The project is located 4 to 6 miles Southeast of Graeagle, CA and 10 miles south of Portola in Plumas and Sierra Counties, California.				

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Beckwourth Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
Mills Peak Trail South CE *UPDATED*	- Recreation management	Completed	Actual: 02/06/2019	06/2019	Jeremy Dorsey 530-836-7120 jdorsey02@fs.fed.us
	Description: Construct 1.0 miles of new non-motorized trail, convert 0.3 miles of non-system road to trail, and add 0.4 miles of existing user-created trail to the National Forest Trail System.				
	Location: UNIT - Beckwourth Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. Trail system would connect the Mills Peak Trail to the Round Lake Trailhead.				
Thompson Meadow Restoration Project EA *UPDATED*	- Wildlife, Fish, Rare plants - Grazing management - Watershed management	In Progress: Scoping Start 11/08/2017 Est. Comment Period Public Notice 10/2019	Expected:01/2020	09/2020	Joseph Hoffman 530-283-2050 jahoffman@fs.fed.us
	Description: To restore historic floodplain function and the historic meadow water table elevation along a 0.6 mile reach of Thompson Creek, a tributary to McReynolds Creek, which flows to Red Clover Creek.				
	Web Link: http://www.fs.usda.gov/project/?project=52760				
	Location: UNIT - Beckwourth Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Township 25N, Range 13E, Sections 25 and 36. Approximately 11 air miles north of Portola, CA in Plumas County, California.				
Two Rivers Soccer Camp Permit Re-issue CE *UPDATED*	- Special use management	In Progress: Scoping Start 05/01/2015	Expected:01/2020	01/2020	Jeremy Dorsey 909 382-2837 jdorsey02@fs.fed.us
	Description: Re-issue a 20 year permit to Two Rivers Soccer Camp for the following uses: bridge, road, parking area, portion of a soccer field, water transmission lines, storage tank and spring boxes.				
	Location: UNIT - Beckwourth Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Sections 30, 31, 32, T. 22 N., R. 12E., Mt. Diablo Meridian. Two Rivers Soccer Camp is located near Blairsden, California.				

Plumas National Forest	Feather River Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
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Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Feather River Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
Big Bar Hazardous Fuels Reduction Project CE *UPDATED*	<ul style="list-style-type: none"> - Wildlife, Fish, Rare plants - Forest products - Vegetation management (other than forest products) - Fuels management - Watershed management - Road management 	Completed	Actual: 08/28/2019	09/2019	Eric Murphy 530-532-8922 ejmurphy@fs.fed.us
	Description: Some areas within the 2018 Camp Fire burned under high and mixed severity. Left unmitigated these dead, dying, and structurally damaged live trees will become hazardous fuels. We propose to remove fire killed trees that would become dangerous fuels.				
	Web Link: http://www.fs.usda.gov/project/?project=56140				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Butte. LEGAL - Not Applicable. Areas along the 23N00 and 23N28 Roads between Coyote Gap, Highway 70, and Big Bar Mountain, including Big Bar Mountain where the Forest Service lookout was consumed and the radio repeater destroyed.					
Concow Fire Salvage Project CE *UPDATED*	<ul style="list-style-type: none"> - Forest products - Vegetation management (other than forest products) - Fuels management - Watershed management - Road management 	Completed	Actual: 07/01/2019	07/2019	Eric Murphy 530-532-8922 ejmurphy@fs.fed.us
	Description: Tree mortality is occurring in areas of high and mixed fire severity. We propose to log dead and dying trees that present a safety hazard and risk to forest visitors, neighboring landowners and their homes, employees, and facilities.				
	Web Link: http://www.fs.usda.gov/project/?project=55461				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Butte. LEGAL - Not Applicable. Nearby the community of Concow, CA. Areas along Concow Road and Rim Road were burned severely in the Camp Fire (November 8-25, 2018). Elevations 2800-3200 feet.					
FRRD Abandoned Mine Closures 2019 CE *NEW LISTING*	- Minerals and Geology	In Progress: Scoping Start 08/12/2019	Expected:11/2019	04/2020	Donna Duncan 530-283-7614 dmduncan@fs.fed.us
	Description: Abandoned mine closures and site reclamation				
	Web Link: http://www.fs.usda.gov/project/?project=56831				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Butte, Plumas, Sierra. LEGAL - Not Applicable. Four sites on the Feather River Ranger District.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Feather River Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
French Creek I Hazardous Fuels Reduction CE *NEW LISTING*	- Forest products - Fuels management	In Progress: Scoping Start 09/11/2019	Expected:02/2020	09/2020	Jason Vermillion 530-532-7434 jvermillion@fs.fed.us
	Description: The French Creek I project proposes to reduce hazardous fuels and stand density through commercial and pre-commercial thinning, mastication of brush and prescribed burning using GTR-220 and 237 methods. The project will treat no more than 3,000 acres				
	Web Link: http://www.fs.usda.gov/project/?project=56798				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Butte. LEGAL - Not Applicable. Located ~ 10 miles north of Berry Creek, at elevations ranging between 2,300 and 4,500 feet. Annual precipitation ranges between 55 and 70 inches. The Camp Fire burned through the majority of the area.					
