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Rancho Fiesta Storage Improvements Project
Biological Resources Report

November 2023

Prepared for

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1. INTRODUCTION

California American Water (CalAm) is proposing the Rancho Fiesta Storage Improvements Project (project or proposed project), located on Oak Meadow Lane in the Rancho Fiesta neighborhood of Carmel Valley, California (**Figure 1**). The project is in unincorporated County of Monterey (County) in County Assessor's Parcels 187-031-020-000, 187-031-023-000, 187-031-025-000, and 187-031-027-000, and consists of improvements to existing water supply infrastructure that is owned and operated by CalAm as part of the Rancho Fiesta water system at four small sites totaling approximately 0.64 acre (**Figure 2**). Three of the sites are currently partially developed with existing water supply infrastructure (i.e., water tanks, piping, electrical controls, fire hydrant, and related improvements).

To satisfy the reporting criteria of the County and other regulatory agencies, Denise Duffy & Associates, Inc. (DD&A) completed a biological evaluation of the project site to determine if sensitive biological resources are present or have the potential to occur within and in the vicinity of the site. This report describes the existing biological resources within and adjacent to the project site, including any special-status species or sensitive habitats which occur or have the potential to occur in the area. This report also assesses the potential impacts to biological resources that may result from the project, and recommends appropriate avoidance, minimization, and mitigation measures, if necessary, to reduce those impacts to a less than significant level in accordance with the California Environmental Quality Act (CEQA).

1.1 Summary of Results

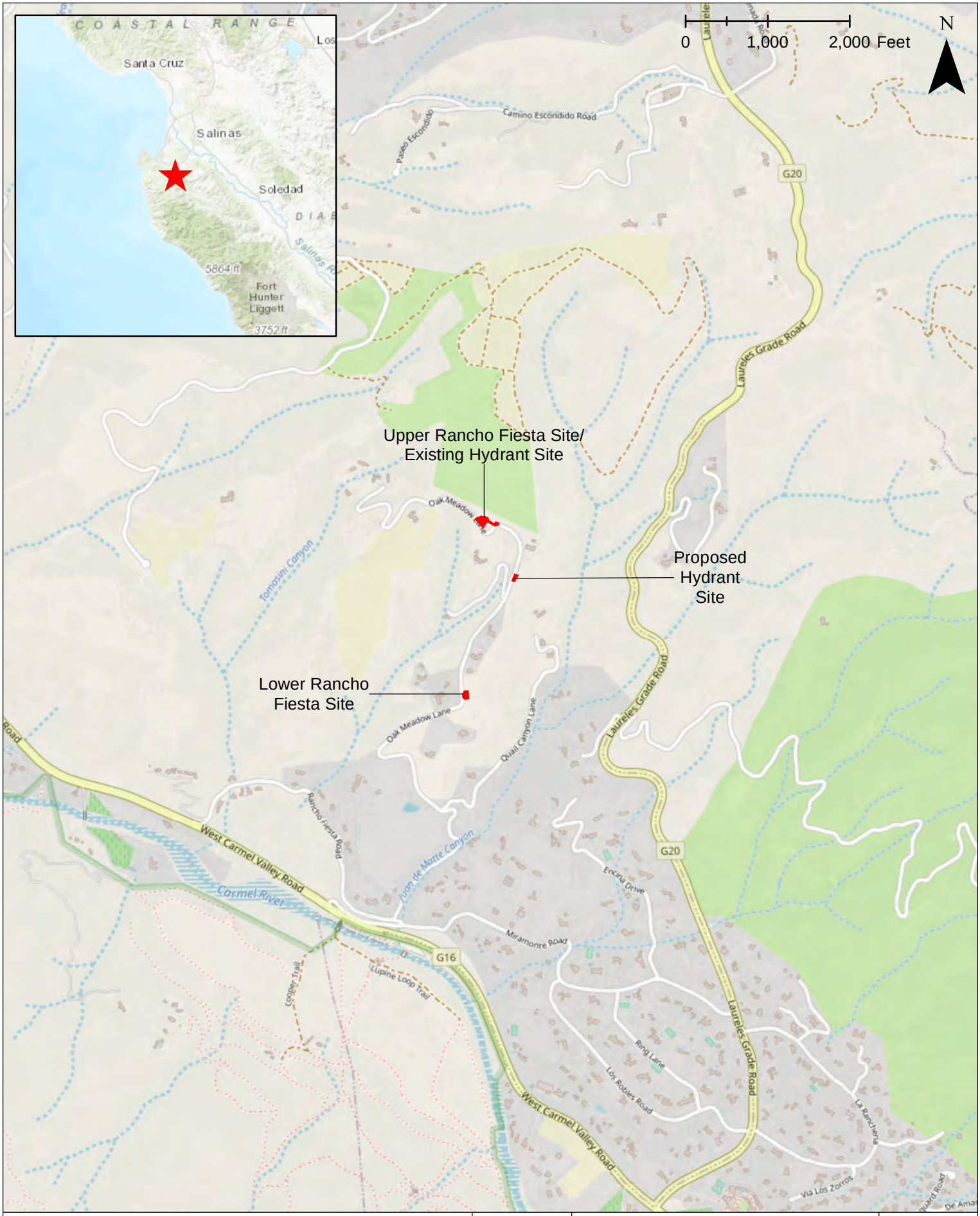
Three natural communities—ruderal/disturbed, annual grassland, and coastal scrub—occur within the project site. In addition, portions of the project site are developed and landscaped.

No special-status plant species occur or have the potential to occur within the project site. Two special-status wildlife species—Crotch bumble bee (*Bombus crotchii*, CBB) and burrowing owl (*Athene cunicularia*)—have the potential to occur within portions of the project site. In addition, raptors and other avian species have the potential to nest within the trees and shrubs within and adjacent to the project site. CBB is a candidate species for listing under the California Endangered Species Act (CESA). If this species is present within the project site and has the potential to be impacted by the project, an incidental take permit (ITP) from the California Department of Fish and Wildlife (CDFW) would be required prior to construction.

Critical habitat for California red-legged frog (*Rana draytonii*, CRLF) is mapped within the Lower Rancho Fiesta site; however, CRLF has a low potential to occur within the project site and critical habitat requirements do not apply to activities that are not conducted on federal land or that do not involve a federal agency. No other sensitive habitats occur within the project site.

Two small coast live oak trees occur within the project site. If the oaks are six inches or larger in diameter[1] and if the project would result in their removal, a tree removal permit from the County would be required prior to construction.

[1] Tree diameter was not recorded during the biological survey.



Project Location

Date	Figure
11/22/2023	1
Scale: 1 in = 2,000 ft	

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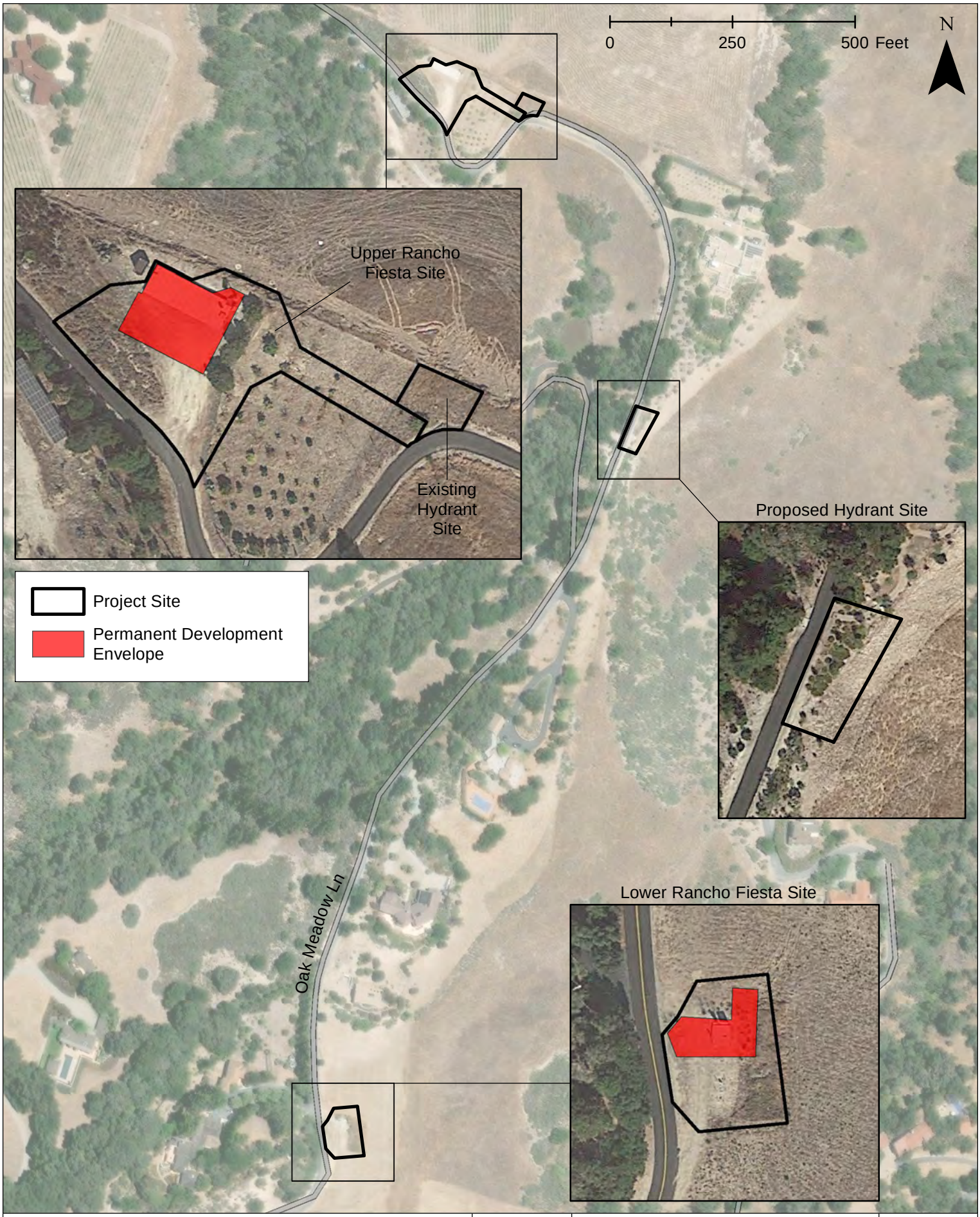

Site Plan

Date
11/22/2023

Scale
1 in = 300 ft

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Figure
2

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1.2 Project Description

Two water pressure zones, Upper Rancho Fiesta and Lower Rancho Fiesta, provide water service to the Rancho Fiesta neighborhood in Carmel Valley, California. The existing storage and pumping capacity are unable to meet the required fire flow standards for each zone. The existing Upper Rancho Fiesta tank is a partially buried rectangular concrete tank with a volume of approximately 50,000 gallons. The Lower Rancho Fiesta tank, originally constructed by re-purposing a railroad tanker car, is a predominantly buried tank with a volume of approximately 10,000 gallons.

