

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 District
28 Liberty Ship Way, Suite 2800
Sausalito, CA 94960

Project Title: Southern Marin Zone Emergency Notification Network Project

Project Applicant: Southern Marin Fire District

Project Location – Specific: Installation of emergency notification sirens at Eastwood Park, the Marin County Fire Department Marin City Station, and southern City of Sausalito near South Street and Hecht Avenue.

Project Location – City:
Sausalito, Marin City, and Tamalpais Valley

Project Location – County:
Marin County

Description of Nature, Purpose and Beneficiaries of Project:

The purpose of the proposed project is to install emergency alerting sirens to provide evacuation and disaster notification in the Southern Marin Zone. The installation and implementation of the proposed long range acoustic device (LRAD) units would improve the resiliency and redundancy of existing communication and LRAD systems. Evacuation and disaster notification is a critical component to long term fire adaptive strategy. The installation of LRAD units would communicate warnings, instructions, and notifications to nearby residents in the event of an emergency.

Name of Public Agency Approving Project: Southern Marin Fire District

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

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: 15301(f). Addition of safety devices requiring minor alterations of existing structures and 15303. Construction of new, small structures and minor alterations for the construction of a new pole for emergency alerting sirens.
- Statutory Exemptions. State code number: _____

Reasons why project is exempt:

The project is categorically exempt under California Environmental Quality Act (CEQA) Guidelines Section 15301, Class 1, for Existing Facilities and Section 15303, Class 3, for New

Construction or Conversion of Small Structures. A Class 1 exempt project consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. Subsection (f) includes the addition of safety or health protection devices for use during construction of or in conjunction with existing structures, facilities, or mechanical equipment, or topographical features including navigational devices. A Class 3 exempt project consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure.

The Sausalito and Eastwood Park sites of the proposed project would involve installation of emergency notification horns on a new pole. The Marin City site would involve installation of emergency notification horns on an existing structure or a new pole. The scope of the proposed project shown in Figure 1 is consistent with the construction of new, small structures and minor alterations to the location of the new pole for the horns. There are no facts or circumstances specific to this project that would support a finding that any of the potential exceptions to categorical exemptions listed under Section 15300.2 apply. It should be noted that the operation of the LRAD during an emergency is statutorily exempt under Public Resources Code 21080(b)(4): actions necessary to prevent or mitigate an emergency

Lead Agency Contact Person:

Marshall Nau

Area Code/Telephone/Extension:

(415) 906-4470

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: _____ Date: _____ Title: _____

Signed by Lead Agency

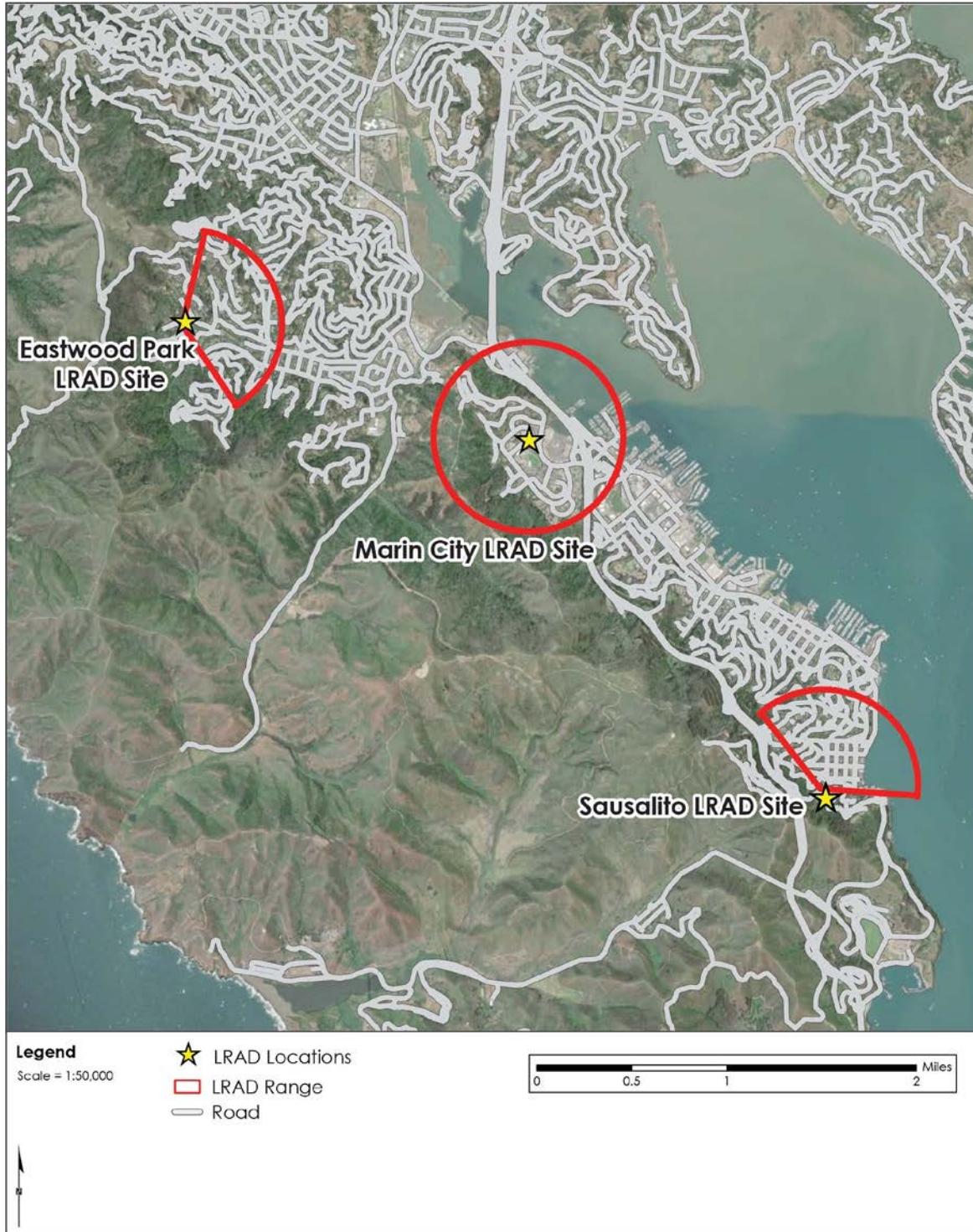
Signed by Applicant

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 LRAD Locations



Date: February 16, 2023

Project: Southern Marin Zone Emergency Notification Network Project

Categorical Exemption Summary

The Southern Marin Fire District (SMFD) as the lead agency under California Environmental Quality Act (CEQA) has determined that the Southern Marin Emergency Notification Network Project (proposed project) is categorically exempt under CEQA Guidelines Section 15301, Class 1, for Existing Facilities and Section 15303, Class 3, for New Construction or Conversion of Small Structures. A Class 1 exempt project consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. Subsection (f) includes the addition of safety or health protection devices for use during construction of or in conjunction with existing structures, facilities, or mechanical equipment, or topographical features including navigational devices. A Class 3 exempt project consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. 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 Sausalito and Eastwood Park sites of the proposed project would involve installation of emergency notification horns on a new pole. The Marin City site would involve installation of emergency notification horns on an existing structure or a new pole. The scope of the proposed project shown in Figure 1 is consistent with the construction of new, small structures and minor alterations to the location of the new pole for the horns.

The following analysis demonstrates the proposed project would not result in adverse environmental effects, supporting the SMFD's 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.

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

Categorical Exemption Determination Memorandum

February 16, 2023

Page 2

management; and public education. This project focuses on wildfire notification and public safety.

Purpose and Need

The purpose of the proposed project is to install emergency alerting sirens to provide evacuation and disaster notification to residences in the Southern Marin Zone. The installation and implementation of the proposed long range acoustic device (LRAD) units would improve the resiliency and redundancy of existing communication and LRAD systems. Evacuation and disaster notification is a critical component to long term fire adaptive strategy. The installation of LRAD units would communicate warnings, instructions, and notifications to nearby residents in the event of an emergency.