Golden Trout Temporary Bridge Placement CE *NEW LISTING*	- Road management	In Progress: Scoping Start 09/13/2019	Expected:10/2019	10/2019	Herman Wendell 530-532-7466 hwendell@fs.fed.us
	Description: We are proposing to install an 85 feet long temporary bridge next to the existing damaged bridge. This will allow administrative and public access across the stream without resource damage. This will involve constructing approaches from both sides.				
	Web Link: http://www.fs.usda.gov/project/?project=56820				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Butte. LEGAL - Not Applicable. The existing bridge crossing South Fork Feather River at Golden Trout was damaged when a large tree traveling down river struck the metal I-beam support causing an approximately 10-inches crack.					
Granite Basin OHV Trail Development Project EA *UPDATED*	- Recreation management - Road management	In Progress: Scoping Start 05/15/2019 Est. Comment Period Public Notice 01/2020	Expected:05/2020	06/2020	Clay Davis 530-532-8940 clay.davis@usda.gov
	Description: The Forest Service is proposing to meet the need for additional OHV riding opportunities for the Granite Basin recreation area. This proposal has two components: construction/reconstruction of OHV trail and road reclassification to authorize OHV use.				
	Web Link: http://www.fs.usda.gov/project/?project=55986				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. Granite Basin.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Feather River Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
Midas Mine One-Year Exploration Plan CE *NEW LISTING*	- Minerals and Geology	In Progress: Scoping Start 09/23/2019	Expected:10/2019	11/2019	Donna Duncan 530-283-7614 dmduncan@fs.fed.us
	Description: Authorize a phase 1 feasibility study to determine economic viability of a small-scale underground mining operation over a one-year period. Perform surface and underground exploration, focused on sampling and mapping.				
	Web Link: http://www.fs.usda.gov/project/?project=56960				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. Grand View and Midas claims in the Granite Basin area.					
Mooreville Ridge Insect and Disease Resilience Project CE *UPDATED*	- Forest products - Vegetation management (other than forest products)	In Progress: Scoping Start 09/20/2018	Expected:11/2019	04/2020	Eric Murphy 530-532-8922 ejmurphy@fs.fed.us
	Description: Reduce the risk of insect and disease-caused tree mortality through mechanical thinning. Fuels deduction and maintenance would be accomplished with mastication and prescribed burning. Residual stands will be more open, increasing resources for trees.				
	Web Link: http://www.fs.usda.gov/project/?project=54027				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. Project area is located ~2 miles west and southwest of La Porte, CA at elevations ranging between 3,700 and 5,900 feet. Stands are Region 5 Forest Health Protection priority areas for treatment.					
PG&E Underground Electric Powerline Special Use Request CE *NEW LISTING*	- Special use management	In Progress: Scoping Start 09/23/2019	Expected:11/2019	11/2019	Erika Brenzovich 530-283-7622 ebrenzovich@fs.fed.us
	Description: PG&E is proposing to install a new underground electric power line within the Highway 70 corridor that will replace approximately 10 miles of the Bucks Creek 1101 12kV pole line that was damaged during the Camp Fire.				
	Web Link: http://www.fs.usda.gov/project/?project=56962				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Butte, Plumas. LEGAL - Not Applicable. Approximately 10 miles within the Highway 70 corridor between Pulga Road and Cresta Dam.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Feather River Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
Strawberry Wildfire Resilience Project CE *UPDATED*	- Forest products - Vegetation management (other than forest products) - Fuels management	In Progress: Scoping Start 03/29/2019	Expected:12/2019	04/2020	Eric Murphy 530-532-8922 ejmurphy@fs.fed.us
	Description: Reduce hazardous fuels and reduce the risk of insect and disease-caused tree mortality through mechanical and hand thinning, mastication of brush, grapple and hand piling, targeted grazing, and prescribed and pile burning.				
	Web Link: http://www.fs.usda.gov/project/?project=55801				
Location: UNIT - Feather River Ranger District. STATE - California. COUNTY - Butte, Plumas, Yuba. LEGAL - Not Applicable. Located nearby Sly Creek Reservoir on and near the La Porte Quincy Highway, Strawberry Valley, CA, is one of a number of small, rural communities surrounded by the Plumas National Forest (WUI).					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Mt. Hough Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
Black Pearl Mining Exploration CE *NEW LISTING*	- Minerals and Geology	In Progress: Scoping Start 03/28/2019	Expected:09/2019	10/2019	Donna Duncan 530-283-7614 dmduncan@fs.fed.us
	Description: Use of a backhoe, loader to excavate gravels. Material will be processed through a trommel using water pumped from an unnamed creek in the Mulligan Slide area.				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. T25N, R8E, Section 31 and 32, Mulligan Slide, north of Meadow Valley, CA.				
