Notice of Exemption 21-2024-198

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):
Novato Fire Protection District
95 Rowland Way
Novato, CA 94945

FILED
DEC 03 2024
SHELLY SCOTT
MARIN COUNTY CLERK
BY: _____, Deputy

Project Title: Novato Zone Marin Valley Long Range Acoustic Device Warning System Project

Project Applicant: Novato Fire Protection District

Project Location – Specific: LRAD installation would occur at the Marin Valley Mobile Country Club clubhouse

Project Location – City:
City of Novato

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 to residents in the Marin Valley Mobile Country Club and Hamilton community. Several fires have occurred at the Marin Valley Mobile Country Club within the last 10 years. Marin Valley Road is the only ingress/egress for residents in the community in the event of an emergency. The installation and implementation of the proposed long range acoustic device (LRAD) unit would improve the resiliency and redundancy of existing communication and LRAD systems. Evacuation and disaster notification are critical components to long term fire adaptive strategy. The installation of LRAD unit would communicate warnings, instructions, and notifications to nearby residents in the event of an emergency.

Name of Public Agency Approving Project: Novato Fire Protection District

Name of Person or Agency Carrying Out Project: Novato Fire Protection 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: 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:_____

POSTED 12/03/2024 TO 01/02/2025

Reasons why project is exempt:
The project is categorically exempt under California Environmental Quality Act (CEQA) Guidelines Section 15303, Class 3, for New Construction or Conversion of Small Structures. 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 as the responsible agency under CEQA concurs with the Novato Fire Protection District's determination that the proposed project is exempt under CEQA. The proposed project would involve the installation of emergency notification horns on a new pole at the Marin Valley Mobile Country Club. The scope of the proposed project, the location of which is shown in Figure 1, is consistent with the construction of new, small structures.

No work would take place within sensitive habitat, including wetlands or waterways. There are no facts or circumstances specific to this project that would support an exception to the categorical exemption. No exceptions listed under Section 15300.2 apply.

Lead Agency Contact Person:	**Area Code/Telephone/Extension:**
Lynne Osgood	415.878.2693

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: 12/2/24 Title: Vegetation Management Program Manager

☑ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

Figure 1 Project Location

MARIN WILDFIRE PREVENTION AUTHORITY

California Environmental Quality Act Categorical Exemption Determination Memorandum

Date: November 21, 2024

Project: Novato Zone Marin Valley Long Range Acoustic Device Warning System Project

Categorical Exemption Summary

The Novato Fire Protection District as the lead agency under California Environmental Quality Act (CEQA) has determined that the Novato Zone Marin Valley Long Range Acoustic Device Warning System Project (proposed project) is categorically exempt under CEQA Guidelines Section 15303, Class 3, for New Construction or Conversion of Small Structures. 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 (Marin Wildfire) as the responsible agency under CEQA concurs with the Novato Fire Protection District's determination that the proposed project is exempt under CEQA. The proposed project would involve the installation of emergency notification horns on a new pole at the Marin Valley Mobile Country Club. The scope of the proposed project, the location of which is shown in Figure 1, is consistent with the construction of new, small structures.

The following analysis demonstrates the proposed project would not result in adverse environmental effects, supporting the Novato Fire Protection District'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 Marin Wildfire, 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 Marin Wildfire 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 Marin Wildfire. Core Projects include those projects that focus on wildfire detection, notification, and evacuation; vegetation management and fire hazard reduction; grants management; and public education. This proposed project focuses on wildfire notification and public safety.

Figure 1 Project Location

Novato Zone Marin Valley Long Range Acoustic Device Warning System Project - Marin Wildfire Prevention Authority

Purpose and Need

The purpose of the proposed project is to install emergency alerting sirens to provide evacuation and disaster notification to residents in the Marin Valley Mobile Country Club and Hamilton community. Several fires have occurred at the Marin Valley Mobile Country Club within the last 10 years. Marin Valley Road is the only ingress/egress for residents in the community in the event of an emergency. 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 are critical components 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 Components

The LRAD would be installed outside of the Marin Valley Mobile Country Club clubhouse. The LRAD unit and control cabinet would be mounted on a new approximately 55-foot-tall Class I or Class II steel pole. The control cabinet would include a built-in MP3 player, solar and AC charging system, and battery backup. All LRAD equipment would be enclosed within a 100-square foot chain link fence between 6 and 10 feet in height.

The LRAD unit would involve installation of eight horns. Four of the horns would be pointed in the northern direction and four would be pointed in the southern direction to achieve coverage for residences in the nearby neighborhoods. Electricity to power the horns would be provided from the existing power at the clubhouse. Back-up power to the LRAD unit horns would be provided by a solar panel installed on the pole. Tree trimming and mowing would occur within the fenced area where the pole would be installed. Tree removal is not anticipated, but removal of one or two trees could occur if the trees within 50 feet of the pole are in front of the horns and obstructing the sound from reaching the targeted community. Tree removal would only occur if tree trimming is not effective at reducing sound obstruction.

Construction

Installation Method

A skip loader with an attached auger would excavate a hole that is 24 inches wide, and the pole would be direct buried to a depth of approximately 8 feet. The excavated soil material would be backfilled around the pole. Ground disturbance would be up to 3.1 square feet for the pole. Excavated material would be temporarily stockpiled adjacent to the hole prior to material being backfilled. Installation activities would require two bucket trucks, a flatbed trailer, and a skip loader with an attached auger. No power shut offs would be required during project construction.

Site Access

The Marin Valley Mobile Country Club site would be accessed via Marin Valley Drive. Equipment and vehicles would be parked in a 5,625-square-foot staging area located within the existing parking area next to the clubhouse. Lane closures along Marin Valley Drive may be required for approximately one to two days and would be coordinated with the City of Novato.

Workers

Contractor crews would install the horns and associated infrastructure at the project site. The contractor crew would be comprised of five to six persons. A single LRAD technician would perform on-site testing, commissioning, and training.