Project Description

Project Sites

The SMFD has 11 LRAD units in operation and 1 unit approved for installation and pending installation as part of the overall LRAD network in the Southern Marin Zone. The SMFD reviews the locations of the existing LRAD units and associated zones of influence based on mapping and data collected from residences to determine where additional LRAD units are needed to ensure adequate coverage. The SMFD conducts outreach to the constituents within their jurisdiction to notify them of the purpose and presence of the LRAD units.

Project Components

The SMFD identified three sites where the proposed LRAD units would be installed: Marin City, Eastwood Park, and the City of Sausalito. The Marin City site LRAD would be installed at the Marin City Fire Station owned by the Marin County Fire Department, which was constructed in 1999. The Eastwood Park site is owned by the Tamalpais Valley Community Service District. The Sausalito site is located on City of Sausalito-owned property in southern Sausalito. The locations of each site are shown in Figure 1. Several siting options are available at each LRAD site, as shown in Figure 2 through Figure 4.

One LRAD unit would consist of several horns, depending upon the range of notification needed, and would be installed at each project site. Each horn would be approximately 18 inches wide, 16 inches long and 10 inches high and white in color.

The LRAD unit at the Marin City site would involve installation of eight horns to achieve a 360-degree range of notification, which would either be mounted on the existing fire station structure or on top of a newly installed steel pole. Electricity to power the horns, if installed on the fire station, would be provided from the existing power at the fire station. If the Marin City LRAD unit is installed on a pole, the LRAD unit and an equipment box would be mounted on a new approximately 55-foot-tall pole. Most power poles are approximately 40 to 45 feet in height, and streetlights are approximately 30 feet in height (Caltrans, 2023). Power to the horns would be provided by two solar panels installed on the pole. No vegetation or tree removal would be required.

The LRAD units at the Eastwood Park and Sausalito sites would be mounted on new approximately 55-foot-tall steel poles. The Eastwood Park LRAD unit would include installation of 6 horns to achieve a maximum 120-degree range of notification. Depending on the site

Categorical Exemption Determination Memorandum

February 16, 2023

Page 3

location, manual or mechanical hand thinning of vegetation would be required if solar power is needed. No tree removal would occur, but some tree trimming could occur.

The Sausalito LRAD site is expected to include the installation of 4 to 6 horns arranged to achieve a cover of 60 to 120 degrees of notification. Power to the LRAD units at these two sites would be provided by two solar panels installed on each pole. Similar to the Eastwood Park site, manual or mechanical hand thinning of vegetation would be required if solar power is needed. No tree removal would occur, although some tree trimming could occur.

Construction

Installation Method

For LRAD units installed on new poles, a Bobcat skid-steer would excavate a hole and the pole would be direct-buried to a depth of approximately 10 feet, then the hole would be backfilled with the excavated material. Ground disturbance would be up to 3.2 square feet per pole. Excavated material would be temporarily stockpiled adjacent to the hole prior to material being backfilled. Installation activities would require two bucket trucks, two utility trucks, two pole trailers, and a skid-steer with an attached auger. Heavy equipment would not be needed for the Marin City site if the LRAD unit is mounted on the fire station. No power shut-offs would be required during project construction for any of the LRAD sites.

Site Access

The Marin City site would be accessed via Drake Avenue and Phillips Drive. Equipment and worker vehicles would be parked at the existing fire station parking lot at the Marin City site and at the paved parking lot at the Eastwood Park site. The Eastwood Park site would be accessed via Glenwood Avenue. The Sausalito site would be accessed via a fire road that is managed by the City of Sausalito and the National Park Service (NPS). Temporary closure of the fire road could occur for approximately 2 to 3 days and would be coordinated with the City of Sausalito and NPS. Signage would be placed at the site prior to construction. Lane and facility closures are not anticipated for the Marin City and Eastwood Park LRAD sites.

Workers

Contractor crews would install the horns and associated infrastructure at each project site. Each contractor crew would be comprised of four to six persons. No more than one contractor crew would be required at each project site.

Schedule and Duration

LRAD horn installation would take approximately 3 to 4 days to complete at each site. Installation activities would occur on weekdays from 8am to 5pm. Installation is anticipated to start in Spring 2023.

Operation and Testing

The proposed project includes regular testing of the LRAD horns once a month for approximately 30 to 60 seconds. LRAD horns have been modeled to produce noise levels 110 decibels (dB) at pole height 90 feet (30 meters) from the source, and up to 115 dB at poles height and 105 feet at ground level depending on the number of horns (Genasys, 2019; Genasys, 2020). Real world observations of a typical LRAD unit with a similar or higher noise

Categorical Exemption Determination Memorandum

February 16, 2023

Page 4

output at the horns, found noise levels of 98 dB at the height of a person, 100 feet from the source. Testing would occur on the first Saturday of every month for the LRAD units, as is currently being conducted for other emergency horn systems in the area. The LRAD units would be visited at a minimum annually to ensure that the equipment is operational, and for those units with solar panels, that the solar panels are clean. The LRAD horns do not require regular maintenance.

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.

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.

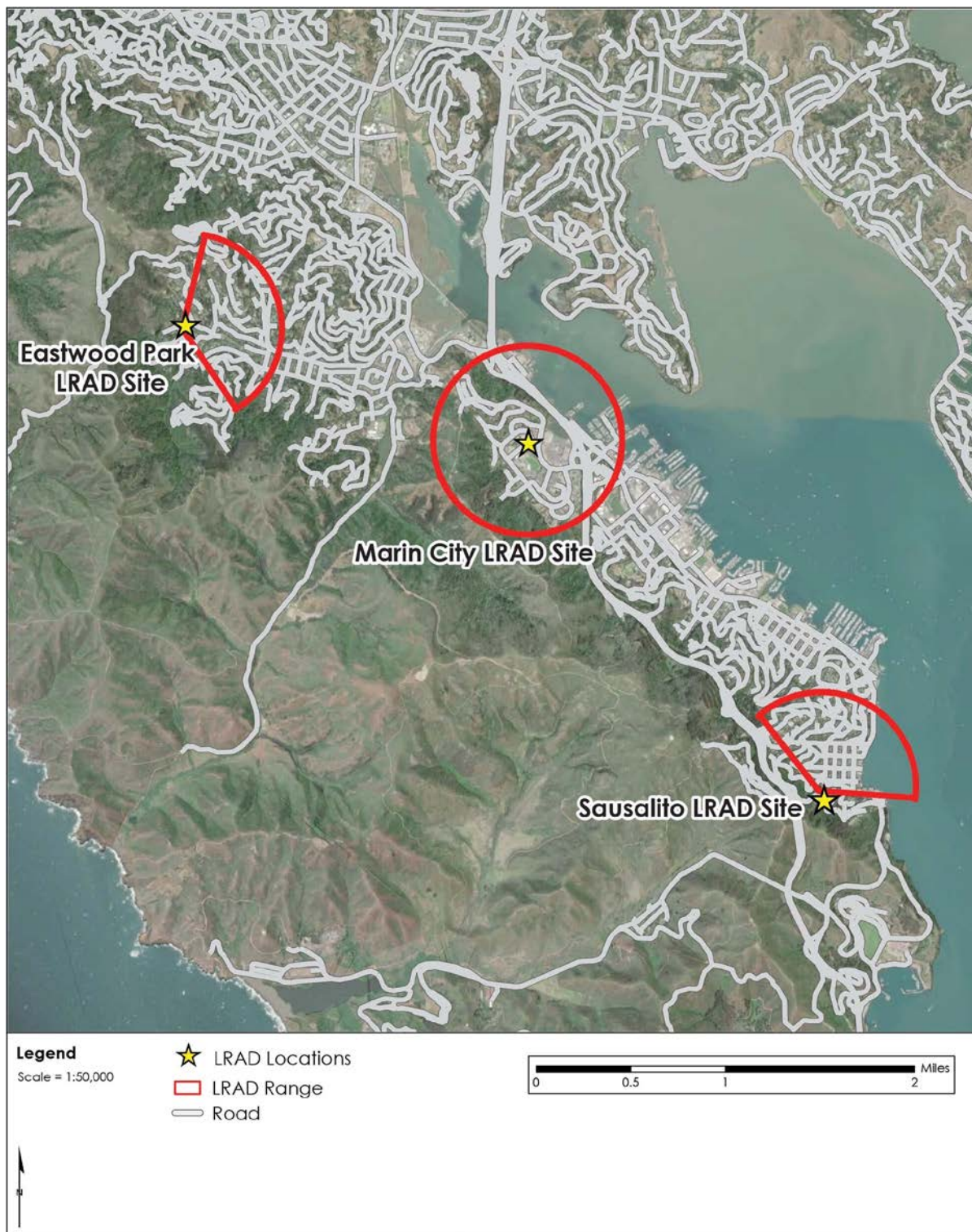
² Adapted from measures in the Midpeninsula Regional Open Space District, Wildland Fire Resiliency Program Final Environmental Impact Report (WFRP EIR), May 2021.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 5

