


APPENDIX D

Biological Impact Report



Biological Impact Report for the
Cypress Point Affordable Housing
Community Project, Moss Beach,
San Mateo County, California

MAY 2023

PREPARED FOR

MidPen Housing Corporation

PREPARED BY

SWCA Environmental Consultants

**BIOLOGICAL IMPACT REPORT FOR THE
CYPRESS POINT
AFFORDABLE HOUSING COMMUNITY PROJECT,
MOSS BEACH, SAN MATEO COUNTY, CALIFORNIA**

Prepared for

County of San Mateo
455 County Center
Redwood City, CA 94063
Attn: Michael Schaller

Prepared by

SWCA Environmental Consultants
60 Stone Pine Road, Suite 100
Half Moon Bay, California 94019
(650) 440-4160
www.swca.com

SWCA Project No. 73999

May 2023

EXECUTIVE SUMMARY

SWCA Environmental Consultants (SWCA) has prepared this Biological Impact Report (BIR) for the Cypress Point Affordable Housing Community Project (Project). MidPen Housing Corporation (MidPen) is proposing the construction of a 66,738-square-foot affordable housing community, which will include 71 units in 16 two-story buildings and a community building, in the community of Moss Beach, San Mateo County, California. The Project would cluster the residential units toward the northwestern corner of the site, retaining the forested open space on the northernmost portion of the site, and leaving room for landscaping and public trails to the south and east. The Project does not include changes to the two existing water tanks on the site.

The purpose of this BIR is to document the biological resources within the Project biological study area (BSA), which consists of the Project footprint (Project area) and a 200-foot buffer surrounding the Project area. SWCA conducted a literature review of existing sources of information regarding occurrences of special-status species and sensitive resources near the BSA. A field survey was conducted within the BSA to document biological resources, including special-status plant and animal species, potentially jurisdictional wetlands and other waters, and environmentally sensitive habitat areas (ESHAs) as defined by the San Mateo County Local Coastal Plan (LCP).

No special-status species were observed within the BSA during the biological field survey. Similarly, no jurisdictional wetlands, water features, or riparian corridors were observed within the Project area.

The BSA has a moderate to high potential to support one special-status plant species—Choris' popcorn flower (*Plagiobothrys chorisianus* var. *chorisianus*)—and one special-status animal species—California red-legged frog (*Rana draytonii*). There is no U.S. Fish and Wildlife Service (USFWS)-designated critical habitat or National Oceanic and Atmospheric Administration (NOAA) designated critical habitat located within the BSA. Three of the vegetation communities observed in the BSA provide suitable nesting and foraging habitat for nesting birds covered under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC).

This page intentionally left blank.

CONTENTS

Executive Summary	i
1 Introduction	1
1.1 Purpose of Biological Resources Evaluation	1
1.2 Project Location and Description	1
2 Regulatory Setting	1
2.1 Federal	1
2.1.1 Clean Water Act	1
2.1.2 Endangered Species Act	4
2.1.3 Migratory Bird Treaty Act	4
2.2 State	5
2.2.1 California Endangered Species Act	5
2.2.2 California Fish and Game Code	5
2.2.3 California Species of Special Concern	6
2.2.4 Porter-Cologne Water Quality Control Act	6
2.3 Local	6
2.3.1 California Coastal Act and County of San Mateo Local Coastal Program	6
3 Methodology	8
3.1 Literature and Records Review	8
3.1.1 Special-Status Plant Species	9
3.1.2 Special-Status Animal Species	11
3.2 Field Survey	11
4 Results	11
4.1 Soils, Topography, and Elevation	11
4.2 Vegetation Communities	11
4.2.1 Monterey Cypress – Monterey Pine Woodland Stands	12
4.2.2 Coyote Brush Scrub	12
4.2.3 Perennial Rye Grass Fields	12
4.2.4 Developed/Disturbed	13
4.3 Critical Habitat	13
4.4 Special-Status Species with Potential to Occur	14
4.4.1 Special-Status Plant Species	14
4.4.2 Special-Status Animal Species	15
4.5 Nesting Migratory Passerine Birds and Raptors	16
4.6 Wildlife Habitat and Movement Corridors	17
4.7 Sensitive Habitats	17
4.8 Marine and Wildlife Reserves	17
4.9 Wetlands and Waters	17
5 Avoidance and Minimization Measures	17
6 Literature Cited	20

Appendices

- Appendix A. USFWS IPaC Records Search Results
- Appendix B. CNDDDB Occurrence Maps and Special-Status Species List
- Appendix C. Critical Habitat Map
- Appendix D. Special-Status Species Considered for Potential Occurrence in the Biological Study Area
- Appendix E. NWI / NHD Records and Soils Map
- Appendix F. Plant and Animal Species Observed During Field Survey
- Appendix G. Photo Documentation

Figures

Figure 1. Project location map.....	2
Figure 2. Project vicinity map.....	3
Figure 3. Biological resources map: vegetation communities.....	10

1 INTRODUCTION

1.1 Purpose of Biological Resources Evaluation

This Biological Impact Report (BIR) has been prepared by SWCA Environmental Consultants (SWCA) at the request of the MidPen Housing Corporation (MidPen) and San Mateo County in support of the Cypress Point Affordable Housing Community Project (Project). The intent of this BIR is to identify sensitive biological resources and environmentally sensitive habitat areas (ESHAs), as defined by the San Mateo County Local Coastal Plan (LCP), that may be impacted by the development of the Project. This BIR includes the results from a desktop review, literature search, and field survey of the Project area, including areas within a 200-foot buffer of the Project area, referred to hereafter as the biological study area (BSA).

1.2 Project Location and Description

The proposed Project is located on an 11.02-acre parcel adjacent to the northeast corner of Carlos and Sierra Streets in the unincorporated community of Moss Beach, San Mateo County, California (Figures 1 and 2). The latitude and longitude of the Project are 37.533542, -122.515883, respectively. The Project is located in Section 4, Township 5 South, and Range 6 West and lies within the extent of the Montara Mountain, California U.S. Geological Survey (USGS) 7.5-minute quadrangle. The parcel is designated as Assessors' Parcel Number (APN) 037-022-070.

The proposed Project is an affordable housing development sponsored by MidPen and designed to provide affordable housing in the San Mateo Midcoast region. The intention of the Project sponsors and County of San Mateo (County) is to improve the jobs/housing balance and jobs/housing fit by providing preference for those who live or work on the San Mateo Coast. The Project consists of development of a 66,738-square-foot affordable housing community, which will include 71 units in 16 two-story buildings and a community building. The Project includes six different building layouts and unit configurations, ranging in height from 23 to 28 feet, which would be clustered toward the northwestern corner of the site, retaining the forested open space on the northernmost portion of the site, and leaving room for landscaping and public trails to the south and east. The project would retain approximately 193 of the existing trees on the site and remove approximately 295 trees. Of the 295 trees proposed to be removed, approximately 190 are considered Significant or Heritage (HortScience 2022). The Project does not include changes to the two existing water tanks on the site.

2 REGULATORY SETTING

2.1 Federal

2.1.1 *Clean Water Act*

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the United States (WOTUS). Policies relating to the loss of aquatic habitats generally stress the need for no net loss of wetland resources. Under Section 404, actions in WOTUS may be subject to an individual permit, nationwide permit (NWP), or regional general permit, or may be exempt from regulatory requirements.

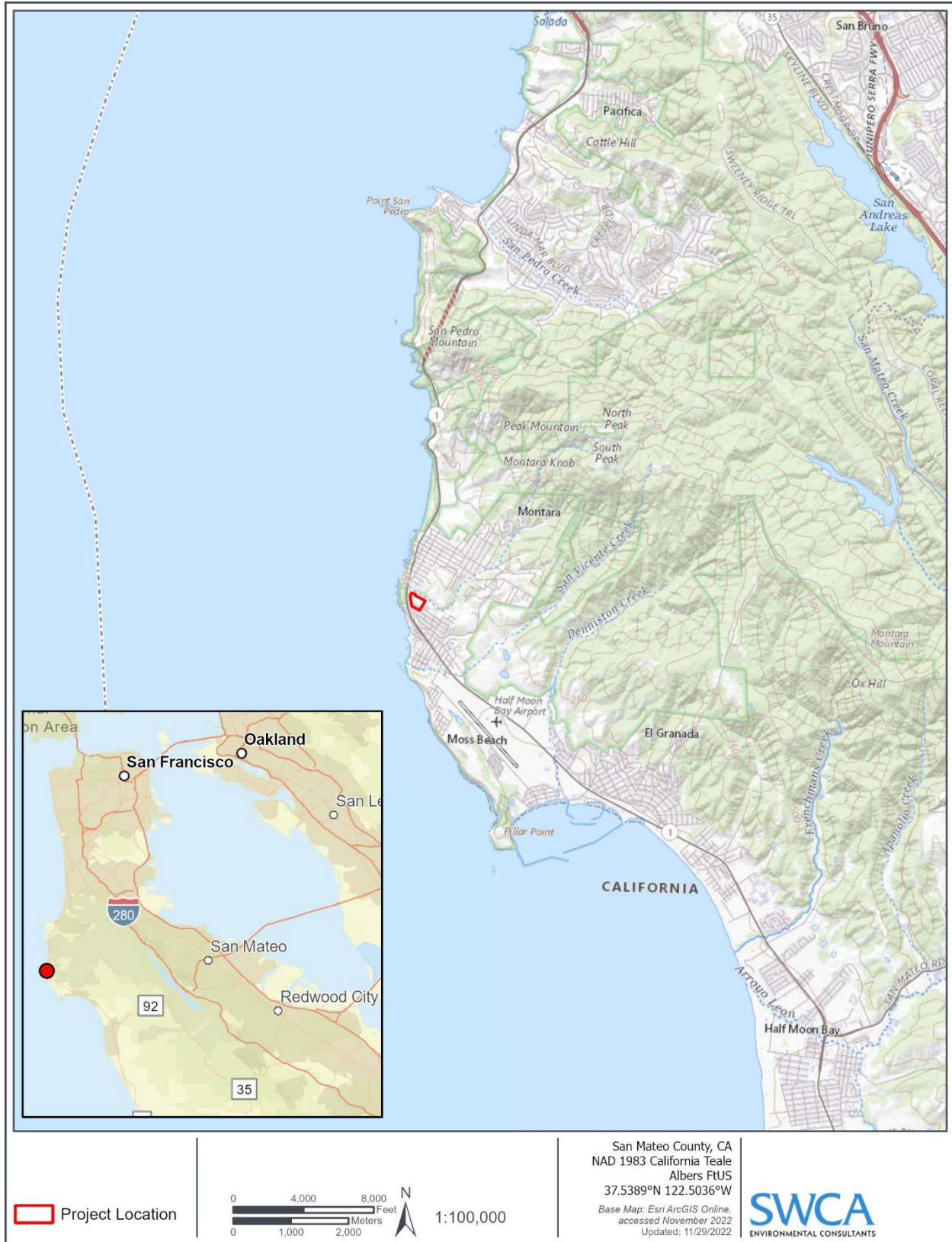


Figure 1. Project location map.



Figure 2. Project vicinity map.

The protection of federal jurisdictional WOTUS has been historically contentious and subject to numerous legal decisions. Most recently, on December 30, 2022, the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (USEPA) announced a final rule (USACE and USEPA 2020) that will update the definition of WOTUS from 1986. A summary of that definition of WOTUS is as follows:

1. Traditional navigable waters, the territorial seas, and interstate waters;
2. Impoundments of waters of the United States;
3. Tributaries to traditional navigable waters, the territorial seas, interstate waters, or impoundments of waters of the United States, if the tributaries meet either the relatively permanent standard or the significant nexus standard;
4. Wetlands (a) adjacent to traditional navigable waters, the territorial seas, and interstate waters; (b) adjacent to and with a continuous surface connection to relatively permanent impoundments of waters of the United States; (c) adjacent to tributaries that meet the relatively permanent standard; and (d) adjacent to and with a significant nexus to impoundments of waters of the United States or jurisdictional tributaries; and
5. Intrastate lakes and ponds, streams, or wetlands not listed above that meet either the relatively permanent standard or the significant nexus standard.

Wetlands are defined as those areas “that are inundated or saturated by surface or groundwater 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 soil conditions” (33 Code of Federal Regulations [CFR] 328.3(b)). Because of the ongoing controversy and legal challenges surrounding WOTUS, there may be additional changes to federal regulations during Project planning that would be captured during design and permitting.

2.1.2 Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 is administered by the U.S. Fish and Wildlife Service (USFWS) and prevents the unlawful “take” of listed fish, animal, and plant species. Section 9(a)(1)(B) specifically states take of species listed as threatened or endangered is unlawful. Take is defined as any action that would harass, harm, pursue, hunt, wound, shoot, kill, trap, capture, or collect any threatened or endangered species. Section 10 of the FESA allows the USFWS to issue incidental take permits if take of a listed species may occur during otherwise lawful activities. Section 10(a)(1)(B) requires a Habitat Conservation Plan for an incidental take permit on non-federal lands.

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 United States Code [USC] 703–711) prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the U.S. Department of the Interior. As used in the MBTA, the term “take” is defined as meaning, “to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires.” An April 11, 2018, memorandum from the USFWS, which enforces the MBTA, provided guidance to “clarify what constitutes prohibited take” (USFWS 2018). The USFWS memorandum stated that the “take of birds, eggs or nests” was prohibited only when the purpose of the activity was to conduct take but was not prohibited when the purpose of the activity was not to conduct take. On January 7, 2021, the USFWS published the Final Rule formalizing this interpretation of the MBTA (USFWS 2021). Therefore, the MBTA is currently limited to purposeful actions, such as directly and knowingly removing a nest to

construct a project, hunting, and poaching and not to actions resulting in incidental take. This rule should be monitored closely as it may change again in the near future under the current administration.