Schedule and Duration

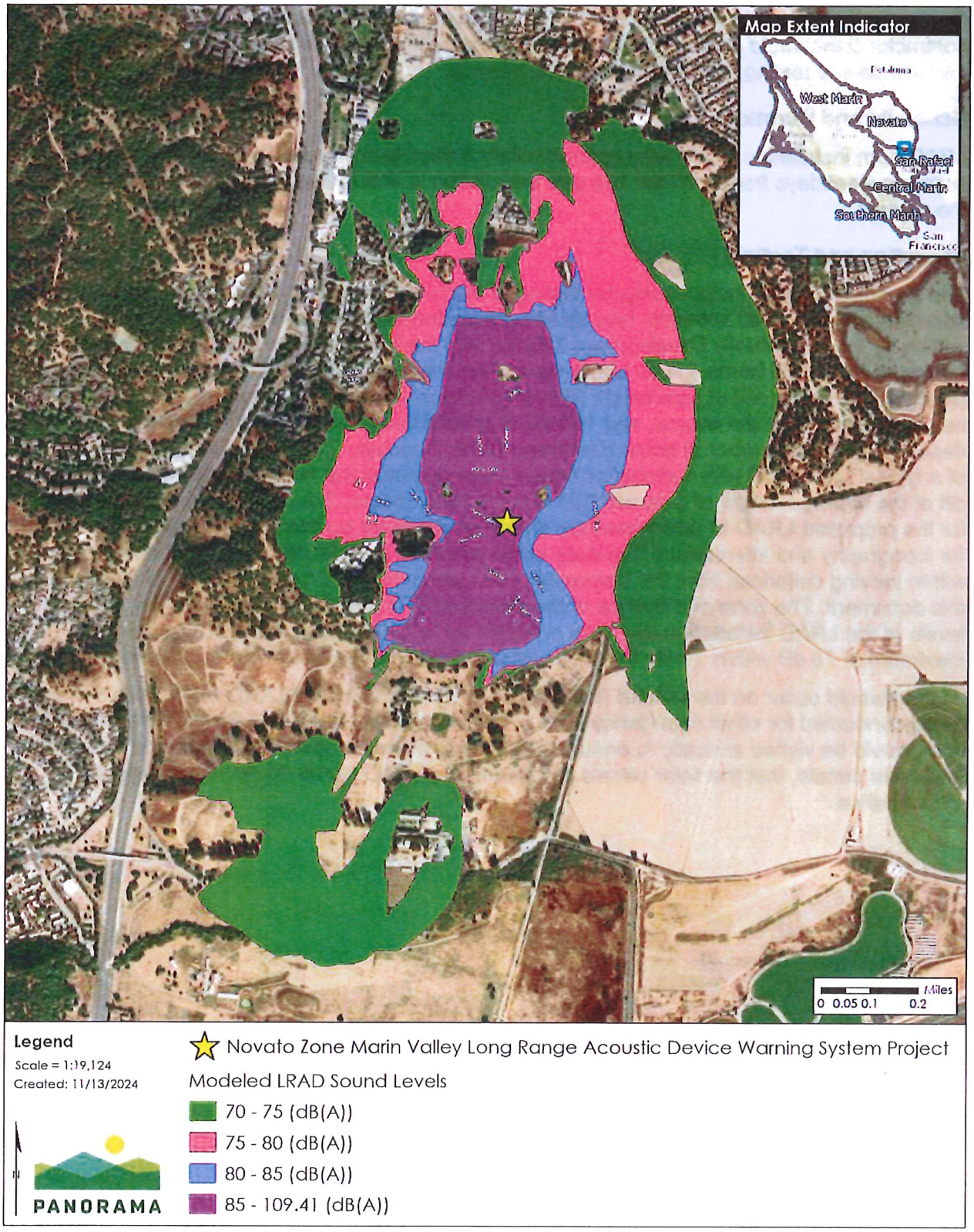
LRAD horn installation would take approximately 3 days to complete. Installation activities would occur on weekdays from 7:30 am to 5 pm. Installation is anticipated to start in Summer 2025 at the earliest.

Operation and Testing

The proposed project includes regular testing of the LRAD horns at full volume once a month for approximately 30 to 60 seconds. Novato Fire Protection District would acquire authorization in writing by the Community Development Director and the Public Works Director for regular testing of the LRAD horns. LRAD horns have been modeled to produce noise levels ranging to up to 110 decibels (dB) at pole height 98 feet (30 meters) from the source, up to 115 dB at pole height 100 feet from the source, and 105 dB at ground level 100 feet from the source, depending on the number of horns (Genasys, 2019; Genasys, 2020). Real world observations of a typical LRAD unit with a similar or higher noise output at the horns, found noise levels of 98 dB at the average height of a person 100 feet from the source. Sound modeling was conducted for the proposed LRAD to determine how sound would travel across the landscape accounting for topography and attenuation. The area within which sound can be heard at different volumes within varying distances from the proposed LRAD unit is referred to as the zone of influence in this document. The zone of influence of the proposed LRAD unit is shown in Figure 2. Noise levels at the LRAD installation site were modeled up to 110 dB and would attenuate to a maximum of 75 dB within 1 mile from the LRAD installation site, but likely much lower.

Testing would occur on the second Saturday of every month for the LRAD units, as is currently being conducted for other emergency horn systems in Marin County. At a minimum, the LRAD units would be visited 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.

Figure 2 LRAD Sound Model



Novato Zone Marin Valley Long Range Acoustic Device Warning System Project - Marin Wildfire Prevention Authority

Project Design and Implementation Features

Marin Wildfire 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 Training[1]

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 FR Parts 44738-44739 and Appendix A to 36 CFR Part 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 Discovery[2]

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 Marin Wildfire cultural resources GIS database.

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

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

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[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.

- 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 biologist. The qualified RPF or biologist will immediately contact the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS), as appropriate, if any wildlife protected by the CE Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled).

ES-1 Environmental Surveys for Rare Plants

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

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[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.

Surveys for rare plants will occur for these species across the entire project footprint. Surveys will occur during the blooming period, if feasible, and will occur prior to work for the specified special-status plant. If blooming period surveys are not feasible and the sensitive plant in question can be keyed to genus outside of the blooming period, surveys will be conducted for all members of the genus. Individuals will be flagged for avoidance or modified methods. Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat and removal after completion. For physical avoidance, a buffer may be implemented as determined necessary by the biologist. Sensitive species damage or loss avoidance may include implementation of appropriate species-specific no-activity buffers around sensitive resources. Temporary fencing will also be implemented, as and where determined necessary based on the species tolerance, if grazing is prescribed in the area of flagged individuals for avoidance or modified methods (WILD-1).

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

NB-1 Nesting Bird Season Avoidance[1,4, 5, 6]

Whenever possible, schedule work outside of the bird nesting season, which is generally from February 1 through July 31st [7]. Not all species nest between the regulatory season, and active nests that are encountered year-round are protected.

NB-2 Nesting Bird Surveys[1,4,5]

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

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

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

NB-3 Nesting Birds: Active Nest Avoidance[1,4,5,7]

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-

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

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

[7] 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.

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[1,4,5,7]

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

NOI-1 Minimization of Noise Disruption to Nearby Neighbors and Sensitive Receptors[4,8]

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

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

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

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

- 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

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 Measures[3]

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 worker.
- 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 are not located in the area of installation and would be avoided by the proposed project, therefore exception (a) does not apply.