Figure 1 LRAD Locations



Note: Zones of influence are estimates. A 120 degree zone of influence is shown for the Sausalito LRAD site, but may be installed for only 60 degrees.

Southern Marin Zone Emergency Notification Network Project - Marin Wildfire Prevention Authority

Categorical Exemption Determination Memorandum

February 16, 2023

Page 6

Figure 2 Marin City LRAD Site



Categorical Exemption Determination Memorandum

February 16, 2023

Page 7

Figure 3 Eastwood Park LRAD Site



Categorical Exemption Determination Memorandum

February 16, 2023

Page 8

Figure 4 Sausalito LRAD Site



Categorical Exemption Determination Memorandum

February 16, 2023

Page 9

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.

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.

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

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

February 16, 2023

Page 10

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).

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
- 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

Categorical Exemption Determination Memorandum

February 16, 2023

Page 11

NOI-1 Minimization of Noise Disruption to Nearby Neighbors and Sensitive Receptors^{4,5}

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 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

⁵ Adapted from San Francisco Public Utilities Commission (SFPUC), Standard Construction Measures, July 2015.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 12

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.

NB-1 Nesting Bird Season Avoidance^{1,4,6,7}

Whenever possible, schedule work outside of the bird nesting season, which is generally from February 1 through July 31st⁸. Not all species nest between the regulatory season, and active nests that are encountered year-round are protected.

⁶ Adapted from measures in the draft Ecologically Sound Practices Partnership, Ecologically Sound Practices for Vegetation Management (ESP) report, May 2021.

⁷ Adapted from Marin County Parks (MCP), Bird Nesting Survey Training Manual, 2017.

⁸ 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

February 16, 2023

Page 13

NB-2 Nesting Bird Surveys^{1,4,6}

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^{1,4,6,7}

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
- 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^{1,4,6,7}

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

Categorical Exemption Determination Memorandum

February 16, 2023

Page 14

failure) has occurred related to work activities. If it is determined that work activity is resulting in nest disturbance, work should cease immediately.

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
- 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 riparian woodlands, flowing watercourses, and wetted wetland areas would be avoided by the proposed project, therefore exception (a) does not apply.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 15

(b) Cumulative Impact:

Installation activities for the LRAD horns would be limited to 3 to 4 days at each site and would be tested on a monthly basis; regular maintenance aside from an annual visit is not required. Installation of the horns would not require vegetation or tree removal and would be installed adjacent to existing infrastructure. As such, 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”:

LRAD horns have been previously installed in Marin County to provide evacuation and disaster notification and there are currently 11 locations in the Southern Marin Zone with LRAD horns installed. The Marin City LRAD unit could be placed on the existing fire station and would be primarily shielded from public view. The installation of new poles would occur within or adjacent to developed residential areas with existing infrastructure and would not result in a substantial aesthetic change. 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, occurs west of the Sausalito site (Caltrans, 2022). The Marin City and Eastwood Park sites are not within the vicinity of a California State Scenic Highway (Caltrans, 2022). Due to the steep slopes to the west of the Sausalito site, the LRAD installation activities and LRAD horns would not be visible from U.S. Route 101, 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 are no hazardous waste sites within the vicinity of the LRAD sites (SWRCB, 2022). As such, no ground disturbing activities that could unearth potentially contaminated soils would occur; therefore, exception (e) does not apply.

(f) Historical Resources:

The proposed project does not propose any ground disturbance at the Marin City site if the LRAD unit is mounted to the fire station structure. The fire station was constructed in 1999 and is not eligible for listing in the California Register of Historic Places. The potential installation of the LRAD unit on the fire station building would not result in an impact to a historic building. Proposed project activities would not cause a substantial adverse change in the significance of historic built environment features.

Minor ground disturbance for installation of the pole at the Marin City, Sausalito, and Eastwood Park sites could occur up to 3.2 square feet per pole. As part of the proposed project, workers would participate in a cultural training prior to project implementation (CUL-1) and should a previously unidentified cultural resource be discovered, work would halt in the area and the resource fully avoided (CUL-2). New pole installations at the proposed project sites would not alter any building or structure 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

**Southern Marin Zone Emergency Notification Network Project - Marin Wildfire
Prevention Authority**

Categorical Exemption Determination Memorandum

February 16, 2023

Page 16

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"/>

Eastwood Park Site

The Eastwood Park site is adjacent to areas partially developed with recreational facilities and adjacent to residences. The Eastwood Park site is located along Glenwood Avenue and Eastwood Way. Viewers in the vicinity of the site would primarily be motorists and recreationalists at Eastwood Park. Equipment used to install the system would be temporarily visible along Glenwood Avenue and Eastwood Way for approximately 3 to 4 days to viewers in the immediate vicinity. The LRAD horn would be installed within the park and would be visible to the public once operational. All the LRAD site options would be within previously disturbed areas of the park, and no trees or vegetation would be removed, although some minor tree limbing could occur to ensure the solar panels operate effectively. The horns would not extrude over the surrounding trees. Aboveground power poles are located in the area, which are similar visually to the LRAD poles, as illustrated in the example shown in Figure 5. LRAD horn installation at the Eastwood Park site would not degrade views from adjacent roadways because the visual change during installation would be minimal (3 to 4 days) and be typical of a developed area. The Eastwood Park LRAD horn would not result in a visual degradation as seen from State or locally designated scenic roads or vistas, including the Marin County ridge and upland greenbelt areas. Significant adverse effects to aesthetics would not occur.

Figure 5 Example of LRAD Unit Installation Adjacent to Power Poles



Categorical Exemption Determination Memorandum

February 16, 2023

Page 17

Marin City Site

The visual character at the Marin City site is developed and residential. Viewers of the site would primarily be motorists and recreationalists at the adjacent George Rocky Graham Park. Similar to the Eastwood Park site, installation activities would occur over an approximately 3-to-4-day period and would be visible to motorists and recreationalists in the immediate vicinity. The LRAD horn would be installed on the existing fire station or on a newly installed steel pole. LRAD horn installed on the fire station structure could be similar in appearance to the unit shown in Figure 6. The fire station has other equipment mounted on it, therefore, the LRAD horn would not degrade the visual character of the immediate area if installed on the fire station structure. If the LRAD unit is installed on a pole, viewers in the immediate vicinity may notice the addition of a new LRAD pole; however, the LRAD pole would be similar to existing power poles and as such the proposed project would not degrade views from adjacent roadways because the visual change would be minimal. No trees or vegetation would be removed, and the visual character of the Marin City site 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. Significant adverse effects to aesthetics would not occur.

Figure 6 Example of LRAD Unit Mounted on a Fire Station



Sausalito Site

The visual character at the Sausalito site is adjacent to developed and primarily residential with forested areas. The Sausalito LRAD unit would be installed along an existing fire road or adjacent roadway. The different site options would be located approximately 700 feet east of

Categorical Exemption Determination Memorandum

February 16, 2023

Page 18

Highway 101 and directly adjacent to the Golden Gate National Recreation Area (GGNRA). An example of an LRAD horn adjacent to trees is shown in Figure 7. Viewers in the vicinity of the site would primarily be motorists and recreationalists. Equipment used to install the system would be temporarily visible along Hecht Avenue or South Street for approximately 3 to 4 days to viewers in the immediate vicinity. Due to the very steep topography, the horns would likely not extrude over the surrounding trees and would be difficult to see from further distances. Viewers in the immediate vicinity may notice the addition of the new LRAD pole; however, the proposed project would not degrade views from adjacent roadways because the visual change would be minimal. The Sausalito LRAD horn would not result in a visual degradation as seen from State or locally designated scenic roads or vistas, including the Marin County ridge and upland greenbelt areas. Significant adverse effects to aesthetics would not occur. The former fire station also has many other facilities mounted on it or near it, including communication antennae and a cellular tower. The LRAD horn would not degrade the visual character of the immediate area.

Figure 7 Example of LRAD Unit Installed Near Trees



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"/>

Categorical Exemption Determination Memorandum

February 16, 2023

Page 19

Installation of the LRAD horns would not convert designated farmland to non-agricultural uses and 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 installation of the LRAD horns would emit diesel particulate matter and criteria air pollutants. Each LRAD site would utilize two bucket trucks, two utility trucks, two pole trailers, and a skid-steer during installation activities and up to one off-haul truck would travel to a landfill to dispose of minimal construction-related waste. Installation activities at the Marin City site would not require the use of heavy equipment if the LRAD unit is installed on the fire station structure. Installation activities would take approximately 3 to 4 days to complete at each site, which would not result in generation of air emissions in excess of Bay Area Air Quality Management District (BAAQMD) significance thresholds. No tilling or grading activities that could generate fugitive dust emissions would occur. Operation of the LRAD horns would not emit diesel particulate matter, criteria air pollutants, or generate fugitive dust emissions. 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 proposed LRAD units were conducted for special-status species, particularly birds and bats (CDFW, 2022; CNPS, 2022). Of the species identified during the database search, species were determined to have potential to occur within the areas of proposed poles 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.

Construction

Special-Status Plants and Sensitive Vegetation Communities

No special-status plant species have the potential to occur within the LRAD sites where ground disturbance could occur (refer to Table 1 for information). The LRAD horn installation at the Marin City site would not involve ground disturbance and would not impact plant and vegetation communities, if the LRAD horn was installed on the fire station structure. The ground cover at the Marin City site is a combination of developed land (paved parking lot) and non-native grassland. The Sausalito site options consist of disturbed soils surrounded by forest habitat. The Eastwood Park site consists of developed recreational facilities and undeveloped land. The Eastwood Park LRAD site options would be located in previously disturbed areas. Some tree limbing could occur for the Eastwood Park and Sausalito site options, but no vegetation removal that could affect sensitive plants would occur. LRAD horn installation on new poles at the project sites would involve minimal ground disturbance. No impact to plant and vegetation communities during construction would occur.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 20

Nesting Birds

Installation activities for the LRAD sites would either occur outside the nesting seasons (NB-1) or a pre-construction nesting bird survey would be required prior to start of project activities (NB-2). If active nests are observed in areas that could be directly or indirectly disturbed, such as by noise, species-appropriate no-disturbance buffer zones will be created (NB-3). If an avoidance buffer cannot be achieved, a biologist would monitor the nest during work activities (NB-4). No significant impacts to nesting birds would occur.

Special-Status Bird Species

Critical habitat and suitable habitat for the marbled murrelet is present within 3 miles of the Eastwood Park LRAD site, but no occurrences have been recorded. There is no potential for the marbled murrelet to be impacted by the proposed project during construction.

Northern spotted owl has a moderate potential to occur within the Eastwood Park and Marin City LRAD ranges (refer to Table 1 for information). A total of four northern spotted owl activity centers are documented within 0.5 mile of the Eastwood Park and Marin City LRAD sites, and one documented nest is within 0.5 mile of the Eastwood Park LRAD site. No known nests or activity centers are located within 0.5 mile of the Sausalito site. Due to the low potential for northern spotted owl to occur within 0.25 mile of the Sausalito site, no effects would occur regardless of when construction occurs.

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 LRAD sites are located in dense residential areas adjacent to roadways (including Highway 101) and would not contain suitable habitat for northern spotted owls where construction activities would occur. Construction 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 installation would not occur before July 31 if an active nest was present, unless the young have fledged (NSO-2). Given the work would be focused on installing LRAD horns near structures and adjacent to roadways, construction activities would not cause significant impacts on northern spotted owls.

Operation

As described above, there is moderate potential for northern spotted owls to occur within 0.5 mile of the Eastwood Park and Marin City LRAD ranges due to known activity centers and a nest site near the Eastwood Park LRAD site. Northern spotted owls are not known to occur within 0.5 mile of the Sausalito LRAD site and would not be affected by testing of the LRAD during operations.

The Marin City and Eastwood Park LRAD sites are located adjacent to roadways within residential land uses. Ambient noise levels along roadways in residential neighborhoods are expected to range from 55 to 75 decibels (dBA) Ldn⁹. LRAD horns can generate noise levels

⁹ Ldn is the average equivalent sound level over a 24 hour period.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 21

that differ depending upon the number of horns, but under ideal conditions¹⁰ have been modeled to produce 110 dB at pole height 90 feet (30 meters) from the source, and up to 115 dB at pole height and 105 feet at ground level, 100 feet from the source (Genasys, 2019) (Genasys, 2020). However, noise attenuation is greater in the real world than modeled attenuation. Based on observations,¹¹ a typical LRAD unit with a similar or higher noise output at the horn produced 98 dB at the height of a person, 100 feet from the source. The LRAD unit where noise data was collected is more representative of the proposed LRAD units. Greater attenuation of noise in the real world is typical due to presence of structures, vegetation, and topographical changes. Noise attenuation per the noise data collected was found to be closer to -11 dB per doubled distance versus -6 dB per doubled distance under unobstructed conditions. A study conducted in a forest environment found a greater attenuation due to presence of tree stems, branches, and bark of around -12 dB per doubled distance, which is similar to the findings of the noise monitoring (Herrington & Brock, 1977).

Intermittent noise is typical along the project roadways from residential activities such as yard work using mowers and leaf blowers, motorcycles, and heavy trucks. Noise levels associated with these typical activities include leaf blowers with noise levels of 76 to 81.5 dBA at 50 feet¹², motorcycles with noise levels ranging from 70 to over 100 dBA at 50 feet¹³, and garbage trucks with noise levels ranging from 63 to 80 dBA at 50 feet¹⁴. Other similar types of noises include emergency vehicle sirens including police and fire vehicles that are relatively common short duration noise sources in residential areas. As a comparison, ambulance or fire truck sirens, fireworks, and custom car stereos at full volume generate noise at 130 to 140 dB at 50 feet (Idaho TC, 2021). The Marin City LRAD site is located at an operating fire station which produces alarms and emergency vehicle sirens. Schools in the vicinity of the Eastwood Park and Marin sites, including the Bayside Marin Luther King, Jr. Academy, Horizon Community School, and the Kumara School would likely contain alarm bells for daily and emergency use. Sports fields are also located in the vicinity of the Marin City LRAD site and could generate short duration noise.

USFWS guidance cites studies of noise effects on Mexican spotted owls with a finding that the owls, during both the nesting season and the non-nesting season, did not flush from helicopter noise unless the noise was at least 92 dB(A) (Delaney, Grubb, & Beier, 1999). The USFWS guidance also provides other data that spotted owls may perceive aircraft “as less threatening...because of their shorter duration, gradual crescendo in noise levels, minimal visibility, and lack of association with human activity (Gilmer & Stewart, 1998).” The memorandum also cited that other studies have shown that other bird species, such as marbled

¹⁰ Modeling assumed a two stack LRAD system and - 6 dB per doubled distance, which is typical of conditions where sound propagation is not blocked by obstructions nor its energy absorbed by intervening atmosphere, vegetation or terrain.

¹¹ Observations were conducted at an existing tower with three sets of four stacked LRAD horns.

¹² Calculated from noise level of 100 to 105.9 dBA at 3 feet away (operator distance) (Husqvarna, n.d.; Balanay, Kearney, & Mannarino, 2016).

¹³ The large range is due to variations in engines and mufflers across different motorcycle models (Rochat, 2013; USEPA, 1974)

¹⁴ Calculated from noise levels of 83 to 100 dBA at 5 feet away (IAC Acoustics, 2021; Work Safe BC, 2021).

Categorical Exemption Determination Memorandum

February 16, 2023

Page 22

murrelet, do not flush in response to short duration, but loud noise events, such as aircrafts or helicopters flying overhead (USFWS, 2020). “During incubation, we do not expect murrelets to flush in response to aircraft based on studies of other species as described by (Craig & Craig, 1984; Grubb, Delaney, Bowerman, & Wierda, 2010; Fraser, Frenzel, & Mathisen, 1984; Delaney, Grubb, & Beier, 1999), and based on observations of marbled murrelets (Long & Ralph, 1998).”

In accordance with USFWS guidance, the recommended threshold for noise-generating activities affecting northern spotted owl is approximately 80 dB and lower. The proposed LRAD units would generate “extreme” noise levels (100-110 dB) at the noise source (refer above for specifics on noise levels). The USFWS guidance document addresses the effects of noise disturbance on northern spotted owls and marbled murrelets to draw conclusions about the potential for identified effects to rise to the level of “take”. While the guidance aims to reduce take of the aforementioned species, the document is not a regulation. The California Coastal Commission’s senior ecologist evaluated a proposal by the City of Half Moon Bay to install eight similar warning system sirens to be tested for up to 60 seconds once a month and found that effects to nesting birds would be less than significant. The staff report prepared by the California Coastal Commission for that project found that although the siren testing may cause a startle response in birds and may act as acoustical cues for other species, it would be brief and intermittent and was therefore not expected to significantly adversely impact sensitive species or their habitat (California Coastal Commission, 2014).

The nearest known activity center from the proposed Marin City LRAD unit is over 0.8 mile away and the nearest potential nesting habitat is 0.33 mile away. The Eastwood LRAD unit zone of influence is focused away from the more forested areas with the greatest potential nesting habitat for northern spotted owls and pointed towards the residences and communities in the area. The nearest known activity center for the Eastwood LRAD site is 0.43 mile away to the southwest and potential nesting habitat is 0.2 mile away.

While loud, the LRAD horns would be tested for 30 to 60 seconds once per month. Most nesting birds would only be exposed to the elevated sound once or twice during nesting and chick rearing. Northern spotted owls incubate eggs for 30 days and chicks learn to fly at 6 weeks. The anticipated noise levels at the nearest documented activity center located 0.43 mile away would be lower than 80 dB, based on estimates from real world observations, as vegetation, topography, and structures are present in the intervening space between the proposed LRAD unit and the documented site. Additionally, the noise generated by the LRAD unit would occur for a short duration (up to 60 seconds once a month) compared to typical noise-generating activities discussed in the USFWS guidance. Therefore, known northern spotted owls nesting and occupying activity centers are not likely to suffer a significant disruption of normal behavior patterns. Were a northern spotted owl to nest within 0.25 mile of the Marin City or Eastwood Park site, it could be exposed to a 30 to 60 second elevated noise event once while incubating eggs and possibly another time before the chicks fledge. Northern spotted owls that may nest or forage in nearby areas of potential habitat (the nearest of which is 0.2 mile away) are likely accustomed to noise disturbances during the nesting season from human activity, such as ambulance, fire engine sirens, or motorcycles that are outlined above, due to adjacency to residential communities and would not be significantly affected. The same is true for nesting migratory birds. Due to the very limited duration of noise levels, infrequency of the noise at up to 60 seconds once per month, and the existing sources of intermittent noises in typical neighborhoods, nesting birds including NSO are not expected to be adversely affected by LRAD horn testing. Significant impacts on biological resources would not occur.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 23

- Figure 8 Special-Status Plant Occurrences**
- Figure 9 Special-Status Wildlife Occurrences**
- Figure 10 Northern Spotted Owl Observations**

Figures omitted to protect special-status wildlife and plant species

Categorical Exemption Determination Memorandum

February 16, 2023

Page 24

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

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
Sensitive Plants					
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	CNPS 1B.2	Wetland, riparian woodland	Low; potential suitable habitat around possible aquatic resource near Eastwood Park, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Arctostaphylos montana</i> ssp. <i>montana</i>	Mt. Tamalpais manzanita	CNPS 1B.3	Chaparral, valley grassland	Low; potential suitable habitat around chaparral habitat near Eastwood Park, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Arctostaphylos virgata</i>	Marin manzanita	CNPS 1B.2	Closed-cone pine forest, redwood forest, mixed evergreen forest, chaparral	Low; potential suitable habitat around chaparral habitat near Eastwood Park or forest habitat near Sausalito LRAD system project locations, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Arenaria paludicola</i>	marsh sandwort	FE, CE, CNPS 1B.1	Wet meadows, freshwater marshes	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 25

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
<i>Calochortus tiburonensis</i>	Tiburon mariposa-lily	FT, CT, CNPS 1B.1	Serpentine grassland	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Calystegia purpurata ssp. saxicola</i>	coastal bluff morning-glory	CNPS 1B.2	Rocky coastal scrub	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Castilleja affinis var. neglecta</i>	Tiburon paintbrush	FE, CT, CNPS 1B.2	Serpentine grassland	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Chloropyron maritimum ssp. palustre</i>	Point Reyes salty bird's-beak	CNPS 1B.2	Coastal salt marsh	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Cirsium andrewsii</i>	Franciscan thistle	CNPS 1B.2	Bluffs, seeps, occasionally serpentine	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Cirsium hydrophilum var. vaseyi</i>	Mt. Tamalpais thistle	CNPS 1B.2	Serpentine seeps	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Eriogonum luteolum var. caninum</i>	Tiburon buckwheat	CNPS 1B.2	Chaparral, coastal prairie, valley grassland, serpentine endemic	Low; potential suitable habitat around chaparral habitat near Eastwood Park, but no CNDDB	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 26

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
				occurrences are present near the project site	
<i>Fissidens pauperculus</i>	minute pocket moss	CNPS 1B.2	Seasonally moist hard-packet soils on steep faces, gullies, or cut banks	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare bryophytes.
<i>Fritillaria lanceolata</i> var. <i>tristulis</i>	Marin checker lily	CNPS 1B.1	Oak or pine scrub, grassland	Low; potential suitable habitat around forest fragments or non-native pine stands near Sausalito LRAD system locations, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Gilia capitata</i> ssp. <i>chamissonis</i>	blue coast gilia	CNPS 1B.1	Coastal sandhills, sand dunes	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Hesperolinon congestum</i>	Marin western flax	FT, CT, CNPS 1B.1	Serpentine, grassland	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Horkelia marinensis</i>	Point Reyes horkelia	CNPS 1B.2	Coastal dunes	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Horkelia tenuiloba</i>	thin-lobed horkelia	CNPS 1B.2	Open chaparral	Low; potential suitable habitat around chaparral habitat near Eastwood	None; the project locations are in well-developed or previously

Categorical Exemption Determination Memorandum

February 16, 2023

Page 27

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
				Park, but no CNDDDB occurrences are present near the project site	disturbed areas, which are unlikely to host rare plants.
<i>Hypogymnia schizidiata</i>	island tube lichen	CNPS 1B.3	Grows on bark and wood of hardwoods and conifers in woodlands, isolated groves, and forests	Low; potential suitable habitat around forest fragments or non-native pine stands near Sausalito LRAD system locations, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare bryophytes.
<i>Kopsiopsis hookeri</i>	small groundcone	CNPS 2B.3	Open woodland, mixed conifer forest	Low; potential suitable habitat around possible aquatic resource near Eastwood Park, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Navarretia rosulata</i>	Marin County navarretia	CNPS 1B.2	Rocky, serpentine	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Quercus parvula var. tamalpaisensis</i>	Tamalpais oak	CNPS 1B.3	Understory conifer woodland	Low; potential suitable habitat around forest fragments or non-native pine stands near Sausalito LRAD system locations, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 28

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	CNPS 1B.2	Open coastal, serpentine, sandy	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Streptanthus glandulosus ssp. niger</i>	Tiburon jewelflower	FE, CE, CNPS 1B.1	Serpentine outcrops in grasslands	None; suitable habitat is not present within project locations	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare plants.
<i>Triquetrella californica</i>	coastal triquetrella	CNPS 1B.2	Roadsides, hillsides, rocky slopes, fields, chaparral; low to moderate elevations	None; suitable habitat is present along the steep slopes south of the Sausalito LRAD system locations, but no CNDDDB occurrences are present near the project site	None; the project locations are in well-developed or previously disturbed areas, which are unlikely to host rare bryophytes.
Sensitive Wildlife					
<i>Brachyramphus marmoratus</i>	marbled murrelet	FT, CE	Breeds inland on mountains near coast	Low; critical habitat present in project area, but no occurrences recorded, and suitable nesting habitat only occurs at the eastern edge of the range for the Eastwood Park system	Low; this species is unlikely to occur within the range
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	SSC	caves, mines, bridges, building, rock crevices, tree hollows in coastal lowlands, and cultivated valleys;	Low; some potentially suitable habitat in oak or bay woodland habitats near the Eastwood Park	Low; this species is unlikely to occur within the range

Categorical Exemption Determination Memorandum

February 16, 2023

Page 29

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
			prefer roosting in caves or other similar open spaces	and Sausalito LRAD system ranges	
Danaus plexippus pop. 1	monarch - California overwintering population	FC	Grassland, woodland	Low to Moderate; potential suitable habitat occurs near the Eastwood Park and Sausalito LRAD systems, and occurrences present south of the Sausalito LRAD system range	None; the LRAD system locations are outside of potential habitat
Dicamptodon ensatus	California giant salamander	SSC	wet coastal forests, such as coastal redwoods, in or near clear, cold permanent and semi-permanent streams and seepages	None; species is highly associated with streams in wet coastal forests. This habitat type is infrequent in the project footprints which are located in well-developed or previously disturbed areas	None
Emys marmorata	western pond turtle	SSC	Freshwater ponds and streams	None; drainages within the project area near Eastwood Park not anticipated to be suitable habitat for species. Not present in vicinity of other sites.	None
Enhydra lutris nereis	southern sea otter	FT, FP	cold, coastal waters with rocky shorelines and large kelp beds	None; species is highly associated with rocky shorelines. This habitat type is not found within	None

Categorical Exemption Determination Memorandum

February 16, 2023

Page 30

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
				the project area, and aquatic areas will be avoided within the project area.	
<i>Eucyclogobius newberryi</i>	tidewater goby	FE	Aquatic	None; aquatic species. Aquatic areas are excluded from the project footprint.	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 forests fragment or non-native pine habitats within Sausalito LRAD system range	Low; work would occur outside nesting season or surveys conducted. Nesting bird avoidance (including raptors) will be included in environmental training to ensure avoidance (NB-1, NB-2, NB-3, NB-4).
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellowthroat	SSC	Coastal riparian and wetland areas, Requires thick continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting	Low; species is highly associated with saltmarsh habitat which is not found within the project locations. CNDDDB occurrences located on the Pacific coastline. This species is unlikely to occur on the highly developed San Francisco Bay coastline	Low; work would occur outside nesting season or surveys conducted. Nesting bird avoidance (including raptors) will be included in environmental training to ensure avoidance (NB-1, NB-2, NB-3, NB-4).
<i>Icaricia icarioides missionensis</i>	Mission blue butterfly	FE	Grasslands	Low; some potentially suitable habitat near the Sausalito LRAD system range, and the CNDDB	None; the LRAD system locations are outside of potential habitat.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 31

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
				occurrence overlaps the Sausalito project range. Not present in vicinity of other sites.	
Laterallus jamaicensis coturniculus	California black rail	FT, FP	Wetlands and marshes	None, suitable habitat is not present near the project locations. Potentially suitable habitat is Bothin Marsh, located between the Eastwood Park and the Marin City LRAD system ranges	None
Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	FE, CE	Aquatic	None; aquatic species. Aquatic areas are excluded from the project footprint.	None
Rallus obsoletus obsoletus	California Ridgway's rail	FE, CE, FP	Saltwater marshes, freshwater marshes, and mangrove swamps	None, suitable habitat is not present near the project locations. Potentially suitable habitat is Bothin Marsh, located between the Eastwood Park and the Marin City LRAD system ranges	None
Rana boylei	foothill yellow-legged frog	CE, SSC	Rocky streams in a variety of habitats, including habitats such as valley foothill hardwood, valley-foothill riparian,	None; species is highly associated with streams in wet coastal forests. This habitat type is infrequent in the project footprints which are located in well-	None

Categorical Exemption Determination Memorandum

February 16, 2023

Page 32

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
			coastal scrub, mixed conifer, mixed chaparral, and wet meadows	developed and previously disturbed areas	
<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	None; species is highly associated with streams in wet coastal forests. This habitat type is infrequent in the project footprints which are located in well-developed areas	None
<i>Reithrodontomys raviventris</i>	salt-marsh harvest mouse	FE, CE, FP	Marshes and wetland edges	None, suitable habitat is not present near the project locations. Potentially suitable habitat is Bothin Marsh, located between the Eastwood Park and the Marin City LRAD system ranges	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 not present in project area but occurs within 0.2 mile of the Eastwood Park LRAD site and 0.3 mile of the Marin City LRAD site. One known nest site	Low; known nest and activity center sites are further than 0.25 mile from all LRAD sites and would not be impacted. Northern spotted owls that may nest or forage in nearby areas of potential habitat (the nearest of which is 0.2 mile

Categorical Exemption Determination Memorandum

February 16, 2023

Page 33

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur at LRAD Sites	Potential to be impacted by the LRAD Units
				present within 0.5 mile of the Eastwood Park LRAD range. No potential to occur near Sausalito LRAD site.	away) are likely accustomed to noise disturbances from human activity that are outlined above and would not be significantly affected.
<i>Zapus trinolatus orarius</i>	Point Reyes jumping mouse	SSC	Wet, marshy coastal meadows	None, wetland species. Wetland habitat is not present at project locations, only CNDDDB occurrence is within Marin Headlands	None

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

February 16, 2023

Page 34

Cultural Resources and Tribal Cultural Resources¹⁵

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 LRAD horn installation at the Marin City site would not involve ground disturbance if mounted on the fire station and would not impact cultural or tribal resources. The fire station building was constructed in 1999 and is not eligible for listing in the California Register of Historic Places. Therefore, the installation of the LRAD unit on the fire station would not result in an impact to a historic building. Significant impacts on historic built environment features would not occur.

LRAD horn installation on new poles would require ground-disturbing activities. Maximum depth of ground disturbance would be 10 feet for the pole. Given the minimal amount of ground disturbance and the existing disturbance at the Marin City, Eastwood Park, and Sausalito sites from the existing road, driveways, fire roads, and parking lots, the potential to disturb cultural resources is low. Workers would participate in a cultural training prior to project implementation (CUL-1) and should a previously unidentified cultural resource be discovered, work would halt in the area and the resource would be fully avoided (CUL-2). 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"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The vehicles and equipment installing the LRAD horns 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 LRAD horns would be powered by solar panels for operation. The use of fuel and electricity 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 providing evacuation and disaster notification. Installation of the LRAD horns 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"/>

¹⁵ 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

February 16, 2023

Page 35

If the LRAD horn is installed on the fire station at the Marin City site, the installation would not involve ground disturbance and would not impact geology and soils.

For new pole installation at the LRAD sites, soil erosion and loss of topsoil could occur during excavation through the exposure of bare soils. Because the amount of ground disturbance would be minimal for LRAD installation on new poles, up to 3.2 square feet per pole, substantial soil erosion and topsoil loss is not anticipated. 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"/>

LRAD horn installation activities would involve use of equipment and vehicles to travel to and from the installation sites. Use of vehicles and equipment would generate some greenhouse gas (GHG) emissions, but not in significant quantities due to the limited duration of LRAD horn installation. 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"/>

Vehicle and equipment would be used at the LRAD sites during installation, which utilize fuels and lubricants. Workers handling hazardous materials are required to adhere to OSHA and Cal/OSHA health and safety requirements to protect workers. As part of the 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). Ground disturbance would not occur at the Marin City site if the LRAD unit is mounted on the fire station structure, ensuring that any potential existing contamination would not be disturbed and would not pose a risk to the environment or public. The LRAD sites are not located within any listed hazardous waste sites that could be disturbed by ground-disturbance for pole excavation and trenching (SWRCB, 2022). 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). Significant impacts related to hazards and hazardous materials would not occur.

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"/>

Vehicles traveling to and from the project sites would be confined to existing roads and structures. No work would occur near waterways. Minimal ground disturbance, up to 3.2 square feet per pole, would occur for LRAD units installed on new poles and would not result in

Categorical Exemption Determination Memorandum

February 16, 2023

Page 36

substantial erosion or alter the existing drainage pattern of the project site. 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"/>

Installation of the LRAD horns would not involve any new development or changes to land uses that could physically divide a community. The project is consistent with the objectives of the Marin Wildfire Prevention Authority, Marin County Fire Code, and the Marin County Community Wildfire Protection Plan (2020). 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"/>

The LRAD horn installation at the Marin City site would not involve ground disturbance if the LRAD unit is installed on the fire station structure and would not impact mineral resources. LRAD horn installation on new poles would involve minimal ground disturbance, up to 3.2 square feet per pole, and to a maximum depth of 10 feet. Installation of the LRAD horn would not alter land uses, access, or subsurface areas that could impact mineral resources.

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"/>

Construction

Marin City and Eastwood Park Sites

The LRAD installation activities would occur on weekdays from 8am to 5pm. This time frame would conform with the Marin County Noise Ordinance § 6.70.030, which limits construction activities to Monday through Friday 7:00 a.m. and 6:00 p.m. and Saturday between 9:00 a.m. and 5:00 p.m. The installers would be required to implement measures (NOI-1) to minimize noise disruption to nearby neighbors and sensitive receptors. There would be no significant construction noise-related impacts.

Sausalito Site

The LRAD installation activities would occur on weekdays from 8am to 5pm. This time frame would conform with the City of Sausalito Municipal Code § 12.16.140, which limits construction activities to Monday through Friday 8:00 am and 6:00 pm and Saturday between 9:00 am and 5:00 pm. The installers would be required to implement measures (NOI-1) to minimize noise

Categorical Exemption Determination Memorandum

February 16, 2023

Page 37

disruption to nearby neighbors and sensitive receptors. There would be no significant construction noise-related impacts.

Operation

Marin City and Eastwood Park Sites

Operation and testing of the LRAD horn at the Marin City and Eastwood Park sites would be allowable under the Marin County Noise Ordinance § 6.70.030, which allows horns used for danger warning. Noise impacts during operation at the Marin City and Eastwood Park sites would not occur.

Sausalito Site

The City of Sausalito Municipal Code § 12.16.130 states that any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device that creates noise that would cause the noise level at the property line of any property to exceed the ambient base noise level by more than five decibels, is generally not allowed. The noise contours shown in Figure 7-7 of the City of Sausalito General Plan: Noise Contours of the City of Sausalito General Plan shows the Sausalito site falling within the 65 dB Ldn noise contour for Highway 101. The threshold for exceedances to outdoor ambient noise according to the Sausalito Municipal Code would therefore be 70 dB Ldn.¹⁶ The indoor ambient noise level threshold according to the general plan is 45 dB Ldn; however, the existing noise levels in the project area likely exceed this noise level given proximity to Highway 101.

Noise modeling was conducted to determine if use of the LRAD horn for 60 seconds would result in an increase in ambient noise of five decibels (5 dB) or more over a 24-hour period. The results of the noise calculations are provided in the table below. There are two options for siting the LRAD in Sausalito (refer to Figure 4). The number of receptors for each location option is provided in the table. At 100 feet, noise from the LRAD horn would not result in a greater than 5 dB (24 hour L_{dn}) increase in the outdoor and indoor ambient base noise level at any of the nearest properties.

Threshold (db Ldn)	Baseline Level at LRAD	Modeled Noise Level (dB Ldn)					
		100 feet	No. of Receptors	200 feet	No. of Receptors	660 feet	No. of Receptors
70 (outdoor)	65 dB Ldn	66.9	Option 1: 0	55.8	Option 1: 3	50.5	Option 1: 109

¹⁶ The City of Sausalito Municipal Code § 12.16.040 provides an ambient base noise level of 55 dB Ldn for the Sausalito site. Therefore, the threshold for ambient noise exceedances would be 60 dB Ldn. The municipal code ambient base noise level is not used in this analysis because the City of Sausalito General Plan identifies issues with the noise ordinance, stating that “the City of Sausalito has adopted a Noise Ordinance that establishes quantifiable noise standard for nuisance or single-event noise sources consistent with maintaining the health and tranquility of residential areas and the community as a whole. The current noise ordinance is difficult to enforce because it establishes unrealistic standards. Road traffic or ambient noise level is often louder than the permissible noise level. For these reasons, and due to the proximity of the Sausalito site to Highway 101, the ambient base noise level from the General Plan is utilized in this analysis.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 38

Threshold (db Ldn)	Baseline Level at LRAD	Modeled Noise Level (dB Ldn)					
		100 feet	No. of Receptors	200 feet	No. of Receptors	660 feet	No. of Receptors
45 (indoor)	55 dB ^a Ldn	56.9 ^a	Option 2: 3	45.8 ^a	Option 2: 13	26.6 ^a	Option 2: 143

Notes:

Noise data from real world observations and associated calculated noise attenuation is used for this assessment. A typical LRAD unit, may produce 98 dB at the height of a person, 100 feet from the source with a noise attenuation of -11 dB per doubling distance.

^a Sound reduction for an open window per studies is 5 to 15 dB. For the calculation an assumption of 10 dB reduction is assumed (Building Performance Center, 2007).

The City of Sausalito Municipal Code § 12.16.050 also requires consideration of specific standards in determining whether a violation of the provisions of the Noise Control Chapter of the municipal code exists. The table below lists each of these standards and a short summary of why installation activities at the Sausalito site would not violate the provisions of the Noise Control Chapter.

City of Sausalito Municipal Code Standard	Justification of No Noise Violation
1. The level of the noise;	LRAD horn would not result in noise levels above the outdoor and indoor ambient noise level threshold.
2. The intensity of the noise;	The LRAD horn would only increase the ambient noise levels for 30 to 60 seconds for one day per month.
3. Whether the nature of the noise is usual or unusual;	The LRAD horn noise would be recognizable as emergency siren testing noise, for which there are various other facilities throughout Marin County.
4. Whether the origin of the noise is natural or unnatural;	The origin of the LRAD horn noise would be unnatural.
5. The level and intensity of the background noise if any;	The Sausalito site is located adjacent to Highway 101 and therefore has existing traffic background noise including siren noise emanating from the highway.
6. The proximity of the noise to residential sleeping facilities;	There are no residential sleeping facilities within 100 feet of Sausalito site Option 1 and three within 100 feet of Option 2. The LRAD horn would only increase the ambient noise level at this one receptor for one day per month. The siren would be run mid-day for 30 to 60 seconds, one day a month, mid-week and not during normal sleeping hours.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 39

City of Sausalito Municipal Code Standard	Justification of No Noise Violation
7. The nature and zoning of the area within which the noise emanates;	The Sausalito site zone of influence is within the R1 and R2 zoning designation but is also located adjacent to Highway 101.
8. The density of the inhabitation of the area within which the noise emanates;	The Sausalito site is located within a residential area, but as stated above, the siren testing would only increase the ambient noise levels for one day per month for 30 to 60 seconds.
9. The time of the day or night the noise occurs;	LRAD horn testing at the Sausalito site would occur during daytime hours only.
10. The duration of the noise;	LRAD horn testing at the Sausalito site would occur for approximately 30 to 60 seconds, which is a very short duration, for once a month.
11. Whether the noise is recurrent, intermittent, or constant; and	Noise from LRAD horn testing would be constant for approximately 30 to 60 seconds once a month.
12. Whether the noise is produced by a commercial or noncommercial activity.	Noise produced from LRAD horn testing would be by a non-commercial activity.

As discussed above, LRAD horns would be tested once a month on the first Saturday of each month. No nighttime testing would occur. The purpose of the proposed project is to be audible to be able to provide evacuation and disaster notification in the event of an emergency and acclimate residences to what. As analyzed, the noise generated by testing the LRAD for one day a month (with the actual noise impact lasting only 30 to 60 seconds) would not be considered a significant operational impact. There would be no significant operational noise-related impacts.

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 installing the LRAD horns are anticipated to be sourced from the existing contractor businesses 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 governmental facilities would be needed

Categorical Exemption Determination Memorandum

February 16, 2023

Page 40

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"/>
Potential for significant impact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

LRAD installation would occur within Eastwood Park. The Marin City and Sausalito LRAD sites are adjacent to the George Rock Graham Park and GGNRA, respectively. LRAD installation would be temporary and would occur over approximately 3 to 4 days per site. Closure of recreational facilities due to LRAD installation is not anticipated. 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 LRAD installation 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"/>

Daily one-way vehicle trips during LRAD horn installation would range from 4 to 6; during operation, no vehicle trips are anticipated. The proposed project would not exceed screening threshold of 110 trips per day. The VMT associated with implementation of the proposed project would not conflict with State CEQA Guidelines section 15064.3, subdivision (b).

Installation activities would not require lane or road closures; however, LRAD horn installation at the Sausalito site may require partial or full closure of the fire road for approximately 3 to 4 days. Closure of the fire road would not slow or impede emergency access or responders. 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"/>

The minimal construction debris generated from LRAD horn installation, and any waste generated by the workers, such as spent vehicle batteries or refuse would be properly disposed of at the appropriate facility. The LRAD poles and horns would be powered by solar panels installed on the poles. If the LRAD unit is installed on the fire station structure at the Marin City site, the LRAD unit would be connected to the existing power at the fire station. The proposed project would not require new electrical power facilities and no impact related to utilities and service systems would occur.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 41

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 Sausalito and Marin City sites are located within the Local Responsibility Area (LRA) in areas identified as high and very high fire severity zones, respectively (CAL FIRE, 2007/2008). The Eastwood Park site is located within the State Responsibility Area (SRA) in an area identified as a very high fire severity zone (CAL FIRE, 2007/2008). The purpose of the proposed project is to provide emergency and disaster notification, which includes the notification of a wildfire, should one occur. 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 or off-road vehicle use that could result in downslope or downstream flooding or landslides should a wildfire occur. No impact related to wildfire would occur.

References

- Balanay, J. A., Kearney, G. D., & Mannarino, A. J. (2016). Assessment of Occupational Noise Exposure among Groundskeepers in North Carolina Public Universities. *Environmental Health Insights*, 83-92.
- Building Performance Center. (2007, April). Sound Insulation Through Ventilated Domestic Windows. *NANR116: Open/Closed Window Research*. Department for Environment, Food and Rural Affairs .
- CAL FIRE. (2007/2008). Fire Hazard Severity Zones Maps.
- California Coastal Commission. (2014). Appeal Staff Report Substantial Issue Determination. *A-2-HMB-10-028* . City of Half Moon Bay.
- Caltrans. (2022). *Scenic Highways*. Retrieved from California State Scenic Highways: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>
- Caltrans. (2023). *Appendix B-1 – Lighting Standards*. Retrieved from <https://dot.ca.gov/caltrans-near-me/district-11/programs/district-11-environmental/i-5pwp-toc/appb1>
- CDFG. (2003). List of California Terrestrial Natural Communities.
- CDFW. (2022, June). California Natural Diversity Database (CNDDDB) 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.
- Craig, T. H., & Craig, E. H. (1984). Results of a helicopter survey of cliff nesting raptors in a deep canyon in southern Idaho. *Journal of Raptor Research*, 20-25.
- Delaney, D., Grubb, T. G., & Beier, P. (1999). Effects of helicopter noise on Mexican spotted owls. *Journal of Wildlife Management*, 60-76.

Categorical Exemption Determination Memorandum

February 16, 2023

Page 42

- Fraser, J. D., Frenzel, L. D., & Mathisen, J. E. (1984). The impact of human activities on breeding bald eagles in North-central Minnesota. *Journal of Wildlife Management*, 585-592.
- Genasys. (2019). Confidential LRAD DS60XL Acoustic Model.
- Genasys. (2020). Graphic of Sound Attenuation Over Distance.
- Gilmer, D. S., & Stewart, R. E. (1998). Dispersal movements and survival rates of juvenile Mexican spotted owls in northern Arizona. *Wilson Bulletin*, 206-217.
- Grubb, T. G., Delaney, D. K., Bowerman, W. W., & Wierda, M. R. (2010). Golden eagle indifference to heli-skiing and military helicopters in Northern Utah. *Journal of Wildlife Management*, 1275-1285.
- 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.
- Herrington, L. P., & Brock, C. (1977). Propagation of Noise Over and Through a Forest Stand. 226-228.
- Hickman, J. (1993). *The Jepson Manual Higher Plants of California*. Berkeley: University of California Press.
- Husqvarna. (n.d.). *Products*. Retrieved June 12, 2017
- IAC Acoustics. (2021). Comparative Examples of Noise Levels.
- Idaho TC. (2021, Sept 4). *Decibel Levels*. Retrieved from <http://idahotc.com/Portals/0/webinar%20documents/Severe%20Disabilities/Sounds,%20Music-Ear%20Damage%20Information.pdf>
- Long, L. L., & Ralph, C. J. (1998). *Regulation and observations of human disturbance near nesting Marbled Murrelets, Arcata, CA*. Pacific Southwest Research Station, Redwood Science Laboratory, Forest Service, U.S. Department of Agriculture.
- MMWD. (2019). *Final Program Environmental Impact Report for the Biodiversity, Fire, and Fuels Integrated Plan*. Retrieved from State Clearinghouse.
- Rochat, J. L. (2013, June). Natural Resource Technical Report NPS/NSNS/NRTR—2013/781. *Motorcycle Noise in a Park Environment*. U.S. Department of the Interior; National Park Service.
- Stebbins, R. (2003). *A field guide to western reptiles and amphibians*. Third edition. New York, New York: Houghton Mifflin Company.
- SWRCB. (2022). *GeoTracker*. Retrieved from <https://geotracker.waterboards.ca.gov/>
- USEPA. (1974, June). Control of Motorcycle Noise Volume I Technology and Cost Information.
- USFWS. (2020). Revised Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California. USFWS.
- Work Safe BC. (2021). How Loud is it? Waste Management.