The proposed project consists of improvements to the existing Upper Rancho Fiesta tank, the addition of a second water storage tank at the Upper Rancho Fiesta site, the replacement of the existing tank at the Lower Rancho Fiesta site, and the relocation of an existing fire hydrant. Specific project improvements include the following:

- Extension of the existing partially buried Upper Rancho Fiesta tank by approximately 16 inches in height to increase its useable volume to 60,000 gallons;
- Installation of a new 60,000-gallon partially buried storage tank at the Upper Rancho Fiesta site to provide additional fire storage capacity for the Upper and Lower Rancho Fiesta Zone;
- Replacement of the existing 10,000-gallon Lower Rancho Fiesta tank with a new approximately 10,000-gallon partially buried storage tank to match the height of the existing valve vault;
- Construction of a bypass pipeline with a pressure sustaining/reducing control valve at the Lower Rancho Fiesta site to allow water from the Upper Rancho Fiesta tanks to drain into the Lower Rancho Fiesta Zone during an emergency; and
- Relocation of a fire hydrant approximately 700 feet south of the existing hydrant located along Oak Meadow Lane.

The project would be constructed predominately within previously disturbed areas associated with existing CalAm water infrastructure. No work is proposed within the roadway. Existing underground piping connects all three sites within Oak Meadow Lane; therefore, no additional piping would be required within the right-of-way. All permanent improvements associated with the project would occur at the existing Upper and Lower Rancho Fiesta sites. The relocation of the fire hydrant on Oak Meadow Lane would result in temporary disturbance of the existing and proposed fire hydrant sites but would not result in a significant area of disturbance. A definitive location for the relocated hydrant has not yet been determined; therefore, this report analyzes potential project impacts associated with the relocation of the hydrant within a broad development envelope where impacts may occur. Construction is anticipated to commence in early 2024 and would last approximately six to eight months.

1.3 Avoidance and Minimization Measures

CalAm consulted with DD&A during the design phase of the project identify measures to avoid or minimize impacts to sensitive biological resources. The following avoidance and minimization measures (AMMs) have been incorporated as part of the project.

AMM 1: The following best management practices shall be implemented to reduce impacts to special-status species:

- The project applicant shall retain a qualified biologist to prepare and conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist shall meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and a review of the project boundaries; 2) how a biological monitor shall examine the area and agree upon a method which will ensure the safety of the monitor during such activities; 3) the special-status species and sensitive habitats that are known or may be present within and directly adjacent to the site; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by the regulatory agencies; and 6) the proper procedures if a special-status species is encountered within the project site during construction.
- Trees and vegetation within and directly adjacent to the project site which are not planned for removal or trimming shall be protected prior to and during construction to the maximum possible with exclusionary fencing, such as ESA fencing for herbaceous and shrubby vegetation or protective wood barriers for trees. A biological monitor shall supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.
- Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).
- No firearms shall be allowed on the project site at any time.
- All food-related and other trash shall be disposed of in closed containers and removed from the project site at least once per week during construction of the project, or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area.
- Following construction, all temporarily disturbed areas shall be returned to pre-project contours and shall be revegetated with a native seed mix consistent with the surrounding vegetation.

AMM 2: Construction activities shall be scheduled after October 31 and before February 1 to avoid the CBB life cycle to the greatest extent feasible. If project activities are scheduled between February 1 and October 31, the project applicant shall contract a qualified biologist to conduct a pre-construction survey for active CBB colonies within grassland areas which will be impacted by the project and an approximate 50-foot buffer of those areas. The survey shall be conducted in accordance with the most recent CDFW survey guidelines and shall be conducted during the CBB life cycle when floral resources are present, ideally during peak bloom. The survey shall occur when temperatures are above 60 degrees Fahrenheit (°F), on sunny days with wind speeds below eight miles per hour, and at least two hours after sunrise and three hours before sunset. Surveyors shall conduct transect surveys focusing on detection of foraging bumble bees and underground nests using visual aids such as binoculars. If construction is halted for more than two weeks during the CBB life cycle, grassland areas shall be re-surveyed prior to the re-initiation of work.

If no CBB or potential CBB are detected during surveys, no further mitigation is required. If potential CBB are seen but cannot be identified, the applicant shall obtain authorization from CDFW to use nonlethal netting methods to capture bumble bees to identify them to species. If protected bumble bee nests are found, a plan to protect bumble bee nests and individuals to ensure no take of CBB shall be developed by a qualified biologist in consultation with the project applicant prior to construction, or take authorization from the CDFW shall be acquired.

AMM 3: A qualified biologist shall conduct a pre-construction survey for active burrowing owl nests in suitable habitat within the construction footprint and within 250 feet of the footprint no more than 14 days prior to the start of construction. If ground disturbing activities are delayed or suspended for more than 14 days after the pre-construction survey, the site shall be resurveyed again within 14 days of the initiation of construction.

If no burrowing owls are found, no further mitigation is required. If it is determined that burrowing owls occupy the site during the non-breeding season (September 1 through January 31), then a passive relocation effort (e.g., blocking burrows with one-way doors and leaving them in place for a minimum of three days) shall be implemented to ensure that the owls are not harmed or injured during construction. Once it has been determined that the owls have vacated the site, the burrows can be collapsed, and ground disturbance can proceed. If burrowing owls are detected within the construction footprint or immediately adjacent lands (i.e., within 250 feet of the footprint) during the breeding season (February 1 to August 31), a construction-free buffer of 250 feet shall be established around all active owl nests. The buffer area shall be enclosed with temporary fencing, and construction equipment and workers shall not enter the enclosed setback areas. Buffers shall remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. After the breeding season, passive relocation of any remaining owls may take place as described above.

AMM 4: Project activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise disturbance) affect protected nesting avian species shall be scheduled after September 15 and before February 1 to avoid the breeding and nesting season. Alternatively, a qualified biologist shall be retained by the project applicant to conduct pre-construction surveys for nesting raptors and other protected avian species within 300 feet of proposed project activities if work occurs between February 1 and September 15. Pre-construction surveys shall be conducted no more than 14 days prior to the start of project activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through September). Because some bird species nest early in spring and others nest later in summer, and because some species breed multiple times in a season, surveys for nesting birds may be required to continue during project activities to address new arrivals. The necessity and timing of these continued surveys shall be determined by the qualified biologist.

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist shall notify the project applicant and an appropriate no-disturbance buffer shall be imposed within which no disturbance should take place (generally 300 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

2. METHODS

2.1 Personnel and Survey Dates

DD&A Environmental Scientists Liz Camilo and Rikki Lougee conducted a survey of the project site on April 6, 2023. The survey consisted of walking the project site to identify general and sensitive habitat types, identifying all plant species to the intraspecific taxon necessary to eliminate them as being special-status species, identifying potential habitat for special-status plant species, and conducting a reconnaissance-level wildlife habitat surveys to identify suitable habitat for or presence of any special-status wildlife species. Data collected during the surveys were used to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts.

The project site was evaluated for botanical resources following the applicable guidelines outlined in *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (U.S. Fish and Wildlife Service [Service], 2000), *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Wildlife [CDFW], 2018), and California Native Plant Society (CNPS) *Botanical Survey Guidelines* (CNPS, 2001).

2.2 Definitions

2.2.1 Special-Status Species

Special-status species are those plants and animals that have been formally listed or proposed for listing as endangered or threatened or are candidates for such listing under the Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Listed species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Section 15380 are also considered special-status species. Animals on the CDFW's list of "species of special concern" (most of which are species whose breeding populations in California may face extirpation if current population trends continue) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA. Additionally, the CDFW also includes some animal species that are not assigned any of the other status designations on their "Special Animals" list; however, these species have no legal or protection status.

Plants listed as rare under the California Native Plant Protection Act (CNPPA) or included in CNPS California Rare Plant Ranks (CRPR) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067 of the CESA and in accordance with CEQA Guidelines Section 15380. In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2023) be fully considered during the preparation of environmental documents relating to CEQA. CNPS CRPR 4 species (plants of limited distribution) may, but generally do not, meet the definitions of Sections 2062 and 2067 of the CESA, and are not typically considered in environmental documents relating to CEQA. While

other species (i.e., CRPR 3 or 4 species) are sometimes found in database searches or within the literature, these were not included within the analysis as they did not meet the definitions of Section 2062 and 2067 of the CESA.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected in California under Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." In addition, fully protected species under the Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

2.2.2 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted vegetation types. Vegetation types considered sensitive include those listed on CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2023b), those that are occupied by species listed under the ESA or are critical habitat in accordance with the ESA, and those that are defined as Environmentally Sensitive Habitat Areas under the California Coastal Act. Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act and Executive Order 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

2.3 Data Sources

The primary literature and data sources reviewed to determine the occurrence or potential for occurrence of sensitive biological resources within the project site are as follows:

- Current agency status information from the Service and CDFW for species listed, proposed for listing, or candidates for listing as threatened or endangered under the ESA or CESA, and those considered CDFW "species of special concern", including:
    - CNDDB occurrences reports from the Seaside quadrangle and the seven surrounding quadrangles, including Carmel Valley, Mt. Carmel, Marina, Monterey, Salinas, Spreckels, and Soberanes Point (CDFW, 2023c; **Appendix A**); and
    - Service IPaC Resource List (Service, 2023a; **Appendix B**).
- The CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2023);
- The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA-NRCS, 2023);
- The National Wetlands Inventory Wetlands Mapper (Service, 2023b); and

- The National Hydrographic Dataset (U.S. Geological Survey [USGS], 2022).

From these resources, a list of special-status plant and wildlife species known or with the potential to occur within or adjacent to the project site was created (**Appendix C**). This list presents these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur in the area.

2.3.1 Botany

Vegetation types identified in *A Manual of California Vegetation* (Sawyer et al., 2009) were utilized to determine if vegetation types identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2023b) are present within the project site. Information regarding the distribution and habitats of local and state vascular plants was also reviewed (Howitt and Howell, 1964 and 1973; Munz and Keck, 1973; Baldwin et al., 2012; Matthews and Mitchell, 2015; Jepson Flora Project, 2023). All plants observed within the project site during the evaluation were identified to species or intraspecific taxon necessary to eliminate them as being special-status species using keys and descriptions in *The Jepson Manual: Vascular Plants of California, Edition 2* (Baldwin et al., 2012) and *The Plants of Monterey County an Illustrated Field Key* (Matthews and Mitchell, 2015). Scientific nomenclature for plant species identified within this document follows Baldwin, et. Al, (2012); common names follow Matthews and Mitchell (2015). A full botanical inventory was not recorded for the project site but the dominant species within each habitat were noted. Dominant plant species are those which are more numerous than their competitors in an ecological community or make up more of the biomass; generally, the species that are most abundant. Most ecological communities are defined by their dominant species.

