

Notice of Exemption

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044
County Clerk County of: Marin
Marin Civic Center
3501 Civic Center Dr., Suite 234,
San Rafael, CA 94903

From (Public Agency):
Southern Marin Fire Department
28 Liberty Way
Sausalito, CA 94965

FILED

OCT 26 2022

SHELLY SCOTT

MARIN COUNTY CLERK

By J. GILARDI Deputy

21-2022-232

Project Title: Southern Marin Zone SMFD Ring Mountain Fuel Break Project

Project Applicant: Southern Marin Fire Department

Project Location – Specific: The proposed project is a fuel break between residential hillside communities and open spaces in the Ring Mountain area.

Project Location – City:

Town of Tiburon

Project Location – County:

Marin County

Description of Nature, Purpose and Beneficiaries of Project:

The purpose of the proposed project is to establish and maintain a defensible space zone along the perimeter of residential hillside communities between homes and open space areas. By creating a fuel reduction zone, the proposed project would slow wildfire spread, reduce wildfire intensity, extend the time residents would have to evacuate, and provide firefighters better access to the fire's edge should a wildfire occur. Removal of fire-hazardous, invasive species and dead vegetation in the forest health treatment areas is intended to reduce fire hazards to the adjacent community as well as provide an opportunity for native, less hazardous plant species to recolonize and restore these areas to more natural habitat and fire-resilient habitat.

Name of Public Agency Approving Project: Southern Marin Fire Department

Name of Person or Agency Carrying Out Project: Southern Marin Fire Department

Exempt Status (check one):

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☐ Common Sense Exemption (Sec. 15061(b)(3));
- ☒ Categorical Exemption. State type and section number: 15304(i). Minor alterations to land for fuel management activities. 15333. Small habitat restoration projects.
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:

The project is categorically exempt under California Environmental Quality Act (CEQA) Guidelines Section 15304, Class 4 for Minor Alterations to Land, and Section 15333, Class 33, for Small Habitat Restoration Projects. A Class 4 exempt project consists of minor public or private

POSTED 10/26/22 TO 11/26/22

alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes. A Class 33 exempt project consists of projects not to exceed 5 acres in size to assure the maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife. The proposed project would involve fuels treatment by removing and thinning vegetation within up to 100 feet of structures on the boundary of residential hillside communities and open space areas and removal of invasive species and select dead and downed vegetation within several forest health treatment areas totaling less than 5 acres.

The portion of the fuel reduction zone adjacent to Highway 101 has had a history of wildfire ignitions due to proximity to the highway and residences. All of the forest health treatment zones have invasive species in high concentrations. Broom is the predominant non-native, invasive shrub in several of the forest health treatment zones, although other non-native species occur. In addition to out-competing native species, dense, mature broom stands have been found to be highly flammable as the plants age, dead wood accumulates and the percent of green material to woody material decreases¹. Eucalyptus is the predominant non-native, invasive tree species in one of the forest health treatment zones. Removal of highly invasive, non-native species reduces drought-related stress on remaining native vegetation, improving drought-tolerance of native trees and other vegetation and provides an opportunity for native plants and vegetation communities to repopulate, enhancing habitats in these areas. Furthermore, removing select dead, dying, and downed vegetation reduces fuel loading and, therefore, the potential for extensive tree mortality during a wildfire. These activities improve the resilience of forests, woodlands, and other ecosystems to drought and wildfire. These proposed activities within the forest health treatment zones on MCOSD lands are consistent with the Countywide Plan policy requiring removal of invasive exotic species to the extent feasible with an overall goal of effectively managing and enhancing native habitat². The scope of the proposed project shown in Figure 1 is consistent with a minor alteration to the condition of the vegetation around structures and the removal of non-native, invasive, fire-hazardous species, and dead and downed vegetation to improve habitat and reduce fire hazards within the fuel reduction zone.

Additionally, no healthy, mature, scenic trees would be removed; no work would take place within wetted wetlands or flowing waterways; and no ground disturbance, such as excavation, would take place. There are no facts or circumstances specific to this project that would support

¹ Zouhar, K. (2005). *Cytisus scoparius*, *C. striatus*. In: *Fire Effects Information System*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory.

² Marin County. (2007, November 6). *Marin Countywide Plan*. Retrieved from https://www.marincounty.org/media/files/departments/cd/planning/currentplanning/publications/couny-wide-plan/cwp_2015_update_r.pdf?la=en

an exception to the categorical exemption. None of the potential exceptions listed under Section 15300.2 apply.

Lead Agency Contact Person:

Jesse Figoni

Area Code/Telephone/Extension:

(415) 906-4471

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?
Yes ☒ No ☐

Signature: Jesse Figoni

Date: 10/24/22

Title: Fire Inspector

☒ Signed by Lead Agency

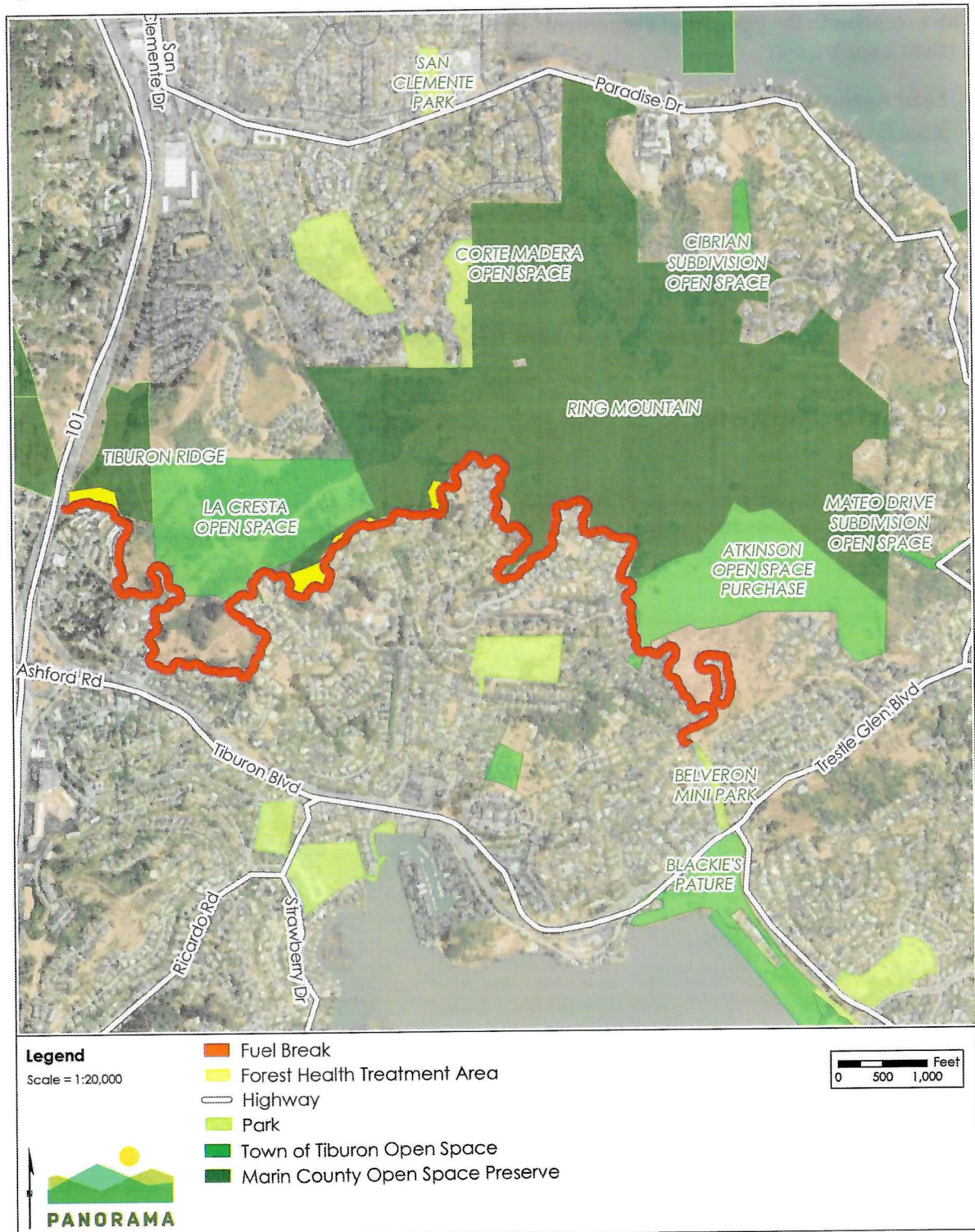
☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.

Date Received for filing at OPR:

Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Figure 1 Project Location



Categorical Exemption Determination Memorandum

October 20, 2022

Page 3

Date: October 20, 2022

Project: Southern Marin Zone SMFD Ring Mountain Fuel Break Project

Categorical Exemption Summary

The Southern Marin Fire Department (SMFD) as the lead agency under California Environmental Quality Act (CEQA) has determined that the Southern Marin Zone SMFD Ring Mountain Fuel Break Project (proposed project) is categorically exempt under CEQA Guidelines Section 15304, Class 4 for Minor Alterations to Land, and Section 15333, Class 33, for Small Habitat Restoration Projects. A Class 4 exempt project consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes. A Class 33 exempt project consists of projects not to exceed 5 acres in size to assure the maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife. The Marin Wildfire Prevention Authority (MWPA) as the responsible agency under CEQA concurs with the SMFD's determination that the proposed project is exempt under CEQA. The proposed project would involve fuels treatment by removing and thinning vegetation within up to 100 feet of structures on the boundary of residential hillside communities and open space areas and removal of invasive species and select dead and downed vegetation within several forest health treatment areas totaling less than 5 acres.

The portion of the fuel reduction zone adjacent to Highway 101 has had a history of wildfire ignitions due to proximity to the highway and residences. The buildup of fire hazardous vegetation in certain portions of the open spaces increase the likelihood of intense wildfires, in the event of ignition, in these areas designated as moderate to high fire hazard severity (CAL FIRE, 2007/2008). All of the forest health treatment zones have invasive species in high concentrations. Broom is the predominant non-native, invasive shrub in several of the forest health treatment zones, although other non-native species occur. In addition to out-competing native species, dense, mature broom stands have been found to be highly flammable as the plants age, dead wood accumulates and the percent of green material to woody material decreases (Zouhar, 2005). Eucalyptus is the predominant non-native, invasive tree species in one of the forest health treatment zones. Eucalyptus is highly flammable and promotes fire spread including heavy litter fall, flammable oils in the foliage, and open crowns bearing pendulous branches (Colwell, 1973; Skolman & Ledig, 1990; Gill M. A., 1977; Gill, Groves, & Noble, 1981). The California Invasive Plant Council (Cal-IPC) gives blue gum eucalyptus an overall negative ecological impact rating of "moderate" due to its ability to displace native plant communities, and alter fire regimes, groundwater availability, and habitat for birds (Cal-IPC, 2015). Dense eucalyptus in an area adjacent to communities and open spaces designated as moderate and high fire hazard severity can increase fire hazard (CAL FIRE, 2007/2008). A few areas within the forest health treatment zones have dead and downed vegetation that is proposed for removal. Fuel treatments, including removal of fuel loads comprised of dead and downed vegetation, may not necessarily minimize the frequency of wildland fire ignition, but fuel treatments have been shown to reduce fire intensity and severity, even under extreme weather conditions (Stephens, et al., 2012; Caltrans, 2022). Removal of highly invasive, non-native species reduces drought-related stress on remaining native vegetation, improving drought-tolerance of native trees and other vegetation and provides an opportunity for native plants and vegetation communities to repopulate, enhancing habitats in these areas. Furthermore, removing select dead, dying, and downed vegetation reduces fuel loading and, therefore, the

Categorical Exemption Determination Memorandum

October 20, 2022

Page 4

potential for extensive tree mortality during a wildfire. These activities improve the resilience of forests, woodlands, and other ecosystems to drought and wildfire. These proposed activities within the forest health treatment zones on MCOSD lands are consistent with the Countywide Plan policy requiring removal of invasive exotic species to the extent feasible with an overall goal of effectively managing and enhancing native habitat (Marin County, 2007). The proposed activities are also consistent with the management priorities and activities in the Town of Tiburon Open Space Resource Management Plan (2010) including fire hazard and risk reduction and invasive species management. . Additionally, the SMFD would present the proposed project at one of the monthly Parks, Open Space, & Trails Commission meetings to discuss and solicit feedback. The scope of the proposed project shown in Figure 1 is consistent with a minor alteration to the condition of the vegetation around structures and the removal of non-native, invasive, fire-hazardous species, and dead and downed vegetation to improve habitat and reduce fire hazards within the fuel reduction zone.

The following analysis demonstrates the proposed project would not result in adverse environmental effects, supporting the determination that the proposed activities are categorically exempt under CEQA. The proposed project would be conducted in compliance with applicable federal, State, and local regulations and under contractual provisions prohibiting work in violation of applicable regulations and plans.

Information regarding the purpose and need for the proposed project, a description of proposed activities, a discussion of why the potential exceptions to a categorical exemption do not apply here, and an assessment of the potential for environmental effects are provided below.

