

PUBLIC DRAFT

Tomales Bay State Park Forest Health and Wildfire Resilience Public Works Plan

Project Proponent:



California State Parks
Bay Area District
845 Casa Grande Road
Petaluma, CA 94954

December 2023

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LIST OF ABBREVIATIONS

CalVTP	California Vegetation Treatment Program
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
Coastal Commission or Commission	California Coastal Commission
Coastal VTS	Coastal Vegetation Treatment Standards
CSP	California State Parks
dbh	diameter at breast height
ESHA	Environmentally Sensitive Habitat Areas
FIGR	Federated Indians of Graton Rancheria
GIS	Geographic Information System
LCP	Local Coastal Program
LRA	Local Responsibility Area
MWPA	Marin Wildfire Prevention Authority
NEPA	National Environmental Policy Act
NOID	Notice of Impending Development
NOP	Notice of Preparation
PRC	Public Resources Code
Program EIR	Program Environmental Impact Report
PSA	Project-Specific Analysis
PWP	Public Works Plan
SP	State Park
SPR	standard project requirements
USFWS	US Fish and Wildlife Service
WUI	wildland-urban interface

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1 INTRODUCTION

The Tomales Bay State Park (SP) Forest Health and Wildfire Resilience Public Works Plan (PWP) has been prepared with collaboration among the staffs of the California Coastal Commission (Coastal Commission or Commission), California State Parks (CSP) Bay Area District, and California Board of Forestry and Fire Protection. CSP has consulted and collaborated, government to government, with the Federated Indians of Graton Rancheria, on the development and planning of the project to ensure the project aligns with tribal priorities and needs. The Federated Indians of Graton Rancheria is the federally and state recognized tribe representing Coast Miwok, whose cultural and ancestral lands encompass what is now known as Marin County. Other input has been provided by: Marin County Fire Department and Marin County Planning Division of the Community Development Agency.

This PWP complies with the requirements of Public Resources Code (PRC) Section 30605, which enables the Commission to “promote greater efficiency for the planning of any public works or state university or college or private university development projects and as an alternative to project-by-project review.” PWPs provide a single plan that establishes a framework for comprehensive planning, reviewing, analysis and approval of qualifying public projects in the Coastal Zone, including ecological restoration and forest resilience projects. Projects covered by the PWP can be approved and implemented using a Notice of Impending Development (NOID). The PWP establishes a time- and cost-efficient, integrated and coordinated project review and approval system with environmental standards that protect sensitive coastal resources, including Environmentally Sensitive Habitat Areas (ESHAs).

This PWP has been developed to function in tandem with the California Vegetation Treatment Program (CalVTP) and its associated Program Environmental Impact Report (Program EIR). In addition to the environmentally protective standard project requirements (SPR) of the CalVTP, the collaborators developed the Coastal Vegetation Treatment Standards (Coastal VTS) to provide additional guidance and clarity for protection of ESHA and other coastal resources for projects implemented in the Coastal Zone. The Tomales Bay SP Forest Health and Wildfire Resilience PWP provides a project approval pathway for ecological restoration project(s) within the Tomales Bay SP designed to improve ecosystem health of degraded Bishop pine forest and other habitats with the co-benefit of reducing wildfire risk. Consistent with the Tomales Bay SP General Plan goals and guidelines, this PWP provides the review and approval framework to authorize individual vegetation management projects within the park over a 10-year term using principles, strategies, and best management practices that align ecological restoration and forest health with coastal resource protection.

The PWP serves as the framework for preparation of a planned joint Project-Specific Analysis (PSA) and California Environmental Quality Act (CEQA) Addendum (PSA/Addendum) pursuant to the CalVTP process and Coastal VTS, integrating both CalVTP and California Coastal Act (Coastal Act) requirements. This planned restoration project, which would be authorized using a NOID, must meet the standards of both the PWP and the CalVTP Program EIR. The joint PSA/Addendum and Coastal VTS provide concurrent compliance with CEQA and the Coastal Act. In the future, during the term of this PWP, if there are substantial changes to the planned project or additional projects proposed, a revised PSA/Addendum supplemented with new information, a new PSA, or other data demonstrating the project is consistent with the certified PWP, and an associated NOID, would be submitted. This PWP has also been designed for consistency with Marin County’s certified Local Coastal Program (LCP), as amended. Projects that are currently exempt from the Coastal Act will continue to be exempt and this PWP does not create new exemptions from the Coastal Act or LCP.

This PWP is divided into the following sections:

- ▶ Section 1: Introduction
- ▶ Section 2: Purpose and Need
- ▶ Section 3: Program Description
- ▶ Section 4: Summary of the CalVTP SPRs, CalVTP Mitigation Measures, and Coastal VTS
- ▶ Section 5: State and Local Planning Context

- ▶ Section 6: Planned PSA/Addendum and Coastal VTS Analysis
- ▶ Section 7: Administration, Approval Process, and Program Review
- ▶ Section 8: Glossary of Terms
- ▶ Section 9: References
- ▶ Section 10: Exhibits: Coastal VTS, CalVTP SPRs, and CalVTP Mitigation Measures

2 PURPOSE AND NEED

2.1 PURPOSE

The effects of fire suppression and climate change have altered and continue to impact the landscape of California. This combination of stressors has resulted in sensitive habitats that have both declined substantially in habitat quality and increased substantially in their vulnerability to severe wildfire.

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 and extreme temperature highs have also been prevalent in the last decade and are predicted to worsen as climate change continues to alter landscapes and local climates (NOAA 2023; IPCC 2023). The 2020 California wildfire season was a record-setting year of wildfires that burned across the state of California. As of the end of that year, nearly 10,000 fires had burned over 4.2 million acres, more than 4 percent of the state's roughly 100 million acres of land, making 2020 the largest wildfire season recorded by far in California's modern history. California's August Complex fire has been described as the first "gigafire" as the area burned exceeded 1 million acres. The fire crossed seven counties and has been described as "larger than the state of Rhode Island" (CAL FIRE 2020). The 4,929-acre Woodward Fire burned in Point Reyes National Seashore in August 2020, as well. The 2020 wildfires also included the CZU Lightning Complex Fire that burned from the coast range all the way west to the beach on the San Francisco Peninsula, confirming that Northern California coastal forests, long thought to be unlikely to experience severe wildfire, are also at great risk.

Prior to 2020, 2018 experienced the largest, most destructive, and deadliest wildfires on record in California history. Among the 2018 fires was the Woolsey Fire in the Santa Monica Mountains, which also burned to the coast traveling over 10 miles from its ignition point, ultimately burning a 15-mile-long stretch of the California coast. The mass destruction and elevated understanding of community vulnerability seen in the 2018 wildfire season ushered in a series of executive orders, legislation, and reports focused on identifying (a) the factors driving the level of catastrophic fire affecting the state, (b) the barriers to implementing fuel load reduction and forest resilience work at an appropriate pace and scale, and (c) the key tools and mechanisms necessary to turn the tide on this crisis and set the state on a trajectory that reduces the risk, severity, and impact of catastrophic wildfires. The California Forest Management Task Force's January 2021 *Wildfire and Forest Resilience Action Plan* is a clear call to action for increasing the pace and scale of forest health and fuel reduction actions, and places the essential work described in this Public Works Plan (PWP) within the critical context of state, regional, and local fire resilience efforts.

In addition to their direct human and ecological toll, these catastrophic wildfires exact a global climate toll from their greenhouse gas emissions. The California Air Resources Board, in their public draft December 2020 report *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*, estimates that California's 2020 wildfire season resulted in the release of approximately 112 million metric tons of carbon dioxide into the atmosphere (CARB 2020). This is equivalent to approximately 24.2 million passenger vehicles driven for an entire year (Bloomberg Law 2021).

To address ecosystem degradation and the hazardous fuel conditions resulting from decades of fire suppression and climate change, California State Parks (CSP) proposes to design, permit, and implement critical, high-priority ecological restoration treatment activities in Tomales Bay State Park (SP) that will improve resilience of forested areas of the park, preserve and steward Bishop pine forest by creating a mosaic of seral stages, restore native grasslands and shrublands, reduce future risk of catastrophic wildfire, and reestablish tribal priorities for vegetation management.

2.2 NEED

As with other areas of the state, native vegetation communities in Marin County, including in Tomales Bay SP, have been substantially altered by land use and management practices over the past 200 years. Climate change and drought are contributing to the decline in health and vigor of native vegetation communities in the region. Forests within Tomales Bay SP are in decline due to more than a century of fire exclusion and introduced pathogens. The last substantial fire in the Heart's Desire Area of the park burned in 1932 (CAL FIRE 2022). The 1995 Vision Fire burned portions of the three parcels composing the Inverness Area (CAL FIRE 2022) but did not affect most of the park. This lack of fire has resulted in insufficient forest regeneration due to heavy accumulation of dead and downed woody material, dense understory growth, and thick layers of litter and duff. Bishop pine forests throughout the Coastal Zone are in a state of decline owing to age senescence, lack of fire, pathogens, and prolonged drought (GGNPC and CSP 2022). Lack of fire has facilitated conifer encroachment and dense understory shrub development in oak woodlands and other hardwood forests, and enabled encroachment of pioneering shrub species and invasive grasses and forbs into native grasslands. These factors have degraded the habitat quality for native plant and wildlife species and interrupted natural ecosystem processes. Ecological restoration treatments are required to reestablish the balance in these systems. The following paragraphs describe in more detail the degraded ecosystem conditions in Tomales Bay SP that CSP would improve through the ecological restoration treatments.

Bishop pine forest faces numerous threats across its range including diminished water availability due to drought and changes in fog cover, fire suppression resulting in lack of regeneration that allows for long term conversion of Bishop pine dominated forest to hardwood dominated forest, and pathogens such as western gall rust (*Peridermium harknessii*) and pine pitch canker (*Fusarium circinatum*), which are present in the park and affecting Bishop pine vigor. The buildup of litter and duff, accumulation of downed woody debris, dense understory growth, and the large number of dead standing and dying trees from age senescence and pathogens has created hazardous fuel conditions that increase the potential for catastrophic wildfire in the park.

Many of the Bishop pine stands in Tomales Bay SP, particularly in the Heart's Desire area of the park, are nearing the end of their approximately 80- to 100-year life span and are not regenerating due to a lack of significant fire over the past approximately 90 to 100 years. Bishop pine is a closed-cone species and is dependent on fire to open the cones allowing seed release, consume the duff and litter layers exposing mineral soil, and facilitate seed germination from cones in the forest canopy. The natural fire process drives regeneration and establishes a new even-aged early seral stand. In the absence of natural fire and traditional burning by Coast Miwok, there is very little Bishop pine regeneration in the late seral stands and there are no early seral stage Bishop pine forest stands in the park. Bishop pinecones are moderately serotinous and will open in the absence of fire if temperatures are hot enough to melt the resins holding the scales closed, but regeneration will occur only if bare mineral soil is available with limited competition for light, space, and nutrients (Harvey and Agne 2021). In the absence of fire or vegetation treatment mimicking natural conditions, Bishop pine will not regenerate, and the late seral stage stands will die without reproducing sufficiently to maintain the forest.

Hardwood dominated forests within Tomales Bay SP are declining in some areas of the park due to the absence of fire and the presence of the pathogen *Phytophthora ramorum*, which causes sudden oak death leading to mortality in tanoak and coast live oak trees. Many tanoaks in Tomales Bay SP have been killed by sudden oak death contributing to a buildup of downed trees on the forest floor. High mortality of tanoaks and coast live oaks has facilitated growth of understory woody plants in gaps within many of the hardwood stands, including resprouting tanoaks that never fully mature due to suppression by the pathogen. The accumulation of downed woody material, the dense understory shrub growth, and the significant duff and litter layers has resulted in very little hardwood regeneration in some locations and has created a higher density of fuels in the understory, increasing the risk of catastrophic wildfire.

Marin manzanita (*Arctostaphylos virgata*), a rare manzanita species that is endemic to Marin County, is present in the Heart's Desire and Inverness Areas of the park, where it grows in openings in the Bishop pine and mixed evergreen forests. According to the California Natural Diversity Database (CNDDDB 2022 and California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2022), there are 24 occurrences of Marin manzanita that are known or presumed to still be in existence, though 18 of these 24 occurrences have not been censused in the last 20 years.

The distribution of Marin manzanita is extremely limited with occurrences known only from the Muir Woods watershed, Bolinas Ridge, Geronimo Ridge, and Inverness Ridge (NPS 2007, CNDDDB 2022). Like Bishop pine, Marin manzanita is dependent on stand-replacing fire for regeneration. It is an obligate seeder, meaning it reproduces only from seed and does not resprout from a burl or root crown following fire or cutting (NPS 2007). Dormant seeds stored deep in a persistent seed bank are stimulated to sprout by chemical compounds in smoke caused by fire (NPS 2007). Seedlings are not shade tolerant and rely on fire to create openings and bare mineral soil to reestablish. In the absence of fire in Tomales Bay SP, this species is declining due to shading and crowding by other shrubs and lack of regeneration.

In the absence of natural disturbances including fire and prehistoric native ungulate grazing, California annual and perennial grassland on Millerton Point in the East Shore Park Area is being encroached upon by coyote brush (*Baccharis pilularis*), a native pioneering shrub species. In the Millerton Area of the park, the Millerton Fire of 1987 and Shoreline Fire of 2001 were the most recent fires, but those fires burned only on the east side of State Route 1 and did not touch Millerton Point (CAL FIRE 2022). Succession of California native grasslands (also known as coastal prairies) to shrub and tree dominated communities due to lack of natural disturbances like fire and native ungulate grazing is a trend along the California coastline. In the absence of these disturbances, heavy buildup of thatch from introduced annual grasses is suppressing regeneration of native grasses and forbs. Marin checker lily (*Fritillaria lanceolata* var. *tristulus*) is a rare perennial herb that has been documented in the grassland on Millerton Point and could be threatened by buildup of thatch from annual grasses. Thatch buildup increases the risk of more intense fires that can kill mature native bunchgrasses and native forbs. Studies have shown that use of prescribed burning in grasslands decreases cover of nonnative annual grasses and thatch and increases cover of native grasses and forbs and dominance of native species (Witham et al. 1998). On coastal prairies of California's central coast, removal of grazing has been shown to reduce cover of native annual forbs and perennial grasses (Hatch et al. 1999; Hayes and Holl 2003) while spring burning has been shown to reduce introduced annual species seed production and thatch, and to increase native perennial grass seedling establishment. Summer burns have been shown to increase the number and vigor of native grasses (Menke 1992) and fall burns have been shown to increase cover of native grasses in California coastal grasslands (Hatch et al. 1999).

The coast in this region has become particularly vulnerable to catastrophic wildfires due to historic development and resource management patterns. High priority ecological restoration and wildfire risk reduction projects must be carried out at a greater pace and scale to promote fire resiliency in these coastal areas, while also protecting sensitive coastal resources. This PWP offers implementation benefits from the enhanced efficiency of concurrent California Environmental Quality Act (CEQA) and Coastal Act compliance.