2.2 State

2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) of 1970 generally parallels the main provisions of the FESA, but unlike its federal counterpart, the CESA applies the take prohibitions to species proposed for listing (called “candidates” by the state). Section 2080 of the California Fish and Game Code (CFGC) prohibits the take, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in CFGC Section 86 as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The CESA allows for take incidental to otherwise lawful activities under CFGC Section 2081. Project proponents wishing to obtain incidental take permits are able to do so through a permitting process outlined in California Code of Regulations (CCR) Section 783.

2.2.2 California Fish and Game Code

2.2.2.1 FULLY PROTECTED SPECIES

The State of California first began to designate species as “Fully Protected” before the creation of the FESA and CESA. Lists of Fully Protected Species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, mammals, amphibians, reptiles, and birds. Most Fully Protected Species have since been listed as threatened or endangered under the FESA and/or CESA. The Fully Protected Species Statute (CFGC Section 4700) provides that Fully Protected Species may not be taken or possessed at any time. Furthermore, the California Department of Fish and Wildlife (CDFW) may authorize take of Fully Protected Species only in very limited circumstances, such as for necessary scientific research.

2.2.2.2 PROTECTION FOR BIRDS

According to CFGC Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (with limited exceptions). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds of prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbances that cause nest abandonment and/or loss of reproductive effort are considered “take” by the CDFW.

2.2.2.3 PROTECTION FOR PLANTS

The Native Plant Protection Act (NPPA) of 1977 (CFGC Sections 1900–1913) includes provisions that prohibit the take of endangered or rare native plants. The CDFW administers the NPPA and generally regards as rare many plant species with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, and 2B in the California Native Plant Society (CNPS) Rare Plant Inventory (CNPS 2022a). In addition, sometimes CRPR 3 and 4 plants are considered if the population has local significance in the area and is impacted by the Project. Section 191(b) of the CFGC includes a specific provision to allow for the incidental removal of endangered or rare plant species, if not otherwise salvaged by CDFW, within a right-of-way to allow a public utility to fulfill its obligation to provide service to the public.

2.2.2.4 LAKE AND STREAMBED ALTERATION AGREEMENT

Section 1602 of the CFGC requires that a Lake and Streambed Alteration Agreement application be submitted to the CDFW for “An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.” Evaluation of CDFW jurisdiction followed guidance in the CFGC and *A Review of Stream Processes and Forms in Dryland Watersheds* (CDFW 2010). In general, under CFGC Section 1602, CDFW jurisdiction extends to the maximum extent or expression of a stream on the landscape (CDFW 2010).

2.2.3 California Species of Special Concern

Species of Special Concern (SSC) is a category conferred by the CDFW to fish and animal species that meet the state definition of threatened or endangered, but have not been formally listed (e.g., federally or state-listed species), or are considered at risk of qualifying for threatened or endangered status in the future based on known threats. SSC is an administrative classification only, but these species should be considered “special-status” for the purposes of the California Environmental Quality Act (CEQA) analysis (see Section 3.1.1, *Special-Status Plant Species*, and Section 3.1.2, *Special-Status Animal Species*).

2.2.4 Porter-Cologne Water Quality Control Act

The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to CWA Section 401(a)(1). Section 401 specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity, including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters. Through the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), the RWQCB asserts jurisdiction over “waters of the state” (WOTS), which are generally identical in extent to WOTUS, but may also include waterbodies not currently under federal jurisdiction, such as isolated, intrastate waters. The Porter-Cologne Act defines WOTS as “surface water or ground water, including saline waters, within the boundaries of the state.”

2.3 Local

2.3.1 California Coastal Act and County of San Mateo Local Coastal Program

The California Coastal Act (CCA) of 1976 governs the decisions made by the California Coastal Commission (CCC) regarding issues such as shoreline public access and recreation, terrestrial and marine habitat protection, water quality, commercial fisheries, and development within the California coastal zone. Development within the coastal zone requires either a Coastal Development Permit (CDP) or CDP Exemption from the CCC or from a local government with a CCC-certified LCP. Pursuant to Public Resources Code (PRC) Section 30106, development in this context means:

. . . on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the

land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511).

Whereas, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

The CCC also regulates activities in wetlands. Unlike the federal government, the CDFW and CCC have adopted the Cowardin et al. (1979) definition of wetlands:

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface of the land or is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes (at least 50 percent of the aerial vegetative cover); (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

The Project is located within the coastal zone in San Mateo County. The San Mateo County LCP was approved by the County Board of Supervisors and CCC in 1980. In April 1981, the County assumed responsibility for implementing the State Coastal Act in the unincorporated areas of San Mateo County, including issuance of CDPs. For a permit to be issued, the development must comply with the policies of the LCP and those ordinances adopted to implement the LCP. The LCP defines wetlands as:

. . . an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Such wetlands can include mudflats (barren of vegetation), marshes, and swamps. Such wetlands can be either fresh or saltwater, along streams (riparian), in tidally influenced areas (near the ocean and usually below extreme high water of spring tides), marginal to lakes, ponds, and man-made impoundments. Wetlands do not include areas which in normal rainfall years are permanently submerged (streams, lakes, ponds and impoundments), nor marine or estuarine areas below extreme low water of spring tides, nor vernal wet areas where the soils are not hydric.

In San Mateo County, wetlands typically contain the following plants: cordgrass, pickleweed, jaumea, frankenia, marsh mint, tule, bullrush, narrow-leaf cattail, broadleaf cattail, pacific silverweed, salt rush, and bog rush. To qualify, a wetland must contain at least a 50% cover of some combination of these plants, unless it is a mudflat.

The County provides the following definition for Sensitive Habitats:

. . . any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites

and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.

Sensitive habitat areas include, but are not limited to, riparian corridors, wetlands, marine habitats, sand dunes, sea cliffs, and habitats supporting rare, endangered, and unique species.

Policies of the San Mateo County LCP take precedence over San Mateo County General Plan policies for property located in the Coastal Zone. Actions taken by counties or municipalities within the coastal zone may be appealed to the CCC only under defined circumstances (specified in PRC Section 30603). The CCC also retains permit authority in certain limited areas, such as tidelands and submerged lands (CCA Section 30519(b)). Development must also comply with other provisions of the County Code and Ordinances, such as zoning, building, and health regulations.

2.3.2 Significant Tree Ordinance of San Mateo County

The Significant Tree Ordinance (2016) governs the cutting of significant trees and tree communities and requires the replacement of significant trees communities on public and private property within the unincorporated area of the County. Cutting or removal of a Significant Tree requires a permit from the County. The County defines significant trees as “any live woody plant rising above the ground with a single stem or trunk of a circumference of thirty-eight (38”) or more measured at four- and one-half feet (4 ½’) vertically above the ground or immediately below the lowest branch, whichever is lower, and having the inherent capacity of naturally producing one main axis continuing to grow more vigorously than the later axes.”

2.3.3 Regulations for the Protections of Heritage Trees

These Heritage Trees Ordinance (2016) requires submittal of an Existing Tree Plan, including (1) an Arborist’s report of all significant or heritage trees to be removed, and (2) a Tree Protection Plan for all trees to be preserved.^{1,2} Permits must be acquired for all regulated trees to be removed. The Planning Commission will act upon any tree removal in a scenic corridor. Significant trees to be removed must be replaced with 3 or more trees, as determined by the Community Development Director.

3 METHODOLOGY

3.1 Literature and Records Review

SWCA performed an extensive literature review, including a review of the previously-prepared August 2020 DeNovo *Biological Resources Report*, and the 2022 HortScience | Bartlett Consulting *Arborist Report* to gain familiarity with the Project and identify potential sensitive biological features, including ESHAs, target flora and fauna species, and wetlands or other waters that have the potential to occur in the BSA (Figure 3). The review consisted of a records search of current versions of the USFWS online Information for Planning and Consultation (IPaC) species list system (USFWS 2023b) (Appendix A),

¹ San Mateo County. 2016. *Significant Tree Ordinance of San Mateo County*. Available at: <https://www.smcgov.org/planning/tree-regulations>. Accessed May 5, 2023.

² San Mateo County. 2016. *Regulation of Removal and Trimming of Heritage Trees on Public and Private Property*. Available at: <https://www.smcgov.org/planning/tree-regulations>. Accessed May 5, 2023.

CDFW California Natural Diversity Database (CNDDDB 2023) (Appendix B), and CNPS Online Inventory of Rare and Endangered Plants (CNPS 2023b) within the Montara Mountain, San Mateo, and Half Moon Bay, California USGS 7.5-minute quadrangles (USGS 2023a). The CNDDDB and CNPS searches were further refined to a 2-mile search surrounding the Project area (see Appendix B). The USFWS Critical Habitat Mapper (USFWS 2023a) was queried to identify critical habitat for terrestrial and aquatic species near the BSA (Appendix C). All of the special-status species and sensitive habitats found in the literature review were compiled into a table for use during the field survey, as described in Section 3.2, *Field Survey* (Appendix D).

The National Wetlands Inventory (NWI) Database (USFWS 2023c) and USGS National Hydrography Dataset (NHD) (USGS 2023b) (Appendix E), U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Soil Survey for San Mateo County (NRCS 2023) (see Appendix E), and aerial imagery were also reviewed to provide additional information for soils and potential wetland features known to occur in the BSA.

3.1.1 Special-Status Plant Species

For the purposes of this BIR, special-status plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.12 for listed plants and various notices in the *Federal Register* for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the FESA.
- Plants considered by the CNPS to be “rare, threatened, or endangered” in California (CRPR 1A, 1B, 2A, and 2B in CNPS [2023b]).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 CCR Section 670.5).
- Plants listed under the NPPA (CFGC Section 1900 et seq.).
- Plants considered sensitive by other federal agencies (e.g., U.S. Forest Service, U.S. Bureau of Land Management), state and local agencies, or jurisdictions.

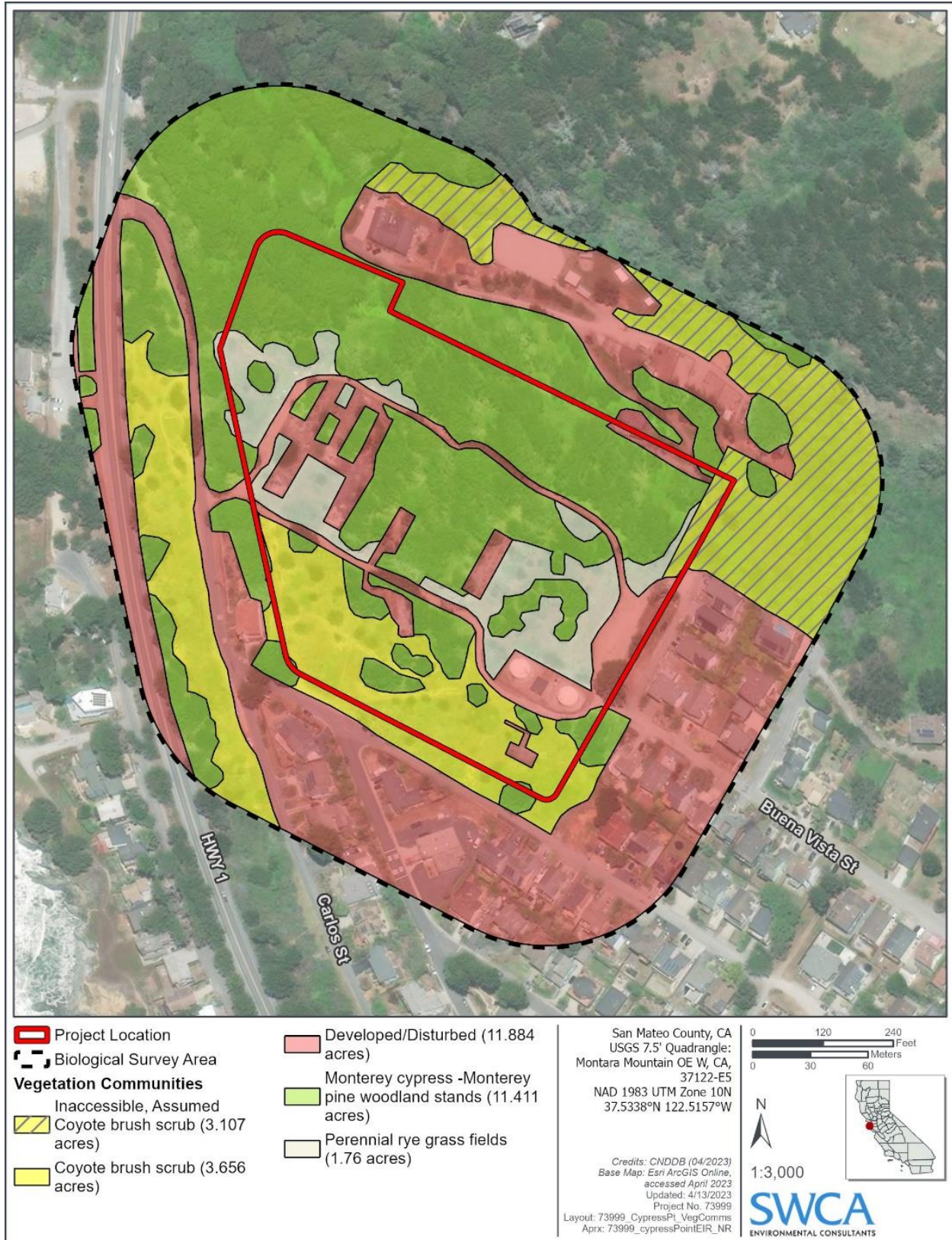


Figure 3. Biological resources map: vegetation communities.