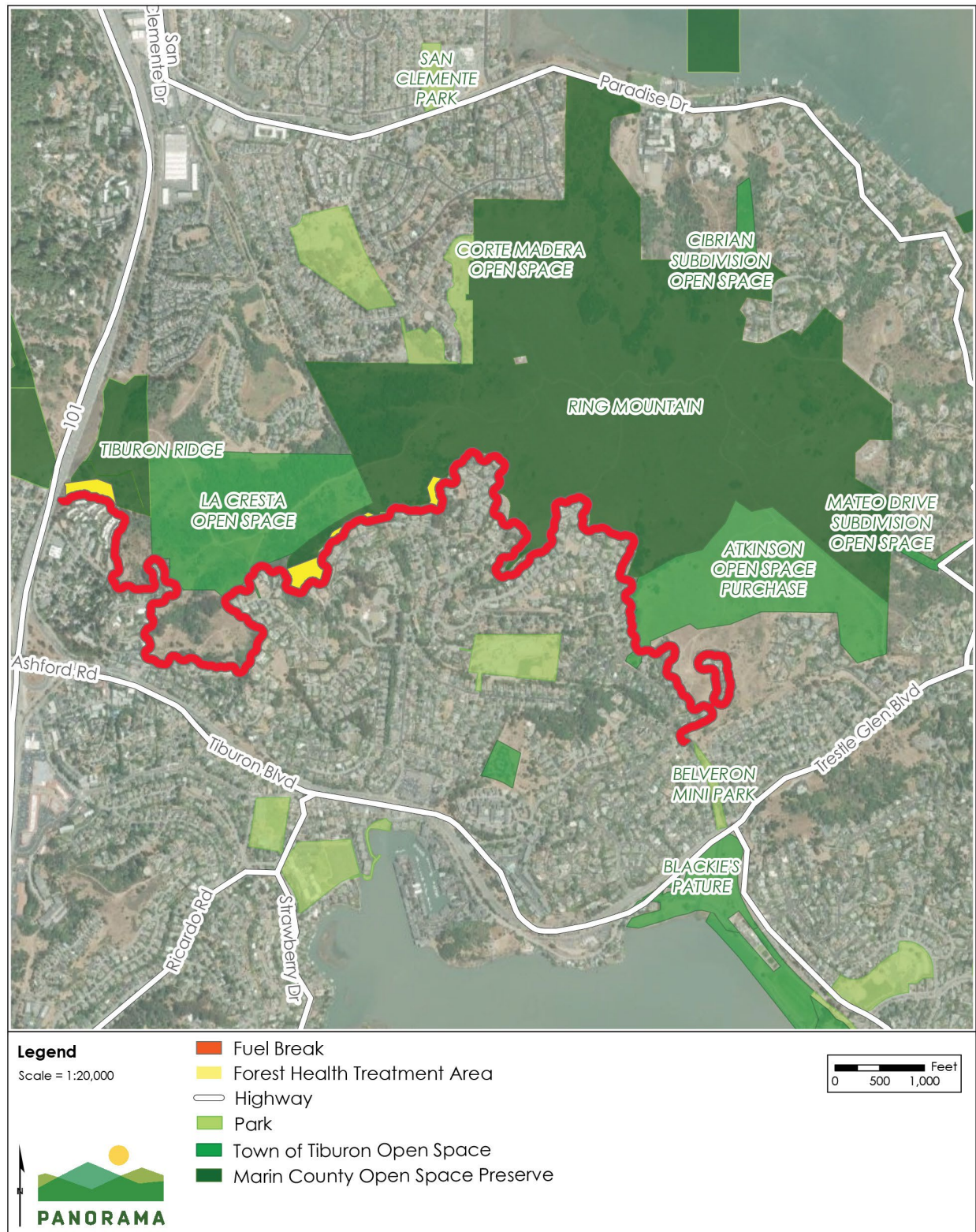
Less than a quarter of the fuel reduction zone is located on Marin County Open Space District (MCOSD) lands. Any applicable Best Management Practices consistent with the MCOSD's Vegetation Biodiversity Management Plan, including those to reduce the spread of sudden oak death, will be adhered to as appropriate. This Categorical Exemption covers all lands funded as part of the proposed project, including the portions on MCOSD lands.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 5

Figure 1 Proposed Project Location



Southern Marin Zone SMFD Ring Mountain Fuel Break Project – Marin Wildfire Prevention Authority

Categorical Exemption Determination Memorandum

October 20, 2022

Page 6

Background

Marin County voters passed Measure C in 2020, which established a 17-member Joint Powers Authority, the MWPA, to fund and oversee proactive state-of-the-art wildfire prevention and preparedness efforts within the County. Members include several cities and towns, fire protection districts, and community service districts. The MWPA was formed to develop and implement a comprehensive wildfire prevention and emergency preparedness plan throughout almost all of Marin County. This proposed project is a Core Project that is funded by and within the purview of the MWPA. Core Projects include those projects that focus on wildfire detection, notification, and evacuation; vegetation management and fire hazard reduction; grants management; and public education.

Purpose and Need

The purpose of the proposed project is to establish and maintain a defensible space zone along the perimeter of residential hillside communities between homes and open space areas. By creating a fuel reduction zone, the proposed project would slow wildfire spread, reduce wildfire intensity, extend the time residents would have to evacuate, and provide firefighters better access to the fire's edge should a wildfire occur. Removal of fire-hazardous, invasive species and dead vegetation in the forest health treatment areas is intended to reduce fire hazards to the adjacent community as well as provide an opportunity for native, less hazardous plant species to recolonize and restore these areas to more natural habitat and fire-resilient habitat.

Project Description

Treatment Area

The fuel break would be located around the boundary of the residential communities in the Town of Tiburon, within the jurisdiction of SMFD, and unincorporated Marin County that are adjacent to open space areas, owned and managed by MCOSD and the Town of Tiburon. The term "fuel break" in this document refers to a strategic area where flammable vegetation is modified. In forested areas, ladder fuels and woody understory vegetation are thinned by removing dead and dying shrubs, tree limbs, and other vegetation trimming and removal. The residential community encompassed by the fuel break would directly benefit from vegetation treatment.

Treatment for the proposed project would occur on approximately 48.13 acres and would involve vegetation thinning up to 100 feet from structures. Invasive, non-native species, hazardous trees, and fire-hazardous vegetation would be targeted. An additional up to 5 acres of fire-hazardous invasive species and select dead and down vegetation removal would be conducted outside of the fuel break. No healthy, mature, scenic trees would be removed under this proposed project. Fuel reduction treatments would avoid flowing streams and wetted wetlands within the project area. Trees screening water infrastructure (e.g., water storage tanks) would not be thinned without coordination with the infrastructure owner. Vegetation treatment activities that have the potential to damage sensitive plants would not occur in serpentine habitats during special-status plant blooming periods or surveys would be conducted to ensure avoidance of individuals (ES-1). The project area is primarily characterized by grassland, chaparral, oak and mixed woodlands, and eucalyptus. Treatments vary depending on the cover type, as described in the following sections.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 7

Fuel Break Treatment up to 100 feet from Structures

Grassland and Chaparral

Treatment within grassland and chaparral communities would be limited to handheld manual and mechanical removal of grasses, dead woody vegetation, and removal of low-lying shrubs and brush to achieve horizontal spacing and reduce overall fuel loading. Native stands of brush would be thinned to a spacing of up to 5 to 10 feet, depending upon the site conditions. Non-native plant species such as broom would be removed. Typically, non-native species would be pulled by hand for removal, although larger individuals may be cut.

Oak and Mixed Woodland

Treatment within woodland communities would be limited to manual and mechanical thinning using a hand crew. Fuel reduction work within woodland treatment areas would involve pruning tree branches 8 to 10 feet above ground (not to exceed 1/3 of the tree's height), removal of dead/downed branches, and the removal of small diameter (less than 8 inches diameter at breast height [DBH]) live trees to achieve appropriate horizontal spacing. Understory ladder fuels including non-native, invasive Scotch broom and French broom and shrub-like understory tree saplings would be removed or thinned, preferably by hand pulling. Hazardous trees (e.g., dead or dying trees), dead standing trees, and non-native trees would be removed where deemed appropriate in coordination with an arborist or qualified fire professional. In general, one snag (i.e., standing dead tree) would be retained per acre for habitat if the retained snag would not be a hazard, as determined in coordination with MCOSD or Town of Tiburon, for trees on their land. A hazard tree generally poses a risk of failure or fracture with the potential to cause injury to people or damage to property.

Eucalyptus

Treatment within eucalyptus stands would be conducted by a hand crew using manual and mechanical tools. Treatment would include removing eucalyptus duff and litter beneath the trees. Branches of mature, healthy trees would be thinned 8 to 10 feet above ground (not to exceed 1/3 of the tree's height) to reduce ladder fuels. Removal of small diameter (less than 10 inches DBH) trees would be removed to achieve horizontal spacing. Hazardous trees (e.g., dead or dying trees), dead standing trees, and non-native trees would be removed where deemed appropriate in coordination with an arborist or qualified fire professional.

Forest Health Treatment Areas

The areas identified for forest health treatments have been visited by MCOSD and fire professional staff and determined to have a high density of non-natives and select dead vegetation constituting high fuel loads. Treatment would be confined to the removal of invasive, non-native, fire-hazardous plant species, including but not limited to Scotch and French broom. In coordination with MCOSD, select dead standing trees, and dead and downed vegetation would also be removed. The extent of removal would depend upon site conditions, but in certain cases stands of invasive, non-native brush would be thinned with a spacing of 8 to 10 feet, rather than fully removed, to maintain soil stability in sloped areas. Non-native brush would be hand pulled, where feasible.

Treatment Method

Project treatments would include handheld manual and mechanical fuel reduction using chainsaws, brush cutters, string trimmers, loppers, pole pruners, and other similar handheld

Categorical Exemption Determination Memorandum

October 20, 2022

Page 8

tools. The treatment activities would be conducted by hand crews. No heavy equipment would be used due to steep slopes and limited access to the work area. A trailer-mounted chipper would be operated from nearby paved roads.

Non-native, invasive shrubs, notably broom and eucalyptus, may be treated with herbicides after cutting, if permitted per the land managers/owners. The vegetation would be cut with tools and then herbicide painted on using spot treatments such as the cut-stump or painted application methods, which have been found to have the best success rate for control of certain species, including broom (Oneto, Kyser, & JM., 2010). Follow-up treatments could include application of foliar treatments. Should chemical treatments be applied as part of initial or follow-up treatment, herbicide application would be implemented according to all applicable regulations. Herbicides would not be applied within 24 hours of a known rain event and signs would be posted at the project site within or adjacent to public recreation areas, residential areas, schools, or any other public areas at least 1 day prior to application and would remain posted on-site at least 1 day following application (HAZ-4).

Biomass Processing

Project debris and cut material would be disposed of through chipping and hauling, chipping and broadcasting, or pile burning depending upon the location and condition of the work area. If chipped, the vegetative material would be fed through the chipper and broadcast at treatment areas or hauled away for disposal. Chipped material spread on site would be chipped to under 3 inches in size and would be applied at most to 2 to 4 inches in depth to minimize wildfire risk. Chipped debris would not be broadcast on sensitive serpentine habitats due to the likely presence of special-status plant species (ES-1). Disposed debris would be hauled to the Marin Resource Recovery Center or other appropriate facility. Approximately 2 to 10 tons (estimated 1.4 to 7 cubic yards) of material could be disposed of each workday.

Cut material may be pile burned depending upon the conditions of the work area. Suitable pile burning treatment areas are typically flat or have gentle slopes and have open areas away from tree canopies and power lines. Areas selected for pile burning would be away from waterways. Piles would generally be 4 feet in diameter and 4 feet in height but may vary. Multiple piles may be burned on a single day. Pile burning would be conducted in compliance with Bay Area Air Quality Management District (BAAQMD) Regulation 5 for open burning and burn day restrictions.

Workers

A single contractor crew would consist of 4 to 8 workers at a single location. Up to two crews may work at the same time across the fuel reduction zone.

Site Access

Treatment areas would be accessed via existing roads, fire roads, and trails to the maximum extent feasible. Private residences may be used as access points with the landowner's permission. Vehicles and equipment would be staged at the contractor's yard daily.

Schedule and Duration

All work would be performed weekdays between 8:00 am and 5:00 pm. The proposed project is anticipated to start in January 2023. Initial treatment is anticipated to occur over 4 to 6 weeks. Following project implementation, the condition of the fuel break and fuel reduction area would

Categorical Exemption Determination Memorandum

October 20, 2022

Page 9

be monitored and reassessed by fire district staff every year to evaluate if maintenance is needed. Maintenance treatments are anticipated to be similar to the proposed activities but are subject to change depending on the condition following initial treatment of the fuel reduction zone.

