SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE

# Biological Resources Assessment

## DraLion Subdivision and Development Project

## San Martin, California

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## Executive Summary

This assessment of biological resources was prepared by Sunset Ecological Solutions for the proposed development of the property along California Avenue, unincorporated community of San Martin, Santa Clara County, California (APN 779-08-001). It was prepared to determine the vegetation communities present on the parcel, potential for sensitive biological communities, and special-status species to occur in the Project Area based on a field site visit and review of background literature. All sensitive biological communities or special-status species observed during the site visit were noted. However, this assessment does not constitute full protocol-level surveys for sensitive biological communities and special-status species, nor is it a formal wetland delineation. As part of this assessment, potentially significant impacts on biological resources were assessed and avoidance measures for any potential impacts have been recommended and incorporated into the Project.

Based on the site visit and review of background literature and databases, the Project Area consists of non-native annual grassland, coast live oak woodland, bare ground, and ruderal areas. The Project Area contains no sensitive biological communities. No special-status plant species were observed in the Study Area during the field site visit and none are deemed to have potential to occur. One special-status bird species, burrowing owl, and one special-status mammal species, American badger, has a moderate potential occur within the Project Area. Additionally, non-special-status nesting birds may be present during the breeding season. With the implementation of avoidance and minimization measures proposed, the DraLion Subdivision and Development Project will prevent disturbance to wildlife species that have a moderate or higher potential to occur. Work will either commence outside of the nesting bird season, or implement preconstruction surveys for burrowing owl and nesting birds prior to the start of the Project.

The Project, when considering the proposed avoidance and minimization measures, will not impact sensitive biological resources.

## Introduction

The purpose of this report is to provide the results of the biological resources assessment background search and site visit for the 8.97-acre parcel located on California Avenue in San Martin, Santa Clara County (County), California on Assessor's Parcels Numbers (APN) 779-08-001 (Study Area, See Appendix A Figures 1 and 5).

This site visit and assessment was conducted to fulfill the need for a determination of the presence or potential occurrence of protected habitats or special-status species and identify potential impacts to those resources that could occur from the DraLion Subdivision and Development Project (Project) activities.

## Project Description

The Project proposes to subdivide the Study Area into two roughly equally sized lots. The existing parcel will be subdivided along California Avenue. Each parcel will contain one

approximately 2,000 square foot single family home with a garage. Parcel one (west parcel) will use Harding Avenue as access to the property and parcel two (east parcel) will use Colony Avenue to access the property. A well is proposed to be constructed at the southwestern corner of parcel one and be shared between the two parcels. A subgrade water line that runs along the southern boundary of the two parcels will provide water to parcel two. Each parcel proposes to have a septic tank and a septic drain field (see Project Plans in Appendix B and Figure 5 in Appendix A). Because the developments are conceptual at this stage, a generalized 10-foot disturbance footprint around all of these features is assumed and covers a total area of approximately 69,250 square feet (1.59 acres). All areas within this buffer are assumed to be impacted by the Project. All proposed Project disturbance has been designed to be located outside of any potential jurisdictional waters of the US and State and sensitive biological communities.

The Project also proposes the recommended minimization and avoidance measures as presented in this report for protected habitats, and special-status vegetation and wildlife species, including nesting birds. These proposed measures are more fully described in the Impacts and Avoidance and Minimization Measures section below, but summarized here to include:

- A biologist will conduct a worker education awareness program about the special-status species that may be present at the site for sensitive biological resources;
- Pre-construction wildlife surveys will be conducted after construction of the wildlife exclusion fence and before Project activities begin;
- Project construction will either commence outside of the nesting bird season (January 15 to August 15); or surveys shall be conducted by a qualified biologist no more than two weeks prior to the Project start and all active nests will be avoided;
- Inclusion of proposed Project construction best management practices (BMPs), including sediment and erosion controls.

## Methods

On August 14, 2024, Sunset Ecological Solutions biologist Kevin Chang conducted a field assessment of the Study Area and areas immediately surrounding it to evaluate the potential presence of sensitive habitat, sensitive vegetation communities, and aquatic features. On-site habitats were additionally assessed to determine the potential for occurrence of special-status plant and wildlife species. Observed plant communities, aquatic features, and plant and wildlife species were noted. Site conditions were noted as they relate to habitat requirements of special-status plant and wildlife species known to occur in the vicinity as determined by the background literature research.

Prior to the site visit, and again during the writing of this report, background literature was reviewed to determine the potential presence of sensitive vegetation types, aquatic communities, and special-status plant and wildlife species. Resources reviewed for sensitive vegetation communities and aquatic features include aerial photography, the California Native Plant Society (CNPS) Online Database (2024), the Information for Planning and Consultation

(IPaC) database (USFWS 2024), and the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, CDFW 2024). For database queries, a 3-mile radius around the Study Area was included as the focal search area.

# Regulatory Background

## Sensitive Biological Communities

Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, or riparian habitat. These habitats are protected under federal regulations such as the Clean Water Act; state regulations such as the Porter-Cologne Act, the Streambed Alteration Program, and CEQA; or local ordinances or policies such as city or county tree ordinances, Special Habitat Management Areas, and General Plan Elements.

### Waters of the US

Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (CWA) applies to all waters including wetlands that have a continuous surface connection to a navigable water. The landward limits of Section 10 jurisdiction in tidal waters extends to the mean high water (MHW) line in tidal (navigable) waters of the U.S while the Section 404 landward limits extend to the high tide line and extent of any adjacent wetlands. Any actions within Section 10 or the Rivers and Harbors Act or Section 404 of the CWA are subject to jurisdiction from the US Army Corps of Engineers (USACE). Additionally, CWA Section 401 requires an applicant for any federal permit that proposes an activity which may result in a discharge to "waters of the United States" to obtain certification from the state that the discharge will comply with other provisions of the Act. Certification is provided by the San Francisco Bay Regional Water Quality Control Board (RWQCB).

### Waters of the State

The Porter-Cologne Act (Division 7 of the California Water Code) is the primary state regulation that addresses water quality standards. Under the act, State Water Regional Control Board has the ultimate authority over water rights and water quality policy. The state and regional boards regulate all pollutant or nuisance discharges that may affect either surface water or groundwater.

### Streams, Lakes, and Riparian Habitat

Streams and lakes, as habitat for fish and wildlife species, are subject to jurisdiction by the California Department of Fish and Wildlife (CDFW) under Sections 1600-1616 of California Fish and Game Code. Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or ephemerally through a bed or channel having banks and supports fish or other aquatic life…[including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals,

aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). “Riparian” is defined as “on, or pertaining to, the banks of a stream.” Riparian vegetation is defined as “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

### Critical Habitat

Critical habitat is a term defined in the ESA as a specific, formally-designated geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with the USFWS to conserve listed species on their lands and to ensure that any activities or Projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or Projects do not adversely modify critical habitat to the point that it will no longer aid in the species’ recovery. In many cases, this level of protection is similar to that already provided to species by the ESA jeopardy standard. However, designated critical habitat areas that are currently unoccupied by the species but which are needed for the species’ recovery are protected by the prohibition against adverse modification.

## Special-Status Species

Special-status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. In addition, CDFW Species of Special Concern (SSCs; species/taxa that face extirpation in California if current population and habitat trends continue), and CDFW California Fully Protected Animals (species for which CDFW will not authorize take) are all considered special-status species. Although SSCs generally have no special legal status, they are given special consideration under CEQA. Plant species on the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (Inventory) with California Rare Plant Ranks (Rank) of 1, 2, and 3 (CNPS 2024) are also considered special-status plant species and must be considered under CEQA.

In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGC). Under these laws, deliberately destroying active bird nests, eggs, and/or young is illegal.

Bat species designated as “High Priority” by the Western Bat Working Group (WBWG) are afforded legal protection under Section 15380(d) of the CEQA Guidelines. Species designated “High Priority” are defined as “imperiled or are at high risk of imperilment based on available information on distribution, status, ecology, and known threats. California Fish and Game Code continues to protect non-listed bat species and their roosting habitat, including individual

roosts and maternity colonies. Relevant regulations include CFGC Section 86; 2000; 2014; 3007; 4150, along with Title 14 of California Code of Regulations.

## Wildlife Corridors

Wildlife movement corridors are linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments. Habitat corridors provide connectivity for, and are used by wildlife and as such fulfill several functions. They maintain connectivity for daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation. The suitability of a habitat as a wildlife movement corridor is related to the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the specific species ecology.

Wildlife use movement corridors in several ways. Species may use corridors as mainly a through-way or route to move between separated habitats or species might consistently live or dwell in the corridor itself. Large herbivores, such as deer and elk, and medium-to-large carnivores, such as coyotes, bobcats and mountain lions, are typically passage species. "Corridor dwellers" are those species that have limited dispersal capabilities - a category that includes most plants, insects, reptiles, amphibians, small mammals, and birds - and use corridors for a greater length of time and the wildlife movement corridors must fulfill key habitat components specific to a species' life history requirements in order for these species to survive. For these reasons movement corridors is best evaluated on a species-level.

## Santa Clara County

The County of Santa Clara tree ordinance requires that a tree removal permit is obtained prior to the removal of a heritage or protected tree. A heritage tree includes any tree which because of its history, girth, height, species, or other unique quality, has been recommended for inclusion on the heritage resource inventory by the Historical Heritage Commission and found by the board of Supervisors to have special significant to the community, and which has therefore been included in the heritage resource inventory adopted by resolution of the Board of Supervisors.

A protected tree shall consist of the following:

a) Any tree having a main trunk or stem measuring 37.7 inches or greater in circumference (12 inches or more in diameter) at a height of 4 ½ feet above ground level, or in the case of multi-trunk trees a total of 75.4 inches in circumference (24 inches or more of the diameter) of all trunks in the following areas of the County:
    (1) Parcels zone “Hillsides” (three acres of less);
    (2) Parcels within a “-d” (Design Review) combining zoning district;
    (3) Parcels within the Los Gatos Hillside Specific Plan Area.
b) Any tree within the “-h1” Historic Preservation zoning district for New Almaden having a main trunk or stem measuring 6 inches or more in diameter (18.8 inches or greater in circumference) at a height of 4.5 feet above ground level, or in the case of multi-trunk

trees, a total of 12 inches in diameter (37.7 inches in circumference) of all trunks at 4.5 feet above ground. For parcels having a base zoning district of "HS, Hillside" within the "-h1" combining zoning district, this provision supersedes C16-3(a)(1).

c) Any heritage tree, as that term is defined in Section C16-2.
d) Any tree required to be planted as a replacement for an unlawfully removed tree; pursuant to Section C16-17€ of this division.
e) Any tree that was required to be planted or retained by the conditions of approval for any use permit; building site approval, grading permit, architectural and site approval (ASA), design review, special permit or subdivision.
f) On any property owned or leased by the County, any tree which measures over 37.7 inches in circumference (12 inches or more in diameter) measured 4.5 feet above the ground, or which exceeds 20 feet in height.
g) Any tree, regardless of size, within road rights-of-way and easements of the County, whether within or without the unincorporated territory of the County.

## Santa Clara Valley Habitat Plan

The Santa Clara Valley Habitat Plan (Habitat Plan) is a 50-year regional plan to protect endangered species and natural resources while allowing for orderly development in Santa Clara County. Development projects that occur within the Habitat Plan may require a permit from the Santa Clara Valley Habitat Agency if the Project has potential to impact covered species or their habitat under the Habitat Plan. The Habitat Plan provides private developers, consultants, and property owners a streamlined approach for requesting and receiving CDFW and USFWS "take" permits for private development projects.

The following species are covered under the Santa Clara Valley Habitat Plan:

Table 1. Covered Species under the Santa Clara Valley Habitat Plan

| **Wildlife** | **Plants** |
|---|---|
| Bay checkerspot butterfly | Coyote ceanothus |
| California tiger salamander | Fragrant fritillary |
| California red-legged frog | Loma Prieta hoita |
| Foothill yellow-legged frog | Metcalf Canyon jewelflower |
| Least Bell's vireo | Most beautiful jewelflower |
| San Joaquin kit fox | Mount Hamilton thistle |
| Tricolored blackbird | Santa Clara Valley dudleya |
| Western burrowing owl | Smooth lessingia |
| Western pond turtle | Tiburon Indian paintbrush |

Additionally, if the proposed project affects any unmapped burrowing owl occupied nesting habitat, serpentine, riparian, stream, pond, or wetland land covers, coverage under the Habitat Plan is required.

# Results

## Existing Conditions

The Study Area has been, and is currently undeveloped. No structures exist within the Study Area. The Study Area is bounded by California Avenue to the north, Harding Avenue to the west, Colony Avenue to the east, and private residences to the south. The Study Area is enclosed by barbed wire fencing along Harding Avenue, Colony Avenue, and California Avenue. A wooden fence encloses the southern end of the Study Area. Adjacent land uses in the area include agricultural fields with low-density rural residential properties. Highway 101 lies 0.9 miles to the east of the Study Area.

The Study Area contains approximately 8.97 acres in total consisting of coast live oak woodland, non-native annuals grasslands, bare ground, and ruderal areas. (see Appendix A, Figure 6).

Soils within the Study Area are composed of San Ysidro loam 0 to 2 percent slopes, San Ysidro loam acid variant 0 to 2 percent slopes, and Pleasanton loam 0 to 2 percent slopes (USDA, 2024). See Appendix A Figure 2 to view the soils within the Study Area. Elevations are generally flat, between approximately 288 feet NAVD88 at the western end of the Study Area to 292 feet NAVD88 at the eastern end of the Study Area.

## Biological Communities

Biological communities in the Study Area include non-native annual grasslands, coast live oak woodland, bare ground, and ruderal areas. Descriptions for each biological community are contained in the following sections and location of each community are shown in Appendix A, Figure 6.

Table 2. Land Cover Types

| **Land Cover Type** | **Area** |
|---|---|
| Non-native Annual Grassland | 5.74 ac. |
| Coast Live Oak Woodland | 2.68 ac. |
| Bare Ground | 0.36 ac. |
| Ruderal | 0.19 ac. |
| **Total** | **8.97 ac.** |

## Non-Sensitive Biological Communities

### *Non-native Annual Grassland*

Non-native annual grassland areas comprise approximately 5.74 acres within the Study Area, occurring primarily in the western and portion of the Study Area, as well as along the southern boundary of the Study Area (See Appendix A Figure 6). At the time of the site visit, most grasses were unidentifiable due to the entire Study Area being mowed. From historical imagery, the site has been routinely mowed. However, grasses were able to be identified along the margins of the Study Area and around trees where mowing did not occur. Non-native annual grasslands within the Project Area contain elements of several non-native grassland alliances described by CNPS (2016a), including wild oat (*Avena barbata*), slim oat (*Avena fatua*), ripgut brome (*Bromus diandrus),* soft chess (*Bromus hordaceus*), and harding grass (*Phalaris aquatica*). See Appendix C Photos 2 and 6 for images of the non-native grassland.

### *Coast Live Oak Woodland*

Coast live oak woodland covers approximately 2.68 acres or the Study Area. The woodland area covers the eastern portion of the Study Area. The dominant tree species observed was coast live oak (*Quercus agrifolia*). Other trees observed include valley oak (*Quercus lobatum*)*,* walnut trees (*Juglans spp.*), and plum trees (*Prunus cerasifera*). The understory of the woodland consisted of non-native annual grasses and herbaceous vegetation including curly dock (*Rumex crispus*) and shortpod mustard (*Hirschfeldia incana*). The understory has been cut and is heavily disturbed. Common non-special-status birds were observed within the coast live oak woodland. Trees within the coast live oak woodland provide nesting and foraging habitat. Several ground squirrel and rabbit burrows were found within the coast live oak woodland. The burrows could potentially provide suitable habitat for burrowing owl and California tiger salamander. However, California tiger salamander has a low potential to occur in the Project Area. See the Special-Status Wildlife Species Section below for a description of burrowing owl and California tiger salamander and their potential to occur. See Appendix C, Photo 7 to view the observed burrows.

### *Bare Ground*

Bare ground areas comprise approximately 0.36 acres within the Study Area. The bare ground is located in the southwestern portion of the Study Area, and is presumably due to recent grading activities. Soils in the bare ground portion were noticeably less compacted compared to surrounding vegetation communities. No vegetation was observed on the bare ground. See Appendix C, Photo 3. The bare ground is not likely to provide high quality habitat for any special-status species.

### *Ruderal Vegetation*

Ruderal areas comprise 0.19 acres within the Study Area. Although not described in the literature, ruderal areas typically occur on land that has been previously disturbed and was subsequently colonized by non-native or invasive plant species. Within the Study Area, ruderal areas occur adjacent to the bare ground and in the southwestern corner of the Study Area (See Appendix C, Photo 4). The area is low lying and mud cracks were observed. However, no

wetland vegetation was present. Ruderal vegetation observed included chicory (*Cichorium intybus*), field blindweed (*Convolvulus arvensis*), willowherbs (*Epilobium spp.*), shortpod mustard, ribwort plantain (*Plantago lanceolata*), and curly dock.

### Sensitive Biological Communities

#### Waters of the US and State

No Waters of the US or State are located within the Study Area. A low-lying area consisting of ruderal vegetation with signs of hydrology was observed; however, it does not meet the USACE definition of a wetland due to a lack of wetland vegetation. No other sensitive biological communities were observed within the Study Area.

#### Critical Habitat

The Study Area is not located within critical habitat for any special status species. Designated critical habitat for steelhead – central California coast DPS (*Oncorhynchus mykiss*) lie in Llagas Creek approximately 0.3 miles to the north and 0.6 miles to the east. California tiger salamander (*Ambystoma californiense*) critical habitat lies 0.7 miles and 2 miles to the southwest. Bay checkerspot butterfly (*Euphydryas editha bayensis*) critical habitat lies 0.8 miles to the southwest (USFWS 2024).

## Special-Status Plant Species

A CNDDB search resulted in four special-status plant species occurring within a 3-mile radius of the Study Area (see Appendix A, Figure 3). An additional six plants were included into the special-status species occurrence table that are either covered under the Habitat Plan or in the USFWS IPaC list. The special-status species occurrence table (Appendix D) summarizes the potential for each of these species to occur in the Study Area. All of these species are extirpated or require specific habitats or soils that do not occur within the Study Area. The habitats within the property have little to no potential to support many of the special-status plant species that had been previously recorded within a 3-mile radius of the Study Area or were included in the General Plan and USFWS IPaC list.

No special status plant species were observed on the property. However, no focused-level surveys were conducted for any plants. Species that are identifiable year-round (e.g., manzanitas) were determined to be absent if they were not observed during the survey. In total, no special-status plants, including woodland woollythreads, were deemed to have a moderate or higher potential to occur within the Study Area. Potential for woodland woollythreads to occur within the Study Area is discussed in more detail below. Woodland woollythreads has an CNDDB occurrence of the plant species within the Study Area and the County of Santa Clara has requested surveys of the site for presence of the plant species.

#### Woodland Woollythreads (*Monolopia gracelins*) Rank 1B.2

Woodland woollythreads are an annual flowering plant in the aster family (*Asteraceae*) and endemic to California. The stems are erect to ascending and can grow up to 2.5 feet tall. The leaves and stems are generally woolly. The inflorescence consists of a ray flower with generally

yellow corollas and 20-100 yellow disk flowers (Johnson 2012). The flower blooms between March through July. The existing range of woodland woollythreads include the San Francisco Bay Area and San Luis Obispo County. It can be found in serpentine grasslands, chaparral, and oak woodlands.

There is a generalized CNDDB occurrence overlapping the Study Area. The exact location of the mapped plant is unknown but it was observed in the vicinity of San Martin. The observation was from a collection from 1901 and no updates of the occurrence are given. In the Project Area, no serpentine soils are present and the site is routinely disturbed from mowing. Through historical imagery, the Study Area has been mowed for decades, drastically reducing the propagability of dormant seeds within the soil. Additionally, the Project Area consists of several non-native species that are likely to outcompete woodland woollythreads. Thus, woodland woollythreads has no potential to occur within the site due to frequent disturbance However, preconstruction surveys for woodland woollythreads as requested by the County will be conducted to determine absence during the blooming season (March - July) prior to the project.

## Special-Status Wildlife Species

A CNDDB search resulted in ten special-status wildlife species occurring within a 3-mile radius of the Study Area (see Appendix A, Figure 4). An additional eight wildlife species were included that are either covered under the Habitat Plan or included in the USFWS IPaC list. The special-status species occurrence table, (Appendix C) summarizes the potential for each of these species to occur in the Study Area. No special-status wildlife species were observed in the Study Area during the site assessment.

Seventeen special-status wildlife species documented in the vicinity have no or low potential to occur within the Study Area due to lack of suitable habitat, previous and repeated site disturbance, and habitat fragmentation. One special-status bird species, the burrowing owl, has a moderate potential to occur which may burrows observed on site as nesting habitat and use the grasslands within the Project Area for foraging. In addition, non-protected nesting birds are present within the coast live oak woodland. Pre-construction nesting bird surveys will be conducted before construction activities begin. Species with CNDDB occurrences within or overlapping the Study Area and burrowing owl are discussed in more detail below.

### California Tiger Salamander (*Ambystoma californiense*) Federally Threatened, CDFG Species of Special Concern.

California tiger salamander (CTS) is a large, terrestrial salamander with a black body and white to yellow spots and bars (Stebbins 2003). The Central California Distinct Population Segment (DPS) is state and federally-listed as Threatened and is designated as a California Species of Special Concern. CTS are distributed throughout the Central Valley and Central Coast ranges from Colusa County south to San Luis Obispo and Kern counties from sea level to 1054 meters (3,460 feet) in elevation.

Two disjunct populations are located within Sonoma County and Santa Barbara County, which are geographically isolated from the Central Valley population.

CTS inhabit lowland grasslands, oak savannah, and mixed woodland habitats, and require vernal pools, seasonal ponds, or semi-permanent calm waters that pond water for a minimum of three to four months in duration for breeding and larval maturation, and adjacent upland habitat with small mammal burrows for aestivation (Storer 1925, Barry and Shaffer 1994, Stebbins 2003).

CTS begin migrating to breeding sites following the onset of autumn rains typically in November, and have been documented traveling distances up to 1.3 miles from a breeding site (Orloff 2007). Eggs are laid singly or in small clusters on the pond bottom or attached to individual strands of vegetation (Storer 1925, Shaffer and Fisher 1991, Barry and Shaffer 1994, Jennings and Hayes 1994). Metamorphosis occurs a minimum of ten weeks following hatching and young migrate in mass when temporary pools begin to dry in late spring or early summer (Feaver 1971, Jennings and Hayes 1994, Stebbins 2003). Juveniles and adults aestivate through the summer and fall typically in small mammal burrows, most frequently created by California ground squirrel (*Spermophilus beecheyi*) or pocket gopher (*Thomomys* spp.) (Jennings and Hayes 1994, Stebbins 2003). CTS are at risk of extinction due to loss of habitat from development of agriculture and grazing lands, habitat fragmentation, and introduction of predatory exotic species such as mosquitofish (*Gambusia affinis*), bullfrogs (*Rana catesbeiana*), and Louisiana red swamp crayfish (*Procambarus clarkii*) (Zeiner 1990, and Jennings and Hayes 1994).

Critical habitat for the Central California DPS of CTS was designated in 2005 (USFWS 2005) and there are ten critical habitat units within Santa Clara County. The Project Area does not overlap with any critical habitat unit for CTS.

The nearest CNDDB record of CTS is 0.8 miles to the southwest and was recorded in 1998 (CDFW 2024). Multiple ponds to the southwest have observed occurrences. Multiple ponds and vernal pools are present within 1 mile of the Project Area and have the potential to provide breeding habitat for CTS.

Ground squirrel burrows were observed within the Project Area and can provide upland habitat for CTS, but the Project Area is regularly disturbed. Agricultural and rural residential development in-between the Project Area and known breeding ponds make it unlikely for CTS to migrate to the Project Area. Additionally, there are no known occurrences east of Santa Teresa Boulevard which lies in-between the Project Area and known breeding ponds. Thus, there is a low potential for CTS to occur in the Project Area.

### Burrowing Owl (*Athene cunicularia*). California Species of Special Concern.

Burrowing owl are found throughout North and South America. In California, the populations have been declining due to urbanization, agriculture, and eradication of burrowing mammals (USFWS 2024).

Burrowing owls live within open habitats with sparse vegetation or bare soils, including prairies, grasslands, desert, and sagebrush steppe environments. The species have also adapted to live in urban and agricultural areas, including golf courses, pastures, airport medians, road embankments, or any open areas. Within the Santa Clara Valley, burrowing owls use

abandoned California ground squirrel burrows for nesting and shelter, but will also use burrows dug by other animals.

Burrowing owl has been observed 1.3 miles north west of the Study Area (CDFW 2024). California ground squirrel burrows were observed throughout the Study Area, but more prevalent in the western portion of the Study Area. Portions of the Project Area and areas within a 250 foot disturbance distance of potential nesting habitat may provide suitable foraging habitat. Thus, burrowing owl have a moderate potential to occur within the Project Area.

### American Badger (*Taxidea taxus*). California Species of Special Concern

American badger is a burrowing mammal native to North America. Within California, badgers are widely distributed throughout however, they may be comparatively uncommon or absent from areas where they historically occurred. They are more abundant in drier open stages of shrub, forest, and herbaceous habitats, with friable soils. The diet consists of rodents, especially ground squirrels and pocket gophers (CDFW, 2024).

American badger has been observed 0.8 miles to the northeast from the Study Area (CDFW 2024). Two other observations occur within a 3 mile radius from the Study Area. The open spaces and presence of burrowing rodents provide suitable foraging habitat for the American badger. Suitable denning habitat for badgers is also present in the non-native annual grasslands; however, frequent mowing may reduce the likelihood of dens. Thus, the American badger has a moderate potential to occur as a forager and low potential to occur as a breeder.

## Wildlife Corridors

The Project is not located within or adjacent to any areas identified as regionally important wildlife corridors (Habitat Plan). Additionally, no biologically significant wildlife movement areas, such as waterways and riparian buffers, are present. While the site is undeveloped, the habitat is highly fragmented by surrounding agricultural and rural developments. While the site may have historically been a movement corridor between the Santa Cruz and Diablo Mountain ranges, significant development within the Santa Clara Valley and the vicinity of the Study Area prevents such movement. Construction of the new residence would not increase the impact for wildlife movement through the area. While Project may have the potential to affect local movement from small species that currently reside in the Study Area and the surrounding agricultural and single family residences, animals are not expected to be significantly affected by the proposed residential development of the site, and surrounding agricultural and open habitat areas would provide the same movement habitat for these species.

## Santa Clara County

### Heritage and Protected Trees

In the Project Area, all trees proposed to be removed along Harding Avenue, California Avenue, and Colony Avenue will require a tree removal permit as they are within the right of way of the County. Although several trees have a main trunk or stem measuring 37.7 inches or greater within the Project Area, the parcel is not zoned as “hillsides”, in a design review zoning district,

or within the Los Gatos Hillside Specific Plan Area, thus not being considered a protected tree under Santa Clara County ordinance. An arborist report should be conducted to identify the health of all trees proposed to be removed.

### Santa Clara Valley Habitat Plan

The Study Area is located within the Santa Clara Valley Habitat Plan and land cover is mapped as Rural Residential. It is categorized as Area 3: Rural Development Not Covered under Private Development Coverage Areas. The Study Area is located within Fee Zone B (Agricultural and Valley Floor Lands). It is not located within any burrowing owl, wetland, or potential serpentine fee zones. The Study Area does not fall within any Habitat Plan Conditions areas.

## Impacts and Avoidance and Minimization Measures

No sensitive habitats or special-status species were observed within the Study Area. No special status plants, including woodland woollythreads, have potential to occur. However, one special status bird species, burrowing owl, have a moderate potential to occur. Project impacts are anticipated to occur entirely on non-sensitive vegetation communities, including portions of the non-native annual grasslands, coast live oak woodland, bare ground, and ruderal areas (See Appendix A Figure 7).

The proposed project has been designed to avoid impacts to both sensitive habitats and special-status species. Mitigation measures developed by the project proponent, as discussed below, will prevent impacts to special-status species and nesting birds.

Table 3. Impacts by Land Cover Type

| **Land Cover Type** | **Temporary Impacts** | **Permanent Impacts** |
|---|---|---|
| Non-native Annual Grassland | 0.59 ac. | 0.32 ac. |
| Coast Live Oak Woodland | 0.16 ac. | 0.08 ac. |
| Bare Ground | 0.33 ac. | > 0.01 ac. |
| Ruderal | 0.08 ac. | 0.02 ac. |
| **Total** | **1.16 ac.** | **0.43 ac.** |

The following sections present recommended proposed measures to avoid or reduce impacts to these species within the Project Area.

### Sensitive Biological Communities

No sensitive biological communities are located within the Project Area. Thus, no measures are recommended for avoiding and minimizing impacts to sensitive biological communities.

## Special-Status Plants

Grading of the site will remove much of the vegetation and disturb existing soils. Any occurring rare plants would be directly impacted. While no focused rare-plant surveys were conducted, no special-status plant species were observed in the Study Area, and no special-status plants have been determined to have a moderate or higher change of occurring. However, the County has requested a survey for woodland woollythreads within the Study Area. A preconstruction survey for woodland woollythreads will be conducted prior to construction. If woodland woollythreads are observed on site, a buffer would be implemented and CDFW would be consulted for further measures.

## Special-Status Wildlife

One special-status wildlife species, burrowing owl, has a moderate or higher potential to be present in the Project Area or has potential to disperse into the project work areas. However, the proposed Project avoidance and minimization measures as discussed below will ensure that special-status species with moderate potential to occur and disperse will not be impacted:

### General Wildlife Mitigation Measures

- A worker education awareness program will be conducted about the special-status species that may be present at the site. The training shall consist of basic identification of each protected wildlife species that has moderate potential to occur. The program will cover the basic biology and behavior of each species, how they may be encountered in the work area, and procedures to follow when they are encountered. Any personnel joining the work crew later will receive the same training before beginning work. The penalties for noncompliance will be relayed to all project personnel. The education session will be presented by the project biologist. An educational brochure containing color photographs of all listed species in the work area(s) will be distributed to all employees working within the Project site(s). The original list of employees who attend the training sessions will be maintained by the applicant and be made available for review by the agencies upon request.
- A qualified biologist shall conduct pre-construction surveys within 48 hours before the onset of construction activities to identify any wildlife within the Project Area. The pre-construction survey will identify any burrows within the disturbance area to determine if burrows are suitable habitat for any special status species.
- All open sections of trenches or holes will be inspected each morning prior to the start of work for the day and periodically during the course of the workday. If any animals are observed in a trench or hole, the on-call biologist will be called to assist all "non-sensitive" species in escaping from the bore pit or will relocate the animal(s) to suitable habitat outside the work area. CDFW and/or USFWS will be informed if any special-status species are found. Any special-status animal will not be assisted or handled.
- To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches more than 1 foot deep will be completely covered at the close of each working day by plywood or similar materials, or provided with one or more

escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals.

- Because wildlife may take refuge in cavity-like and den-like structures and become trapped, all construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods will be either securely capped prior to storage or thoroughly inspected by the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way.
- At the start of each work day, construction staff will check under the vehicles and their tires to ensure no wildlife species are utilizing the equipment as temporary shelter.
- All Project-related vehicle traffic will be restricted to established roads, construction areas, and other designated areas. These areas should be established in locations disturbed by previous activities to prevent further adverse effects.

### Burrowing Owl

The proposed project would directly disturb burrows suitable for burrowing owl. Construction noise could also temporarily adversely affect nesting owls within disturbance distances during nesting season for burrowing owl (February 1 through September 30). The following measures would be provided to avoid impacts to burrowing owl.

- A habitat assessment for burrowing owls shall be conducted within 30 days of grading, or construction activities that shall result in ground disturbance or vegetation removal, to confirm that habitat for burrowing owl is absent from the site. If the habitat assessment confirms that habitat for this species is absent from the site, then no further mitigation for burrowing owls would be required.
- Habitat assessment for burrowing owls shall be conducted within 30 days of grading, or construction activities for the future proposed residences that shall result in ground disturbance, to confirm that habitat for burrowing owls remains from the site. If the habitat assessment confirms that habitat for this species is now absent from the site, then no further mitigation for burrowing owls would be required.
- Preconstruction surveys for burrowing owls shall be implemented if the above habitat assessment results in presence of habitat for burrowing owls (i.e. California ground squirrel burrows or other burrows of sufficient size), then the following measures shall be implemented to ensure that the project does not impact this species.
    - A pre-construction survey shall be conducted by a qualified biologist for burrowing owls within 30 days of the on-set of grading, or construction activities. This survey shall be conducted according to methods described in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012).
    - If evidence of burrowing owls is found during the breeding season (February 1 – August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance shall include establishment of a 250-foot non-disturbance buffer zone around nests.

Construction may occur outside of the 250-foot non-disturbance buffer zone. Construction may occur inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the project proponent develops an avoidance, minimization, and monitoring plan that shall be reviewed by the County and CDFW prior to project construction based on the following criteria.

- The County and CDFW approves of the avoidance and minimization plan provided by the project applicant.
- A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction). The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities shall cease within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until the adults and juveniles from the occupied burrows have moved out of the project site.

- During the non-breeding season (September 1 – January 31), the project proponent shall establish a 250-foot non-disturbance buffer around occupied burrows as determined by a qualified biologist. Construction activities outside of this 250-foot buffer are allowed. Construction within the non-disturbance buffer is allowed if the following criteria are met in order to prevent owls from abandoning important overwintering sites.
  - A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction)
  - The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
  - If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities shall cease within the 250-foot buffer.
  - If the owls are gone for at least one week, the project proponent may request approval from the County that a qualified biologist excavates usable burrows to prevent owls form re-occupying the site. After all usable burrows are excavated, the buffer zone shall be removed and construction may continue. Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

- Based on the avoidance, minimization, and monitoring plan developed (as required in the above section), during construction, the non-disturbance buffer zones shall be established and maintained if applicable. A qualified biologist shall monitor the site consistent with the requirements described above to ensure that buffers are enforced

and owls are not disturbed. The biological monitor shall also conduct training of construction personnel on the avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.

- Any passive relocation plan would need to be approved by the County and CDFW, and would only occur during the non-breeding season (September 1–January 31) if the other measures described above do not allow work to continue. Passive relocation would only be proposed if the burrow needed to be removed, or had the potential of collapsing (e.g., from construction activities), as a result of the covered activity.
- If passive relocation is eventually allowed, a qualified biologist can passively exclude birds from heir burrows during non-breeding season only by installing one-way doors in burrow entrances. These doors shall be in place for 48 hours to ensure owls have left the burrow, and then the biologist shall excavate the burrow to prevent reoccupation. Burrows shall be excavated using hand tools. During excavation an escape route shall be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having the overburden collapse into the burrow and trapping owls inside.
- Any exceptions to passive relocation prohibitions would be subject to the approval of the County and CDFW.
- The project can opt-in to the Santa Clara Valley Habitat Plan, Alternative Mitigation BIO-MIT-1b, and follow the mitigations measures for burrowing owls included under Condition 15 of the Habitat Plan.

### American badger

The proposed project would directly disturb burrows and foraging habitat suitable for American badger. No badgers were observed in the Study Area during the site survey; however, should badgers occur onsite at the time of construction, the project could result in mortality of individuals of the species. The following avoidance and minimization measures would avoid significant impacts to American badger.

- During the course of the preconstruction surveys for other species, a qualified biologist shall also determine the presence or absence of badgers prior to the start of construction. If badgers are found to be absent, no other mitigations for the protection of badgers shall be warranted.
- If an active badger den is identified during pre-construction surveys within or immediately adjacent to an area subject to construction, a construction-free buffer of up to 300 feet shall be established around the den. Once the biologist has determined that badger has vacated the burrow, the burrow can be collapsed or excavated, and ground disturbance could proceed.
- Should the burrow be determined to be a natal or reproductive den, and because badgers are known to use multiple burrows in a breeding burrow complex, a biological monitor shall be present onsite during construction activities in the vicinity of the burrows to ensure the buffer is adequate to avoid direct impact to individuals or natal/reproductive den abandonment. The monitor shall be required to be present until it is determined that young are of an independent age and construction activities would not harm individual badgers.

### Nesting Birds

The proposed project would remove or directly disturb mature trees or vegetation suitable for use by nesting birds and construction noise could temporarily adversely affect nesting birds off site within disturbance distances during nesting bird season (January 15 through August 14), if present. The following measures would be provided to avoid impacts to both special-status birds and non-special-status nesting bird species. If any active nests are established within the vicinity of proposed grading in the future, they will be avoided until young birds are able to leave the nest (fledge) and forage on their own. Avoidance will be accomplished either by scheduling grading and tree removal during the non-nesting period (August 15 through February 1) or, if this is not feasible, by conducting a pre-construction survey for nesting birds within 14 days of the start of construction activities. Provisions of the pre-grading survey effort, if necessary, will include the following:

- If construction is scheduled during the nesting period (January 15 through August 14), a qualified wildlife biologist will conduct a pre-construction bird survey to confirm the presence or absence of active nests in the vicinity of proposed construction activities. The survey area will include the complete Project Area and adjacent areas up to 300 feet for raptors.
- If active nests are encountered, the biologist will prepare and implement species-specific measures to prevent abandonment of the active nest(s). At a minimum, construction in the vicinity of a nest's tree or burrow shall be deferred until the young birds have fledged, and a construction-disturbance within a distance determined by the biologist will be provided based on the species, visual and auditory buffers, and presence of non-project activity disturbance. Grading or other project-related disturbance in the vicinity of the nest will not be permitted until the biologist confirms that the young birds have fledged.
- If project construction is halted for more than 14 days during the nesting season, another survey will be conducted to assure nests are not bult within that time period.

Implementation of the above proposed measures will avoid impacts to special-status and non-special status nesting birds should they occur on-site.

## Wildlife Corridors

No mitigation is proposed as no impacts to wildlife corridors were identified.

## Santa Clara County

### Heritage and Protected Trees

The Project is anticipated to remove several trees that would be considered protected trees by the County of Santa Clara. A tree removal permit would be required. Before removal, a certified arborist should determine the trees to be removed are diseased. If diseased, no tree replacement would be required. A tree replacement ratio of 1:1 would mitigate for the removal of healthy, protected trees.

## Santa Clara Valley Habitat Plan

The Project Area is located within the Habitat Plan area. Within the Project Area, land cover types non-native annual grasslands, coast live oak woodland, bare ground, and ruderal. The Project Area is located within Area 3 - Rural Development Not Covered. This classification exempts rural development projects in unincorporated Santa Clara County lands from the requirement for coverage and payment of fees under the Habitat Plan.

The Project is not expected to impact any wildlife or plant species covered by the Habitat Plan due to a lack of suitable habitat, suitable soils, extirpation from the region, abundance of invasive vegetation, and highly disturbed habitat. However, if burrow surveys determine presence for burrowing owl, then burrowing owl would be covered under the Habitat Plan. The Project is not within any unmapped burrowing owl occupied nesting habitat, serpentine, riparian, stream, pond or wetland land covers However, the burrow habitat assessment and surveys, if warranted, may determine that this is unmapped burrowing owl occupied nesting habitat. No avoidance and minimizations are recommended for species covered under the Habitat Plan.

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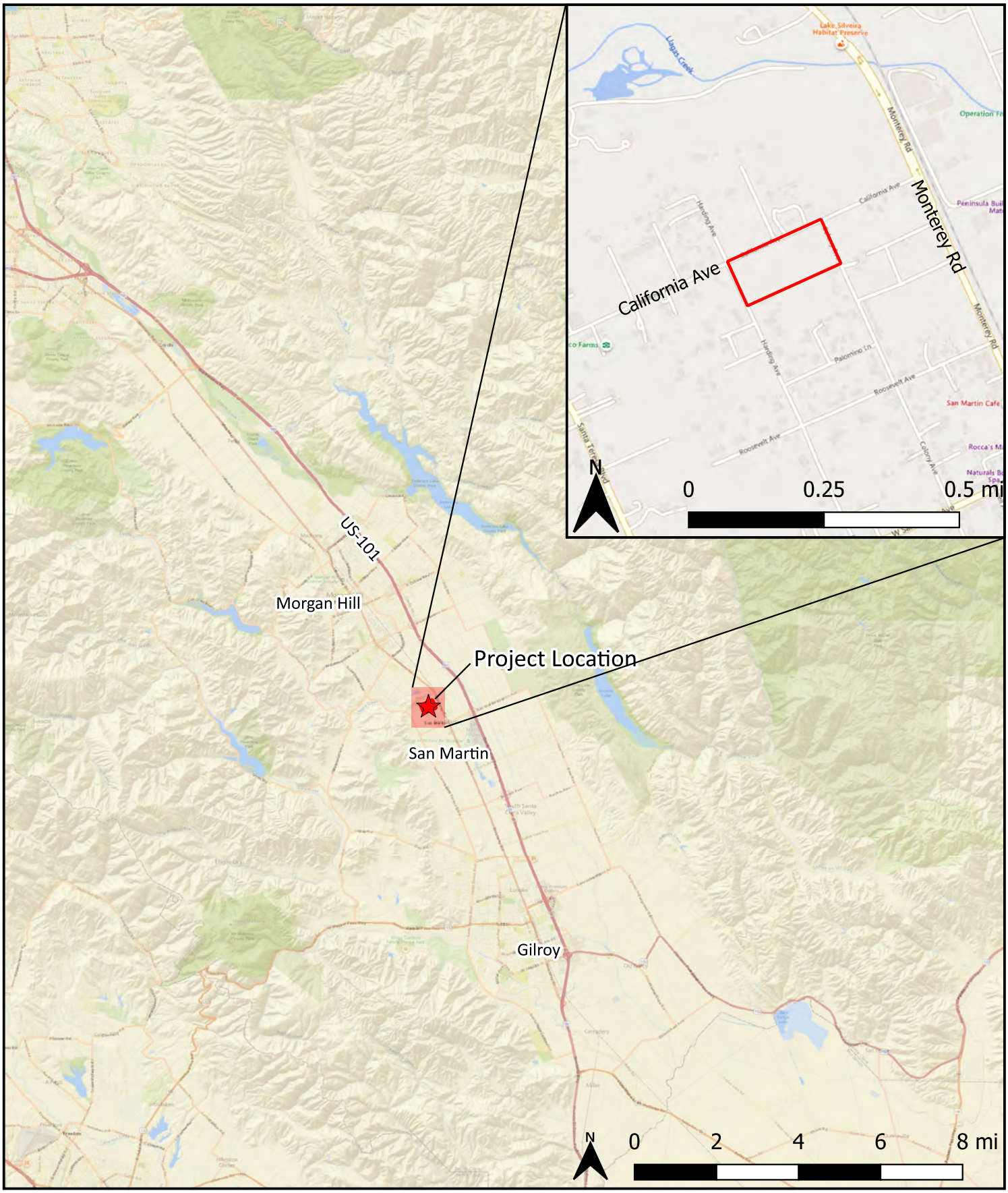
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APPENDIX A. PROJECT FIGURES




Source: Bing Map 2024, Esri Standard 2024

Prepared By: KChang July 22 2024

# Figure 1. Project Vicinity Map

DraLion Subdivision and Development Project
Biological Resources Assessment
California Ave, San Martin, California

SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE



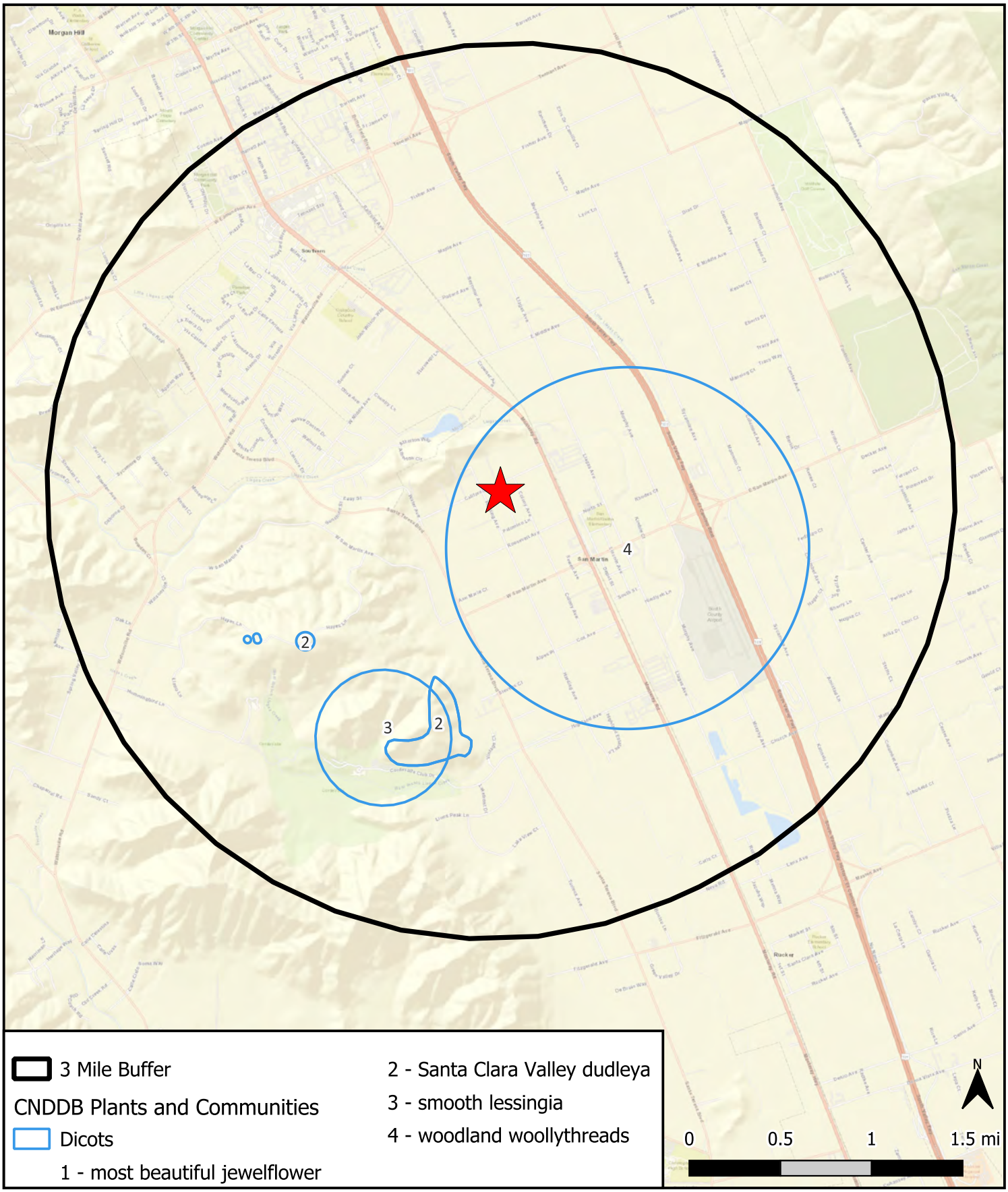

Source: Esri Satellite 2024, USGS Soil Survey 2024

Prepared By: KChang July 22 2024

# Figure 2. Soil Types in Study Area

DraLion Subdivision and Developent Project
Biological Resources Assessment
California Ave, San Martin, California

SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE




Source: CDFW CNDDB 2024, Esri Standard 2024

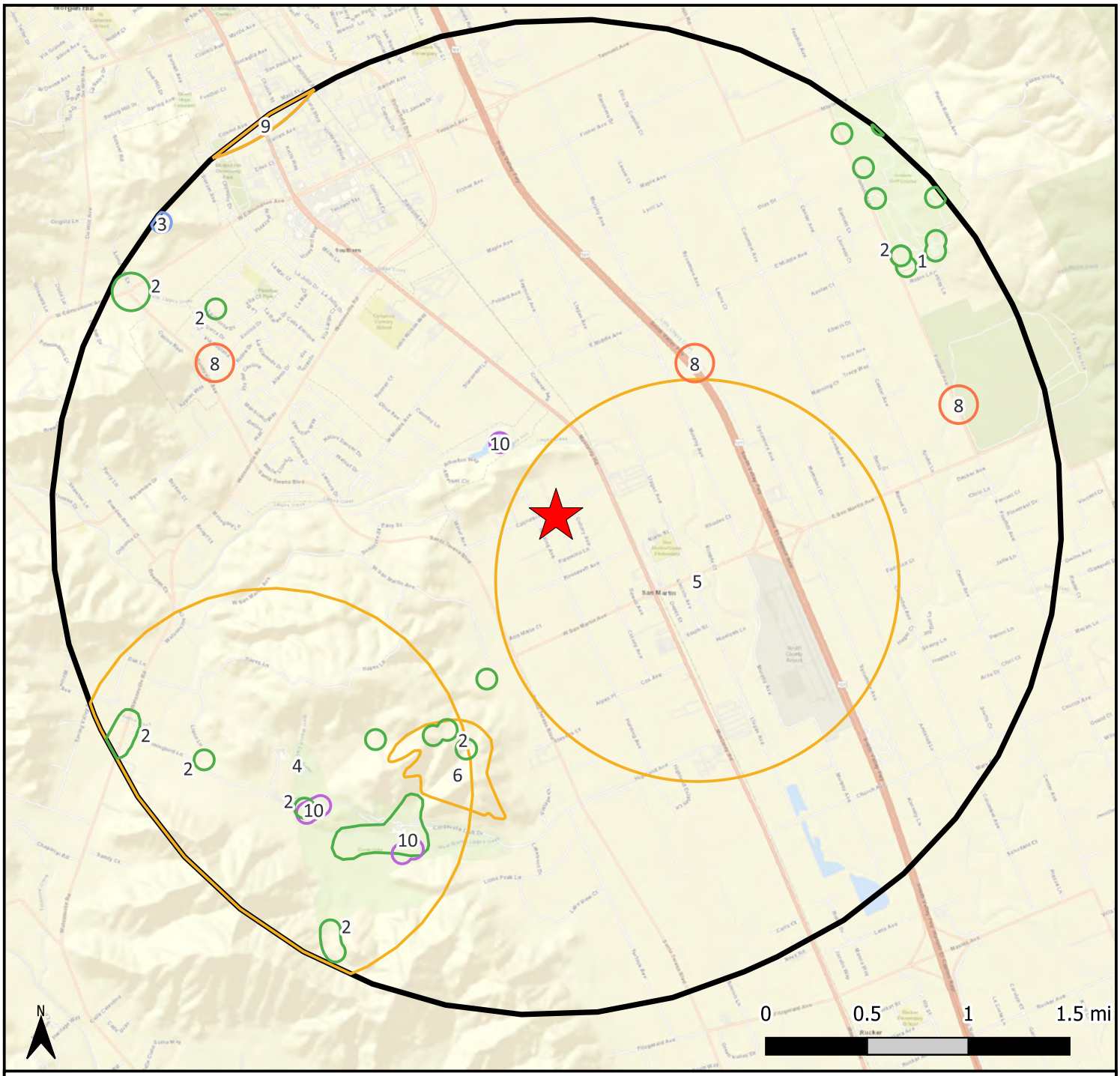
Prepared By: KChang July 22 2024

Note: The occurences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special species occur in an area.

# Figure 3. CNNDB Plant and Community Occurrences

DraLion Subdivision and Development Project
Biological Resources Assessment
California Ave, San Martin, California

SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE




3 Mile Buffer

CNDDB Animal Occurrences

Amphibians

1 - California red-legged frog

2 - California tiger salamander - central California DPS

Birds

3 - burrowing owl

Insects

4 - Bay checkerspot butterfly

5 - Crotch's bumble bee

6 - Opler's longhorn moth

7 - western bumble bee

Mammals

8 - American badger

Reptiles

9 - coast horned lizard

10 - northwestern pond turtle

Source: CDFW CNDDB 2024, Esri Standard 2024

Prepared By: KChang July 22 2024

Note: The occurences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special species occur in an area.

# Figure 4. CNNDB Wildlife Occurrences

DraLion Subdivision and Development Project
Biological Resources Assessment
California Ave, San Martin, California

SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE




Source: Esri Satellite 2024, Faria Engineering & Surveying

Prepared By: KChang August 15 2024

# Figure 5. Proposed Subdivision and Developments

DraLion Subdivision and Development Project
Biological Resources Assessment
California Ave, San Martin, California

SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE




Source: Esri Satellite 2024, Faria Engineering & Surveying

Prepared By: KChang August 21 2024

# Figure 6. Vegetation Communities

DraLion Subdivision and Development Project
Biological Resources Assessment
California Ave, San Martin, California

SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE




Source: Esri Satellite 2024, Faria Engineering & Surveying

Prepared By: KChang August 21 2024

# Figure 7. Project Impacts

DraLion Subdivision and Development Project
Biological Resources Assessment
California Ave, San Martin, California

SUNSET ECOLOGICAL SOLUTIONS
BIOLOGY, PERMITTING, AND COMPLIANCE

APPENDIX B. PROJECT PLANS

## Applicant/Owner:

Maggie Rakow
DraLion LLC, a California limited liability company
12200 Center Ave
San Martin, CA
408-859-9549
mdndesigns19@gmail.com

## Engineer:

David L. Faria, RCE 92432
Faria Engineering & Surveying
1656 Cienega Road Unit 100
Hollister, CA 95023
602.515.7650
david@fariaengineering.com

## Project Information:

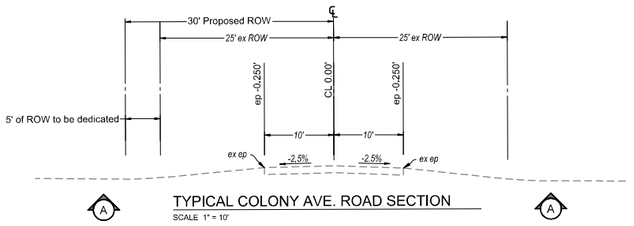
| | |
|---|---|
| APN | 779-08-001 |
| Present Use: | Vacant |
| Proposed Use: | Residential |
| Present Zoning: | RR-5Ac |
| Existing Improvements: | As Shown |
| Water: | ex well |
| Sanitary Sewer: | proposed OWTS |
| Gas & Electric: | PGE |
| Fire Responsibility Area: | LRA |
| Wildland Urban Interface: | N/A |
| HCP Area: | Rural Development Not Covered |
| Hazard Zone(s): | N/A |
| Gross Area: | 10.001 ac |
| Net Area: | 8.959 ac |

***Boundary Note:*** Property lines shown on this plan are based on record data and boundary monumentation measured to date.

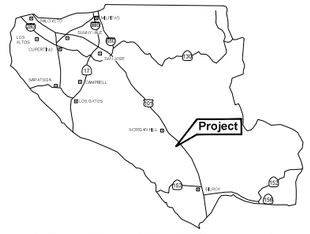
***Flood Zone:*** The property lies wholly in Zone D, areas in which flood hazards are undetermined, but possible, per FEMA Firm Panel 06085C0629H, effective May 18, 2009.

***Basis of Bearings:*** The basis of bearings for this map is the centerline of California Avenue as filed in Book 285 of Maps at Page 7, Santa Clara County Records. (S64° 56'W).

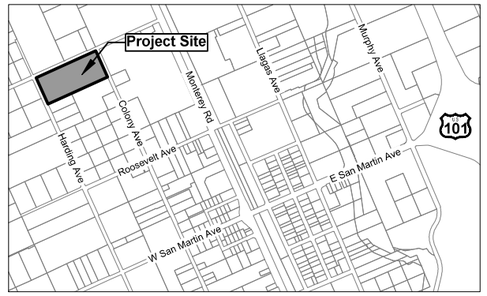
***Benchmark:*** Elevations shown on this plan are based on field survey using GPS (NAVD88).



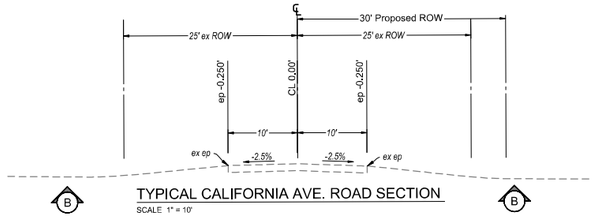

TYPICAL COLONY AVE. ROAD SECTION
SCALE 1" = 10'



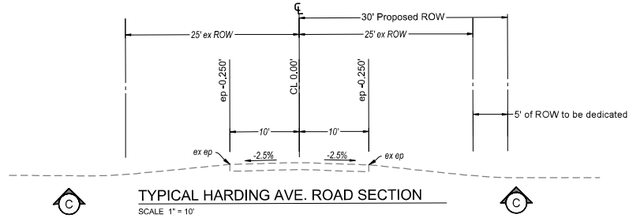

COUNTY LOCATION MAP




Vicinity Map



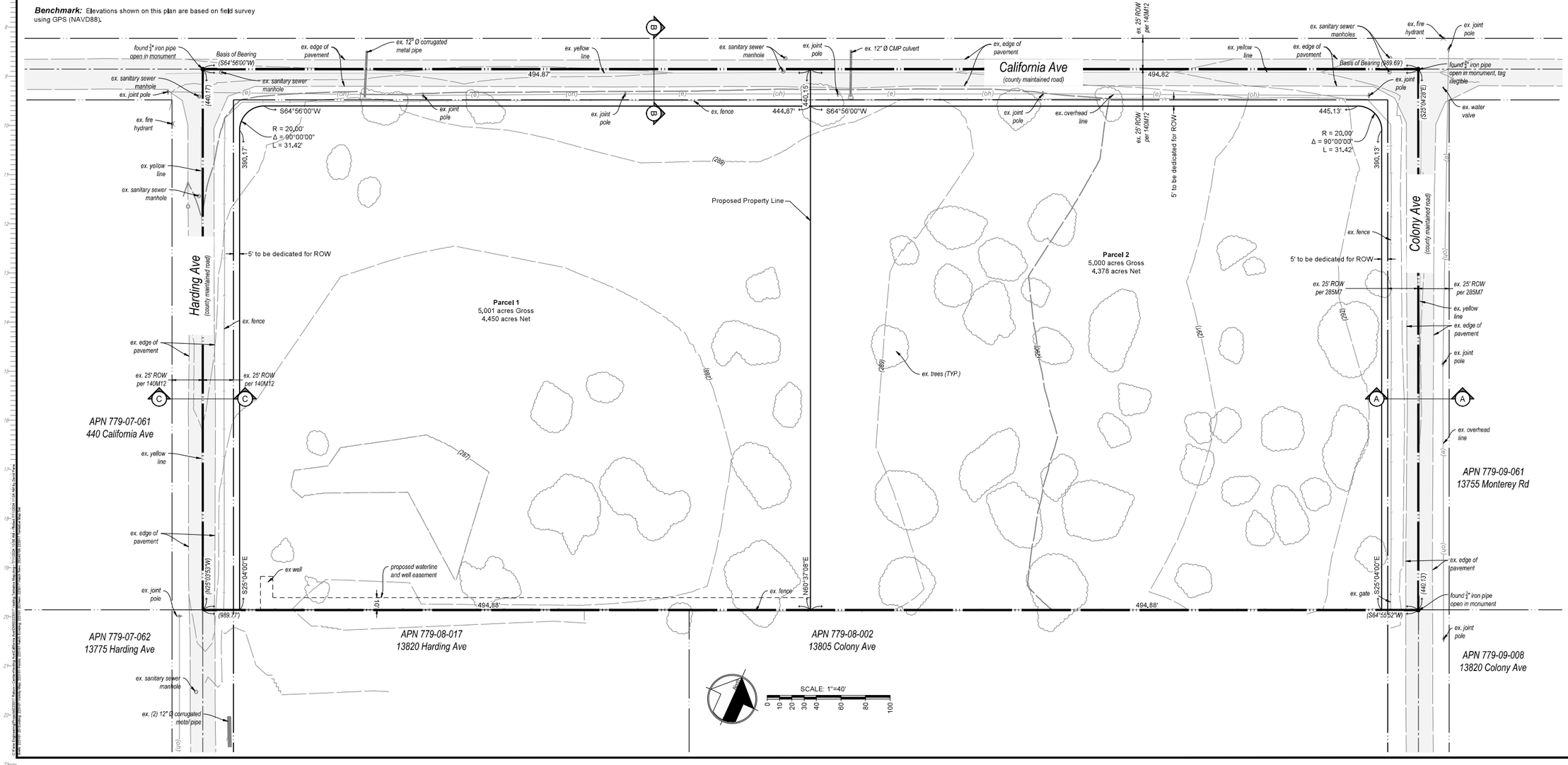

TYPICAL CALIFORNIA AVE. ROAD SECTION
SCALE 1" = 10'




TYPICAL HARDING AVE. ROAD SECTION
SCALE 1" = 10'

### Statement of Dedications and Proposed Improvements:

1. The owner shall dedicate an additional 5 feet of right of way for California Avenue, Harding Avenue, and Colony Avenue to make a 30 foot half street right of way.
2. No improvements are proposed with the Tentative Map.




REGISTERED PROFESSIONAL ENGINEER
DAVID L. FARIA
No. 92432
EXP. 09-30-2025
CIVIL
STATE OF CALIFORNIA
7/9/2024

| | | |
|---|---|---|
| 1 | - | - |
| 2 | - | - |
| 3 | - | - |
| 4 | - | - |
| 5 | - | - |
| REVISIONS | | BY |

FARIA
ENGINEERING & SURVEYING
PLANNING ★ BUILDING ★ SEPTIC
david@fariaengineering.com
(602) 515-7650

# DraLion LLC - Vesting Tentative Map
# APN 779-08-001

| | |
|---|---|
| DATE: | 7/9/2024 |
| SCALE: | 1" = 40' |
| DRAWN BY: | DF |
| CHECKED BY: | DF |
| JOB NO. | 223017 |
| SHEET NO: | 1 OF 2 |

**Applicant/Owner:**

Maggie Rakow
DraLion LLC, a California limited liability company
12200 Center Ave
San Martin, CA
408-859-9549
mdndesigns19@gmail.com

**Engineer:**

David L. Faria, RCE 92432
Faria Engineering & Surveying
1656 Cienega Road Unit 100
Hollister, CA 95023
602.515.7650
david@fariaengineering.com

**Project Information:**

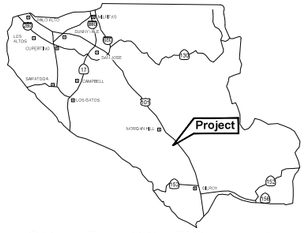
| | |
|---|---|
| APN | 779-08-001 |
| Present Use: | Vacant |
| Proposed Use: | Residential |
| Present Zoning: | RR-5Ac |
| Existing Improvements: | As Shown |
| Water: | proposed shared well |
| Sanitary Sewer: | proposed OWTS |
| Gas & Electric: | PGE |
| Fire Responsibility Area: | LRA |
| Wildland Urban Interface: | N/A |
| HCP Area: | Rural Development Not Covered |
| Hazard Zone(s): | N/A |
| Gross Area: | 10.001 ac |
| Net Area: | 8.959 ac |

***Boundary Note:*** Property lines shown on this plan are based on record data and boundary monumentation measured to date.

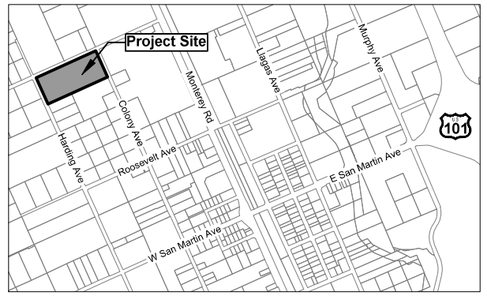
***Flood Zone:*** The property lies wholly in Zone D, areas in which flood hazards are undetermined, but possible, per FEMA Firm Panel 06085C0629H, effective May 18, 2009.

***Basis of Bearings:*** The basis of bearings for this map is the centerline of California Avenue as filed in Book 285 of Maps at Page 7, Santa Clara County Records. (S64° 56'W).

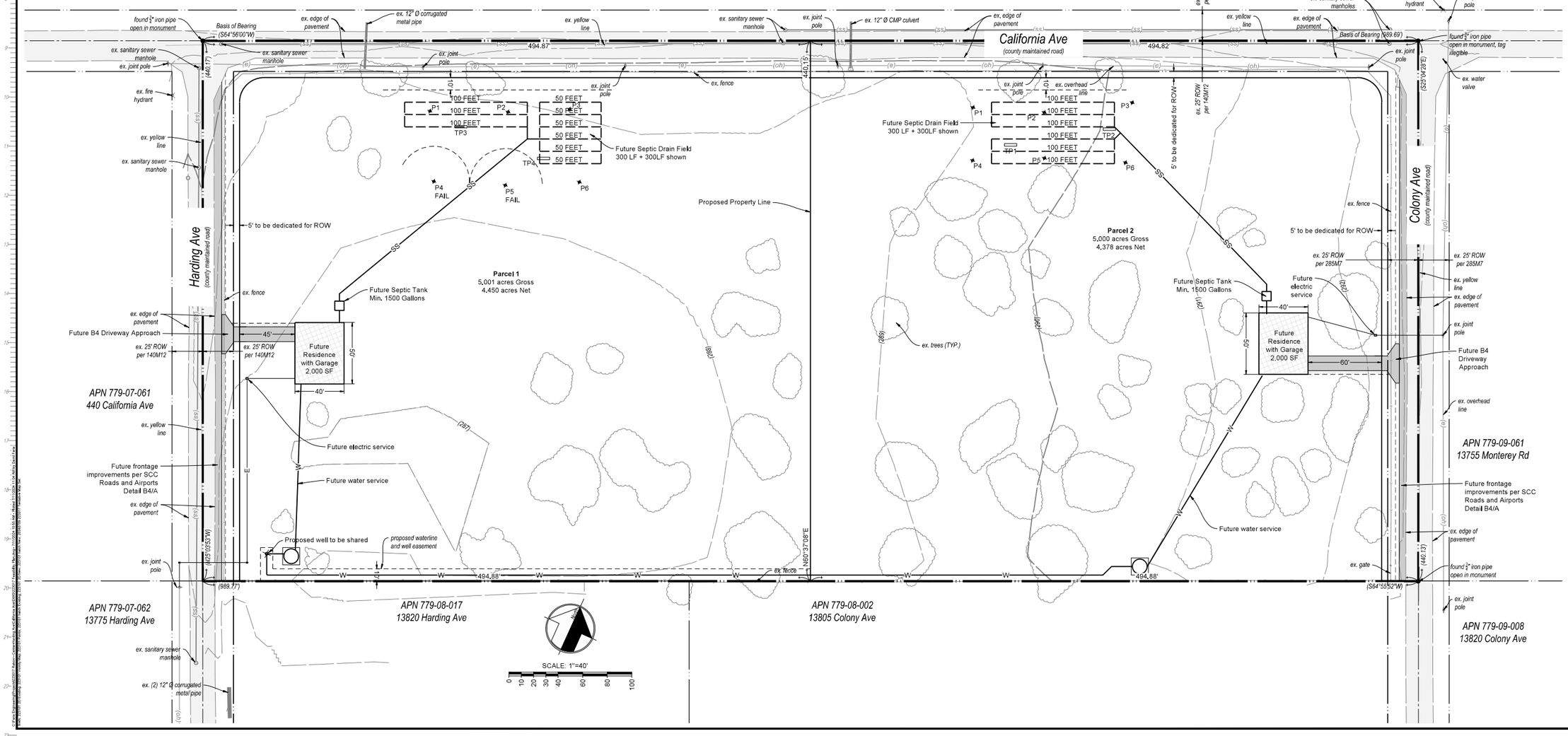
***Benchmark:*** Elevations shown on this plan are based on field survey using GPS (NAVD88).




COUNTY LOCATION MAP




Vicinity Map




REGISTERED PROFESSIONAL ENGINEER
DAVID L. FARIA
No. 92432
EXP. 09-30-2025
CIVIL
STATE OF CALIFORNIA
7/9/2024

| | | |
|---|---|---|
| 1 | - | - |
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| 5 | - | - |
| REVISIONS | | BY |

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& SURVEYING
PLANNING ★ BUILDING ★ SEPTIC
david@fariaengineering.com
(602) 515-7650

# DraLion LLC - Feasibility Site Plan
## APN 779-08-001

| | |
|---|---|
| DATE: | 7/9/2024 |
| SCALE: | 1" = 40' |
| DRAWN BY: | DF |
| CHECKED BY: | DF |
| JOB NO. | 223017 |
| SHEET NO: | 2 |
| OF | 2 |

APPENDIX C. PHOTOGRAPHS



Photograph 1. View of the coast live oak woodland present in the Study Area, facing west. Tree canopy consisted of coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobatum*), walnuts (*Juglans spp.*), and plum (*Prunus spp.*). California Avenue is located at the right of the photo. Photo taken on 8/14/2024.



Photograph 2. View of coast live oak woodland and non-native annual grassland. The entire Study Area is routinely mowed. Photo facing north and towards California Avenue. Photo taken on 8/14/2024.



Photograph 3. View of bare ground located in the southwest portion of the Study Area, facing west and towards Harding Avenue. The area was presumably non-native annual grassland before grading removed all vegetation. Photo taken on 8/14/2024.



Photograph 4. View of the ruderal area located in the southwestern corner of the Study Area, facing south. Vegetation consisted of chicory (*Cichorium intybus*), field blindweed (*Convolvulus arvensis*), and curly dock (*Rumex crispus*). Photo taken on 8/14/2024.



Photograph 4. View of the southern boundary of the Study Area, facing west. The southern boundary is completely fenced. Photo taken on 8/14/2024.



Photograph 6. View of the non-native annual grasslands located in the middle of the Study Area, facing north. Non-native grasslands consist of wild oat (*Avena barbata*), slim oat (*Avena fatua*), ripgut brome (*Bromus diandrus),* soft chess (*Bromus hordaceus*), *and* harding grass (*Phalaris aquatica*). Photo taken on 8/14/2024.



Photograph 7. View of an observed ground squirrel burrow located within the non-native annual grassland. Burrows were observed throughout the Study Area and are presumed active. Focused burrow surveys are recommended if construction commences during the burrow nesting season. Photo taken on 8/14/2024.



Photograph 8. View of narrow leaf milkweed (*Asclepias fascicularis*) observed within the Study Area. Two patches of milkweed were observed in the Study Area; however, due to common disturbance, it was determined to be poor habitat for Monarch butterfly. Photo taken on 8/14/2024.

APPENDIX D. SPECIAL STATUS SPECIES TABLE

## Special Status Plants

| Name | Status | Habitats | Potential to Occur | Recommended Action |
|---|---|---|---|---|
| *Castilleja affinis var. neglecta* Tiburon Indian paintbrush | FE, ST, Rank 1B.2, HPC | Affinity to serpentine within valley and foothill grasslands. Elevation ranges from 60-400m. | None. No suitable serpentine substrate present in Study Area. | No further action recommended |
| *Ceanothus ferrisiae* Coyote ceanothus | FE, Rank 1B.1, HPC | Grows in arid slopes in serpentine chaparral, valley, and bunchgrass foothill grasslands below 300m. | None. No suitable serpentine substrate present in Study Area. | No further action recommended |
| *Cirsium fontinale var. campylon* Mt. Hamilton thistle | Rank 1B.2, HPC | Grows in moist serpentine soils near streams, springs of water, ad other wet areas. Found in Santa Clara, Alameda, and Stanislaus Counties. | None. No suitable serpentine substrate present in Study Area. | No further action recommended |
| *Dudleya abramsii ssp. Setchellii* Santa Clara Valley dudleya | FE, Rank 1B.1, HPC | Grows in rock outcrops within serpentine grasslands, between 390 – 990 feet in elevation. Only found in the Coyote Valley area of Santa Clara County. | None. No suitable serpentine substrate or rocky outcrops present in Study Area. | No further action recommended |
| *Fritillaria liliacea* Fragrant fritillary | Rank 1B.2, HPC | Prefers heavy soils including clays. Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland, and vernal pools. 3-410 m. Blooms February to April. | Low. No suitable serpentine substrate present in Study Area. | No further action recommended |
| *Hoita strobilina* Loma Prieta hoita | Rank 1B.1, HPC | Found in chaparral and woodland habitat, often on serpentine soils in the Santa Cruz Mountains, Mt Diablo and Mt Hamilton mountain ranges. | None. No suitable serpentine substrate present in Study Area. | No further action recommended |
| *Lessingia micradenia var. glabrata* smooth lessingia | Rank 1B.2, HPC | Endemic to Santa Clara County. Found in serpentine within chaparral, cismontane woodland, and grassland. Often on gravelly roadcuts. | None. No suitable serpentine substrate present in Study Area. | No further action recommended |

| Name | Status | Habitats | Potential to Occur | Recommended Action |
|---|---|---|---|---|
| *Monolopia gracelins* woodland woollythreads | Rank 1B.2 | Chaparral, valley and foothill grasslands, cismontane woodland, broadleaved upland forest, north coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine, but may only have weak affinity. 120-875 m. | None. No serpentine soils present in Project Area. Grasslands within Project Area are routinely mowed. Additionally, grasslands consist of non-native annuals which outcompete native vegetation. | No further action recommended |
| *Streptanthus albidus ssp. albidus* Metcalf Canyon jewelflower | FE, Rank 1B.1, HPC | Found in valley and foothill serpentine grasslands. Elevations ranges from 50-800m. | None. No suitable serpentine substrate present in Study Area. | No further action recommended |
| *Streptanthus albidus ssp. Peramoenus* most beautiful jewelflower | 1B.2, HPC | Often in serpentine soils in open areas such as grasslands. Also found on steep slopes in woodlands and baren rocky slopes. | None. No suitable serpentine substrate present in Study Area. | No further action recommended |

## Special Status Wildlife

| Name | Status | Habitats | Potential to Occur | Recommended action |
|---|---|---|---|---|
| **Amphibians** | | | | |
| *Ambystoma californiense* California tiger salamander - central California DPS | FT, ST, WL, HPC | Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding. | Low. Lack of breeding habitat within Study Area, but several known breeding populations 0.8 mile southwest. Observed ground squirrel burrows within Project Area may provide upland habitat for a low number of individuals; however, agricultural lands and rural residential development between ponds and Project site, along with no known occurrences east of Stanta Teresa Boulevard, makes it unlikely this species would occur on site. | No further action recommended. |
| *Rana draytonii* California red-legged frog | FT, SSC, HPC | Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat. | None. No suitable aquatic or riparian vegetation within Study Area. Nearest CNDDB occurrence 2 miles to the northwest. | No further action recommended. |
| *Rana boylii* foothill yellow-legged frog | PT, SE, SSC, HPC | Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. | None. No suitable stream habitat present in Study Area. | No further action recommended. |
| **Birds** | | | | |
| *Agelaius tricolor* Tricolored blackbird | ST, SSC, HPC | Found primarily in the Central Valley. Nests over or near freshwater emergent riparian thickets or agricultural fields. Highly colonial and breeds in large colonies. | Low. No freshwater or riparian habitat present in Study Area., but aquatic and riparian habitat present 0.3 miles north. May rarely use Project Area for foraging and dispersal. | Conduct nesting bird surveys prior to construction. |

| | | | | |
|---|---|---|---|---|
| *Aquila chrysaetos* Golden eagle | FP | Found on cliffs or in large trees. Sensitive to human activity and avoids developed areas. | None. No suitable large trees or cliffs present in Project Area. Human activity is moderate. | Conduct nesting bird surveys prior to construction. |
| *Athene cunicularia* burrowing owl | SSC | Resides in wide-open, sparsely vegetated areas like prairies, deserts, grasslands, and agricultural fields. Range extends from the tip of South America to Canada. Permanent resident in California. | Moderate. Burrows observed within the Project Area that could support burrowing owl. | Conduct focused-level burrow survey within and adjacent to the Project Area to determine if nesting birds or raptors are present. See proposed avoidance and minimization recommendations for further measures. |
| *Gymnogyps californianus* California condor | FE, SE, FP | Lives in rocky shrubland, woodlands, coniferous forest, and oak savanna. Often nests on cliffs, rocky walls, and large trees. Can travel up to 160 km for food. Year-round resident. | Low. No suitable nesting habitat in Study Area. May rarely occur during foraging or dispersal. | Conduct nesting bird surveys prior to construction. |
| *Haliaeetus leaucocephalus* Bald eagle | SE, FP | Nests in tall, old-growth trees close to aquatic foraging habitat and away from human disturbances. Aquatic foraging habitat consists of fresh and saltwater. | None. No suitable old-growth trees or aquatic foraging habitat present in Project Area. | Conduct nesting bird surveys prior to construction. |
| *Vireo bellii pusillus* Least Bell's vireo | FE, SE, HPC | Breeds in primarily willow-dominated riparian woodlands, sometimes nests in neighboring mulefat scrub, oak woodlands and chapparal. | Low. No suitable riparian or chapparal habitat within Project Area. Oak woodland habitat within Project Area is heavily disturbed. | Conduct nesting bird surveys prior to construction. |
| **Mammals** | | | | |
| *Taxidea taxus* American badger | SSC | Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows. | Moderate. The open areas within the Study Area may support the species. Burrows were observed throughout the Study Area. | Conduct a pre-construction survey. See proposed avoidance and minimization recommendations for further measures. |

| | | | | |
|---|---|---|---|---|
| *Vulpes macrotis mutica*<br>San Joaquin kit fox | FE, ST, HPC | Primarily found in San Joaquin County. Found in annual grassland or mixed shrubs throughout low lying valleys and rolling hills. | Low. The Study Area is located outside of the known range of this species. | No further action recommended. |
| **Reptiles** | | | | |
| *Actinemys marmorata*<br>northwestern pond turtle | Proposed threatened, SSC, HPC | A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. | None. No suitable aquatic habitat present. | No further action recommended. |
| *Phrynosoma blainvillii*<br>coast horned lizard | SSC | Found in open areas with sandy soils and low vegetation, including valleys, foothills, and semiarid mountains, grasslands, conifer forests, woodlands, and chaparral. Historically ranges from central valley and Pacific coast from Baja California to Santa Clara Valley. | None. No suitable sandy soils present in Project Area. | No further action recommended. |
| **Insects** | | | | |
| *Adela oplerella*<br>Opler's longhorn moth | SSC | Typically found on creamcups (*Platystemon californicus*). Geographically ranges between Marin and Santa Cruz counties. | None. No creamcups observed and the Project Area is routinely mowed. | No further action recommended. |
| *Bombus crotchii*<br>Crotch's bumble bee | CE | Found between San Diego and Redding, in a variety of habitats including open grasslands, shrublands, chaparral, desert margins, and semi-urban settings. Nests underground in abandoned rodent dens or above ground in tufts of grass, old bird nests, or tree cavities. Fond to milkweed, but also lupines, medics, phacelias, sages, clarkias, and poppies. 0-2438m. | Low. While rodent nests and narrowleaf milkweed within Study Area may provide nesting and foraging habitat, the area is routinely disturbed from mowing, which removes much of the foraging vegetation. | No further action recommended. |
| *Bombus occidentalis*<br>western bumble bee | CE | Occurs in California in wide variety of habitats including shrublands, chaparral, gardens, and urban parks. | Low. Lack of flowering plants and the Project Area is routinely disturbed from mowing. | No further action recommended. |

| | | | | |
|---|---|---|---|---|
| *Danaus plexippus* Monarch butterfly | FC | Occurs in areas with a wide variety of flowering plants for nectar sources. Host plant is milkweeds (*Asclepias spp.*). Overwinters in coastal California on oaks, willows, cottonwoods, eucalyptus, cypress, and pines. | Low. No suitable overwintering habitat present in Project Area. May rarely occur during foraging and migration due to observance of narrow leaf milkweed within Study Area. | No further action recommended. |
| *Euphydryas editha bayensis* Bay checkerspot butterfly | FT | Native grasslands on outcrops of serpentine soil; California plantain and owl's clover are host plants. Found in the vicinity of San Francisco Bay, including San Francisco Peninsula and in San Mateo County. | None. No suitable serpentine habitat present in Study Area. No hose plants observed. | No further action recommended. |

**Status codes abbreviations:**

| | |
|---|---|
| BCC | Federal Bird of Conservation Concern |
| FE | Federal Endangered |
| FT | Federal Threatened |
| FC | Federal Candidate |
| SE | State Endangered |
| ST | State Threatened |
| CE | State Candidate Endangered |
| SSC | CDFW Species of Special Concern |
| FP | CDFW Fully Protected |
| WL | CDFW Watch List |
| Rank 1B.1 | CNPS Rank 1B.1: Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California |
| Rank 1B.2 | CNPS Rank 1B.2: Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California |
| Rank 4.2 | CNPS Rank 4.2: Plants of limited distribution; fairly threatened in California |
| HPC | Santa Clara Valley Habitat Plan Covered Species |

APPENDIX E. USFWS IPAC SEARCH

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

# IPaC resource list

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

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

NOT FOR CONSULTATION

## Location

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

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

---

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).

NOT FOR CONSULTATION

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:

# Mammals

| NAME | STATUS |
|---|---|
| San Joaquin Kit Fox Vulpes macrotis mutica<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/2873 | Endangered |

# Birds

| NAME | STATUS |
|---|---|
| California Condor Gymnogyps californianus<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/8193 | Endangered |
| Least Bell's Vireo Vireo bellii pusillus<br>Wherever found<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/5945 | Endangered |

# Reptiles

| NAME | STATUS |
|---|---|
| Northwestern Pond Turtle Actinemys marmorata<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/1111 | Proposed Threatened |

# Amphibians

| NAME | STATUS |
|---|---|

NOT FOR CONSULTATION

California Red-legged Frog Rana draytonii — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2891

California Tiger Salamander Ambystoma californiense — Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Foothill Yellow-legged Frog Rana boylii — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5133

# Insects

| NAME | STATUS |
|---|---|

Bay Checkerspot Butterfly Euphydryas editha bayensis — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2320

Monarch Butterfly Danaus plexippus — Candidate
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

# Flowering Plants

| NAME | STATUS |
|---|---|

Metcalf Canyon Jewelflower Streptanthus albidus ssp. albidus — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4186

Santa Clara Valley Dudleya Dudleya setchellii — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3207

NOT FOR CONSULTATION

# 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.

You are still required to determine if your project(s) may have effects on all above listed species.

# Bald & Golden Eagles

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

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

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

NOT FOR CONSULTATION

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

# Probability of Presence Summary

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

**Probability of Presence** (■)

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

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

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

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

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

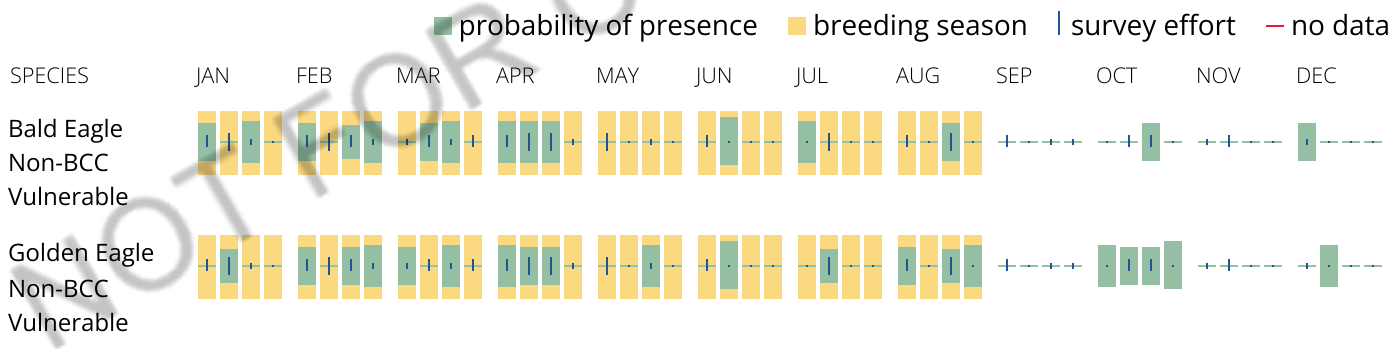
**Breeding Season** (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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

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

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

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




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

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

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

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

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

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

**What if I have eagles on my list?**

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

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# Migratory birds

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

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

**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, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

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| NAME | BREEDING SEASON |
|---|---|
| Allen's Hummingbird Selasphorus sasin<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9637 | Breeds Feb 1 to Jul 15 |
| Bald Eagle Haliaeetus leucocephalus<br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. | Breeds Jan 1 to Aug 31 |
| Belding's Savannah Sparrow Passerculus sandwichensis beldingi<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/8 | Breeds Apr 1 to Aug 15 |
| Black Skimmer Rynchops niger<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/5234 | Breeds May 20 to Sep 15 |

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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

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

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

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15
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/8350

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

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

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

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5
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/5513

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

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Western Gull Larus occidentalis — Breeds Apr 21 to Aug 25
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Western Screech-owl Megascops kennicottii cardonensis — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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

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

# Probability of Presence Summary

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

**Probability of Presence** (■)

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

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

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

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

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### Breeding Season (■)

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

### Survey Effort (|)

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

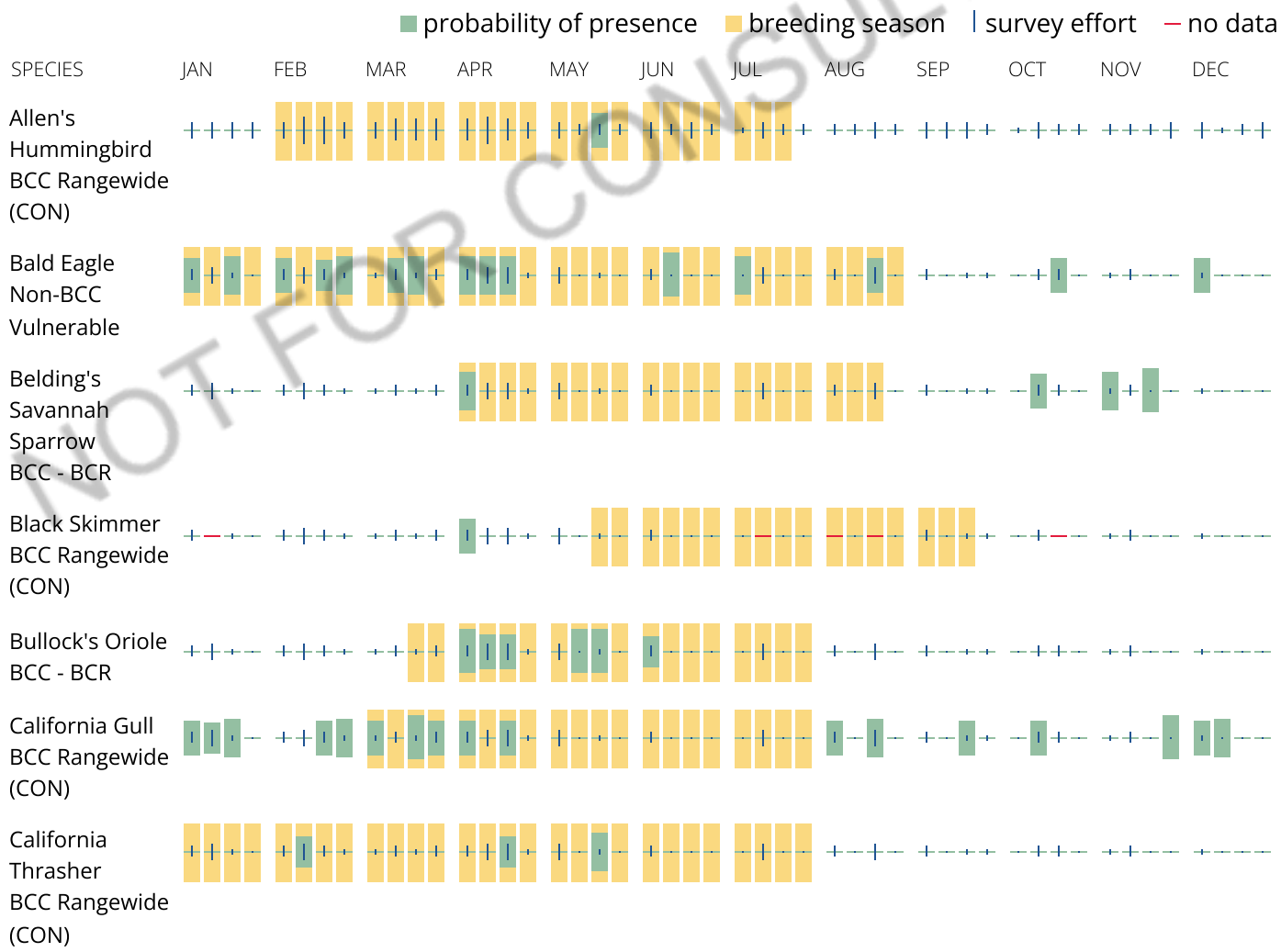
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (–)

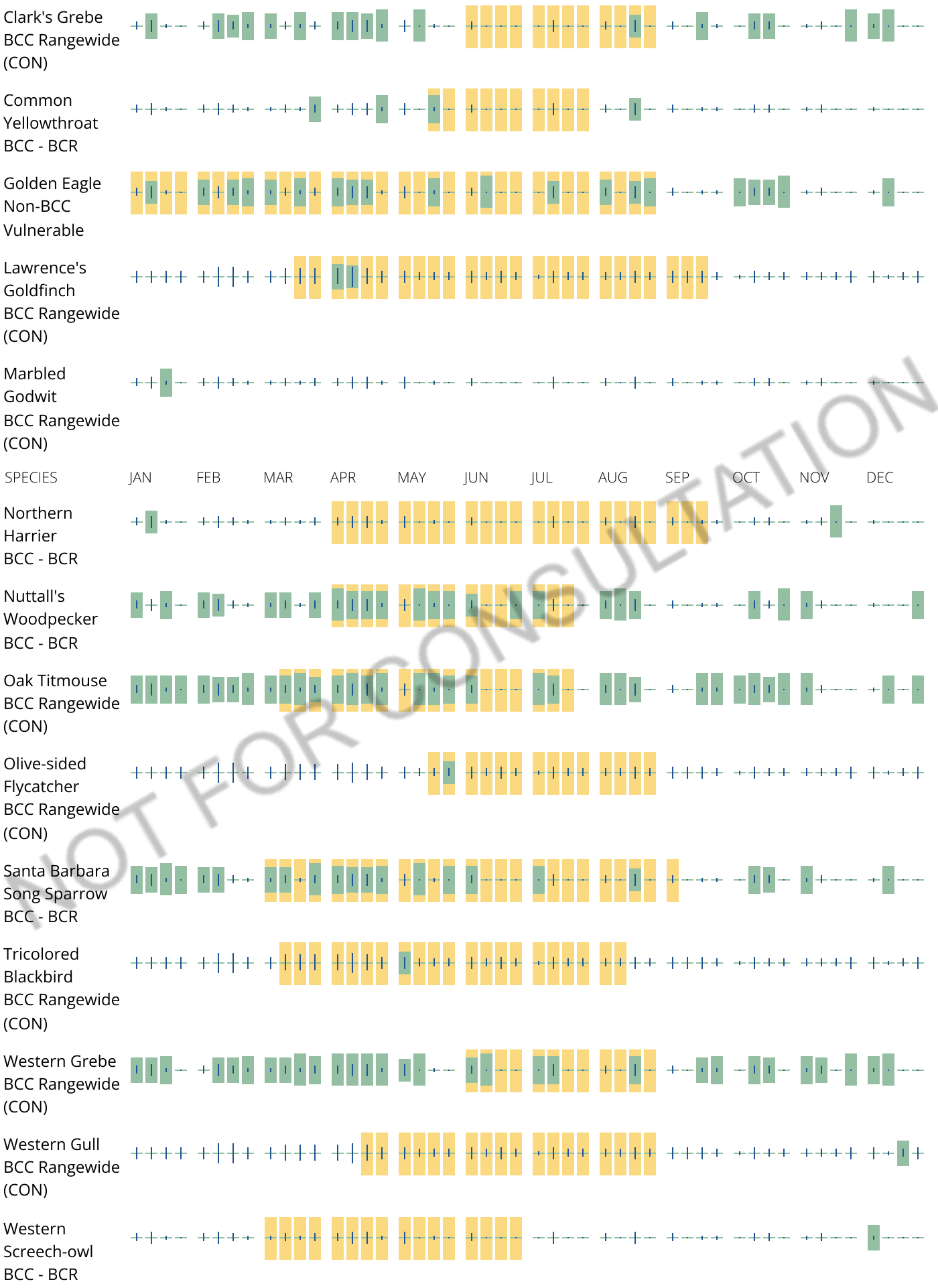
A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

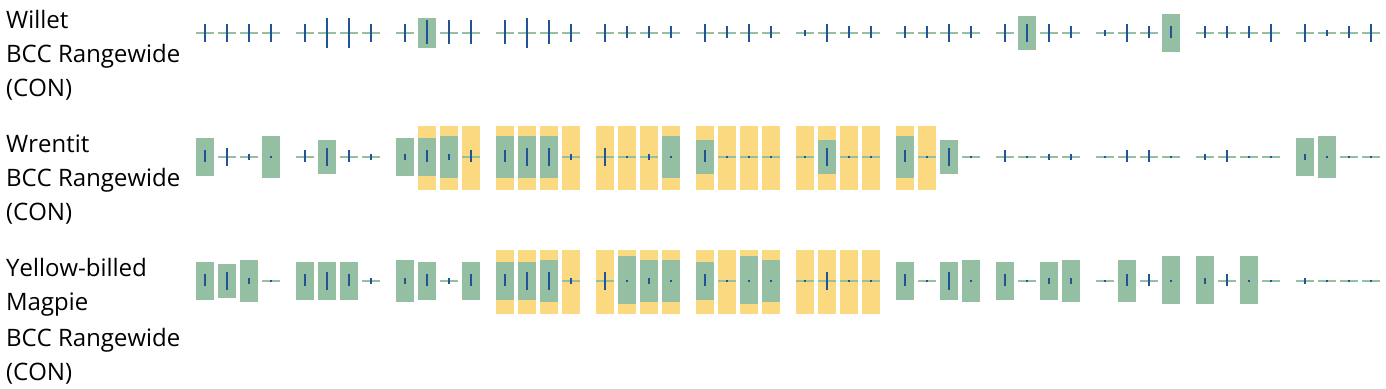
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.




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

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

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

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

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

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

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

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

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

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### 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

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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.

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# 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 tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

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

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APPENDIX F. PLANTS AND WILDLIFE OBSERVED DURING SITE VISIT

| ***Scientific Name*** | **Common Name** |
|---|---|
| **Plants** | |
| *Asclepias fascicularis* | narrow leaf milkweed |
| *Avena barbata* | slender oat |
| *Avena fatua* | slim oat |
| *Baccaris pilularis* | coyote brush |
| *Bromus diandrus* | ripgut brome |
| *Bromus hordaceus* | soft chess |
| *Carduus pycnocephalus* | Italian thistle |
| *Centaurea solstitialis* | yellow star-thistle |
| *Chlorogalum pomeridianum* | wavy-leafed soaplant |
| *Cichorium intybus* | chicory |
| *Cirsium vulgare* | bull thistle |
| *Convolvulus arvensis* | field blindweed |
| *Croton setigerus* | turkey mullein |
| *Datura stramonium* | stinkwort |
| *Epilobium brachycarpum* | panicled willowherb |
| *Erodium malacoides* | Mediterraean stork's-bill |
| *Helminthotheca echioides* | bristly oxtongue |
| *Hirschfeldia incana* | shortpod mustard |
| *Juglans spp.* | walnut |
| *Marrubium vulgare* | white horehound |
| *Phalaris aquatica* | harding grass |
| *Plantago lanceolata* | ribwort plantain |
| *Quercus agrifolia* | coast live oak |
| *Quercus lobata* | valley oak |
| *Rumex crispus* | curly dock |
| *Rumex salicifolius* | willow dock |
| **Wildlife** | |
| *Aphelocoma californica* | California scrub jay |
| *Calypte anna* | Anna's hummingbird |
| *Cathartes aura* | turkey vulture |
| *Corvus brachyrhynchos* | American crow |
| *Haemorhous mexicanus* | house finch |
| *Melanerpes formicivorus* | acorn woodpecker |
| *Otospermophilus beecheyi* | California ground squirrel |
| *Sayornis nigricans* | black phoebe |
| *Spinus psaltria* | lesser goldfinch |
| *Sylvilagus audubonii* | desert cottontail |
| *Zenaida macroura* | mourning dove |