(b) Cumulative Impact:

Installation activities for the LRAD horns would be limited to 3 days and would be tested on a monthly basis; regular maintenance aside from an annual visit is not required. Installation of the horns would occur adjacent to the existing clubhouse. Vegetation thinning and mowing would be minimal and would only occur within the 100 –square-foot fenced area around the LRAD unit. Mowing and landscaping maintenance is performed around the existing clubhouse building on an ongoing basis. Therefore, vegetation thinning and mowing would be consistent with existing vegetation management activities that occur at the clubhouse and would not contribute to cumulatively significant impacts. Tree removal may occur, if the tree(s) within 50 feet of the LRAD pole are in front of the horns and interfere with the LRAD sound distribution. Tree removal would only occur if tree limbing does not improve the sound distribution. The visual character of the proposed project work areas would be modified by the installation of the LRAD unit and fence, but the proposed LRAD unit would be similar to the existing infrastructure around the clubhouse (i.e., flagpole, streetlights, pool fencing). No other LRAD or similar types of sirens are located in the area. Therefore, there are no overlapping zones of influence that could cumulatively increase noise levels experienced by receptors in the area. As such, the proposed project would not contribute to any potential significant cumulative effect from vegetation treatment activities, changes to visual character, or noise and therefore, exception (b) does not apply.

(c) Significant Effects due to "Unusual Circumstances":

LRAD horns were previously installed in Marin County to provide evacuation and disaster notification and there is one mobile LRAD system in the Novato Zone. The installation of a new pole would occur within or adjacent to developed residential areas with existing infrastructure (e.g., flagpoles, streetlights) 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:
No designated California State Scenic Highways occur in the vicinity of the LRAD installation site; therefore, exception (d) does not apply (Caltrans, 2024).

(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 site (SWRCB, 2024). As such, no ground disturbing activities that could unearth potentially contaminated soil would occur; therefore, exception (e) does not apply.

(f) Historical Resources:

Minor ground disturbance for installation of the pole at the LRAD site could occur up to 3.1 square feet for the pole installation. As part of the proposed project, workers would participate in cultural training prior to project implementation (CUL-1). Should a previously unidentified cultural resource be discovered, work would halt in the area and the resource would be fully avoided or only methods allowed by a qualified cultural resource specialist/archaeologist would be implemented (CUL-2). Proposed project activities would not alter any built environment features and would not cause a substantial adverse change in the significance of a known or previously undiscovered historical resource. Therefore, exception (f) does not apply.

Environmental Assessment

Aesthetics

Question	Yes	No
Relevant to the project?	☒	☐
Potential for significant impact?	☐	☒

The visual character at the project site is developed and primarily residential with bordering forested areas. The LRAD unit would be installed adjacent to the Marin Valley Mobile Country Club clubhouse. Viewers in the vicinity of the site would primarily be motorists along Marin Valley Drive, residents, and clubhouse visitors. Equipment used to install the system would be temporarily visible along Marin Valley Drive and at the clubhouse for approximately 3 days to viewers in the immediate vicinity. Viewers in the immediate vicinity would notice the addition of the new LRAD pole and fenced area. However, the proposed LRAD pole and fence would be similar to existing infrastructure around the clubhouse, including the existing flagpole in front of the clubhouse building and fencing around the clubhouse pool area. Depending on the location of the installation site at the clubhouse, the clubhouse building, landscaping, and topography may obscure the installation site from viewers along Marin Valley Drive. Mowing and vegetation thinning would occur within the fenced area of the installation site. Mowing and landscaping maintenance is performed regularly around the clubhouse building. Therefore, mowing and vegetation thinning at the LRAD installation site would be consistent with existing vegetation management activities. As discussed above, tree removal (one to two trees) would only occur if the tree(s) within 50 feet of the LRAD pole and in front of the horns obstruct the LRAD notification system from reaching nearby communities, and tree limbing does not improve the sound distribution of the LRAD system. The removal of one to two trees would not result in a significant change in the visual character of the installation site. The 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.

Agriculture and Forestry Resources

Question	Yes	No
Relevant to the project?	☒	☐
Potential for significant impact?	☐	☒

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?	☒	☐
Potential for significant impact?	☐	☒

Vehicles and equipment for installation of the LRAD horns would emit diesel particulate matter and criteria air pollutants. The proposed project would utilize two bucket trucks, one skip loader,

and one flatbed trailer during installation activities. Installation activities would take approximately 3 days to complete, 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 generate any emissions. Significant air quality impacts would not occur.

Biological Resources

Question	Yes	No
Relevant to the project?	☒	☐
Potential for significant impact?	☐	☒

Biological database searches were conducted for the proposed LRAD (CDFW, 2024; CNPS, 2024). Of the species identified during the database search, species that were determined to have potential to occur within the LRAD installation area or within the zone of influence are shown in Figure 2.

Construction

Special-Status Plants and Sensitive Vegetation Communities

The LRAD would be installed adjacent to a recreational clubhouse facility in an area that is currently undeveloped land. LRAD horn installation on a new pole would involve relatively minimal ground disturbance. Tree limbing and mowing of annual grasses would occur within the 100-square-foot fenced area. Tree removal may occur if trees within 50 feet of the LRAD pole and facing the LRAD horns obstruct the sound from reaching nearby communities, and tree limbing does not improve the sound distribution of the LRAD system. Congested-headed hayfield tarplant (*Hemizonia congesta ssp. congesta*) is the only rare plant with potential to occur within the area of ground disturbance for installation of the LRAD unit (refer to Table 1 and Figure 3 for information). While there is potential for this species to occur in nearby grasslands, congested-headed hayfield tarplant is unlikely to occur directly adjacent to the clubhouse facility. If the LRAD installation site is moved farther away in the downslope areas of the abutting grassland, there is a higher potential to encounter this species. Workers would receive training from a qualified professional prior to beginning the vegetation treatments in areas where sensitive biological resources could occur. Training would include identification of special-status plant species and sensitive communities for avoidance (ET-1). The training for this proposed project would involve identification of congested-headed hayfield tarplant for avoidance if encountered within the installation site. If the installation site is moved farther away from the clubhouse, botanical surveys would be conducted prior to work (ES-1). Any individuals found during the pre-activity surveys would be flagged for avoidance or modified methods. The congested-headed hayfield tarplant would have a low to no potential to be impacted by LRAD installation activities with the worker training for avoidance and surveys, if needed, as shown in Table 1. No impacts on rare plants and sensitive vegetation communities during construction would occur.

Nesting Birds

No special-status wildlife species have the potential to occur within the LRAD installation site. However, the tricolored blackbird, short-eared owl, and saltmarsh common yellowthroat have a moderate potential to occur within the LRAD zone of influence, which is discussed below (refer

to Table 1 and Figure 4 for information). Migratory birds and birds of prey have the potential to nest in the LRAD zone of influence and are protected under the Migratory Bird Treaty Act and Sections 3503 and 3503.5 of the California Fish and Game Code. Installation activities for the LRAD site are planned to occur during the nesting seasons. Accordingly, a pre-construction nesting bird survey would be required prior to the 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.

Operation

Migratory and Nesting Birds

Migratory birds and birds of prey have the potential to nest or forage within the LRAD zone of influence, including the area with higher anticipated sound output closer to the LRAD unit, and are protected under the Migratory Bird Treaty Act and Sections 3503 and 3503.5 of the California Fish and Game Code. During monthly testing, any nearby nesting birds could be subject to noise levels over 100 dB in the area directly adjacent to the LRAD unit. Testing would occur each month for a very short duration, up to 60 seconds. The proposed LRAD project is located adjacent to Marin Valley Drive and residential land uses, and ambient noise levels along roadways in residential neighborhoods are expected to range from 55 to 75 decibels (dBA) Ldn.[9] Intermittent noise is typical along the residential roadways near the proposed LRAD unit from residential activities such as the use of mowers and leaf blowers for landscaping, 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 feet[10], motorcycles with noise levels ranging from 70 to over 100 dBA at 50 feet[11], and garbage trucks with noise levels ranging from 63 to 80 dBA at 50 feet.[12] Other similar and relatively common short-duration noise includes emergency vehicle sirens such as police and fire vehicles. In comparison, ambulance and fire truck sirens, fireworks, and custom car stereos at full volume generate noise that ranges from 130 to 140 dB at 50 feet (Idaho TC, 2021).

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 cause adverse impacts to sensitive species or their habitat (California Coastal Commission, 2014).

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

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

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

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

Residences, roadways, and aircrafts flying overhead (e.g., helicopters, airplanes) would likely cause more regular sound disturbance to migratory nesting birds than the LRAD unit. As such, these bird species in and around the residential communities where the LRAD sound output would be highest would likely have a baseline noise tolerance and would not be adversely impacted by the infrequent, periodic noise from the LRAD unit. Additionally, 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. Significant impacts on nesting birds would not occur from monthly LRAD testing.

Special-Status Wildlife Species

The bald eagle (*Haliaetus leucocephalus*), burrowing owl (*Athene cunicularia*) and California black rail (*Laterallus jamaicensis coturniculus*) are protected under the California Endangered Species Act, along with the California Ridgway's rail (*Rallus obsoletus obsoletus),* which is also federally protected. As discussed in Table 1, bald eagle and burrowing owl have a low potential to forage within the LRAD zone of influence and if so, may be startled by the LRAD system. The sound from the LRAD system may be considered annoying to these species, but testing would occur briefly for approximately 30 to 60 seconds once a month and would not significantly disrupt behavior patterns that could result in injury or mortality to the wildlife. The nearest suitable habitat for California black rail and California Ridgway's rail is outside the LRAD zone of influence shown in Figure 2. As such, the California black rail and California Ridgway's rail, may be startled from LRAD testing, but LRAD noise levels would be 70 dB or less and, as noted previously, of a short duration once a month. The LRAD system would not result in "take" as defined by the California ESA[13] of the burrowing owl, bald eagle, or California black rail, or "harassment" as defined by the Federal ESA[14] of the California Ridgway's rail, and therefore would not result in significant impacts.

As described above, the tricolored blackbird (*Agelaius tricolor*), short-eared owl (*Asio flammeolus)*, and saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) have a moderate potential to occur within the LRAD zone of influence, of which only the tricolored blackbird is listed as California Threatened. These species may be sensitive to noise generated by monthly LRAD testing particularly during the nesting season. All potential nesting habitats for special-status bird species are located outside of the noise model buffer referred to as the zone of influence. Suitable nesting habitat for the tricolored blackbird and saltmarsh common yellowthroat is located approximately 0.75 mile east of the LRAD site near the Hamilton wetlands, which is outside of the modeled zone of influence and therefore noise generated by testing is anticipated to be 70 dB or less. Foraging habitat for the short-eared owl is located within 0.25-mile of the LRAD site but the species is not known to nest within the zone of influence.

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[13] The California ESA defines "take" of sensitive species as "Hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish & G. Code, § 86).

[14] The Federal ESA defines "take" of a listed species as, "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 U.S.C., §1532 (19)). The Federal ESA defines "harass" to mean, "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering" (16 U.S.C., §1532 (20); 50 C.F.R. § 17.3).

LRAD horns can generate noise levels that differ depending upon the number of horns, but under ideal conditions[15] 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 dB at ground level, 100 feet from the source (Genasys, 2020; Genasys, 2019). However, noise attenuation is greater in the real world than modeled attenuation and does not account for other factors such as topography. Based on observations,[16] a typical LRAD unit with a similar or higher noise output at the horn than the type modeled 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 unit. Greater attenuation of noise in the real world compared to noise modeling is typical due to presence of structures, vegetation, and topographical changes. As such, noise levels may be even lower by the time the sound reaches the potential suitable nesting habitat for tricolored blackbird and saltmarsh common yellowthroat.

Studies describing potential noise impacts to the three wetland bird species that have a moderate potential to occur within the zone of influence listed above are not available. However, there are several studies regarding noise impacts to northern spotted owl (*Strix occidentalis caurina*), marbled murrelet (*Brachyramphus marmoratus*), and Mexican spotted owl (*Strix occidentalis lucida*) that may be considered relevant for the special-status bird species in consideration for this project. 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). 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", as defined by the Federal Endangered Species Act, during the breeding season for both of these specific species. While the guidance aims to reduce take of the aforementioned species, the document is not a regulation and none of the special-status bird species in the area are listed as federally endangered or threatened. Noise levels from the LRAD testing would be substantially lower than 80 dB in the area of potential nesting habitat for the tricolored blackbird and saltmarsh common yellowthroat. In accordance with USFWS guidance for two federally listed bird species, potential noise levels from the LRAD unit would be considered low for the two species in question (USFWS, 2020).

Additionally, substantial residential and commercial development borders the western boundary of the Hamilton wetlands, where common noise-generating activities described above under the *Migratory and Nesting Bird* analysis occur regularly. Low sound source examples include most hand tools, lawnmowers, and small generators (25 kVA or less), which are relatively common sources of noise in the LRAD zone of influence, including the edges of the suitable nesting wetland habitat where the LRAD noise level would be greatest (USFWS, 2020). Residences, roadways, and aircrafts (e.g., helicopters, airplanes) located closer to the Hamilton wetlands

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[15] 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.

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

would likely cause more regular sound disturbance to these special-status bird species than the noise emitted from the LRAD unit. Significant impacts on biological resources would not occur.

Wetlands

No streams intersect or occur adjacent to the project work area as shown in Figure 5 (USFWS, 2024). Streams and seasonal wetlands would be avoided by project activities. Training would ensure that workers conducting manual and mechanical activities to avoid wetlands (ET-1). Significant impacts on wetlands would not occur.

Figure 3 Special-Status Plant Occurrences
Figure 4 Special-Status Wildlife Occurrences

Figures omitted to protect special-status wildlife and plant species

Figure 5 Wetlands and Waterways

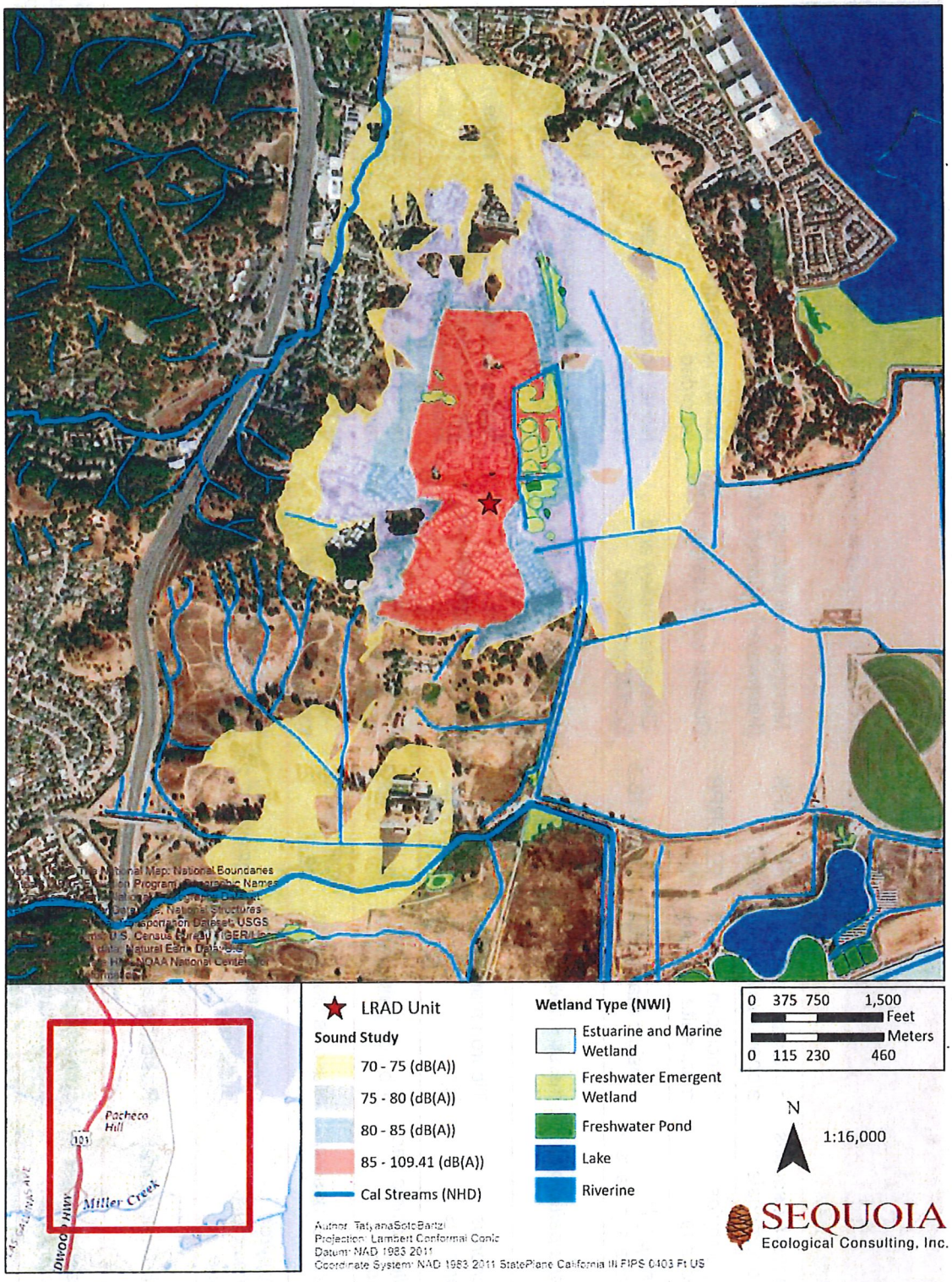

Table 1 Special-Status Species with Potential to Occur in the Project Vicinity

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
Sensitive Plants					
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	FE, CRPR 1B.1	Marshes and swamps (freshwater), riparian scrub	None; no occurrences recorded	None
Arctostaphylos franciscana	Franciscan manzanita	FE, CRPR 1B.1	Coastal scrub (serpentine)	None; no occurrences recorded	None
Arctostaphylos montana ssp. ravenii	Presidio Manzanita	CRPR 1B.3	Chaparral, valley and foothill grassland	None; no occurrences recorded	None
Arenaria paludicola	marsh sandwort	FE, CE, CRPR 1B.1	Marshland and wetlands	None; no occurrences recorded	None
Calochortus tiburonensis	Tiburon mariposa lily	FT, ST, CRPR 1B.1	Serpentine grasslands	None; no suitable habitat present near LRAD installation site	None
Castilleja affinis var. neglecta	Tiburon paintbrush	CRPR 1B.2	Valley and foothill grassland (serpentinite)	None; no occurrences recorded	None
Ceanothus masonii	Mason's ceanothus	CR, CRPR 1B.2	Chaparral (openings, rocky, serpentinite)	None; no occurrences recorded	None
Chloropyron maritimum ssp. palustre	Point Reyes salty bird's-beak	CRPR 1B.2	Marshes and swamps (coastal salt)	None; no suitable habitat present near LRAD installation site	None
Clarkia franciscana	Presidio clarkia	FE, CE, CRPR 1B.1	Coastal scrub, valley and foothill grassland (serpentine)	None; no occurrences recorded	None
Hemizonia congesta ssp. *congesta*	congested-headed hayfield tarplant	CRPR 1B.2	Northern coastal scrub and valley grasslands	Low; CNDDB occurrence within 1 mile of southernmost portion of	None; can be identified and avoided with training (ET-1). Work not

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
				zone of influence. Species unlikely to occur in landscaped area of proposed LRAD installation site.	expected impact species in LRAD installation site. If the installation site is moved away from the clubhouse and installation occurs during blooming season, surveys would occur (ES-1).
Hesperolinon congestum	Marin western flax	FT, ST, CRPR 1B.1	Chaparral, valley and foothill grassland, serpentine	None; no suitable habitat near LRAD installation site and no occurrences within 3-miles of project area	None
Holocarpha macradenia	Santa Cruz tarplant	FT, CE, CRPR 1B.1	Coastal prairie along central coast, grassy areas, clay soil	None; no suitable habitat near LRAD installation site and no occurrences within 3-miles of project area	None
Layia carnosa	beach layia	FT, SE, CRPR 1B.1	Coastal bluff scrub	None; no suitable habitat near LRAD installation site and no occurrences within 3-miles of project area	None
Lessingia germanorum	San Francisco lessingia	FE, CE, CRPR 1B.1	Coastal scrub (remnant dunes)	None; no suitable habitat near LRAD installation site and no occurrences within 3-miles of project area	None
Pentachaeta bellidiflora	white-rayed pentachaeta	FE, CE, CRPR 1B.1	Serpentine grasslands	None; no suitable habitat near LRAD installation	None

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
				site and no occurrences within 3-miles of project area	
Plagibothrys diffusus	San Francisco popcornflower	CE, CRPR 1B.1	Coastal prairies and valley/foothill grasslands	None; no suitable habitat near LRAD installation site and no occurrences within 3-miles of project area	None
Pleuropogon hooverianus	North Coast semaphore grass	ST, CRPR 1B.1	Meadows, vernal-pools	None; no suitable habitat near LRAD installation site and no occurrences within 3-miles of project area	None
Polygonum marinense	Marin knotweed	CRPR 3.1	Marshes and swamps (brackish, coastal salt)	None; no suitable habitat near LRAD installation site	None
Sanicula maritima	adobe sanicle	CR, CRPR 1B.1	Chaparral, coastal prairies, meadows and seeps, valley and foothill grasslands	None; no occurrences recorded	None
Streptanthus glandulosus ssp. pulchellus	Mt. Tamalpais bristly jewelflower	CRPR 1B.2	Chaparral and valley grassland (serpentine)	None; no suitable habitat near LRAD installation site	None
Streptanthus glandulosus ssp. niger	Tiburon black jewelflower	CRPR 1B.2	Valley and foothill grassland (serpentine)	None; no suitable habitat near LRAD installation site	None
Trifolium amoenum	two-fork clover	FE, CRPR 1B.1	Coastal bluff scrub, valley and foothill grassland (sometimes serpentinite),	None; no suitable habitat near LRAD installation site	None

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
			moist, heavy soils, disturbed areas		
Sensitive Wildlife[17]					
Agelaius tricolor	tricolored blackbird	CT, SSC	Wetlands and grasslands	Moderate; potential for flyovers in the zone of influence and LRAD installation site. Several eBird occurrences in surrounding wetlands (Las Galinas Valley Sanitary District). However, the zone of influence does not provide suitable habitat consistent with life history	Low; potentially suitable nesting habitat present outside of and 0.75-mile to the east of the zone of influence. Refer to detailed analysis above for effects from noise generated by testing of the LRAD system on species while foraging or nesting.
Aquila chrysaetos	golden eagle	FP	Grasslands	Low; few eBird occurrences near the zone of influence. Potential for flyover or perching on tall trees in the zone of influence and LRAD installation site. However, golden eagles hunt over open water, which is not present within the zone of influence. Nesting habitat not present in the zone of	Low; no known nesting pairs within 1 mile of zone of influence. Avian species foraging within the LRAD zone of influence may be startled by the sound emitted during LRAD testing.

[17] Operational impacts from the LRAD units are not include in the table and are discussed in the operations analysis above.

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
				influence nor LRAD installation site.	
Asio flammeolus	short-eared owl	SSC	Wetlands and grasslands	Moderate; multiple eBird occurrences in the vicinity; none within the zone of influence or LRAD installation site. Based on eBird occurrences, species winters in area but no breeding-season/nesting records are known in the area	Low; suitable foraging habitat present and wintering occurrences 0.25-mile from the LRAD site. Avian species foraging within the LRAD zone of influence may be startled by the sound emitted during LRAD testing. Refer to detailed analysis above for effects from noise generated by testing of the LRAD system on species while foraging.
Asio otus	long-eared owl	SSC	Dense oak woodlands adjacent to riparian corridors	None; long-eared owls are rare in this region. Suitable habitat is present in surrounding areas but not within the zone of influence. No suitable foraging or nesting habitat present in the zone of influence nor LRAD installation site	None; suitable habitat not present and species not expected to occur.
Athene cunicularia	burrowing owl	CC, FP, SSC	Open, dry, and sparsely vegetated areas with abundant mammal burrows	Low; single CNDDB occurrence from 1984. Suitable habitat is not present within the zone of	Low; suitable foraging or nesting habitat not present in the zone of influence. Suitable

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
				influence or LRAD installation site but may be present approximately 0.8 mile from the project site to the south of the St. Vincent's School for Boys. Multiple wintering eBird occurrences south of the zone of influence in open fields	habitat is beyond the expected range of potential LRAD sound impacts. Avian species foraging within the LRAD zone of influence may be startled by the sound emitted during LRAD testing. Refer to detailed analysis above for effects from noise generated by testing of the LRAD system on species while foraging.
Charadrius nivosus nivosus	western snowy plover	FT, SSC	Nests in coastal dunes and salt ponds	None; CNDDB observation and all eBird records are located at Hamilton wetlands over 0.5-mile from the zone of influence. No suitable habitat present within the zone of influence nor LRAD installation site	None; suitable habitat not present in the zone of influence. Suitable habitat is beyond expected range of potential LRAD sound impacts
Chlifonias niger surinamenisis	black tern	SSC	Freshwater and brackish marshes, wetlands	None; no CNDDB or eBird occurrences recorded within 3 miles of the zone of influence	None; suitable habitat not present in the zone of influence. Suitable habitat is beyond expected range of potential LRAD sound impacts

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
Circus hudsonius	northern harrier	SSC	Marshes, fields, prairies. Nests on ground in dense field or marsh	Low; potential for flyovers or foraging within the zone of influence. Over 100 eBird records in the last decade, mostly concentrated along shoreline where marshlands provide suitable foraging habitat. Suitable nesting and foraging habitat is not present within the zone of influence or LRAD installation site, but is present within 3-mile buffer	Low; suitable habitat not present in the zone of influence. Suitable habitat is beyond the expected range of potential LRAD sound impacts. Avian species foraging within the LRAD zone of influence may be startled by the sound emitted during LRAD testing.
Contopus cooperi	olive -sided flycatcher	SSC	Douglas-fir forest	Low; potential for flyovers in zone of influence. eBird occurrences located in Lucas Valley, no suitable habitat present within zone of influence nor LRAD installation site	Low; suitable habitat not present in the zone of influence. Suitable habitat is beyond the expected range of potential LRAD sound impacts. Avian species foraging within the LRAD zone of influence may be startled by the sound emitted during LRAD testing.
Cypseloides niger	black swift	SSC	Nests on ledges or in crevices in steep cliffs along coast or near	None; suitable habitat not present within zone of influence nor LRAD installation site. eBird	None; suitable habitat not present near the zone of influence nor LRAD installation site.

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
			streams or waterfalls in mountains	records are sparse within 3 miles of the zone of influence with less than 5 observations since 2016	
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FC	Grassland, woodland	Low; no overwintering habitat (Xerces Society) present within 3 miles of the zone of influence, but larval host plant (milkweed) documented nearby (Calflora) and could be present within the zone of influence and LRAD installation site	Low; can disperse from other areas. Species life stages and host plant (milkweed) will be included in environmental training to ensure avoidance during LRAD installation (ET-1). Minimal vegetation removal is expected to occur.
Emys marmorata	northwestern pond turtle	FP, SSC	Freshwater ponds and streams	Low; freshwater ponds and wetlands are within the zone of influence, not directly adjacent to LRAD installation site. However, CNDDB occurrence located over a mile from the zone of influence	None; installation will not occur within suitable habitat. Potential for upland migration and dispersal but anthropogenic barriers are present (i.e., roads, houses) between LRAD installation site and the nearest occurrence. Sound from the LRAD system unlikely to impact species.
Eucyclogobius newberryi	tidewater goby	FE	Aquatic	None; aquatic areas are excluded from the project footprint	None; suitable habitat not present

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
Geothlypis trichas sinuosa	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	Moderate; small patch of marsh east of the zone of influence present with one eBird occurrence noted. More concentrated occurrences of this species are found along the shoreline and at Hamilton Marsh. Not expected to occur near the LRAD installation site	Low; potentially suitable nesting habitat present outside of and 0.75 mile to the east of the zone of influence Refer to detailed analysis above for effects from noise generated by testing of the LRAD system on species while foraging or nesting.
Haliaetus leucocephalus	bald eagle	CE	Mountain and foothill forests, woodlands near waterbodies	Low; potential flyovers or perching in trees within the zone of influence. Over 30 eBird records within 3-miles of the zone of influence. However, bald eagles nest near and hunt over open water and nest in tall trees nearby, which are not present within the zone of influence nor LRAD installation site	Low; suitable habitat not present in the zone of influence. Suitable habitat is beyond the expected range of potential LRAD sound impacts. Avian species foraging within the LRAD zone of influence may be startled by the sound emitted during LRAD testing. Refer to detailed analysis above for effects from noise generated by testing of the LRAD system on species while foraging.
Laterallus jamaicensis coturniculus	California black rail	CT, FP	Wetlands and marshes	Low; small potentially suitable patch of wetland habitat east of the zone of	Low; potentially suitable habitat present outside of and to the east of the

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
				influence. No CNDDB records in vicinity, and species is hidden on eBird to protect occurrence details	zone of influence, but impacts from the LRAD system are not expected. Suitable habitat is outside of anticipated range of the LRAD zone of influence. Refer to detailed analysis above for effects from noise generated by testing of the LRAD system on species while foraging.
Melospiza melodia samuelis	San Pablo song sparrow	SSC	Tidal marshes (San Pablo Bay)	Low; several eBird observations within 3-miles of the zone of influence, but mainly concentrated near the shoreline where marshes occur. No nesting or foraging habitat present within the sound study area.	None; suitable habitat not present in the zone of influence.
Passerculus sandwichensis belding	Belding's savannah sparrow	SE	Coastal marshes	None; no CNDDB occurrences near the zone of influence. Many eBird sightings of "savannah sparrow" in vicinity. However, the zone of influence and LRAD installation site is	None; not expected to occur

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
				outside of subspecies known range	
Rallus obsoletus obsoletus	California Ridgway's rail	FE, CE, FP	Saltwater marshes, freshwater marshes, and mangrove swamps	Low; several eBird observations within 3-miles of the zone of influence area, however, occurrences are concentrated near shorelines where marshes occur. No nesting or foraging habitat present within the sound study area nor LRAD installation site.	Low; potentially suitable habitat present outside of and to the east of the zone of influence, but impacts from the LRAD system are not expected. Suitable habitat is outside of anticipated range of the LRAD zone of influence. Refer to detailed analysis above for effects from noise generated by testing of the LRAD system on species while foraging.
Rana draytonii	California red-legged frog	FT, SSC	Breeds in ponds/slow moving streams, may use grassland and oak woodland for dispersal and foraging	None; no occurrences recorded. No suitable present within the zone of influence nor LRAD installation site.	None; suitable habitat not present and sound from the LRAD system unlikely to impact species
Reithrodontomys raviventris	salt marsh harvest mouse	FE, CE, FP	Marshes and wetland edges	None; no suitable habitat within the zone of influence nor LRAD installation site	None; not expected to occur
Spirinchus thaleichthys	longfin smelt	FP, CT	Aquatic (estuaries and lakes)	None; no suitable habitat within the zone of influence and aquatic	None; suitable habitat not present in the zone of influence

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
				areas are excluded from the project footprint	
Spea hammondii	western spadefoot	FP	Open areas with sandy or gravelly soils in mixed woodlands, grasslands, scrub, and foothills.	None; no suitable habitat within the zone of influence nor LRAD installation site. The zone of influence and LRAD installation site outside known species' range	None; suitable habitat not present and sound from the LRAD system unlikely to impact species
Sternula antillarum browni	California least tern	FE, SE	Nest on beaches, mudflats, and sand dunes.	None; no CNDDB or eBird occurrences. No breeding or foraging habitat within zone of influence nor LRAD installation site	None; suitable habitat not present near the LRAD zone of influence
Strix occidentalis caurina	northern spotted owl	FT, CT	Dense canopies of mature and old-growth forests. Nests in tree hollows	Low; no suitable habitat within the zone of influence. The closest documented occurrence is over 1 mile from the zone of influence, and approximately 1.6 miles from LRAD installation site	Low; no suitable habitat present within the zone of influence and species is not expected to occur. LRAD system unlikely to impact species.
Strix occidentalis occidentalis	California spotted owl	SSC	Dense canopies of mature and old-growth forests in the Sierra Nevada, Coastal, Transverse, and Peninsular mountain ranges. Nests in tree hollows	None; no suitable habitat within sounds study area nor LRAD installation site and no documented occurrences nearby. Area is outside the species' known range	None; no suitable habitat within the zone of influence and no documented occurrences nearby. Not expected to occur.

Scientific Name	Common Name	Sensitive Status	Habitat Types	Potential to occur in installation area or zone of influence	Potential to be impacted by the project
Thalasseus elegans	elegant tern	SSC	Forage in shallow waters. Nest on flat, sandy, or rocky islands with little vegetation	None; no CNDDB occurrences near the zone of influence, multiple recent eBird occurrences at Hamilton Wetlands. No suitable breeding or foraging habitat is present in the zone of influence nor LRAD installation site.	None; suitable habitat not present in the zone of influence.

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, 2024; CNPS, 2024; CDFG, 2003; Hickman, 1993; Stebbins, 2003)

Cultural Resources and Tribal Cultural Resources[18]

Question	Yes	No
Relevant to the project?	☒	☐
Potential for significant impact?	☐	☒

LRAD horn installation on the new pole would require ground-disturbing activities in a small, concentrated area. Maximum depth of ground disturbance would be 8 feet for the pole. Given the minimal amount of ground disturbance for the proposed project and the disturbance at Marin Valley Mobile Country Club from the existing road, driveways, 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?	☒	☐
Potential for significant impact?	☐	☒

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 require electricity for operation. The LRAD horns would be powered by the existing Marin Valley Mobile Country Club clubhouse, and back-up power would be provided by solar panels mounted on the pole. The use of electricity would be minimal and would only be used during testing of the horns (once a month for 30 to 60 seconds). The use of fuel and electricity to implement the proposed 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?	☒	☐
Potential for significant impact?	☐	☒

For new pole installation at the LRAD site, 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 the new pole, up to 3.1 square feet, and temporary as the ground would be stabilized immediately after installation, substantial soil erosion and topsoil loss is not anticipated. Significant impacts related to erosion and loss of topsoil would not occur.

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

Greenhouse Gas Emissions

Question	Yes	No
Relevant to the project?	☒	☐
Potential for significant impact?	☐	☒

LRAD horn installation activities would involve use of equipment and vehicles to travel to and from the installation site. 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?	☒	☐
Potential for significant impact?	☐	☒

Vehicle and equipment would be used at the LRAD site 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). The LRAD site is not located within any listed hazardous waste sites that could be disturbed by ground-disturbance for pole excavation and trenching (SWRCB, 2024). Crews would maintain fire suppression equipment (e.g., Pulaski axe, shovel, fire extinguisher) in work vehicles during installation 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?	☒	☐
Potential for significant impact?	☐	☒

Vehicles traveling to and from the project site would be confined to existing roads and structures. No work would occur near waterways. Minimal ground disturbance, up to 3.1 square feet for the pole, would occur for the installation of the LRAD unit on a new pole and would not result in 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?	☐	☒
Potential for significant impact?	☐	☒

Installation of the LRAD unit would not involve any new development or changes to land uses that could physically divide a community. The proposed project is consistent with the objectives

of the Marin Wildfire Prevention Authority, Novato Ordinance 2019-2 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?	☐	☒
Potential for significant impact?	☐	☒

LRAD horn installation on a new pole would involve minimal ground disturbance, up to 3.1 square feet for the pole, and to a maximum depth of 8 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?	☒	☐
Potential for significant impact?	☐	☒

Construction

The LRAD installation activities would occur on weekdays from 7:30 am to 5:00 pm. This timeframe would conform with the appropriate noise ordinance (i.e., City of Novato Noise Ordinance §19.22.070)[19], which limits construction activities and other related work to Monday through Friday 7:00 am to 6:00 pm and Saturday from 10:00 am to 5:00 pm for the City of Novato Noise Ordinance. 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.

Operation

The City of Novato Municipal Code 19.22.070 restricts noise for residences in excess of 60 dBA between 6 am and 10 pm, and 45 dBA between 10 pm to 6 am. Noise modeling was conducted to evaluate the noise levels generated by the operation of the LRAD unit. Noise levels were modeled to range from 70 dBA to 110 dBA within 1 mile of the LRAD unit, as shown in Figure 2.

As discussed above, the LRAD unit would be tested once a month on the second Saturday of each month. No nighttime testing would occur. The purpose of the proposed project is to be audible 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 unit for one day a month (with the actual noise impact lasting only 30 to 60 seconds) would not be considered a significant operational impact. In accordance with the City of Novato Municipal Code 19.22.070, the Novato Fire Protection District would acquire authorization from the

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

Community Development Director and the Public Works Director for operation of the LRAD unit. There would be no significant operational noise-related impacts.

Population and Housing

Question	Yes	No
Relevant to the project?	☐	☒
Potential for significant impact?	☐	☒

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?	☐	☒
Potential for significant impact?	☐	☒

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 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?	☒	☐
Potential for significant impact?	☐	☒

LRAD installation would occur within the Marin Valley Mobile Country Club that provides recreational opportunities including hiking trails nearby and an outdoor pool. LRAD installation would be temporary and would occur over approximately 3 days. Closure of recreational facilities due to LRAD installation is not anticipated. 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?	☒	☐
Potential for significant impact?	☐	☒

Daily one-way vehicle trips during LRAD horn installation would range from approximately 10 to 12 trips. During project operations, no regular 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 require lane closures along Marin Valley Boulevard for approximately one to two days. Prior to temporary lane closures, emergency response agencies would be notified of the closure (TR-1). Flaggers would be equipped with two-way radios to control traffic during temporary lane closures. Additionally, traffic control measures would be implemented to maintain traffic circulation along Marin Valley Boulevard (TR-2). Temporary lane closure 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?	☒	☐
Potential for significant impact?	☐	☒

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 unit would be powered by a connection to the power grid via the existing Marin Valley Mobile Country Club clubhouse, and back-up power would be provided by a solar panel installed on the pole. The proposed project would not require new electrical power facilities and no impact related to utilities and service systems would occur.

Wildfire

Question	Yes	No
Relevant to the project?	☒	☐
Potential for significant impact?	☐	☒

The proposed project is located within the Local Responsibility Area (LRA) in areas identified as high fire severity zones, respectively (CAL FIRE, 2024). 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.

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