Project Design and Implementation Features

The MWPA has developed specific design and implementation features adapted from several source documents referenced in footnotes after each name that will be incorporated as applicable into the project design and implementation for each of its projects. The following specific design and implementation measures are part of the proposed project:

CUL-1 Training¹

For all activities with the potential for ground disturbance (excluding prescribed herbivory, vegetation and tree trimming, and hand pulling smaller vegetation) all contractors and crew will receive training prepared by and/or conducted by a qualified archaeologist (who meets the U.S. Secretary of Interior's professional standards set forth in 48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61) prior to beginning work. The Tribal Heritage Preservation Officer(s) (THPO) from a local tribe (Federated Indians of Graton Rancheria [Graton Rancheria]) will be notified of the opportunity to attend and/or train crews. The training will address the potential for encountering subsurface cultural resources, recognizing basic signs of a potential resource, understanding required procedures if a potential resource is identified including reporting the resource to a qualified archaeologist and/or THPO, as appropriate, and understanding all procedures required under Health and Safety Code § 7050.5 and PRC §§ 5097.94, 5097.98, and 5097.99 for the discovery of human remains.

CUL-2 Unanticipated Discovery²

In the event that a previously unidentified cultural resource is discovered during implementation of an activity all work within a minimum of 150 feet of the discovery will be halted. The resource will be located, identified, and recorded in the MWPA cultural resources GIS database.

The boundaries around the buffered resource will be temporarily marked, such as with fencing or flagging. A qualified archaeologist will inspect the discovery and determine whether further investigation is required. Data regarding archaeological resources will be kept confidential per law. As appropriate, the qualified archaeologist will inform Graton Rancheria's THPO of the discovery. If the discovery can be avoided and no further impacts will occur, the resource will be documented on California State Department of Parks and Recreation cultural resource record forms and no further effort will be required. If the project proponent wishes to continue work in the area, only work performed using hand tools or powered hand tools is allowed, work cannot include ground disturbance and the work area can only be accessed on foot as determined acceptable by the qualified cultural resource specialist/archaeologist.

¹ Adapted from measures in the Marin Municipal Water District, Final Program Environmental Impact Report for the Biodiversity, Fire, and Fuels Integrated Plan (BFFIP EIR), October 2019.

² Adapted from measures in the Midpeninsula Regional Open Space District, Wildland Fire Resiliency Program Final Environmental Impact Report (WFRP EIR), May 2021.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 10

Alternatively, the qualified archaeologist and/or THPO or tribal monitor will evaluate the resource and determine whether it is:

- Eligible for the CRHR (and a historical resource for purposes of CEQA),
- A unique archaeological resource as defined by CEQA, and/or
- A potential tribal cultural resource (all archaeological resources could be a tribal cultural resource).

If the resource is determined to be neither a unique archaeological, an historical resource, nor a potential tribal cultural resource, work may commence in the area.

If the resource meets the criteria for either a historical resource, unique archaeological resource, and/or tribal cultural resource, work will remain halted in the buffered area around the resource. No work will occur within the buffered area except those methods previously discussed as determined acceptable by the qualified archaeologist and/or THPO or tribal monitor. After work is completed, all cultural resource delineators (e.g., flags or fencing) will be removed in order to avoid potential vandalism, unauthorized excavation(s), etc.

CUL-3 Cultural Resource Investigation²

Prior to implementation of vegetation management activities that have potential for intensive ground disturbance below the ground surface, significant heat from a burn, or use of heavy equipment off established roads and trails, a qualified archaeologist will conduct a records search and/or site-specific survey of the project areas where such disturbances could occur. Outreach with Graton Rancheria will be conducted as early as feasible to obtain information regarding culturally sensitive areas and/or the location of tribal cultural resources within the project areas. Any information provided by Graton Rancheria and/or tribal monitor(s) is confidential and exempt from public disclosure in accordance with statutory and regulatory requirements (Gov. Code § 6254(r), 6254.10; PRC § 5097.98(c); Cal. Code Regs. § 15120(d)). Records searches and field survey results will be shared with Graton Rancheria, as appropriate. Resources found during the records search, tribal outreach, and/or survey will be flagged for avoidance with an appropriate buffer identified by the qualified archaeologist, or the qualified archaeologist may identify modifications to the prescriptions using only hand tools or powered hand tools and access by foot with no ground disturbance, provided it would avoid all impacts to the resources. Any resource found during the site survey will be documented on California State Department of Parks and Recreation cultural resource record forms and a survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures.

CUL-4 Native American Project Notification

For core projects subject to a CEQA determination or compliance and requiring MWWPA Board of Directors' approval, Graton Rancheria will be notified and project maps and/or spatial data provided for projects that will potentially entail ground disturbance. Any input from Graton Rancheria regarding specific resources that could be affected will be considered during project implementation through the methods of avoidance as described in CUL-3.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 11

CUL-5 Cultural Resources Monitoring

Based on the results of CUL-3 and -4, cultural resources monitoring may be conducted in order to avoid impacts to known resources. In addition to flagging the resource for avoidance (as described in CUL-3) if monitoring is conducted, a qualified archaeologist will be present during ground disturbance work to ensure the known resources are avoided and protected during project implementation, and if the resource is identified to be pre-contact archaeological and/or a tribal cultural resource, a tribal monitor will be invited to attend during the ground disturbance work.

ET-1 Environmental Training for Biological Resources^{3,4}

All crew members and contractors will receive training from a qualified registered professional forester (RPF) or biologist prior to beginning a treatment project where sensitive biological resources could occur in the work areas. The training will describe the appropriate work practices necessary to effectively implement the appropriate project design and implementation features and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of potentially present special-status species with potential to occur; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; best management practices; and reporting requirements. As appropriate, the training will include protocols for work, such as specific trimming methods, where applicable. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF or biologist. The qualified RPF or biologist will immediately contact the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS), as appropriate, if any wildlife protected by the CE Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled).

ES-1 Environmental Surveys for Rare Plants

Within areas where rare and special-status plants have a moderate to high potential to occur, based on desktop data of habitat types, known site-specific information, and the professional judgement of qualified biologists, surveys will be conducted prior to any activity that has the potential to damage perennial plants or is proposed to occur during the flowering season for the specific annual plant species that has the potential to damage the flowering body and seeds of these plant species. Activities that have the potential to damage the flowering body may include but may not be limited to mowing, weed whacking, off-road vehicle and heavy equipment use, discing, and prescribed burning.

Surveys for rare plants will occur for these species across the entire project footprint. Surveys will occur during the blooming period, if feasible, and will occur prior to work for the specified special-status plant. If blooming period surveys are not feasible and the sensitive plant in

³ Adapted from the measures in the East Bay Municipal Utility District (EBMUD) Practices and Procedures Monitoring and Reporting Plan Section 01 35 44 Environmental Requirements, August 2018.

⁴ Adapted from measures in the California Board of Forestry and Fire Protection California Vegetation Treatment Program Final Environmental Impact Report (CalVTP EIR), November 2019.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 12

question can be keyed to genus outside of the blooming period, surveys will be conducted for all members of the genus. Individuals will be flagged for avoidance or modified methods. Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat and removal after completion. For physical avoidance, a buffer may be implemented as determined necessary by the biologist. Sensitive species damage or loss avoidance may include implementation of appropriate species-specific no-activity buffers around sensitive resources. Temporary fencing will also be implemented, as and where determined necessary based on the species tolerance, if grazing is prescribed in the area of flagged individuals for avoidance or modified methods (WILD-1).

IP-1 Clean Equipment^{4,5}

All crew members, surveyors, and other personnel on site related to project activities will clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, known plant pathogens, or invasive wildlife.

IP-2 Prevent the Spread of Invasive Species and Plant Pathogens^{4,5}

Segregate and treat soils and vegetation contaminated with invasive plant seeds and propagules. Treat, as appropriate, to prevent the spread of invasive plants. Treatment may include disposal on site within already infested areas, chipping or pile burning and mulching to eliminate viable seeds, or disposal at an approved cogeneration plant or green waste facility.

Minimize soil disturbance to the greatest extent possible to reduce the potential for introducing or spreading invasive plants or plant pathogens, to protect topsoil resources, and to reduce available habitat for the establishment of new invasive plants.

IP-3 Treat Invasive Plants Prior to Seeding^{4,5}

Schedule activities to maximize the effectiveness of control efforts and minimize introduction and spread of invasive plants as feasible, with consideration for project objectives and location (e.g., install and maintain fuel breaks, disc lines, and other work before non-native plants set seeds).

IP-4 Retain Native Plants^{4,5}

When removing vegetation, focus first on removing invasive and highly flammable species, and dead or diseased vegetation. Retain beneficial, low-fire risk native plant species whenever possible.

⁵ Adapted from measures in the draft Ecologically Sound Practices Partnership, Ecologically Sound Practices for Vegetation Management (ESP) report, May 2021.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 13

GEO-1 Erosion and Soils Loss Stabilization Measures²

Soils will be stabilized if a vegetation management activity may leave less than 70 percent groundcover or native mulch/organic material.

- For areas between 50 percent and 70 percent ground cover left:
- Sow native grasses and other suitable native vegetation on denuded areas where natural colonization or other replanting will not occur rapidly; use slash or chips to prevent erosion on such areas.
- Use surface mounds, depressions, logs, rocks, trees and stumps, slash and brush, the litter layer, and native herbaceous vegetation downslope of denuded areas to reduce sedimentation and erosion, as necessary to prevent erosion or slope destabilization.
- Install approved, biodegradable erosion-control measures and non-filament-based geotextiles (e.g., coir, jute) when:
 - Conducting substantial ground-disturbing work (e.g., 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
 - Removing invasive plants from stream banks to prevent sediment movement into watercourses and to protect bank stability.
- Sediment-control devices, if installed, will be certified weed-free, as appropriate. Sediment control devices will be inspected daily during active work to ensure that they are repaired and working as needed to prevent sediment transport into the waterbodies.

For areas with less than 50 percent ground cover:

- Any of the above measures
- Stabilize with mulch or equivalent immediately after project activities, to the maximum extent practicable.
- If project activities could result in substantial sediment discharge from soil disturbance, as determined by the qualified personnel (e.g., RPF), organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion.
- Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface.

Once work is completed, the areas will be inspected at least annually if accessible, until groundcover exceeds 70 percent or slopes have stabilized, as determined by a qualified professional. At that time, erosion-control and slope-stability devices may be removed.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 14

GEO-3 Soil Saturation and Rain Event Measures^{1,2,4}

The following measures will be implemented to prevent soil loss and erosion during rain events and following rain events:

- Shut down use of off-road heavy equipment, skidding, and truck traffic when soils become saturated (from rain event) and unable to support the machines. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur.
- Off-road heavy equipment work will be suspended if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours
- Ground disturbing work (e.g., use of heavy equipment, pulling large vegetation) will not occur during rain events (i.e., 0.5 inch of rain within a 48-hour or greater period ≥ 1.5 inches in 24 hours) and may resume when precipitation stops and soils are no longer saturated. Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials.
- For activities that involve ground disturbing work and have not been stabilized, inspect for evidence of erosion after the first rain event (i.e., 0.5 inch of rain within a 48-hour or greater period) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours.
- For activities that involve ground disturbing work, inspect project areas for the proper implementation of erosion control, as necessary and determined by the qualified personnel (e.g., RPF), prior to the rainy season. If erosion control measures are not properly implemented, the measures will be remediated prior to the first rainfall event.

HAZ-1 Leak Prevention and Spill Cleanup^{1,4}

The project proponent will, at a minimum, implement measures that address the following procedures related to the use of hazardous materials during work:

- Proper disposal or management of contaminated soils and materials (i.e., clean up materials)
- Daily inspection of vehicles and equipment for leaks and spill containment procedures
- Emergency response and reporting procedures to address hazardous material releases
- Emergency spill supplies and equipment will be available to respond in a timely manner if an incident should occur
- Response materials such as oil-absorbent material, tarps, and storage drums will be available in the plan area at all times during management activities and will be used as needed to contain and control any minor releases
- The absorbent material will be removed promptly and disposed of properly
- Use of secondary containment and spill rags when fueling

Categorical Exemption Determination Memorandum

October 20, 2022

Page 15

- Discourage “topping-off” fuel tanks
- Workers using fuels or other hazardous materials must be knowledgeable of the specific procedures necessary for hazardous materials cleanup and emergency response
- All diesel and gasoline powered equipment will be maintained per manufacturer's specification, and in compliance with all state and federal emission requirements

HAZ-2 Wildfire Risk Reduction^{1,3,4}

The following measures will be implemented during activities that involve the use of equipment that can generate sparks or heat:

- Maintain fire suppression equipment (e.g., shovel, extinguisher) in work vehicles and ensure workers are trained in use
- Closely monitor for ignited vegetation from equipment and tool use
- Train workers to properly handle and store flammable materials to minimize potential ignition sources
- Prohibit smoking in vegetated areas
- Avoid use of spark- and/or heat-generating equipment during high fire danger days (e.g., Red Flag Days and Fire Weather Watch)
- Outfit off-road diesel vehicles and equipment with spark arrestors
- Avoid metal string or blade weed trimmers
- Maintain one fire extinguisher for each chainsaw

HAZ-3 Pile Burning³

The following measures will be implemented to reduce hazards associated with pile burning:

- Pile burning will only be allowed on days when fire is less likely to spread (e.g., wind speeds are less than 15 mph).
- Piles will only be constructed in areas where burning can be safely controlled, for example, on the flattest area possible. Bottoms of steep, vegetated hills will be avoided.
- Piles should be constructed with 10 feet of clearance around them.
- Piles will be set back from public roads and trails at a distance to minimize risk to the public or cordoned off from the public.
- All requirements of CAL FIRE, the local fire department, and/or the BAAQMD will be met, including any permit, notification, burn bans, and reporting requirements.
- Have fire suppression crews on-site during the fire season determined by CAL FIRE or the local fire department (typically mid-May to mid-November) during curtain and pile burns.
- Pile burning will adhere to BAAQMD criteria pollutant thresholds and Regulation 5 for open burning.