To improve the ecological conditions of the park's forests, woodlands, and grasslands and reduce risks of catastrophic wildfire, this PWP provides a programmatic authorization tool that uses the CalVTP standard project requirements (SPRs) along with targeted strategies for coastal resource protection as defined in this PWP and Coastal Vegetation Treatment Standards (Coastal VTS). This PWP guides CSP in the design and implementation of multiple ecological restoration/forest health projects throughout Tomales Bay SP over a 10-year period. This PWP also creates a clear and agreed upon process for approval of projects submitted under the PWP (Section 6) that includes:

- ▶ Consultation among California Coastal Commission (Coastal Commission or Commission) staff, CSP staff, registered foresters or qualified professionals, Board of Forestry and Fire Protection, Marin County Fire Department, Marin County Planning Division of the Community Development Agency, the Federated Indians of Graton Rancheria, and local communities;
- ▶ Inclusion of the combined resource protection of both CalVTP SPRs and the Coastal VTS developed for Tomales Bay SP in the CalVTP PSA(s);
- ▶ Timeline for PSA review and approval under the PWP process, including through the preparation of a Notice of Impending Development (NOID); and
- ▶ A process for monitoring, enforcement, and programmatic review of ecological restoration projects.

This effort leverages significant collaboration between Commission and CSP staff over the past 14 months to develop a set of agreed-upon environmental protection standards applied to vegetation treatment described as the Coastal VTS (Exhibit A). The Coastal VTS and the CalVTP Program EIR together provide clear guidance on special requirements for protection of sensitive coastal resources when carrying out ecological restoration/forest health projects within the Coastal Zone. This PWP may also serve as a model that can be used by other CSP districts in coastal communities to address similar ecological restoration and wildfire resilience needs.

3 PROGRAM DESCRIPTION

3.1 OVERARCHING GOAL

This Public Works Plan (PWP) and the consistent projects that would be approved under it directly support the intent of Tomales Bay State Park's (SP's) forest health, ecological restoration, and wildfire resilience goals; California's climate goals; the goals of the 2021 *California Wildfire and Forest Resilience Action Plan*; Federated Indians of Graton Rancheria priorities for vegetation management; and the input from the staff of the California Coastal Commission (Coastal Commission or Commission) and Marin County's Local Coastal Program (LCP) for the protection of Environmentally Sensitive Habitat Areas (ESHAs) and other coastal resources in compliance with the Coastal Act. Approved projects will be implemented within or adjacent to ESHAs and will be designed to do the following.

- ▶ Proactively restore forest health and improve ecosystem resiliency by conducting ecologically minded forest health and wildfire resilience treatments in the park's forests, woodlands, and grasslands.
- ▶ Protect Tomales Bay by implementing ecological restoration projects across contributing watersheds.
- ▶ Encourage resilient forests through the reduction of dense understory growth, downed woody debris, and thick layers of litter and duff to facilitate forest regeneration and the long-term storage of carbon in forest and woodland trees and soils, thus promoting larger, healthier stands of mature trees.
- ▶ Minimize ecological impacts and the loss of forest carbon from large, intense wildfires through reducing the buildup of litter and duff, accumulation of downed woody debris, dense understory growth, and the large number of dead standing and dying trees resulting from years of fire suppression.
- ▶ As a co-benefit, promote public safety, health, and welfare and protect public and private property by reducing wildfire risk through the implementation of ecologically restorative treatments in the park.

3.2 PROJECT DESIGN

Vegetation communities and their associated faunal assemblages have evolved with specific disturbance regimes. These regimes result in a mosaic of habitats, and along with energy inputs and stability over time, are important drivers of diversity. In Mediterranean climates, such as those found in much of California, fire is the most important, large-scale natural disturbance regime driving the distribution and composition of vegetative communities.

Expanding human population, increased development into the wildland-urban interface, and policy that concentrated the state's resources on fire suppression, has resulted in significantly altered vegetation communities and increased fire risk to lives and property. These factors have been widely recognized and significant resources are now being directed towards forest management and fuels treatments. Project goals and treatments are focused on improving ecological health through the restoration of ecosystem processes, conditions, and resiliency. Ecological restoration would protect and improve forest regeneration and resilience and reduce fuels thereby reducing the risk of catastrophic wildfire. When developing vegetation treatment projects, the terms forest health, ecological restoration, and fuel reduction are often used interchangeably; however, they can either refer to markedly different treatments or end states, or ideally to very similar ones. In the broadest sense, a healthy forest or ecosystem is one that possesses the ability to sustain the unique species composition and processes that exist within it. This encompasses a system's biodiversity, including the plant, animal, and fungal assemblages that occur there, as well as the ecosystem processes and services that the forest provides, such as carbon sequestration, erosion control, and nutrient cycling. Managing for ecological restoration or forest health means managing to sustain and support these assemblages and processes and explicitly designing treatment projects to directly improve both ecosystem health and essential ecosystem services. Projects designed to meet these goals are referred to as "ecological restoration/forest health projects" in this PWP.

Fuel reduction, while often supporting forest or other ecosystem health objectives, is designed based on the type, arrangement, and quantity of flammable materials found in the landscape. By modifying any of the attributes mentioned above, fuel reduction projects seek to alter fire behavior, typically reducing intensity, rate of spread, or flame length to assist in control of wildfires. Although projects designed for the primary purpose of fuel reduction are not planned at Tomales Bay SP and are not part of this PWP, with vegetation serving as the major source of fuel in wildland fires, manipulation of vegetation to create ecologically resilient and healthy forests and other habitats has an accessory benefit of helping protect life and property from wildfire as well.

If appropriately designed and implemented, ecological restoration/forest health projects should achieve as many of the following goals as feasible:

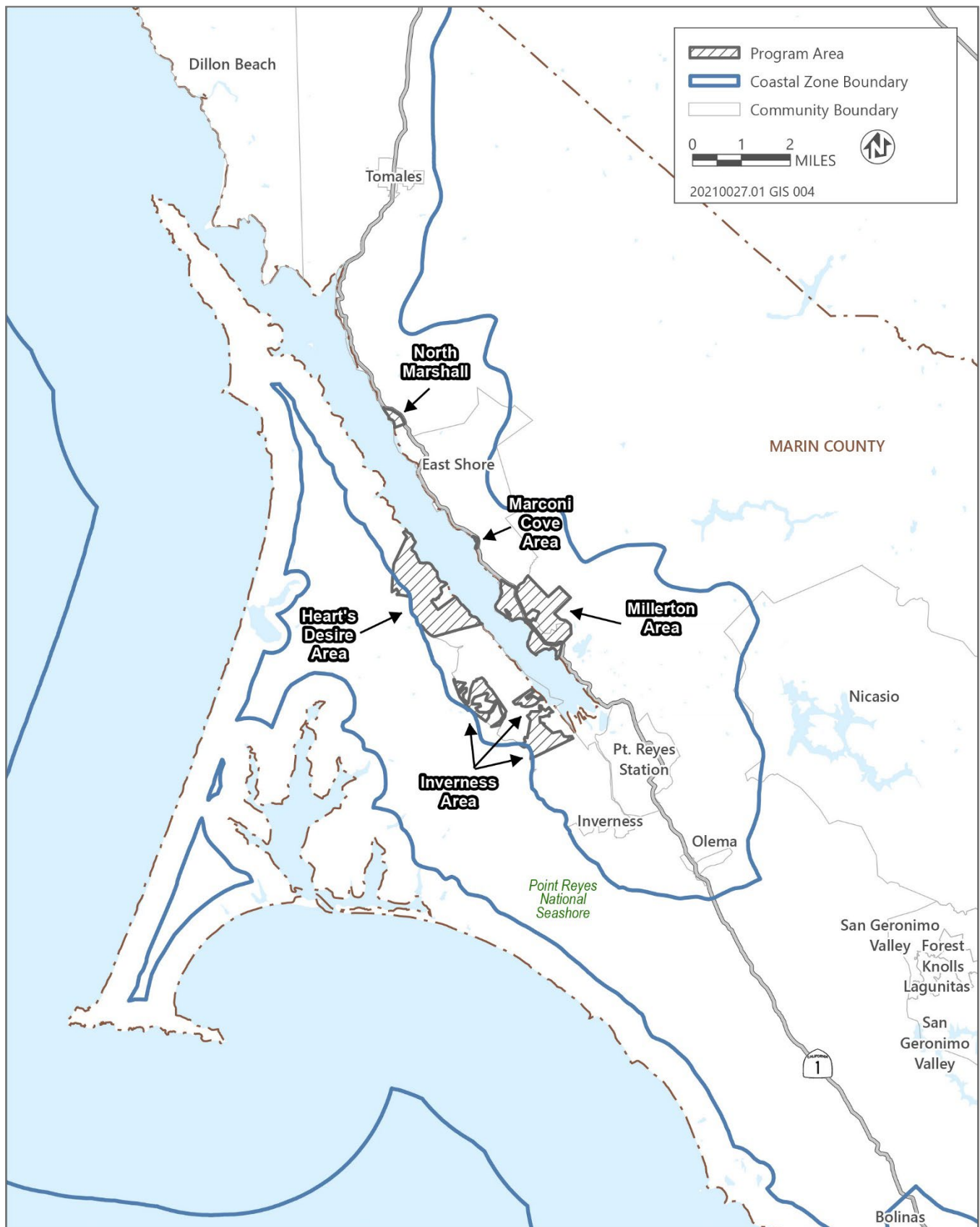
- ▶ promote a mosaic of native vegetation types that support diverse native floral, faunal, and fungal assemblages and are resilient to climate change and wildfire;
- ▶ improve habitat for rare, threatened, and endangered plant and animal species where they are present;
- ▶ increase the ability to manage wildfire and implement prescribed burning;
- ▶ reduce impacts to natural and cultural resources from fire suppression activities;
- ▶ maintain important cultural landscapes; and
- ▶ educate the public about the role of fire in California's landscapes and their role in it.

These goals acknowledge that complete re-establishment of fire regimes that existed during the evolutionary history of the plants and animals found within Tomales Bay SP cannot be replicated under current conditions. It is also accepted that even if historic fire regimes were re-established, these natural communities have been so altered that the effects of these regimes would not restore most of these communities to a pre-European contact state.

Given these constraints, where possible, evolutionarily appropriate fire regimes or surrogates (e.g., mechanical and manual treatment) for those regimes should be enacted or maintained. Literature provides peer-reviewed support for the design approach described in this PWP (Keeley 2002, Stephens et al. 2012, Vaillant et al. 2009).

To accomplish this vision of ecological restoration, wildfire resilience, and improved forest health, this PWP will guide development, approval, and implementation of high-priority ecological restoration/forest health projects within Tomales Bay SP's Coastal Zone over the next 10 years. Tomales Bay SP is the PWP Program Area and depicts the eligible area where activities under the PWP could occur (Figure 1). However, treatment activities will not likely occur across the entirety of this area due to access difficulties and for resource protection purposes, including those required by the SPRs and mitigation measures in the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (Program EIR) and Coastal Vegetation Treatment Standards (Coastal VTS).

Alternatives to the vegetation treatment types and activities covered under the CalVTP Program EIR were considered during development and public review of the Program EIR, as required by State California Environmental Quality Act (CEQA) Guidelines Section 15126.6. 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 Program EIR 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. A no program alternative and alternatives that modified or constrained the proposed vegetation treatment types and activities were evaluated in the Program EIR. Non-vegetation management and defensible space alternatives were also considered but eliminated from detailed analysis. The Alternatives can be found in Chapter 6 of the CalVTP Final Program EIR, Volume II at <https://bof.fire.ca.gov/projects-and-programs/calvtp-homepage/> (under "Read the CalVTP Program EIR and Supporting CEQA Documents"). The alternatives analysis in the Program EIR satisfied CEQA requirements for approval and implementation of CalVTP.



Sources: Data received from CSP in 2022, adapted by Ascent in 2023.

Figure 1 PWP Program Area and Coastal Zone Boundary

California State Parks (CSP) conducted a December 14, 2022, virtual community meeting where information on the Tomales Bay SP Forest Health and Wildfire Resilience Project was provided. After the meeting, CSP received a public comment requesting the consideration of alternatives, including several alternatives that were previously eliminated in the Program EIR. This PWP employs the treatment types and activities included in the Final Program EIR and does not include alternatives that were previously eliminated from the CalVTP.

Treatment projects covered by this PWP would seek to stimulate Bishop pine regeneration and establish early-seral stage stands using prescribed burning (primarily pile burning) to create controlled fire conditions necessary for cone opening to develop early-seral stage stands. Limited broadcast burning opportunities may exist in the understory of Bishop pine forests to mimic regeneration driven by stand replacing fire. Recognizing the risk of a crown fire and the proximity of neighboring communities, limited broadcast burning in small Bishop pine treatment areas would only be considered in collaboration with fire agencies and after extensive pretreatment, under specific weather and topographic conditions, or in areas where there are few surviving standing pine trees.

3.3 PROGRAM AREA

The Tomales Bay SP Forest Health and Wildfire Resilience PWP covers an area within Tomales Bay SP on the east and west sides of Tomales Bay, northwest of the unincorporated community of Point Reyes Station. The PWP Program Area (program area) encompasses approximately 2,433 acres where potential future project activities could take place. The Program Area is within Marin County's Coastal Zone and is covered by its LCP. CSP does not propose PWP activities to be implemented across the entirety of the program area, but at planned treatment locations within it. Figure 1 shows the geographic context of the PWP.