China Bar Placer Mining Plan of Operations EA *NEW LISTING*	- Minerals and Geology	In Progress: Scoping Start 04/01/2019 Est. Comment Period Public Notice 10/2019	Expected:12/2019	05/2020	Donna Duncan 530-283-7614 dmduncan@fs.fed.us
	Description: Placer mining bench gravels in the North Fork Feather River Drainage. Use of a small backhoe and a trommel. Settling ponds will prevent discharge into river.				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T26N, R8E, Sec 19. Seneca, CA, China Bar.				

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Mt. Hough Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
DigitalPath Indian Ridge Antenna CE *NEW LISTING*	- Special use management	Completed	Actual: 05/20/2019	09/2019	Colleen Heard 530-283-7622 colleen.heard@usda.gov
Description: DigitalPath is requesting to use an existing tower for communications and the advancement of broadband availability. A 20x10x8ft communication vault & 30 3x5ft solar panels would be added to the site. A small propane generator would be added also.					
Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T25N, R9E, Sec 1. The tower is located approximately 2 miles west of Mt. Hough communication site.					
El Rico Mina Mining Exploration Project EA *UPDATED*	- Minerals and Geology	Cancelled	N/A	N/A	Leslie Edlund 530-283-7650 ledlund@fs.fed.us
Description: The project would entail construction of .4 miles of new road construction to access a ridgetop area. Once the road is completed, core drilling samples would be taken along the road using a drill rig, which may lead to construction of a shaft.					
Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. T26N, R9E, Section 4, MDBM.					
Four Kings Mining Exploration Project CE *UPDATED*	- Minerals and Geology	Completed	Actual: 06/24/2019	06/2019	Leslie Edlund 530-283-7650 ledlund@fs.fed.us
Description: Operators will excavate an area along the stream bench using a backhoe to dig three test trenches. Trenches are expected to be 30' x 3' x 2'. Material will be processed through a trommel using water pumped from West Branch Lights Creek.					
Web Link: http://www.fs.usda.gov/project/?project=55205					
Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. Legal location is T28N, R11E, Section 31, MDBM. The claim is located along the West Branch of Lights Creek, northeast of Greenville, CA.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest Mt. Hough Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Greenhorn Ranch Outfitter Guide Permit Reissue CE *UPDATED*	- Special use management	Completed	Actual: 05/03/2019	08/2019	Colleen Heard 530-283-7622 colleen.heard@usda.gov
	Description: Reissue a 10 year O&G Permit for horseback rides and an assigned campsite on Nat Forest Sys land. This is the same operation as the past 10 years, with approximately 39 miles of trail and the majority of the rides with 8 miles of the Ranch				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T24 R10,R11 T23R10 R11 T24 R12. Mt. Hough Ranger District and Little Summit Lake on Beckwourth Ranger District.				
Jacks Meadow Creek and McFarland Aspen Stand Improvement CE *UPDATED*	- Wildlife, Fish, Rare plants - Vegetation management (other than forest products)	Completed	Actual: 06/20/2019	07/2019	Colin Dillingham 530-283-7687 cdillingham@fs.fed.us
	Description: Aspen is shade intolerant and needs full sunlight for successful establishment and growth. This project proposes to remove competing conifers from within and immediately adjacent to aspen stands identified in the project area to maximize sun exposure				
	Web Link: http://www.fs.usda.gov/project/?project=54573				
Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. sections 7 and 8 of T24N, R8E (Jacks Meadow Creek); section 36 of T24N, R7E; section 31 and 32 of T24N, R8E; and sections 3, 4, 7, 8, 17, and 18 of T23N, R8E (McFarland).					
Long Valley Forest Health Project CE *NEW LISTING*	- Wildlife, Fish, Rare plants - Forest products - Vegetation management (other than forest products) - Fuels management	Developing Proposal Est. Scoping Start 10/2019	Expected:02/2020	09/2020	Kyla Sabo 530-283-7652 kylasabo@fs.fed.us
	Description: Improve forest health and fire resiliency within the project area as well as reduce meadow and aspen encroachment by lodgepole pine.				
	Web Link: http://www.fs.usda.gov/project/?project=56891				
Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T26N R8E Sections 11-13, 24, T26N, R9E Sections 7, 18, 19, 30. The project area is South of Round Valley Reservoir.					