HAZ-4 Application of Herbicides⁴

Projects will comply with all herbicide application regulations and ecologically sound integrated pest management principles.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 16

- Herbicide containers will be triple rinsed with clean water at an approved site, and rinsate will be disposed of by placing it in the batch tank for application.
- Herbicide drift to public areas or sensitive areas will be minimized through the following measures:
 - Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative).
 - No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.
 - Spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift.
 - Low nozzle pressures will be utilized.
 - Spray nozzles will be kept within 24 inches of vegetation, if spraying.
- For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, signs will be posted at each end of herbicide application areas and any intersecting trails notifying the public of the use of herbicides at a minimum 1 day before and 1 day after herbicide use.

HAZ-5 Protect Vegetation and Special-Status Species from Herbicides⁴

The project proponent will implement their approved integrated pest management (IPM) procedures when utilizing herbicides, or the following measures if no IPM is in place that addresses herbicide use in sensitive areas:

- Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway.
- Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.
- No terrestrial or aquatic herbicides will be applied within Watercourse and Lake Protection Zones (WLPZs) of Class I⁶ and II⁷ watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ.
- No herbicides will be applied within a 50-foot buffer of federal Endangered Species Act (ESA) or California ESA listed plant species or within 50 feet of dry vernal pools.

⁶ A Class I watercourse includes any domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area, and/or fish are always or seasonally present onsite, and includes habitat to sustain fish migration and spawning.

⁷ A Class II watercourse has fish always or seasonally present offsite within 100 feet downstream, and or aquatic habitat for nonfish aquatic species. Class II watercourses excludes Class III waters that are tributaries to Class I waters.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 17

- For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by California Department of Pesticide Regulation, if warranted) to prevent overspray.

NOI-1 Minimization of Noise Disruption to Nearby Neighbors and Sensitive Receptors^{4,8}

All projects will comply with applicable local noise ordinances. All powered equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.

Measures to minimize noise disruption to nearby neighbors and sensitive receptors will be implemented as needed. These measures may include but are not limited to:

- Using noise control technologies on equipment (e.g., mufflers, ducts, and acoustically attenuating shields)
- Locating stationary noise sources (e.g., pumps and generators) away from sensitive receptors
- Closing engine shrouds during equipment operations
- Shutting down equipment when not in use. Equipment will not be idled unnecessarily.
- Operating heavy equipment during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship)
- Locating project activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible

NSO-1 Northern Spotted Owl Nesting Season Avoidance¹

Each project will be reviewed by a qualified biologist to determine if northern spotted owls have potential to occur near proposed project activities. Within areas where northern spotted owl have the potential to occur, work, including mowing with heavy equipment, the mechanical removal of vegetation, or prescribed burning, including pile and broadcast burning, will occur outside of the northern spotted owl nesting season to the extent feasible (February 1 to July 31).

If work must occur during the northern spotted owl nesting season, either NSO-2 or NSO-3 will apply.

NSO-2 Work During Northern Spotted Owl Nesting Season – Surveys¹

Within an area where northern spotted owl has the potential to occur, when work will occur during the northern spotted owl nesting season (February 1 through July 31), and work is not considered low-impact by a qualified biologist the following measure will apply. Low impact type activities include, but are not limited to, goat grazing, hand pulling of weeds, hand trimming of trees and vegetation with non-mechanized equipment, chipping from existing roadways in

⁸ Adapted from San Francisco Public Utilities Commission (SFPUC), Standard Construction Measures, July 2015.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 18

residential areas, and use of mechanized equipment adjacent to roads or in residential areas that is a typical noise for the environment. In contrast, high-impact activities may include operation of heavy machinery in wildlands with lower baseline environmental noise, or work which produces noise disturbance for a longer duration than is typical in the environment.

The biologists will determine if a known breeding pair is found within 0.25 mile of the proposed activity (i.e., from existing surveys that season or historic data) and perform a nest check to confirm presence. If no survey data for the season has been completed for the areas, two surveys will be conducted by a qualified biologist (whose qualifications have been approved by the MWPA or lead public agency) for nesting northern spotted owls during the months of April and May preceding the commencement of these activities. At a minimum, the survey area will include all suitable nesting habitats within 0.25 mile of any planned activity sites, and then one of the two options listed below will be implemented. If access cannot be secured for surveys, then work should be delayed until after the nesting season, unless it can be shown that noise generation from the activities and the activities proposed would be below noise and visual disturbance levels for northern spotted owls (refer to USFWS Revised Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California) at the nest site, if known.

- If it is conclusively determined that there are nesting northern spotted owls, planned activities that generate noise (e.g., mowing, heavy equipment usage, crews with hand tools that generate noise) in areas without regular human disturbances from human residency (e.g., leaf blowers, home construction and remodeling, roadways), that are within 0.25-mile of an identified active nest will not begin prior to September 1 unless the young have fledged, at which time work may begin no earlier than July 10. Prescribed burns may only occur within suitable northern spotted owl habitat (as determined by a qualified biologist) during the nesting season if protocol surveys have determined that northern spotted owl nesting is not occurring in the area of planned activity.
- If work must occur within 0.25 mile, and work has been determined to have the potential to impact an active northern spotted owl nest, CDFW and USFWS would be consulted to determine if take could occur and whether further permits are required.

NSO-3 Northern Spotted Owl Habitat Alteration¹

For projects involving removal of large trees (10-inches DBH or greater) in potential northern spotted owl roosting, or nesting habitat (as identified during the desktop review) in areas without regular human disturbances from human residency, habitat alteration within core use areas (nesting and roosting habitat) will be planned in consultation with a qualified northern spotted owl biologist.

NSO-4 Retain Dusky-footed Woodrat Nests^{1,5}

Dusky-footed woodrats are important prey for northern spotted owls. Wherever feasible, project activities will leave dusky-footed wood rat nests intact. If possible, maintain a 3-foot buffer of vegetation around dusky-footed woodrat middens.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 19

NB-1 Nesting Bird Season Avoidance^{1,4,5,9}

Whenever possible, schedule work outside of the bird nesting season, which is generally from February 1 through July 31st ¹⁰. Not all species nest between the regulatory season, and active nests that are encountered year-round are protected.

NB-2 Nesting Bird Surveys^{1,4,5}

If work that has the potential to impact nesting birds commences between February 1 and July 31 (during the nesting season), a qualified biologist (whose qualifications have been approved by the MWPA or lead public agency) will conduct a pre-activity survey for nesting birds.

Nesting bird surveys are recommended during the nesting season for work involving mowing with heavy equipment, other vegetation (including tree) removal or limbing and trimming activities, and prescribed (broadcast and pile) burning. Low-impact activities including goat grazing, hand-pulling weeds, and herbicide application do not generally require nesting bird surveys. Determination of need for surveys for low-impact activities should be evaluated on a case-by-case basis in consultation with a qualified biologist or RPF.

Nesting bird surveys will occur within no more than 7 days prior to work to ensure that no nests will be disturbed during vegetation management work. If work pauses for more than 7 days, a follow-up survey will be conducted prior to the restarting of work. Appropriate survey areas will be determined by the qualified biologist depending on the project footprint, type of activity proposed, and suitable habitat for nesting birds. Surveys will be conducted during periods of high bird activity (i.e., 1-3 hours after sunrise and 1-3 hours before sunset). If the qualified biologist determines that visibility is significantly obstructed due to on-site conditions (such as access issues, rain, fog, smoke, or sound disturbance [including high wind]), surveys will be deferred until conditions are suitable for nest detection.

NB-3 Nesting Birds: Active Nest Avoidance^{1,4,5,9}

If active nests (i.e., presence of eggs and/or chicks) are observed in areas that could be directly or indirectly disturbed (including noise disturbance), a temporary, species-appropriate no-disturbance buffer zone will be created around the nest sufficient to reasonably expect that breeding would not be disrupted. No work will occur inside the buffer zone.

The size of the buffer zone will be determined by the biologist, by taking into account factors including but not limited to the following:

- Noise and human disturbance levels at the site at the time of the survey and the noise and disturbance expected during the work;
- Distance and amount of vegetation or other screening between the site and the nest; and

⁹ Adapted from Marin County Parks (MCP), Bird Nesting Survey Training Manual, 2017.

¹⁰ Note that the general nesting season between February 1 and July 31 is a guideline, and that birds may begin nesting beforehand, and complete nesting after these dates. Regardless, active nests are protected year-round. Avian nesting season may begin as early as January 1.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 20

- Sensitivity of individual nesting species and behaviors of the nesting birds, taking into account factors such as topography, visibility to source of disturbance, noise/vibration, nesting phase, and other case-by-case specifics.

Buffer sizes may be altered during the course of work at the recommendation of the biologist. Raptor nests are subject to additional protections, including during the “branching” phase, when fledglings begin to fly but do not fully leave the nest. Buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified biologist.

If work must occur within the buffer, proceed to NB-4.

NB-4 Nesting Birds - Active Nest Monitoring^{1,4,5,9}

If an avoidance buffer is not achievable, a qualified biologist may monitor the nest(s) during work activities within the recommended nest buffer to document that no take of the nest (nest failure) has occurred related to work activities. If it is determined that work activity is resulting in nest disturbance, work should cease immediately.

RB-1 Pework Survey^{3,4}

If vegetation management activities would (1) occur in trees with potential for roosting bat species (e.g., trees with a diameter at breast height of 10 inches or greater), (2) would include removal of trees where a bat could be roosting and (3) the work would commence between March 1 and July 31, during the bat maternity period, a pre-activity survey will be conducted for roosting bats within 2 weeks prior to work to ensure that no maternity roosting bats will be disturbed during work. This survey can be conducted concurrent with other surveys for other sensitive species. Potentially suitable bat roosting habitat within the work footprint that have been determined to be unoccupied by roosting bats, or that are located outside the avoidance buffer for active roosting sites may be removed. Roosting initiated during work is presumed to be unaffected, and no buffer would be necessary.

RB-2 Avoidance of Maternity Roosts and Day Roosts³

If active maternity roosts or day roosts are found within the project site, or in areas subject to disturbance from work activities, avoidance buffers will be implemented. The buffer size will be determined in consultation with the qualified biologist or RPF.

RB-3 Bat Roosting Tree Removal – Seasonal Restrictions³

If it is determined that a colonial maternity roost is potentially present, the roost will be avoided and will not be removed during the breeding season (March 1 through July 31) unless removal is necessary to address an imminent safety hazard.

Operation of mechanical equipment producing high noise levels (e.g., chainsaws, heavy equipment) in proximity to buildings/structures supporting or potentially supporting a colonial bat roost will be restricted to periods of seasonal bat activity (as defined above), when possible.

RB-4 Bat Roosting Tree Removal – Emergency Removals³

Potential non-colonial roosts that must be removed in order to address a safety hazard, can be removed after consultation with a biologist. Removal will occur on warm days in late morning to afternoon when any bats present are likely to be warm and able to fly. Appropriate methods will

Categorical Exemption Determination Memorandum

October 20, 2022

Page 21

be used to minimize the potential of harm to bats during tree removal. Such methods may include using a two-step tree removal process. This method is conducted over two consecutive days, and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on Day 1. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed, to not return to the roost that night. The remainder of the tree is removed on Day 2.

SH-1 Riparian Resources – Project Design^{4,5}

In riparian areas, treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are representative of healthy stands of the riparian vegetation types that are characteristic of the region. Allowable activities include hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. Mature, healthy trees will not be removed from a riparian corridor. Any activities conducted within a riparian corridor will be conducted so as to avoid alteration to a bed, channel, or bank of a waterway and all debris, including sawdust, chips, or other vegetative material, will be prevented from entering the bed, channel, or bank of a waterway, unless a permit from the California Department of Fish and Game under Section 1600 is obtained.

SH-3 Minimization of Pile Burning Disturbance^{11,12}

Pile burning will not be performed in sensitive habitats, such as serpentine-associated communities, wetlands, or riparian areas. If piles are burned on a different day than piled, the piles should be moved prior to burning to ensure wildlife is not present, such as by re-piling by hand, or a qualified biologist will inspect the pile prior to burning to ensure wildlife are not present. If moving or inspection of the piles is not feasible, the pile will be lit from one side and allowed to burn slowly to the other side, in order to allow any wildlife to relocate, rather than lighting the entire pile at once.

TR-1 Emergency Access to Project Areas^{1,2}

The following measures will be implemented to maintain emergency access:

- At least one week prior to temporary lane or full closure of a public road for vegetation management-related work, the appropriate emergency response agency/agencies will be contacted with jurisdiction to ensure that each agency is notified of the closure and any temporary detours in advance and obtain all required encroachment permits

¹¹ Adapted from Marin County Open Space District (MCOSD). (2015, April). Vegetation and Biodiversity Management Plan. *Best Management Practices*.