The California Invasive Plant Council (Cal-IPC) Inventory (Cal-IPC, 2023) was reviewed to determine if any invasive plant species are present within the project site.

2.3.2 Wildlife

The following literature and data sources were reviewed to determine potential presence of special-status wildlife within the project site: CDFW reports on special-status wildlife (Remsen, 1978; Williams, 1986; Jennings and Hayes, 1994; Thelander, 1994; Thomson et al., 2016); California Wildlife Habitat Relationships Program species-habitat models (Zeiner et al., 1988 and 1990); and general wildlife references (Stebbins, 1972, 1985, and 2003).

2.4 Regulatory Setting

2.4.1 Federal Regulations

Federal Endangered Species Act

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The ESA is administered by the Service or National Oceanic and Atmospheric Administration Marine Fisheries Service (NMFS). In general, the NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under Service jurisdiction.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or

collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit the take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Clean Water Act

The U.S. Army Corps of Engineers (ACOE) and U.S. Environmental Protection Agency (EPA) regulate discharge of dredged and fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). Waters of the U.S. are defined broadly as waters susceptible to use in commerce (including waters subject to tides, interstate waters, and interstate wetlands) and other waters (such as interstate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds) (33 CFR 328.3). Potential wetland areas are identified as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils conditions."

Under Section 401 of the CWA, any applicant receiving a Section 404 permit from the USACE must also obtain a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB). A Section 401 Water Quality Certification is issued when a project is demonstrated to comply with state water quality standards and other aquatic resource protection requirements.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Most actions that result in permanent or temporary possession of a protected species constitute violations of the MBTA. The Service is responsible for overseeing compliance with the MBTA and implements Conventions (treaties) between the United States and four countries—Canada, Mexico, Japan, and Russia—for the protection of migratory birds. The Service maintains a list of migratory bird species that are protected under the MBTA.

2.4.2 State Regulations

California Endangered Species Act

The CESA was enacted in 1984. The California Code of Regulations (Title 14, §670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize "take" of any state listed species.

California Native Plant Protection Act

The CNPPA of 1977 directed CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and Endangered plants in the State." The CNPPA prohibits importing rare and Endangered plants into California, taking rare and Endangered plants, and selling rare and Endangered plants. The CESA and CNPPA authorized the Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the CNPPA are not protected under CESA; however, these plants may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research.

California Fish and Game Code

Birds. Section 3503 of the Fish and Game Code states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal MBTA. Section 3800 prohibits the take of nongame birds.

Fully Protected Species. The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (§5515), mammals (§4700), amphibians and reptiles (§5050), and birds (§3511). Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research, relocation of the bird species for the protection of livestock, and for certain renewable energy and infrastructure projects.

Species of Special Concern. As noted above, the CDFW also maintains a list of wildlife "species of special concern." Although these species have no legal status, the CDFW recommends considering these species during analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

Lake or Streambed Alteration. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW's jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne) is California's statutory authority for the protection of water quality and applies to surface waters, wetlands, and groundwater, and to both point and nonpoint sources. Under the Porter-Cologne, the State Water Resources Control Board (State Board) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne

also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level. The project site is located within Region 3 – Central Coast RWQCB. Porter-Cologne incorporates many provisions of the federal CWA, such as delegation to the State Board and RWQCBs of the National Pollutant Discharge Elimination System (NPDES) permitting program.

Under Porter-Cologne, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegate to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne sets forth the obligations of the State Board and RWQCBs to adopt and periodically update water quality control plans (basin plans). The act also requires waste dischargers to notify the RWQCBs of such activities through filing of Reports of Waste Discharge (RWD) and authorizes the State Board and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWD requirements and WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects, when implemented according to prescribed terms and conditions.

The term "Waters of the State" is defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope but has special responsibility for wetlands, riparian areas, and headwaters, including isolated wetlands, and waters that may not be regulated by the ACOE under Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne.

2.4.3 Local Regulations

County of Monterey Code of Ordinances

The County of Monterey regulates the removal or significant trimming of native oak, madrone, and redwood trees in the County's Carmel Valley Planning Area, per the provisions in the County Code of Ordinances (County Code) Chapter 16.60 (Preservation of Oak and Other Protected Trees). The removal of a protected oak, madrone, or redwood tree as defined in the Code requires a tree removal permit from the County. The removal of more than three protected trees requires the preparation and implementation of a forest management plan.

3. RESULTS

3.1 Natural Communities

3.1.1 Landscaped/Developed and Ruderal/Disturbed

- *A Manual of California Vegetation* classification: None
- *California Natural Communities List*: Not listed

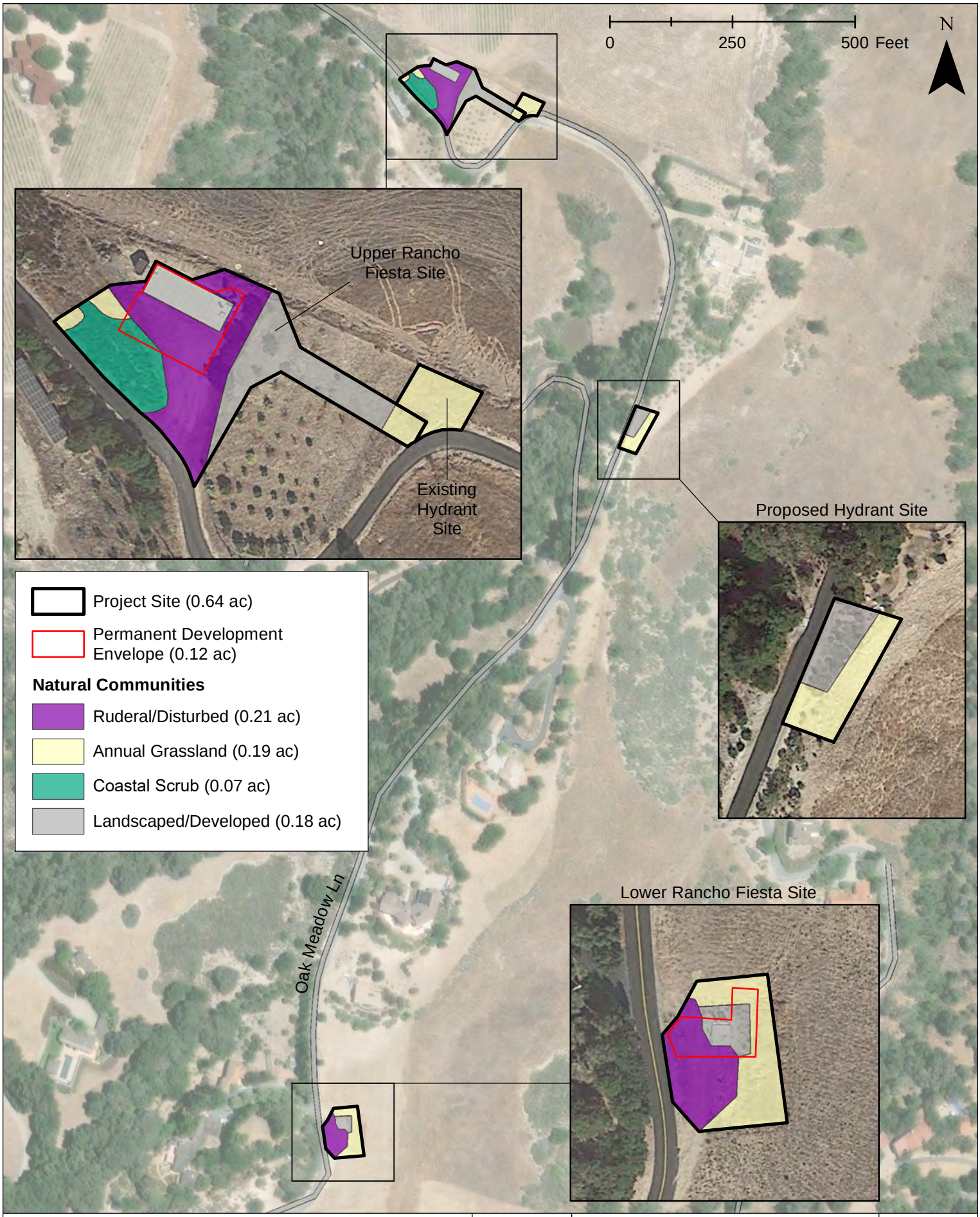
Portions of the project site are developed within water storage infrastructure or landscaped with gravel, planted horticultural or agricultural species, or mowed lawn. Very little natural vegetation is present within these areas. Ruderal areas are those areas which have been developed or have been subject to historic and ongoing disturbance by human activities and are devoid of vegetation or dominated by non-native and/or invasive weed species. Ruderal areas within the project site surround landscaped and developed areas and consist of areas denuded of vegetation or dominated by a sparse cover of non-native grasses, filaree (*Erodium* spp.), and sand spurry (*Spergularia* sp.). Approximately 0.18 acre of landscaping/development and 0.21 acre of ruderal habitat occur within the project site (**Figure 3**).

Landscaped/developed and ruderal/disturbed areas are considered to have low biological value as they are generally denuded of vegetation or are dominated by non-native plant species and consist of relatively low-quality habitat from a wildlife perspective. However, some common wildlife species that do well in urbanized areas, including European starling (*Sturnus vulgaris*), western fence lizard (*Sceloporus occidentalis*), ground squirrel (*Otospermophilus beecheyi*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), American crow (*Corvus brachyrhynchos*), western scrub jay (*Aphelocoma californica*), and rock pigeon (*Columba livia*), may be found foraging within these areas.

3.1.2 Annual Grassland

- *A Manual of California Vegetation* classification(s): Wild oats and annual brome grasslands (*Avena* spp. - *Bromus* spp. herbaceous semi-natural alliance)
- CDFW *California Natural Communities List*: Not sensitive

Throughout California, annual grasslands typically occur in open areas of valleys and foothills, usually on fine-textured clay or loam soils that are somewhat poorly drained (Holland, 1986). This natural community is often dominated by non-native annual grasses and forbs along with scattered native grasses and wildflowers. Annual grassland within the project site consists of a moderate to dense cover of non-native annual grasses and forbs, but native species are also present. Dominant species observed include slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), fiddleneck (*Amsinckia* sp.), California poppy (*Eschscholzia californica*), and smooth cat's ear (*Hypochaeris glabra*). Other common species observed include sky lupine (*Lupinus nanus*), bicolor lupine (*Lupinus bicolor*), and filaree. Approximately 0.19 acre of annual grassland occurs within the project site (**Figure 3**).