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest	Mt. Hough Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region	
Moonlight-Superior Drill Project CE *NEW LISTING*	- Minerals and Geology	In Progress: Scoping Start 02/25/2019	Expected:10/2019	05/2020	Donna Duncan 530-283-7614 dmduncan@fs.fed.us
	Description: Exploratory drilling, drill pad construction, sump pit excavation, water for drilling, improve some roads, some cross country travel.				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T27N, R10E, Sec 1,12, T27N, R11E, Sec 6. Moonlight Valley, north of Taylorsville, CA.				
Mt Hough OHV and Watershed Restoration CE	- Recreation management - Wildlife, Fish, Rare plants - Watershed management	Developing Proposal Est. Scoping Start 03/2019	Expected:08/2019	10/2019	Kurt Sable 530-283-7641 ksable@fs.fed.us
	Description: The Mt Hough RD has found a need to close 7.9 mi. of non-system OHV trails that are causing resource damage. 0.6 mi. of new motorized and non-motorized trail will be constructed to provide key access.				
	Web Link: http://www.fs.usda.gov/project/?project=55637				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Township 24 North, Range 8 East; Section 8, Township 24 North, Range 9 East, Sections 6and 36; Township 24 North, Range 10 East, Section%u2019s 4, 5 , 6: Township 25 North, Range 9, Section 21, Township. This project is located near Quincy CA, on Mt Hough proper, Grizzly Peak, South Park, and Snake Lake areas.				
Mt. Hough Abandoned Mine Closure 2019 CE *NEW LISTING*	- Minerals and Geology	In Progress: Scoping Start 08/12/2019	Expected:10/2019	10/2019	Donna Duncan 530-283-7614 dmduncan@fs.fed.us
	Description: Abandoned mine safety closures and site reclamation.				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. Four sites on the Mt. Hough Ranger District.				
Multiple Special Use Permit Relssues CE *UPDATED*	- Special use management	Completed	Actual: 11/15/2018	11/2018	Colleen Heard 530-283-7627 cheard@fs.fed.us
	Description: The Plumas National Forest has identified 14 expired special use permits that need to be reissued. All uses are existing with no proposed changes. No off-road vehicle travel is proposed.				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - Not Applicable. Permits are located in Genesee Valley, Butterfly Valley, Quincy, East Quincy, Bucks Lake area, and Twain.				

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
Plumas National Forest Mt. Hough Ranger District (excluding Projects occurring in more than one District)			R5 - Pacific Southwest Region		
Plumas Imperial Mining Plan of Operations EA *UPDATED*	- Minerals and Geology	In Progress: Scoping Start 02/25/2019 Est. Comment Period Public Notice 10/2019	Expected:11/2019	04/2020	Leslie Edlund 530-283-7650 ledlund@fs.fed.us
	Description: Plan of Operation submitted to mine using heavy equipment to excavate material, processing through a trammel and use of settling ponds. .5 miles of non-system road was constructed under a previous plan. This road will be maintained.				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T24N, R9E, Sec 18. Near Meadow Valley, CA.				
R.E. Dahlens Placer Mining Plan of Operations EA *UPDATED*	- Minerals and Geology	In Progress: Scoping Start 01/30/2019 Est. Comment Period Public Notice 10/2019	Expected:11/2019	04/2020	Donna Duncan 530-283-7614 dmduncan@fs.fed.us
	Description: Placer mining, continuing operation, on North Fork Feather River				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T26N, R8e, Sec 16. west of Seneca, CA.				
Soper Wheeler Silver Creek Pipeline Replacement Project EA *UPDATED*	- Special use management - Road management	In Progress: Scoping Start 10/11/2018 Est. Comment Period Public Notice 09/2019	Expected:12/2019	04/2020	Erika Brenzovich 530-283-7620 ebrenzovich@fs.fed.us
	Description: The proposed project includes the replacement of the existing plastic and metal pipe with new high-density polyethylene (HDPE) 14-20 diameter pipe for a total length of 5,405 feet				
	Web Link: http://www.fs.usda.gov/project/?project=54827				
Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T 24 N, R 8 E, Sec 15 & 16. The project is located near Meadow Valley, CA adjacent to Silver Creek.					
Twain Store & RV Park--2019 Amendment CE *NEW LISTING*	- Special use management	Completed	Actual: 05/01/2019	05/2019	Colleen Heard 530-283-7627 cheard@fs.fed.us
	Description: The request is to add an Off Highway Vehicle parking area in the location of the existing tent cabin area. They plan to move the tent cabin sites to the equestrian camping location and forego equestrian camping. Camping will only be on 1 side of road				
	Location: UNIT - Mt. Hough Ranger District. STATE - California. COUNTY - Plumas. LEGAL - T25N, R8E, NE 1/4 Section 22. Twain, CA.				

Project Name	Project Purpose	Planning Status	Decision	Expected Implementation	Project Contact
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This report contains the best available information at the time of publication. Questions may be directed to the Project Contact.