¹² Adapted from California Department of Fish and Wildlife (CDFW). (2011). California Endangered Species Act Incidental Take Permit No. 2081-2011-046-03. *Wildfire Hazard Reduction and Resource Management Plan*. East Bay Regional Parks District

Categorical Exemption Determination Memorandum

October 20, 2022

Page 22

- In the event of any emergency, roads blocked or obstructed for maintenance activities will be cleared to allow the vehicles to pass.
- During temporary lane or road closures on public roads, flaggers equipped with two-way radios will be utilized where needed to control traffic. During an emergency, flaggers will radio to the crew to cease operations and reopen the public road to emergency vehicles.
- All authorized vehicles at the treatment site will be parked to not block roads when no operator is present to move the vehicle.

TR-2 Traffic Control Measures³

Traffic control measures will be implemented to maintain traffic and pedestrian circulation on streets affected by project activities. The following measures may include:

- All traffic control devices will conform to the latest edition of the MUTCD, and as amended by the latest edition of the MUTCD California supplement.
- Any work that disturbs normal traffic signal operations and ensure proper temporary traffic control (lane shifts, lane closures, detours etc.) will be coordinated with the agency having jurisdiction, at least 72 hours prior to commencing work.
- Flaggers and/or warning signage of work ahead.
- A minimum of twelve (12) foot travel lanes on public roads must be maintained unless otherwise approved.
- Maintaining access to driveways and private roads at all times unless other arrangements have been made.
- Traffic control devices will be removed from view or covered when not in use.
- Sidewalks for pedestrians will remain open if safe for pedestrians. Alternate routes and signing will be provided if pedestrian routes are to be closed.
- Scheduling truck trips during non-peak hours to the extent feasible.

Discussion of Potential Exceptions (CEQA Section Guidelines 15300.2)

(a) Location:

Sensitive habitats, including flowing watercourses and wetted wetland areas would be avoided by manual and mechanical treatments. Riparian woodlands may be encountered but any vegetation trimming or thinning would be conducted by hand and would avoid alteration to and deposition of debris within the bed, channel, or bank of a waterway (SH-1). Only herbicides approved for use in aquatic environments would be applied by hand in riparian habitats and only during low-flow periods (HAZ-6). Due to the scope and design of the proposed project, the proposed project would not adversely affect riparian habitats as the work would not affect shade or species diversity and could be beneficial if invasive species removal is needed, therefore exception (a) does not apply.

(b) Cumulative Impact:

Other defensible space and fuel reduction zone creation between communities is occurring in the Southern Marin Zone and greater Marin County but would not be conducted within the same area as this proposed project and would not result in cumulative impacts as defined in CEQA Guidelines Section 15300.2. Ongoing maintenance of the fuel reduction zones would be limited to the types of activities previously described, which would be performed periodically to create

Categorical Exemption Determination Memorandum

October 20, 2022

Page 23

defensible space between structures and roadways and open space. The visual character of the fuel reduction zone would be modified each time vegetation treatments are implemented as vegetation regrows, due to reduction in vegetation cover and type (e.g., broom removal), but the natural character would remain. The design and implementation of this proposed project (e.g., ES-1, CUL-1) ensures that significant effects on environmental resources are avoided over successive years of maintenance. The proposed project would not contribute to any potential significant cumulative effect and therefore, exception (b) does not apply.

(c) Significant Effects due to “Unusual Circumstances”:

The proposed vegetation management activities and future maintenance activities are considered routine and are prevalent and typical throughout the County and Bay Area region. Sensitive waterways would be avoided. Significant effects on special-status species would not occur through the design and implementation of the proposed project (e.g., ES-1, NSO-1). The proposed project would modify vegetation, but the natural character would remain, and the aesthetic change would not be substantial. Therefore, there are no unusual circumstances associated with the proposed project or the environment in which it would be implemented, and exception (c) does not apply.

(d) Scenic Highways:

A California State Scenic Highway, U.S. Route 101, occur in the vicinity of the fuel reduction zone adjacent to the work areas (Caltrans, 2022). The proposed vegetation management activities would result in minor changes to the vegetation patterns and would occur within the fuel break and forest health treatment zone. Views from motorists along U.S. Route 101 would not be degraded, because the visual change would be minimal, and the natural vegetation and characteristics of the area would remain. Equipment and vehicles may be visible along the fuel reduction areas for short durations, but vegetation management activities would occur in any one area only for a short period of time, therefore, exception (d) does not apply.

(e) Hazardous Waste Sites:

Per the current government database of hazardous waste sites at the time of this filing, there is one closed hazardous waste site located within 125 feet of the fuel reduction zone (SWRCB, 2022). No substantial ground disturbing activities that could unearth potentially contaminated soils would occur; therefore, exception (e) does not apply.

(f) Historical Resources:

The proposed project would involve handheld manual and mechanical vegetation trimming and removal and pile burning. No intense ground-disturbing activities would occur. While some hand pulling of invasive plants could occur, ground disturbance from hand pulling is minimal. As part of the proposed project, workers would participate in a cultural training and the Graton Rancheria would be notified of this proposed project prior to project implementation (CUL-1 and -4). A records search was conducted prior to work that identified known cultural resources within the treatment areas that require further investigation to relocate in the field and then determine whether avoidance or modifying the prescription is needed to avoid impacts to the resource (CUL-3) (Far Western, 2022). Should a previously unidentified cultural resource be discovered, work would halt in the area and the resource fully avoided or only methods allowed by a qualified cultural resource specialist/archaeologist would be implemented (CUL-2). If any resources are discovered during implementation that require monitoring to continue treatment in

Categorical Exemption Determination Memorandum

October 20, 2022

Page 24

the area, a qualified archaeological would be present and, as appropriate, a tribal monitor would be invited to monitor during ground disturbance (CUL-5). Proposed project activities would not alter any built environment features and would not cause a substantial adverse change in the significance of a known or previously undiscovered historical resource. Therefore, exception (f) does not apply.

Environmental Assessment

Aesthetics

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The visual character within the proposed fuel reduction zone is characterized by primarily residential and forested areas. Vegetation consists of densely forested mountain areas as well as grass lowlands and hills. Viewers in the vicinity of the fuel reduction zone would primarily be homeowners and recreationalists that are adjacent to the fuel break and forest health treatment zone. Parts of the fuel break and forest health treatment zone are directly along U.S. Route 101, and motorists would be able to see segments of the fuel reduction zone for brief durations.

Equipment and trucks performing the work would be temporarily visible along or staged near the fuel reduction zone. The vegetation thinning activities would be in one area for a short period of time (a few hours to a day) and the work would be performed in a limited area within the fuel reduction zone at any given time.

Minor changes to the vegetation patterns and form would occur from manual and mechanical removal of small or hazard trees and shrubs, as well as weed removal. The vegetative material would be chipped or cut and either broadcast on site or hauled away from the work area, or pile burned. Viewers in the immediate vicinity may notice changes in the density and type of the vegetation within the fuel reduction zone. These methods of vegetation thinning currently occur in the Southern Marin Zone as well as throughout broader Marin County to create defensible space between structures and open space. This type of work and vegetation management is typical of the area and a characteristic part of the existing environment. The proposed project would not degrade residential, recreationalist, or motorist views from nearby residences, roads, or trails because the visual change would be minimal and is typical in the area. The natural vegetation and characteristics of the areas would remain. Visual degradation as seen from State or locally designated scenic roads or vistas, including the Marin County ridge and upland greenbelt areas, would not occur.

Pile burning, if conducted, would result in visual impacts from the staging of debris to allow the vegetation to dry, burning the debris, smoke plumes from the burn, and the appearance of scorched vegetation. Piles would be located in open areas away from any dense vegetation or forests. While piles may be visible to the public, pile burning would be temporary. Pile burns may result in smoke plumes which may be visible from a distance. Pile burns would typically last a day, and visual exposure to the public from smoke plumes would be minimal. Significant adverse effects to aesthetics would not occur.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 25

Agriculture and Forestry Resources

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed vegetation thinning activities would not convert designated farmland to non-agricultural uses. Project activities would primarily involve thinning and removal of small fire-hazardous trees, shrubs, and underbrush. Healthy, mature, native trees would not be removed and as such would not result in the loss of forest land, nor would it convert forestry land to non-forestry use. Adverse effects on agriculture and forestry resources would not occur.

Air Quality

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Vehicles and equipment for fuel reduction activities would emit diesel particulate matter and criteria air pollutants. In a typical day, it is assumed that worker trucks, chainsaw, chipper, and mechanical hand tools would operate for a few hours per crew and up to one off-haul truck would travel to a green waste disposal center a day. No tilling or grading activities that could generate fugitive dust emission would occur.

Pile burning may be used to dispose of vegetative debris instead of chipping depending on the conditions of the work area. Pile burning would emit air pollutants including particulate matter. Pile burning of vegetative debris would comply with restrictions required by BAAQMD's Regulation 5. The piles of debris burned in any one year and any ongoing treatment activities would not exceed the BAAQMD significance thresholds (USDA, 2014; Urbanski, 2014; USFWS, 2022). Pile burning would be conducted by qualified professionals in accordance with the burn permit and standard industry practices including the California Forest Practice Rules, which would ensure the safety of workers conducting the pile burns. Significant air quality impacts would not occur.

Biological Resources

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Biological database searches for the vicinity of the fuel reduction zones were conducted (CDFW, 2022; CNPS, 2022). Of the species identified during the database search, species were determined to have potential to occur within the work areas if the species is known to occur in the vicinity of the sites and if the sites or immediate vicinity contains suitable habitat to support these species.

Special-Status Plants and Sensitive Vegetation Communities

Riparian, wetland, and other sensitive habitats may occur along or near the fuel reduction zone. No critical habitat for sensitive plants occurs within the vicinity of the work area. Serpentine soils

Categorical Exemption Determination Memorandum

October 20, 2022

Page 26

are documented within the project area and serpentine-associated communities therefore have the potential to be present as shown in Figure 2 (USDA, 2020). No critical habitat for sensitive plants occurs within the vicinity of the work area. Several special-status plant species have a moderate potential to occur in the fuel reduction zone (refer to Table 1 for information). Of the special-status plant species that have a moderate potential to occur, five of the species are associated with serpentine soils.

Project activities may occur within riparian areas but any vegetation trimming or thinning would be conducted by hand and alteration to and deposition of debris avoided within the bed, channel, or bank of a waterway (SH-1). Treatment within the fuel break and the forest health treatment zone would be limited to vegetation thinning and the removal of fire-hazardous and dead vegetation, which would not alter the vegetation communities leading to type conversion or loss and would make the communities more resilient to threat of type conversion after wildfire. Pile burning may be conducted as a vegetation disposal method. Material would not be piled and burned in sensitive habitats (SH-3). Pile burns would affect a relatively small area within the fuel reduction zone.

Herbicides may be applied in a targeted manner, such as stump treatment or spot spray, to non-native, invasive plant species to prevent resprouting, minimizing risk to non-target species. Herbicides would not be applied within a 50-foot buffer of any ESA or California ESA listed species (HYD-5). Workers would receive training from a qualified professional prior to beginning the vegetation treatments in areas where sensitive biological resources could occur. Training would include identification of special-status plant species and sensitive communities for avoidance (ET-1). The training for this proposed project would involve identification of Tiburon mariposa-lily, Tiburon paintbrush, Franciscan thistle, Tiburon buckwheat, Diablo helianthella, Marin western flax, Tiburon jewelflower, and coastal triquetrella for avoidance if encountered within the fuel reduction zone. Workers would clean equipment and handle vegetation to avoid spreading invasive species and plant pathogens when moving between different project locations (IP-1, IP-2, IP-3).