Natural Communities

Date
11/22/2023

Scale
1 in = 300 ft

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Figure
3

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Annual grassland is an abundant natural community with statewide distribution. The community protects the soil from erosion and provides the primary source of forage for grazing wildlife and domestic livestock. Although this natural community consists largely of non-native annuals, it effectively prevents the reestablishment of native perennials over large areas and is considered a stable ecosystem in its final stage of ecological succession (CDFW, 2005). Common wildlife species which may occur within this habitat include pocket gopher (*Thomomys bottae*), ground squirrel, European starling, and western fence lizard.

3.1.3 Coastal Scrub

- *A Manual of California Vegetation* classification(s): Coyote brush scrub (*Baccharis pilularis* shrubland alliance)
- CDFW *California Natural Communities List*: Not sensitive

Coastal scrub habitat is characterized by sparse to dense soft-leaved, low-stature shrubs, approximately one to two meters tall, that lack grassy openings and are often integrated with other natural communities. Coastal scrub within the project site consists of a dense monoculture of coyote brush (*Baccharis pilularis*). A few individual plants of other species such as California sagebrush (*Artemisia californica*), sticky monkeyflower (*Diplacus aurantiacus*), blue dicks (*Dipterostemon capitatus*), and cudweed (*Pseudognaphalium* sp.) were observed; however, these plants are not common or present in more than a few numbers within coastal scrub. Approximately 0.07 acre of coastal scrub occurs within the project site (**Figure 3**).

Scrub communities provide cover and food for a variety of wildlife species, including songbirds, snakes, lizards, rodents, and other small mammals. Common species that may occur within coastal scrub habitat include California quail (*Callipepla californica*), blue-gray gnatcatcher (*Polioptila caerulea*), Anna's hummingbird (*Calypte anna*), western fence lizard, northern pacific rattlesnake (*Crotalus oreganus*), gopher snake (*Pituophis catenifer*), and brush rabbit (*Sylvilagus bachmani*).

3.2 Special-Status Species

Published occurrence data within the project area and surrounding USGS quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the project site (see *Section 2. Methods*). Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the project site (**Appendix C**). No special-status plant species were observed or have the potential to occur within the project site. The special-status wildlife species that have been determined to have a moderate or high potential to occur within or immediately adjacent to the project site are discussed below. All other species are assumed unlikely to occur or have a low potential to occur based on the species-specific reasons presented in **Appendix C**, are therefore unlikely to be impacted by the project, and are not discussed further.

Crotch Bumble Bee

The crotch bumble bee (*Bombus crotchii*, CBB) is a candidate species for listing under CESA. The CBB was historically common in the southern two-thirds of California, but now appears to be absent from most of it, especially in the center of its historic range (Xerces Society for Invertebrate Conservation [The Xerces Society] et, al., 2018). Bumble bees are insects that live in colonies made up of one queen, female workers and, near the end of the season, reproductive members of the colony (new queens, or gynes, and males).

Unlike their close relative the honeybee, bumble bee colonies do not persist with the same queen for several years. Instead, bumble bee colonies die at the end of each season, and a new colony is founded each year. Mated, overwintered queens emerge from hibernation in the early spring to establish a new colony. After locating a nest site, the queen will construct a wax honeypot for nectar storage and will lay her first clutch of eggs on a mass of pollen moistened with nectar in a small wax cup. After hatching, the larvae feed on the pollen for approximately two weeks before spinning a silk cocoon and pupating for another two weeks. The adult bees that emerge are female worker bees that forage for resources, tend new clutches of eggs and larvae, regulate nest temperature, and defend the nest. The queen will then remain in the nest and lay more eggs. At some time in the summer, the colony will transition to production of males and new queens. Adult males do not forage for the colony but will leave the nest to feed at flowers and search for mates. Newly emerged queens leave the nest during the day to feed on pollen and nectar to build fat reserves that will carry them through a winter of hibernation. Queens usually mate only once with one male before finding a suitable overwintering site and entering a period of torpor. The new queen having reproduced, the colony declines and the males, workers, and old queen will die before winter (Williams et. al., 2014).

Typical habitat types for CBB include open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows where abundant floral resources are present (Williams et. al., 2014; The Xerces Society et. al., 2018). CBB requires plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is from early February to late October. CBB is a generalist forager and has been reported to visit a wide variety of flowering plants; however, it has a very short tongue that is best suited to open flowers with short corollas. The plant families most associated with CBB include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. Like most other species of bumble bees, CBB typically nests underground. Most reports of nests are from underground cavities, such as old squirrel or other animal nests, and in open west-southwest slopes bordered by trees. A few nests have also been reported from above-ground locations such as in logs among railroad ties or under buildings (Hatfield et. al., 2015; The Xerces Society et, al., 2018; Thorpe et. al., 1983). Very little is known about overwintering sites utilized by most bumble bees, including CBB; however, they generally overwinter in soft, disturbed soil or under leaf litter of other debris (Goulson, 2010; Williams et. al., 2014; The Xerces Society et. al., 2018). One report identified that hibernacula was two inches deep "in a steep west slope of the mound of earth" and a closely related European species, has been reported to hibernate beneath trees (Hatfield et. al., 2015; The Xerces Society et, al., 2018). Additionally, a recent study at the former Fort Ord on the Monterey Peninsula that studied potential overwintering habitat found individuals of two species (*B. melanopygus* and *B. vosnesenskii*) hibernating in the duff below Monterey cypress trees, while none were observed in areas where the groundcover consisted of pine needle duff, grassy meadow, or the invasive iceplant (*Carpobrotus* sp.) (Williams et. al., 2019).

Suitable habitat for the CBB is present within the project site in annual grassland areas. Some mammal burrows and flowering annual plants which could provide nectar for this species were observed within grassland habitat within the Upper and Lower Rancho Fiesta sites during the April 2023 biological survey. The presence of coyote brush (which flowers from August to November) and other shrubs in adjacent habitat suggests that sufficient nectar and pollen for the entire life cycle of a CBB colony may be present within and adjacent to the project site. The CNDDB does not report any occurrences of CBB within the quadrangles reviewed; however, this species has been observed at the Hastings Reserve, located approximately 14 miles southeast of the project site (pers. Comm. Leif Richardson of the Xerces Society for Invertebrate Conservation, 2023). In addition, the CDFW considers the project site to be within the

current range of this species (CDFW, 2023a). Therefore, the CBB has a moderate potential to occur within the project site at the Upper and Lower Rancho Fiesta sites. Mammal burrows were not observed within the existing or proposed hydrant sites, where the soil is compacted and rocky; therefore, this species is not expected to occur within those sites.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is a CDFW species of special concern. Burrowing owls are a year-round resident of open, dry grassland and desert habitats, and grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. In general, burrowing owls frequent open grasslands and shrublands with perches and burrows. Burrowing owls use rodent burrows (often California ground squirrel) for roosting and nesting cover. These burrows are lined with excrement, pellets, debris, grass, and feathers (occasionally are unlined). Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available. Breeding occurs from March through August, with the peak occurring in April and May. This species is semicolonial and is probably the most gregarious owl in North America. Burrowing owls eat mostly insects, but small mammals, reptiles, birds, and carrion are also taken. This species usually hunts from a perch and hovers, hawks, dives, and hops after prey on the ground. Conversion of grassland to agriculture, poisoning of ground squirrels, and other forms of habitat destruction have led to the reduction in their numbers in the recent decades.

The CNDDB reports seven occurrences of this species within the quadrangles reviewed, the nearest located approximately 7.7 miles west of the project site. Suitable habitat for the burrowing owl (including mammal burrows) is present within and directly adjacent to the project site in annual grassland habitat, but only at the Lower Rancho Fiesta site. The annual grassland habitat at the Upper Rancho Fiesta site is not expansive or open enough to support this species, and mammal burrows were not observed at the two hydrant sites, where the soil is compacted and rocky. No sign of this species (e.g., pellets, whitewash, feathers) were observed during the April 2023 biological survey, but this species has the potential to move into the project site prior to construction. Therefore, the burrowing owl has a moderate potential to occur within the project site at the Lower Rancho Fiesta site.

Other Raptors and Protected Avian Species

Raptors, their nests, and other nesting birds are protected under California Fish and Game Code and the MBTA. While the life histories of these species vary, overlapping nesting and foraging similarities allow for their concurrent discussion. Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest habitats, as well as open grasslands, are used most frequently for nesting. Breeding occurs February through September, with peak activity May through July. Prey for these species include small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Various species of raptors and nesting birds, such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), and turkey vulture (*Cathartes aura*), have a potential to nest within any of the large trees present directly adjacent to the project site. The trees within the project site itself are likely too small to support nesting raptors; however, smaller protected avian species, such as songbirds and hummingbirds may nest within these trees or within the shrubs in the coastal scrub habitat.

3.3 Sensitive Habitats

3.3.1 Waters of the U.S.

A man-made drainage ditch runs from the existing hydrant site and under the adjacent road through a culvert and drains into the hill below. No water was present within this ditch during the April 2023 survey. The ditch is not identified in the National Hydrography Dataset (USGS, 2022) or on the Service's wetland mapper (Service, 2023b). The ditch is ephemeral, was dug in upland, and does not meet the definition of waters of the U.S. as identified in CFR 328.3(a)(8), and, therefore, is not subject to the jurisdiction of the ACOE. The drainage ditch does meet the definition of waters of the state; however, "ditches with intermittent flow that are not a relocated water of the state or excavated in a water of the state, or that do not drain wetlands" are not protected resources and are excluded from permitting requirements of the State Water Resources Control Board (SWRCB), as identified in the *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB, 2021). As a result, the drainage ditch is not considered a sensitive habitat.

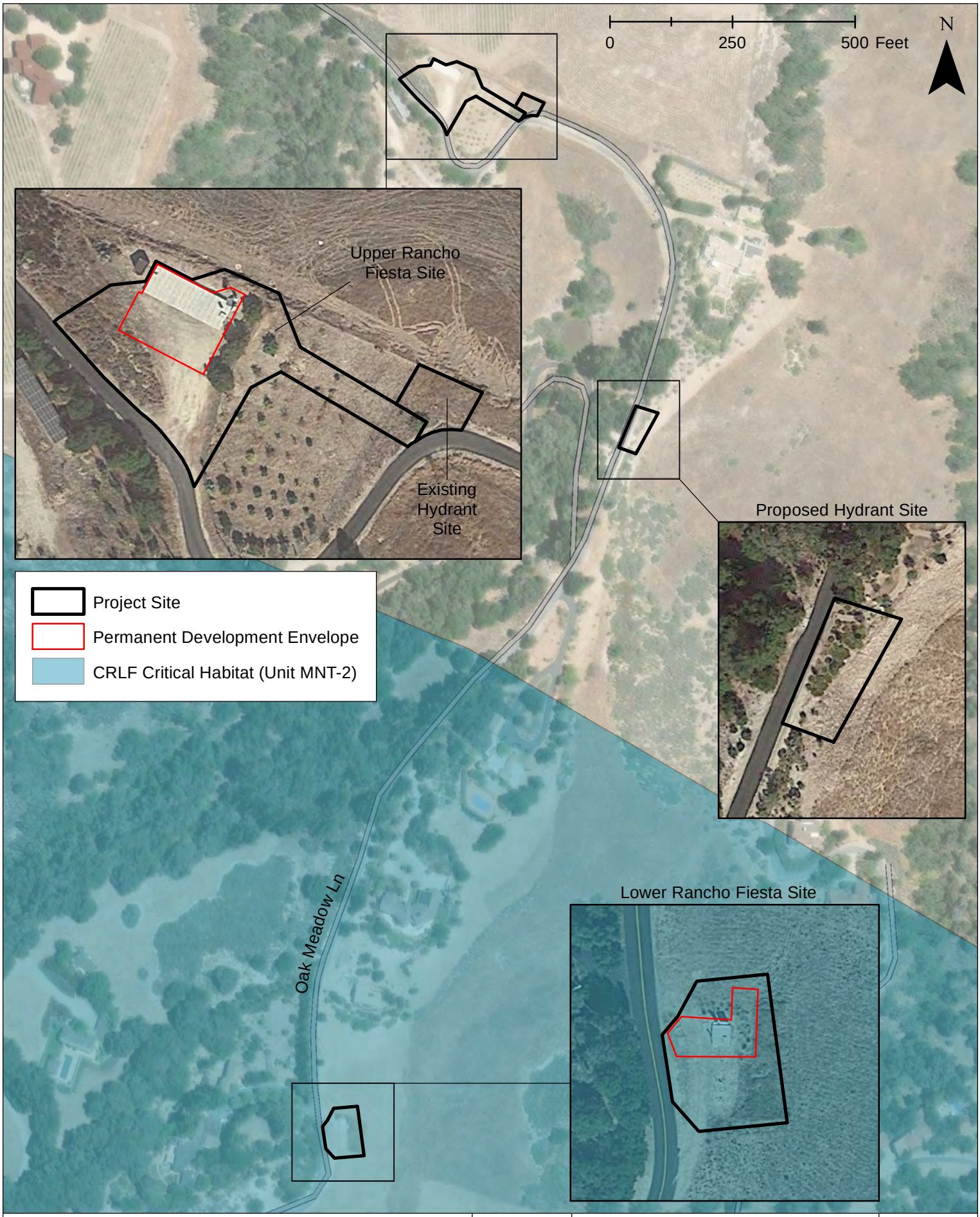
3.3.2 Critical Habitat

The Lower Rancho Fiesta site lies within Critical Habitat Mapping Unit MNT-2 for the federally threatened California red-legged frog (*Rana draytonii*, CRLF), which the Service designated on April 13, 2006 (71 FR 19244-19346) and revised on March 17, 2010 (75 FR 12816-12959). The primary physical and biological features of CRLF critical habitat are aquatic breeding habitat, non-breeding aquatic habitat, upland habitat, and dispersal habitat. No aquatic resources or upland habitat are present within the project site; the site provides only critical dispersal habitat for CRLF. Approximately 0.16 acre of critical dispersal habitat for CRLF (the Lower Rancho Fiesta site) is present within the project site (**Figure 4**). However, specific protections for migrating CRLF are unwarranted because dispersal habitat is ubiquitous and migrating frogs are widely distributed across the landscape in space and time (Bulger et al., 2003). Therefore, the potential for an individual CRLF to be present within the project site during construction is low and the potential for take of this species as a result of the project is unlikely (**Appendix C**). In addition, critical habitat requirements do not apply to activities that are not conducted on federal land or that do not involve a federal agency.

3.3.3 Protected Trees

Two small coast live oak (*Quercus agrifolia*) trees were observed within the Lower Rancho Fiesta site. These trees appear to have been planted. However, the County of Monterey regulates the removal of protected oak trees, as defined in County Code Chapter 16.60 (Preservation of Oak and Other Protected Trees), within the project site. If the project would require removal of these trees, a tree removal permit from the County may be required depending on the size of the trees.[2]

[2]Tree diameter was not recorded during the biological survey.



Sensitive Habitats

Date
11/22/2023

Scale
1 in = 300 ft

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Figure
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4. IMPACTS AND MITIGATION

The following section describes potential impacts that may result from the project. For the purposes of this analysis, an impact is significant and requires mitigation if it would result in any of the following:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the Service;
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or the Service;
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means;
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites;
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Criterion "c" was not evaluated for impacts to state or federally protected wetlands, as none are present within or directly adjacent to the project site. Criterion "f" was not evaluated for conflicts with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because the project site is not located within any such plan area.

Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the Service.

No special-status plant species are known or have the potential to occur within the project site based on the results of focused surveys and/or lack of suitable habitat. Two special-status wildlife species, the CBB and the burrowing owl, have the potential to occur within the project site; CBB has the potential to occur within the Upper and Lower Rancho Fiesta sites while burrowing owl has the potential to occur only at the Lower Rancho Fiesta site. In addition, raptors and other protected avian species have the potential to nest within trees and shrubs within and adjacent to the project site.

Permanent project improvements would result in conversion of less than 0.01 acre of habitat for CBB and burrowing owl (annual grassland habitat) into permanent development. Considering the expansive area of annual grassland outside of the project site, this is a negligible impact that would not adversely affect the continued existence of these species. Construction activities could result in injury, nest abandonment, and/or mortality of CBB, burrowing owl, and other raptors and nesting birds, if present within or directly adjacent to the site during construction activities. Impacts to CBB would be considered take of a candidate species for listing under CESA. However, AMMs 1-4, which have been incorporated into the project (see

Section 1.3 Avoidance and Minimizations Measures) will avoid impacts to CBB—or will require compliance with California Fish and Game Code by requiring take authorization from the CDFW prior to construction if impacts cannot be avoided—and will avoid or minimize impacts to burrowing owl and other raptors and protected avian species by requiring construction best management practices (e.g., worker education), scheduling project activities outside of the CBB life cycle or the burrowing owl and avian breeding and nesting seasons to the extent feasible, requiring surveys for these species if the project cannot avoid these periods, and requiring avoidance buffers and other minimization measures if these species are identified during surveys. Therefore, no impact is expected, and no mitigation is required.

Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or the Service.

Critical dispersal habitat for CRLF is mapped within the Lower Rancho Fiesta portion of the project site. However, as identified in *Section 3.3.2 Critical Habitat*, critical habitat requirements do not apply to activities that are not conducted on federal land or that do not involve a federal agency. Therefore, because this project does not have a federal nexus, no impact is expected, and no mitigation is required.

Impact BIO-3: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites.

The project would result in minor improvements in existing disturbed areas which are consistent with existing improvements. In addition, the project site is located adjacent to an existing road and would not require the development of additional roads or structures for access that would disconnect, fragment, or otherwise impede wildlife movement in the area. Therefore, no impact is expected, and no mitigation is required.

Impact BIO-4: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Two small coast live oak trees, likely planted, are present within the Lower Rancho Fiesta site. Construction of the proposed project could result in permanent impacts to trees within the project site; however, the number of trees proposed for removal, if any, have not been determined at the time of report preparation. As discussed in *Section 2.4.3 Local Regulations*, the County requires a tree removal permit to remove or damage oak trees at least six inches in diameter within the Carmel Valley Master Plan Area, which includes the project site. If tree removal is required, the project applicant will comply with County Code and obtain a tree removal permit for any protected oak trees prior to construction. Therefore, no impact is expected, and no mitigation is required.

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APPENDIX A

California Natural Diversity Database Report

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Seaside (3612157) OR Carmel Valley (3612146) OR Mt. Carmel (3612147) OR Monterey (3612158) OR Marina (3612167) OR Salinas (3612166) OR Spreckels (3612156) OR Soberanes Point (3612148))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Agrostis lacuna-vernalis vernal pool bent grass	PMPOA041N0	None	None	G1	S1	1B.1
Allium hickmanii Hickman's onion	PMLIL02140	None	None	G2	S2	1B.2
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S2S3	SSC
Aphyllon robbinsii Robbins' broomrape	PDORO040Q0	None	None	G1	S1	1B.1
Arctostaphylos edmundsii Little Sur manzanita	PDERI04260	None	None	G2	S2	1B.2
Arctostaphylos hookeri ssp. hookeri Hooker's manzanita	PDERI040J1	None	None	G3T2	S2	1B.2
Arctostaphylos montereyensis Toro manzanita	PDERI040R0	None	None	G2?	S2?	1B.2
Arctostaphylos pajaroensis Pajaro manzanita	PDERI04100	None	None	G1	S1	1B.1
Arctostaphylos pumila sandmat manzanita	PDERI04180	None	None	G1	S1	1B.2
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Astragalus tener var. titi coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Castilleja ambigua var. insalutata pink Johnny-nip	PDSCR0D403	None	None	G4T2	S2	1B.1
Centromadia parryi ssp. congdonii Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Chorizanthe minutiflora Fort Ord spineflower	PDPGN04100	None	None	G1	S1	1B.2
Chorizanthe pungens var. pungens Monterey spineflower	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
Clarkia jolonensis Jolon clarkia	PDONA050L0	None	None	G2	S2	1B.2
Coelus globosus globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
Collinsia multicolor San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
Cordylanthus rigidus ssp. littoralis seaside bird's-beak	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S3	SSC
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Delphinium californicum ssp. interius Hospital Canyon larkspur	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Delphinium hutchinsoniae Hutchinson's larkspur	PDRAN0B0V0	None	None	G2	S2	1B.2
Delphinium umbraculorum umbrella larkspur	PDRAN0B1W0	None	None	G3	S3	1B.3
Emys marmorata western pond turtle	ARAAD02030	Proposed Threatened	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Ericameria fasciculata Eastwood's goldenbush	PDAST3L080	None	None	G2	S2	1B.1
Eriogonum nortonii Pinnacles buckwheat	PDPGN08470	None	None	G2	S2	1B.3
Erysimum ammophilum sand-loving wallflower	PDBRA16010	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Erysimum menziesii Menzies' wallflower	PDBRA160R0	Endangered	Endangered	G1	S1	1B.1
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	
Eumetopias jubatus Steller sea lion	AMAJC03010	Delisted	None	G3	S2	
Euphilotes enoptes smithi Smith's blue butterfly	IILEPG2026	Endangered	None	G5T2	S2	
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Gilia tenuiflora ssp. arenaria Monterey gilia	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
Hesperocyparis goveniana Gowen cypress	PGCUP04031	Threatened	None	G1	S1	1B.2
Hesperocyparis macrocarpa Monterey cypress	PGCUP04060	None	None	G1	S1	1B.2
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Horkelia marinensis Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
Hydrobates homochroa ashy storm-petrel	ABNDC04030	None	None	G2	S2	SSC
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
Lavinia exilicauda harengus Monterey hitch	AFCJB19013	None	None	G4T3	S3	SSC
Layia carnosa beach layia	PDAST5N010	Threatened	Endangered	G2	S2	1B.1
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lupinus tidestromii Tidestrom's lupine	PDFAB2B3Y0	Endangered	Endangered	G1	S1	1B.1
Malacothamnus palmeri var. involucratus Carmel Valley bush-mallow	PDMAL0Q0B1	None	None	G3T2Q	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Malacothrix saxatilis var. arachnoidea Carmel Valley malacothrix	PDAST660C2	None	None	G5T2	S2	1B.2
Meconella oregana Oregon meconella	PDPAP0G030	None	None	G2G3	S2	1B.1
Microseris paludosa marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	PDLAM18162	None	None	G3T2	S2	1B.2
Monolopia gracilens woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2
Neotoma macrotis luciana Monterey dusky-footed woodrat	AMAFF08083	None	None	G5T3	S3	SSC
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	G5T2Q	S2	
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Pinus radiata Monterey pine	PGPIN040V0	None	None	G1	S1	1B.1
Piperia yadonii Yadon's rein orchid	PMORC1X070	Endangered	None	G1	S1	1B.1
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Plagiobothrys uncinatus hooked popcornflower	PDBOR0V170	None	None	G2	S2	1B.2
Potentilla hickmanii Hickman's cinquefoil	PDROS1B370	Endangered	Endangered	G1	S1	1B.1
Ramalina thrausta angel's hair lichen	NLLEC3S340	None	None	G5?	S2S3	2B.1
Rana boylii pop. 6 foothill yellow-legged frog - south coast DPS	AAABH01056	Endangered	Endangered	G3T1	S1	
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Reithrodontomys megalotis distichlis Salinas harvest mouse	AMAFF02032	None	None	G5T1	S2	
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S3	
Rosa pinetorum pine rose	PDROS1J0W0	None	None	G2	S2	1B.2
Sidalcea malachroides maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sorex ornatus salarius Monterey shrew	AMABA01105	None	None	G5T1T2	S1S2	SSC
Spea hammondii western spadefoot	AAABF02020	None	None	G2G3	S3S4	SSC
Stebbinsoseris decipiens Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
Sulcaria spiralifera twisted horsehair lichen	NLT0042560	None	None	G3G4	S2	1B.2
Taricha torosa Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Tortula californica California screw moss	NBMUS7L090	None	None	G2G3	S2?	1B.2
Trifolium buckwestiorum Santa Cruz clover	PDFAB402W0	None	None	G2	S2	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Trifolium polyodon Pacific Grove clover	PDFAB402H0	None	Rare	G1	S1	1B.1
Trifolium trichocalyx Monterey clover	PDFAB402J0	Endangered	Endangered	G1	S1	1B.1

