COASTAL CONSERVANCY

Staff Recommendation
June 7, 2021

MOUNT TAMALPAIS WATERSHED FUELS REDUCTION PROJECT

Project No. 21-016-01
Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse up to $1,000,000 to the Marin Municipal Water District to implement vegetation management projects identified in the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) in the Mount Tamalpais Watershed, and to reduce ladder fuels in the Marin County Parks Blithedale Summit Preserve, and adoption of findings under the California Environmental Quality Act.

LOCATION: Mount Tamalpais, Marin County

EXHIBITS

Exhibit 1: Project Location Map

Exhibit 2: Biodiversity, Fire, and Fuels Integrated Plan (BFFIP)

Exhibit 3: Final Program Environmental Impact Report and Mitigation Monitoring and Reporting Program for the Biodiversity, Fire and Fuels Integrated Plan

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RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed one million dollars ($1,000,000) to Marin Municipal Water District ("the grantee") to implement vegetation management projects identified in the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) in the Mount Tamalpais Watershed and to reduce ladder fuels in the Marin County Parks Blithedale Summit Preserve.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.

2. Evidence that all permits and approvals required to implement the project have been obtained.
3. Evidence that the grantee has entered into agreements sufficient to enable the grantee to implement the project.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 3 of Division 21 of the Public Resources Code, regarding the Climate Ready Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The Conservancy has independently reviewed and considered the "Final Program Environmental Impact Report for the Biodiversity, Fire, and Fuels Integrated Plan" ("Final EIR") certified by Marin Municipal Water District in October 2019 pursuant to the California Environmental Quality Act ("CEQA") and attached to the accompanying staff recommendation as Exhibit 3.
    a. The Conservancy finds that the BFFIP portion of the proposed project will have potentially significant environmental effects in the areas of Air Quality, Greenhouse Gas Emissions, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality and Tribal Cultural Resource, as described in the CEQA section of the accompanying staff recommendation, and that with the exception of effects on Air Quality and Greenhouse Gas Emissions, these effects will be mitigated to a less-than-significant level through the mitigation measures identified in the Final EIR.
    b. The Conservancy further finds that the BFFIP portion of the proposed project may result in significant and unavoidable impacts to Air Quality and Greenhouse Gas Emissions but that environmental and other benefits of the proposed project as described in the accompanying staff recommendation outweigh and render acceptable these unavoidable adverse environmental impacts to achieve the objectives of the project.
4. The Conservancy adopts the Significant Impacts Findings and Statement of Overriding Considerations set forth in CEQA section of the accompanying staff recommendation.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends authorization of a grant of an amount not to exceed one million dollars to Marin Municipal Water District ("Marin Water") to implement vegetation management projects identified in the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP), and to reduce ladder fuels

in the Marin County Parks Blithedale Summit Preserve. The proposed project consists of fuels modification and forestry restoration on approximately 500-acres within the Mount Tamalpais watershed and Blithedale Summit Preserve. Marin Water is serving as the project lead, but will subaward a portion of the work to the Marin County Parks and Open Space District ("Parks District").

Marin Water provides water for approximately 190,000 people living in central and southern Marin County and also manages approximately 21,600 acres of publicly accessible watershed lands that support rich, natural ecosystems. These lands have a long history of wildfire and, in general, the entire plan area has a moderate to high wildfire hazard risk. Over 25,000 structures housing approximately 45,000 residents are located within 2 miles of Marin Water lands along a wildland-urban interface (WUI) that has a California Department of Fire, Fire Hazard rating of "high" to "very high." The Marin County Fire Department recorded 251 wildland fires in its jurisdiction during the 5-year period from 2009 to 2014. The wildland fires were most commonly caused by tree branches contacting power lines and sparks from mechanical equipment contacting vegetation. Most of the recorded small roadside fires were likely caused by vehicle exhaust systems contacting accumulated vegetation debris.

Marin Water developed and adopted the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) and associated Environmental Impact Report (EIR) to address this situation. The purpose of the BFFIP is, in a large part, to identify the tools and actions Marin Water can take to reduce fuel loads and fire risks and improve ecosystem health on lands within its jurisdiction. The BFFIP identifies 27 specific actions that are designed to achieve the goals of minimizing the risk from wildfires, preserving and enhancing existing significant biological resources, and allowing for an adaptive framework for the periodic review and revision of BFFIP implementation in response to changing conditions and improved knowledge.

Of the 27 actions identified in the BFFIP, 19 are considered administrative and would include inventorying and monitoring resources, partner collaboration, and planning for various District activities. The remaining eight management actions include vegetation management in the field through the use of hand tools and mechanical equipment to establish and maintain fuelbreaks and defensible spaces; to remove invasive plant species; and to improve and restore native ecosystems on watershed lands. These latter eight actions will be funded in part through this grant. Herbicide use, though analyzed in the EIR, is not included as part of the proposed project. All work on Marin Water land would be performed using manual and mechanical tools and equipment, and prescribed burning.

The tools and techniques available for vegetation management actions, be it fuelbreak construction, fuelbreak maintenance, forest enhancement, or habitat restoration, are fundamentally the same regardless of the purpose of any given project. Project-specific differences arise in the use of those tools, with the timing, scale, intensity, and frequency of their use driven by site conditions and desired outcome. The BFFIP includes manual and mechanical approaches to manage vegetation. Manual methods of vegetation management include tree girdling, removal or pruning; mulching; plastic cover application (solarization); weed pulling by hand or using hand tools such as shovels to remove plants; competitive planting; and propane flame torching. Mechanical methods of vegetation management include

cutting and mowing with heavy equipment, cutting plants with powered hand equipment, scalping, mowing, masticating, and pulling large plants with heavy equipment. Prescribed burning, including broadcast and pile burning, is also included.

As part of the BFFIP, Marin Water is conducting a series of management actions to construct and maintain fuelbreaks, manage the spread of non-native invasive species, thin and remove Douglas fir trees encroaching into sensitive habitats, such as grasslands and Oak woodlands, and is managing forests impacted by SOD to address fuel build up and improve stand structure on its lands. An additional project included in this grant will occur on Marin County Park's Blithedale Preserve. Here the focus is on removing 30 acres of invasive ladder fuels, including decadent broom and dense Chilean mayten, in Douglas fir forest in the preserve. The project work will greatly benefit the health of the forest through reduce understory non-native fuels in the preserve as well as enriching habitat for the threatened Northern Spotted Owl.

The BFFIP and EIR underwent an extensive outreach effort to the community. Numerous comments were received on the DEIR prior to Marin Water's certification of the FEIR with numerous adjustments.

Site Description: The BFFIP applies to the three administrative units owned by Marin Water: 1) Mount Tamalpais Watershed (also referred to as "the Watershed"); 2) Nicasio Reservoir, and 3) Soulajule Reservoir. The reservoirs provide drinking water to the region. The proposed project consists of work on the Marin Water's Pine Point land within the first administrative unit of the Mount Tamalpais Watershed, and on the Blithedale Preserve in Mill Valley.

Reservoirs on the Mount Tamalpais Watershed and Nicasio Reservoir provide approximately 75 percent of the water that the District supplies to its customers. These three administrative units also preserve important natural resources and serve as valuable scenic and recreational open space resources. These areas cover approximately 21,600 acres. The Watershed contains the drainage area for five reservoirs. It comprises 18,900 acres. Four of the District's water supply reservoirs (Lagunitas, Bon Tempe, Alpine, and Kent Lakes) are in the Watershed. The fifth, Phoenix Lake, is located on Ross Creek. The Watershed supports a rich variety of habitat that hosts a range of wildlife, plants, and special-status species. The Watershed also supports recreational activities such as hiking and fishing, and is adjacent to other recreational areas, including the Golden Gate National Recreation Area, Point Reyes National Seashore, Mount Tamalpais State Park, Samuel P. Taylor State Park, and Marin County Parks (MCP) lands. The Watershed also abuts urban areas, including the communities of Fairfax, San Anselmo, Ross, Kentfield, and Mill Valley.

Blithedale Summit Preserve, a 639-acre property managed by the Parks District for public access and habitat preservation, is within the Mount Tamalpais Watershed. The Preserve includes a trail network and borders both Marin Water property as well as numerous residential districts, making it ideally suitable for the fuel management approaches proposed under this grant.

Over multiple decades, fuel load and forest conditions on Mount Tamalpais have been impacted by the spread of sudden oak death and the non-native invasive plants, such as French broom.

Grant Applicant Qualifications: Chartered on April 25, 1912, the Marin Municipal Water District is the first municipal water district in California. Marin Water's mission is to manage its natural resources in a sustainable manner, and to provide its customers with high-quality water at a reasonable price. Marin Water manages a 21,600-acre watershed and serves more than 191,000 people in central and southern Marin with water supply from reservoirs on Mt. Tamalpais and in west Marin, with the remaining supply coming from neighboring Sonoma County's Russian River water system. Marin Water has administered four previous Conservancy grants successfully for a variety of projects including sediment reduction, trail construction and enhancement and community coordination and outreach. Their active and successful management of natural resources on their 21,600-acre watershed area positions them well to manage contractors efficiently and effectively for the implementation of the BFFIP.

PROJECT FINANCING

Coastal Conservancy	**$1,000,000**
Marin Water/Marin Parks	$2,263,000
Project Total	**$3,263,000**

The anticipated source of funding is a Fiscal Year 2020-21 special appropriation from the General Fund to the Conservancy. This appropriation was part of a package of funding for the purpose of urgent wildfire risk reduction. The proposed project is consistent with the anticipated funding source.

Unless specifically labelled "Required Match" the other sources of funding listed above are provided as estimates. The Coastal Conservancy does not typically require matching funds nor does it require documentation of expenditures from other funders. Typical grant conditions require Grantees to provide any funds needed to complete the project.

CEQA COMPLIANCE:

The project contains two distinct components on different ownerships, with their own CEQA analysis.

The smaller Blithedale Summit Preserve project on Parks District land is categorically and statutorily exempt from environmental review under the California Environmental Quality Act (CEQA) pursuant to the CEQA Guidelines at California Code of Regulations, Title 14, Sections 15301, 15304, and 15269.

Section 15304 (Minor Alterations) exempts projects that consist of minor alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes.

Section 15301 (Existing Facilities) exempts projects that consist of operation, repair, maintenance, or minor alterations of existing structures, facilities, or topographical features, involving negligible expansion of existing or former use of the site. Such projects include, but are not limited to, management of existing landscaping or native growth.

Section 15269 (Emergency Projects) exempts emergency projects, including: emergency repairs to serviced facilities necessary to maintain service essential to the public health, safety, or welfare, including those repairs that require a reasonable amount of planning to address and anticipated emergency; and specific actions necessary to prevent or mitigate an emergency.

The second, larger project, the work on Marin Water's watershed lands, has been reviewed through development of an Environmental Impact Report. The grantee prepared and circulated the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) Draft Environmental Impact Report ("DEIR"), to affected public agencies and interested parties for a 90-day review period from March 21, 2019 to June 19, 2019. Comments on the Draft Program EIR were to be submitted in writing by to allow interested individuals and public agencies time to review and comment on the document. At the end of the public review period, written responses were prepared for all substantive comments received on the Draft EIR during the circulation period. The comments and responses were then added to the DEIR to form the "Final Program Environmental Impact Report for the Biodiversity, Fire, and Fuels Integrated Plan" ("Final EIR"). Marin Water certified the Final EIR and approved the project in October 2019. Marin Water filed a Notice of Determination with the State Clearinghouse later that month.

The objectives of the proposed plan are defined in the BFFIP and the Project Description of the Program EIR. The plan objectives are: 1) Minimize the risk of wildfire: Completing the fuelbreak system, continuing to maintain the fuelbreak system, and reversing weed spread throughout the fuelbreak system; 2) Preserve and enhance existing significant biological resources: Minimizing unnatural disturbances, mimicking lost or diminished ecosystem processes such as naturally occurring wildfire, restoring native plant communities, and eliminating or reducing weed populations to enhance ecosystem resiliency, and; 3) Provide an adaptive framework for the periodic review and revision of BFFIP implementation decisions in response to changing conditions and improved knowledge: Adapting management actions to address changes in the environment and in vegetation management methodologies and technologies, including from climate change, from species migration and habitat change, for treatment of forest disease, and for weed control tools and techniques.

Pursuant to CEQA Guidelines §15126.6 the DEIR considered a range of alternatives. These included: 1) No Work Alternative; 2) Refocused Effort Alternative (performing only fire risk reduction work but no forest thinning/enhancement work); 3) No Broadcast Burning Alternative (e.g. utilizing animals to graze vegetation in lieu of mechanical treatments), and; 4) Limited Use of Herbicides Alternative. The DEIR\ analyzed these alternatives and identified the No Broadcast Burning Alternative as the environmentally superior alternative because it reduced air quality impacts associated with prescribed burning. However, the ecological benefits of the proposed project, notably those of mimicking fire in a natural setting, led the grantee to select the proposed project. Ultimately, the Final EIR identified fifteen (15) potentially significant effects of the project that, with mitigation, were reduced to less-than-significant levels. The potentially significant impacts of the project were found in Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality and Tribal Cultural Resources.

Coastal Conservancy staff has independently reviewed the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) and Final EIR (Exhibit 3), and the Mitigation Monitoring and Reporting Program (MMRP, Exhibit 3) adopted by Marin Water in October 2019, and concurs that there is no substantial evidence that the project will have a significant effect on the environment in the areas of Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality and Tribal Cultural Resources. The potentially significant impacts in these areas will be mitigated. However, the project will have potentially significant impacts in the areas of Air Quality and Greenhouse Gas Emissions that cannot be mitigated to a less than significant level. The discussion below summarizes the project's impacts and mitigations and provides a statement of overriding considerations for the unavoidable potentially significant impacts.

Findings for Significant Effects Reduced to Less Than Significant Levels Through Mitigation

Biological Resources

The EIR analyzes potential impacts to a variety of listed or special status species, notably the Northern spotted owl and 46 plant species of special concern. The EIR identifies potential impacts stemming from project activities and then identifies a series of mitigation measures to reduce or avoid impacts altogether.

All impacts can be reduced to less than significant levels through various mitigation measures that require worker training, surveys, local area avoidance, seasonal avoidance, modified actions (hand methods), passive relocation of species when allowed, and monitoring. With mitigation, direct impacts would be less than significant.

Mitigation for potential impacts to Northern spotted owl requires areas proposed for vegetation management within 0.25 mile of a northern spotted owl activity center maintain a mix of disturbed and undisturbed habitat, and partial avoidance of woodrat stick nests, to minimize impacts on northern spotted owl from diminished prey populations. Indirect habitat impacts would be less than significant with mitigation.

Implementation of the plan could have direct and indirect impacts on riparian and wetland habitats. Mitigation from Hydrology would reduce this impact by restricting access to dry crossings or plating the crossing and/or obtaining permits as needed. Sedimentation impacts would also be reduced to less than significant through measures in Geology and Soils, and Hydrology and Water Quality that require numerous measures to minimize or eliminate erosion from active work sites or prescribed burns. Impacts from spread of invasive species or forest diseases that could damage plant and animal habitat, as well as sensitive plant communities, would be mitigated through washing of vehicles and equipment, use of weed-free materials, and phasing work to avoid spreading weeds and forest disease. Impacts would be less than significant with mitigation.

Cultural Resources

The lands managed by Marin Water in the plan area contain multiple historic and prehistoric resources. Such resources on the District lands include, but are not limited to, prehistoric and historic archaeological sites and historic buildings and structures. Thirty-nine cultural resources compliance studies cover parts of the BFFIP area. Seventy-five resources, comprised of 13

prehistoric, 61 historic, and 1 historic/prehistoric sites, have either been recorded or informally noted in these previous studies.

Many of the vegetation management techniques and actions proposed in the plan could have effects on both known and previously undiscovered historic and prehistoric resources. Manual methods and prescribed burning would have less potential to impact these resources, but impacts could still occur depending on the position of the resource (on the surface) and its fragility. Mitigation would be implemented that includes implementation of training programs for all workers; maintaining a geographic information system database of known cultural resources and survey areas; comparing work areas to surveyed areas prior to work; and avoiding or only using hand methods in the vicinity of resources. The measure also requires surveying of areas not previously surveyed prior to conducting work that could damage resources. Impacts would be less than significant with mitigation.

Some potential for encountering Native American human remains exists. If human remains are encountered and disturbed, impacts would be significant. Mitigation requires that handling of human remains and associated or unassociated funerary objects discovered during any soil disturbing activity within the proposed plan area complies with applicable State laws. Impacts would be less than significant with inadvertent discovery protocol and mitigation.

Geological Resources

Implementation of the BFFIP would include actions that could cause erosion and loss of topsoil through removal of vegetation covering slopes and exposing soil, and through the removal of tree and plants by the root systems that bind soil, particularly on slopes. Mitigation would reduce these impacts by requiring the implementation of erosion control measures during work, if the activity would reduce groundcover by 70 percent or more.

Mitigation would also prohibit broadcast burning within certain riparian areas and would require maintaining a 50-foot buffer around certain streams when the broadcast burn is proposed upslope and on a slope greater than 30 percent. Mitigation would also require certain design features to be implemented when grazing. Impacts would be less than significant with mitigation.

The proposed management actions that could alter vegetative cover, that could expose soils, and/or that could minimize soil-root matrix strength could pose a significant impact related to slope stability and landslides. Mitigation would reduce impacts to less than significant by requiring erosion control, evaluating areas for slope instability before conducting work and avoiding areas that are unstable, avoiding use of heavy equipment on slopes greater than 30 percent, and stopping work when soils are saturated. Impacts would be less than significant with mitigation.

Greenhouse Gases

Carbon sequestration impacts were evaluated qualitatively and based on conformance with Statewide policies and goals, in particular, the State's 2018 Forest Carbon Plan. The BFFIP conforms to the goals of the 2018 Forest Carbon Plan and the long-term benefits to carbon stock would outweigh short-term costs. Impacts would be less than significant. GHG emissions

from broadcast burning would be significant and unavoidable and are discussed in the next section.

Hazardous Materials and Fire Hazards

The BFFIP identifies potentially adverse impacts from hazardous material spills, and fire risk from vehicle ignition of dry material. Mitigation requires the District to implement spill prevention and response best management practices, having fire suppression crews available during fire season, maintaining fire suppression equipment in work vehicles, observing Red Flag Day restrictions, prohibiting smoking, and training workers. Mitigation also requires that prescribed burns are only conducted in accordance with a Prescribed Burn Plan that identifies the parameters for the burn and the required safety measures and notifications; District-use-only roads and trails are closed within at least 500 feet of the outer edges of a broadcast burn; public roads are closed within at least 500 feet of a broadcast burn if feasible or a Traffic Control Plan prepared and implemented; and broadcast burns are appropriately spaced from structures susceptible to fire. Impacts would be less than significant with implementation of mitigation measures.

Hydrology and Water Quality

Vegetation management actions would result in some minor modification to the hydrologic condition in the plan area. Water quality impacts from sedimentation and siltation of waterbodies or waterways would accrue primarily from the actions associated with forest treatments, non-native brush and understory removal, and plantings for stand regeneration. Mitigation measures include requiring the implementation of erosion control measures during work, if the activity would reduce groundcover by 70 percent or more. Mitigation also requires installation of approved erosion control measures and non-filament based geotextiles when conducting substantial ground disturbing work (i.e., use of heavy equipment, pulling large vegetation) within 100 feet and upslope of currently flowing or wet wetlands, streams, lakes and riparian areas; causing soil disturbance on moderate to steep (10 percent slope and greater) slopes; and following the removal of invasive plants from stream banks to prevent sediment movement into watercourses and to protect bank stability. Mitigation also requires avoidance of waterbody crossings when wet, performing crossings in a way that does not alter banks or beds of waterways, and obtaining permits as needed for waterway crossings. Impacts would be less than significant with mitigation.

Noise

Use of powered equipment in areas not previously exposed to noise from vegetation management activities could result in a relatively high intrusive noise exposure and a temporary increase in ambient noise levels for nearby daytime sensitive receptors, given the existing noise environment; Impacts would be potentially significant. Mitigation requires that work in proximity of a sensitive receptor only occurs Monday through Friday from 7 am to 6 pm and Saturdays from 9 am to 5 pm with no work allowed on Sundays or holidays, to follow the requirements of the Marin Countywide Plan. This and various other measures ensure that, with implementation of mitigation, noise impacts would be less than significant.

Recreation

Heavy equipment operating on or close to roads could throw up rocks, sticks, and other debris, posing a hazard to those on the nearby road. Impacts on recreationalists' safety and experience could be potentially significant. Mitigation requires closing of roads where hazards occur, providing signage for closures, and providing a road guard or protective fencing where roads or trails do not need to be fully closed. With implementation of mitigation, impacts would be less than significant.

Transportation

While all transportation related effects are deemed less than significant, several of the vegetation management methods included in the District's toolbox require lane or full road closures that could impact emergency access in the Watershed. Restricted emergency access could be a significant impact. Mitigation requires the District to make provisions to be able to create access for emergency responders across any work site and coordination with the local fire district and other emergency response agency with jurisdiction. Impacts would be less than significant with mitigation.

Cumulative Impacts

A total of 28 projects are located within the environmental geographic extents specified for each environmental resource topic covered under the BFFIP that could have some potential to lead to cumulative impacts. These projects range from individual buildings or built structures, to actions for improving District infrastructure, to overall vegetation management plans for the surrounding facilities (e.g. Golden Gate National Recreation Area). Cumulative effects could generally occur for those environmental parameters where plan-level significant impacts could occur. Mitigation proposed for the plan would be adequate to minimize the plan's contribution to most cumulative effects to less than significant levels. The proposed plan would have an unavoidable cumulatively significant impact from generation of air pollutant and GHG emissions, even with implementation of mitigation.

Growth-Inducing Impacts Section 15126.2(d) of the CEQA Guidelines requires preparers of an EIR to consider the growth inducing impacts of a proposed project. There would be no direct growth-inducing impacts from the proposed project.

Findings for Significant Unavoidable Impacts

Air Quality

Implementation of the plan would result in a sizeable increase in vehicle and equipment usage (an approximately 300 percent increase over existing usage at full implementation). The primary source of air quality emissions would be from these vehicles and equipment, but also from prescribed burning (broadcast burning). Air emissions were modeled for Year 5 of the plan (the year when maximum effort would be reached). Emissions would exceed thresholds for PM10, PM2.5, and NOx which would be a significant impact. Mitigation would be implemented to focus broadcast burns on vegetation types that emit less air pollutants, but impacts would remain significant and unavoidable, even with mitigation.

Broadcast burning, as described in the BFFIP and included as part of the Project, is the primary catalyst for the significant-and-unavoidable impacts to air quality and greenhouse gas emissions. Notwithstanding the short term adverse impacts, the broadcast burning was also shown to have significant longer term benefits. Broadcast Burning as an ecosystem enhancement tool were described extensively in the EIR. Broadcast burning not only removes accumulated fuels, but it also enhances the soils and seed banks to allow certain native plants that require fire to sprout. It "has benefits to soil health, plant regeneration, understory growth, and species diversity over time, that manual and mechanical methods...cannot provide" (Draft Program EIR, p. 4-21). Broadcast burning also checks the spread of invasive species while providing benefits to special-status plants by encouraging their growth. California Native Plant Society (CNPS) finds broadcast burning to be an "essential and highly positive force" toward returning nutrients to the soil and regulating forest density and diversity.

Green House Emissions

The analysis of impacts related to GHGs encompasses both the emissions of GHGs from vehicles and equipment used to implement the BFFIP as well as any changes in carbon sequestration of the forested lands in the plan area as a result of vegetation management. The CO2 emissions were found to exceed significance thresholds. These exceedances were primarily due to broadcast burning. Impacts would remain significant and unavoidable with mitigation.

Regarding greenhouse gas emissions, and as the EIR points out, carbon released from broadcast burning areas of natural landscape under controlled conditions would be considerably less than the emissions if the area were subject to a wildfire. Wildfires have been found to account for a disproportionately large portion of the overall loss of carbon stock in California, for the years 2000 to 2010 (CNRA, 2018). Wildfires -also resulted in a greater quantity of carbon lost per acre compared to broadcast burning and burned an order of magnitude more land than broadcast burning (CARB, 2017d)

Statement of Overriding Considerations

The environmental benefits of the proposed project warrant approval of funding for the project even though two of the environmental impacts of the proposed project cannot be mitigated. The BFFIP will provide significant public benefits by reducing the risk of wildfire, with its adverse impacts to public health and safety, water quality, natural resources, habitat, and climate change, in a manner that minimizes adverse environmental effects and implements resource and habitat management goals.

Specific objectives established by Marin Water to meet the project goals include the following: 1) Minimize the risk from wildife; 2) Preserve and enhance significant biological resources, and; 3) Provide an adaptive framework for the periodic review and revision of BFFIP implementation decisions in response to changing conditions and improved knowledge. The public safety, air quality, natural resource, and community benefits of the BFFIP outweigh the two unmitigated and unavoidable environmental impacts of the project.

For these reasons, the Conservancy staff recommends that the Conservancy find that the project, as mitigated, avoids or reduces to less than significant all potentially significant

environmental effects, except for two temporary significant and unavoidable impacts to Air Quality and Greenhouse Gas Emissions. With respect to these potential unavoidable effects, Conservancy staff recommends that the Conservancy adopt the findings included in this staff report and the Statement of Overriding Considerations.

Upon approval of the project, Conservancy staff will file a Notice of Determination.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The recommended project would be undertaken pursuant to Section 31113 of Chapter 3 of Division 21 of the Public Resources Code, which authorizes the Conservancy to address the impacts and potential impacts of climate change on resources within the Conservancy's jurisdiction (Section 31113(a)).

Pursuant to Section 31113(b), the Conservancy is authorized to award grants to nonprofit organizations and public agencies to undertake projects that include reducing greenhouse gas emissions, and addressing extreme weather events, sea level rise, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources.

Pursuant to Section 31113(c), the Conservancy must prioritize grants for projects that maximize public benefits and have one of several purposes, including reducing emissions of greenhouse gases.

Consistent with these sections, the proposed project maximizes public benefits and is a priority because it facilitates the reduction of greenhouse gas emissions from increased wildfires due to climate change. Besides reducing greenhouse gas emissions, the public benefits include improvement of forest health and protection of life, property, public health, water quality, and natural resources.

The proposed project addresses resources within the Conservancy's jurisdiction by improving forest health and reducing the risks of wildfire that would adversely impact water quality and habitat in a coastal watershed (Chapter 5.5 of Division 21 of the Public Resources Code) that is also within one of the nine counties of the San Francisco Bay Area (Chapter 4.5 of Division 21 of the Public Resources Code.

CONSISTENCY WITH CONSERVANCY'S 2018-2022 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 8, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will implement projects to increase resilience to climate change impacts using nature-based solutions and other multi-benefit strategies.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.

2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Promotion and implementation of state plans and policies:**

   The proposed project will help implement:

- California's Wildfire and Forest Resilience Action Plan (Governor's Forest Management Task Force, January 2021), which calls for activities such as fuels reduction, forest thinning, vegetation management, prescribed fire, shaded fuel breaks, defensible space, and enhancement of fire-prone habitats to reduce fire risk.

- The California Forest Carbon Plan (CNRA, 2018), which calls for restoration of natural fire regime and forest composition through a multitude of approaches including thinning, prescribed burns, invasive vegetation management, and shaded fuel breaks.
- The Community Wildfire Prevention & Mitigation Report (Cal Fire, 2019), which urges state and local agencies to implement the goals of the Carbon Forest Plan and lays out recommendations to agencies to increase the scale and pace of management and mitigation actions to improve forest health and resiliency.
- The Forests and Rangelands Companion Plan, California State Wildlife Action Plan Update (CDFW 2015), which encourages projects that seek to create a healthier and more resilient forest ecosystem.
- The Environmental Goals and Policy Report "A Strategy for California @ 50 Million, Supporting California's Climate Change Goals" (OPR, 2015), Goal 6 of the Steward and Protect Natural and Working Landscapes section, which calls on the State to "Build resilience into natural systems and prioritize natural and green infrastructure solutions".

4. **Support of the public:** There is enormous public support for wildfire risk reduction. A statewide poll last fall found that 74% of surveyed voters believe that wildfire threat is greater now than in the past.
5. **Location:** The proposed project will be located in a county within the Coastal Conservancy's jurisdiction.
6. **Need:** California is facing unprecedented fire risk due to climate change and a growing populace. The proposed funding was approved to accelerate fire risk reduction projects in advance of next year's fire season. This funding is needed to initiate this work as soon as possible.
7. **Greater-than-local interest:** Minimizing wildfire risk is of statewide significance.
8. **Sea level rise vulnerability:** The subject land is situated well above current and projected Year 2100 sea levels.

Additional Criteria

9. **Urgency:** California is facing unprecedented fire risk due to climate change and a growing populace. The 2020 fire season broke numerous records. The proposed project is urgently needed to reduce fire risk in advance of the upcoming fire season.
10. **Resolution of more than one issue**: This project addresses three major issues: it seeks to reduce wildfire risk, improve forest health, and will be focused on areas where homes and communities are most at risk, the wildland-urban interface (WUI).
11. **Readiness**: The project is ready to begin work immediately.
12. **Vulnerability from climate change impacts other than sea level rise:** The project will address fire resiliency in the context of anticipated climate change. Fire resilience is a critical issue due to increased average temperatures, reduced marine fog and longer and more severe droughts.
13. **Minimization of greenhouse gas emissions:** This project seeks to mitigate GHG emissions from catastrophic wildfires by lessoning the fire risk, improving resilience to fire, and improving carbon sequestration.