3.1.2 Special-Status Animal Species

For the purposes of this BIR, special-status animal species are defined as the following:

- Animals listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed animals and various notices in the *Federal Register* for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the FESA.
- Animals listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5).
- Animals that are SSC to the CDFW.
- Animal species that are Fully Protected in California (CFGF Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

3.2 Field Survey

On April 3, 2023, SWCA biologist Charlotte Soergel conducted a reconnaissance-level survey of the BSA. The purpose of the field survey was to evaluate the presence or absence of suitable habitat for special-status species determined to have the potential to occur in the BSA, sensitive habitats with potential to occur, potentially jurisdictional wetland features, and other ESHAs as defined by the County LCP. In addition, the surveyor identified and mapped vegetation communities using *A Manual of California Vegetation*, Second Edition (Sawyer et al. 2009). The survey included walking throughout the Project area and the surrounding 250-foot buffer (BSA) where accessible (see Figure 3).

A complete list of plant and animal species observed within the BSA during the field survey is included in Appendix F. When necessary, the biologist referred to *The Jepson Manual* (Baldwin et al. 2012) to identify plant species. Representative photographs depicting existing conditions are included in Appendix G.

4 RESULTS

4.1 Soils, Topography, and Elevation

The topography within the BSA is generally flat and gently slopes westward toward the Pacific Ocean. Elevations within the BSA range from approximately 85 to 195 feet above mean sea level. According to the NRCS Web Soil Survey (NRCS 2023), soils in the BSA consist of one soil type: Typic Argiustolls, loamy-Urban land association, 5 to 15 percent slopes (see Appendix E). Typic Argiustolls soils are moderately well-drained soils comprised of coastal alluvium derived from weathered sedimentary rock. This soil type is moderately well drained and typically occurs along fluvio-marine terraces (NRCS 2023).

4.2 Vegetation Communities

The BSA consists of developed uses, including neighboring residences and roadways, water tanks and an associated maintenance structure operated by Montara Water and Sanitary District (MWSD), concrete remnants of military facilities that are scattered throughout the Project area, and dirt access roads that travel around the perimeter of the Project area, and undeveloped land dominated by a mix of native and non-native vegetation. Four vegetation communities were mapped in the BSA and were classified using

the naming conventions of *A Manual of California Vegetation*, Second Edition (Sawyer et al. 2009). Vegetation communities present in the BSA include Monterey cypress – Monterey pine woodland stands (*Hesperocyparis macrocarpa* – *Pinus radiata* Forest and Woodland Semi-Natural Alliance), coyote brush scrub (*Baccharis pilularis* Shrubland Alliance), perennial rye grass fields, and developed/disturbed areas.

Photographs (see Appendix G) and mapping (see Figure 3) depict the characteristics and locations of vegetation communities within the BSA.

4.2.1 Monterey Cypress – Monterey Pine Woodland Stands

Monterey cypress – Monterey pine woodland stands (*Hesperocyparis macrocarpa* – *Pinus radiata* Forest and Woodland Semi-Natural Alliance) are characterized by a predominance of Monterey cypress (*Hesperocyparis macrocarpa*), Canary Island pine (*Pinus canariensis*), Aleppo pine (*Pinus halepensis*), Italian stone pine (*Pinus pinea*), and Monterey pine (*Pinus radiata*) in the tree canopy along with coast wattle (*Acacia cyclops*) and eucalyptus (*Eucalyptus* spp.) species. This vegetation community is naturalized on the coast and is often planted as trees, groves, and windbreaks (Sawyer et al. 2009).

This vegetation community occurs throughout the BSA with dense cover occurring through the central and along the northern and eastern survey perimeters. This community has the potential to support nesting and foraging birds protected under the MBTA and may provide marginal overwintering habitat for monarch butterfly.

4.2.2 Coyote Brush Scrub

Coyote brush scrub is characterized by coyote brush as dominant or co-dominant in the shrub canopy along with coastal sage brush (*Artemisia californica*), blueblossom (*Ceanothus thyrsiflorus*), beaked hazelnut (*Corylus cornuta*), sticky monkeyflower (*Diplacus aurantiacus*), California buckwheat (*Eriogonum fasciculatum*), lizard tail (*Eriophyllum staechadifolium*), California coffeeberry (*Frangula californica*), coast silk tassel (*Garrya elliptica*), salal (*Gaultheria shallon*), oceanspray (*Holodiscus discolor*), deerweed (*Acmispon glaber*), coastal bush lupine (*Lupinus arboreus*), California wax myrtle, California blackberry (*Rubus ursinus*), white sage (*Salvia apiana*), purple sage (*Salvia leucophylla*), and poison oak (*Toxicodendron diversilobum*). Emergent trees may be present at low cover, including Bishop pine (*Pinus muricata*), Douglas fir (*Pseudotsuga menziesii*), coast live oak (*Quercus agrifolia*), or California bay (*Umbellularia californica*). This vegetation community occurs on river mouths, stream sides, terraces, stabilized dunes of coastal bars, spits along the coastline, coastal bluffs, open slopes, and ridges with variable soils ranging from sandy to relatively heavy clay (Sawyer et al. 2009).

This vegetation community occurs throughout the BSA, primarily in the areas where there are gaps in the tree canopy. In the BSA, coyote brush is dominant with cotoneaster (*Cotoneaster coriaceus*), poison oak, California blackberry, ocean spray, red elderberry (*Sambucus racemosa*), and pampas grass (*Cortaderia selloana*) along the western extent of the BSA and southwestern extent of the Project area. Coyote brush scrub in the BSA has the potential to serve as upland dispersal habitat for California red-legged frog and may support special-status plant species, including Choris' popcorn-flower. This community has the potential to support nesting and foraging birds protected under the MBTA.

4.2.3 Perennial Rye Grass Fields

Perennial rye grass fields are characterized by a dominance or co-dominance of perennial rye grass in the herbaceous layer along with redtop (*Agrostis stolonifera*), wild oats (*Avena fatua*), black mustard (*Brassica nigra*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), bull thistle (*Cirsium vulgare*), reed fescue (*Festuca arundinacea*), common velvetgrass (*Holcus lanatus*), seaside barley

(*Hordeum marinum*), hawkbit (*Leontodon saxatilis*), bird's foot trefoil (*Lotus corniculatus*), Harding grass (*Phalaris aquatica*), Kentucky blue grass (*Poa pratensis*), curly dock (*Rumex crispus*), and various clover species (*Trifolium* spp.).

This vegetation community occurs primarily along the northwest and southern perimeters of the Project area and is dominated by perennial rye grass, wild oats, ripgut brome, four seeded vetch (*Vicia tetrasperma*), and soft chess. Other species observed in this community include Bermuda buttercup (*Oxalis pes-caprae*), wild radish (*Raphanus sativus*), rattle snake grass (*Briza maxima*), limited cover of prairie June grass (*Koeleria macrantha*), and common dandelion (*Taraxacum californicum*). Along the southeastern extent of the Project area, limited patches of spreading rush (*Juncus patens*), little-robin (*Geranium purpureum*), bird's foot trefoil (*Lotus corniculatus*), and common cat's ear (*Hypochaeris radicata*) are present. The perennial rye grass field community in the BSA has the potential to serve as upland dispersal habitat for California red-legged frog and may support special-status plant species, including Choris' popcorn-flower. In addition, this community has the potential to support nesting and foraging birds protected under the MBTA.

4.2.4 Developed/Disturbed

Developed/disturbed areas are generally characterized by residential or commercial development dominated by a mix of exotic ornamental and native plant species. Vegetation density, canopy cover, and species composition will vary based on purpose and/or design. This habitat type occurs on the eastern, southern, and western sides of the BSA and includes Lincoln, Buena Vista, and Carlos Streets. These areas are characterized by residential development and paved public roadways. Vegetation types in these areas include ornamental trees and shrubs. In addition, within the Project area, there are remnants of concrete structures from previous military uses distributed throughout the site. Two water towers and an associated maintenance hut occur in the southeastern portion of the BSA. Unpaved, dirt maintenance roads traverse the perimeter of the Project area.

Disturbed areas throughout the BSA were dominated by invasive plant species, including French broom (*Genista monspessulana*), cape ivy (*Delairea odorata*), pride of madeira (*Echium candicans*), borage (*Borago officinalis*), fairy stonecrop (*Crassula multicaeva*), longleaf wattle (*Acacia longifolia*), and periodic ice plant (*Carpobrotus edulis*) mats. Occasional native species occur within this community and include California bee plant (*Scrophularia californica*), California mugwort (*Artemisia douglasiana*), common yarrow (*Achillea millefolium*), and pacific sanicle (*Sanicula crassicaulis*).

4.3 Critical Habitat

There is no federally listed critical habitat within the Project area or BSA. However, there is USFWS federally designated critical habitat for California red-legged frog (a federally threatened species and CDFW SSC) approximately 1.1 mile east of the Project area in San Vicente Creek, which flows south of the Project area towards the Pacific Ocean.

Additionally, there is National Oceanic and Atmospheric Administration (NOAA) federally designated critical habitat for five marine species within 2 miles of the Project area within the Pacific Ocean: black abalone (*Haliotis cracherodii*; a federally endangered species) critical habitat is located approximately 0.1 mile west of the Project area, leatherback sea turtle (*Dermochelys coriacea*; a federally endangered species) critical habitat is located approximately 1 mile west of the Project area, green sturgeon (*Acipenser medirostris*; a federally threatened species) critical habitat is located approximately 1 mile west of the Project area, killer whale (*Orcinus orca*; a federally endangered species) critical habitat is located approximately 1 mile west of the Project area, and humpback whale (*Megaptera novaeangliae*; a federally endangered species) critical habitat is located approximately 1.5 miles west of the Project area.

No critical habitat will be affected by the Project (see Appendix C).

4.4 Special-Status Species with Potential to Occur

Based on the existing biological conditions in and adjacent to the BSA, a review of relevant literature, the known occurrences of special-status species in the area, and SWCA biologists' local knowledge of the region, 10 special-status plant species and eight special-status animal species were identified to have potential to occur within the BSA. Summary descriptions for these species are provided below, and descriptions of other plants and animal species that were evaluated for potential occurrence are provided in Appendix D.

4.4.1 Special-Status Plant Species

Based on CNDDDB and CNPS queries, 10 special-status plant species were identified with potential to occur in the Montara Mountain, San Mateo, and Half Moon Bay, California USGS 7.5-minute quadrangles. SWCA further evaluated the species and their habitat requirements to identify which special-status plant species have the potential to occur within the BSA. This analysis compared the known habitat requirements of the 10 species with the BSA's existing conditions, elevation, and soils. The evaluation also took into consideration which species had recent occurrences within 2 miles of the BSA (see Appendix B).

No special-status plant species identified during the desktop review were observed during the field survey. The survey was conducted within the bloom windows for all plant species analyzed. One occurrence of Choris' popcorn flower (*Plagiobothrys chorisianus* var. *chorisianus*; CRPR 1B.2) was identified in 2016, located approximately 0.8 mile northeast of the BSA (CNDDDB 2023); however, this species was not observed during the April 2023 field survey. Of the ten species considered for potential occurrence (see Appendix D, Table D-1), four species, coastal marsh milkvetch (*Astragalus pycnostachyus* var. *pycnostachyus*), Coast yellow leptosiphon (*Leptosiphon croceus*), San Francisco owl's-clover (*Triphysaria floribunda*), and Ornduff's meadowfoam (*Limnanthes douglasii* ssp. *ornduffii*) were determined to have no potential to occur due to lack of suitable habitat, soils, or elevation requirements.

One species, Choris' popcorn flower, was determined to have moderate potential to occur in the BSA. The following five special-status plant species have low potential to occur within the BSA due to a lack of high-quality suitable habitat and the absence of recent occurrences within the 2-mile records search:

- Blasdale's bent grass (*Agrostis blasdalei*)
- Hickman's cinquefoil (*Potentilla hickmanii*)
- Kellogg's horkelia (*Horkelia cuneata* var. *sericea*)
- Perennial goldfields (*Lasthenia californica* ssp. *macrantha*)
- Rose leptosiphon (*Leptosiphon rosaceus*)

Species that were determined to have low potential to occur or be absent from the BSA are not discussed further in this BIR. Special-status plant species habitat descriptions and rationale for potential to occur in the BSA are provided in Appendix D. Given the above information, in addition to the implementation of avoidance and minimization measures provided in Section 5, *Avoidance and Minimization Measures*, no impacts to special-status plant species are anticipated.

4.4.1.1 CHORIS' POPCORN FLOWER

Choris' popcorn flower is an annual herb in the borage family (Boraginaceae) that blooms from March to June. It typically occurs in mesic areas in coastal prairie, chaparral, northern coastal scrub, and wetland riparian areas, at elevations ranging from 20 to 525 feet (Baldwin et al. 2012; Calflora 2023; CNPS 2023a, 2023b).

There is one CNDDDB record of Choris' popcorn flower within 2 miles of the of the BSA (CNDDDB 2023), one of which was documented in 2016, located approximately 0.8 mile northeast of the BSA. Choris' popcorn flower has a moderate potential to occur within or adjacent to the BSA due to the suitable mesic coastal scrub habitat. No Choris' popcorn flower was observed at the time of the April 2023 site assessment, which was conducted during the blooming period for this species. Vegetation communities within the BSA that could potentially support this species are limited to coyote brush scrub and perennial rye grass fields. Portions of the Project work area are anticipated to occur in coyote brush scrub and perennial rye grass field vegetation communities; therefore, a preconstruction survey for this species, during the appropriate bloom period of March to June, is recommended. With implementation of avoidance and minimization measures, including preconstruction survey and special-status plant avoidance, provided in Section 5, *Avoidance and Minimization Measures*, no Project impacts to Choris' popcorn flower are anticipated.

4.4.2 Special-Status Animal Species

Based on a CNDDDB query and a review of existing literature, eight special-status animal species were identified in the Montara Mountain, San Mateo, and Half Moon Bay, California USGS 7.5-minute quadrangles. None of the eight special-status animal species identified during desktop review were observed during the field survey.

SWCA evaluated the species to identify which special-status animal species have the potential to occur within the BSA. This analysis compared the known habitat requirements of those species with the BSA's existing conditions. The evaluation also took into consideration which species have been recorded in the CNDDDB within 2 miles of the BSA (see Appendix B).

Of the eight species considered for potential occurrence, one—California red-legged frog (*Rana draytonii*; federally threatened, CDFW SSC)—was determined to have moderate potential to occur within the Project area and BSA. Of the remaining seven species, five were determined to have low potential to occur and two were determined to be absent from the Project area and BSA due to a lack of suitable foraging and/or breeding habitat, aestivating habitat, life history, and/or other biotic considerations.

California red-legged frog was determined to have moderate potential to occur in the BSA, and the following five special-status animal species have low potential to occur within the BSA:

- Western bumble bee (*Bombus occidentalis*): California candidate endangered (low potential)
- Monarch butterfly (*Danaus plexippus*): federal candidate species (low potential)
- Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*): CDFW SSC (low potential)
- San Francisco garter snake (*Thamnophis sirtalis tetrataenia*): federally and state endangered, CDFW Fully Protected Species (low potential)

Due to its moderate potential to occur, California red-legged frog is discussed in the following section. Species that were determined to have low potential to occur or be absent from the BSA (see Appendix D, Table D-1) are not discussed further in this BIR.

4.4.2.1 CALIFORNIA RED-LEGGED FROG

California red-legged frog, a federally threatened species and CDFW SSC, occurs in various different habitat types, depending on its life cycle stage. Breeding areas include aquatic habitats, such as lagoons, streams, and natural and humanmade ponds. The species prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to approximately 2 feet, and the presence of emergent vegetation (e.g., cattails, bulrush). During periods of wet weather, some individuals may make overland dispersals through adjacent upland habitats of distances up to 1 mile (USFWS 2002). Upland habitats, including small mammal burrows and woody debris, can also be used as refuge during the summer if water is scarce or unavailable (Jennings and Hayes 1994). California red-legged frogs typically travel between sites and are unaffected by topography and vegetation types during migration. Dispersal habitat makes it possible for California red-legged frog to locate to new breeding and non-breeding sites and is crucial for conservation of the species.

Seven California red-legged frog occurrences have been recorded within 2 miles of the BSA between 2006 and 2019 (CNDDDB 2023). The closest CNDDDB occurrence (2012) was recorded approximately 0.7 mile north of the BSA (see Appendix B). While no suitable aquatic breeding habitat was observed on-site, potentially suitable upland dispersal habitat for this species is present within the BSA. Additionally, Montara Creek, which is located approximately 250 feet north of the Project area and immediately north of the BSA, may provide marginally suitable aquatic dispersal habitat during wet season periods of inundation. Although there is potentially suitable upland dispersal habitat within the BSA, this species is more likely to utilize higher-quality, suitable aquatic and non-breeding habitat within and adjacent to Montara Creek where there is also more woody debris used for refugia. In addition, the BSA does not provide a suitable overland route to other aquatic breeding sites and no small mammal burrows were observed within the BSA. California red-legged frog was not observed in the BSA during the field survey.

Based on the above information and number of known occurrences within 2 miles of the Project area and within the BSA, there is moderate potential for dispersing California red-legged frog to occur in the BSA and Project area during the wet season (October 15–May 31) and low potential for the species to occur in the BSA during the dry season (June 1–October 15). With implementation of avoidance and minimization measures, including having a biological monitor present during Project initial ground-disturbing activities and installation of wildlife exclusion fencing, provided in Section 5, *Avoidance and Minimization Measures*, Project impacts to California red-legged frog are not anticipated.

4.5 Nesting Migratory Passerine Birds and Raptors

The BSA contains suitable nesting and foraging habitat for avian species protected under the MBTA and CFGC Sections 3503 and 3513 during the typical nesting season (February 15–September 15). Suitable nesting and foraging habitats would include the non-native grassland areas, shrubs, and trees within and adjacent to the Project area. Nesting is unlikely outside of the typical nesting season, although some avian species may forage year-round near the site. Avian species protected by the MBTA and CFGC observed in the BSA during the April 2023 field survey included American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), Brewer's blackbird (*Euphagus cyanocephalus*), California quail (*Callipepla californica*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), house wren (*Troglodytes aedon*), killdeer (*Charadrius vociferus*), red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), savannah sparrow (*Passerculus sandwichensis*), song sparrow (*Melospiza melodia*), and turkey vulture (*Cathartes aura*).

No nesting birds were observed during the field survey, which occurred during the typical nesting season. However, the Project has the potential to impact nesting birds, including their eggs or young, covered

under the MBTA and CFGC. With implementation of avoidance and minimization measures provided in Section 5, *Avoidance and Minimization Measures*, no impacts to these avian species are anticipated.

4.6 Wildlife Habitat and Movement Corridors

Suitable migration habitat for amphibians, reptiles, birds, and mammals are present along the Pacific Ocean coastline to the west of the BSA. In addition, migrating raptors are known to occur in the area adjacent to the Project area, especially during the fall. However, there are no known migratory corridors that intersect the BSA. The BSA is bordered by urban and residential development to the east and south and Highway 1 to the west. Riparian corridors adjacent to the BSA to the north and south are more likely to be utilized by wildlife traveling through the surrounding area. The BSA contains moderately suitable upland dispersal habitat for California red-legged frog and is likely utilized by common wildlife species. However, because the BSA is contained within residential and urban development, the Project is not expected to interfere substantially with the movement of any native resident or migratory animals.

4.7 Sensitive Habitats

As mentioned previously, coyote brush scrub and perennial rye grass field communities in the BSA may provide moderately suitable upland dispersal habitat for California red-legged frog. However, these vegetation communities within the BSA are unlikely to be considered a Sensitive Habitat by the County given the surrounding development (i.e., fragmentation of habitat) that diminishes the dispersal habitat value. No other Sensitive Habitats, as defined by the San Mateo County LCP Policies 7.1 through 7.14, were observed within the Project area.

4.8 Marine and Wildlife Reserves

The BSA is not located within 200 feet of a marine or wildlife reserve. The closest marine or wildlife reserve to the Project site is the Fitzgerald Marine Reserve, which is located approximately 0.63 mile south of the BSA.

4.9 Wetlands and Waters

A formal wetland delineation was not conducted as part of this BSA. However, no potentially jurisdictional waters or wetlands were observed during the field investigation. Montara Creek is located approximately 250 feet north of the Project area and immediately north of the BSA. In addition, San Vicente Creek is located approximately 0.6 mile south of the BSA.

5 AVOIDANCE AND MINIMIZATION MEASURES

The following avoidance and minimization measures are designed to prevent the Project from having a potentially significant biological impact:

1. Prior to the start of the Project, all construction crew members, including the project stormwater inspector, will attend an environmental awareness training presented by a qualified biologist. A training brochure describing special-status species, Project avoidance and minimization measures, key contacts, and potential consequences of impacts to special-status species and potentially jurisdictional features will be distributed to the crew members during the training. During the training the qualified biologist will review with the project stormwater inspector the requirement

of weekly inspection of wildlife exclusion fencing as described in Avoidance Measure 7. Trainees will sign an environmental training attendance sheet.

2. A preconstruction survey for California red-legged frog shall be conducted within the Project area immediately prior to ground disturbance. If no individuals are detected, then construction-related activities may proceed provided project avoidance and minimization measures in this document are adhered to. If adults are present in the construction area, work shall be stopped until individuals are allowed to disperse on their own volition, or the species is relocated by a qualified biologist with permission to handle California red-legged frog.
3. A qualified biological monitor shall be present during all initial ground-disturbing activities, including grubbing and/or vegetation removal and installation of the wildlife exclusion fence.
4. Disturbance to vegetation shall be kept to the minimum necessary to complete the Project activities. To minimize impacts to vegetation, a qualified biologist shall work with the contractor to designate the work area and any staging areas and clearly delineate areas that shall be avoided with exclusion fencing (e.g., high-visibility orange construction fencing, silt fence, ERTEC fencing, or other similar material).
5. Ground-disturbing construction activities (e.g., grubbing or grading) should occur during the dry season (June 1 to October 15) to facilitate avoidance of California red-legged frog. Regardless of the season, no ground disturbing activities shall occur within 24 hours following a significant rain event (greater than 1/4 inch in a 24-hour period). Following a significant rain event and the 24-hour drying-out period, a qualified biologist would conduct a preconstruction survey for California red-legged frog prior to the restart of any Project ground disturbing activities.
6. To avoid impacts to California red-legged frog and other sensitive wildlife species, a wildlife exclusion fence (e.g., silt fence, ERTEC fencing, or other similar material) shall be installed around the perimeter of the Project, at the discretion of the qualified biologist.
7. The wildlife exclusion fence shall be inspected by a qualified biologist or project stormwater inspector, who has received environmental awareness training from a qualified biologist, on a weekly basis to ensure that the fence is functioning as intended throughout the duration of construction activities that may impact California red-legged frog (e.g., ground disturbance, materials staging/parking required on the north side of the Project Area). Removal of the wildlife exclusion fence may be conducted at the discretion of a qualified biologist if ground disturbance activities have been completed and remaining Project activities would not impact California red-legged frog (i.e., only interior site build out activities remain).
8. Regardless of the season, construction shall adhere to State Water Resources Control Board best management practices (BMPs), and no ground disturbing activities shall occur within 24 hours following a significant rain event (defined as greater than 1/4 inch in a 24-hour period).
9. Before completion of the Project, all exposed or disturbed surfaces shall be permanently protected from erosion with reseeding and landscaping.
10. If any animals are encountered during Project activities, said animals shall be allowed to leave the work area unharmed. Animals shall not be picked up or moved in any way.
11. All spoils, such as dirt, excavated material, debris, and construction-related materials, generated during Project activities shall be placed within the limits of the designated construction area. Spoils shall be covered or secured to prevent sediment from escaping. Once the spoil pile is no longer active, it shall be removed from the work area and disposed of lawfully at an appropriate facility.
12. All exposed soils in the work area resulting from Project activities shall be stabilized immediately following the completion of work to prevent erosion. Erosion and sediment control BMPs, such

as silt fences, straw hay bales, gravel or rock-lined drainages, water check bars, and broadcast straw, can be used. BMPs shall be made of certified weed-free materials. Straw wattles, if used, shall be made of biodegradable fabric (e.g., burlap) and free of monofilament netting. At no time shall silt-laden runoff be allowed to enter any drainages or other sensitive areas.

13. Prior to the start of construction, a preconstruction survey for Choris' popcorn flower shall be conducted during the appropriate blooming period. Choris' popcorn flower occurrences within 50 feet of the Project work areas shall be flagged for avoidance by the Project. If the Project cannot avoid impacts to this species, MidPen shall consult with the CDFW on appropriate measures and/or actions to protect or salvage the plant(s) prior to beginning construction.
14. During Project activities, all trash that may attract predators shall be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris shall be removed from work areas.
15. Construction materials, including, but not limited to, wooden pallets, BMPs, equipment, or other materials, that are left on the ground for more than 24 hours shall be inspected before and during moving of the materials to prevent potential impacts to animals that may have used the materials as a temporary refuge. Plastic pipes, if used, shall be covered with material to prevent animals from entering the pipes.
16. The number of access routes, number and size of staging areas, and total area of the activity shall be limited to the minimum necessary to complete the Project, and their boundaries shall be clearly demarcated.
17. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 100 feet from any drainages and other water features. Crew members shall ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the construction contractor shall prepare a plan to be approved by the County before construction begins to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and the appropriate measures to take should a spill occur.
18. If Project activities, including grass mowing and tree trimming/removal, are conducted during nesting bird season (February 15–September 15), preconstruction nest surveys shall be conducted in and near the Project area (within 250 feet for large raptors and 100 feet for all other birds) by a qualified biologist within 7 days of the start of construction. If nesting birds are identified during the preconstruction survey, then the Project shall be modified (i.e., a no-work exclusion buffer of appropriate size [to be determined by the qualified Project biologist] shall be erected around active nests) and/or delayed as necessary to avoid impacts to the identified nests, eggs, and/or young.
19. Construction activities shall avoid Heritage or significant trees, as defined by the San Mateo County Tree Ordinance, that have not previously been authorized for removal with the County. If construction activities are occurring near a Heritage or significant tree or trees, exclusion fencing will be installed to keep construction activities out of the area.

6 LITERATURE CITED

- Baldwin, B., D. Goldman, D. Keil, R. Patterson, and T. Rosatti (editors). 2012. *The Jepson Manual: Vascular Plants of California*. 2nd ed. Berkeley, California: University of California Press.
- Calflora. 2023. Information on California plants for education, research and conservation (Calflora). Berkeley, California. Available at: <https://www.calflora.org/>. Accessed March 30, 2023.
- California Department of Fish and Wildlife (CDFW). 2010. *A Review of Stream Processes and Forms in Dryland Watersheds*.
- California Native Plant Society (CNPS). 2023a. Manual of California Vegetation Online. California Native Plant Society. Available at: <http://cnps.org/>. Accessed March 30, 2023.
- . 2023b. Rare Plant Inventory (online edition, v9-01 1.5). California Native Plant Society Rare Plant Program. Available at: <https://www.rareplants.cnps.org/>. Accessed March 30, 2023.
- California Natural Diversity Data Base (CNDDB). 2023. Rarefind data for the Half Moon Bay 7.5-minute U.S. Geological Survey topographic quadrangle.
- Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 131 pp.
- DeNovo Planning Group. 2020. *Biological Resources Assessment for the MidPen Housing Cypress Point Housing Project*. August 2020.
- HortScience | Bartlett Consulting. 2022. *Arborist Report, Cypress Point*. July 1, 2022
- Jennings, M.R., and M.P. Hayes. 1994. *Amphibian and Reptile Species of Concern in California*. Sacramento, California: California Department of Fish and Game.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition*. Sacramento, California: California Native Plant Society. 1,300 pp.
- U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (USEPA). 2020. *The Navigable Waters Protection Rule: Definition of “Waters of the United States;” Final Rule*. *Federal Register* 85(77):22250–22342. April 21. Available at: <https://www.govinfo.gov/content/pkg/FR-2020-04-21/pdf/2020-02500.pdf>. Accessed March 30, 2023.
- U.S. Department of Agriculture Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed March 30, 2023.
- U.S. Fish and Wildlife Service (USFWS). 2002. *Recovery Plan for the California Red-legged Frog (Rana aurora draytonii)*. Portland, Oregon: U.S. Fish and Wildlife Service.
- . 2023a. Critical Habitat Portal. Available at: <http://criticalhabitat.fws.gov/>. Accessed March 30, 2023.
- . 2018. Guidance on The Recent M-Opinion Affecting the Migratory Bird Treaty Act. Available at: [guidance memorandum \(bna.com\)](https://www.bna.com/guidance-memorandum). Accessed March 30, 2023.

- . 2023b. Information for Planning and Consultation (IPaC). Available at: <http://ecos.fws.gov/ipac/>. Accessed March 30, 2023.
- . 2023c. National Wetlands Inventory. Available at: <http://www.fws.gov/wetlands/>. Accessed March 30, 2023.
- . 2021. *Regulations Governing Take of Migratory Birds; Final Rule*. *Federal Register* 86(4):1134–1165. January 7. Available at: <https://www.huntonnickelreportblog.com/wp-content/uploads/sites/30/2021/01/Final-MBTA-Rule-Jan-7-2021.pdf>. Accessed March 30, 2023.
- U.S. Forest Service (USFS). 2021. Western Bumble Bee (*Bombus occidentalis*) species profile. Available at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd534364.pdf. Accessed March 30, 2023.
- U.S. Geological Survey (USGS). 2023a. USGS Topographic Maps of California. Available at: <https://www.library.ucsb.edu/src/maps/usgs-topo-maps-california>. Accessed March 30, 2023.
- . 2023b. National Hydrography Dataset GIS Data. Available at: <http://nhd.usgs.gov/>. Accessed March 30, 2023.
- Xerces Society. 2021. Western Bumble Bee (*Bombus occidentalis*) species profile. Available at: <https://xerces.org/endangered-species/species-profiles/at-risk-bumble-bees/western-bumble-bee>. Accessed March 30, 2023.

APPENDIX A

USFWS IPaC Records Search Results

IPaC resource list

IPaC will be down for a maintenance event the week of April 10th. We apologize for any inconvenience this may cause. ✕

(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

San Mateo County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

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 species¹ 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 Fisheries²).

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](#).

-
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:

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
Foothill Yellow-legged Frog <i>Rana boylei</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5133	Proposed Threatened

Fishes

NAME	STATUS
Longfin Smelt <i>Spirinchus thaleichthys</i> No critical habitat has been designated for this species.	Proposed Endangered

Flowering Plants

NAME	STATUS
Hickman's Potentilla <i>Potentilla hickmanii</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6343	Endangered

Critical habitats

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

There are no critical habitats at this location.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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-incident-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
<p>Allen's Hummingbird <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637</p>	Breeds Feb 1 to Jul 15
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> 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.</p>	Breeds Jan 1 to Aug 31
<p>Belding's Savannah Sparrow <i>Passerculus sandwichensis beldingi</i> 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</p>	Breeds Apr 1 to Aug 15
<p>Black Oystercatcher <i>Haematopus bachmani</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591</p>	Breeds Apr 15 to Oct 31
<p>Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234</p>	Breeds May 20 to Sep 15
<p>Black Swift <i>Cypseloides niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878</p>	Breeds Jun 15 to Sep 10
<p>Black Turnstone <i>Arenaria melanocephala</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere

<p>Bullock's Oriole <i>Icterus bullockii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	<p>Breeds Mar 21 to Jul 25</p>
<p>California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Mar 1 to Jul 31</p>
<p>California Thrasher <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Jan 1 to Jul 31</p>
<p>Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Jun 1 to Aug 31</p>
<p>Common Yellowthroat <i>Geothlypis trichas sinuosa</i> 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</p>	<p>Breeds May 20 to Jul 31</p>
<p>Golden Eagle <i>Aquila chrysaetos</i> 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</p>	<p>Breeds Jan 1 to Aug 31</p>
<p>Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481</p>	<p>Breeds elsewhere</p>
<p>Nuttall's Woodpecker <i>Picoides nuttallii</i> 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</p>	<p>Breeds Apr 1 to Jul 20</p>
<p>Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914</p>	<p>Breeds May 20 to Aug 31</p>

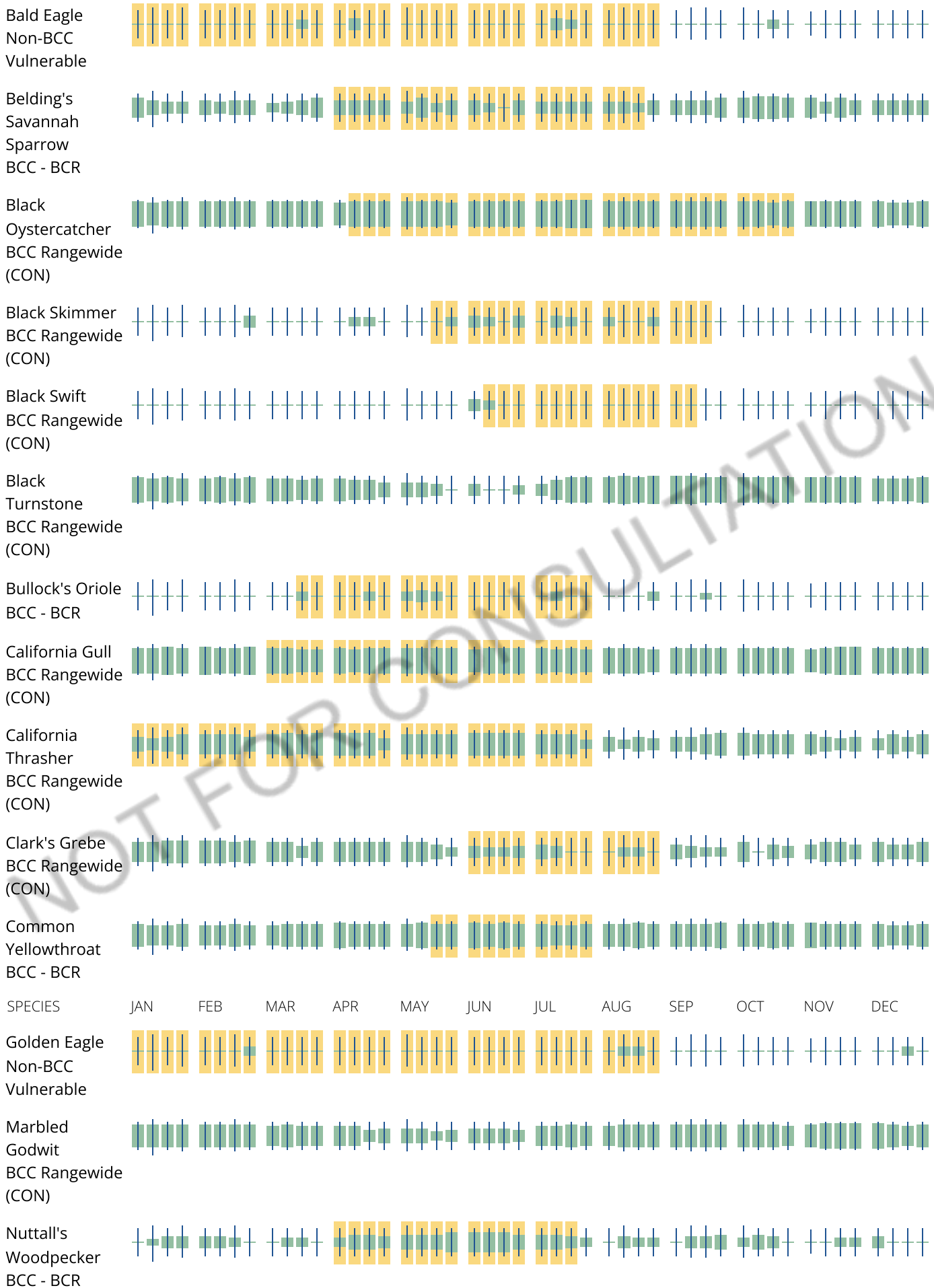
<p>Scripps's Murrelet <i>Synthliboramphus scrippsi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Feb 20 to Jul 31</p>
<p>Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480</p>	<p>Breeds elsewhere</p>
<p>Tricolored Blackbird <i>Agelaius tricolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910</p>	<p>Breeds Mar 15 to Aug 10</p>
<p>Western Grebe <i>aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743</p>	<p>Breeds Jun 1 to Aug 31</p>
<p>Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds elsewhere</p>
<p>Wrentit <i>Chamaea fasciata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	<p>Breeds Mar 15 to Aug 10</p>

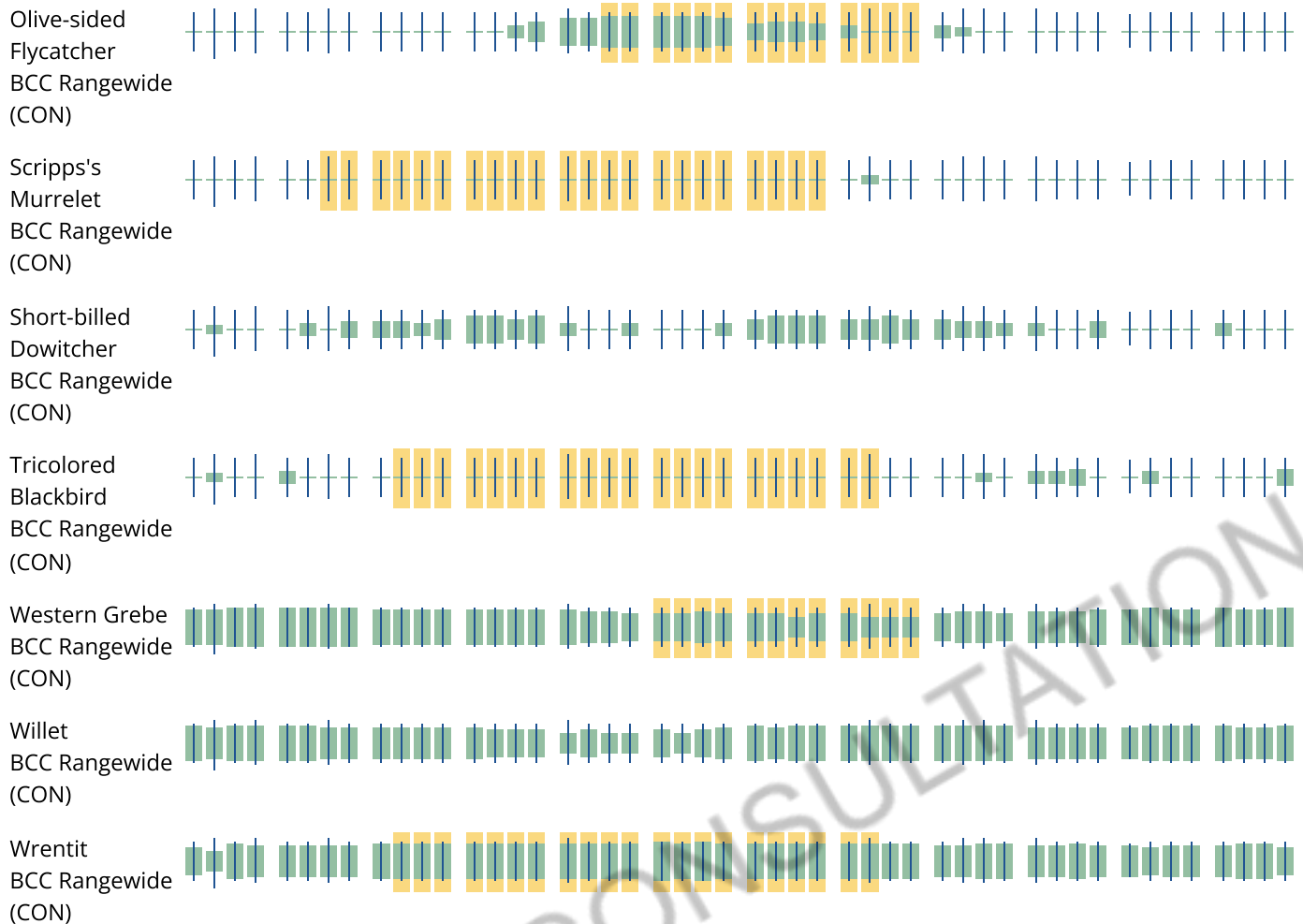
Probability of Presence Summary

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.





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 to 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](#).

This location did not intersect any wetlands mapped by NWI.

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 tubercid 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.

NOT FOR CONSULTATION

APPENDIX B

CNDDDB Occurrence Maps and Special-Status Species List

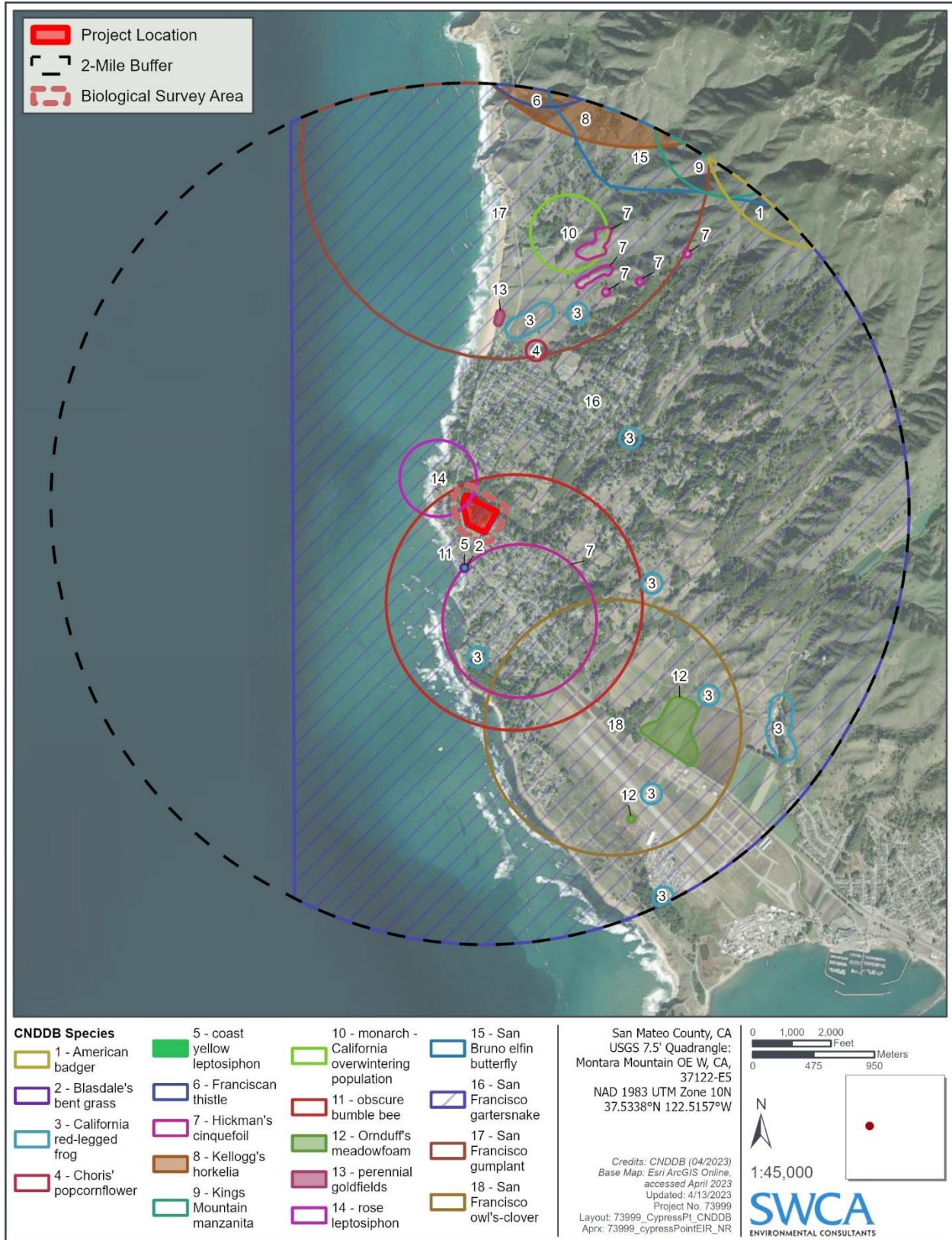


Figure B-1. Two-mile CNDDB sensitive species map.*

* Note that in order to keep locality data confidential for some species, CDFW suppresses coordinate data for San Francisco garter snake. As such, although the location data of this species is not shown in the above 2-mile radius map, it is understood that this species does occur within 2 miles of the Project area as listed in Table B-1.

Table B-1. Special-Status Species List

Scientific Name	Common Name	EONDX	ACCURACY	SITEDATE	FEDLIST	CALLIST	CRPR	CDFW STATUS
<i>Agrostis blasdalei</i>	Blasdale's bent grass	100588	specific area	20150503	None	None	1B.2	
<i>Arctostaphylos regismontana</i>	Kings Mountain manzanita	56356	2/5 mile	19930908	None	None	1B.2	
<i>Bombus caliginosus</i>	obscure bumble bee	97936	3/5 mile	19290704	None	None		
<i>Callophrys mossii bayensis</i>	San Bruno elfin butterfly	23049	non-specific area	20170603	Endangered	None		
<i>Danaus plexippus plexippus</i> pop. 1	monarch - California overwintering population	100116	1/5 mile	2015XXXX	Candidate	None		
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	16946	1 mile	19850908	None	None	3.2	
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	104676	1 mile	XXXXXXXX	None	None	1B.1	
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	103074	specific area	20150503	None	None	1B.2	
<i>Leptosiphon croceus</i>	coast yellow leptosiphon	46039	specific area	20150514	None	Endangered	1B.1	
<i>Leptosiphon rosaceus</i>	rose leptosiphon	46065	1/5 mile	195004XX	None	None	1B.1	
<i>Limnanthes douglasii</i> ssp. <i>ornduffii</i>	Ornduff's meadowfoam	93451	non-specific area	20110216	None	None	1B.1	
<i>Limnanthes douglasii</i> ssp. <i>ornduffii</i>	Ornduff's meadowfoam	93452	specific area	2011XXXX	None	None	1B.1	
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	Choris' popcornflower	110062	specific area	20150328	None	None	1B.2	
<i>Potentilla hickmanii</i>	Hickman's cinquefoil	19533	2/5 mile	19330506	Endangered	Endangered	1B.1	
<i>Potentilla hickmanii</i>	Hickman's cinquefoil	35653	specific area	20190305	Endangered	Endangered	1B.1	
<i>Rana draytonii</i>	California red-legged frog	11954	1/5 mile	20040607	Threatened	None		SSC
<i>Rana draytonii</i>	California red-legged frog	71138	specific area	200111XX	Threatened	None		SSC
<i>Rana draytonii</i>	California red-legged frog	103900	non-specific area	20170109	Threatened	None		SSC
<i>Rana draytonii</i>	California red-legged frog	115354	specific area	201901XX	Threatened	None		SSC
<i>Rana draytonii</i>	California red-legged frog	119724	specific area	20100305	Threatened	None		SSC
<i>Rana draytonii</i>	California red-legged frog	119725	specific area	20061011	Threatened	None		SSC
<i>Rana draytonii</i>	California red-legged frog	119728	80 meters	20190504	Threatened	None		SSC
<i>Taxidea taxus</i>	American badger	56791	3/5 mile	19480501	None	None		SSC
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	27539	specific area	20160407	Endangered	Endangered		FP

Scientific Name	Common Name	EONDX	ACCURACY	SITEDATE	FEDLIST	CALLIST	CRPR	CDFW STATUS
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	27540	non-specific area	20060927	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	27538	non-specific area	20140328	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	27537	1/5 mile	19870505	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	14767	specific area	20130703	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	27531	specific area	20111115	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	27497	specific area	20080413	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	72663	specific area	20080421	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	92544	1/10 mile	20070812	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	92595	1/10 mile	20060815	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	92603	80 meters	20110505	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	92744	80 meters	20070413	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	92745	specific area	20120720	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	92750	1/10 mile	19380805	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	93211	non-specific area	19510318	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	93247	1/5 mile	20040804	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	93262	1/5 mile	19791226	Endangered	Endangered		FP
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	93271	1/5 mile	1983XXXX	Endangered	Endangered		FP
<i>Triphysaria floribunda</i>	San Francisco owl's-clover	103381	3/5 mile	19000317			1B.2	

This page intentionally left blank.

APPENDIX C

Critical Habitat Map

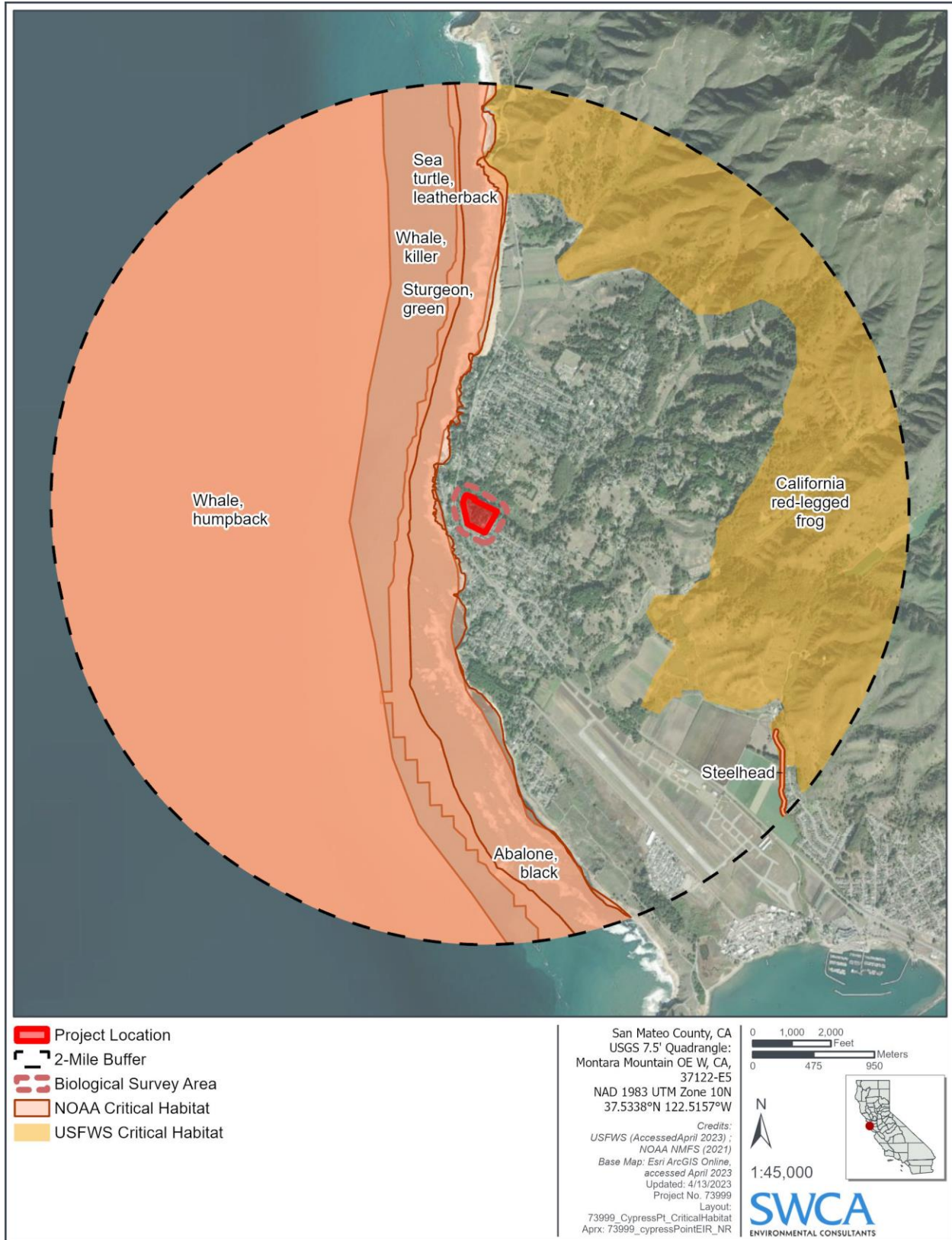


Figure C-1. Critical habitat map.

This page intentionally left blank.

APPENDIX D

Special-Status Species Considered for Potential Occurrence in the Biological Study Area

Table D-1. Special-Status Species Considered for Potential Occurrence in the Biological Study Area

Species Name	General Habitat Description	Legal Status Federal/State/ CNPS Status	Potential for Occurrence and Rationale
Plants			
Blasdale's bent grass (<i>Agrostis blasdalei</i>)	Perennial rhizomatous herb that occurs in coastal bluff scrub, coastal dunes, and coastal prairie habitats. Elevation: 5-150 meters. Blooming period: May–June.	--/--/1B.2	Low: Potentially suitable coyote brush scrub habitat that is present within the BSA is of marginal quality. This species was not observed during the field survey, which was conducted within the appropriate blooming period for this species. There is one recorded CNDDDB occurrence located approximately 0.32 mile south of the BSA.
Choris' popcorn-flower (<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>)	Annual herb that occurs in wetland and riparian areas in chaparral, coastal prairie, and coastal scrub. Elevation: 15–160 meters. Flower Season: March–June.	--/--/1B.2	Moderate: Potentially suitable coyote brush scrub habitat is present along the northwest portions of the BSA. This species was not observed during the field survey, which was conducted within the appropriate blooming period for this species. There is one recorded CNDDDB occurrence located approximately 0.80 mile north of the BSA.
Coastal marsh milkvetch (<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>)	Perennial herb that occurs in coastal marshes, seeps, and adjacent sand along northern and central California coast. Elevation: 0–150 meters. Flower season: April–October.	--/--/1B.2	None: Suitable habitat is absent within the BSA. No CNDDDB occurrences have been recorded within 2 miles of the BSA.
Coast yellow leptosiphon (<i>Leptosiphon croceus</i>)	Annual herb that occurs in coastal bluff scrub and coastal prairie habitats. Blooming period: April–May. Elevation: 10-150 meters	--/--/1B.2	None: Suitable habitat is absent within the BSA. This species has one known population and was not observed during the field survey, which was conducted within the appropriate blooming period for this species. There is one recorded CNDDDB occurrence located approximately 0.24 mile southwest of the BSA in coastal bluff scrub habitat.
Hickman's cinquefoil (<i>Potentilla hickmanii</i>)	Occurs in vernal wet meadows, coastal bluff scrub, closed-cone coniferous forest, vernal mesic meadows and seeps, and freshwater marshes and swamps. Found along central California coast. Blooming period: April–August. Elevation: 10–149 meters.	FE/SE/1B.1	Low: Suitable Monterey Cypress – Monterey Pine Woodland habitat within the BSA is of marginal quality due to extensive historic development-related disturbance. The BSA lacks suitable mesic habitat with granitic soils. This species was not observed during the field survey, which was conducted within the appropriate blooming period for this species. There is one recent recorded CNDDDB occurrence within 2 miles of the BSA.
Kellogg's horkelia (<i>Horkelia cuneata</i> var. <i>sericea</i>)	Perennial herb that occurs in closed-cone coniferous forest, chaparral, coastal dunes, and coastal scrub. Elevation: 10–200 meters. Flower season: April–September.	--/--/1B.1	Low: Potentially suitable coyote brush scrub habitat is present on the western and northeastern extent of the BSA; however, no CNDDDB occurrences have been recorded within 2 miles of the BSA. The CNPS database recorded this species within the Half Moon Bay, California USGS 7.5-minute quadrangle; this occurrence is greater than 20 years old. This species was not observed during the field survey, which was not conducted during the appropriate blooming period.

Species Name	General Habitat Description	Legal Status Federal/State/ CNPS Status	Potential for Occurrence and Rationale
Perennial goldfields (<i>Lasthenia californica</i> ssp. <i>macrantha</i>)	Perennial herb that occurs in coastal bluff scrub, coastal dunes, and coastal scrub. Elevation: 6–750 meters. Flower season: January–November.	--/--/1B.2	Low: Potentially suitable coyote brush scrub habitat is present on the western and northeastern extent of the BSA but is of marginal quality and lacks the strong coastal influence typical of bluffs on the immediate coast. This species was not observed during the field survey, which was not conducted within the appropriate blooming period for this species. There is one recorded CNDDDB occurrence approximately 0.91 mile from the BSA within coastal bluff scrub habitat adjacent to Montara State Beach.
Rose leptosiphon (<i>Leptosiphon rosaceus</i>)	Annual herb that occurs in coastal bluff scrub. Elevation: 0–100 meters. Flower season: April–July.	--/--/1B.1	Low: Potentially suitable coyote brush scrub habitat is present on the western and northeastern extent of the BSA. This species was not observed during the field survey, which was conducted within the appropriate blooming period for this species. There is one recorded CNDDDB occurrence approximately 0.10-mile northwest of the BSA within coastal bluff scrub habitat adjacent to Point Montara Lighthouse; however, the occurrence is from the 1950s and is presumed extirpated.
San Francisco owl's-clover (<i>Triphysaria floribunda</i>)	Annual herb found in coastal prairie, coastal scrub, and coastal grasslands on serpentine soils. Blooming period: April–June. Elevation: 10–160 meters.	--/--/1B.2	None: No suitable habitat occurs within the BSA. This species was not observed during the field survey, which was conducted within the appropriate blooming period for this species. In addition, no serpentine soils are present within the BSA. There is one recorded CNDBB occurrence within 2 miles south of the BSA.
Ornduff's meadowfoam (<i>Limnanthes douglasii</i> ssp. <i>ornduffii</i>)	Annual herb found in agricultural fields, meadows, and seeps. Restricted to single agricultural field in San Mateo County. Blooming period: November–May. Elevation: 10–20 meters.	--/--/1B.1	None: No suitable habitat occurs within the BSA. This species was not observed during the field survey. There are two recorded CNDDDB occurrences within 2 miles of the BSA located approximately 1.4 and 1.6 miles southeast of the BSA within agricultural and meadow habitat required for this species. This species has only been documented in these two locations.
Natural Communities of Concern			
Northern Coastal Salt Marsh	Marsh habitat supporting herbaceous, suffrutescent, salt-tolerant hydrophytes often active in summer and dormant in winter. Characteristic species include marsh jaumea (<i>Jaumea carnosa</i>), sea lavender (<i>Limonium californicum</i>), and alkali heath (<i>Frankenia salina</i>). Developed around Humboldt Bay, Tomales Bay, San Francisco Bay, Elkhorn Slough, and Morro Bay.		None: The Project area does not support northern coastal salt marsh.

Species Name	General Habitat Description	Legal Status Federal/State/ CNPS Status	Potential for Occurrence and Rationale
Northern Maritime Chaparral	Dense shrub habitat composed of several species of manzanita, wild lilac, and chamise. Associated with sandy substrates in coastal fog zone, usually on rolling to hilly terrain. Occurs from Santa Cruz to Sonoma Counties.		None: The Project area does not support northern maritime chaparral.
Animals			
Invertebrates			
Western bumble bee (<i>Bombus occidentalis</i>)	In California, populations are currently restricted to high elevation sites in Sierra Nevada, though there have been few observations on northern California coast (Xerces Society 2021). Basic habitat requirements include suitable nesting sites for colonies, nectar and pollen from floral resources available throughout duration of colony period (spring, summer, and fall), and suitable overwintering sites for queens (U.S. Forest Service 2021).	--/SC	Low: The BSA contains marginally suitable foraging habitat for this species and impacts to this species are not expected. There are no recorded CNDDDB occurrences within 2 miles of the BSA.
Monarch butterfly (<i>Danaus plexippus</i>)	Occurs along coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind-protected tree groves (eucalyptus, Monterey pine, and cypress), with nectar and water sources nearby.	FC/--	Low: The BSA contains marginally suitable overwintering habitat for this species within Monterey cypress – Monterey pine woodland habitat; however, the trees within the Project area were likely planted as windbreaks and do not provide dense canopy cover preferred by this species. In the northwestern portion of the BSA, the Monterey cypress are denser and may provide more suitable overwintering habitat for monarchs. However, this area is not within the Project footprint. In addition, there is only one recorded CNDDDB occurrence, approximately 1.4 miles northeast of the Project area; the record is from 1984. Therefore, potential for overwintering monarchs is low.
San Bruno elfin butterfly (<i>Callophrys mossii bayensis</i>)	Small brownish butterfly that occurs in coastal mountains near San Francisco Bay, in fog belt of steep north-facing slopes that receive little direct sunlight. Primary larval host plant is stonecrop (<i>Sedum spathulifolium</i>).	FE/--	None: No suitable habitat for this species occurs within the BSA. There are no recorded CNDDDB occurrences within 2 miles of the BSA.

Species Name	General Habitat Description	Legal Status Federal/State/ CNPS Status	Potential for Occurrence and Rationale
Amphibians			
California red-legged frog (<i>Rana draytonii</i>)	Inhabits permanent and temporary pools, streams, freshwater seeps, and marshes in lowlands and foothills occurring from sea level to 6,500 feet. Uses adjacent upland habitat for foraging and refuge. Breeds during wet season from December through March. Lays between 300 and 4,000 eggs in large cluster attached to plants near water surface. Eggs hatch after about 4 weeks and undergo metamorphosis in 4 to 7 months.	FT/SSC	Moderate: No suitable aquatic habitat for this species was observed on-site; however, there is potentially suitable aquatic habitat for this species in Montara Creek immediately north of the BSA if the area is inundated for a sufficiently long period of time during the wet season and within San Vicente Creek approximately 0.6 mile south of the BSA. In addition, potentially suitable upland dispersal habitat is present within coyote brush scrub habitat along the western portions of the BSA. The species was not observed in the BSA during the field survey. Seven CNDDDB occurrences have been recorded within 2 miles of the BSA between 2006 and 2019.
Foothill yellow-legged frog (<i>Rana boylei</i>)	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Range in California includes north and central coasts and western Sierra Nevada.	FC/SE, SSC	None: No suitable aquatic habitat for this species was observed on-site or within the BSA. There are no recorded CNDDDB occurrences within 2 miles of the BSA.
Mammals			
American badger (<i>Taxidea taxus</i>)	Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils.	--/--/SSC	None: The BSA contains marginally suitable habitat for this species within grassland habitat on-site. However, no burrows were observed during the site visit and the level of disturbance within the BSA has likely impacted soils and habitat viability for this species. There are no recorded CNDDDB occurrences within 2 miles of the BSA.
Reptiles			
Green sea turtle (<i>Chelonia mydas</i>)	Occurs in marine environments and often found in shallow waters with marine grass flats, coral reefs, and algae. Typically found in tropical waters.	FT/--/--	None: The BSA does not provide suitable habitat for this species. No CNDDDB occurrences have been recorded within the BSA.
San Francisco garter snake (<i>Thamnophis sirtalis tetrataenia</i>)	Uses wide range of habitats; prefers grassland or wetland near ponds, marshes, and sloughs; and may overwinter in upland areas away from water.	FE/SE, FP	Low: Marginally suitable upland dispersal habitat for this species is present within the BSA within grassland habitat throughout the BSA, yet it is unlikely for this species to occur in the BSA given the marginal quality of habitat and distance (approximately 250 feet) from the potentially suitable aquatic habitat in Montara Creek. Eighteen CNDDDB occurrences have been recorded within 2 miles of the BSA since the 1930s. However, suitable high-quality foraging and aquatic habitat for this species is absent within the BSA. This species was not observed in the BSA during the field survey.

Species Name	General Habitat Description	Legal Status Federal/State/ CNPS Status	Potential for Occurrence and Rationale
Fish			
Longfin smelt (<i>Spirinchus thaleichthys</i>)	Anadromous smelt found in California's bay, estuary, and nearshore environments from San Francisco Bay north to Lake Earl, near Oregon border. San Francisco Estuary and Sacramento-San Joaquin Delta support largest longfin smelt population in California.	FC/ST, SSC	None: The BSA does not provide suitable habitat for this species. No CNDDDB occurrence recorded within BSA.
Birds			
California least tern (<i>Sternula antillarum browni</i>)	Largely coastal species that feeds on fish and nests on sandy dunes or beaches. Once common in California; currently nesting colonies are isolated to southern California and scattered Bay Area beaches.	FE/SE/--	None: The BSA does not provide suitable habitat for this species. No CNDDDB occurrence recorded within BSA.
Marbled murrelet (<i>Brachyramphus marmoratus marmoratus</i>)	Spends most of non-breeding season in offshore or nearshore environments near coniferous forests. Only California alcid species to nest inland. Typically nests in upper branches of redwoods or Douglas fir forests. Builds nests with lichens and mosses.	FT/SE/--	None: The BSA does not provide suitable habitat for this species. No CNDDDB occurrence recorded within BSA.
Saltmarsh common yellowthroat (<i>Geothlypis trichas sinuosa</i>)	Frequents low, dense vegetation near water, especially marshes and wetlands. Nests usually placed on or within 8 centimeters (3 inches) of ground. May be over water, in emergent aquatic vegetation, dense shrubs, or other dense growth.	--/SSC	Low: The BSA does not contain suitable marsh habitat for this species or dense vegetation near water to support nesting and foraging behavior. Coastal scrub habitat located at the western and northeastern extents of the Project site may provide marginal foraging habitat for this species. No CNDDDB occurrence recorded within BSA.
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	Found in shores, peninsulas, offshore islands, bays, estuaries, and rivers along Pacific Coast. Breeding sites entail coastal beaches above high-tide line, sand spits, dune-backed beaches, and river bars.	FT, MBTA/SSC	None: The BSA does not contain suitable nesting or foraging habitat for this species. No CNDDDB occurrence recorded within BSA.

Sources: Baldwin et al. (2012); CNDDDB (2023); USFWS (2023b)

Status Codes:

-- = No status

Federal: FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; MBTA = Protected by Migratory Bird Treaty Act

State: SE = State Endangered; ST = State Threatened; SC = State Candidate; SR = State Rare; SSC = California Species of Special Concern; FP = Fully Protected

California Native Plant Society:

List 1B = Rare, threatened, or endangered in California and elsewhere

List 2 = Rare, threatened, or endangered in California, but more common elsewhere

CNPS Threat Code:

_.1 = Seriously endangered in California (more than 80% of occurrences threatened / high degree and immediacy of threat)

_.2 = Fairly endangered in California (20–80% occurrences threatened)

_.3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)

Potential for Occurrence Ratings:

Present = The species has been observed during Project surveys.

High = The Project area is located within the geographic and elevation ranges of the species; suitable habitat that meets the life history requirements of the species is present in or near the Project area; and observations have been documented recently (i.e., within the past 20 years) within 0.25 mile of the Project.

Moderate = The Project area is located within the geographic and elevation ranges of the species; suitable habitat for the species is present in or near the Project area, but may be of low quality; and observations may have been documented within 1 mile of the Project.

Low = The Project area is not located within the geographic and/or elevation ranges for the species; suitable habitat for the species is present, but may be of marginal quality; barriers to migration/dispersal may be present; the species was not documented within 1 mile of the Project; and/or all observation records within 1 mile are more than 20 years old.

None = Suitable habitat does not exist in the Project area, or the species is restricted to or known to be present only within a specific area outside of the Project area. Nearby occurrence records, if present, are extirpated or are more than 20 years old.

Absent = Surveys for the species have been conducted during the appropriate season and the species was not observed.

APPENDIX E

NWI / NHD Records and Soils Map

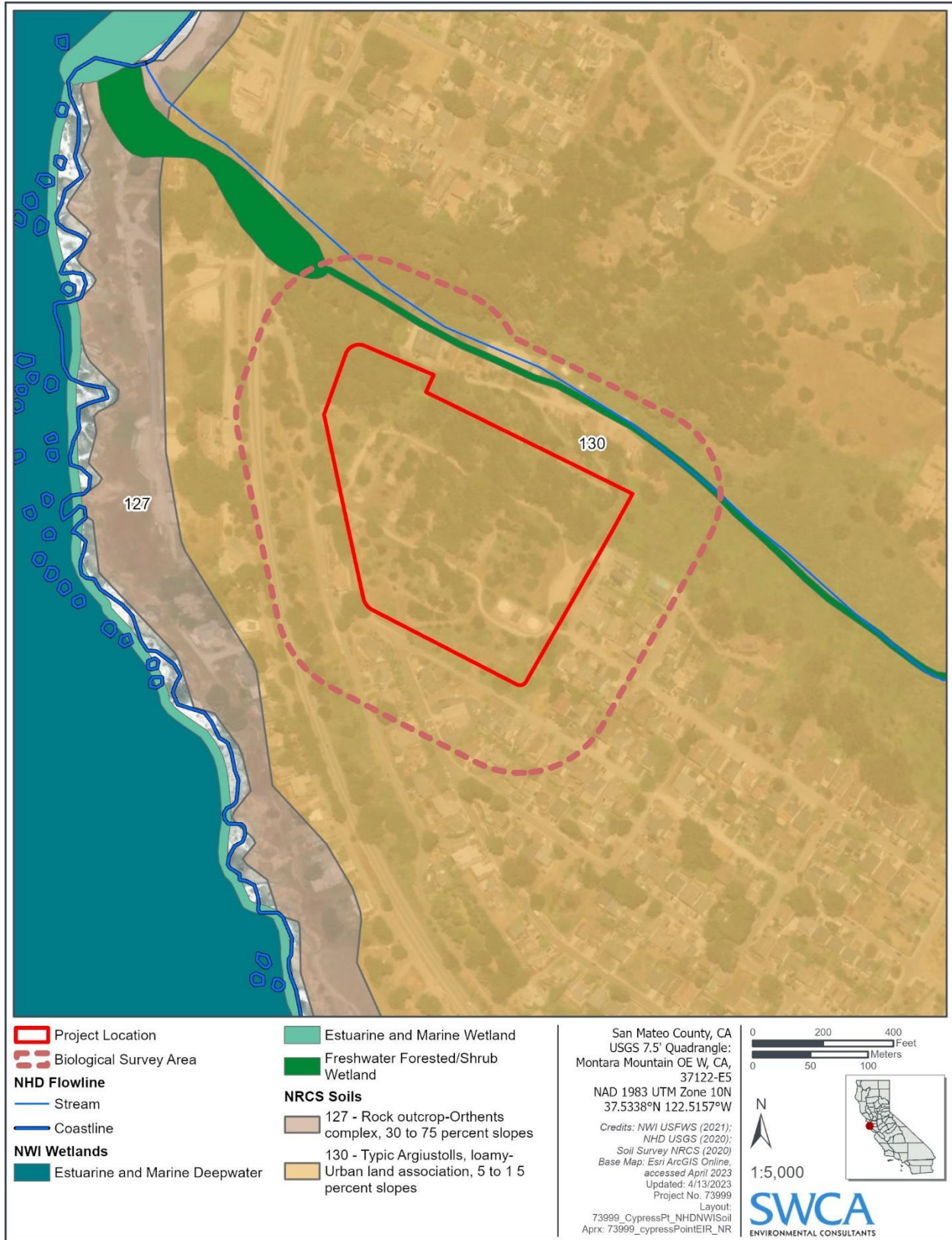


Figure E-1. NWI / NHD Records and soils map.

This page intentionally left blank.

APPENDIX F

Plant and Animal Species Observed During Field Survey

Table F-1. Plant Species Observed During the Field Survey

Scientific Name	Common Name	Origin	Form	Rarity Status	Cal-IPC Status ¹	Wetland Status (AW 2016) ²
<i>Acacia</i> sp.	Acacia	Non-native (invasive)	Shrub	-	-	-
<i>Achillea millefolium</i>	Yarrow	Native	Perennial herb	-	-	-
<i>Allium triquetrum</i>	White flowered onion	Non-native	Perennial herb	-	-	-
<i>Artemisia californica</i>	California sage brush	Native	Shrub	-	-	-
<i>Artemisia douglasiana</i>	California mugwort	Native	Perennial herb	-	-	-
<i>Avena barbata</i>	Slim oat	Non-native (invasive)	Annual grass	-	Moderate	-
<i>Baccharis pilularis</i>	Coyote brush	Native	Shrub	-	-	-
<i>Bellis perennis</i>	English lawn daisy	Non-native	Perennial herb	-	-	-
<i>Brassica rapa</i>	Common mustard	Non-native (invasive)	Annual herb	-	Limited	FACU
<i>Bromus diandrus</i>	Ripgut brome	Non-native (invasive)	Annual grass	-	Moderate	-
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	Non-native (invasive)	Annual herb	-	Moderate	-
<i>Carpobrotus edulis</i>	Iceplant	Non-native (invasive)	Perennial herb	-	High	-
<i>Ceanothus thyrsiflorus</i>	Blueblossom	Native	Shrub	-	-	-
<i>Cirsium vulgare</i>	Bull thistle	Non-native (invasive)	Perennial herb	-	Moderate	FACU
<i>Conium maculatum</i>	Poison hemlock	Non-native (invasive)	Perennial herb	-	Moderate	FACW
<i>Cortaderia jubata</i>	Andean pampas grass	Non-native (invasive)	Perennial grass	-	High	FACU
<i>Cotoneaster franchetii</i>	Cotoneaster	Non-native (invasive)	Shrub	-	Moderate	-
<i>Crassula ovata</i>	Jade plant	Non-native	Shrub	-	-	-
<i>Delairea odorata</i>	Cape ivy	Non-native (invasive)	Perennial herb	-	High	FAC
<i>Echium candicans</i>	Pride of madeira	Non-native (invasive)	Shrub	-	Limited	-
<i>Erigeron canadensis</i>	Canada horseweed	Native	Annual herb	-	-	-
<i>Festuca myuros</i>	Rattail sixweeks grass	Non-native (invasive)	Annual grass	-	Moderate	-
<i>Festuca perennis</i>	Italian rye grass	Non-native (invasive)	Annual, perennial grass	-	Moderate	FAC
<i>Foeniculum vulgare</i>	Fennel	Non-native (invasive)	Perennial herb	-	High	-
<i>Fragaria chiloensis</i>	Beach strawberry	Native	Perennial herb	-	-	-

Scientific Name	Common Name	Origin	Form	Rarity Status	Cal-IPC Status ¹	Wetland Status (AW 2016) ²
<i>Genista monspessulana</i>	French broom	Non-native (invasive)	Shrub	-	High	UPL
<i>Geranium dissectum</i>	Wild geranium	Non-native (invasive)	Annual herb	-	Limited	-
<i>Geranium molle</i>	Crane's bill geranium	Non-native	Annual, perennial herb	-	-	-
<i>Hedera helix</i>	English ivy	Non-native (invasive)	Vine or shrub	-	High	-
<i>Helminthotheca echioides</i>	Bristly ox-tongue	Non-native (invasive)	Annual, perennial herb	-	Limited	FAC
<i>Hirschfeldia incana</i>	Short-podded mustard	Non-native (invasive)	Perennial herb	-	Moderate	FAC
<i>Hesperocyparis macrocarpa</i>	Monterey cypress	Native	Tree	Rank 1B.2	-	-
<i>Holcus lanatus</i>	Common velvetgrass	Non-native (invasive)	Perennial grass	-	Moderate	-
<i>Hordeum murinum</i>	Foxtail barley	Non-native (invasive)	Annual grass	-	Moderate	FACU
<i>Hypochaeris radicata</i>	Hairy cats ear	Non-native	Perennial herb	-	Moderate	FACU
<i>Iris douglasiana</i>	Douglas iris	Native	Perennial herb	-	-	-
<i>Juncus patens</i>	Rush	Native	Perennial grass-like herb	-	-	FACW
<i>Lotus corniculatus</i>	Bird's foot trefoil	Non-native	Perennial herb	-	-	FAC
<i>Lysimachia arvensis</i>	Scarlet pimpernel	Non-native	Annual herb	-	-	FAC
<i>Malva parviflora</i>	Cheeseweed	Non-native	Annual herb	-	-	-
<i>Medicago polymorpha</i>	California burclover	Non-native	Annual herb	-	Limited	FACU
<i>Oxalis pes-caprae</i>	Bermuda buttercup	Non-native (invasive)	Perennial herb	-	Moderate	-
<i>Pinus radiata</i>	Monterey pine	Native	Tree	Rank 1B.1	-	-
<i>Plantago coronopus</i>	Cut leaf plantain	Non-native	Annual herb	-	-	FAC
<i>Plantago lanceolata</i>	Ribwort	Non-native	Perennial herb	-	Limited	FAC
<i>Polystichum munitum</i>	Western sword fern	Native	Fern	-	-	FACU
<i>Prunus cerasifera</i>	Cherry plum	Non-native	Tree	-	Limited	-
<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	Non-native	Annual herb	-	-	FAC
<i>Raphanus sativus</i>	Radish	Non-native (invasive)	Annual, biennial herb	-	Limited	-
<i>Rubus ursinus</i>	California blackberry	Native	Vine, shrub	-	-	FAC
<i>Rumex acetosella</i>	Sheep sorrel	Non-native (invasive)	Perennial herb	-	Moderate	FACU
<i>Rumex crispus</i>	Curly dock	Non-native (invasive)	Perennial herb	-	Limited	FAC

Scientific Name	Common Name	Origin	Form	Rarity Status	Cal-IPC Status ¹	Wetland Status (AW 2016) ²
<i>Rumex pulcher</i>	Fiddleleaf dock	Non-native	Perennial herb	-	-	FAC
<i>Sambucus racemosa</i>	Red elderberry	Native	Shrub	-	-	FACU
<i>Sanicula crassicaulis</i>	Pacific sanicle	Native	Perennial herb	-	-	-
<i>Senecio vulgaris</i>	Common groundsel	Non-native	Annual herb	-	-	FACU
<i>Scrophularia californica</i>	California bee plant	Native	Perennial herb	-	-	FAC
<i>Silybum marianum</i>	Milk thistle	Non-native (invasive)	Annual, perennial herb	-	Limited	-
<i>Sonchus asper</i> ssp. <i>asper</i>	Sow thistle	Non-native	Annual herb	-	-	FAC
<i>Sonchus oleraceus</i>	Sow thistle	Non-native	Annual herb	-	-	UPL
<i>Stipa pulchra</i>	Purple needle grass	Native	Perennial herb	-	-	-
<i>Symphotrichum chilense</i>	Pacific aster	Native	Perennial herb	-	-	FAC
<i>Taraxia ovata</i>	Sun cup	Native	Perennial herb	-	-	-
<i>Toxicodendron diversilobum</i>	Poison oak	Native	Vine, shrub	-	-	FACU
<i>Trifolium hirtum</i>	Rose clover	Non-native	Annual herb	-	Limited	-
<i>Vicia sativa</i>	Common vetch	Non-native	Annual herb, vine	-	-	-
<i>Vinca major</i>	Big-leaf periwinkle	Non-native (invasive)	Perennial herb	-	Moderate	FACU
<i>Zantedeschia aethiopica</i>	Calla lily	Non-native	Perennial herb	-	-	-

¹ California Invasive Plant Council (Cal-IPC) Ratings:

High: These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate: These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited: These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

² Facultative Wetland (FACW) = Usually occur in wetland, but may occur in non-wetland; Facultative (FAC) = Occur in wetland and non-wetland; Facultative Upland (FACU) = Usually occur in non-wetland, but may occur in wetland; Upland (UPL) = Almost never occur in wetland.

Table F-2. Animal Species Observed During the Field Survey

Scientific Name	Common Name
Birds	
<i>Corvus brachyrhynchos</i>	American crow
<i>Turdus migratorius</i>	American Robin
<i>Calypte anna</i>	Anna's hummingbird
<i>Sayornis nigricans</i>	Black phoebe
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Psaltiriparus minimus</i>	Bushtit
<i>Melospiza crissalis</i>	California towhee
<i>Callipepla californica</i>	California quail
<i>Corvus corax</i>	Common raven
<i>Haemorhous mexicanus</i>	House finch
<i>Troglodytes aedon</i>	House wren
<i>Charadrius vociferus</i>	Killdeer
<i>Zenaida macroura</i>	Mourning dove
<i>Buteo lineatus</i>	Red-shouldered hawk
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Melospiza melodia</i>	Song sparrow
<i>Cyanocitta stelleri</i>	Steller's jay
<i>Cathartes aura</i>	Turkey vulture
<i>Aphelocoma californica</i>	Western scrub-jay

APPENDIX G

Photo Documentation



Photo G-1. View facing southeast showing coyote brush scrub and Monterey cypress – Monterey pine vegetation communities. Photo taken April 4, 2023.



Photo G-2. View facing northwest showing developed uses in the southern portion of the BSA with invasive species and perennial rye grass to the left and right of the dirt access road. Photo taken April 4, 2023.



Photo G-3. View facing northwest showing a dirt access road, adjacent concrete foundation (left), and perennial rye grass and Monterey cypress – Monterey pine vegetation communities in the northern portion of the BSA. Photo taken April 4, 2023.



Photo G-4. View facing north showing cape ivy, grassland, and Monterey cypress – Monterey pine vegetation communities along the northeastern portion of the proposed Project area. Photo taken April 4, 2023.



Photo G-5. View facing north showing the remnants of concrete foundations situated in the northern portion of the BSA. Photo taken April 4, 2023.



Photo G-6. View facing northeast showing a dirt access road and materials staging at the entrance to the site in the southern portion of the BSA. Photo taken April 4, 2023.



Photo G-7. View facing northeast showing dense California blackberry occurring with cotoneaster in the central portion of the BSA. Photo taken April 4, 2023.



Photo G-8. View facing northwest of an access road and representative vegetation communities throughout the BSA. Photo taken April 4, 2023.