Record Count: 92

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APPENDIX B

IPaC Resource List

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Monterey County, California

Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958
FW8VenturaSection7@FWS.Gov

2493 Portola Road, Suite B
Ventura, CA 93003-7726

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern Sterna antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Marbled Murrelet Brachyramphus marmoratus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover Charadrius nivosus nivosus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened

Yellow-billed Cuckoo Coccyzus americanus — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/3911

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/2891

California Tiger Salamander Ambystoma californiense — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Foothill Yellow-legged Frog Rana boylii — Proposed Endangered

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5133

Fishes

NAME	STATUS

Tidewater Goby Eucyclogobius newberryi — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/57

Insects

NAME	STATUS

Monarch Butterfly Danaus plexippus — Candidate

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Smith's Blue Butterfly Euphilotes enoptes smithi — Endangered
Wherever found
There is **proposed** critical habitat for this species.
https://ecos.fws.gov/ecp/species/4418

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi	Threatened

Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/498

Flowering Plants

NAME	STATUS
Clover (tidestrom''s) Lupine Lupinus tidestromii	Endangered

Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4459

Contra Costa Goldfields Lasthenia conjugens — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/7058

Marsh Sandwort Arenaria paludicola — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2229

Monterey Spineflower Chorizanthe pungens var. pungens — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/396

Yadon's Piperia Piperia yadonii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4205	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Red-legged Frog Rana draytonii https://ecos.fws.gov/ecp/species/2891#crithab	Final

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list,click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be

present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence

at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

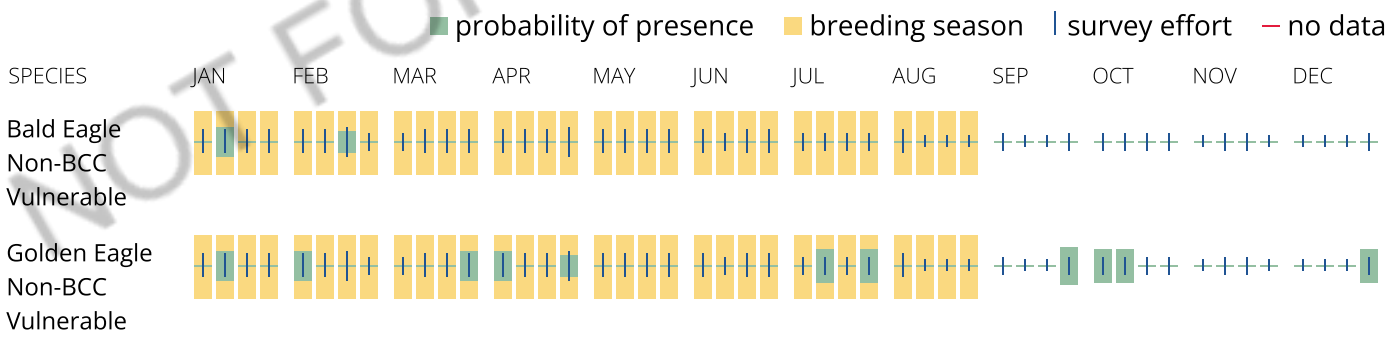
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

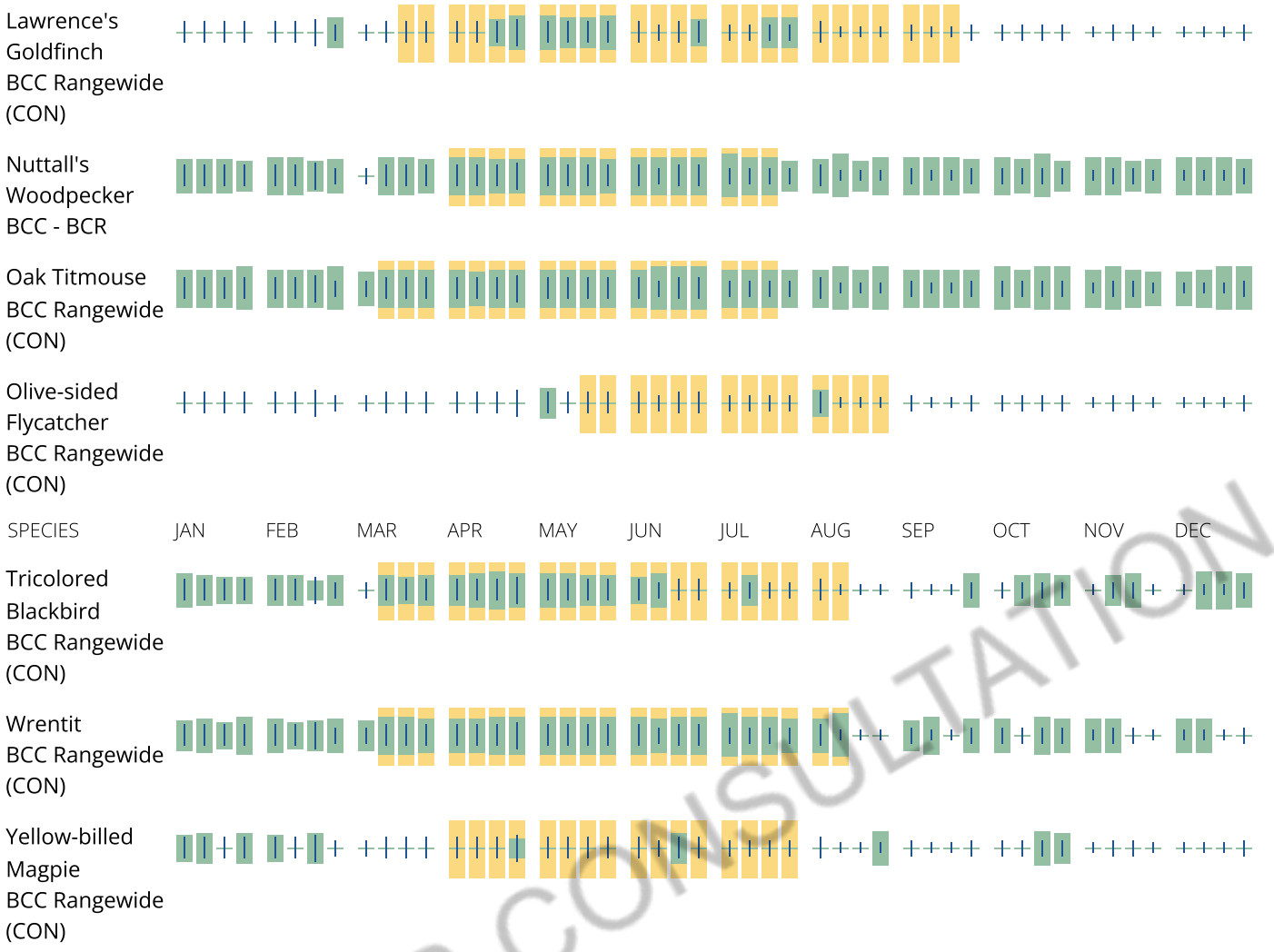
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid

cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to

you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

PEM1/SSA

FRESHWATER FORESTED/SHRUB WETLAND

PFO/SSA

RIVERINE

R4SBJ

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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APPENDIX C

Special-Status Species Table

Special-Status Species Table

Marina, Salinas, Monterey, Seaside, Spreckels, Soberanes Point, Mt. Carmel, and Carmel Valley Quadrangles