Special-Status Wildlife

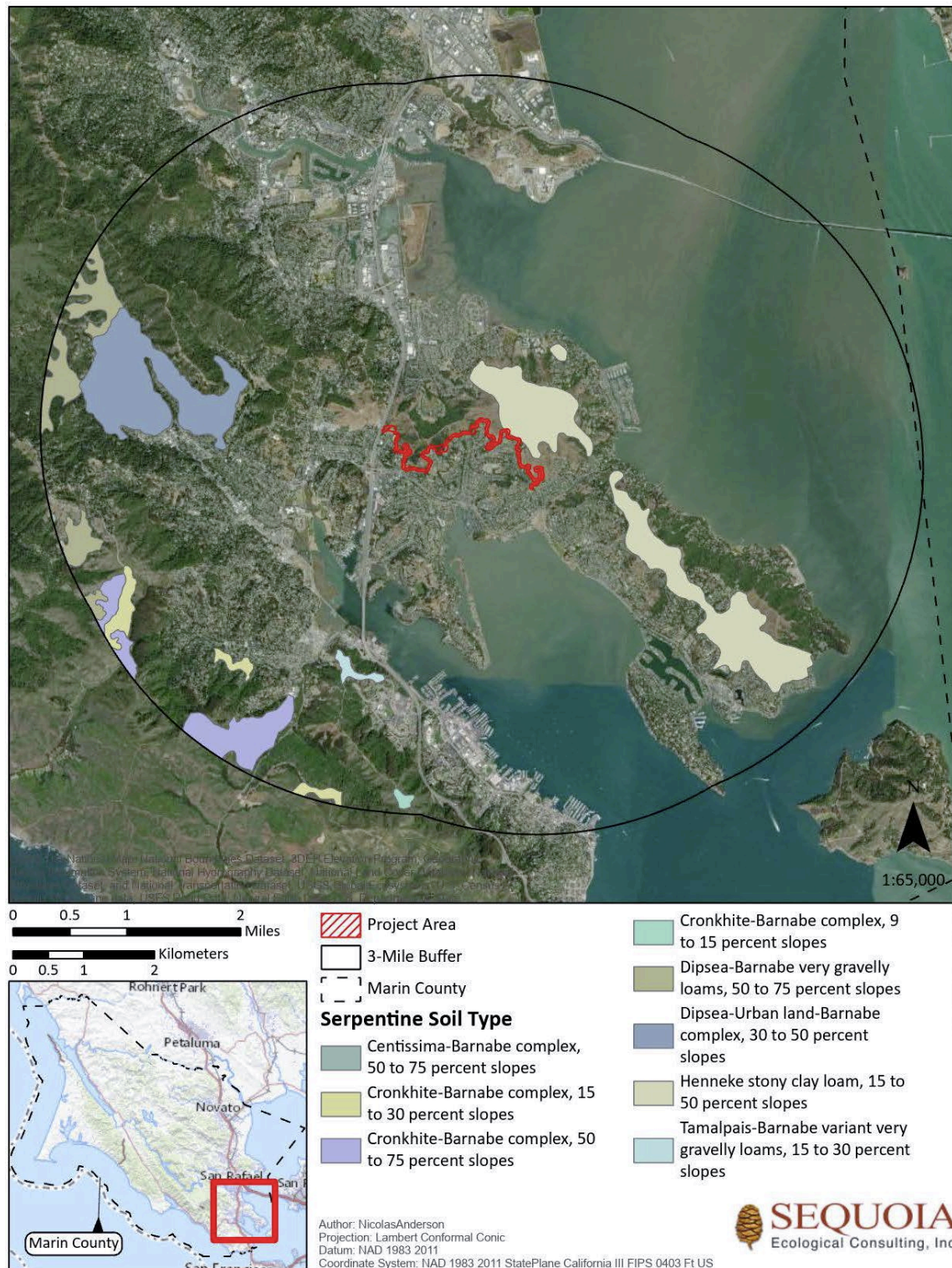
Northern spotted owl has a moderate potential to occur within the fuel reduction zone (refer to Table 1 for information). Workers would be trained to identify and avoid the types of wildlife species with a potential to occur in the work areas (ET-1). Migratory birds and birds of prey have a potential to nest or forage within the project site and are protected under the Migratory Bird Treaty Act and Sections 3503 and 3503.5 of the California State Code. Proposed project activities are currently planned to occur outside of the nesting season but follow up maintenance activities could occur from February 1 to July 31, during which time appropriate nesting bird and/or maternity roosting bat surveys would be conducted to avoid any effects to nesting birds and maternity roosting bats (per PDIFs NB-1, NB-2, NB-3, NB-4, RB-1, RB-2, RB-3, RB-4). If active nests are observed at the project site, an avoidance buffer would be implemented, or a qualified biologist may monitor the nests during work activities if an avoidance buffer is not achievable (NB-3, NB-4).

Categorical Exemption Determination Memorandum

October 20, 2022

Page 27

Figure 2 Serpentine Soils



Southern Marin Zone SMFD Ring Mountain Fuel Break Project – Marin Wildfire Prevention Authority

Categorical Exemption Determination Memorandum

October 20, 2022

Page 28

Critical habitat for the marbled murrelet is present within 3 miles of the project site. No suitable habitat for the marbled murrelet is present in the project area. There is no potential for the marbled murrelet to be impacted by the proposed project.

Critical habitat for northern spotted owl is adjacent to the project area. An activity center is documented within 0.8 mile of the proposed fuel break and forest health treatment area. As such, there is a moderate potential for northern spotted owl to occur within the project area. Vegetation treatment and removal would target invasive, non-native, and fire-hazardous vegetation and accumulative dead biomass along the fuel reduction zone. Small trees, 10 inches DBH and smaller, would be removed, as needed, as part of clearance for horizontal spacing and removal of non-native trees. This vegetation would grow back and be retreated as needed. Northern spotted owls typically prefer dense canopy closure of mature and old-growth trees with logs, standing snags, and live trees with broken tops. Most of the Marin County owls are known to use younger forests than those further north in California (MMWD, 2019). The owls also require open space in the understory or less dense habitats to allow flight under the canopy to forage (Gutierrez, Franklin, & Lahaye, 2020). The proposed project would thin vegetation in the understory and reduce the risk of high intensity fire that could permanently damage established nest sites. The proposed project may also improve foraging habitat for northern spotted owl by reducing understory density and therefore permitting foraging by owls in flight. Impacts to prey density should not be affected as vegetation immediately surrounding woodrat nests would also be left and only a subset of available habitat to woodrats would be treated (NSO-4). Vegetation treatment activities would occur outside of the Northern spotted owl nesting season to the extent possible (NSO-1). If high-impact work was to occur during the nesting season, surveys would be conducted to determine if a breeding pair were located within 0.25 mile of the work area, and treatments would not occur before July 31 if an active nest was present, unless the young have fledged (NSO-2). If any large trees 10 inches DBH or greater are identified for removal based on forestry practices, a qualified northern spotted owl biologist would be consulted (NSO-3). Given the work would be focused on removal of hazardous fuels near structures and adjacent to roadways and structures and the relatively low intensity of the vegetation thinning activities, the work would not be considered major habitat alteration for northern spotted owls.

Piles for burning would be moved prior to burning to ensure wildlife could relocate, or a qualified biologist would inspect the piles prior to burning. If the piles are unable to be re-piled or inspected, the piles would be lit from one side and allowed to burn slowly to the other side of the pile to allow any wildlife time to vacate the pile (SH-3). Significant impacts on special-status wildlife species would not occur.

Wetlands

Streams intersect or occur adjacent to the project work areas as shown in Figure 5 (USFWS, 2022). Treatment activities within streams or wetlands would be limited (SH-1). Only herbicides approved for use in aquatic environments would be applied by hand in riparian habitats and only during low-flow periods (HAZ-6). Training would ensure that workers conducting manual and mechanical activities to avoid wetlands (ET-1). Significant impacts on wetlands would not occur.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 29

Figure 3 Special-Status Plant Occurrences

Figure 4 Special-Status Wildlife Occurrences

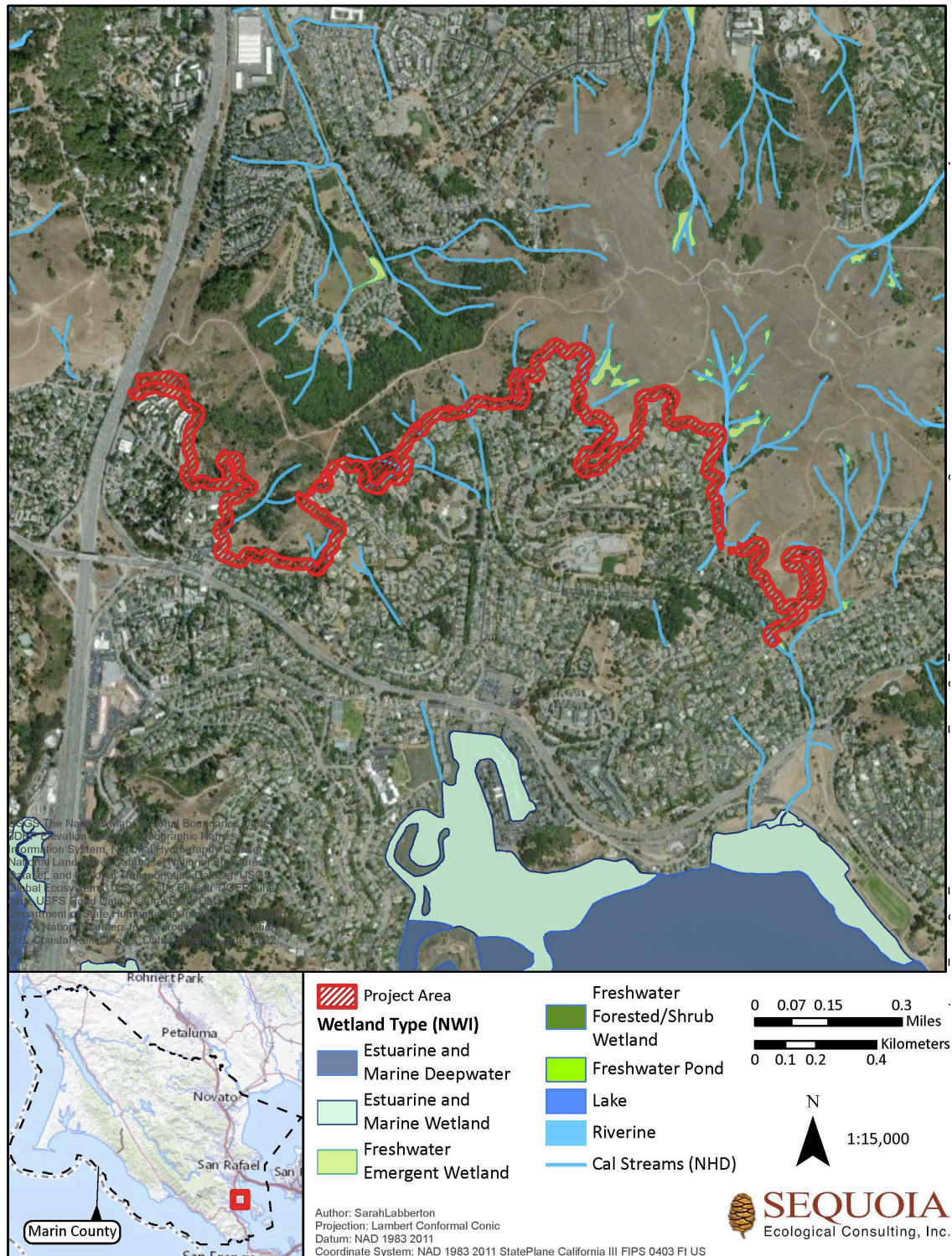
Figures omitted to protect special-status wildlife and plant species

Categorical Exemption Determination Memorandum

October 20, 2022

Page 30

Figure 5 Wetlands and Waterways



Southern Marin Zone SMFD Ring Mountain Fuel Break Project – Marin Wildfire Prevention Authority

Categorical Exemption Determination Memorandum

October 20, 2022

Page 31

Figure 6 Northern Spotted Owl Observations

Figure omitted to protect northern spotted owl nest locations

Categorical Exemption Determination Memorandum

October 20, 2022

Page 32

Table 1 Special-Status Species with Potential to Occur in the Project Vicinity

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in treatment areas	Potential to be impacted by treatment
Sensitive Plants					
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	CNPS 1B.2	Wetland, riparian woodland	Low; potentially suitable habitat near the project area, and known occurrences within the 3 mile buffer but not in proximity to work area.	Low; wetland and riparian areas will be avoided, and species can be identified and avoided with training (ET-1).
<i>Arctostaphylos montana</i> ssp. <i>montana</i>	Mt. Tamalpais manzanita	CNPS 1B.3	Chaparral, valley grassland	Low; lack of suitable habitat in project area and occurrence not in proximity of work area.	Low; species can be identified and avoided with training (ET-1).
<i>Calochortus tiburonensis</i>	Tiburon mariposa-lily	FT, CT, CNPS 1B.1	Serpentine grassland	Moderate; Potentially suitable habitat and soils present in project area.	Low; species can be identified and avoided with training (ET-1); if work that could damage flowering body occurs during blooming season, surveys will occur (ES-1).
<i>Castilleja affinis</i> var. <i>neglecta</i>	Tiburon paintbrush	FE, CT, CNPS 1B.2	Serpentine grassland	Moderate; Potentially suitable habitat and soils present in project area.	Low; species can be identified and avoided with training; if work that could damage flowering body occurs during blooming season, surveys will occur (ES-1).
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	CNPS 1B.2	Coastal salt marsh	Low; no suitable habitat within the project area.	None.
<i>Eriogonum luteolum</i> var. <i>caninum</i>	Tiburon buckwheat	CNPS 1B.2	Chaparral, coastal prairie, valley grassland, serpentine endemic	Moderate; Potentially suitable habitat and soils present in project area.	Low; species can be identified and avoided with training (ET-1); if work that could damage flowering body occurs during

Categorical Exemption Determination Memorandum

October 20, 2022

Page 33

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in treatment areas	Potential to be impacted by treatment
					blooming season, surveys will occur (ES-1).
<i>Fissidens pauperculus</i>	minute pocket moss	CNPS 1B.2	Seasonally moist hard-packet soils on steep faces, gullies, or cut banks	Low; lack of suitable habitat in project area and occurrence not in proximity of work area.	Low; bryophytes are unlikely to be impacted by project activities, wet areas avoided by project design.
<i>Gilia millefoliata</i>	dark-eyed gilia	CNPS 1B.2	Coastal dunes	Low; no suitable habitat within the project area and occurrences not within proximity of work area.	None
<i>Helianthella castanea</i>	Diablo helianthella	CNPS 1B.2	Open, grassy sites	Moderate; Potentially suitable habitat present in project area.	Low; species can be identified and avoided with training (ET-1); if work that could damage flowering body occurs during blooming season, surveys will occur (ES-1).
<i>Hesperolinon congestum</i>	Marin western flax	FT, CT, CNPS 1B.1	Serpentine, grassland	High; suitable habitat and soils found within project area. Occurrences found within work area and large abundance of individuals found in previous years.	Low; species can be identified and avoided with training (ET-1); if work that could damage flowering body occurs during blooming season, surveys will occur (ES-1).
<i>Kopsiopsis hookeri</i>	small groundcone	CNPS 2B.3	Open woodland, mixed conifer forest	Low; one occurrence within 3 miles, not in proximity of work area. Potentially suitable habitat present within the project area.	Low; can be identified and avoided with training (ET-1).
<i>Microseris paludosa</i>	marsh microseris	CNPS 1B.2	Moist grassland, open woodland	Low; potentially suitable habitat within project area.	Low; can be identified and avoided with training (ET-1).