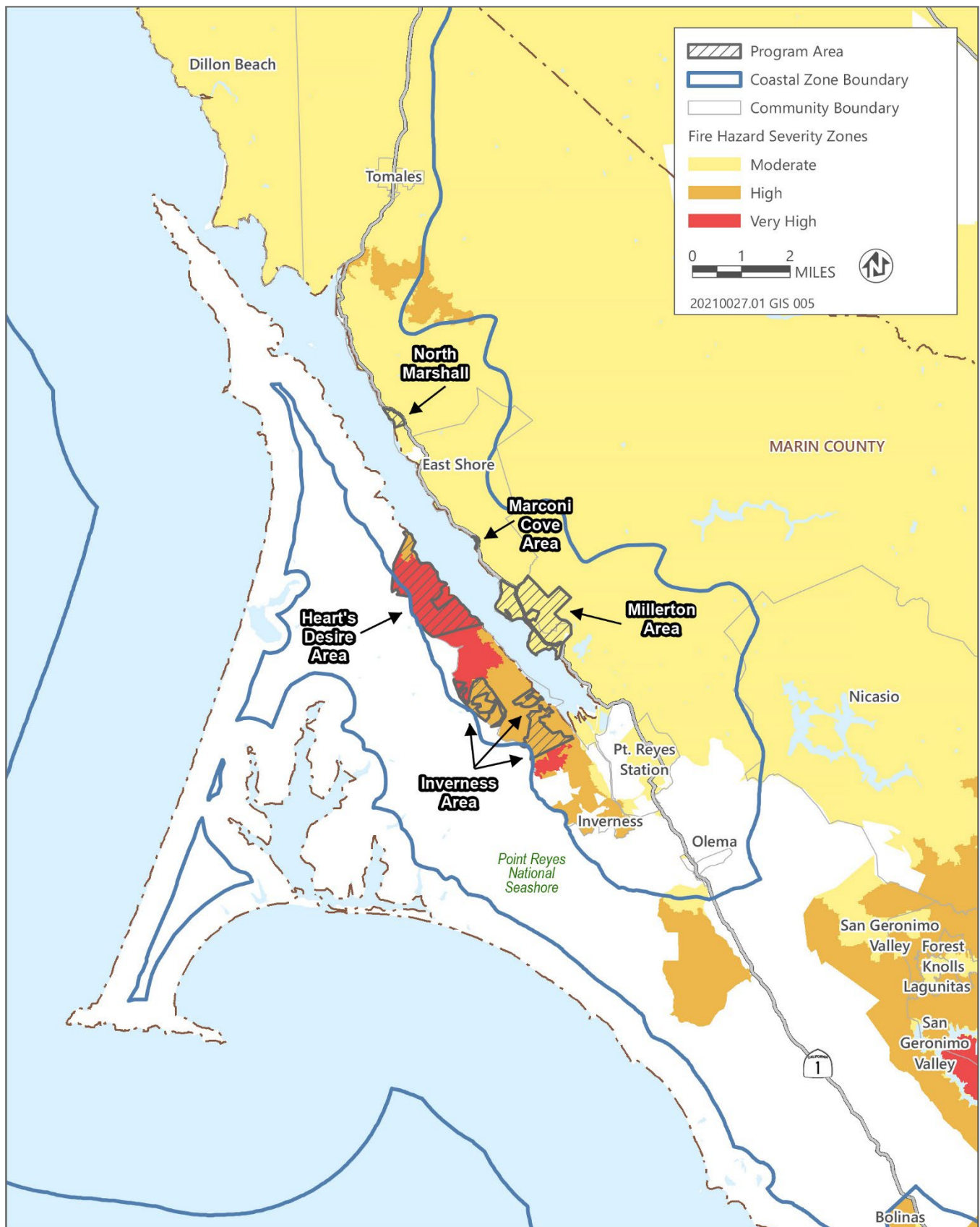
Figure 2 displays the program area overlain on the California Department of Forestry and Fire Protection's (CAL FIRE's) Fire Hazard Severity Zone Maps, which inform planning efforts within the program area about fire hazard. Figure 3 shows how the program area is covered by the CalVTP treatable landscape and its Program EIR. The PWP has been developed as a companion to the CalVTP. Figure 4 and Figure 5 illustrate the vegetation types within the program area and vicinity.

3.4 TYPES OF PROJECTS AND ACTIVITIES TO BE COVERED

The projects covered under this PWP are the ecological restoration treatment type under the CalVTP. The requirements in the CalVTP Program EIR provide planning guidance, environmental standards and analysis, SPRs, and mitigation and monitoring requirements. In addition, projects will be designed explicitly to meet the Coastal Zone-specific requirements contained in the Coastal VTS and in collaboration with Commission staff (Exhibit A).

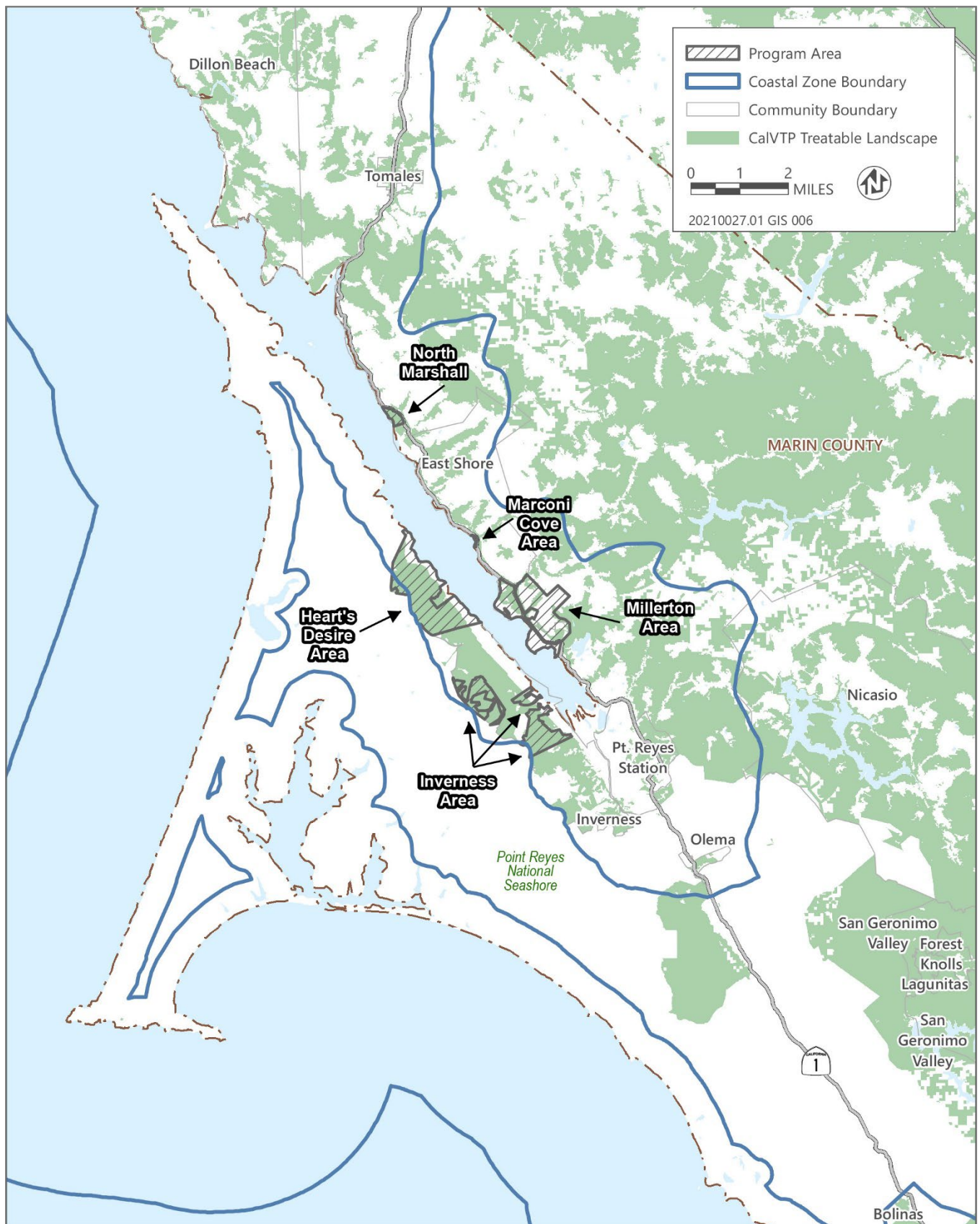
3.4.1 Coastal Vegetation Treatment Standard Project Type

The Coastal VTS for this PWP contemplates one project type (i.e., forest health projects) that is closely related to one of the treatment types defined in the CalVTP Program EIR (i.e., ecological restoration). Forest health projects provide ecological benefits and improve the habitat's fire resiliency, including within ESHAs, and are comprised of projects that qualify as the CalVTP ecological restoration treatment type. Fire prevention projects can include CalVTP WUI fuel reduction and fuel break treatment types, but those treatments are not proposed by CSP as part of this PWP; therefore, fire prevention projects have not been included in this PWP's Coastal VTS. Ecological restoration projects designed to meet these goals are referred to as "ecological restoration/forest health projects" in this PWP, are consistent with the definitions in the CalVTP, and have been cross-referenced with the terms used in the Coastal VTS.



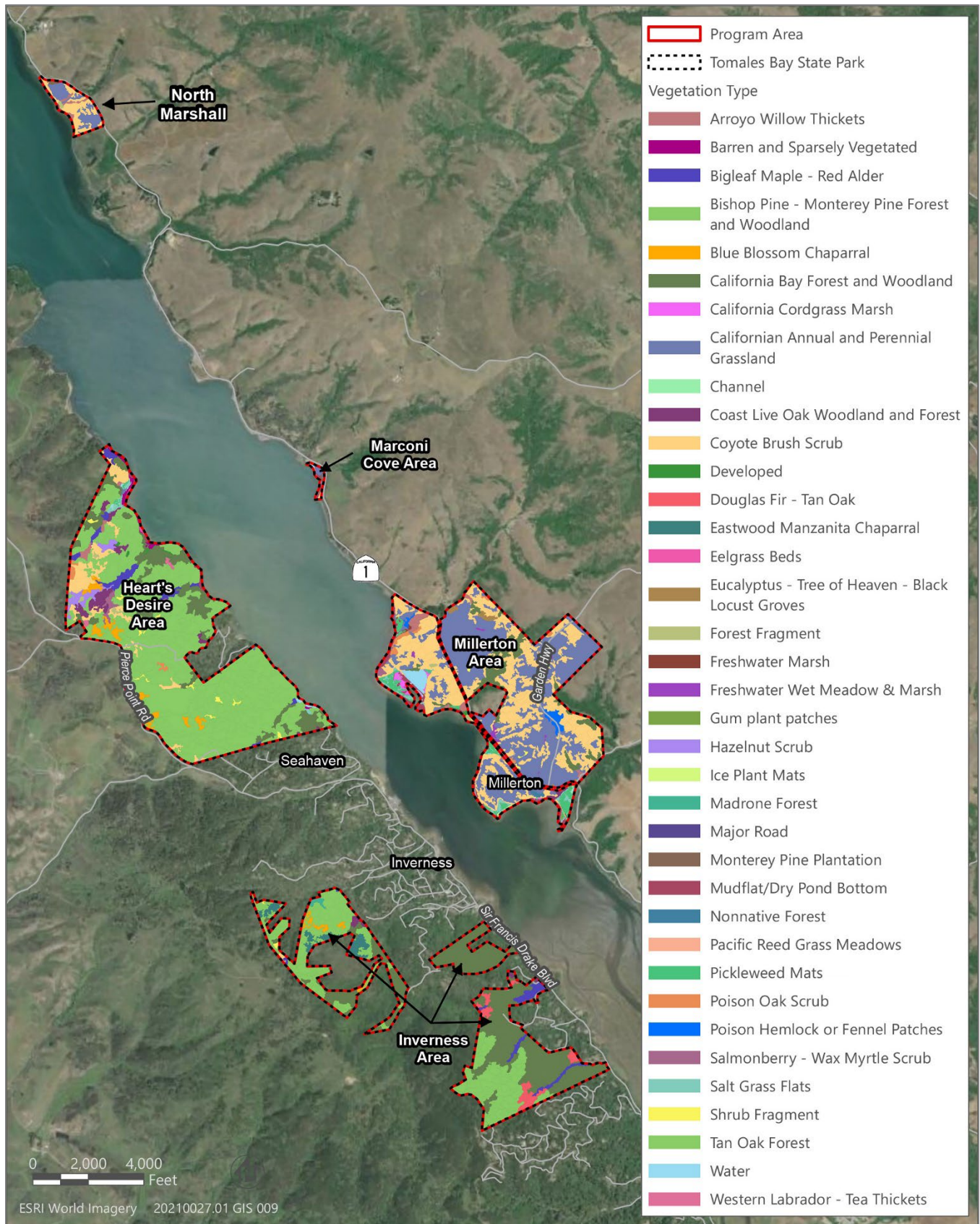
Sources: Data received from CSP in 2022, adapted by Ascent in 2023.

Figure 2 PWP Program Area and CAL FIRE Fire Hazard Severity Zones



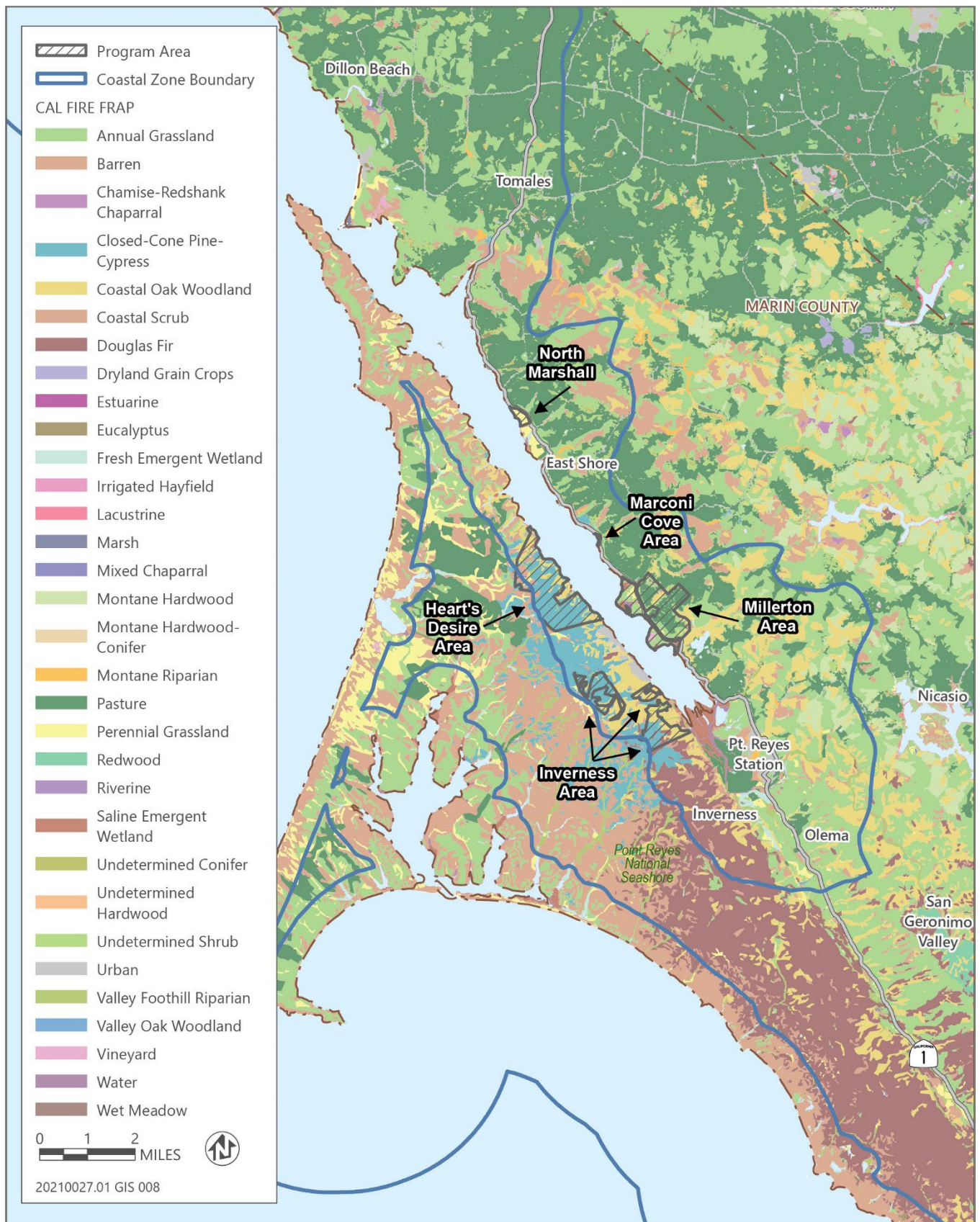
Sources: Data received from CSP in 2022, adapted by Ascent in 2023.

Figure 3 PWP Program Area and CalVTP Treatable Landscape



Sources: Data downloaded from Golden Gate National Parks Conservancy in 2021; adapted by Ascent in 2023.