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
MAMMALS			
Corynorhinus townsendii Townsend's big-eared bat	— / CSC / —	Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees.	**Unlikely** No suitable habitat within the project site.
Neotoma macrotis luciana Monterey dusky-footed woodrat	— / CSC / —	Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	**Low** Suitable habitat is present in the small area of coastal scrub within the project site. The CNDDB reports one occurrence of this species within the quadrangles reviewed, located approximately ten miles northeast of the project site. No woodrat nests were observed within the project site during the April 2023 biological survey. Given the presence of adjacent disturbances (e.g., road, active agriculture) and the minimal area of suitable habitat within the site, the potential for this species to move into the into the site prior to construction is low.
Sorex ornatus salarius Monterey ornate shrew	— / CSC / —	Mostly moist or riparian woodland habitats and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs.	**Unlikely** No suitable habitat within the project site.
Taxidea taxus American badger	— / CSC / —	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	**Unlikely** No suitable habitat within the project site. No burrows of sufficient den size were observed during the April 2023 biological survey.
BIRDS			
Agelaius tricolor Tricolored blackbird (nesting colony)	— / ST&CSC / —	Nest in colonies in dense riparian vegetation (particularly willow thickets), along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	**Unlikely** No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Athene cunicularia Burrowing owl (burrow sites & some wintering sites)	— / CSC / —	Year-round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.	**Moderate** Suitable habitat is present within the project site. Some mammal burrows were observed within the site during the April 2023 biological survey. The CNDDB reports seven occurrences of this species within the quadrangles reviewed, the nearest located approximately 7.7 miles west of the project site.
Brachyramphus marmoratus Marbled murrelet	FT / SE / —	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	**Not Present** No suitable habitat within the project site.
Charadrius alexandrinus nivosus Western snowy plover	FT / CSC / —	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	**Not Present** No suitable habitat within the project site.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT / SE / —	Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation.	**Unlikely** No suitable habitat within the project site. The project site is likely outside of the currently know range for this species.
Coturnicops noveboracensis Yellow rail	— / CSC / —	Wet meadows and coastal tidal marshes. Occurs year round in California, but in two primary seasonal roles: as a very local breeder in the northeastern interior and as a winter visitor (early Oct to mid-Apr) on the coast and in the Suisun Marsh region	**Not Present** No suitable habitat within the project site.
Cypseloides niger Black swift	— / CSC / —	Regularly nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats.	**Unlikely** No suitable habitat within the project site.
Empidonax traillii extimus Southwestern willow flycatcher	FE / SE / —	Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds, and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (*Salix sp.*), tamarisk (*Tamarix ramosissima*), or both.	**Unlikely** No suitable habitat within the project site. The project site is likely outside of the currently know range for this species.
Gymnogyps californianus California condor	FE / SE /—	Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19-mile commute one way). Nest sites in cliffs, crevices, potholes.	**Unlikely** No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Hydrobates homochroa Ashy storm-petrel (nesting colony)	— / CSC / —	Tied to land only to nest, otherwise remains over open sea. Nests in natural cavities, sea caves, or rock crevices on offshore islands and prominent peninsulas of the mainland.	**Not Present** No suitable habitat within the project site.
Laterallus jamaicensis coturniculus California black rail	— / ST&CFP / —	Inhabits freshwater marshes, wet meadows & shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year & dense vegetation for nesting habitat.	**Not Present** No suitable habitat within the project site.
Pelecanus occidentalis californicus California brown pelican	— / CFP / —	Found in estuarine, marine subtidal, and marine pelagic waters along the California coast. Usually rests on water or inaccessible rocks, but also uses mudflats, sandy beaches, wharfs, and jetties.	**Not Present** No suitable habitat within the project site.
Rallus obsoletus obsoletus California Ridgway's rail	FE / SE&CFP / —	Salt and brackish marshes.	**Not Present** No suitable habitat within the project site.
Riparia riparia Bank swallow (nesting)	— / ST / —	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	**Unlikely** No suitable habitat within the project site.
Sterna antillarum browni California least tern	FE / SE / —	Prefers undisturbed nest sites on open, sandy/gravelly shores near shallow-water feeding areas in estuaries. Sea beaches, bays, large rivers, bars.	**Not Present** No suitable habitat within the project site.
Vireo bellii pusillus Least Bell's Vireo	FE / SE / —	Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	**Unlikely** No suitable habitat within the project site. The project site is likely outside of the currently know range for this species.
REPTILES AND AMPHIBIANS			
Ambystoma californiense California tiger salamander	FT / ST / —	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	**Low** Suitable upland habitat is present within the project site; however, no suitable breeding is present habitat within or adjacent to the site. The project site is outside of the 2.2 km dispersal range of any known CTS breeding resources. There are two ponds south and east of the project site within 1 km of the site; however, the hydroperiods of these ponds are likely too long to support CTS. In addition, only a few mammal burrows were observed within the site during the April 2023 biological survey in the. Therefore, the potential for this species to occur within the project site is low and take of this species as a result of the project is unlikely.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Anniella pulchra Northern California legless lizard	— / CSC / —	Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas.	**Unlikely** No suitable habitat within the project site. Soils are likely too rocky and compacted to support this species.
Emys marmorata Western pond turtle	— / CSC / —	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	**Unlikely** No suitable habitat within the project site.
Phrynosoma blainvillii Coast horned lizard	— / CSC / —	Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.	**Unlikely** No suitable habitat within the project site.
Rana boylii Foothill yellow-legged frog	FC / SE / —	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.	**Unlikely** No suitable habitat within the project site.
Rana draytonii California red-legged frog	FT / CSC / —	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	**Low** No suitable aquatic or upland habitat for CRLF is present within the project site. The CNDDB reports occurrences of this species within the Carmel River riparian corridor, located approximately 0.6 mile south of the project site. The Lower Rancho Fiesta site lies within designated critical dispersal habitat for this species; however, specific protections for migrating CRLF are unwarranted because dispersal habitat is ubiquitous and migrating frogs are widely distributed across the landscape in space and time (Bulger et al., 2003). Therefore, the potential for an individual CRLF to be present within the project site during construction is low and the potential for take of this species as a result of the project is unlikely.
Spea hammondii Western spadefoot	— / CSC / —	Grasslands with shallow temporary pools are optimal habitats for the western spadefoot. Occur primarily in grassland habitats but can be found in valley and foothill woodlands. Vernal pools are essential for breeding and egg laying.	**Unlikely** No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Taricha torosa Coast Range newt (Monterey County south only)	— / CSC / —	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoirs.	**Unlikely** No suitable habitat within the project site.
Thamnophis hammondii Two-striped garter snake	— / CSC / —	Associated with permanent or semi-permanent bodies of water bordered by dense vegetation in a variety of habitats from sea level to 2400m elevation.	**Unlikely** No suitable habitat within the project site.
FISH			
Eucyclogobius newberryi Tidewater goby	FE / — / —	Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County.	**Not Present** No suitable habitat within the project site. The project site is outside the known range of this species.
Lavinia exilicauda harengus Monterey hitch (Pajaro/Salinas hitch)	— / CSC / —	Found only within the Pajaro and Salinas River systems. Can occupy a wide variety of habitats, however, they are most abundant in lowland areas with large pools or small reservoirs that mimic such conditions. May be found in brackish water conditions within the Salinas River lagoon during the early summer months when the sandbar forms at the mouth of the river.	**Not Present** No suitable habitat within the project site. The project site is outside the known range of this species.
Oncorhynchus mykiss irideus Steelhead (south-central California coast DPS)	FT / — / —	Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams.	**Not Present** No suitable habitat within the project site.
Spirinchus thaleichthys Longfin smelt	FC / ST / —	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 PPT, but can be found in completely freshwater to almost pure seawater.	**Not Present** No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
INVERTEBRATES			
Bombus crotchii Crotch bumble bee	— / SC / —	Occurs in open grassland and scrub at relatively warm and dry sites. Requires plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is from early February to late October. Generally nests underground, often in abandoned mammal burrows. Within California, this species is known to occur in the Mediterranean, Pacific Coast, Western Desert, as well as Great Valley and adjacent foothill regions.	**Moderate** Suitable habitat is present within the project site. The CNDDB does not report any occurrences of this species within the quadrangles reviewed, but this species has been observed at the Hastings Reserve, located approximately 14 miles from the project site. Some mammal burrows were observed within the project site during the April 2023 biological survey. Although only a limited number of flowering plants were observed within the project site during the biological survey, other sources of nectar occur adjacent to the site.
Bombus occidentalis Western bumble bee	— / SC / —	Found in a range of habitats, including mixed woodlands, farmlands, urban parks and gardens, montane meadows, and prairie grasslands. Requires plants that bloom and provide adequate nectar and pollen throughout the colony's life cycle, which is from early February to late November. Generally nests underground, often in abandoned mammal burrows. Populations are currently largely restricted to high elevation sites in the Sierra Nevada; however, the historic range includes the northern California coast.	**Unlikely** Suitable habitat is present within the project site. However, the project site is outside the current range of this species.
Branchinecta lynchi Vernal pool fairy shrimp	FT / — / —	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	**Not Present** No suitable habitat within the project site.
Danaus plexippus Monarch butterfly	— / SC / —	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	**Unlikely** No suitable habitat within the project site.
Euphilotes enoptes smithi Smith's blue butterfly	FE / — / —	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Eriogonum latifolium* and *E. parvifolium*.	**Not Present** No suitable habitat within the project site. The host plants for this species were not observed within the project site during the April 2023 biological survey.
PLANTS			
Agrostis lacuna-vernalis Vernal pool bent grass	— / — / 1B	Vernal pool Mima mounds at elevations of 115-145 meters. Annual herb in the Poaceae family; blooms April-May. Known only from Butterfly Valley and Machine Gun Flats of Ft. Ord National Monument.	**Not Present** No suitable habitat within the project site. The project site is outside the known distribution and elevation ranges of this species. Not observed within the project site during the April 2023 biological survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Allium hickmanii Hickman's onion	— / — / 1B	Closed-cone coniferous forests, maritime chaparral, coastal prairie, coastal scrub, and valley and foothill grasslands at elevations of 5-200 meters. Bulbiferous perennial herb in the Alliaceae family; blooms March-May.	**Not Present** The project site is marginally outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Aphyllon robbinsii Robbins' broomrape	— / — / 1B	Coastal bluff scrub and possibly coastal dunes at elevations of 0-100 meters. Achlorophyllous annual herb in the Orobanchaceae family; blooms April-July.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Arctostaphylos hookeri ssp. *hookeri* Hooker's manzanita	— / — / 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Arctostaphylos montereyensis Toro manzanita	— / — / 1B	Maritime chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 30-730 meters. Evergreen shrub in the Ericaceae family; blooms February-March.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Arctostaphylos pajaroensis Pajaro manzanita	— / — / 1B	Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.
Arctostaphylos pumila Sandmat manzanita	— / — / 1B	Openings of closed-cone coniferous forests, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 3-205 meters. Evergreen shrub in the Ericaceae family; blooms February-May.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Arenaria paludicola Marsh sandwort	FE / SE / 1B	Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August.	**Unlikely** No suitable habitat within the project site. The project site is outside of the known distribution and elevation ranges of this species.
Astragalus tener var. *tener* Alkali milk-vetch	— / — / 1B	Playas, valley and foothill grassland on adobe clay, and vernal pools on alkaline soils at elevations of 1-60 meters. Annual herb in the Fabaceae family; blooms March-June.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Astragalus tener var. *titi* Coastal dunes milk-vetch	FE / SE / 1B	Sandy soils in coastal bluff scrub, coastal dunes, coastal prairie (mesic); elevation 1-50 meters. Annual herb in the Fabaceae family; blooms March-May.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Castilleja ambigua var. insalutata Pink Johnny-nip	— / — / 1B	Coastal prairie and coastal scrub at elevations of 0-100 meters. Annual herb in the Orobanchaceae family; blooms May-August.	**Unlikely** Marginally suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species.
Centromadia parryi ssp. *congdonii* Congdon's tarplant	— / — / 1B	Valley and foothill grassland on heavy clay, saline, or alkaline soils at elevations of 0-230 meters. Annual herb in the Asteraceae family; blooms May-November.	**Unlikely** Marginally suitable habitat is present within the project site; however, soil conditions within the site are unlikely to support this species.
Chorizanthe minutiflora Fort Ord spineflower	— / — / 1B	Sandy openings of maritime chaparral and coastal scrub at elevations of 55-150 meters. Only known occurrences on Fort Ord National Monument. Annual herb in the Polygonaceae family; blooms April-July.	**Not Present** No suitable habitat within the project site. The project site is outside the known distribution and elevation ranges of this species. Not observed within the project site during the April 2023 biological survey.
Chorizanthe pungens var. *pungens* Monterey spineflower	FT / — / 1B	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-July.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Clarkia jolonensis Jolon clarkia	— / — / 1B	Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Collinsia multicolor San Francisco collinsia	— / — / 1B	Closed-cone coniferous forest and coastal scrub, sometimes on serpentinite soils, at elevations of 30-250 meters. Annual herb in the Plantaginaceae family; blooms March-May.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Cordylanthus rigidus ssp. *littoralis* Seaside bird's-beak	— / SE / 1B	Closed-cone coniferous forests, maritime chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Annual hemi-parasitic herb in the Orobanchaceae family; blooms April-October.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Delphinium californicum ssp. *interius* Hospital Canyon larkspur	— / — / 1B	Openings in chaparral, coastal scrub, and mesic areas of cismontane woodland at elevations of 230-1095 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Delphinium hutchinsoniae Hutchinson's larkspur	— / — / 1B	Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Delphinium umbraculorum Umbrella larkspur	— / — / 1B	Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Ericameria fasciculata Eastwood's goldenbush	— / — / 1B	Openings in closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Eriogonum nortonii Pinnacles buckwheat	— / — / 1B	Chaparral and valley and foothill grassland on sandy soils, often on recent burns, at elevations of 300-975 meters. Annual herb in the Polygonaceae family; blooms May-September.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Erysimum ammophilum Sand-loving wallflower	— / — / 1B	Openings in maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Erysimum menziesii Menzies' wallflower	FE / SE / 1B	Coastal dunes at elevations of 0-35 meters. Perennial herb in the Brassicaceae family; blooms March-September.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Fritillaria liliacea Fragrant fritillary	— / — / 1B	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Gilia tenuiflora ssp. *arenaria* Monterey gilia	FE / ST / 1B	Openings in maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Hesperocyparis goveniana Gowen cypress	FT / — / 1B	Closed-cone coniferous forest and maritime chaparral at elevations of 30-300 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Point Lobos near Gibson Creek and the Huckleberry Hill Nature Preserve near Highway 68.	**Not Present** No suitable habitat within the project site. The project site is outside the native range of this species. Not observed within the project site during the April 2023 biological survey.
Hesperocyparis macrocarpa Monterey cypress	— / — / 1B	Closed-cone coniferous forest at elevations of 10-30 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Cypress Point in Pebble Beach and Point Lobos State Park; widely planted and naturalized elsewhere.	**Not Present** No suitable habitat within the project site. The project site is outside the native range of this species. Not observed within the project site during the April 2023 biological survey.
Horkelia cuneata ssp. *sericea* Kellogg's horkelia	— / — / 1B	Openings of closed-cone coniferous forests, maritime chaparral, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September.	**Not Present** The project site is marginally outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Horkelia marinensis Point Reyes horkelia	— / — / 1B	Coastal dunes, coastal prairie, and coastal scrub on sandy soils at elevations of 5-350 meters. Perennial herb in the Rosaceae family; blooms May-September.	**Not Present** Not observed within the project site during the April 2023 biological survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Lasthenia conjugens Contra Costa goldfields	FE / — / 1B	Mesic areas of valley and foothill grassland, alkaline playas, cismontane woodland, and vernal pools at elevations of 0-470 meters. Annual herb in the Asteraceae family; blooms March-June.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.
Layia carnosa Beach layia	FT / SE / 1B	Coastal dunes and coastal scrub on sandy soils at elevations of 0-60 meters. Annual herb in the Asteraceae family; blooms March-July.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Legenere limosa Legenere	— / — / 1B	Vernal pools and wetlands at elevations of 1-880 meters. Annual herb in the Campanulaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.
Lupinus tidestromii Tidestrom's lupine	FE / SE / 1B	Coastal dunes at elevations of 0-100 meters. Perennial rhizomatous herb in the Fabaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Malacothamnus palmeri var. *involucratus* Carmel Valley bush-mallow	— / — / 1B	Chaparral, cismontane woodland, and coastal scrub at elevations of 30-1100 meters. Perennial deciduous shrub in the Malvaceae family; blooms May-October.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Malacothrix saxatilis var. *arachnoidea* Carmel Valley malacothrix	— / — / 1B	Chaparral and coastal scrub on rocky soils at elevations of 25-1036 meters. Perennial rhizomatous herb in the Asteraceae family; blooms June-December.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Meconella oregana Oregon meconella	— / — / 1B	Coastal prairie and coastal scrub at elevations of 250-620 meters. Annual herb in the Papaveraceae Family; blooms March-April.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Microseris paludosa Marsh microseris	— / — / 1B	Mesic areas of closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland at elevations of 5-300 meters. Perennial herb in the Asteraceae family; blooms April-July.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Monardella sinuata ssp. *nigrescens* Northern curly-leaved monardella	— / — / 1B	Chaparral, coastal dunes, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills) on sandy soils at elevations of 0-300 meters. Annual herb in the Lamiaceae family; blooms April-September.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Monolopia gracilens Woodland woollythreads	— / — / 1B	Openings of broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland on serpentinite soils at elevations of 100-1200 meters. Annual herb in the Asteraceae family; blooms February-July.	**Not Present** Not observed within the project site during the April 2023 biological survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Pinus radiata Monterey pine	— / — / 1B	Closed-cone coniferous forest and cismontane woodland at elevations of 25-185 meters. Evergreen tree in the Pinaceae family. Only three native stands in CA at Ano Nuevo, Cambria, and the Monterey Peninsula; introduced in many areas.	**Not Present** No suitable habitat within the project site. The project site is outside the native elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Piperia yadonii Yadon's rein orchid	FE / — / 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms February-August.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.
Plagiobothrys chorisianus var. *chorisianus* Choris's popcorn-flower	— / — / 1B	Mesic areas of chaparral, coastal prairie, and coastal scrub at elevations of 15-160 meters. Annual herb in the Boraginaceae family; blooms March-June.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Potentilla hickmanii Hickman's cinquefoil	FE / SE / 1B	Coastal bluff scrub, closed-cone coniferous forests, vernally mesic meadows and seeps, and freshwater marshes and swamps at elevations of 10-149 meters. Perennial herb in the Rosaceae family; blooms April-August.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Ramalina thrausta Angel's hair lichen	— / — / 2B	North coast coniferous forest on dead twigs and other lichens. Epiphytic fructose lichen in the Ramalinaceae family. In northern CA it is usually found on dead twigs, and has been found on *Alnus rubra*, *Calocedrus decurrens*, *Pseudotsuga menziesii*, *Quercus garryana*, and *Rubus spectabilis*. In Sonoma County it grows on and among dangling mats of *R. menziesii* and *Usnea* spp.	**Not Present** No suitable habitat within the project site. The project site is outside the known range of this species. Not observed within the project site during the April 2023 biological survey.
Rosa pinetorum Pine rose	— / — / 1B	Closed-cone coniferous forest at elevations of 2-300 meters. Perennial shrub in the Rosaceae family; blooms May-July. Possible hybrid of *R. spithamea*, *R. gymnocarpa*, or others; further study needed.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.
Stebbinsoseris decipiens Santa Cruz microseris	— / — / 1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and openings in valley and foothill grassland, sometimes on serpentinite, at elevations of 10-500 meters. Annual herb in the Asteraceae family; blooms April-May.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Sulcaria spiralifera Twisted horsetail lichen	— / — / 1B	California North Coast coniferous forest at elevations of 0–30 meters. Often found on conifers, including *Picea sitchensis*, *Pinus contorta* var. *contorta*, *Pseudotsuga menziesii*, *Abies grandis*, and *Tsuga heterophylla*. Fruticose lichen in the Parmeliaceae family.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Tortula californica California screw moss	— / — / 1B	Valley and foothill grassland and chenopod scrub on sandy soils at elevations of 10-1460 meters. Moss in the Pottiaceae family.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence in Project Site
Trifolium buckwestiorum Santa Cruz clover	— / — / 1B	Gravelly margins of broadleaved upland forest, cismontane woodland, and coastal prairie at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October.	**Not Present** Not observed within the project site during the April 2023 biological survey.
Trifolium hydrophilum Saline clover	— / — / 1B	Marshes and swamps, mesic and alkaline valley and foothill grassland, and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.
Trifolium polyodon Pacific Grove clover	— / SR / 1B	Mesic areas of closed-cone coniferous forest, coastal prairie, meadows and seeps, and valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-July.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not observed within the project site during the April 2023 biological survey.
Trifolium trichocalyx Monterey clover	FE / SE / 1B	Sandy openings and burned areas of closed-cone coniferous forest at elevations of 30-240 meters. Annual herb in the Fabaceae family; blooms April-June.	**Not Present** No suitable habitat within the project site. Not observed within the project site during the April 2023 biological survey.

STATUS DEFINITIONS

Federal

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
FC = Candidate for listing under the federal Endangered Species Act
— = no listing

State

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SC = Candidate for listing under California Endangered Species Act
SR = listed as Rare under the California Endangered Species Act
CFP = California Fully Protected Species
CSC = CDFW Species of Concern
— = no listing

California Native Plant Society

1B = California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
2B = California Rare Plant Rank 2B species; plants rare, threatened, or endangered in California, but more common elsewhere
— = no listing

POTENTIAL TO OCCUR

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys
High = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of suitable habitat conditions
Moderate = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of marginal habitat conditions within the site
Low = species known to occur in the vicinity from the CNDDB or other documentation, lack of suitable habitat or poor quality
Unlikely = species not known to occur in the vicinity from the CNDDB or other documentation, no suitable habitat is present within the site
Not Present = species was not observed during surveys or no obligate habitat is present within the site

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