Categorical Exemption Determination Memorandum

October 20, 2022

Page 34

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in treatment areas	Potential to be impacted by treatment
				Two historic occurrences to west of work area.	
<i>Polygonum marinense</i>	Marin knotweed	CNPS 3.1	Coastal salt, brackish marshes, swamps	Low; no suitable habitat within the project area. Occurrences not in proximity to work area.	None
<i>Streptanthus glandulosus</i> ssp. <i>niger</i>	Tiburon jewelflower	FE, CE, CNPS 1B.1	Serpentine outcrops in grasslands	Moderate; Potentially suitable habitat and soils present in project area. Occurrences in proximity to work area with abundance of individuals.	Low; species can be identified and avoided with training (ET-1); if work that could damage flowering body occurs during blooming season, surveys will occur (ES-1).
<i>Triquetrella californica</i>	coastal triquetrella	CNPS 1B.2	Roadsides, hillsides, rocky slopes, fields, chaparral; low to moderate elevations	Moderate; potentially suitable habitat and soils within the project area. Occurrence in proximity of work area.	Low; bryophytes are unlikely to be impacted by project activities.
Sensitive Wildlife					
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC	caves, mines, bridges, building, rock crevices, tree hollows in coastal lowlands, and cultivated valleys; prefer roosting in caves or other similar open spaces	Low; potentially suitable habitat near project area, and one known occurrence within 3-mile buffer but not in proximity to work area.	Low; work will occur outside the bat maternity roosting period or surveys conducted and roosting trees avoided. Bat identification and roosting avoidance will be included in the environmental training for crews (RB-1, RB-2, RB-3, RB-4, ET-1).

Categorical Exemption Determination Memorandum

October 20, 2022

Page 35

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in treatment areas	Potential to be impacted by treatment
<i>Dicamptodon ensatus</i>	California giant salamander	SSC	wet coastal forests, such as coastal redwoods, in or near clear, cold permanent and semi-permanent streams and seepages	Low; species is highly associated with streams in wet coastal forests. This habitat type is infrequent in the project footprint which hugs residential developments, and riparian areas will be avoided within the project area.	Low; suitable habitat not present in project area and is excluded by project design. Species will be included in environmental training to ensure avoidance (ET-1).
<i>Enhydra lutris nereis</i>	southern sea otter	FT, FP	cold, coastal waters with rocky shorelines and large kelp beds	Low; species is highly associated with rocky shorelines. This habitat type is not found within the project area, and marine areas will not be impacted by project activities. One known occurrence within 3-mile buffer but not in proximity to work area.	None
<i>Falco peregrinus anatum</i>	American peregrine falcon	FP	Nests on cliff ledge or hollow of broken tree snag, also uses ledges of buildings or other structures	Low; some potentially suitable habitat in project area, but occurrences within 3-mile buffer not in proximity of work area.	Low; work would occur outside nesting season or surveys conducted. Nesting bird avoidance (including raptors) will be included in environmental training to ensure avoidance (ET-1, NB-1, NB-2, NB-3, NB-4).
<i>Laterallus jamaicensis coturniculus</i>	California black rail	FT, FP	Wetlands and marshes	Low; potentially suitable habitat over 1/4 mile from the work area	None

Categorical Exemption Determination Memorandum

October 20, 2022

Page 36

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in treatment areas	Potential to be impacted by treatment
<i>Melospiza melodia samuelis</i>	San Pablo song sparrow	SSC	Marshes and wetland edges	Low; potentially suitable habitat over 1/4 mile from the work area	None
<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	FE, CE, FP	Saltwater marshes, freshwater marshes, and mangrove swamps	Low; potentially suitable habitat over 1/4 mile from the work area	None
<i>Rana draytonii</i>	California red-legged frog	FT, SSC	Breeds in ponds/slow moving streams, may use grassland and oak woodland for dispersal and foraging	Low; aquatic habitat will be avoided in project area. CRLF may move upland away from aquatic features during wet weather. Occurrences not in proximity to work area.	Low; suitable habitat not present in project area and is excluded by project design. Species will be included in environmental training to ensure avoidance (ET-1).
<i>Reithrodontomys raviventris</i>	salt-marsh harvest mouse	FE, CE, FP	Marshes and wetland edges	Low; potentially suitable habitat over 1/4 mile from the work area	None
<i>Spirinchus thaleichthys</i>	longfin smelt	FC, CT	Aquatic	None; aquatic species. Aquatic areas are excluded from the project footprint.	None
<i>Strix occidentalis caurina</i>	Northern spotted owl	FT, CT	Dense canopies of mature and old-growth forests. Nests in tree hollows	Moderate; suitable habitat found within project area. An activity center is identified within 0.8 miles of project area.	Low; work would occur outside the nesting season or surveys conducted and nests avoided. Identification and nest avoidance will be included in the environmental training for crews. No observations or habitat for NSO in work area

Categorical Exemption Determination Memorandum

October 20, 2022

Page 37

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in treatment areas	Potential to be impacted by treatment
					footprint or within 1/4 mile(ET-1, NB-1, NB-2, NB-3, NB-4).

Notes:

Species with occurrences within 3 miles of project areas were examined. Species which are considered "extirpated" or those with occurrence data greater than 75 years old were removed from the analysis as they are not anticipated to occur in the vicinity of the work area. Species with occurrence data which was greater than 50 years old was examined for inclusion on a case-by-case basis.

FE	Federally Endangered	CR	California Rare
FT	Federally Threatened	CC	California State Candidate
FC	Federal Candidate	FP	Fully Protected
CE	California State Endangered	SSC	California State Species of Special Concern
CT	California State Threatened	CNPS	California Native Plant Society Ranks

Source: (CDFW, 2022; CNPS, 2022; CDFG, 2003; Hickman, 1993; Stebbins, 2003)

Categorical Exemption Determination Memorandum

October 20, 2022

Page 38

Cultural Resources and Tribal Cultural Resources¹³

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Equipment and vehicles for the fuel reduction activities would operate from existing roads and trails adjacent to the work areas. No intense ground disturbing activities (e.g., discing) would occur. While some hand pulling of invasive species may occur, the potential to disturb cultural resources is generally low since this work results in little ground disturbance and no heavy equipment. Workers would participate in a cultural training and the Graton Rancheria would be notified of this project prior to proposed project implementation (CUL-1 and -4). Should a previously unidentified cultural resource be discovered, work would halt in the area and the resource fully avoided until the resource is reviewed by an archaeologist (CUL-2). If any resources are discovered during implementation that require monitoring to continue treatment in the area, a qualified archaeological would be present and, as appropriate, a tribal monitor would be invited to monitor during ground disturbance (CUL-5).

The proposed treatments would involve cutting of grasses, thinning and removal of understory vegetation to reduce ladder fuels, small fire-hazardous trees and shrubs, limbing of lower tree limbs, and removal of dead and dying vegetation. A cultural resources records search was completed for the fuel break and forest health treatment zone (CUL-3) (Far Western, 2022). Two known cultural resources intersect the project area, and two known cultural resources are within 150 feet of the project area. The two recorded cultural resources include Native American archaeological sites. An inventory survey would be conducted in the areas of the known resources as well as for the portion of the fuel reduction zone in the vicinity of the adjacent known resource due to the potential presence of Native American archaeological resources prior to initiation of treatment activities that have the potential to impact cultural resources (e.g., extensive broom pulling). Resources would be flagged for avoidance or monitoring would be conducted if needed (CUL-3 and CUL-5).

Heat from a wildfire or a prescribed burn may scorch, create a buildup of residue on the resource, fracture the resource, or destroy the resource (Sturdevant, Skalsky, Wienk, & Dolan, 2009). Pile burning would be conducted so as to avoid impacts to cultural resources. Pile burning would only occur in areas that has been identified and inspected for the presence of cultural resources, depending on the location and previous use, as appropriate, or in areas that have had a cultural survey conducted and evidence of no resources to ensure avoidance of any cultural resources (CUL-3). Significant impacts on cultural resources and human remains would not occur.

Energy

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

¹³ No tribal consultation requirement is associated with filing a notice of exemption per Assembly Bill 52 (PRC §21080.3.1.(b)).

Categorical Exemption Determination Memorandum

October 20, 2022

Page 39

Potential for significant impact?

☐☒

The vehicles and equipment conducting the fuel reduction activities would consume energy, including gas, diesel, and motor oil. Vehicle engines and fuel used during implementation of the project would comply with State and local energy reduction and efficiency requirements. The use of fuel to implement the project would be minimal and the proposed fuel consumption would, additionally, be considered beneficial and not wasteful given the positive outcome of the work to create defensible space between occupied structures and open space areas. Implementation of fuel reduction activities would not cause a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

Geology and Soils

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Vehicle travel to the work areas would generally occur on existing paved roads. Work areas would be accessed on foot, and operation of equipment would occur using existing paved roads adjacent to the work areas.

Soil erosion and loss of topsoil could occur during manual and mechanical vegetation cutting and removal through the exposure of bare soils or ground disturbance from pulling large vegetation. After the vegetation thinning is completed, erosion and topsoil loss through loss of root-soil matrix strength if root systems die is expected to be minimal. Root systems of larger vegetation would generally be left in place, minimizing the potential for erosion. Serpentine soils, which are typically vulnerable to erosion, are documented within the project area. While some soil types present in work areas may be more prone to erosion than others, vegetation removal and cutting that maintain at least 70 percent of groundcover would not result in substantial erosion (Lang & McDonald, 2005). Erosion control devices would be installed (GEO-1) in areas where erosion could occur (e.g., steep slopes with apparent erosion). Vegetation debris piles are localized and relatively small in size. Burn scars from pile burning would not be significant enough to result in increased soil erosion and topsoil loss. Significant impacts related to erosion and loss of topsoil would not occur.

Greenhouse Gas Emissions

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Vegetation thinning activities would involve manual and mechanical vegetation removal and pile burning within the fuel break and forest health treatment zone. Greenhouse gas (GHG) emissions from pile burning and would vary daily depending on the number of piles burned each workday. However, pile burns would have low GHG emissions compared to GHG emitted from catastrophic wildfires. Use of vehicles and equipment during these activities and vehicle travel

Categorical Exemption Determination Memorandum

October 20, 2022

Page 40

to treatment areas would generate some GHG. Project activities would not generate significant quantities of GHG emissions¹⁴.

The proposed project would involve vegetation thinning and would not typically remove any healthy, mature trees. Thinning can result in greater sequestration rates by reducing competition for the larger, more resilient trees (CAL FIRE, 2018). These processes are not quantified but would fluctuate during initial treatment and future maintenance. Due to the current higher fuel loads, it is anticipated that a net release of carbon from removal of vegetation could occur, at least in the near-term as the ecosystem fuel loads are restored closer to pre-fire suppression conditions and wildland fire risk is minimized while defensible space is improved. The fluctuation would be insignificant compared to overall carbon stock in Marin County. Significant greenhouse gas emission impacts would not occur.

Hazards and Hazardous Materials

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Trucks, vehicles, and equipment are used for ongoing vegetation management throughout Marin County. Workers handling hazardous materials are required to adhere to Occupational Safety and Health Administration (OSHA) and Cal/OSHA health and safety requirements to protect workers and minimize risks of accidental spills of fuels and lubricants. As part of the proposed project, spill prevention and response measures would be implemented that would ensure that hazardous materials are properly stored on-site and that any accidental releases of hazardous materials would be properly controlled and quickly cleaned up (HAZ-1). The proposed project would comply with all herbicide regulations (HAZ-4), including the Marin County Integrated Pest Management Policy and the U.S. Environmental Protection Agency (EPA) Hazardous Materials Transportation Act, Federal Insecticide, Fungicide, and Rodenticide Act, and the Agricultural Worker Protection Standards (WPS). Herbicides prohibited by the EPA would not be applied, and the proposed project would comply with the requirements of the WPS to protect workers applying herbicides from occupational exposure. The proposed project would also require the minimization of herbicide drift to public areas, herbicide containers would be triple rinsed at an approved site, and signage would be placed in any herbicide application area within 500 feet of adjacent public recreation areas (HAZ-4). Off-road grading or other intense ground disturbance would not occur, ensuring that any potential existing contamination would not be disturbed and would not pose a risk to the environment or public. Pile burning would occur in areas of lowest risk for fire spread and under conditions to ensure control of the burn. Burning would only be performed with a burn permit by qualified personnel. Pile burning would adhere to all BAAQMD Regulation 5 Open Burning requirements. Work crews would maintain fire suppression equipment in work vehicles (HAZ-2). Significant impacts related to hazards and hazardous materials would not occur.