Figure 4 PWP Program Area Vegetation Types



Sources: Data downloaded from CAL FIRE in 2015; adapted by Ascent in 2023.

Figure 5 PWP Program Area Regional Habitat Types

3.4.2 Projects Inside and Outside CalVTP Treatable Landscape

The CalVTP ecological restoration treatment type projects qualify as Coastal VTS forest health projects within the forests, woodlands, shrublands, and grasslands of the PWP area. In plant communities that have departed from their 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 value and services. These activities are designed to increase forest and ecosystem health, improve native species composition and age structure, and mitigate tree encroachment into coastal shrub and grassland ecosystems. Ecological restoration treatment also includes removing weedy and invasive species and diseased vegetation, with an emphasis on moderating uncharacteristic fuel build-up due to the deprivation of natural fire regimes. The forest health project standards in the Coastal VTS apply to the ecological restoration treatment type.

The CalVTP Program EIR provides coverage for ecological restoration treatment type projects in the CalVTP-designated treatable landscape. The treatable landscape is a combination of State Responsibility Area (SRA) lands and selected Local Responsibility Area (LRA) lands that fall under three categories: identified WUI areas, existing fuel breaks along ridgelines and roadways, and ecological restoration treatment areas. As described in Appendix PD-1 from the CalVTP Program EIR, the treatable landscape was developed for the entirety of California using three Geographic Information System (GIS)-based analyses that compared SRA land, selected LRA land, treatable categories, and vegetated landscapes dominated by tree, shrub, or herb communities.

Some areas adjacent to the treatable landscape fell outside of the treatable landscape identified in the CalVTP Program EIR because of mapping anomalies or because they fell outside the criteria for mapping the fuel types or treatment types. The scattered array of acres outside of the mapped CalVTP treatable landscape is due to the method by which the CalVTP treatable landscape was digitally developed and the resultant degree of mapping resolution. Using desktop applications to apply buffers around geographic and topographic features and demarcate jurisdictional boundaries (i.e., SRA and LRA), the method resulted in some treatable landscape areas that are shown on maps to be disjointed and scattered and some that are in held LRA areas surrounded by SRA. Areas not qualifying for the treatable landscape categories are omitted from analysis in the CalVTP Program EIR, but if they have landscape characteristics substantially similar to nearby treatable landscape, they can be covered by CalVTP requirements with a CEQA Addendum (pursuant to CEQA Guidelines Section 15164) integrated with the Project-Specific Analysis (PSA) (PSA/Addendum) to incorporate the non-treatable landscape within the PWP Program Area. With this approach, all treatment activities will be covered by the CalVTP, Coastal VTS, and PWP requirements. Figure 3 shows areas within and outside of the CalVTP treatable landscape in the program area.

Ecological restoration projects may extend into areas of Tomales Bay SP that are outside the GIS-created treatable landscape in the CalVTP Program EIR because of mapping anomalies. If treatment is proposed in these areas, they could be covered by a CEQA Addendum to the Program EIR, in which case CalVTP requirements would apply. Some of these areas contain hardwood forest habitat where the accumulation of downed woody material, dense shrub understory, and significant duff and litter layers have resulted in very little hardwood regeneration and have created a higher density of fuels in the understory. Ecological restoration would promote and enhance hardwood forest regeneration and resilience. Additionally, some of the shrub and grassland habitats on the east side of Tomales Bay SP are outside of the treatable landscape. Ecological restoration treatments in these areas outside the treatable landscape would mimic the beneficial effects of a low to moderate intensity wildfire; protect, expand, and improve grassland and shrubland habitats; and reduce fuels in the park through the removal of thatch, encroaching coyote brush, and invasive woody plants, such as French broom (*Genista monspessulana*), blue gum (*Eucalyptus globulus*), and silver wattle (*Acacia dealbata*).

3.4.3 Projects Exempt from CEQA

Tomales Bay SP may propose one or more projects that qualify for an exemption from CEQA (e.g., class 4 categorical exemption, CEQA Guidelines Section 15304). Under the PWP, projects in this category would still be designed and analyzed to meet the parameters of the Coastal VTS and all applicable elements of the CalVTP, but would not be approved as a project covered by the Program EIR. For example, a blue gum removal project along 0.5 acre of land

could prove valuable in reducing flammable vegetative fuel loads in a neighborhood setting. A project like this could be designed to replace nonnative vegetation with native species and would likely require authorization under the Coastal Act. The PWP anticipates these projects could be approved through the Notice of Impending Development (NOID) process with creation of a project document and supporting studies that are similar to the PSA and include the relevant measures and standards from the CalVTP and Coastal VTS.

3.4.4 Maximum and Minimum Intensity of Activities Proposed to be Undertaken

In addition to their ecological enhancement purpose, forest health projects will provide fire resiliency benefits in the Coastal Zone to protect against loss of life, property, and ecosystems from catastrophic wildfire. All projects under this PWP, specifically projects being conducted within ESHAs, will provide ecological benefit, either directly or indirectly, to the greatest extent feasible. In addition, forest health projects are explicitly designed to provide direct ecological benefits to local landscapes.

The CalVTP identifies five specific treatment activities that CSP may use to implement projects and meet project goals and objectives. This PWP has been developed to be consistent with the CalVTP, and the maximum and minimum intensity of activities proposed to be undertaken will be consistent with the analysis, evaluations, and limitations approved as part of the CalVTP Program EIR (refer to "Read the CalVTP Program EIR and Supporting CEQA Documents" at <https://bof.fire.ca.gov/projects-and-programs/calvtp-homepage/>). In addition to the CalVTP, all projects undertaken through this PWP will adhere to the Coastal VTS for projects in the Coastal Zone (Exhibit A) and all other Project Standards in Section 4 of this Plan. These standards were developed through extensive collaboration between CSP and Commission staff.

Minimum and maximum intensity of a treatment will be based on the project goals and objectives as well as the size and location of a project. Projects approved under this PWP may include any or all of the proposed treatment types and intensities. The five CalVTP treatment activities that are proposed for use in projects covered under this PWP include the following:

PRESCRIBED BURNING

The application of low-intensity fire onto target vegetation for purposes of ecological restoration includes pile burning and broadcast burning. Prescribed burns are carried out with appropriate preparation, such as creating a fire line by removing fuels that will prevent the fire's spread outside of the target area. Burns are planned and conducted in close coordination with fire personnel and carried out only when weather, air quality, and fuel conditions are optimal. Prescribed burning includes applying fire to coastal prairie to reduce thatch (fuels) and restore native vegetation; to a low intensity forest understory burn aimed at reducing ground fuels and fire intolerant species; to control the occurrence and spread of sudden oak death in hardwood forests. During initial treatments, State Parks proposes to use pile burning in Bishop pine stands to allow convective heat to open the serotinous cones stored in the tree canopy, promoting seed release, and mimicking conditions that create even aged early-seral stage stands.

Limited broadcast burning opportunities may exist in the understory of Bishop pine forests to mimic regeneration driven by stand replacing fire. Recognizing the risk of a crown fire and the proximity of neighboring communities, limited broadcast burning in small Bishop pine treatment areas would only be considered in collaboration with fire agencies and after extensive pretreatment, under specific weather and topographic conditions, or in areas where there are few surviving standing pine trees.

MECHANICAL TREATMENT

This treatment type focuses on the use of mechanical equipment to cut, uproot, crush/compact, or chop existing vegetation. Among a variety of uses, the most common and efficient manner is to use this equipment on slopes generally less than 35 percent to increase the health and vigor of the forest by reducing vegetation. This type of

treatment will primarily include mastication but may also include mowing shrubs and small trees, and in some cases skidding larger, felled dead trees.

MANUAL TREATMENT

This treatment focuses on the use of hand tools and hand-held power tools such as chainsaws, hand saws, or brush cutters, and pole-saws to remove target vegetation. These tools would be used to cut, lop, clear, or prune woody and herbaceous vegetation for thinning and removal, invasive plant removal, and shrub removal. Manual treatments may be used during burn unit preparation to reduce fuels around the perimeter and/or in certain areas within the burn unit to help achieve burn plan objectives. Manual treatments would generally be required on slopes greater than 35 percent and would be used in or adjacent to identified sensitive areas related to natural, cultural, and tribal resources.

PRESCRIBED HERBIVORY

This treatment uses domestic livestock (goats or sheep) to reduce target plant populations to accomplish specific vegetation goals. Prescribed herbivory treatments include the use of goats or sheep to graze or browse target vegetation and would be limited to scrubland and grassland habitats.

HERBICIDE APPLICATION

Herbicides are applied through ground application methods and used to target specific invasive species when other methods are not feasible due to their costs, effectiveness, or potential environmental impacts. Some applications are applied to new foliar growth of invasive species where uprooting may cause excessive soil disturbance. Other applications target the stumps immediately after the felling of woody invasive species to prevent resprouting. Examples of invasive species that occur in the park and are likely to be treated include jubata grass (*Cortaderia jubata*), cape ivy (*Delairea odorata*), blue gum, French broom, and acacia (*Acacia* spp.).

MAXIMUM SIZE OF FACILITIES PROPOSED TO BE CONSTRUCTED PURSUANT TO THE PWP AND THE PROPOSED TIMETABLE AND ANY PHASING OF DEVELOPMENT ACTIVITY CONTEMPLATED

No facilities are proposed for construction as part of this PWP. Projects addressed by this PWP only involve ecological restoration/forest health activities.

CSP is planning one ecological restoration/forest health project and associated CalVTP PSA/Addendum that will be submitted to the Coastal Commission for approval with a NOID. CSP has been working with technical advisors, stakeholders, and Coastal Commission staff to prioritize and develop ecological restoration/forest health treatments that will be implemented over the 10-year period of this PWP. No other projects at Tomales Bay SP are in the planning stages but if another project is planned, it would be submitted to the Coastal Commission to be approved through another NOID.

Projects approved under the PWP may include both an initial implementation phase and subsequent follow-up management at ecologically appropriate intervals. These planned intervals will be clearly described in information accompanying the NOID for each project. A project may include anywhere from one to many treatment areas.

The planned PSA/Addendum will be submitted to the Coastal Commission after the PWP has been approved by the Commission. CSP will define specific ecological restoration/forest health treatments consistent with the PSA/Addendum, Coastal VTS, and PWP and when they are planned to be implemented (considering available funding and seasonal workflow schedules). The NOID will include references to relevant information in the PSA/Addendum for review and approval for the purpose of coastal development authorization prior to conducting the project.

Coordination between CSP and Coastal Commission shall occur as early as feasible in the design process of each project to promote an efficient consistency review under the PWP (see Section 4, for more on administrative processes related to the PWP). The PSA/Addendum (and any future project documentation) shall include clear problem and goal statements (e.g., overall project goals, ecological goals) associated with the project proposed pursuant to this PWP and will be submitted as part of the NOID process. The statements are intended to assist CSP and Coastal Commission in developing mutual understanding of the potential impacts and benefits—both short and long term—for each project, and the structure for the problem and goal statements as articulated in the Coastal VTS. It is expected that this information will be derived from the PSA/Addendum's discussion of SPRs BIO-3 (Sensitive Natural Communities) and BIO-8 (Identify and Minimize Impacts to Coastal Zone ESHA), including the completed Coastal VTS documentation provided in the attachments section of the PSA/Addendum.

4 SUMMARY OF THE CalVTP SPRs, CalVTP MITIGATION MEASURES, AND COASTAL VTS

4.1 PWP PROJECT REQUIREMENTS

The California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report's (Program EIR's) standard project requirements (SPRs) and Mitigation Monitoring and Reporting Program (MMRP) tables contain the full accounting of applicable protective measures that will be implemented for projects under this Public Works Plan (PWP). The SPRs can be found in Chapter 2, "Program Description," of the CalVTP Final Program EIR, Volume II and the MMRP is located in Appendix B of the Final Program EIR, Volume I on the Board of Forestry and Fire Protection CalVTP webpage at <https://bof.fire.ca.gov/projects-and-programs/calvtp-homepage/>. Exhibit B provides a summary of SPRs that will be incorporated into PWP projects, as applicable, and a list of mitigation measures that may be required. The planned Project-Specific Analysis (PSA) and Addendum to the Program EIR (Addendum) (refer to Section 6, "Planned PSA/Addendum and Coastal VTS Analysis") and any future projects will address the requirements of the Coastal Vegetation Treatment Standards (Coastal VTS) provided in Exhibit A, the topics of which are listed below:

- ▶ Protect ecosystems
- ▶ Protect wetlands
- ▶ Protect Bishop pine forest
- ▶ Protect Marin manzanita
- ▶ Use the vegetation removal hierarchy
- ▶ Determine suitable use of prescribed burning
- ▶ Determine suitable use of prescribed herbivory
- ▶ Control invasive species
- ▶ Limit equipment types
- ▶ Limit herbicide use
- ▶ Limit fencing
- ▶ Limit accelerants
- ▶ Limit the need for soil stabilization
- ▶ Protect equitable coastal public access and recreation

4.2 PWP PROJECT STANDARDS

4.2.1 Project Standard 1. Qualifying PWP Projects

Projects subject to this PWP shall be limited to forest health projects, as defined in the Coastal VTS and undertaken within the PWP Program Area (program area) (Figure 1, above) over 10 years from the date of PWP certification. The California Coastal Commission (Coastal Commission or Commission) may grant an extension beyond 10 years with a future PWP amendment, if the Commission determines that additional time is warranted, and that the amendment is consistent with Coastal Act and relevant Local Coastal Program (LCP) requirements at that time.

4.2.2 Project Standard 2. Consistency with the CalVTP Program EIR

PWP projects shall be fully consistent with the requirements of the CalVTP Program EIR, including the SPRs and mitigation measures of the CalVTP Program EIR, except where more specifically addressed in Project Standard 3. These CalVTP Program EIR measures include, but are not limited to:

- ▶ Administrative standard project requirements, SPRs AD-1 through AD-9
- ▶ Aesthetic and Visual Resource standard project requirements, SPRs AES-1 through AES-3 and Mitigation Measure AES-3
- ▶ Air Quality standard project requirements, SPRs AQ-1 through AQ-6 and Mitigation Measure AQ-1
- ▶ Archaeological, Historical, and Tribal Cultural Resources standard project requirements SPRs CUL-1 through CUL-8 and Mitigation Measure CUL-2
- ▶ Biological Resources standard project requirements, including Special Status Plants, Environmentally Sensitive Habitat Areas (ESHAs), Invasive species, & Wildlife SPRs BIO-1 through BIO-12 and Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-2a, BIO-2b, BIO-2c, BIO-2d, BIO-2e, BIO-2f, BIO-2g, BIO-3a, BIO-3b, BIO-3c, BIO-4, and BIO-5
- ▶ Geology, Soils, and Mineral Resource standard project requirements, SPRs GEO-1 through GEO-8
- ▶ Greenhouse Gas Emissions standard project requirements, SPR GHG-1 and Mitigation Measure GHG-2
- ▶ Hazardous Material and Public Health and Safety standard project requirements, SPRs HAZ-1 through HAZ-9 and Mitigation Measure HAZ-3
- ▶ Hydrology and Water Quality standard project requirements, SPRs HYD-1 through HYD-6
- ▶ Noise standard project requirements, SPRs NOI-1 through NOI-6
- ▶ Recreation standard project requirement, SPR REC-1
- ▶ Transportation standard project requirement, SPR TRAN-1
- ▶ Public Services and Utilities standard project requirement, SPR UTIL-1

A summary of SPRs and mitigation measures from the CalVTP Program EIR are attached to this PWP as Exhibit B.

4.2.3 Project Standard 3. Coastal VTS

Projects shall be fully consistent with the Coastal VTS attached as Exhibit A.

4.2.4 Project Standard 4. Project and Program Monitoring

Monitoring for each PWP project shall occur consistent with all specified CalVTP monitoring requirements. In addition, 5 years following certification of this PWP, California State Parks (CSP) shall prepare a 5-year programmatic review identifying at a minimum: the status of individual projects implemented under the PWP, as well as projects expected to be implemented under the PWP; level of program completion (e.g., number of acres treated, high-priority areas for the subsequent 5 years, collective monitoring results, constraints and lessons learned, and program success). The programmatic review shall be submitted to the Coastal Commission and Marin County. At the 10-year anniversary of PWP certification, a 10-year programmatic review shall be prepared by CSP and submitted to the County and Coastal Commission for review.

5 STATE PARK AND LOCAL PLANNING CONTEXT

The 1981 Marin County Local Coastal Program (LCP), as amended, establishes the local coastal planning context of the Public Works Plan (PWP). The California State Parks (CSP) 2004 Tomales Bay State Park (SP) General Plan provides the state park planning context. Also, the cumulative planning context of other related projects proposed, planned, or currently underway in the vicinity informs this PWP.

5.1 MARIN COUNTY LOCAL COASTAL PROGRAM

The Marin County Board of Supervisors and the California Coastal Commission (Coastal Commission or Commission) approved the Marin County LCP in 1980 and 1981, respectively. The most recent certified LCP Amendments went into effect in August of 2021 and include the full LCP except for the environmental hazards policies that are currently in progress. The certified LCP environmental hazards policies from 2004 will continue in effect until amended. CSP has reviewed the LCP and collaborated with the Marin County Community Development Agency in development of this PWP. The PWP has been designed to meet the requirements of the LCP. As such, future forest health projects within the Coastal Zone and approved under this PWP would be consistent with the LCP and would not require additional approvals from Marin County. A summary list of the most relevant LCP policies is provided below.

- ▶ Significant stands of trees should be identified and protected (Policy C-ES-2)
- ▶ Support management of Tomales Bay State Park and Mount Tamalpais State Park consistent with the adopted General Plan (Policy C-PK-11)
- ▶ The resource values of ESHAs shall be protected by limiting development (Policies C-BIO-1, C-BIO-2, and C-BIO-3)
- ▶ Encourage restoration of degraded ESHAs (Policy C-BIO-5)
- ▶ Where feasible, require the removal of nonnative, invasive plant species, revegetation of denuded areas with native and non-invasive plants, and provision of primarily native, drought-tolerant plant species for areas of new or replacement planting (Policy C-BIO-6)
- ▶ Support and encourage the environmental conservation...and habitat restoration efforts of the California Department of Parks and Recreation (Policy C-BIO-28)

5.2 TOMALES BAY STATE PARK GENERAL PLAN

The California State Park and Recreation Commission approved the Tomales Bay SP General Plan in May of 2004. It implements the mission of CSP “[t]o provide for the health, inspiration and education of the people of California by helping to preserve the state’s extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.” The General Plan establishes the long-range vision for the park and includes goals and guidelines to protect and improve the park’s natural, cultural, and recreational values. The PWP is prepared to implement the applicable goals and guidelines of the General Plan. The projects that will be approved under the PWP focus on protecting and enhancing natural resources and biological diversity. The PWP has been designed to help implement the following General Plan objectives, goals, and guidelines:

- ▶ Manage for the enhancement and perpetuation of native plant species diversity and the biological integrity of native plant communities (Vegetation and Fire Management planning objective);
- ▶ Restore the role of fire in the natural ecological processes of the park (Vegetation and Fire Management planning objective);
- ▶ Improve regeneration and preservation of the aging stands of the park’s Bishop pines in the Heart’s Desire area, particularly at Jepson Memorial Grove, including investigation of the use of both low-intensity prescribed burning

and mechanical means to create openings allowing for natural seedling establishment (Area-specific proposals in Environmental Analysis and Guideline HD-1); and

- ▶ Retain natural values where the Marconi Cove Area property is narrowest, on the south end (Guideline MC-4).

Intended accessory objectives of the PWP include helping implement co-beneficial General Plan goals and guidelines to:

- ▶ Improve visitor safety by reducing potential hazards such as wildfire and anticipate wildfires and plan strategies to preserve sensitive park resources, ensure human safety, and protect property (Wildfire Safety Goal) and
- ▶ Consult Native American tribes and groups to ensure productive, collaborative working relationships for management practices, such as vegetation rehabilitation projects (Guideline CUL-3).

5.3 CUMULATIVE PLANNING CONTEXT

The cumulative planning context of the Tomales Bay SP ecological restoration/forest health projects is informative to the PWP. Related projects proposed, planned, or currently underway in the vicinity of the PWP area are summarized below to describe the cumulative planning setting. There are currently no reasonably foreseeable future vegetation projects that would remove Bishop pine habitat. The California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (Program EIR) satisfied the California Environmental Quality Act (CEQA) requirements for cumulative impact analysis related to vegetation treatment projects conducted consistent with that environmental document, such as the proposed Tomales Bay SP projects.

5.3.1 Point Reyes National Seashore Wildfire Management

In 2004, the Department of Interior, National Park Service (NPS) completed a Fire Management Plan/Environmental Impact Statement (FMP/EIS) for Point Reyes National Seashore and North District of Golden Gate National Recreation Area. Fire management identified in the FMP/EIS is being used to markedly increase efforts to enhance natural resources and reduce hazardous fuels. The NPS fire management includes prescribed burning and mechanical treatments to protect or enhance cultural resources, such as reducing vegetation in areas identified as important historic viewsheds. Prescribed burning in Bishop pine stands is conducted only if the burns are conducted under conditions that would result in germination and recruitment of new stands of Bishop pine. Prescribed burns in Bishop pine forest habitat have been small and carefully monitored to ensure burn objectives (recruitment and long-term maintenance of Bishop pine and associated native species without introduction of invasive plant species) were being met. For road clearing, trees along the sides of the roadways would be limbed up to 10 feet in height as needed. Native tree species that could be limbed include Douglas-fir and Bishop pine. Trees less than 4 inches in diameter at breast height (dbh) are removed from 10–15 feet wide corridors on each side of the road (measured from the edge of the roadway). This width can increase to 20 feet wide where roads cross topographic saddles. While the FMP/EIS concluded that some adverse impacts may occur, in all cases these adverse impacts would be temporary effects related to actions to preserve and restore park resources and values. Prescribed burning would stimulate reproduction in Bishop pine forest that would otherwise not take place. Overall, the fire management activities identified in the FMP/EIS would result in major benefits to park resources, including Bishop pine habitat, which would be restored.

5.3.2 Marin Wildfire Prevention Authority Vegetation Treatment Projects

The vegetation treatment work that the Marin Wildfire Prevention Authority (MWPA) currently has underway near Tomales Bay SP includes the West Marin Zone Evacuation Route Core Project, which consists of vegetation management within 10 feet of certain roadsides. This MWPA work includes thinning of ladder fuels and limbing trees within 10 feet of roads and up to 15 feet above roads. For the roadside treatments, mature trees may be limbed but would not be removed or killed. Some immature trees (less than 8 inches dbh) and shrubs would be thinned, and

weeds and grasses would be cut. The MWPA is considering additional project areas in and adjacent to communities in West Marin and has identified general project areas. At the time this document was written, those projects are conceptual and undergoing early scoping and would be subject to future CEQA and Coastal Act compliance. While awareness of these possible activities is important, until specific projects are proposed, they are not yet reasonably foreseeable probable future projects and their influence, if any, on the cumulative planning context of the CSP projects would be speculative.

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6 PLANNED PSA/ADDENDUM AND COASTAL VTS ANALYSIS

Ecosystems are undergoing significant change as the climate warms, forest health is declining as a result of increased pathogens and a lack of regeneration, and altered fire regimes and increased fuel loads are leading to more catastrophic wildfires. The Tomales Bay State Park (SP) Forest Health and Wildfire Resilience Project will be implemented under this Public Works Plan (PWP) in multiple project phases as funding becomes available. The goals of this project are to preserve and steward the park's Bishop pine and mixed hardwood forests, improve resilience of the forests and other habitat areas of the park for ecological benefit, reduce wildfire risk, and reestablish tribal priorities for vegetation management in the park.

A Project-Specific Analysis (PSA) and California Environmental Quality Act (CEQA) Addendum (PSA/Addendum) consistent with the California Vegetation Treatment Program (CalVTP) and its associated Program Environmental Impact Report (Program EIR) is being prepared for this project and will be submitted to the California Coastal Commission (Coastal Commission or Commission) after the approval of this PWP. The PSA/Addendum will document that the project is implementing the applicable standard project requirements (SPRs) and mitigation measures of the Program EIR and the Coastal Vegetation Treatment Standards (Coastal VTS). The PSA/Addendum will be reviewed and approved by California State Parks (CSP) and then submitted to the Coastal Commission to confirm that it meets the criteria for consistency with this PWP. Tribal partners, US Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and Marin County Community Development Agency will be provided an opportunity to review the PSA/Addendum and provide input on relevant resource protection measures. During preparation of the PSA/Addendum and PWP, CSP provided draft project and treatment descriptions for this project to the public upon request and conducted a community meeting and other outreach to provide information on this project, as summarized at https://www.parks.ca.gov/?page_id=31231.

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7 ADMINISTRATION, APPROVAL PROCESS, AND PROGRAM REVIEW

The purpose of this chapter is to set forth procedures for reviewing and authorizing projects contained in California State Park's (CSP's) Tomales Bay State Park (SP) Forest Health and Wildfire Resilience Public Works Plan (PWP) for vegetation treatment in the Coastal Zone that is carried out pursuant to the planned CSP Project-Specific Analysis (PSA) and California Environmental Quality Act (CEQA) Addendum (PSA/Addendum)(and any future ecological restoration/forest health projects) and Board of Forestry and Fire Protection's final Program Environmental Impact Report (Program EIR) for the California Vegetation Treatment Program (CalVTP).

7.1 ROLES AND RESPONSIBILITIES

This PWP will help expedite implementation of a series of projects in a comprehensive and coordinated manner to help meet the state's vegetation treatment goals outlined in the CalVTP. As part of this effort, two primary agencies will participate in the PWP process; their roles and responsibilities are as follows:

- i. The California Coastal Commission (Coastal Commission or Commission) shall be responsible for reviewing and acting on the PWP and any amendments to it, as well as all PWP components, including reviewing and acting on the draft and final Project-Specific Analyses submitted as part of the Notice of Impending Developments (NOIDs), reviewing and acting on all related NOIDs, enforcing NOID (project) conditions, and reviewing monitoring reports.
- ii. CSP shall be responsible for drafting the PWP and any amendments, releasing them for public review, and approving them prior to Commission consideration, as well as preparing all proposed NOID (project) components, including drafting the planned PSA/Addendum (and any future projects), public noticing of NOIDs, submitting NOIDs to the Commission, and preparing and submitting any other project materials to the Commission. CSP shall ensure that individual projects are developed in coordination with the Commission and in compliance with the PWP and CalVTP Program EIR. CSP shall also be responsible for monitoring and enforcement of project conditions. CSP may partner with other agencies, landowners, and others to implement the responsibilities above but shall be responsible for implementation of the PWP and NOID processes.

7.2 PROCEDURES FOR PWP FILING AND CERTIFICATION

For convenience and clarity, this section summarizes relevant statutory and regulatory requirements that apply to the adoption, amendment, and implementation of PWPs. It does not modify those requirements nor preclude their amendment by the Coastal Commission through statutory and regulatory means.

A PWP is a land use planning document that plans and sets a framework for implementing a specific public works project or array of public works-related activities. A PWP provides a land use planning alternative to Local Coastal Programs (LCPs) for obtaining approval of large or phased public works projects, as well as any development proposed, including vegetation treatment for forest health or fire prevention purposes, and remains under the authority of the Coastal Commission irrespective of coastal permit jurisdictional boundaries. A PWP is an alternative to project-by-project review for public works, which would otherwise require multiple coastal development permits for different components of the public works project. A PWP must be sufficiently detailed regarding the size, kind, intensity, and location of development to allow the Coastal Commission to determine its consistency with the policies in Chapter 3 of the Coastal Act (pre-LCP certification) or the certified LCP (post-LCP certification). Once the Coastal Commission certifies a PWP, no coastal development permit is required for development that is consistent with the PWP. Instead, the project proponent (in this case, CSP) provides a NOID to the Coastal Commission and other interested persons. The Coastal Commission then reviews the NOID for consistency with the approved PWP; if the Coastal Commission determines that the proposed development described in the NOID is consistent with the PWP, the development may proceed. If the proposed development is not consistent with the PWP, the Coastal Commission

will apply conditions to that specific project to achieve consistency with the PWP. If the NOID describes development that is not within the scope of the PWP, the Commission will not accept the NOID for filing, and CSP will need to obtain a PWP amendment before proceeding with it.

The Coastal Commission PWP review and approval process does not supplant the review processes required of CSP or agencies other than the Coastal Commission by CEQA, National Environmental Policy Act (NEPA), or other laws and regulations. Compliance with the CEQA, NEPA and/or other regulatory requirements are addressed at the project level, such as the CalVTP Program EIR and a project's CalVTP PSA or PSA/Addendum.

Prior to the filing of a PWP for certification by the Coastal Commission, and pursuant to Coastal Act Section 30503 and Sections 13353.5 and 13515 of the Commission's regulations, maximum opportunities for public participation must be afforded. A public review draft PWP must be made available to the public at least 6 weeks prior to local adoption of the PWP, including posting the public draft PWP to CSP's website and transmitting it to: members of the public; each local government contiguous with the area subject to the PWP; local governments, special districts, or port or harbor districts that could be directly affected by or whose development plans should be considered in the PWP; relevant regional, state and federal agencies; and local libraries and media. Posting can be done through electronic means and does not need to be conducted via hardcopy. Further, pursuant to Section 13515(d) of the Commission's Regulations, CSP must provide notice of the local hearing on the public draft PWP "not less than ten (10) working days before the hearing." The hearing should also be scheduled for a specific time and, when feasible, the hearing should be held in the Coastal Zone or in a place easily accessible to residents of the Coastal Zone.

The Public Draft of this PWP is being released on December 18, 2023, for public review and comment, which will continue throughout the Coastal Commission review and authorization process. The draft document will be distributed for public review and comment for 6 weeks, during which time public comment is solicited.

Section 30605 of the Coastal Act allows PWPs to be submitted to the Coastal Commission for review in the same manner prescribed for the review of LCPs as set forth in Chapter 6 (commencing with Section 30500 of the Coastal Act). Sections 13371 and 13356(b)(2) of Commission's Regulations require that the Coastal Commission not approve or adopt a PWP unless it finds that there are no feasible alternatives or feasible mitigation measures available that would substantially lessen significant adverse impacts that the development may have on the environment. Section 21080.5(a) of CEQA, Section 30605 of the Coastal Act, and Section 13355 of the Commission's Regulations also require the distribution of environmental information sufficient in detail to enable the Coastal Commission to determine the consistency of the plan with the policies of the Coastal Act or LCP, as applicable.

The Board of Forestry and Fire Protection has prepared the CalVTP Final Program EIR (November 2019) to evaluate the potential environmental impacts of the proposed CalVTP treatment activities undertaken across the state. CSP is preparing a CalVTP PSA/Addendum to confirm the project is consistent with the Program EIR. The Coastal Commission's environmental analysis for this PWP may draw on facts from the CalVTP Program EIR and PSA/Addendum. However, the Coastal Commission has the authority and duty to conduct its own review of the PWP, any amendments, and any project-specific NOIDs under the Coastal Act. Such review will also satisfy any obligations to conduct CEQA review under its certified regulatory program.

This PWP provides for a 10-year period in which projects may be carried out consistent with the provisions of the PWP. The Commission may grant an extension to this timeframe through a future PWP amendment if the Commission determines that additional time is warranted, and that the amendment is consistent with Coastal Act and relevant LCP requirements at that time.

If the PWP needs to be amended following its certification by the Commission, Sections 13365 – 13371 of the Commission's Regulations govern the process for such amendments. Section 13366 of the Regulations requires CSP "to demonstrate that a public hearing at the local level has been held on the proposed amendment within a reasonable time prior to submission of the amendment application to the Commission" consistent with the standards of Section 13353.5 of the California Code of Regulations. Pursuant to Section 13367, a PWP amendment application shall be rejected if it would "lessen or avoid the intended effect, or any conditions, of a certified public works plan." If accepted, the PWP amendment application would be noticed and scheduled for hearing as either a minor amendment (pursuant to Section 13368) and heard at the next regularly scheduled Commission hearing, or as a

regular amendment (pursuant to Section 13369) and processed in accordance with Sections 13370-71. The hearing requirements for review of the PWP amendment would be the same as provided for review of a PWP, as provided in Section 13356. Any amendments will need to be found consistent with Chapter 3 or the Coastal Act or any relevant LCPs, as they exist at that time.

Lastly, after certification of the PWP, the Coastal Commission continues to retain permit jurisdiction over development on tidelands, submerged lands, and public trust lands, whether filled or unfilled, within CSP's service area. Under the Federal Coastal Zone Management Act, the Commission also retains federal consistency review authority over federal agency activities and federally licensed or permitted activities on or adjacent to the project sites. Projects neither covered by the PWP nor located in the Commission's retained permit jurisdiction shall be reviewed by Marin County for consistency with its certified LCP.

7.3 PROJECT REVIEW AND AUTHORIZATION UNDER THE PWP

Consistency determinations for individual projects proposed as part of the PWP are made by the Commission and are subject to public review and comment and a public hearing. Sections 30605 and 30606 of the Coastal Act and Title 14, Section 13359 of the California Code of Regulations (CCR) govern the Commission's review process for development proposed pursuant to a certified PWP. Section 30606 of the Coastal Act requires the public agency (i.e., CSP) proposing the public works project to provide a NOID to the Coastal Commission (and other interested parties, organizations, and governmental agencies), along with data demonstrating the project is consistent with the certified PWP. Once a NOID is deemed complete, it is scheduled for a public hearing within 30 working days, at which time the Coastal Commission determines whether conditions are required to bring the project into conformance with the approved PWP.

For the purpose of submitting a NOID for an individual project, CSP shall comply with the following procedures and prepare the following documents:

- i. **Project Development:** Prior to preparing data demonstrating the project is consistent with the certified PWP, CSP shall initiate discussion of a proposed project with Coastal Commission staff by providing the project location and scope and detailing the anticipated benefits and impacts of the project, including expected impacts to coastal resources and potential SPRs and mitigation measures.
- ii. **Site Visits:** To the extent feasible, CSP and relevant Commission staff shall visit the areas proposed for vegetation treatment prior to the drafting of the PSA, PSA/Addendum, or other data, as specified below. At a minimum, Coastal Commission staff shall provide preliminary comments on proposed projects to identify potential issues of concern or suggest project alternatives to explore.
- iii. **Draft PSA, Draft PSA/Addendum, or other data demonstrating the project is consistent with the certified PWP:** CSP shall oversee the drafting of a PSA or PSA/Addendum, if needed, in accordance with the CalVTP Program EIR, or other data demonstrating the project is consistent with the certified PWP. If a Draft PSA or Draft PSA/Addendum is needed, it shall be completed in accordance with the requirements of the CalVTP Program EIR to determine whether the project qualifies as within the scope of the Program EIR, or that the project will not result in any new or substantially more significant impacts than as described in the Program EIR or CalVTP. For CalVTP projects that fall partially outside the treatable landscape, a PSA/Addendum shall be prepared in compliance with CEQA Guidelines Section 15164. In this case, CSP will be required to develop all relevant sections of a PSA or PSA/Addendum, and a description of how the project adheres to the Coastal Vegetation Treatment Standards (Coastal VTS) in order to be included under this PWP.

The PSA, PSA/Addendum, or the other data demonstrating the project is consistent with the certified PWP will include the following:

- a. a description of the proposed project, including a narrative description of the size, kind, intensity, and location of each proposed development and the supporting site plans and elevations thereof;

- b. environmental documentation for the project(s) including information and CEQA discretionary actions prepared pursuant to or in addition to the CalVTP Program EIR, and an analysis of alternative locations for each proposed development activity, if warranted, due to significant impacts on Environmentally Sensitive Habitat Areas (ESHAs) or other coastal resources that could be avoided or minimized by implementing in a different location;
 - c. all technical reports associated with the project(s) (i.e., biological reports, geotechnical reports, traffic analyses), including all reports and plans required by the Program EIR and PWP;
 - d. the results of consultation with parties interested in, with jurisdiction over, and/or affected by the project(s), including consultations with concerned public entities and agencies and any additional consultation that might be required or needed;
 - e. all implementing mechanisms associated with the project(s) (including but not limited to CEQA mitigation monitoring reports, legal documents, landowner authorization, etc.); and,
 - f. all public comments received regarding the project(s).
- iv. Final PSA, PSA/Addendum, or other data demonstrating the project is consistent with the certified PWP: Following review of the Draft PSA, Draft PSA/Addendum, or other data by Commission staff and other interested parties, CSP shall prepare a Final PSA or PSA/Addendum as required by the CalVTP Program EIR, or other data, that incorporates requested revisions and includes the components required under iii above. The Final PSA or PSA/Addendum shall be completed in accordance with the requirements of the CalVTP Program EIR to determine whether the project qualifies as within the scope of the Program EIR (or other data demonstrating consistency with the PWP) and shall comply with the Coastal VTS.
 - v. Preparation and Submittal of a Notice of Impending Development: Following development or in conjunction with preparation of the Final PSA, Final PSA/Addendum, or other data, CSP shall prepare a NOID for each project or batch of projects for Commission review and approval consistent with the PWP. Unless there are unusual or exigent circumstances, CSP shall give advanced written notice to the Coastal Commission Executive Director of its intent to submit a NOID prior to submitting the NOID. CSP shall coordinate with the Executive Director to ensure that a NOID is not submitted at a time when it would be legally infeasible for the Commission to bring the item to hearing within 30 working days from being submitted and filed as complete (e.g., when the Commission is not holding a hearing in a particular month). The NOID shall adhere to and include the following procedures and materials:
 - a. Mailed/Emailed Notice. At least 30 working days prior to undertaking development activities, CSP shall give written notice of its intent to implement a project by submitting a NOID. CSP shall send the NOID via first-class mail, e-mail, or other reasonable means, to the following persons, parties and agencies: the Coastal Commission's Executive Director; owners of record of each property within 100 feet (excluding road rights-of-way) of the proposed project(s); persons residing on properties located within 100 feet (excluding road rights-of-way) of the proposed project(s), as well as those persons residing in greater distances that may need to be noticed pursuant to the CalVTP SPRs and mitigation measures; all local governments and special districts that could be affected; all regional, state, and federal agencies that may have an interest in or be affected; all other persons, parties, and agencies who have requested to receive such notice, either for the project(s) that is the subject of the notice or for all PWP projects; and persons, parties, and agencies that are known by CSP to be interested in the specific project(s) that is the subject of the notice (e.g., persons, parties, and agencies that submitted testimony or other comments during the CEQA/NEPA process for the PWP). CSP should also post the NOID on its website in a downloadable format.
 - b. Notice Content. The NOID shall be clearly titled as such and shall, at a minimum, include the following information:
 - i. The description of the proposed project(s), including a narrative description of the size, kind, intensity, and location of each proposed development as well as an identification of the existence of the Final PSA/Addendum (or documentation for future proposed projects), including the existence of

- supporting materials and documentation (e.g., maps, technical documents), and information regarding where and when the NOID and supporting material is available for public review (including where the Final PSA/Addendum and supporting materials and documentation can be downloaded);
- ii. CSP's approval of the project(s), including any locally-adopted resolutions or identification numbers for filing purposes if available;
 - iii. The anticipated date of commencement of development of the project(s);
 - iv. The appropriate CSP contact person(s) and her/his contact information;
 - v. The process for Coastal Commission review of the project(s) (including Coastal Commission contact information and proposed Commission date of action on the NOID).
- c. Posted Notice. CSP shall post the NOID in conspicuous locations at the proposed project(s) site(s) no later than the date that the NOID is sent pursuant to v.a. above, (i.e., at least 30 working days prior to commencement of development activities). The Notice shall comply with the following requirements:
- i. Notices that are posted shall be printed, clearly visible, and laminated or otherwise weatherproofed so as to be legible at all times.
 - ii. Notices shall be posted at locations on the perimeter (and/or within the perimeter as appropriate) of the proposed project site where the site intersects public use areas (e.g., streets, paths, parking lots). Where project sites do not contain intersections with public use areas, at least one notice shall be posted at the project site entryway. Notices shall also be posted at the CSP office and sent to the Coastal Commission's North Central Coast District office for posting.
 - iii. Notices shall indicate that a NOID has been submitted to the Coastal Commission for the proposed development and shall contain a general description of the nature of the proposed development, as well as Coastal Commission contact information and the date of proposed Commission action on the NOID.
 - iv. Notices that do not meet the criteria listed above, that otherwise become illegible, or that otherwise are not visible to pedestrians or disappear (for whatever reason) shall be replaced. All notices shall remain posted until the effective date of authorized commencement of development.
- d. Supporting Materials. Supporting information sufficient to allow the reviewer to determine whether the proposed project is consistent with the certified PWP shall accompany the NOID sent to the Executive Director. At a minimum, the supporting information shall include:
- i. the Final PSA, Final PSA/Addendum, or other data;
 - ii. any final authorization documents from CSP (e.g., resolutions, minute orders, certifications, etc.) not included in the Final PSA, Final PSA/Addendum, or other data;
 - iii. copies of all public comments received regarding the proposed PWP project;
 - iv. the proposed method of financing the activity, including any grants provided by a public entity; and
 - v. for the Executive Director only: (a) A mailing list with names and addresses for each of the persons, parties, and agencies listed in v.a above, where the list is labeled and organized by each of the categories listed; (b) One set of plain (i.e., unadorned with no return address) regular business size (9½ inches by 4½ inches) envelopes stamped with first class postage (metered postage is not acceptable) addressed to each of the listed addressees from v.a, above, for each Commission hearing (if applicable) on the matter (i.e., if there are multiple Commission hearings on the matter, then multiple envelope sets shall be provided as directed by the Executive Director); alternately, CSP may provide a combination of valid email addresses, media, and envelopes in a manner acceptable to the Executive Director of the Commission to ensure transmittal of the Commission hearing notice to all parties in v.a above, and, (c) Evidence that the Notice of Impending

Development has been posted pursuant to the parameters of v.c, above, (e.g., a site plan with the notice locations noted and/or photos of the notice locations attached).

Any proposed Development that is exempt from permitting requirements pursuant to the certified LCP and its provisions carrying out Section 30610 of the Coastal Act and Sections 13250–13253 of the Commission’s regulations, is also exempt from needing to obtain any authorization through the NOID process. Likewise, consistent with the certified LCP and its provisions carrying out Sections 13250 – 13253 of the Commission’s regulations, Development that would be exempt except for its location in a sensitive area—such as repair and maintenance work taking place in environmentally sensitive habitat area—requires authorization through a NOID. Development that is categorically excluded from needing a coastal development permit pursuant to the certified LCP also does not require authorization through a NOID.

7.4 COASTAL COMMISSION REVIEW OF PWP COMPONENTS, INCLUDING NOIDS

The Coastal Commission shall review project(s) for consistency with the PWP in accordance with the procedures of this Section.

i. Filing the NOID

Consistent with 14 CCR Sections 13357(a)(5), 13359(a), and 13353–13354, unless there are unusual circumstances, within five working days of receipt of the NOID and all applicable supporting information of the project(s), the Executive Director shall review the submittal and shall determine whether additional information is necessary to determine if the proposed project(s) is/are consistent with the PWP, and if additional information is deemed necessary, shall request such information from CSP.

- a. The NOID shall only be deemed filed if the Executive Director determines that the information supplied is consistent with the information requirements of Coastal Act Section 30606 and 14 CCR Sections 13357(a)(5), 13359(a), 13353, and 13354 and is sufficient to allow the Commission to determine whether the proposed project is consistent with the certified PWP.
- b. If the Executive Director has requested additional supporting information needed to determine consistency with the PWP, then the Notice shall be deemed filed when the Executive Director determines that all necessary supporting information has been received.

ii. Coastal Commission Hearing Deadline

Consistent with 14 CCR Sections 13357(a)(5) and 13359, the thirtieth working day following the day the NOID is deemed filed is the Hearing Deadline. The Hearing Deadline may be extended if, on or before the Hearing Deadline, CSP waives its right to a hearing within thirty working days and agrees to an extension to a certain date, no more than three months from the Hearing Deadline, to allow for Commission review of the proposed project(s) at a later hearing.

iii. Coastal Commission Review and Determination of Consistency with PWP

The Executive Director shall report in writing to the Commission regarding any pending proposed project(s). The Coastal Commission shall review the proposed project(s) at a scheduled public hearing prior to the Hearing Deadline.

The Executive Director’s report to the Commission shall include a description sufficient to allow the Commission to understand the location, nature, and extent of the project(s), and a recommendation regarding the consistency of the proposed project(s) with the certified PWP. On or before the Hearing Deadline the Commission shall make one of the following determinations:

- a. Determine that the proposed project(s) is/are consistent with the certified PWP, or

- b. Determine that conditions are required to render the proposed project(s) consistent with the certified PWP, including identification and adoption of the required conditions.

Following the Commission's determination, the Executive Director shall inform CSP of the Commission's determination and shall forward any conditions associated with it. If the Commission has identified conditions required to render the project(s) consistent with the PWP, development shall not be undertaken until the conditions have been incorporated into the project(s).

Commission review of a proposed project(s) shall be deemed complete on the date of a Commission determination that the project(s) is/are consistent with the PWP with or without conditions.

Upon completion of Commission review, CSP may commence with project activities provided that any conditions imposed by the Commission to render the project(s) consistent with the PWP have been incorporated into the project(s).

- iv. Effective Date and Expiration Date of PWP Authorizations; Extension of Authorizations

Unless expressly stated otherwise in the approval documents, the effective date of a project authorization shall be the date the Commission's review of the proposed project is deemed complete pursuant to Section iii, above.

Unless expressly stated otherwise in the approval documents, the expiration date of a project authorization pursuant to this PWP shall be 10 years following its effective date, or expiration of the term of the PWP (including any amendments thereto), whichever is sooner. However, for any project authorized for a period longer than 5 years, the continued authorization past 5 years is contingent on CSP submitting a written explanation to the Executive Director describing whether conditions have changed significantly, and the Executive Director determining that there are no significantly changed conditions that affect the ability of the project to still be implemented consistent with the PWP. Thereafter, implementation of the project may not commence unless the authorization has been extended as provided herein, or a new authorization and review by the Commission has been completed in accordance with PWP provisions for initial review of a proposed project.

7.5 MONITORING REQUIREMENTS

Following implementation of individual projects under the PWP, CSP shall provide monitoring reports in accordance with the requirements (i.e., SPRs and mitigation measures) of the CalVTP Program EIR. CSP shall maintain a record of monitoring reports in their office, which shall be made available for public review. CSP shall submit a copy of each monitoring report to the Executive Director within 10 working days of its completion.

7.6 ENFORCEMENT

In addition to all other available remedies, the provisions of the PWP, NOID authorizations, and the Coastal Act shall be enforceable pursuant to Chapter 9 of Public Resources Code (PRC) Division 20. Any person who performs or undertakes CalVTP-related activities inconsistent with the PWP, any NOID issued pursuant thereto, or the Coastal Act, or who fails to act as required by the PWP, a NOID or the Coastal Act, may, in addition to any other penalties or remedies, be subject to (i) an order pursuant to PRC Sections 30809, 30810, 30811, or 30812 or (ii) civil or administrative liability in accordance with the provisions of PRC Sections 30820, 30821, 30821.6 and 30822.

CSP shall ensure that PWP-related activities are consistent with the PWP and with the terms and conditions of NOID authorizations issued pursuant to the PWP. CSP shall investigate in a reasonable time allegations regarding CalVTP-related activities being undertaken inconsistent with the provisions of the PWP or NOID authorizations and shall attempt to resolve any such inconsistencies discovered. The Executive Director or Coastal Commission may also enforce the terms of the PWP, NOIDs, and the Coastal Act.

7.7 PWP PROGRAMMATIC REVIEW

Five years following certification of this PWP, CSP shall prepare a 5-year programmatic review identifying at a minimum: the status of individual projects implemented under the PWP, as well as projects expected to be implemented under the PWP; level of program completion (e.g., number of acres treated, high-priority areas for the subsequent 5 years; collective monitoring results; constraints and lessons learned; and program success). The programmatic review shall be submitted to the Coastal Commission. At the 10-year mark following certification of the PWP, a final programmatic review, shall be prepared by CSP and submitted to the County and the Coastal Commission for review. CSP may request an extension with the 10-year review if needed to implement the projects authorized in the PWP. The Commission may grant an extension to this timeframe through a future PWP amendment if the Commission determines that additional time is warranted, and that the amendment is consistent with Coastal Act and relevant LCP requirements at that time.

8 GLOSSARY OF TERMS

"California Coastal Commission" and **"Coastal Commission"** and **"Commission"** mean the California Coastal Commission.

"California State Parks" and **"CSP"** mean the California Department of Parks and Recreation, also known as California State Parks. CSP manages lands to preserve the state's extraordinary biological diversity, protect its most valued natural and cultural resources, and create opportunities for high-quality outdoor recreation.

"California Vegetation Treatment Program" and **"CalVTP"** mean the vegetation treatment activities and associated environmental protections developed by the Board of Forestry and Fire Protection to reduce the risk of loss of lives and property, support fire suppression and reduce its costs, restore ecosystems, and protect natural resources as well as other assets at risk from severe wildfire. The CalVTP supports the use of prescribed burning, mechanical treatments, manual treatments (i.e., hand crews), targeted herbicide application, and prescribed herbivory as tools to reduce hazardous vegetation around communities in the wildland urban interface (WUI), construct fuel breaks, restore healthy ecological fire regimes, sustain ecological functions, and enhance habitat resilience to wildfire.

"California Vegetation Treatment Program Environmental Impact Report" and **"CalVTP Program EIR"** and **"Program EIR"** mean the certified, final environmental impact report that evaluates the environmental impacts of the CalVTP in accordance with the California Environmental Quality Act (CEQA) and CEQA Guidelines Section 15168, which was certified by the Board of Forestry and Fire Protection on December 30, 2019. It is available at <https://bof.fire.ca.gov/projects-and-programs/calvtp-homepage/>.

"Coastal Vegetation Treatment Standards" and **"Coastal VTS"** mean the final forest health standards developed by the Coastal Commission and CSP to protect coastal resources, including Environmentally Sensitive Habitat Areas (ESHAs), for the purpose of providing additional standards to or clarification of Program EIR standard project requirements (SPRs) for projects in the Coastal Zone to achieve conformance with state and local coastal resource protection requirements.

"Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511). As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

"Executive Director of the Commission" and **"Executive Director"** mean the Executive Director of the Coastal Commission or their designee.

"Mitigation Measures" mean the measures in the certified Final CalVTP Program EIR, or additional measures required by the Coastal Commission, to prevent, reduce, or offset adverse environmental effects of a project.

"Notice of Impending Development" and **"NOID"** mean a notice of a project proponent's intention to implement one or more of the projects contained in the PWP, which notice shall be provided by CSP to the Coastal Commission and to others, as required by this chapter of the PWP.

"Project" means a development component included in the PWP, which requires submittal of a Project-Specific Analysis (PSA) or PSA/Addendum for projects that do not fit entirely within the CalVTP Program EIR and Notice of

Impending Development (NOID), as well as incorporation of CalVTP Program EIR SPRs, CalVTP Program EIR mitigation measures, and Coastal VTS.

“Project proponent” means 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 (i.e., projects) consistent with the Program EIR for CEQA compliance, as defined by the CalVTP Program EIR. Under this PWP, CSP is the project proponent.

“Project-Specific Analysis” and **“PSA”** mean the process developed as part of the CalVTP Program EIR for project proponents to evaluate each vegetation treatment project intended to implement the CalVTP Program EIR to determine whether the activity qualifies as ‘within the scope’ of the Program EIR or requires additional environmental documentation or its own independent environmental review.

“Public works” means (a) all production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission, except for energy facilities; (b) all public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities and (c) all publicly financed recreational facilities, all projects of the State Coastal Conservancy, and any Development by a special district.

“Treatable landscape” means the appropriate CalVTP areas within which to implement proposed vegetation treatments (i.e., projects) and which were identified by first dividing the State Responsibility Area and portions of the Local Responsibility Area into vegetation types from the California Wildlife Habitat Relationship system and excluding those vegetation types with negligible wildfire risks (e.g., wet meadow, estuarine).

“Standard Project Requirements” or **“SPRs”** mean the measures required by the CalVTP Program EIR that a proposed project must implement to avoid and minimize environmental impacts and comply with applicable laws and regulations. SPRs are intended to be implemented as part of the proposed project and enforced in the same way as mitigation measures consistent with Section 15126.4 of the State CEQA Guidelines.

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10 EXHIBITS: COASTAL VTS, CalVTP SPRS, AND CalVTP MITIGATION MEASURES

EXHIBIT A

Coastal Vegetation Treatment Standards (Coastal VTS) for forest health and wildfire resilience projects in Tomales Bay State Park

1. All projects shall comply with and carry out the requirements of the CalVTP Program EIR, including use of approved treatment methods, treatment activities, and all applicable standard project requirements (SPRs) and mitigation measures.
2. A Project-Specific Analysis (PSA) or equivalent data shall be submitted to the California Coastal Commission (CCC) for review and approval pursuant to the California State Park's Bay Area District (CSP) *Forest Health and Wildfire Resilience Public Works Plan (PWP)* prior to conducting a project. Coordination between California State Parks (CSP) and CCC shall occur as early as feasible in the design process to avoid delays.
3. A PSA or equivalent data shall include clear problem and goal statements (i.e., overall project goals, ecological restoration goals) associated with each project proposed pursuant to this public works plan. These statements are intended to assist CSP and CCC in developing mutual understanding of the potential impacts and benefits – both short- and long-term – for the project. It is expected that this information will be incorporated into the PSA.
4. In the Tomales Bay State Park coastal zone, vegetation treatment projects shall be limited to Forest Health projects. The purpose of Forest Health projects is to restore and enhance ecosystems, including to prevent fire behavior to which the ecosystem is not adapted. The ecosystems that can be treated under this category include forested ecosystems as well as other ecosystems, such as woodland and scrub-dominated systems.
5. The California Coastal Act and certified LCP define "Environmentally Sensitive [Habitat] Area" (ESHA) as *any area in which plant or animal life, or their habitats, are either rare or especially valuable because of their special nature or role in an ecosystem, and that could be easily disturbed or degraded by human activities and developments* (see Coastal Act Section 30107.5; Land Use Plan Section C-BIO-1). Rarity determinations for habitats and species are made by California Department of Fish and Wildlife (CDFW), US Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS), and are used to support a CCC ESHA determination¹. In addition, an ESHA determination may be made on the basis of an area constituting "especially valuable habitat" where it is of a special nature and/or serves a special role in the ecosystem, such as providing a pristine example of a habitat type or supporting important ecological linkages. The Coastal Act and certified LCP require that ESHAs be protected against any significant disruption of habitat values and only allow uses dependent on the ESHA's resources within those areas (see Coastal Act Section 30240; Land Use Plan Section C-BIO-2). It is anticipated that most of the Forest Health and Wildfire Resilience activities pursued within Tomales Bay State Park will take place within natural communities that qualify as ESHAs (e.g., Bishop pine forest, coast live oak woodland and forest, tanoak forest, California bay woodland and forest).
6. In the coastal zone, wetlands are defined as where lands *may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens* (see Coastal Act Section 30121; Local Implementation Plan Section 22.130.030). Administrative Regulations (Section 13577(b)) and the Local Implementation Plan (Section 22.130.030) further elaborate on this definition as *where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes*, and goes on to establish what is effectively a single-

¹ CDFW defines natural communities, animals, and plants with a global or state ranking of 1, 2, or 3 as rare and the CCC typically finds these to be ESHAs. CCC also typically considers plant and animal species listed by the federal and state endangered species acts (ESA and CESA, respectively) and/or identified under other special status categories by various authorities (e.g., California Species of Special Concern per CDFW, plant taxa having a California Rare Plant Rank (CRPR) of '1B' and '2B' per CNPS) as constituting ESHAs.

parameter rule, meaning that only one of the three parameters used by the US Army Corps of Engineers and various other agencies – hydric soils, hydrophytic vegetation, or hydrology – need be present to delineate a coastal wetland feature. Under the Coastal Act, poorly functioning or degraded areas that meet the definition of wetlands are nonetheless subject to wetland protection policies. Though it is not necessarily anticipated that Forest Health projects will occur around coastal wetlands, it is important to recognize that coastal wetlands can and do occur as part of the landscape mosaic. Wetlands as referenced in the CalVTP are more narrowly defined than would be recognized under the Coastal Act and LCP. The Coastal Act and LCP generally protect wetlands and allow for impacts in only specific situations (see Coastal Act Section 30233; Land Use Plan Section C-BIO-15).

7. In addition to the requirements of the CalVTP Program EIR, the following standards shall also be met in the Tomales Bay State Park coastal zone, not only in ESHA but in all habitats:
 - a. Protect Ecosystems. Forest Health projects shall:
 - i) proactively restore and enhance ecosystems, protect watersheds, and promote long-term storage of carbon, including through the minimization of carbon loss from large and intense wildfires;
 - ii) restore and maintain vegetation cover to a threshold that reflects appropriate fire frequencies (i.e., fire-return intervals) on the landscape, considering estimated pre-European settlement conditions as well as future climate change, and the maintenance or improvement of ecosystem health;
 - iii) maintain vegetation cover and composition to comply with the standards (membership rules) set forth in the online edition of the Manual of California Vegetation (MCV) to avoid unintended habitat conversion²; and,
 - iv) provide for an appropriate mosaic of native plants by age, size, and class that support overall habitat function.
 - b. Protect Wetlands. Forest Health projects shall interpret wetlands in the CalVTP as inclusive of coastal wetlands, and further, shall:
 - i) delineate all wetland boundaries and a 100-foot buffer surrounding each;
 - ii) limit treatment activities within wetland boundaries to those that would restore ecological benefits to the wetlands or would maintain wetland habitat quality while improving surrounding ecosystems, including ESHAs, and limit activities to the implementation of prescribed (broadcast) burning, and allow for this only where determined by a qualified RPF or qualified professional that:
 - (1) no special-status species are present;
 - (2) habitat function would be maintained or enhanced/restored;
 - (3) the burn shall occur within the expected fire return interval for the vegetation communities present;
 - (4) no soil disturbance, mechanical treatments, or equipment or vehicle access shall occur;
 - (5) no pile burning shall occur; and,
 - (6) no fire ignition (including the associated use of accelerants) shall occur within wetlands.
 - iii) limit treatment activities within wetland buffers to those that would restore ecological benefits to the wetlands or would maintain wetland habitat quality while improving surrounding ecosystems, including ESHAs. No fire ignition (including the associated use of accelerants) shall occur within wetland buffers; and,
 - iv) hand containment lines intended to facilitate prescribed (broadcast) burns are the only type of containment lines that shall be allowed within the wetland buffer. Prohibit any hand containment lines within a minimum of 50 feet from any wetland unless avoidance of 50 feet would make broadcast

² Membership rules are quantitative definitions used to assign field samples to vegetation types based on data analysis and can include species constancy, cover values, and the presence of indicator species.

burning for ecological restoration infeasible due to widespread distribution of *Juncus* patch wetlands, in which case, buffer encroachment shall be limited to the maximum extent feasible while allowing for necessary burn implementation.

- c. Protect Bishop Pine Forest. Forest Health projects shall:
- i) create and maintain a mosaic of seral stage stands of Bishop pine forest across the park so that all seral stages are represented at the landscape scale;
 - ii) limit pile burning to areas outside the dripline of mature Bishop pine trees; and,
 - iii) limit the use of prescribed (broadcast) burns to secondary treatment, following the initial reduction of fuel loads to safe levels by other treatment methods.
- d. Protect Marin Manzanita. Forest Health projects shall:
- i) map and avoid Marin manzanita plants within proposed treatment units;
 - ii) except as allowed under subsection iv, below, limit treatments within 25 feet of these plants to manual treatment and targeted herbicide application, to promote Marin manzanita seedling establishment and remove competing vegetation;
 - iii) prohibit pile burning within 50 feet of Marin manzanita plants, as measured from the dripline of individual shrubs; and,
 - iv) limit the use of prescribed (broadcast) burns to secondary treatment, following the initial reduction of fuel loads and competing vegetation to safe levels by other treatment methods; broadcast burning shall occur no closer than 5 feet of Marin manzanita plants.
- e. Use Vegetation Removal Hierarchy. Except for prescribed fire project components, a vegetation removal hierarchy shall be identified and implemented for each project to obtain the vegetation cover threshold identified by a qualified RPF or qualified professional, as necessary, while ensuring that unintended habitat conversion does not occur, and that vegetation cover is sufficient to support the project's ecological goals. In order of priority and application, the hierarchy shall be as follows:
- i) thinning and removal of dead, dying, and diseased trees and shrubs (except that some snags will be retained to provide wildlife shelter, dens, etc.);
 - ii) removal of invasive species; and,
 - iii) removal of native species that are not listed as endangered, threatened, rare, or otherwise especially valuable, with the end goal of having appropriate species composition in the plant community with a mix of vegetation age, height, and density.
- In all cases, indicator species and diagnostic species appropriate to the vegetation type will be maintained in accordance with the standards (membership rules) set forth by the online edition of the Manual of California Vegetation (MCV), with the intention of maintaining cover and composition consistent with meeting project ecological goals. If vegetation cover threshold goals, as articulated in the MCV, cannot be met, then removal of endangered, threatened, rare, or otherwise especially valuable species and habitats that would be otherwise prohibited may be considered only if: such removal is critical to maintain the area's ecological resilience to catastrophic fire; removal provides net benefits to the habitat; and, no other alternative exists that meets the project restoration and resilience goals.
- f. Determine Suitable Use of Prescribed Burning. Prescribed burning may be allowed if it is found to be the least environmentally damaging feasible alternative to achieving project goals. Prescribed burning shall be conducted pursuant to an approved plan that ensures protection of habitat and other coastal resources, as documented in the PSA.
- g. Determine Suitable Use of Prescribed Herbivory. Prescribed herbivory may be allowed if it is found to be the least environmentally damaging feasible alternative to achieving project goals. Prescribed herbivory shall be

conducted pursuant to an approved plan that ensures protection of habitat and other coastal resources, as documented in the PSA.

- h. Control Invasive Species. Treatment activities and treatment types shall limit the spread of invasive species and prevent the spread of plant pathogens in all habitats, including those habitats that are not determined to be sensitive natural communities, coastal wetlands, or otherwise qualifying as ESHA.
- i. Limit Equipment Types. All projects shall be carried out using the least invasive type of equipment feasible. Projects shall avoid the use of large masticators, track vehicles, and other heavy equipment, where feasible. When such heavy equipment is used, it shall remain on existing roads to the extent feasible. In riparian habitat, the use of heavy equipment shall be prohibited, except when authorized through a valid Lake and Streambed Alteration Agreement and/or, if applicable, Clean Water Act Section 401 Water Quality Certification, and when reviewed and approved by CCC.
- j. Limit Herbicide Use. Herbicides shall be avoided to the maximum extent feasible and may be used only if such treatment activities are the least environmentally damaging feasible alternative and will not result in significant adverse impacts to sensitive ecological resources (e.g., when used to control invasive species).
- k. Limit Fencing. The use of wildlife-friendly fencing for prescribed herbivory activities subject to CalVTP SPR BIO-11 shall require adequate ground clearance for smaller species to avoid entrapment and/or entanglement.
- l. Limit Accelerants. Accelerants shall only be allowed for use in prescribed fire applications. The use of accelerants that could significantly disrupt or degrade ESHA or wetlands is prohibited.
- m. Limit the Need for Soil Stabilization. The use of riprap and/or chemical soil stabilizers that could significantly disrupt or degrade ESHA or wetlands is prohibited.
- n. Protect Equitable Coastal Public Access and Recreation. Equitable coastal public access and recreational opportunities shall be preserved during project operations to the maximum extent feasible, including by, but not limited to, minimizing trail closures, limiting the use of public parking spaces for staging operations, posting accessway signage and using flaggers, and designing construction access corridors in a manner that has the least impact on coastal public access. Additionally, CSP shall maintain access to the maximum extent feasible for any scheduled programs. Following the completion of Forest Health projects, all affected coastal public access and recreational amenities shall be restored to existing conditions, in a manner that maximizes equitable coastal public access and recreation.

EXHIBIT B

Summary of CalVTP Standard Project Requirements (SPRs) and Mitigation Measures

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
Administrative		
SPR AD-1	Project Proponent Coordination	For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures.
SPR AD-2	Delineate Protected Resources	The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area.
SPR AD-3	Consistency with Local Plans, Policies, and Ordinances	The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them.
SPR AD-4	Public Notifications for Prescribed Burning	At least days prior to the commencement of prescribed burning operations, the project proponent will post signs, publish, and send county supervisor notification of prescribed burning operations.
SPR AD-5	Maintain Site Cleanliness	Project proponent will use fully covered trash receptacles and is required to remove all temporary non-biodegradable flagging.
SPR AD-6	Public Notifications for Treatment Projects	One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area.
SPR AD-7	Provide Information on Proposed, Approved, and Completed Treatment Projects	For any vegetation treatment project using the CalVTP Program EIR for CEQA compliance, the project proponent will provide the Project-Specific Analysis, Mitigation Monitoring and Reporting Program, GIS data, and a post-project implementation report to the Board of Forestry and Fire Protection or CAL FIRE during the proposed, approved, and completed stages of the project.
SPR AD-8	Request Access for Post-Treatment Assessment	For CAL FIRE projects and public landowners, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance.
SPR AD-9	Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required	All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP.
Aesthetic and Visual Resources		
SPR AES-1	Vegetation Thinning and Edge Feathering	The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions.
SPR AES-2	Avoid Staging within Viewsheds	The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR AES-3	Provide Vegetation Screening	The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions.
Mitigation Measure AES-3	Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks	Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks: If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent will implement, where feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives.
Air Quality		
SPR AQ-1	Comply with Air Quality Regulations	The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located.
SPR AQ-2	Submit Smoke Management Plan	The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160.
SPR AQ-3	Create Burn Plan	The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns.
SPR AQ-4	Minimize Dust	Limit the speed of vehicles. If road use creates excessive dust, the project proponent will wet appurtenant roads or use a non-toxic chemical dust suppressant, remove any soil tracking onto public paved roads, suspend ground disturbing treatment activities outside the project area if particulate emissions cause issues per Health and Safety Code Section 41700.
SPR AQ-5	Avoid Naturally Occurring Asbestos	The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos.
SPR AQ-6	Prescribed Burn Safety Procedures	Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP).
Mitigation Measure AQ-1	Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques	Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. 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. Use renewable diesel fuel in diesel-powered construction equipment. 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 NOX and PM.
Archaeological, Historical, and Tribal Cultural Resources		
SPR CUL-1	Conduct Record Search	An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR CUL-2	Contact Geographically Affiliated Native American Tribes	Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located.
SPR-CUL-3	Pre-field Research	The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey.
SPR CUL-4	Archaeological Surveys	The project proponent will coordinate with an archaeologically- trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area.
SPR CUL-5	Treatment of Archaeological Resources	If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas.
SPR CUL-6	Treatment of Tribal Cultural Resources	The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas.
SPR CUL-7	Avoid Built Historical Resources	If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources.
SPR CUL-8	Cultural Resource Training	The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources.
Mitigation Measure CUL-2	Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources	If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find.
Biological Resources		
SPR BIO-1	Review and Survey Project-Specific Biological Resources	The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment.
SPR BIO-2	Require Biological Resource Training for Workers	The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project.
SPR BIO-3	Survey Sensitive Natural Communities and Other Sensitive Habitats	If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018).

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR BIO-4	Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function	Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions will Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat. Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat.
SPR BIO-5	Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub	The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent).
SPR BIO-6	Prevent Spread of Plant Pathogens	When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following: Clean and sanitize vehicles, equipment, footwear, and clothing, include training, minimize soil disturbance, minimize soil and plant material movement, and clean soil and debris from equipment and sanitize tools.
SPR BIO-7	Survey for Special-Status Plants	If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment.
SPR BIO-8	Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs	When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHAs).
SPR BIO-9	Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife	The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): clean clothing, footwear, and equipment used during treatments, for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area, stage equipment in areas free of invasive plant infestations, identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities, treat invasive plant biomass onsite to eliminate seeds and propagules, and implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants.
SPR BIO-10	Survey for Special-Status Wildlife and Nursery Sites	If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites.
SPR BIO-11	Install Wildlife-Friendly Fencing (Prescribed Herbivory)	If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR BIO-12	Protect Common Nesting Birds, Including Raptors	The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. If an active nest is observed, the project proponent may establish one of the following: Establish a temporary, species-appropriate buffer around the nest, modify the treatment in the vicinity of an active nest to avoid disturbance of active nests, or defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. Trees with visible raptor nests, whether occupied or not, will be retained.
Mitigation Measure BIO-1a	Avoid Loss of Special-Status Plants Listed under ESA or CESA	If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no- disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high- visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity.
Mitigation Measure BIO-1b	Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA	If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat: Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). 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. No fire ignition (nor use of associated accelerants) will occur within the special- status plant buffer.
Mitigation Measure BIO-1c	Compensate for Unavoidable Loss of Special-Status Plants	If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
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 either the treatment will not being implemented within the occupied habitat or Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted.
Mitigation Measure BIO-2b	Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)	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. „ 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.
Mitigation Measure BIO-2c	Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)	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.
Mitigation Measure BIO-2d	Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)	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 Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017) per SPR BIO-10, the following protective measures will be implemented to avoid and minimize impacts to valley elderberry longhorn beetle: 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. If elderberry shrubs are located within 165 feet of the treatment area, the following measures will be implemented: 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: 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.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
Mitigation Measure BIO-2e	Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)	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 ten 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.
Mitigation Measure BIO-2f	Avoid Habitat for Special- Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)	If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures will be implemented: 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.
Mitigation Measure BIO-2g	Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)	Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). 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).
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: 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).

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
Mitigation Measure BIO-3a	Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands	Reference the Manual of California Vegetation, Appendix 2, Table A2, Fire Characteristics (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in Fire in California's Ecosystems (Van Wagtendonk et al. 2018) and the Manual of California Vegetation (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). 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).
Mitigation Measure BIO-3b	Compensate for Loss of Sensitive Natural Communities and Oak Woodlands	If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions: Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: Restoring sensitive natural community or oak woodland functions and acreage within the treatment area; Restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects.
Mitigation Measure BIO-3c	Compensate for Unavoidable Loss of Riparian Habitat	If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following: Compensate for unavoidable losses of riparian habitat acreage and function by: Restoring riparian habitat functions and acreage within the treatment area; Restoring degraded riparian habitat outside of the treatment area; purchasing riparian habitat credits at a CDFW-approved mitigation bank; or preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value. The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
Mitigation Measure BIO-4	Avoid State and Federally Protected Wetlands	Impacts to wetlands will be avoided using the following measures: The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures). A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. 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.
Mitigation Measure BIO-5	Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites	The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10: Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment. Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied.
Geology, Soils, and Mineral Resources		
SPR GEO-1	Suspend Disturbance during Heavy Precipitation	The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur).
SPR GEO-2	Limit High Ground Pressure Vehicles	The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure.
SPR GEO-3	Stabilize Disturbed Soil Areas	The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge.
SPR GEO-4	Erosion Monitoring	The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event.
SPR GEO-5	Drain Stormwater via Water Breaks	The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version).

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR GEO-6	Minimize Burn Pile Size	The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4.
SPR GEO-7	Minimize Erosion	To minimize erosion, the project proponent will prohibit the use of heavy equipment on slopes steeper than 65%, steeper than 50% where erosion hazard rating is high or extreme.
SPR GEO-8	Steep Slopes	The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard).
Greenhouse Gas Emissions		
SPR GHG-1	Contribute to the AB 1504 Carbon Inventory Process	The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the US Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory.
Mitigation Measure GHG-2	Implement GHG Emission Reduction Techniques During Prescribed Burns	When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018): Reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; reduce the total area burned through mosaic burning; burn when fuels have a higher fuel moisture content; reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and schedule burns before new fuels appear.
Hazardous Material and Public Health and Safety		
SPR HAZ-1	Maintain All Equipment	The project proponent will maintain all diesel- and gasoline- powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements.
SPR HAZ-2	Require Spark Arrestors	The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors.
SPR HAZ-3	Require Fire Extinguishers	The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428.
SPR HAZ-4	Prohibit Smoking in Vegetated Areas	The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4).
SPR HAZ-5	Spill Prevention and Response Plan	The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants.
SPR HAZ-6	Comply with Herbicide Application Regulations	The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR HAZ-7	Triple Rinse Herbicide Containers	The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684.
SPR HAZ-8	Minimize Herbicide Drift to Public Areas	The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour, spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift, low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift, and spray nozzles will be kept within 24 inches of vegetation during spraying.
SPR HAZ-9	Notification of Herbicide Use in the Vicinity of Public Areas	For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides.
Mitigation Measure HAZ-3	Identify and Avoid Known Hazardous Waste Sites	Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials.
Hydrology and Water Quality		
SPR HYD-1	Comply with Water Quality Regulations	Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions.
SPR HYD-2	Avoid Construction of New Roads	The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads).
SPR HYD-3	Water Quality Protections for Prescribed Herbivory	The project proponent will include the following water quality protections for all prescribed herbivory treatments: Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas will be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding, water will be provided for grazing animals in the form of an on-site stock pond or a portable water source located outside of environmentally sensitive areas, and treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR HYD-4	Identify and Protect Watercourse and Lake Protection Zones (WLPZ)	The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916.5 of the California Forest Practice Rules (February 2019 version). buffer distances vary from 50-150 feet depending on stream class and slope. Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry. Equipment used in vegetation removal operations will not be serviced in WLPZs. WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs. Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.
SPR HYD-5	Protect Non-Target Vegetation and Special-status Species from Herbicides	The project proponent will implement the following measures when applying herbicides: Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway, use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water, no terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application, no herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools, for spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray, Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative), and no herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.
SPR HYD-6	Protect Existing Drainage Systems	If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities.
Noise Standard Project Requirements		
SPR NOI-1	Limit Heavy Equipment Use to Daytime Hours	The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship).
SPR NOI-2	Equipment Maintenance	The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications.

Standard Project Requirements and Mitigation Measures (if applicable)		SPR or Mitigation Measure Summary
SPR NOI-3	Engine Shroud Closure	The project proponent will require that engine shrouds be closed during equipment operation.
SPR NOI-4	Locate Staging Areas Away from Noise-Sensitive Land Uses	The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure.
SPR NOI-5	Restrict Equipment Idle Time	The project proponent will require that all motorized equipment be shut down when not in use.
SPR NOI-6	Notify Nearby Off-Site Noise-Sensitive Receptors	For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity.
Recreation		
SPR REC-1	Notify Recreational Users of Temporary Closures	If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(is) in which the affected recreation area or facility is located.
Transportation		
SPR TRAN-1	Implement Traffic Control during Treatments	Prior to initiating vegetation treatment activities, the project proponent will work with the agency(is) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed.
Public Services and Utilities		
SPR UTIL-1	Solid Organic Waste Disposition Plan	For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities.

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