CALIFORNIA COASTAL COMMISSION 455 MARKET STREET, SUITE 300 SAN FRANCISCO, CA 94105



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Prepared on February 23, 2024 for March 15, 2024 hearing

To: California Coastal Commission and Interested Parties

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- **Subject:** Tomales Bay State Park Forest Health and Wildfire Resilience Public Works Plan (PWP-2-MAR-24-0001-1)

SUMMARY OF STAFF RECOMMENDATION

California State Parks (CSP) Bay Area District prepared the Tomales Bay State Park Forest Health and Wildfire Resilience Public Works Plan (PWP) to facilitate the planning, review, and authorization of vegetation treatment projects within Tomales Bay State Park to improve forest health, restore ecosystems, and increase wildfire resilience. Due to historic fire suppression that has led to an accumulation of fuel loads, coupled with drought, a warming climate, and the spread of invasive species, larger and more catastrophic wildfires are threatening Marin County's communities and natural resources. Long-standing fire suppression has also 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, contributing to the decline of Bishop pine forests throughout the Coastal Zone. The PWP will help to address these risks within Tomales Bay State Park through vegetation treatment that will align fire resilience planning with the protection of coastal resources to facilitate healthy forests.

The PWP was designed to function with the California Vegetation Treatment Program (CalVTP), which was developed under the direction of the California Board of Forestry and Fire Protection (BOF) and in cooperation with the California Department of Forestry and Fire Protection (CalFIRE) to reduce wildfire risks as one component of the range of actions being implemented by the State to respond to California's wildfire challenges. Importantly, the State's strategy relies on an increase in the pace and scale of vegetation treatment to reduce those risks. In addition to complying with the State's fire planning efforts, the PWP applies additional efficiencies over and above implementation of the CalVTP by addressing specific local coastal issues and ensuring full consistency with the Marin County Local Coastal Program (LCP), which is the standard of review for this PWP. The PWP also provides for efficient programmatic streamlining of both California Environmental Quality Act (CEQA) compliance and Coastal Act authorizations. It does this by creating a framework within which identified vegetation treatment projects can be analyzed and implemented under a coordinated plan that relies on the standards (called Standard Project Requirements, or SPRs) and mitigation

measures adopted as part of the certified CalVTP Programmatic Environmental Impact Report (PEIR), as well as coastal-specific standards (Coastal Vegetation Treatment Standards, or Coastal VTS) developed collaboratively by Commission and CSP staff.

The PWP would enable CSP to design and implement multiple critical fire resilience projects throughout the 2,433-acre PWP program area over a 10-year period. Vegetation treatment activities under this PWP are categorized as "forest health" projects designed to restore and enhance ecosystems, including to prevent fire behavior to which the ecosystem is not adapted. Vegetation treatment could be carried out using prescribed burning, mechanical treatment (e.g., use of masticators), manual treatment (e.g., use of chainsaws), prescribed herbivory, and/or limited, strategic herbicide application. As proposed under the PWP, projects would be designed in a manner that protects coastal resources while meeting fire resiliency goals. Qualifying projects must be covered by the PWP, must incorporate CalVTP PEIR and Coastal VTS requirements, and must include project and program monitoring.

Staff believe that the PWP will provide an important tool for helping to reduce fire danger in Tomales Bay State Park while simultaneously protecting forests and ecosystem health. Importantly, although the PWP is designed to allow CSP to facilitate regulatory authorizations in the County's coastal zone, CSP is not limited to the PWP for permitting vegetation treatment projects. The PWP simply provides a streamlined Coastal Act authorization vehicle for such projects, but vegetation treatment activities within Tomales Bay State Park may continue to be authorized directly by the County through CDPs, exemptions, or other approval mechanisms allowed under the LCP. In such a case, the County would also be responsible for any other necessary CEQA documentation.

Staff's analysis has concluded that the PWP is consistent with the Marin County LCP, and that there are no other feasible alternatives or mitigation measures available that would further lessen any significant adverse effects that the approval would have on the environment. Thus, staff recommends that the Commission certify the proposed PWP as submitted. The necessary motion is found on page 8 of the staff report.

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Exhibit 1 – Tomales Bay State Park Forest Health and Wildfire Resilience Public Works Plan

LIST OF ACRONYMS

BOF BMP	California Board of Forestry and Fire Protection
CalFIRE	California Department of Forestry and Fire Protection
CalVTP	California Vegetation Treatment Program
CCR	California Code of Regulations
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
Coastal VTS	Coastal Vegetation Treatment Standards
CSP	California State Parks
CZ	Coastal Zone
ESHA	Environmentally Sensitive Habitat Area
GHG	Greenhouse Gas
IP	Implementation Plan
LCP	Local Coastal Program
LUP	Land Use Plan
NOID	Notice of Impending Development
PEIR	Programmatic Environmental Impact Report
PRC	Public Resources Code
PSA	Project-Specific Analysis
PWP	Public Works Plan
RWQCB	Regional Water Quality Control Board
SPR	Standard Project Requirement
SRA	State Responsibility Area
WUI	Wildland Urban Interface

PROCEDURAL BACKGROUND

The CSP Bay Area District has prepared the subject PWP (see <u>Exhibit 1</u>) to guide planning, reviewing, and authorizing vegetation treatment projects pursuant to the Board of Forestry's certified PEIR for the CalVTP (see <u>https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-program-eir/</u>). The PWP creates a framework within which identified projects can be analyzed and implemented under a coordinated plan. The goal of this process is to optimize the suite of proposed vegetation treatment types and activities so that wildfire management and ecological restoration goals are met in a manner that maximizes protection and enhancement of Tomales Bay State Park's significant coastal resources.

A. Public Works Plans

Coastal Act Section 30114 defines public works to include, among other things, the following:

(c) All publicly financed recreational facilities, all projects of the State Coastal Conservancy, and any development by a special district.

Section 30605 of the Coastal Act states, in part:

To promote greater efficiency for the planning of any public works ... and as an alternative to project-by-project review, plans for public works ... may be submitted to the commission for review in the same manner prescribed for the review of local coastal programs set forth in Chapter 6 (commencing with Section 30500). ... If any such plan for public works is submitted after the certification of local coastal programs, any such plan shall be approved by the commission only if it finds, after full consultation with the affected local governments, that the proposed plan for public works is in conformity with certified local coastal programs in jurisdictions affected by the proposed public works. ... Where a plan for a public works ... has been certified by the commission, any subsequent review by the commission of a specific project contained in the certified plan shall be limited to imposing conditions consistent with Sections 30607 and 30607.1. ...

Thus, a PWP is one of the alternatives available to the Commission and project proponents for Commission review of large or phased public works projects, and remains under the authority of the Commission, irrespective of local government coastal permit jurisdictional boundaries (here, as applies to Marin County). A PWP is an alternative to project-by-project review for public works (which, in this situation would require multiple coastal development permits (CDPs)). PWPs must be sufficiently detailed regarding the size, kind, intensity, and location of development to allow the Commission to determine consistency with the policies in Chapter 3 of the Coastal Act (pre-LCP certification) or the certified LCP (post-LCP certification). Once the Commission approves a PWP, no CDP is required for a specific project described within it; rather, before commencing each specific phase or project, the project proponent needs to submit notice in the form of a Notice of Impending Development (NOID), which requires the Commission to determine whether the submitted project is consistent with the standards within the PWP, or if conditions are necessary to make it consistent.

B. PWP Project Review

Consistency determinations for individual projects proposed as part of the PWP are made by the Coastal 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 Coastal Commission's review process for development proposed pursuant to a certified PWP. Section 30606 of the Coastal Act requires the applicant proposing the PWP 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 is tasked with determining whether the project is PWP-consistent, or if it can be made PWP-consistent through conditions. If a project cannot meet those tests, then it is not covered by the PWP, and would need its own separate authorization through a CDP.

As applicable to this proposed PWP, development submitted to the Commission for review under the NOID process shall not be authorized unless it is of a type, location, and size as identified in Section 3 of the PWP (see <u>Exhibit 1</u>), and it is demonstrated that project implementation is in compliance with all SPRs and Mitigation Measures of the CalVTP (Project Standard 2), as well as the more coastal-specific Coastal VTS

development standards for Tomales Bay State Park (Project Standard 3). Projects may also be conditioned by the Commission to ensure consistency with the PWP; however, the Commission cannot reject a proposed project if it is included within the listed project types authorized as a part of the Commission's original PWP review and it is otherwise PWP-consistent.

The proposed PWP also identifies specific filing content requirements regarding future NOID submittals under Section 7, including preparation and submittal of draft and final Project-Specific Analyses (PSA). A PSA is required by the CalVTP PEIR to determine whether a project qualifies as within the scope of the CalVTP PEIR and whether the project will result in any new or substantially more significant impacts than described in the CalVTP PEIR. The PSA also serves as a foundation for the Commission's Coastal Act analysis.

C. PWP Reporting Mechanisms

Proposed PWP Project Standard 4 requires PWP projects to adhere to the reporting and monitoring requirements as provided in the PEIR SPRs. More specifically, the administrative SPRs contained within the CalVTP PEIR ensure that projects are reported on and project data is available to the public. For example, SPR AD-7 of the PEIR requires a completed Mitigation Monitoring and Reporting Program to be submitted to CalFIRE and the Board of Forestry for all proposed, approved, and completed stages of vegetation treatment projects. This information will be posted to an online database available to the public and will ensure that the requirements of all relevant SPRs that are implemented are verified and monitored by the agency or organization responsible for ensuring that the SPRs are implemented. Similarly, SPR AD-6 ensures that public notifications for treatment projects are posted in conspicuous locations describing treatment activities and timing, as well as contact information. SPR-GHG-1 also requires project proponents subject to AB 1504¹ to provide all vegetation treatment data for carbon inventory tracking to the U.S. Forest Service and CalFIRE. Further, the PWP requires that individual projects be noticed in conjunction with Commission regulations.

In addition, pursuant to proposed PWP Project Standard 4, the PWP requires CSP to prepare a five-year programmatic review identifying: 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 five years, etc.); collective monitoring results; constraints and lessons learned; and program success. The programmatic review must be submitted to Marin County and the Coastal Commission for review. At the ten-year mark following certification of the PWP, a final programmatic review is to be prepared by CSP and submitted to the County and Coastal Commission for review.

D. Public Participation

A Public Review Draft of the PWP was first released on December 18, 2023, for a sixweek review period. CSP held a local hearing to collect public testimony on January 10,

¹ See <u>https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=200920100AB1504</u>.

2024. The draft was subsequently updated to make administrative corrections and provide clarifying language, which was then adopted by the CSP Planning and Acquisition Committee (PAC) on February 12, 2024. Following submittal of the locally-adopted PWP to the Commission on February 14, 2024, Commission staff continued to accept public comment on the PWP.

In addition, members of the public will have additional opportunities to comment on individual projects designed and implemented under the PWP. As part of the project design stage, CSP must consult with parties interested in, with jurisdiction over, and/or affected by the proposed project. Further, persons residing within 100 feet of the project boundary, as well as within greater distances that may need to be noticed pursuant to the CalVTP SPRs and mitigation measures, or those persons, parties, and agencies who have requested to receive such notice, will receive a notice of a completed NOID to be submitted to the Commission for consistency review under the PWP. Once a NOID is submitted to the Commission and agendized for hearing, interested parties may also submit written comment to the Commission prior to the scheduled hearing on the NOID, and/or request to provide public testimony during the Commission hearing on the NOID (see the Procedures for PWP Filing and Certification section starting on page 7-1 of the PWP in Exhibit 1).

E. Local Government and Stakeholder Consultation

Throughout the development of the PWP, Commission staff and CSP staff have engaged with Marin County staff. Regular coordination meetings on the PWP commenced in December 2022.

The development of the coastal-specific development standards (see Coastal VTS for Tomales Bay State Park on page 10-1 of <u>Exhibit 1</u>) and the PWP has been a collaborative process with representatives of Marin County staff and CSP staff building off the existing Coastal VTS developed in prior Forest Health and Wildfire Resilience PWPs to design a Coastal VTS consistent with the Marin County LCP. Marin County staff have indicated that the County is in support of the PWP and believes that it is consistent with the County's LCP.²

The Commission and CSP also notified tribal representatives from the Federated Indians of Graton Rancheria and Guidiville Rancheria of California. Tribal entities were notified of the development of the PWP, as well as the availability of the Public Review Draft PWP once available. Following such notification, Commission staff consulted with Buffy McQuillen of the Federated Indians of Graton Rancheria in December of 2023 to discuss the PWP's tribal cultural resource protection measures, as well as the prioritization of habitat for protective measures. No other tribes or tribal representatives requested consultation.

All stakeholders will have the opportunity to consult with CSP and/or provide comments to CSP and the Commission during the project design stage, including through the

² The County expressed support of the CSP's locally-adopted PWP in correspondence dated February 22, 2024.

NOID submittal and Commission adoption process (see the Procedures for PWP Filing and Certification section starting on page 7-1 of the PWP in <u>Exhibit 1</u>).

F. Environmental Documents

Section 30605 of the Coastal Act and CCR Sections 13353 and 13357 require PWPs to include environmental information sufficient in detail to enable the Commission to determine the consistency of the plan with the policies of the Coastal Act or LCP, as applicable. Consistent with these requirements, the PWP relies, in part, on the analysis and conclusions in the Board of Forestry's certified Program Environmental Impact Report of December 2019 to examine potential environmental impacts of vegetation treatment projects being considered in the coastal zone. The CalVTP PEIR provides evidence that supports the Commission's analysis of the PWP's coastal resource impacts and contains standards that help protect coastal resources in a manner consistent with the LCP. Specifically, the PEIR provides a comprehensive framework for implementing vegetation treatment projects through the adherence to Standard Project Requirements and Mitigation Measures that will result in the avoidance and minimization of adverse impacts to environmental resources.

In addition to the CalVTP, the Coastal Vegetation Treatment Standards (see Coastal VTS on page 10-1 of <u>Exhibit 1</u>) provide additional standards and requirements that projects within the Coastal Zone must meet, including related to specific habitat considerations. All PWP projects must be consistent with all Project Standards outlined in Section 4 of the PWP, including the CalVTP SPRs and Mitigation Measures and the Coastal VTS.

MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, certify the proposed PWP as submitted. To do so, staff recommends a **YES** vote on the motion below. Passage of this motion will result in certification of the PWP as submitted and adoption of the following resolution and findings. The motion to certify passes only by affirmative vote of a majority of the appointed Commissioners.

Motion: I move that the Commission certify Public Works Plan PWP-2-MAR-24-0001-1 as submitted by California State Parks, and I recommend a yes vote.

Resolution to certify: The Commission hereby certifies the Tomales Bay State Park Forest Health and Wildfire Resilience Public Works Plan as submitted and adopts the findings set forth below on the grounds that the Plan conforms with the Marin County Local Coastal Program. Certification of the Plan as submitted complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the Plan on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the Plan on the environment.

FINDINGS AND DECLARATIONS

A. Background

CalVTP Background

Following then-Governor Brown's 2018 Executive Order B-52-18, which mandated a substantial increase in the pace and scale of vegetation treatment in California for the purpose of reducing wildfire threats, the BOF certified its final PEIR for the CalVTP in December 2019. As one approach to addressing the wildfire crisis, the CalVTP PEIR provides an important tool to help reduce risks to life, property, and natural resources by targeting vegetation reduction and/or modification in the State Responsibility Area (SRA) for fire prevention and suppression.

Based on the PEIR, the objectives of the CalVTP are to:

- Serve as the vegetation management component of the State's range of actions underway to reduce risks to life, property, and natural resources by managing the amount and continuity of hazardous vegetative fuels that promote wildland fire consistent with California's 2018 Strategic Fire Plan (BOF and CalFIRE 2018) and California's Wildfire and Forest Resilience Action Plan (Governor's Forest Management Task Force 2021).
- Substantially increase the pace and scale of vegetation treatments to contribute to achieving a statewide total of at least 500,000 acres per year on non-federal lands, consistent with the former Governor's EO B-52-18, which results in a CalVTP target up to 250,000 acres per year after considering other types and areas of vegetation treatments.
- Increase the use of prescribed burning as a vegetation treatment tool, consistent with the provisions of Senate Bill 1260, Statutes of 2018, and Public Resources Code (PRC) Section 4483(a).
- Contribute to meeting California's greenhouse gas (GHG) emission goals by managing forests and other natural and working lands as a net carbon sink, consistent with the California Forest Carbon Plan (Forest Climate Action Team 2018), California's 2017 Climate Change Scoping Plan (California Air Resources Board 2017), Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada (Little Hoover Commission 2018), and California 2030 Natural and Working Lands Climate Change Implementation Plan (California Environmental Protection Agency et al. 2019).
- Improve ecosystem health in fire-adapted habitats by safely mimicking the effects of a natural fire regime, considering historic fire return intervals, climate change, and land use constraints.

Vegetation treatment consists of three treatment types, as described in the PEIR, including:

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

Within each of the three treatment types listed above, five treatment activities are identified in the PEIR, including:

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

To avoid and minimize environmental impacts, the PEIR stipulates that project proponents must adhere to the PEIR's SPRs, which are development standards or best management practices (BMPs) designed "to integrate environmental protection into a comprehensive approach to reduce wildfire risk statewide through vegetation treatment."

When designing projects to implement the CalVTP, project proponents are also required to complete a Project-Specific Analysis (PSA) to determine whether the proposed vegetation treatment project is "within the scope" of the PEIR or requires additional environmental documentation and review. As the PEIR states:

The purpose of the PSA is to evaluate the proposed site and the later activity to determine whether the environmental effects of the activity are addressed within the scope of this PEIR, consistent with Section 15168 of the CEQA Guidelines for later activities consistent with a program and its PEIR. The PSA also requires the project proponent to determine that all applicable SPRs and mitigation measures identified in the CaIVTP PEIR have been incorporated into the project, and whether additional mitigation would be necessary.

Tomales Bay State Park Existing Conditions

Tomales Bay State Park is located along the western and eastern shores of Tomales Bay in Marin County. The State Park contains a variety of habitat types, with forested areas of Bishop pine, mixed hardwood, and mixed hardwood-conifer stands. Over 1,100 acres of rare Bishop pine forest exist in the State Park, but the population is in decline.³ Like many areas of the State, forest, woodland, and grassland landscapes throughout Marin County and in Tomales Bay State Park are undergoing significant change. Climate change, drought, invasive species, and pathogens like sudden oak death are increasing the vulnerability of many ecosystems to wildfire. Forests within Tomales Bay State Park are also in decline due to altered fire regimes; the last substantial fire in the Heart's Desire Area burned in 1932. As a result of fire suppression, heavy accumulation of dead and downed woody material, dense understory, and thick layers of litter and duff are increasing fuel loads, making a catastrophic wildfire more likely. Ecological restoration treatments are necessary to reestablish natural ecosystem processes and support forest and ecosystem health in the State Park.

The PWP covers an area within Tomales Bay State Park on the east and west sides of Tomales Bay, northwest of the unincorporated community of Point Reyes Station. The PWP Program Area encompasses approximately 2,433 coastal zone acres where potential future projects could take place. Figure 1 on page 3-3 of <u>Exhibit 1</u> shows the geographic context within which the PWP would apply as well as the relationship between the PWP Program Area, coastal zone boundary, and the five areas within Tomales Bay State Park. Figure 2 on page 3-5 of <u>Exhibit 1</u> displays the PWP Program Area overlayed on CalFIRE's Fire Severity Zone Maps to provide context for future planning efforts within the PWP Program Area. Figure 3 on page 3-6 of <u>Exhibit 1</u> shows the CalVTP Treatable Landscapes map and how that program overlaps with the PWP Program Area. While the PWP has been developed as a companion to the CalVTP, it is expected that some high priority project areas not included in the modeled treatable landscape will be developed and authorized through the PWP. Figure 4 and Figure 5 on pages 3-7 and 3-8 of <u>Exhibit 1</u> provide additional context by illustrating both the vegetation types and regional habitat types mapped within the PWP Program Area.

³ Bishop pine forests along the California coast have recently been in a state of decline due to age senescence, fire suppression, disease, and drought. (Tomales Bay State Park Ecological Restoration Vegetation Treatment Guidelines, Nov. 2022)

Marin County Local Coastal Program

Marin County's LCP was fully certified by the Commission in 1981. Most of the County's LCP was recently completely updated, where that update was certified by the Commission and took effect in 2021. However, that update did not include the portion of the County LCP that addresses coastal hazards (referred to in LCP terms as "environmental hazards"). As a result, for coastal hazards provisions, the LCP standards in effect for this project are those from the 1980s-era LCP. The County issues CDPs throughout its coastal zone.

The PWP was designed to be consistent with certified LCP policies, including policies protecting Environmentally Sensitive Habitat Areas (ESHA), encouraging restoration, and supporting park management per the Tomales Bay State Park General Plan.⁴ County staff have collaborated on the development of this PWP. They have advised that the PWP's provisions for project design consistent with the CalVTP (including the SPRs, Mitigation Measures) and the Coastal VTS sufficiently protect coastal resources and are consistent with the County's LCP.⁵

Tomales Bay State Park General Plan

The California State Park and Recreation Commission approved the Tomales Bay State Park General Plan in May 2004. It 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 general plan supports the mission of CSP "to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation." Notably, the General Plan specifies the planning objective to restore the role of fire in the natural ecological processes in the park and improve regeneration and preservation of the Bishop pines by creating openings to allow for natural seedling establishment.

B. Forest Health and Wildfire Resilience Public Works Plan Description

The PWP provides a cost-effective and programmatic approach to compliance with the California Coastal Act that can help to increase the pace and scale of implementation of critical projects that will improve both ecological conditions (i.e., forest health) and the resilience of Tomales Bay State Park landscapes to future climate change-induced wildfire. Over the proposed ten-year period of the PWP, CSP plans to conduct high priority ecosystem health treatments within the PWP Program Area in moderate to very high wildfire hazard areas of Tomales Bay State Park.

All projects approved via the Tomales Bay State Park PWP will be forest or ecosystem health projects. While the CalVTP treatable landscape indicates a majority of the program area as mapped WUI fuel reduction area and not ecosystem restoration area,

⁴ Marin County LCP Policy C-ES-2, Policy C-PK-11, Policies C-BIO-1 to C-BIO-3, Policy C-BIO-5 to C-BIO-6, and Policy C-BIO-28

⁵ The County expressed support of the CSP's adopted PWP in correspondence dated February 22, 2024.

projects proposed under this PWP in the State Park will be explicitly designed to directly improve ecosystem health as well as improve wildfire resilience. Thus, all treatments will result in ecosystem restoration as well as reduce the intensity, rate of spread, and extent of catastrophic wildfire on adjacent lands and ecosystems.

Approved projects will be designed to:

- 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.

Five treatment activities may be carried out depending on the goals and objectives of each specific project, including prescribed burning, mechanical treatment (e.g., use of masticators), manual treatment, prescribed herbivory, and herbicide application. For a detailed description of these treatment activities, see the CalVTP Background section above, as well as Section 3 of the PWP in Exhibit 1.

C. Coastal Habitats

General Ecological Considerations

The fire suppression policies of the last century and climate change have resulted in unhealthy forests that set the stage for disease, pest infestations, non-native species invasion, and larger and more intense fires than would naturally occur in the absence of human interventions. Fire suppression has promoted dense overgrowth in many forests, characterized by an unnaturally thick and impenetrable understory. These crowded forests, particularly when stressed by drought conditions, provide a ladder for flames to reach high into treetops or crowns and produce more intense fires that are challenging to manage. Additionally, buildup of live and dead understory vegetation reduces fire and drought resiliency. The warmer temperatures, drier conditions, and extended droughts associated with climate change further exacerbate the problems facing forests and the likelihood of catastrophic fires. Changes to native disturbance regimes, including fire,

can additionally result in the conversion of habitat via altered processes (e.g., succession, invasion), and thus, weaken the resilience of coastal ecosystems.

Fire has been essential to the health of many forest ecosystems for thousands of years. The historical ecological role of large fires in maintaining the structure and function of many fire-dominated ecosystems is widely acknowledged by fire ecologists.⁶ Without the more frequent burns that were associated with natural fire regimes and their generally lower intensity, many forests are less healthy and, in some cases, declining due to lack of fire. Bishop pine (*Pinus muricata*) forests, for example, require fire for natural seedling establishment, as mature seeds are not released until heat melts the resin bonds of their tightly sealed cones.⁷ Studies of forests in Marin County confirm that fire is an important factor in shaping native plant community composition and distribution.⁸ Any restoration of fire-adapted ecosystems must take into account the types of treatments that are likely to result in regeneration of healthier forests.

Commission ecologists helped develop the Coastal VTS for forest health and fire prevention projects in sensitive habitats. The Coastal VTS was initially developed in collaboration with the Resource Conservation Districts and Counties of both San Mateo and Santa Cruz, with input from CalFire to ensure that it was not redundant with the CalVTP PEIR and that applying the Coastal VTS would bring projects in the Coastal Zone into conformance with LCP coastal resource protection requirements. This initial version of a Coastal VTS has been customized to address LCP-specific requirements for Marin County and Tomales Bay State Park in collaboration with CSP and planning staff from Marin County.

California forests, shrublands, and grasslands are often ecologically impaired where fire has been suppressed, and climate change further imposes stress. The Commission's ecologists consider ecosystem health projects that adhere to the Biological SPRs, mitigation measures, and the Coastal VTS developed for the geographies and ecosystems specified therein to qualify as restoration projects. These projects are designed to improve overall ecological condition including native community structure, diversity, and associated functions.

⁶ Keane, R.E., Agee, J.K., Fule, P., Keeley, J.E., Key, C., Kitchen, S.G., Miller, R. and Schulte, L.A., 2008. Ecological effects of large fires on US landscapes: benefit or catastrophe? A. *International Journal of Wildland Fire*, 17(6), pp.696-712.

Baker, W., 1995. Long-term response of disturbance landscapes to human intervention and global change. *Landscape Ecol.* 10, 143–159

⁷ Harvey, B. J. and B. A. Holzman. 2014. Divergent successional pathways of stand development following fire in a California closed-cone pine forest. *Journal of Vegetation Science* 25: 88-99.

⁸ Forrestel, A. B., Moritz, M. A., & Stephens, S. L. 2011. Landscape-scale vegetation change following fire in Point Reyes, California, USA. *Fire Ecology*, 7(2), 114-128.

Applicable LCP Coastal Habitat Provisions

Removal (or modification) of major vegetation for fire resilience purposes generally requires a coastal development permit,⁹ as it can impact coastal habitats. The Marin County Implementation Plan (IP) defines "major vegetation" in Section 22.130.030 as "[a]ny vegetation that is a sensitive species, defined as species listed by the state or federal government as threatened, endangered, or as a species of special concern, or that is located, on a beach or sand dune, within fifty feet of the edge of a coastal bluff, in an environmentally sensitive habitat area (ESHA) or its buffer, or heritage trees or vegetation that is visually prominent and/or a significant part of the public viewshed." Further, the Marin County Land Use Plan (LUP) identifies 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 which could be easily disturbed or degraded by human activities and developments (Policy C-BIO-1). The LUP additionally describes ESHA to consist of three general categories: wetlands, streams and riparian vegetation, and terrestrial ESHAs. Terrestrial ESHA encompass non-aquatic habitats that support rare and endangered species (for example, coastal dunes as referenced in C-BIO-7, roosting and nesting habitats as referenced in C-BIO-10, and riparian vegetation that is not associated with a perennial or intermittent streams).

The LUP Biological Resource Policies (C-BIO-2 and C-BIO-3) protect ESHAs against disruptions of habitat values and define the uses permitted in ESHA to include resource dependent uses, including accessways and trails associated with interpretation of the resource, or those otherwise specifically provided for in other policies. Further, protection extends to areas adjacent to ESHAs and parks and recreations areas, to prevent impacts that would degrade the resources. Both Policies C-BIO-2 and C-BIO-3 require biological site assessments that can confirm the extent of the ESHA; identify other sensitive biological resources; recommend buffers, mitigation measures, or necessary site restoration program; and provide other information to protect the resource. Other LCP policies specifically protect wetlands, coastal streams, riparian vegetation, and terrestrial environments that include unique plant habitats and rare and endangered animal habitats by imposing buffers and other avoidance and minimization measures to limit impacts.¹⁰

Habitat restoration is explicitly called for in Policy C-BIO-28 (California Parks and Recreation) and Policy C-BIO-5 (Ecological Restoration). The LCP encourages the restoration and enhancement of degraded ESHAs and the creation of new ESHAs and calls for streamlining regulatory processes whenever possible to facilitate the successful completion of restoration projects. Removing invasive plants is one aspect of habitat restoration and is supported by its own LCP policy (C-BIO-6). These LUP biological

⁹ Marin County Land Use Plan Policy C-BIO-4 requires a Coastal Permit for the removal or harvesting of major vegetation other than for agriculture, instructing that the treatment avoid ESHA, ESHA buffers, coastal waters, and public views.

¹⁰ See, for example, LCP Policy C-ES-2 (Protection of trees), Policy C-BIO-10 (Roosting and Nesting Habitat), Policy C-BIO-11 (Development Adjacent to Roosting and Nesting Habitat), Policy C-BIO-14 (Wetlands), Policy C-BIO-18 (Wetland Buffers), Policy C-BIO-21 (Tomales Bay Shoreline), Policy C-BIO-24 (Coastal Stream and Riparian Vegetation Buffers).

resources provisions are further referenced by IP sections detailing Biological Resource standards.¹¹

Generally, the LCP standards ensure protection of sensitive habitat and species by avoiding extensive changes to vegetation or significant reductions in habitat areas; avoiding adverse impacts to wildlife habitat and riparian habitat; and avoiding other impacts from noise, sediment, and other disturbance. Development within ESHA is allowed for habitat creation and enhancement, as well as restoration of damaged habitat. In past cases, the Commission has only found very limited types of uses to be dependent on ESHA resources. These include low-intensity access and recreation uses (such as interpretive trails), nature study, scientific research, and habitat enhancement/restoration. Where restoration will be conducted to offset impacts to ESHA, detailed restoration and monitoring plans are required, as specified in IP Section 22.64.050.A.3. As such, the PWP must be consistent with the LCP's sensitive habitat protection framework, including providing for restorative projects that do not significantly disrupt habitat values.

PWP Coastal Habitat Protection Standards

Under the PWP, vegetation treatment activities that might affect ESHA, special-status species, and other biological resources in the treatable landscape must be designed and implemented to protect these resources consistent with the PWP Project Standards. If vegetation treatment activities were carried out without these protections, they could cause adverse impacts, for example, by resulting in vegetation removal that disrupts or displaces sensitive habitat and species. In addition, workers carrying out manual treatment activities could adversely impact sensitive species if buffers and flagging of sensitive species are not carried out properly.

To protect ESHA and biological resources, the CalVTP (pursuant to PWP Project Standard 2) and Coastal VTS for Tomales Bay State Park (pursuant to PWP Project Standard 3) include a significant number of safeguards. In general, these safeguards: ensure review of site-specific records and reconnaissance-level surveying to determine the potential for sensitive species and habitat within treatment areas; require resource-protection training for crews carrying out treatment activities; require measures to protect against impacts to sensitive habitats and species; and require other appropriate measures designed to address habitat concerns. The SPRs, mitigation measures, and Coastal VTS standards are described in more detail below.

For biological resources, many SPRs provide for design and treatment measures to protect against resource impacts. SPR BIO-1 requires a qualified professional, such as biologist, to conduct a data review and reconnaissance-level survey prior to commencing with treatment activities. Where sensitive biological resources are found pursuant to this survey, SPR BIO-3, SPR BIO-7, and SPR BIO-10 require a protocol-level survey for special status vegetation communities and sensitive habitats, special-status plant species, and special-status wildlife species. Treatment must then be

¹¹ IP Section 22.64.050 includes a definition of ESHA similar to the Coastal Act

designed to protect against adverse impacts (e.g., SPR BIO-4, 5, 11, and 12). Further, work crews must undergo biological resource training, including proper implementation of biological SPRs and mitigation measures, as well as identification and avoidance of sensitive biological species (SPR BIO-2). A number of best management practices must also be implemented to prevent the spread of plant pathogens and invasive species, such as cleaning and sanitizing equipment, staging equipment in designated areas, and treating invasive biomass on-site (SPR BIO-6 and SPR BIO-9). Treatment will help protect habitat by prioritizing retention of larger, healthy native trees (e.g., SPR BIO-4 and BIO-8). Project proponents must also consult with Commission staff through the preparation of NOIDs to ensure projects are designed to protect the habitat function and values of the ESHA (SPR BIO-8). Further, Mitigation Measure BIO-4 requires avoidance of impacts to wetlands, including through buffers and restrictions on herbicide and prescribed herbivory usage. For a more detailed summary of these SPRs, see page 10-5 of Exhibit 1.

In addition, the CalVTP includes numerous measures for addressing any residual impacts to biological resources. In general, these mitigation measures require avoidance and protection of listed and non-listed special status plants, habitats, and wildlife species, through no-disturbance buffers (Mitigation Measures BIO-1a, 1b, 2a, and 2b) and other measures to address potential impacts overall. Where avoidance and protection of such biological resources is not feasible, compensatory mitigation is required, typically through the preservation and enhancement of similar species and/or habitat outside the treatment area, or through the purchasing of mitigation credits from conservation or mitigation banks (see, for example, Mitigation Measures BIO-1c and 2c).

The coastal-specific standards (Coastal VTS) provide additional protections that build on and refine CalVTP requirements for the protection of ESHA and biological resources in the State Park (see page 10-1 of Exhibit 1). The Coastal VTS requires that forest health projects restore and enhance ecosystems and forests, protect watersheds, and promote long-term storage of carbon; restore and maintain vegetation cover to thresholds reflecting appropriate fire-return intervals; maintain vegetation cover and composition to comply with the standards set forth in the Manual of California Vegetation so that habitat conversion is avoided; and provide for appropriate mosaics of native vegetation. Critically, the Coastal VTS requires that all vegetation treatment activities, excluding prescribed burning and herbivory, follow a vegetation removal hierarchy that prioritizes thinning and removal of dead, dying, and diseased vegetation, followed by removal of invasive species, and lastly, removal of native species that are not endangered, threatened, rare or otherwise especially valuable. Prescribed burning and herbivory are acknowledged as indiscriminate methods that should be limited to use where sensitive species would not be precluded from recovery.

The Coastal VTS for Tomales Bay State Park also provides for additional standards that relate to the CalVTP SPRs and/or meet LCP-specific ESHA requirements. For example, the use of heavy machinery, herbicides, prescribed fire, and prescribed herbivory must be limited to projects where their use is required and where demonstrated that they are the least environmentally damaging alternative. In specific habitats like Bishop pine forest and areas with Marin Manzanita, broadcast burning is limited to secondary

treatment following initial reduction of fuel loads by other treatment methods, and pile burning must fall outside buffers from mature vegetation. Treatment activities are limited within wetland boundaries and within wetland buffers with provisions to only allow activities that would restore ecological benefits to the wetlands or would maintain wetland habitat quality while improving surrounding ecosystems, including ESHAs. Further, the use of accelerants is limited to prescribed fire application where such use will not significantly disrupt or degrade ESHA, while riprap and chemical soil stabilizers that could significantly disrupt or degrade ESHA are explicitly prohibited. Similarly, wildlife-friendly fencing used pursuant to SPR BIO-11 must also allow for adequate ground clearance for smaller species to avoid entrapment and/or entanglement.

LCP Consistency Analysis

The PWP is consistent with the County LCP because restoration of sensitive habitats is allowed within and/or adjacent to ESHA and other sensitive resources. Specifically, the LCP allows for restoration activities within sensitive habitat areas if adequate protection measures are implemented to minimize adverse impacts and encourages the restoration of degraded ESHA. Since the PWP relies on the SPRs, mitigation measures, and Coastal VTS developed for Tomales Bay State Park to safeguard sensitive habitats and species, including protocol-level and reconnaissance surveys prior to treatment activities (SPR BIO-1, SPR BIO-3, and SPR BIO-7), design of treatment in a manner that avoids impacts to sensitive species (e.g., SPR BIO-1, SPR BIO-4, SPR BIO-5, SPR BIO-6, SPR BIO-8, and SPR BIO-12), and mitigation for significant environmental impacts within any sensitive habitat area (Mitigation Measures BIO 1c, 2c, and 3c), the PWP follows County LCP standards for both protection of ESHA and its restoration.

Ecosystem health treatments are explicitly designed for the purpose of ecological restoration. As described above, a suite of measures will ensure that these projects are carried out in a sensitive manner in which, for example, adequate canopy cover is retained, treatments will be limited to the removal of uncharacteristic fuel loads, and treatment activities will be scheduled to avoid active nesting seasons. The requirement for retention of plant cover also ensures that these projects will be consistent with the LCP's habitat protections. In addition, the PEIR requires that a qualified biologist or other individual familiar with the ecology of the treatment area monitor all treatment activities in ESHAs to ensure that the various standards are met. Project proponents must also submit PSAs that will describe each project, potential alternative locations that could minimize impacts of the project, and other measures that will be taken to address project impacts. In addition, SPR AD-7 requires proponents of projects covered by the VTP PEIR to submit a completed Mitigation Monitoring and Reporting Program after project completion. Together, this suite of measures will ensure that PWP activities do not impermissibly disrupt the habitat values of ESHA; on the contrary, the activities will help restore ESHA and promote a healthier forest ecosystem. Although there will be some habitat disturbance in the short-term, this is a necessary component of restoration activities, which are explicitly called for in the LCP.

The Coastal VTS and other standards will also ensure that restoration activities that include use of herbicides when removing invasive plants will not cause significant disruption of ESHA. For example, Coastal VTS standard 7j states: "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 of invasive species)." Other standards will also limit the use of herbicides in order to protect sensitive habitats (e.g., SPR BIO-4 disallows their use within wetland buffers). This type of vegetation treatment that both protects a healthy native habitat mosaic, as well as also intends to avoid habitat degradation caused by catastrophic wildfire, is compatible with the LCP provisions protecting ESHA and is expected to contribute to overall habitat enhancement across the treatment areas.

Although it is not necessarily anticipated that forest health projects will occur around coastal wetlands, coastal wetlands can and do occur as part of the landscape mosaic. The PWP does not propose or permit any diking, filling, or dredging of wetlands; however, the Marin PWP requires protection of wetland ESHA by, among other things, requiring buffer zones around wetlands, inside of which only certain development may occur. Here, restoration work is permitted to occur within ESHA itself because it is a resource dependent use (LUP Policy C-BIO-2), so it may also occur within wetland ESHA and buffers near wetland ESHA, so long as sufficient protective measures are in place. The PWP includes measures to ensure that wetland ESHA will not have its habitat value impermissibly degraded. In addition to the general ESHA protection measures discussed above, the PWP: limits treatment activities within wetland boundaries and 100 foot wetland buffers to those that would restore ecological benefits to the wetlands or would maintain wetland habitat guality while improving surrounding ecosystems; disallows use of accelerants in wetlands; and disallows project work in wetlands, with the exception of broadcast burning if certain conditions are met (Coastal VTS Standard 7.b).

In conclusion, the PWP provides a detailed series of prescriptions for protecting coastal habitats and species in Tomales Bay State Park, including CalVTP PEIR and the Coastal VTS requirements, and appropriately mitigates for residual impacts. Therefore, the proposed PWP can be found consistent with the LCP's coastal habitat provisions.

D. Water Resources

The County's LCP ensures that water resources are protected through policies and ordinances that address surface water, including water supply; water quality and instream flows; and groundwater measures. The LCP addresses water quality concerns in all phases of development, including design, construction, and post-construction maintenance. These standards include but are not limited to water quality protection, monitoring, and enhancement; site design/source control measures; drainage standards; and design standards for high impact projects.¹² The LCP protects water quality and biological productivity by directing development to follow best management

¹² High impact projects, defined as those with a high potential for generating pollutants, include those that occur within 200 feet of the ocean, coastal wetlands or streams, or ESHA, or discharge runoff directly to the ocean, coastal waters, or to a stream or wetland buffer.

practices (BMPs) to control erosion, sedimentation, and polluted runoff. Thus, water quality protection is important for maintaining healthy coastal habitats.

Vegetation treatment activities under the PWP must be designed and implemented to protect water quality (consistent with PWP Project Standards 2 and 3). Without such requirements, vegetation treatment projects have the potential to adversely impact water quality. For example, mechanical removal of vegetation may introduce heavy machinery, such as masticators, into forested areas, potentially resulting in disturbed and compacted soils that could further contribute to erosion and sedimentation. The equipment used for mechanical removal of vegetation is also a potential risk to water quality through leaks and spills of fuels and other chemicals if such equipment is not maintained correctly, or if maintenance occurs near or within sensitive water resource areas. Where herbicides are applied, the risk for runoff, misapplication, or spills can all threaten water quality, including leaching into groundwater.

To address these potential impacts, the CalVTP includes six SPRs that ensure the protection of water quality. For example, SPR HYD-1 requires project proponents to comply with the appropriate Waste Discharge Requirements and/or Basin Plan Prohibitions of the Regional Water Quality Control Board (RWQCB) to ensure that waste is disposed of in an appropriate manner. Similarly, prescribed herbivory must follow certain standards to guard against water quality impacts, including through the use of fencing to create buffers from sensitive water resources (SPR HYD-3), while Watercourse and Lake Protection Zones are to be established to ensure the presence of buffers between heavy machinery and prescribed burning activities (SPR HYD-4). For herbicide use, SPR HYD-5 protects non-target vegetation and special-status species by restricting herbicide use within and/or adjacent to various waterbodies. Relatedly, SPR HYD-6 requires treatment activities adjacent to roadways with existing stormwater drainage infrastructure to be maintained. Lastly, SPR HYD-2 prohibits the construction or reconstruction of any new roads, including temporary roads. For a summary of these hydrological SPRs, see page 10-15 of <u>Exhibit 1</u>.

The CalVTP also includes additional SPRs that contribute to water quality protection, which are discussed in more detail under the relevant findings of this report (see Coastal Habitats and Coastal Hazards section). These include measures for incorporating buffers around water resources (SPR BIO-1); designing treatment activities to prevent the spillage of pesticides (SPR HAZ-5); requiring measures to maintain heavy equipment and follow proper herbicide disposal procedures (SPR HAZ-1 and SPR HAZ-7); minimizing erosion through soil stabilization, restrictions on heavy machinery use, and monitoring (SPR GEO-1 through SPR GEO-4, as well as SPR GEO-8); prohibiting the use of heavy equipment in sensitive resource areas (SPR GEO-7); designing prescribed burning to avoid high-intensity, severe burns (SPR AQ-3); and requiring drainage features and conditions to remain unchanged following treatment activities (SPR BIO-4 and SPR BIO-5).

In addition to the CalVTP measures discussed above, the Coastal VTS developed for Tomales Bay State Park includes additional measures addressing specific water resource concerns of the LCP. For example, vegetation removal should employ the least invasive type of equipment feasible, with heavy equipment generally prohibited from riparian habitat. Soil stabilization using riprap or chemical soil stabilizers that could degrade ESHA or wetlands is prohibited. Herbicides also may not be used unless their use is found to be the least environmentally-damaging feasible alternative and the use will not result in adverse impacts to sensitive coastal resources.

Given the above standards, vegetation treatment activities carried out under the PWP would be designed and implemented consistent with the LCP through measures that would avoid potential adverse impacts to water resources, maintain biological productivity, and protect water quality (consistent with PWP Project Standards 2 and 3). As such, the PWP protects water resources and is consistent with the County LCP.

E. Visual Resources

The Marin County LCP protects coastal zone visual resources, including views to and along the ocean and scenic coastal areas seen from public viewing areas and views of ridgelines. The LUP describes public viewing areas as including "highways, roads, beaches, parks, coastal trails and accessways, vista points, and coastal streams and waters used for recreational purposes" (Policy C-DES-2). New development must be sited and designed to protect ridgeline views (Policy C-DES-3).

Treatment activities under the PWP are not generally anticipated to result in visual resource impacts given that proposed treatments will be designed to guard against significant, visible alterations (consistent with PWP Project Standards 2 and 3) and that the PWP does not permit construction of new structures, roads, fire breaks, or other visually incompatible features, either on ridgelines or elsewhere. Indeed, the SPRs and Mitigation Measures ensure that project sites will be screened with sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from outside the project area (SPR AES-3). Similarly, for mechanical and manual treatment, vegetation must be thinned and feathered to break up or screen linear edges to mimic forms of natural clearings to the extent feasible (SPR AES-1). Lastly, all treatment types must also avoid staging equipment, including vehicles and vegetation debris, within viewsheds to the extent feasible (SPR AES-2).

Proposed PWP vegetation treatment projects would be designed and implemented consistent with the County's visual resource protection policies because PWP development standards would avoid, minimize and mitigate potential adverse visual resource and aesthetic impacts. Thus, the proposed PWP is consistent with the LCP provisions protecting visual resources.

F. Coastal Hazards

Many types of coastal environmental hazards contribute to risk in Marin County and Tomales Bay State Park. While Coastal Act Section 30253 refers to minimizing risks in "areas of high geologic, flood, and fire hazard," the Marin County LCP recognizes earthquakes and erosion as the highest risk hazards in the areas of Tomales Bay State Park. Notably, wildfire risks in parts of Tomales Bay State Park are rated as very high according to Cal FIRE's Fire Hazard Severity Scale that assesses fuel load, fire

weather, and topography.¹³ The County's 2023 Operational Area Multi-Jurisdictional Hazard Mitigation Plan recognizes that wildfire in these areas is highly likely, potentially severe, and highly influenced by climate change.

The County's LCP addresses environmental hazards by ensuring that new development will not create a hazard, reduce the stability of the area, or result in the need for landform-altering devices. The LUP identifies earthquake risk along the San Andreas fault and erosion of beaches and bluffs as the major geologic hazards around Tomales Bay. The County's LUP includes a key hazards policy (New Development and Land Use Policy 5) for areas mapped as potentially subject to geologic or other hazards¹⁴ requiring demonstration "that the area of construction is stable for development, the development will not create a hazard or diminish the stability of the area, and the development will not require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs." Erosion hazards are also addressed in water resources policies (C-WR-4, C-WR-6, C-WR-7) that require siting and design consideration or erosion control plans. For hazards associated with toxic compounds, chemicals, fuels, or other hazardous substances, the LCP provides policies (C-WR-14, C-WR-15, C-WR-16) and ordinances (IP Section 22.64.080) to minimize runoff of such pollutants.

Vegetation treatment activities proposed under the PWP will be designed and implemented to protect coastal resources and avoid and/or minimize risks from hazards (consistent with PWP Project Standards 2 and 3). If these measures were not implemented, existing or new coastal hazards could result in hazardous situations, including the uncontrolled spread of wildfires, post-fire flooding or landslides, or the inadvertent discharge of hazardous materials (e.g., accelerants, herbicides) into the environment. Related to unstable geology and soils, the CalVTP includes eight geological SPRs. In general, these standards ensure that treatment activities do not contribute to erosion. For example, mechanical treatment and herbicide use must cease under specified environmental conditions, such as precipitation (SPR GEO-1 and SPR GEO-2). Project proponents must also stabilize soil disturbed during mechanical treatment, prescribed herbivory treatments, and prescribed burns through the use of mulch or an equivalent medium immediately after treatment activities, to the maximum extent feasible, to minimize the potential for substantial sediment discharge (SPR GEO-3). Potential for erosion must be assessed prior to treatment activities, while inspections for erosion during and following treatment activities are also required, including remediation where necessary (SPR GEO-4). Other erosion control measures address storm runoff (SPR GEO-5) and slope gradients through limitations on heavy equipment (SPR GEO-7 and SPR GEO-8), while burn piles must not exceed specified land area so that soil damage is minimized (SPR GEO-6). Overall, the various SPRs and other

¹³ Inverness Ridge is rated Very High Severity in Fire Hazard Severity Zones in State Responsibility Area <u>viewer</u> as of September 29, 2023.

¹⁴ These mapped hazard areas include "Alquist-Priolo earthquake hazards zones, areas subject to tsunami runup, landslides, liquefaction, beach or bluff erosion, steep slopes averaging greater than 35%, or flood hazard areas."

measures will ensure that there is not removal of vegetation to such a significant degree that would lead to uncontrolled runoff or hazardous erosion conditions, and that would ensure protection of safety as well as biological resources. A summary of these geological hazard SPRs can be found in <u>Exhibit 1</u>.

Further, a number of SPRs address the potential for hazards to affect health and safety, including exposure to hazardous materials or to physically hazardous situations. For hazards associated with machinery and equipment, the CalVTP requires that all machinery and equipment be maintained in accordance with manufacturing guidelines, as well as State and federal emissions requirements, including the use of spark arrestors for mechanized hand tools (SPR HAZ-1 and SPR HAZ-2). Tree cutting crews must also carry one fire extinguisher for every inventoried chainsaw, while every vehicle must be equipped with one long-handled shovel and one axe consistent with PRC Section 4428 (SPR HAZ-3). For herbicide use, a licensed Pest Control Advisor is required to prepare a Spill Prevention and Response Plan 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-5). Project proponents must also coordinate all herbicide use with the County Agricultural Commission and obtain all required licenses and permits and follow all recommendations and regulations pertaining to the safe use of pesticides, including adherence to herbicide application parameters during application to minimize drift into public areas (SPR HAZ-6 and SPR HAZ-8). Disposal of herbicide containers must also adhere to regulations to ensure the prevention of contamination of waterbodies (SPR HAZ-7). Lastly, project proponents must post signage of herbicide usage occurring within or adjacent to sensitive areas such as schools and residential areas, as well as within 500 feet of any public area (SPR HAZ-9). A summary of the hazard SPRs can be found in Exhibit 1.

Lastly, the Coastal VTS limits the use of herbicides, herbivory and heavy equipment and machinery to the maximum extent feasible. These standards will help ensure that sensitive resources and communities are protected from inadvertent exposure to hazardous materials and from adverse impacts stemming from the use of heavy machinery or herbivory, such as on slope stability.

The PWP can therefore be found consistent with Marin County LCP provisions that address environmental hazards. This is because the SPRs and Coastal VTS ensure that vegetation treatment activities will be designed to minimize risks to life and property in areas of high geologic, fire and flood hazards, assure slope stability, and neither create not contribute significantly to erosion, geologic instability, or destruction of surrounding areas.

G. Cultural Resources

The County's LCP includes a suite of policies for the protection of archaeological, paleontological, tribal, and historical resources (hereafter collectively referred to as cultural resources). For example, the County's LUP requires protection of cultural resources through identification of potential adverse impacts and mitigation measures such as avoidance and permanent protection of areas with resources as open space

(Policy C-HAR-2). Policy C-HAR-3 also prescribes monitoring of construction on sensitive archaeological sites by a qualified archaeologist and appropriate Native American consultant during activities that involve earth moving and mitigation measures if significant resources are discovered. Lastly, the LCP describes historic areas and provides protections for areas and structures (built pre-1930) of special character and visitor appeal (Policies C-HAR-4 to C-HAR-8).

Vegetation treatment activities could potentially impact known and unknown cultural resources through treatment that involves soil disturbance. For example, the removal of vegetation through manual treatment activities will result in the presence of workers in geographic areas that may include unknown cultural resources. Similarly, mechanical treatment could also result in the physical disturbance of land surfaces (e.g., masticator churning up the surface), which could impact shallow, undiscovered artifacts.

The CalVTP includes significant measures to protect cultural resources. Only qualified professionals or trained workers are authorized to implement the SPRs and Mitigation Measures, while pre-treatment research and reconnaissance surveying of treatment areas is required for treatment activities. For example, SPR CUL-1 requires an archaeological and historical resource record search to be conducted pursuant to local or state agency procedures; SPR CUL-2 stipulates that California Native American Tribes in the counties where the treatment activity is located be contacted and provided with a written description of the project objectives and location; SPR CUL-3 necessitates a pre-field research to "inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory"; and SPR CUL-4 requires an archaeologist to conduct a site-specific survey of the treatment area and to provide a survey report.

Where cultural resources are known to exist or are discovered through project activities, the CalVTP requires additional protection measures. First and foremost, SPR CUL-8 requires that all project crew members and contractors be trained in the protection of cultural resources, including halting work where archaeological resources are encountered and treatment activities involve soil disturbance. Relatedly, SPR CUL-5 and SPR CUL-6 both necessitate consultation with the culturally affiliated tribes to develop protection measures for cultural resources in the treatment area. Such protection measures may include adjustments to the treatment location so that impacts to cultural resources are avoided, and/or changing the treatment design so that adverse impacts to avoid treatment activities near historical resources (as defined by Section 15064.5 of the State CEQA Guidelines), including by prohibiting prescribed burning and mechanical treatment within 100 feet of such resources.

Despite the aforementioned measures to protect cultural resources, the CalVTP recognizes that ground disturbance during vegetation treatment activities could result in inadvertent damage to or destruction of cultural resources that are discovered during project operations. As such, Mitigation Measure CUL-2 requires all ground-disturbing activities within 100 feet of a discovered cultural resource to cease where such resources are discovered. A qualified archaeologist is also required to assess the

resource and develop procedures to protect its integrity, including in-situ preservation amongst other measures.

Given that the PWP adheres to the cultural resource SPRs and Mitigation Measures of the CalVTP, proposed vegetation treatment projects would be designed and implemented consistent with the LCP's cultural resource policies that require protection of such resources through record research, reconnaissance surveying, and protection through adjustments in treatment location or design (consistent with PWP Project Standards 2 and 3). As such, the proposed PWP is consistent with LCP provisions protecting cultural resources.

H. Public Access and Recreation

The County's LCP aligns with the Coastal Act by requiring protection of, and maximizing opportunities for, coastal public access and recreation. Some policies explicitly call for protection of existing public coastal accessways and well as restoration of public coastal access areas where necessary (Policy C-PA-16 and C-PA-17). IP Section 22.64.180 details public coastal access standards that include siting and designing development to avoid impacts of development to users of coastal access and recreation areas. In terms of maximizing recreation, the LUP also provides for promotion of opportunities for coastal recreation (C-PK-1) and supports management of Tomales Bay State Park consistent with the adopted General Plan per Land Use Plan Policy C-PK-11.

The proposed PWP includes measures to ensure impacts to public access and recreation are avoided and minimized. Vegetation treatment activities could temporarily impact public access and recreation by requiring temporary closure of trails or other public areas and facilities to ensure public safety during certain treatment activities, such as herbicide application, prescribed burning, or tree trimming. SPR REC-1 addresses these impacts by requiring State Parks to post notifications of temporary closures at least two weeks prior to the commencement of the treatment activities. This would help to avoid and minimize disruptions to recreational users by notifying them in advance of their proposed recreational use. Similarly, SPR HAZ-9 requires project proponents utilizing herbicide application within or adjacent to public recreation areas to post signs at each end of herbicide treatment area and any intersecting trails. Further, SPR TRAN-1 would require the preparation of a Traffic Management Plan (TMP) "if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments." Measures included within a TMP could mitigate traffic impacts through signage, flaggers, or treatment schedule restrictions that aim to avoid peak vehicle traffic times.

In addition, the coastal-specific standards in the Coastal VTS (see page 10-1 of <u>Exhibit</u><u>1</u>) include a public access and recreation provision requiring the protection of public access and public recreational areas and facilities during project operations to the maximum extent feasible. Measures to be implemented include minimization of trail closures, limiting the use of public parking spaces for staging operations, posting available accessway signage, and using flaggers, and designing construction access corridors in a manner that has the least impact on public access. Completed vegetation

treatment projects must also ensure that any impacted coastal public access and recreational amenities are restored to existing conditions. Thus, this standard ensures that impacts to access and recreational amenities are avoided and minimized, as well as restored upon project completion.

Therefore, proposed PWP vegetation treatment projects would be designed and implemented consistent with the LCP's public access and recreation policies because PWP development standards would ensure that adverse impacts to public access and recreation would be avoided where possible, or minimized where avoidance would not be feasible (consistent with PWP Project Standards 2 and 3), thus protecting public access. Any potential disruption of public access and recreational use would also be temporary, while such resources would be restored to existing conditions following project implementation, pursuant to the Coastal VTS. Proposed PWP vegetation treatment projects will enhance visitor experiences by providing healthier and more resilient forests and other habitats within Tomales Bay State Park. Therefore, the proposed PWP is consistent with the LCP provisions protecting public access and recreation.

I. California Environmental Quality Act

Pursuant to Public Resources Code Section 21067 and Sections 15050 and 15051 of Title 14 of the California Code of Regulations, the Board of Forestry is the lead agency for CEQA purposes, as it is the public agency with principal responsibility for carrying out the CalVTP, while State Parks is a responsible agency tasked with implementing vegetation treatment under the PWP. As the lead agency under CEQA, the BOF certified its PEIR in December 2019 in accordance with State CEQA Guidelines Section 15168(c) for streamlining later vegetation treatment activities.

As an agency with a certified regulatory program under CEQA Section 21080.5, the Commission must consider alternatives and mitigation measures that would substantially lessen any significant adverse environmental effects that the proposal would otherwise have on the environment. Sections 13371 and 13356(b)(2) of Title 14 of the California Code of Regulations require that the Commission not approve or adopt a PWP unless it can find that: "...there are no feasible alternatives, or feasible mitigation measures,...available which would substantially lessen any significant adverse impact that the development...may have on the environment."

Alternatives to the proposed PWP were analyzed for their potential to substantially lessen any significant adverse impacts that the development may have on the environment. No such feasible alternatives were found.

The No Project alternative was determined not to meet the primary project objectives. Risks from wildfire are present in many areas of California, including natural areas and habitats in the coastal zone. The PWP is intended to allow a streamlined process to help increase the pace and scale of vegetation management activities designed to restore forest health, improve ecosystem resilience, and prevent ecologically damaging, high-severity wildfires. The PWP would help the State meet its goals by authorizing ecological restoration-oriented, vegetation management projects over a 10-year period that reduce those fire risks. Without a PWP, vegetation management projects could be authorized through other regulatory channels, such as individual Coastal Development Permits (CDPs). The time requirements for CDPs would likely result in a slower pace of project implementation.

If fewer projects move forward, or occur at a slow pace, any adverse near-term disturbance of natural habitat and native species caused by vegetation management would likewise be reduced. However, there would also be fewer habitat benefits from Forest Health projects, because ecological restoration would be delayed or diminished. Bishop pine forests throughout the Coastal Zone are in a state of decline owing to age senescence, lack of fire, pathogens, and prolonged drought (Avocet Research Associates and Gaman 2019). Lack of fire and other factors (e.g., disease, drought) have 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. Essentially, without a certified PWP, ecologically restorative vegetation treatment and wildfire risk reduction in Tomales Bay State Park would be minimal, which would be in conflict with forest health and wildfire resiliency goals adopted by the state as a key strategy in the plan to address the wildfire crisis. Although existing, artificially high fuels loads and invasive species in habitat areas may be reduced through other actions by California State Parks, this reduction would occur at a much slower rate than with the PWP, allowing for the continued degradation of habitat quality for native plant and wildlife species and interrupted natural ecosystem processes, as well as risk of hotter and more frequent wildfires that would damage habitat. Without a PWP, there would be fewer restoration projects proposed and carried out and potentially more requests for emergency permits and individual permits for smaller projects, which would fail to provide the region-wide, systemic approach to wildfire resilience and fuel reduction that the State has found is needed to deal with the fire risks throughout the State. The "no project" alternative would not meet the project objectives, nor would it be less environmentally damaging overall, although it would reduce near-term and temporary impacts associated with treatment activities to some areas.

Another alternative is to reduce the overall PWP Program Area available for projects. The PWP program area covers approximately 2,433 acres of Tomales Bay State Park on the east and west sides of Tomales Bay, northwest of the unincorporated community of Point Reyes Station. The PWP program area includes grassland and shrubland habitats, Bishop pine forest, and hardwood forests. A reduced program area alternative that was considered would limit the area where vegetation treatment activities could occur to only Bishop pine and hardwood forests.

First, by their nature, the proposed program activities must take place within predominantly native habitats. As a result, projects are anticipated to occur directly within these habitat areas and there are no alternative program area configurations that would completely avoid such areas. In addition, limiting the extent of the program area would not substantially reduce impacts because implementation of the PWP treatment

activities is not intended to occur throughout the entire program area. Rather, of the approximately 2,433 acres in the PWP program area, treatments would be prioritized on approximately 1,590 acres of the program area due to the remaining 843 acres being infeasible to access for treatments based on the steepness of the slope, distance from access points, or because they are within habitat that is not identified for treatment. The PWP is designed to allow flexibility on the location of vegetation treatments based on treatment prioritization over a ten-year period, including priorities for ecological restoration and forest health activities, consideration of available funding, and seasonal workflow schedules. In addition, removing the treatment of grasslands and shrublands from the PWP program would leave invasive plant species (e.g., ice plant and coyote brush) that are encroaching into the grassland habitats, thereby accelerating degradation of these areas. Similar to the No Project alternative, vegetation management in grasslands and shrublands could be authorized through other means, such as individual CDPs. However, this would be a much slower process, which could result in further loss or degradation of grassland and shrubland habitat and more treatment being required to remove the encroaching invasive plants.

Furthermore, Executive Order B-52-18 (May 2018) adopted a goal of 500,000 annual acres of vegetation management treatments to occur on non-federal lands. Of the 103 million acres that comprise the State, approximately 20.3 million acres are under the responsibility of CAL FIRE and considered treatable areas. In contrast, the program area is 2,433 acres and represents only one area of the entire State in need of vegetation treatment for fuel reduction, wildfire resiliency, and forest health. Although the program area is small relative to the State's goals, maintaining a larger program boundary allows the necessary flexibility to design projects that maximize effectiveness, as funding and circumstances arise. Therefore, the "reduced program area" would limit flexible implementation as well as neglect the treatment goals of grasslands and shrublands that would benefit from near-term vegetation treatment to prevent further encroachment from invasive plants.

The Commission incorporates its findings on LCP consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of this report. For the reasons discussed in this report, the PWP is consistent with relevant LCP requirements. There are no other feasible alternatives or mitigation measures available that would further lessen any significant adverse effects that the development would have on the environment, and the PWP's forest health projects will not have significant adverse effects on the environment. On the contrary, they will help restore the environment, and the plan's temporary environmental effects are appropriately minimized such that remaining impacts are not considered significant. Thus, the PWP is consistent with CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- Marin County Local Coastal Program
- Board of Forestry Certified Programmatic Environmental Impact Report (December 2019)
- Tomales Bay State Park Forest Health and Wildfire Resilience Public Works Plan