¹⁴ BAAQMD has established thresholds of significance for GHG emissions meant primarily for evaluating GHGs associated with land-use development or stationary-source projects, but the thresholds are not recommended for vegetation-management projects (Flores, 2020).

Categorical Exemption Determination Memorandum

October 20, 2022

Page 41

Hydrology and Water Quality

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Work areas would be mostly accessed using existing paved roads adjacent to the work areas. Riparian woodlands may be encountered but any vegetation trimming, or thinning would be conducted by hand and alteration to, and deposition of debris avoided within the bed, channel, or bank of a waterway (SH-1). Herbicide mixing would occur away from waterways in areas devoid of vegetation, and only herbicides approved for use in aquatic environments would be applied by hand in riparian habitats (HYD-5). Hand pulling of invasive species would occur within the fuel reduction zone. The majority of the proposed manual vegetation removal activities would not result in circumstances that would result in significant ground cover removal and, thus, significant erosion and subsequent sedimentation. For the rare instances where erosion could occur, erosion control measures would be implemented (GEO-1). Burn piles would generally only be 4 feet in diameter and would not impact a large enough area to cause a significant change in stormwater runoff patterns that could result in sedimentation or siltation. Erosion and subsequent sedimentation of waterways would not occur. Significant water quality impacts would not occur.

Land Use and Planning

Question	Yes	No
Relevant to the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Implementation of treatment activities would not involve any new development or changes to land uses that could physically divide a community. The proposed project is consistent with the objectives of the Marin Wildfire Prevention Authority, the Marin County Community Wildfire Protection Plan (2020), and the Town of Tiburon Open Space Resource Management Plan (2010). The Town of Tiburon Open Space Resource Management Plan identifies several management actions including fire hazard and risk reduction and invasive plant control. The proposed project was designed in accordance with the Open Space Resource Management Plan and would not involve any fuel reduction or invasive species removal activities that are incompatible with the management activities outlined in the plan. All activities conducted would comply with local land use regulations and policies.

Mineral Resources

Question	Yes	No
Relevant to the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fuel reduction activities would not result in the loss of availability of a known mineral resource because the work would occur within up to 100 feet of existing structures and would not permanently alter any features. Vegetation clearance is intended to increase defensible space between communities and open space and would not alter land uses, access, or subsurface areas that could impact mineral resources.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 42

Noise

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed fuel reduction activities would occur on weekdays between 8:00 am and 5:00 pm. This timeframe would conform with the appropriate noise ordinance (Marin County Noise Ordinance § 6.70.030; Town of Tiburon)¹⁵ which allows construction activities Monday through Friday 8:00 am to 5:00 pm, depending on the ordinance. Work would progress along the fuel reduction zone. Residences would experience noise associated with activities, but it is anticipated that activities in any one location would only occur for a few hours. A single residence may be able to hear equipment operating for a day as activities progress along the fuel reduction zone. Measures to minimize noise disruption to nearby neighbors would be implemented, as needed (NOI-1). Exceedances of local noise standards would not occur (given the short duration of noise generation in any one location and existing noise levels) and significant noise impacts would not occur.

Population and Housing

Question	Yes	No
Relevant to the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The workers implementing the fuel reduction activities are anticipated to be sourced from the existing contractor and conservation crews in the region. As such, this proposed project would not induce population growth. No impact related to population and housing would occur.

Public Services

Question	Yes	No
Relevant to the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not directly or indirectly induce population growth indirectly necessitating more public services. No new or altered government facilities would be needed to provide public services as a result of the proposed project, and the proposed project would not result in increased demand for public services. No impact related to public services would occur.

Recreation

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

¹⁵ While these activities are not construction and do not require a construction permit, some of the equipment generates noise levels similar to construction equipment (e.g., noise level of a chainsaw is ≤ 82 dBA L_{max} at 50 feet (USDOT, 2008) such that a comparison could be made and justification for ensuring work hours conform.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 43

Potential for significant impact?

☐☒

Treatments would occur adjacent to the Tiburon Ridge, La Cresta, Ring Mountain open space preserves owned and managed by the Marin County Open Space Preserve and the Atkinson Open Space Purchase owned and managed by the City of Tiburon. Treatments and pile burning would be for a short duration in one area, typically for only a few hours to a few days. Signs would be posted at each end of herbicide applications areas and any intersecting trails notifying the public of the use of herbicides in recreational areas (HAZ-5). Ample recreational opportunities are available within and surrounding the Southern Marin Zone (e.g., Mt. Tamalpais State Park and Marin Headlands) that the few displaced recreationalists, if any, could use if discrete areas are unavailable due to vegetation management activities. The proposed project would not directly or indirectly induce population growth that could increase the use of recreational facilities. Significant recreational impacts would not occur.

Transportation

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Multiple crews could conduct vegetation management activities within the fuel reduction zone in a single day. A single crew of up to 22 workers could be working at a single work area and up to two crews may operate at a time. An estimated 24 to 48 daily one-way vehicle trips would occur, which would not exceed the screening threshold of 110 trips per day¹⁶. The VMT associated with implementation of the proposed project would not conflict with State CEQA Guidelines section 15064.3, subdivision (b). Pile burning could be conducted as a method of vegetative debris disposal. Pile burns would be performed away from roadways and would not be a hazard to passing motorists or recreationalists due to the small size of the burns and monitoring during the burn. No significant traffic impacts would occur.

Utilities and Service Systems

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Biomass generated from vegetation removal activities may be processed using a chipper and hauled to a processing facility if pile burning is not used. As the vegetation grows back and follow up maintenance is conducted in future years, additional vegetative materials would be chipped and trucked away. Materials would be trucked to the Marin Resource Recovery Center, which has a permitted capacity of 2,640 tons per day, or other suitable processing facilities, and

¹⁶ The Office of Planning and Research identifies a screening threshold for a small land-use project as a project that generates or attracts fewer than 110 trips per day. Projects that generate fewer than this threshold may be assumed to cause a less-than-significant transportation impact (OPR, 2017). Although a vegetation treatment project is not a land use project, it is assumed that the screening threshold would still apply to the project.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 44

would be able to accept the chipped material (CalRecycle, 2022). No impact related to utilities and service systems would occur.

Wildfire

Question	Yes	No
Relevant to the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The fuel break and forest health treatment zone are within the State Responsibility Area (SRA) and Local Responsibility Area (LRA) in moderate and high fire hazard severity zones (CAL FIRE, 2007/2008). The purpose of the proposed project is to reduce fuel loads, which would reduce the spread and intensity of a wildfire, should one occur and to provide defensible space for fire suppression crews to safely defend communities. Fuel reduction crews would maintain fire suppression equipment (e.g., Pulaski axe, shovel, fire extinguisher) in work vehicles during activities that can generate sparks or heat (HAZ-2). The proposed project would not impair an adopted emergency response plan or evacuation plan. The proposed project does not involve installation or maintenance of any infrastructure that could exacerbate fire risk. The proposed project does not involve intense ground disturbing activities that could result in downslope or downstream flooding or landslides should a wildfire occur. Impacts to people and structures from increased fire risk would not occur.

References

- CAL FIRE. (2007/2008). Fire Hazard Severity Zones Maps.
- CAL FIRE. (2018, May). California Forest Carbon Plan. *Managing Our Forest Landscapes in a Changing Climate*.
- Cal-IPC. (2015). *Cal-IPC*. Retrieved from Plant Assessment Form - Eucalyptus globulus: <https://www.cal-ipc.org/plants/paf/eucalyptus-globulus-plant-assessment-form/>
- CalRecycle. (2022). *SWIS Facility/Site Search*. Retrieved from <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>
- Caltrans. (2022). *Scenic Highways*. Retrieved from California State Scenic Highways: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>
- CDFG. (2003). List of California Terrestrial Natural Communities.
- CDFW. (2022, June). California Natural Diversity Database (CNDDB) Rarefind Program. Sacramento, CA: California Department of Fish and Wildlife.
- CNPS. (2022). Electronic Inventory of Rare and Endangered Vascular Plants of California, Database search for Marin County and surrounding quadrangles. C. Sacramento CA: CNPS.
- Colwell, R. N. (1973). ERTS-1 imagery and high flight photographs as aids to fire hazard appraisal at NASA San Pablo Reservoir Test Site. *Symposium on significant results obtained from the Earth Resources Technology Satellite* (pp. 145-156). Unknown: Unknown.

Categorical Exemption Determination Memorandum

October 20, 2022

Page 45

- Far Western. (2022, October 12). Cultural Resources Review for the Southern Marin Zone SMFD Ring Mountain Fuel Break Project (Work Order No. SM-SOM-23-05-C-FB), Marin County, California.
- Flores, A. (2020, July 2). Environmental Planner BAAQMD. (C. Gilleran, Interviewer)
- Gill, A. M., Groves, R. H., & Noble, I. R. (1981). Fire in tall open-forests (wet sclerophyll forests). In A. M. Gill, R. H. Groves, & I. R. Noble, *Fire and the Australian Biota* (pp. 339-366). Canberra City: ACT: The Australian Academy of Sciences.
- Gill, M. A. (1977). Plant traits adaptive to fires in Mediterranean land ecosystems. In H. A. Mooney, & E. C. Conrad, *Proceedings of the symposium on the environmental consequences of fire and fuel management in Mediterranean ecosystems* (pp. 17-26). Washington DC: U.S. Department of Agriculture, Forest Service.
- Gutierrez, R. J., Franklin, A. B., & Lahaye, W. S. (2020). Spotted Owl (*Strix occidentalis*), version 1.0. In *Birds of the World* (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA.
- Hickman, J. (1993). The Jepson Manual Higher Plants of California. Berkeley: University of California Press.
- Lang, D., & McDonald, G. W. (2005, January 14). Maintaining Groundcover to Reduce Erosion and Sustain Production. NSW Department of Primary Industries.
- Marin County. (2007, November 6). *Marin Countywide Plan*. Retrieved from https://www.marincounty.org/-/media/files/departments/cd/planning/currentplanning/publications/county-wide-plan/cwp_2015_update_r.pdf?la=en
- MMWD. (2019). *Final Program Environmental Impact Report for the Biodiversity, Fire, and Fuels Integrated Plan*. Retrieved from State Clearinghouse.
- Oneto, S., Kyser, G., & JM., D. (2010). Efficacy of Mechanical and Herbicide Control Methods for Scotch Broom (*Cytisus scoparius*) and Cost Analysis of Chemical Control Options. *Journal of Invasive Plant Science and Management*, 3:421-428.
- OPR. (2017, November). Technical Advisory on Evaluating Transportation Impacts in CEQA.
- Skolman, R. G., & Ledig, T. F. (1990). *Eucalyptus globulus* labill bluegum eucalyptus. In R. M. Burns, & B. H. Honkala, *Silvics of North America Vol. 2 Hardwoods Agricultural Handbook* (pp. 299-304). Washington DC: U.S. Department of Agriculture, Forest Service.
- Stebbins, R. (2003). A field guide to western reptiles and amphibians. Third edition. New York, New York: Houghton Mifflin Company.
- Stephens, S. L., Mclver, J. D., Boerner, R. E., Fettig, C. J., Fontaine, J. B., Hartsough, B. R., . . . Schlick, D. W. (2012). The Effects of Forest Fuel-Reduction Treatments in the United States. *BioScience*.
- Sturdevant, J. T., Skalsky, R., Wienk, C. L., & Dolan, B. (2009). Experimental study of local fire conditions and effects on surface or near-surface archeological resources at National Park Service units – Midwest Region. *JFSP Research Projects Reports*. Retrieved from <https://www.nps.gov/archeology/sites/npsites/fire.htm>

Categorical Exemption Determination Memorandum

October 20, 2022

Page 46

- SWRCB. (2022). *GeoTracker*. Retrieved from <https://geotracker.waterboards.ca.gov/>
- Town of Tiburon. (2010). *Open Space Resource Management Plan*.
- Urbanski, S. (2014). Wildland fire emissions, carbon and climate: Emission factors.
- USDA. (2014, March 26). *Piled Fuels Biomass and Emissions Calculator*. Retrieved from <https://depts.washington.edu/nwfire/piles/index.php?>
- USDA. (2020, December 1). Gridded National Soil Survey Geographic (gNATSGO) Database for the Conterminous United States. Retrieved from <https://nrcs.app.box.com/v/soils>
- USDOT. (2008, December 8). Federal Highway Administration's Roadway Construction Noise Model.
- USFWS. (2022). National Wetlands Inventory website. Washington, D.C.
- Zouhar, K. (2005). *Cytisus scoparius*, *C. striatus*. In: *Fire Effects Information System*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory.