Harris & Associates

November 8, 2023

Matthew Esquivel, Senior Project Manager
Warmington Residential
3090 Pullman Street
Costa Mesa, California 92626

Subject: Biological Resources Letter Report for the Warmington Santee Residential Project

Dear Mr. Esquivel:

The purpose of this document is to identify the presence of existing vegetation and wildlife species to identify potential biological constraints, including any potential impacts to aquatic resources, and to assist in early planning of the proposed Warmington Santee Residential Project (project), The project lies in the City of Santee, California (Attachment 1, Figures; Figure 1, Regional Location, and Figure 2, Project Site). This letter report documents the results of a database review and biological field reconnaissance survey for the project. Harris & Associates (Harris) conducted a biological resources field reconnaissance survey of the approximately 4.93-acre project site and a 100-foot buffer (approximately 9.69 acres in total) (survey area). In addition to the results from the field survey conducted, a review of biological databases is provided in this analysis to aid in the constraints evaluation of the project to its current immediate and surrounding environment.

Project Description and Location

The project proposes new residential development within a partially developed parcel in a rural–suburban area in the City of Santee (City), California (Figure 1). The development will consist of a 50-unit multi-family development within 10 buildings. The project will include the removal of an existing single-family residential home, auxiliary structures, and trees and consist of moderate grading operations, retaining wall installation, wet/dry utilities, street work, landscaping, and flatwork. Additionally, the project will involve the creation of an underground detention system and installation of an outlet, curb, gutter, and sidewalk along Summit Avenue. The project has been designed to avoid impacts to sensitive resources within the survey area, including sensitive vegetation communities and potential jurisdictional aquatic resources.

The project site is located at 10939 Summit Avenue (Assessor's Parcel Number 378-190-01-000) in the City (Figure 2). It is immediately north of the intersection of Summit Avenue and Noble Way in the northern part of the City, northwest of the intersection between State Route (SR) 52 and SR-67. To the north, east and west is mostly undeveloped land with rolling hills of high-quality native habitats. Small groups of residential houses are present to the east and north, and the Calvary Chapel of Santee is located to the west. Dense semi-rural residential developments occur south of the project site. The majority of the 4.93-acre lot is currently undeveloped but is generally disturbed by mowing and other human activity related to the few residential structures on the property.

Environmental Setting

The following sections serve to describe the existing conditions in the survey area.

Land Use

The survey area is in a rural–suburban area in the City. The 4.93-acre project site occurs in a partially developed parcel that has one single-family residential home along with sheds and other auxiliary structures that are generally surrounded by disturbed habitat and landscaped with ornamental vegetation. Development in the general area appears to have begun in the early 1970s and has not expanded much to the north but has greatly expanded in the south (Historic Aerials 2023). Small patches of native habitat occur in the north and northeastern

portions of the survey area, and large uninterrupted areas of high-quality native habitat occur further outside the survey area to the north, east, and west including the Sycamore Canyon/Goodan Ranch County Preserve and Sycamore Canyon Open Space Preserve approximately 2.5 miles to the north, Santee Lakes Recreation Preserve approximately 1.4 miles to the west, and an area of existing fully conserved conservation land that occurs to the northeast of the survey area (City of Santee 2023). A heavily developed area with semi-rural residential structures exists south of the survey area. The San Diego River also occurs approximately 1.4 miles south of the survey area.

Topography and Soils

The survey area is relatively flat, but a slight rise in elevation occurs in the northeastern portion of the survey area as a rocky slope develops further northeast and outside the survey area. The on-site elevation ranges from approximately 520 to 560 feet above mean sea level. The topographic lines presented on Figure 3, USGS Topographic Map, represent the survey area elevations. The survey area is depicted on the U.S. Geological Survey (USGS) 7.5-minute San Vicente Reservoir quadrangle (Figure 3).

The survey area is underlain by three soil types: Cieneba–Fallbrook rocky sandy loams (9 to 30 percent slopes, eroded), Greenfield sandy loam (9 to 15 percent slopes), and Ramona sandy loam (2 to 5 percent slopes). The soil types on the project site are presented on Figure 4, Soils. Cieneba–Fallbrook rocky sandy loams (9 to 30 percent slopes, eroded) occurs in the central and eastern portions of the survey area. Greenfield sandy loam (9 to 15 percent slopes) occurs in the western portion of the survey area. Ramona sandy loam (2 to 5 percent slopes) occurs in the southern portion of the survey area (USDA 2019).

Hydrology

The survey area is located in the San Diego River Watershed, specifically within the Lower San Diego Hydrological Area (Hydrologic unit 907.1). The Peñasquitos Watershed and San Diego Bay Watershed border the survey area to the north and south, respectively. The San Diego River Watershed is the second largest in San Diego County (County), encompassing approximately 434 square miles.

The major tributaries to the San Diego River include Boulder Creek, joining the San Diego River in the headwaters above El Capitan Reservoir and San Vicente Creek, joining the river in Lakeside. There are numerous smaller tributaries as well, including Cedar Creek in the headwaters of the San Diego River, Forester Creek and Sycamore Creek in Santee, Oak Creek in Mission Trails Regional Park, as well as Alvarado Creek, Murphy Creek, and Murray Creek in Mission Valley (Project Clean Water 2023).

The U.S Fish and Wildlife Service (USFWS) National Wetlands Inventory mapping and field results show an unnamed riverine channel and tributary to the San Diego River, which occurs approximately 1.9 miles south of the survey area, as the only aquatic resource in the survey area (Figure 5, Hydrology). The aquatic resource travels through the northwestern corner of the survey area. National Wetlands Inventory mapping results also show one unnamed riverine aquatic feature that flows into this feature approximately 0.16 mile south of, and outside the survey area and several other tributaries to the San Diego River to the north, east, west, and southwest, also outside the survey area (USFWS 2023a).

Based on a review of the USGS National Hydrography Dataset, the unnamed riverine feature that traverses the northwestern corner of the survey area is the only identified aquatic feature within the survey area, but several features with connectivity to this feature occur to the north and east outside the survey area (USGS 2023). This feature has hydrologic connections to the San Diego River, which is defined by the U.S. Army Corps of Engineers (USACE) as a traditional navigable water (TNW) (USACE 2023; USGS 2023) (Figure 5).

A formal aquatic resources delineation was not conducted during the survey effort. However, three aquatic resources (Aquatic Feature [AF]-1, AF-2, and AF-3), all non-vegetated channels that are interconnected, were observed in the northwestern portion of the survey area during the biological reconnaissance survey. Drainage patterns on the project site show evidence of minor alteration, with on-site mechanical disturbances associated with the residential developments, including installation of a chain-link fence across the drainage and culvert installation on the east and west sides of Summit Avenue and across a driveway in the northernmost portion of the survey area.

Climate

On a regional level, the County has a Mediterranean climate, which is characterized by wet winters and dry summers. This is largely because of a semi-permanent high-pressure zone that sits over the Pacific Ocean during much of the year and forms a fog belt (marine layer). The survey area is generally within the Peninsular Ranges of Southern California. Generalized climate in the region is regarded as dry, subhumid mesothermal, with warm dry summers and cold moist winters, which pushes the growing season to the wet months of the year (late winter to early spring). Vegetation often goes dormant (senescent) during the later summer months until initial rains start in the fall. The rainy season typically lasts from October through March.

The closest weather station to the project site is approximately 2.5 miles northeast of the project site (NRCS 2023). Between 2003 and 2023, the average maximum temperature was 77 degrees Fahrenheit (°F), and the minimum temperature was 53°F. The average annual precipitation between 2003 and 2023 was approximately 13.66 inches. In 2022, the total rainfall was 11 inches, approximately 1 inch more than the previous year (NRCS 2023). As of September 2023, when the biological reconnaissance survey was conducted, the total annual precipitation in the area was 19 inches, approximately 8 inches greater than the total annual precipitation in September 2022.

Regulatory Setting

Federal

Clean Water Act

Section 401 (40 CFR 121). Section 401 of the Clean Water Act (CWA) gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the United States. The State Water Resources Control Board directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The California Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401(a)(1) of the federal CWA, which specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the state or appropriate interstate water pollution control agency in/where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

Section 404 (33 CFR 328.3[a]). These provisions regulate the discharge of dredged or fill material in waters of the United States, including wetlands. Activities that discharge dredge or fill material into waters of the United States can be authorized by the USACE.

The USACE and the U.S. Environmental Protection Agency (USEPA) have issued a set of guidance documents detailing the process for determining CWA jurisdiction over waters of the United States following the 2008 Rapanos decision. The USEPA and USACE issued a summary memorandum of the guidance for implementing the Supreme Court's decision in Rapanos that addresses the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation by the USEPA and USACE to determine CWA jurisdiction over the project site and to complete the "significant nexus test" as detailed in the guidelines.

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances such as those described in Key Point B below, the significant nexus test would take into account physical indicators of flow (evidence of an ordinary high water mark) if a hydrologic connection to a TNW exists and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and USEPA will apply the significant nexus standard to assess the flow characteristics and functions of the tributary drainage to determine if it significantly affects the chemical, physical, and biological integrity of the downstream TNW.

Wetlands (including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas) are also considered waters of the United States and are defined by USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by the USACE (USACE 1987).

Rapanos Guidance Key Points Summary

A. The USACE and USEPA will assert jurisdiction over the following waters:
   - TNWs
   - Wetlands adjacent to TNWs
   - Non-navigable tributaries of TNWs that are relatively permanent (flows 3 months or longer)
     - Wetlands that abut such tributaries

B. The USACE and USEPA will decide jurisdiction over the following waters based on whether they have a significant nexus with a TNW:
   - Non-navigable tributaries that are not relatively permanent
   - Wetlands adjacent to non-navigable tributaries that are not relatively permanent
   - Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

C. The USACE and USEPA will not assert jurisdiction over the following waters:
   - Swales or erosional features (gullies, small washes characterized by low volume, infrequent, or short-duration flow)
     a) Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The Navigable Waters Protection Rule, published by the USACE and USEPA on April 21, 2020, was vacated during a federal court ruling in Arizona (Pascua Yaqui Tribe v. USEPA) on August 30, 2021. With this ruling, the regulatory agencies have halted implementation of the Navigable Waters Protection Rule and are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime (Rapanos Guidance).

Endangered Species Act (U.S. Code, Title 16, Sections 1531 through 1543)

The federal Endangered Species Act (FESA) and subsequent amendments prohibit the "take" (i.e., harm, harass, or kill individuals or destroy associated habitat) of species federally listed as threatened or endangered. Take incidental to otherwise lawful activities can be authorized by the USFWS through a permit under Sections 4(d), 7, or 10(a).

Migratory Bird Treaty Act (U.S. Code, Title 16, Sections 703 through 711)

The Migratory Bird Treaty Act (MBTA) is the domestic law that affirms or implements a commitment by the United States to four international conventions (Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding season. The MBTA makes it unlawful to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States.

State

Birds of Prey Protection Provision (CFGC, Section 3503.5)

This provision prohibits the taking of birds of prey (Order Falconiformes and Strigiformes), including their nests and eggs.

California Endangered Species Act (CFGC, Section 2050 et seq.)

The California Endangered Species Act prohibits any activities that would jeopardize or take a species designated as threatened or endangered by the state.

California Environmental Quality Act, as Amended (California Public Resources Code, Section 21000 et seq.)

The goal of the California Environmental Quality Act (CEQA) is to assist California public agencies in identifying potentially significant negative environmental impacts caused by their actions and avoiding or mitigating those impacts when feasible.

California Fish and Game Code, Section 3503

California Fish and Game Code (CFGC), Section 3503, prohibits the take, possession, or needless destruction of the nests or eggs of any birds except as otherwise provided by the CFGC or any regulation made pursuant thereto.

California Fully Protected Wildlife Species Provision (CFGC, Sections 3511, 4700, 5050, and 5515)

These provisions prohibit the take of fully protected birds, mammals, amphibians, and fish.

California Native Plant Protection Act of 1977 (CFGC, Sections 1900–1913)

These provisions preserve, protect, and enhance endangered or rare native plants of the state.

Lake and Streambed Alteration Agreement (CFGC, Section 1600)

CFGC Section 1602 regulates water resources in California. Activities that divert or obstruct the natural flow of or change or use material from the bed, channel, or bank of any river, stream, or lake may be authorized by the California Department of Fish and Wildlife (CDFW). CDFW jurisdiction includes intermittent and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated or to the limit of the adjacent riparian vegetation located contiguous to the watercourse if the stream or lake is vegetated.

Natural Community Conservation Planning Act, as Amended (CFGC, Sections 2800–2835)

The primary objective of the Natural Community Conservation Planning program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listing by focusing on the long-term suitability of wildlife and plant communities and including key interests in the process.

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (Porter–Cologne Act) is regulated by the RWQCB for impacts on waters of the state. The RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes all waters of the state and all waters of the United States as mandated by the CWA Section 401 and the Porter–Cologne Act. Although water quality issues related to impacts on waterways are normally addressed in Section 401 Water Quality Certification, should a water of the state be determined by the USACE not to have CWA jurisdiction, the Porter–Cologne Act would be addressed under a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements depending on the level of impact and the properties of the waterway.

Regional Water Quality Control Board

The RWQCB regulates impacts on water quality under Section 401 of the CWA. A project must comply with Section 401 of the CWA before the USACE can issue a Section 404 Permit. The RWQCB will issue a Section 401 Water Quality Certification or Waiver of Certification depending on the extent of impacts on waters of the United States. The RWQCB also regulates impact on waters of the state (usually limited to "isolated" waters or swales that may not fall under USACE jurisdiction) under the Porter–Cologne Act.

Local

City of Santee Multiple Species Conservation Program Subarea Plan

The project is located within the boundaries of the Final Multiple Species Conservation Program (MSCP) Plan (County of San Diego 1998). The MSCP Plan is a long-term, regional habitat conservation program focused on balancing two unique aspects of the County: high biological diversity and rapid urban growth. Under this program, large blocks of inter-connected habitat will be conserved through the acquisition of land by private and public entities and mitigation from development. The County's MSCP is composed of three separate planning areas covering unincorporated regions of San Diego in the South County, North County, and East County. The MSCP Plans associated with the planning areas are the County Subarea Plan (South County Plan), Draft North County Plan, and East County Plan. Each MSCP Plan Area's unique geography requires that each MSCP Plan be tailored to meet the needs of the unique habitats and species in its area.

Local jurisdictions and special districts implement the MSCP Plan for their respective portions through Subarea Plans. The combination of the MSCP Plan and Subarea Plans serve as a Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA and as a Natural Community Conservation Planning Program pursuant to the California Natural Community Conservation Planning Act of 1991.

The City of Santee has prepared a draft Subarea Plan to address the implementation of the MSCP Subregional Plan within the jurisdictional boundary of Santee, which is located east of the City of San Diego and north of El Cajon. As of 2023, five jurisdictions included in the MSCP Subregional Plan have prepared and implemented MSCP Subarea Plans, including the County of San Diego and cities of San Diego, Chula Vista, La Mesa, and Poway. The draft Santee Subarea Plan has been prepared pursuant to the requirements of the MSCP Subregional Plan, the State Natural Community Conservation Planning Act, and section 10(a)(1)(B) of FESA. On March 23, 2023, the City prepared a Notice of Preparation of a draft Environmental Impact Report for the Subarea Plan (City of Santee 2023).

Santee General Plan

The General Plan serves as a long-term policy guide for physical, economic, and environmental growth. It is a statement of the community's vision for ultimate growth. State law requires that every city prepare and adopt a comprehensive long-range plan to serve as a guide for the development of the community. City actions, such as those relating to land use allocations, annexations, zoning, subdivision and design review, redevelopment, and capital improvements must be consistent with the General Plan. The General Plan designates land use categories for the entire city. Each land use category is identified and defined within the General Plan and includes information on the general uses, development, intensity, siting, and compatibility uses (City of Santee 2002). The Conservation Element of the Santee General Plan provides the following objectives and policies that apply to biological resources:

Conservation Element Objective 7.0: Preserve significant biological resources.

- **Policy 7.1:** The City shall encourage the preservation and enhancement of significant biological resources in areas designated as permanent open space.
- **Policy 7.2:** The City shall require that all development proposals provide appropriate mitigation for identified significant biological resources including selective preservation, sensitive site planning techniques, and in-kind mitigation for identified impacts.
- **Policy 7.3:** The City shall require that, for all development proposals involving the setting aside of land for permanent open space either on site or off site, provisions are in place to ensure the long-term management of the open space and biological resources.
- **Policy 7.4:** The City shall complete a Multiple Species Conservation Program Subarea plan that conserves a minimum of 2,600 acres in the City as permanent open space for preservation of habitats and species.

Methods

The methods of this biological resources analysis include a database review and biological resources field reconnaissance survey to document the existing biological conditions in the survey area. The results of this review provide information on the potential constraints to project development due to the presence (or lack thereof) of sensitive biological resources.

Database Review

Review of online databases including the CDFW California Natural Diversity Database (CDFW 2023a), CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2023b), USFWS Information for Planning and Consultation (USFWS 2023b), USFWS National Wetlands Inventory Wetlands Mapper (USFWS 2023a), Consortium of California Herbaria database (CCH 2023), Calflora database (Calflora 2023), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2023) was conducted for the project site and within a 1-mile radius of the project site.

Field Reconnaissance Survey

On September 6, 2023, Harris conducted a biological resources field reconnaissance survey. For the purposes of complete analysis of potential project impacts, a 100-foot buffer was applied around the project site boundary, which, together with the project site, is referred to as the "survey area." The survey was conducted by walking meandering transects throughout the survey area and mapping vegetation communities, documenting plant and wildlife species, noting suitable habitat, and evaluating the potential for occurrence of sensitive, rare, threatened, and endangered plant and wildlife species (Attachment 2, Plant and Wildlife Species Observed). Vegetation mapping was recorded in the field using the ArcGIS Collector application with an aerial image of the survey area. Binoculars were used to visually identify wildlife species; and vocalizations were listened to. The results of the vegetation mapping are presented in Table 1, Vegetation Communities and Land Cover Types, in the Results section. The potential for sensitive plant and wildlife species to occur in the survey area is presented in Table 2, Sensitive Plant and Wildlife Species with Potential to Occur, in the Results section.

The results of this analysis provide information on the potential constraints to project development due to the presence of special-status biological resources. No additional focused wildlife or plant surveys were conducted as part of this analysis.

Survey Limitations

Plants and wildlife were identified by direct observation, vocalizations, or other observance, including tracks, scat, and other sign. Therefore, lists of species observed are not necessarily comprehensive, as species can be nocturnal, secretive, or within the region and survey area seasonally (migration) and, therefore, may not have been observed.

Results

The results presented below provide data from the surveys conducted in the survey area.

Vegetation Communities and Land Cover Types

The survey area is within the southwestern California region of the California Floristic Province (Jepson Online 2023). Five vegetation communities and land use types were observed in the survey area. These include Diegan coastal sage scrub (including disturbed), developed land, disturbed habitat, non-vegetated channel, and non-native woodland (Baldwin et al. 2012; Oberbauer et al. 2008; Holland 1986). Table 1 presents the acreages of the vegetation communities that occur on the project site and in the survey area. Figure 6, Vegetation Communities and Land Cover Types, presents the vegetation community boundaries.

Table 1. Vegetation Communities and Land Cover Types

Vegetation Community and Land Cover Type	Survey Area (acres)[1]	Project Site (acres)[1]
Aquatic		
Non-vegetated channel (64200) [2]	0.03	0.01
Subtotal	*0.03*	*0.01*
Upland		
Diegan coastal sage scrub (including disturbed) (32500) [2]	0.64	0.04
Non-native woodland (79000)	0.22	0.06
Subtotal	*0.86*	*0.10*
Disturbed/Developed		
Disturbed habitat (11300)	5.82	4.21
Urban/developed land (12000)	2.98	0.61
Subtotal	*8.80*	*4.82*
Total	**9.69**	**4.93**

Sources: Holland 1986; Oberbauer et al. 2008.
Notes:
[1]Acreages rounded up to one-hundredth.
[2]Considered a sensitive vegetation community.

The vegetation communities observed on the project site are described in the following subsections.

Aquatic Vegetation Communities

Non-Vegetated Channel (64200)

Non-vegetated channel consists of predominantly sandy, gravelly, or rocky channels lacking or with reduced vegetation. Variable water lines inhibit the growth of vegetation, although some weedy species of grasses may grow along the outer edges of the channel. Vegetation may exist here but is usually less than 10 percent of the total cover (Oberbauer et al. 2008).

Approximately 0.03 acre of non-vegetated channel occurs within the survey area, with approximately 0.01 acre occurring on the project site. Non-vegetated channel occurs within three channels that traverse the northwestern portion of the survey area and are interconnected (Figure 6).

Upland Vegetation Communities

Diegan Coastal Sage Scrub (including Disturbed) (32500)

Diegan coastal sage scrub is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species, such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sage (*Salvia* spp.), with scattered evergreen shrubs, including lemonade berry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*) (Oberbauer et al. 2008). Diegan coastal sage scrub is present in coastal Southern California from Los Angeles, California, to Baja California, Mexico, and supports a rich diversity of sensitive plants and wildlife.

Approximately 0.64 acre of Diegan coastal sage scrub (including disturbed) habitat occurs within the survey area, with approximately 0.04 acres occurring on the project site (Figure 6). Diegan coastal sage scrub (including disturbed) occurs in the northeastern corner of the survey buffer as well as a small portion in the northern and eastern parts of the survey buffer. Dominant species include California sagebrush and laurel sumac in non-disturbed Diegan coastal sage (located in the northeastern corner of the survey area), and California sagebrush

and broom baccharis (*Baccharis sarothroides*) in disturbed Diegan coastal sage scrub (located in the northern and eastern portions of the survey area). Subdominant plant species include California buckwheat in non-disturbed Diegan coastal sage scrub, and black mustard (*Brassica nigra*) and California buckwheat in the disturbed Diegan coastal sage scrub.

Non-native Woodland (79000)

Non-native woodland consists of exotic trees, usually intentionally planted, which are not maintained or artificially irrigated. This classification typically does not apply where these trees have naturalized or are in riparian woodlands. Common species include eucalyptus species (*Eucalyptus* spp.) or tamarisk species (*Tamarix* spp.), but other non-native species may occur.

Approximately 0.22 acre of non-native woodland occurs within the survey area, with 0.06 acre occurring on the project site (Figure 6). Non-native woodland consists of a small grove of planted Peruvian pepper (*Schinus molle*) trees located on the eastern side of the survey area.

Disturbed/Developed Lands

Disturbed Habitat (11300)

Disturbed habitat consists of previously disturbed areas that either are devoid of vegetation (dirt roads/trails) or support scattered non-native plant species such as ornamentals or ruderal exotic species, such as black mustard, short-pod mustard (*Hirschfeldia incana*), and *Erodium* species, that take advantage of disturbance. They are non-native species and are typically found in disturbed habitats, particularly in areas that have been graded, been repeatedly cleared for fuel management purposes, and/or have experienced repeated use that prevents natural revegetation (Oberbauer et al. 2008).

Approximately 5.82 acres of disturbed habitat occurs within the survey area, with 4.21 acres occurring on the project site (Figure 6). Disturbed habitat occurs on the majority of the project site and in the existing residential developments surrounding it in the survey area. Additionally, disturbed habitat occurs to the west of the survey area where a fire break is maintained adjacent to Summit Avenue and in the southeastern corner of the survey area. Disturbed habitat in the survey area is dominated by bare ground, black mustard, and dove weed (*Croton setigerus*).

Urban/Developed Land (12000)

Urban/developed represents areas that have been constructed on or otherwise physically altered to an extent that native vegetation communities are not supported (Oberbauer et al. 2008). This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Urban/developed land in the survey area comprises approximately 2.98 acres, with approximately 0.61 acre occurring on the project site (Figure 6). Urban/developed areas consist of the residential structures on the project site and immediately north and south of it, paved roads, and the Calvary Chapel of Santee to the west (Figure 6).

Plant Species

Attachment 2 lists all vascular plant species observed in the survey area during the 2023 biological resource surveys. A total of 38 plant species were observed in the survey area, 10 (26 percent) of which were native and 28 (74 percent) of which were non-native. Of the 38 plants observed in the survey area, none are considered sensitive.

Wildlife Species

Attachment 2 lists all wildlife species detected in the survey area during the 2023 biological resource surveys. A total of 22 wildlife species were observed in the survey area, 22 (100 percent) of which were native. In total, two invertebrates, 17 birds, one reptile, and two mammals were observed in the survey area. Of the 22 wildlife species observed, none are considered sensitive.

Common bird species observed frequently in the survey area include Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), song sparrow (*Melospiza melodia*), house finch (*Haemorhous mexicanus*), and mourning dove (*Zenaida macroura*).

Sensitive Species

Sensitive species are those recognized by federal, state, or local agencies as being potentially vulnerable to impacts because of rarity, local, or regional reductions in population numbers, isolation/restricted genetic flow, or other factors. Sensitive plants include species listed as threatened or endangered, proposed for listing, or candidates for listing under the FESA by the USFWS (USFWS 2023c) and the California Endangered Species Act by the CDFW (CDFW 2023c); those considered species of special concern by the CDFW (CDFW 2023d); and species included in the California Rare Plant Rank (CRPR) inventory maintained by the CNPS. Sensitive wildlife species include those listed as threatened or endangered, proposed for listing, or candidates for listing under the FESA by the USFWS (USFWS 2023c) and the California Endangered Species Act by the CDFW (CDFW 2023c); and those considered species of special concern by the CDFW (CDFW 2023d).

As described in the Methods section, distributions of historical sensitive species observations within a 1-mile radius of the survey area were reviewed in preparation of this letter report and are depicted on Figure 7, Species with Potential to Occur. Other database results are not included on Figure 7, because Geographic Information System information on specific points is not available. For this biological resources analysis, those species that either are known to occur or have some potential to occur within 1 mile of the survey area are addressed in this section. The list of sensitive plant and wildlife species observed or with a potential to occur in the survey area are provided in Table 2 with listing status, habitat requirements, and observation or potential for occurrence information. Two sensitive species were observed in the survey area during the 2023 survey.

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Plants				
Acanthomintha ilicifolia	San Diego thornmint	FT/SE/1B.1/MSCP	Occurs in vernal pools, coastal sage scrub, chaparral, valley grassland, and riparian habitats between 12 and 3,260 feet amsl. Blooms April–July.	*Not Expected.* No vernal pools exist within the survey area, including within the Diegan coastal sage scrub on site. No historical locations exist within 1 mile of the survey area (CDFW 2023a; USFWS 2023b; CNPS 2023).
Adolphia californica	California adolphia	None/None/2B.1/None	Occurs in coastal scrub, chaparral, and valley and foothill grasslands with clay soils at elevations between 35 and 2,430 feet amsl. Blooms December–May.	*Not expected.* No suitable clay soils are present within Diegan coastal sage scrub in the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1/MSCP	Occurs in open, often disturbed, habitats in coarse substrates in grasslands, coastal scrub, river terraces, pools, and alkali playas in Southern California and Baja California. Found below 600 feet amsl. Blooms April–October.	*Not Expected.* The survey area was previously graded and does not fall within the known remaining population locations of this species within San Diego County. Therefore, this species is not expected to occur. No historical locations exist within 1 mile of the survey area (CDFW 2023a; USFWS 2023b; CNPS 2023).
Artemisia palmeri	San Diego sagewort	None/None/4.2/None	Occurs in usually along or near drainages and riparian areas within chaparral, coastal scrub, riparian forest, and woodland habitats (mesic and sandy soils) from 15 to 3,000 feet amsl. Blooms (Feb) May–September.	*Not expected.* Disturbed Diegan coastal sage scrub surrounds a small portion of the AF-1 in the northwestern portion of the survey area, but this species was not observed during the survey. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Asplenium vespertinum	Western spleenwort	None/None/4.2/None	Occurs in chaparral, cismontane woodland, and coastal scrub between 52 and 11,507 feet amsl. Blooms February–June.	*Low.* Suitable habitat occurs in Diegan coastal sage scrub in the northern, eastern, and northeastern portions of the survey area. The species was not observed during 2023 survey. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1/MSCP	Occurs in chaparral, coastal sage scrub, valley and foothill grassland, and vernal pools at elevations below 330 feet amsl. Blooms April–May.	*Not expected.* Survey area is outside the elevational range for this species. Historical locations occur approximately 0.9 mile northeast of the survey area (Figure 7) (CDFW 2023a; CNPS 2023).
Brodiaea orcuttii	Orcutt's brodiaea	None/None/1B.1/MSCP	Occurs in vernal pools, grassland, and scrub openings at elevations under 5250 feet amsl. Blooms April–July.	*Not expected.* No suitable vernal pools or areas with clay soil occur within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Brodiaea filifolia	Thread-leaved brodiaea	FT/SE/1B.1/MSCP	Occurs in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools at elevations between 80 to 3,675 feet amsl. Blooms March–June.	*Low.* Suitable habitat exists in the Diegan coastal sage scrub in the northeastern corner and in the disturbed coastal sage scrub in the northern and eastern portions of the survey area. The species was not observed during 2023 survey; however, survey was conducted outside the blooming period. No historical locations exist within 1 mile of the survey area (CDFW 2023a; USFWS 2023b; CNPS 2023).
Camissoniopsis lewisii	Lewis' evening-primrose	None/None/3/None	Occurs in clay or sandy soils within cismontane woodland, coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland between 0 and 9,047 feet amsl. Blooms March–May.	*Not expected.* Suitable clay or sandy soils do not occur in Diegan coastal sage scrub in the northern, eastern, and northeastern portions of the survey area. The species was not observed during 2023 survey; however, survey was conducted outside the blooming period. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Ceanothus cyaneus	Lakeside ceanothus	None/None/1B.2/None	Occurs in chaparral, closed-cone coniferous forest general in the mountains in San Diego County between 339 and 4,461 feet amsl. Blooms April–June.	*Not expected.* No suitable habitat occurs within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Chamaebatia australis	Southern mountain misery	None/None/4.2/None	Occurs in chaparral (gabbroic, metavolcanic), usually on dry slopes between 211 and 6,521 feet amsl. Blooms November–May.	*Not expected.* No suitable habitat or soils occur within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Chorizanthe leptotheca	Peninsular spineflower	None/None/4.2/None	Occurs in alluvial fans with granitic soils within chaparral, coastal scrub, and lower montane coniferous forest between 441 and 6,109 feet amsl. Blooms May–August.	*Not expected.* No alluvial fans occur within the coastal scrub in the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Clarkia delicata	Delicate clarkia	None/None/1B.2/ None	Occurs in chaparral and woodland habitat between approximately 218 and 5,901 feet in elevation. Blooms April–June.	*Not expected.* No suitable habitat occurs within the survey area. Non-native woodland in the survey area is unlikely to support this species as it is landscaped. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Clinopodium chandleri	San Miguel savory	None/None/1B.2/MSCP	Occurs on rocky slopes within in chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland between 1,064 and 3,267 feet amsl. Blooms March–July.	*Not Expected.* Survey area outside elevational range of this species. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Comarostaphylis diversifolia ssp. *diversifolia*	Summer holly	None/None/1B.2/ None	Occurs often on north facing slopes in coastal and foothill canyons in heavy chaparral between 24 and 3,521 feet amsl. Blooms April–June.	*Not expected.* No suitable habitat occurs within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Convolvulus simulans	Small-flowered morning-glory	None/None/4.2/None	Occurs in seeps within northern coastal scrub, coastal sage scrub, and valley grasslands communities between approximately 30 and 875 feet in elevation. Blooms May–July.	*Not expected.* No suitable habitat occurs within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Dudleya variegata	Variegated dudleya	None/None/1B.2/MSCP	Occurs on dry hillsides and mesas with clay soils within vernal pools, chaparral, coastal scrub, cismontane woodland, and valley and foothill grassland between 10 to and 5,924 feet amsl. Blooms April–June.	*Not expected.* No hillsides or mesas with clay soils are present in the Diegan coastal scrub in the survey area. Historical locations occur approximately 0.7 mile northeast of the survey area but not within it (Figure 7) (CDFW 2023a; CNPS 2023).
Ericameria palmeri var. *palmeri*	Palmer's goldenbush	None/None/1B.1/MSCP	Occurs in chaparral and coastal scrub in mesic soils between 20 and 7,419 feet amsl. Blooms September–November.	*Not expected.* Disturbed Diegan coastal sage scrub surrounds a small portion of the AF-1 in the northwestern portion of the survey area, but this species was not observed during the survey. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Eryngium aristulatum var. *parishii*	San Diego button celery	FE/SE/1B.1/MSCP	Occurs in vernal pools or marshes within wetlands, coastal sage scrub, valley grassland, and wetland riparian communities that contain clay soils between approximately 37 and 2,907 feet in elevation. Blooms April–June.	*Not expected.* No suitable vernal pools or areas with clay soil occur within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; USFWS 2023a; CNPS 2023).
Ferocactus viridescens	San Diego barrel cactus	None/None/2B.1/MSCP	Occurs in rocky and sandy chaparral, coastal scrub, and valley and foothill grassland habitats typically on hillslopes or mesas between 10 and 1,500 feet amsl. Blooms May–June.	*Low.* Suitable habitat occurs in Diegan coastal sage scrub in the northeastern corner of the survey area where the soil is sandy loam and begins to become rocky just outside the survey area. The species was not observed during 2023 survey. Numerous historical locations

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
				occur north and west of the survey area but not within it (Figure 7) (CDFW 2023a; CNPS 2023).
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	None/None/3.1/None	Occurs in chaparral, generally within moist or disturbed areas with mesic soils between 721 and 2,625 feet amsl. Blooms April–June.	*Not expected.* Survey area is outside elevational range of this species. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Harpagonella palmeri	Palmer's grapplinghook	None/None/4.2/None	Occurs in chaparral, coastal scrub, and valley and foothill grassland with clay soils at elevations between 60 and 3,100 feet amsl. Blooms March–May.	*Not expected.* No coastal sage scrub with clay soils occurs within the survey area. Historical locations occur approximately 0.9 mile north and approximately 0.6 mile southwest of the survey area but not within it (Figure 7) (CDFW 2023a; CNPS 2023).
Holocarpha virgata ssp. *elongata*	Graceful tarplant	None/None/4.2/None	Occurs in coastal sage scrub, foothill woodland, chaparral, and grassland habitats at elevations below 2,950 feet amsl. Blooms May–November.	*Low.* Suitable habitat occurs in Diegan coastal sage scrub in the northeastern corner of the survey area and the northern and eastern portions with disturbed Diegan coastal sage scrub. The species was not observed during the survey, and no historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Horkelia truncata	Ramona horkelia	None/None/1B.3/ None	Occurs in clay and gabbroic soils within chaparral and cismontane woodland between 218 and 4,013 feet amsl. Blooms May–June.	*Not expected.* No suitable habitat with clay or gabbroic soils occurs within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Lepechinia cardiophylla	Heart-leaved pitcher sage	None/None/1B.2/MSCP	Occurs in chaparral, cismontane woodland, and closed-cone coniferous forest between 397 and 4,217 feet amsl. Blooms April–July.	*Not expected.* No suitable habitat occurs within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3/None	Occurs in chaparral and coastal scrub bluff habitats from 5 to 2,905 feet amsl. Blooms January–July.	*Low.* Suitable habitat occurs in Diegan coastal sage scrub in the northeastern corner of the survey area and the disturbed Diegan coastal sage scrub in the northern and eastern portions of the survey area. Not observed during 2023 survey; however, survey was conducted outside the blooming period. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Microseris douglasii ssp. *platycarpha*	Small-flowered microseris	None/None/4.2/None	Occurs in clay soils within coastal sage scrub, woodlands, and valley grassland habitats, or near vernal pools or serpentine outcrops between 29 and 3,429 feet amsl. Blooms March–May.	*Not expected.* No coastal sage scrub with clay soils occur within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Monardella hypoleuca ssp. *lanata*	Felt-leaved monardella	None/None/1B.2/MSCP	Occurs in chaparral, cismontane woodland between 536 and 4,988 feet amsl. Blooms June–August.	*Not expected.* No suitable habitat occurs within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Monardella viminea	Willowy monardella	FE/SE/1B.1/MSCP	Usually occurs along or near ephemeral streams in coarse rocky sand or sandy clay between 122 and 5,118 feet amsl. Blooms June–August.	*Not expected.* No suitable habitat along the drainage within the survey area, and the survey area does not fall within the known remaining eight population locations of this species within San Diego County. Therefore, the species is not expected to occur. No historical locations exist within 1 mile of the survey area (CDFW 2023a; USFWS 2023b; CNPS 2023).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Ophioglossum californicum	California adder's-tongue	None/None/4.2/None	Occurs in moist areas or vernal pools within chaparral, freshwater wetlands, wetland–riparian, and valley and foothill grassland communities between 40 and 2,845 feet amsl. Blooms January–June.	*Not expected.* No vernal pools or mesic soils occur in the survey area. No historical locations exist within 1 mile of the survey area No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Selaginella cinerascens	Ashy spike moss	None/None/4.1/None	Occurs in coastal sage scrub and chaparral habitats, often in red clay soils at elevations between 65 and 2,100 feet amsl. No blooming period listed.	*Not expected.* No coastal sage scrub with clay soils occurs in the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Stipa diegoensis	San Diego County needle grass	None/None/4.2/None	Occurs in chaparral and coastal scrub with mesic or rocky soils between 101 and 2,534 feet amsl. Blooms February–June.	*Low.* Suitable habitat with rocky soils occurs in Diegan coastal sage scrub in the northeastern corner of the survey area. The species was not observed during 2023 survey; however, survey was conducted outside the blooming period. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Tetracoccus dioicus	Parry's tetracoccus	None/None/MSCP	Occurs in chaparral and coastal scrub, often on dry slopes between 161 and 2,838 feet amsl. Blooms April–May.	*Low.* Suitable Diegan coastal sage scrub occurs in the northeastern corner of the survey area, and steep slopes occur further east adjacent to and outside the survey area. Not observed during 2023 survey. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).
Viguiera laciniata	San Diego County viguiera	None/None/4.3/None	Occurs in chaparral and coastal scrub, often on dry slopes between 13 and 3,511 feet amsl. Blooms February–June.	*Moderate.* Suitable Diegan coastal sage scrub occurs in the northeast corner of the survey area. The species was not observed during 2023 survey; however, survey was conducted outside the blooming period. No historical locations exist within 1 mile of the survey area (CDFW 2023a; CNPS 2023).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Wildlife				
Invertebrates				
Bombus crotchii	Crotch's bumblebee	FC/None/None/None	Occurs in grasslands and shrublands, generally in hotter and drier habitats than other species of bumblebee. This species is short-tongued and therefore prefers plants like milkweeds, buckwheats, medics, poppies, and lupines.	*High.* Suitable Diegan coastal sage scrub occurs in the northern, eastern, and northeastern portions of the survey area. California buckwheat was present throughout both disturbed and non-disturbed Diegan coastal sage scrub as a nectar source. Historical locations from as recent as 2020 occur approximately 0.8 mile southwest of the survey area (Figure 7) (CDFW 2023a).
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/SSC/—/MSCP	Generally restricted to shallow freshwater vernal pools and includes swales, tire ruts, and other depressions that are filled seasonally by rainfall.	*Not expected.* No vernal pools or depressions occur within the survey area. Multiple historical locations occur north of the survey area but not within it (USFWS 2023a; CDFW 2023a).
Danaus plexippus	Monarch butterfly (California overwintering population)	FC/ST/—/None	Occurs in a variety of habitats where patches of milkweed (*Asclepias* sp.), the monarch caterpillar host plant, are present. Overwinter in groves of eucalyptus, cypress, and pine along the California coast and high-elevation forests in Mexico.	*High.* Suitable nectar sources for foraging present in landscape/ornamental plants throughout the survey area and Diegan coastal sage scrub in the northern, eastern, and northeastern portions of the survey area. No milkweed patches, suitable as host plants for caterpillars to occupy, occur in the survey area. Eucalyptus and pine trees, suitable for overwintering, occur surrounding the residence within developed areas. No historical locations occur within 1 mile of the survey area; however, this species is likely to occur in the survey area (USFWS 2023b; CDFW 2023a).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Euphydryas editha quino	Quino checkerspot butterfly	FE/None/—/MSCP	Occurs in chaparral and coastal sage shrublands. Cryptogamic soil crusts and host plant species, including dot-seed plantain (*Plantago erecta*) and owl's clover (*Castilleja exserta)*, are species indicators.	*Low.* Limited suitable Diegan coastal sage scrub is present in survey area, but no host plants occur in the survey area. Suitable nectar sources for foraging occur throughout the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a USFWS 2023b).
Lycaena hermes	Hermes copper butterfly	FT/None/—/MSCP	Occurs in chaparral and coastal sage scrub habitats, particularly ones that contain its host plant spiny redberry (*Rhamnus crocea*) and primary nectar plant California buckwheat.	*Moderate.* Suitable Diegan coastal sage scrub habitat with California buckwheat occurs in the northern, eastern, and northeastern portions of the survey area for foraging, but no host plants were observed in these areas. One spiny redberry was observed in the landscaping on the west side of a residential property in survey area, but this area is completely mowed and does not support suitable coastal sage scrub habitat for foraging or breeding within the survey area. No historical locations exist within 1 mile of the survey area (CDFW 2023a USFWS 2023b).
Amphibians				
Anaxyrus californicus	Arroyo toad	FE/SSC/—/MSCP	This species has extremely specialized habitat needs, which include exposed sandy streams with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding.	*Not expected.* No slow-moving, sandy streams with stable terraces occur within the survey area for breeding or foraging. No historical locations exist within 1 mile of the survey area (CDFW 2023a USFWS 2023b).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Spea hammondii	Western spadefoot	FC/SSC/—/None	Occurs primarily in grasslands or coastal sage scrub with vernal pools or similar shallow, temporary pools for breeding.	*Moderate.* Suitable Diegan coastal sage scrub habitat occurs in the northern, eastern, and northeastern portions of the survey area for foraging, but no shallow pools or rutting occur within the survey area for breeding. Human-made pools or ponds within the surrounding rural–residential areas could provide suitable breeding habitat, but none were observed within the survey area. Historical locations occur approximately 0.7 mile north and northwest of the survey area and approximately 0.2 mile south of the survey area (Figure 7) (CDFW 2023a).
Reptiles				
Aspidoscelis hyperythra	Belding's orange-throated whiptail	None/WL/—/MSCP	Occurs in coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also, found in weedy, disturbed areas adjacent to these habitats.	*High.* Suitable Diegan coastal sage scrub habitat and weedy disturbed areas adjacent to coastal sage scrub occur in the northern, eastern, and northeastern portions of the survey area. One historical location occurs approximately 0.6 mile northwest of the survey area (Figure 7) (CDFW 2023a).
Crotalus ruber	Red diamond rattlesnake	None/SSC/—/None	Occurs in open chaparral and coastal sage scrub and along creek banks, particularly among rock outcrops or piles of debris with burrowing rodents for prey.	*High.* Suitable Diegan coastal sage scrub occurs in the northern, eastern, and northeastern portions of the survey area. The non-vegetated channels, which have connectivity to disturbed Diegan coastal sage scrub in the northern portion of the survey area, are also suitable habitat. A historical location occurs approximately 0.6 mile northwest of the survey area but not within it (Figure 7) (CDFW 2023a).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Phrynosoma blainvillei	Blainville's horned lizard	None/SSC/—/MSCP	Occurs in coastal sage scrub, chaparral, and grasslands in primarily loose soils. Often found in areas with harvester ants.	*High.* Diegan coastal sage scrub with loose soils and harvester ants are present in the northern, eastern, and northeastern portions of the survey area. Historical locations occur approximately 0.7 mile north and 0.8 mile northwest of the survey area but not within it (Figure 7) (CDFW 2023a).
Thamnophis hammondii	Two-striped garter snake	None/SSC/—/None	Occurs in and along permanent and intermittent streams within oak woodland, willow, coastal sage scrub, scrub oak, sparse pine, chaparral, and brushland; highly aquatic.	*Low.* Non-vegetated channels in the northwestern portion of the survey area that have connectivity to disturbed Diegan coastal sage scrub are suitable habitat, but this species prefers riparian areas with abundance of fish and amphibians, which are not present in the survey area. One historical location occurs approximately 0.6-mile northwest of the survey area but not within it (Figure 7) (CDFW 2023a).
Birds				
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL/—/MSCP	Occurs in coastal sage scrub and sparse mixed chaparral on rocky hillsides and in canyons; also found in open sage scrub/grassy areas of successional growth.	*Moderate nesting, Moderate foraging.* Suitable Diegan coastal sage scrub for nesting and foraging occurs in the northern, eastern, and northeastern portions of the survey area, particularly on the northeastern corner where rocky habitat occurs just outside the survey area. Historical locations occur north, northeast, and west of the survey area with the closest observations occurring within 0.1 mile of the survey area (Figure 7) (CDFW 2023a; USFWS 2023b).
Ammodramus savannarum	Grasshopper sparrow	None/SSC/—/None	Occurs in grasslands, prairies, hayfields, and open pastures with little to no scrub cover and often with some bare ground.	*Not expected foraging, Not expected nesting.* No suitable grassland habitat occurs within or immediately surrounding the survey area. One

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
				historical location occurs approximately 0.2 mile west of the survey area but not within it (Figure 7) (CDFW 2023a).
Artemisiospiza belli bellii	Bell's sparrow	None/WL/—/None	Occurs in chaparral dominated by chamise and coastal sage scrub dominated by California sagebrush.	*Low nesting, Moderate foraging.* Diegan coastal sage scrub dominated by California sagebrush occurs primarily in the northeastern corner of the survey area and could support foraging or dispersing individuals; however, the habitat in the survey area is small and close to disturbance and would likely discourage nesting. Disturbed Diegan coastal sage scrub in the northern and eastern portions of the survey area could also support foraging and dispersing individuals but are less suitable for nesting. One historical location occurs approximately 0.9 mile north of the survey area but not within it (Figure 7) (CDFW 2023a).
Campylorhynchus brunneicapillus sandiegensis	Coastal cactus wren	BCC/SSC/—/MSCP	Occurs in large cactus patches (i.e., prickly pear [Optunia sp.] or chollas [*Cylindropuntia* sp.]) patches within coastal sage scrub.	*Not Expected Nesting, Not Expected Foraging.* No suitable large native cactus patches exist for foraging or nesting. Historical locations occur approximately 0.8 mile northwest and southwest of the survey area but not within it (Figure 7) (CDFW 2023a).
Empidonax traillii extimus	Southwestern willow flycatcher	FE/SE/—/MSCP	Occurs in habitat often near riparian areas especially with willow species.	*Not expected Foraging, Not Expected Nesting.* No suitable riparian habitat occurs in the survey area. No historical observations occur within 1 mile of the survey area (CDFW 2023a; USFWS 2023b).

Table 2. Sensitive Plant and Wildlife Species with Potential to Occur

Scientific Name	Common Name	Status Federal/State/CRPR/Regional	Habitat	Potential to Occur
Polioptila californica californica	Coastal California gnatcatcher	FT/SSC/—/MSCP	Obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California.	*High foraging, Moderate nesting.* Suitable Diegan coastal sage scrub for foraging and nesting occurs in the northern, eastern, and northeastern portions of the survey area. Numerous historical observations occur north, east, and west of the survey area. One observation occurs immediately adjacent to the survey buffer in the northwestern corner of the survey area (Figure 7) (CDFW 2023a; USFWS 2023b).
Vireo bellii pusillus	Least Bell's vireo	FE/SE/—/MSCP	Occurs in a variety of habitats, but most often associated with riparian habitat, often with willow species. Requires dense understory shrub cover for nest concealment, with an overstory dominated by willows.	*Not expected Foraging, Not Expected Nesting.* No suitable riparian habitat occurs in the survey area. One historical location occurs approximately 0.9 mile north of the survey area but not within it (Figure 7) (CDFW 2023a; USFWS 2023b).
Mammals				
Felis concolor	Mountain lion	None/None/None/ MSCP	Occurs in a variety of habitats throughout California. Rests in rocky areas and on cliffs or ledges that provide cover.	*Moderate*. Suitable habitat and smaller prey available immediately adjacent to the survey area, but no suitable rocky cliffs or ledges that could provide cover are present in the survey area. Foraging individuals could travel through the survey area. Historical locations occur approximately 0.9 mile north of the survey area, but not within it (Figure 7; CDFW 2023a; USFWS 2023b).

Notes: — = no data; amsl = above mean sea level; CRPR = California Rare Plant Rank; None = no status indicated for species

Federal Status
FC = Federal candidate
FE = Federally listed as endangered
FT = Federally listed as threatened

State Status

SSC = State listed as special species of concern
ST = State-listed as threatened
WL = State watch list species

CRPR Ranking

1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.
0.1 = Species seriously threatened in California (over 80 percent of occurrences threatened; high degree and immediacy of threat).
0.2 = Species fairly threatened in California (20–80 percent occurrences threatened; moderate degree and immediacy of threat).
0.3 = Species not very threatened in California (<20 percent of occurrences threatened; low degree and immediacy of threat or no current threats known).

Regional Status

MSCP = Multiple Species Conservation Program covered

Plant Species

No sensitive plant species were observed or determined to have a potential to occur in the survey area (Table 2).

Wildlife Species

No sensitive wildlife species were observed or determined to have a potential to occur in the survey area (Table 2).

Sensitive Wildlife Species Not Observed but with High Potential to Occur

Six sensitive wildlife species were determined to have a high potential to occur in the survey area. None of these species were observed during the biological resource survey. However, no sensitive protocol surveys were conducted. These sensitive wildlife species with a high potential to occur in the survey area are described in the following subsections.

Crotch's Bumblebee

Crotch's bumblebee (*Bombus crotchii*) is a federal candidate species. In October 2018, the Xerces Society for Invertebrate Conservation (CDFW 2019) submitted a petition to CDFW to list Crotch's bumblebee. It was determined that listing the species "may be warranted," and the species became a candidate for federal listing on June 12, 2019, affording it the same legal protection as an endangered or threatened species (CDFW 2019). Crotch's bumblebee is distinguished from other *Bombus* species based on hair coloration. Queens and workers have a black face with a yellow vertex and yellow scutum with black hairs between and below the wings and on the scutellum. The first tergal segments are black, the second is yellow, and third is black sometimes with red. Males have a yellow head, face, scutellum, and scutum with a black band between the wings. The first, second, and third tergal segments on males are yellow, and the third and the fourth through seventh are either entirely black or entirely red. This species is endemic to California where it occurs throughout most of southwestern California in a variety of habitats including open grasslands, shrublands, chaparral, desert margins, creosote scrub, and semi-urban areas. Crotch's bumblebees are generalist foragers but are best suited to forage on species with open flowers and short corollas due to their short tongue. The plant families most commonly visited include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllacae, Asclepiadaceae, and Boraginaceae. While little is known about hibernacula of this species, it is likely that it overwinters in soft, disturbed soil and nests underground. The flight period for Crotch's bumblebee occurs from late February to late October, peaking in early April and again in July (Xerces Society 2018). Threats to this species include habitat loss and modification, herbicides, pesticides, disease, and competition.

Diegan coastal sage scrub with suitable nectar sources including California buckwheat were observed in the northern, eastern, and northeastern portions of the survey area. One historical location from as recent as 2020 occurs approximately 0.8 mile southwest of the survey area (Figure 7) (CDFW 2023a).

Monarch Butterfly

On December 15, 2020, the USFWS found that adding the monarch butterfly to the list of threatened and endangered species was warranted but precluded by higher-priority species reviews and work (USFWS 2023d). Monarch butterfly is one of the most recognizable butterfly species, with orange wings laced with black lines and bordered with white dots. Its wingspan is 3.7 to 4.1 inches. This species occurs in patches of milkweed (*Asclepias* sp.), which is the species' caterpillar host plant. Although the larvae only eat milkweed, adult monarchs feed on a variety of nectar-bearing flowers. Monarch butterflies are found across North America wherever suitable feeding, breeding, and overwintering habitat exists. Monarch butterflies overwinter in groves of eucalyptus, cypress, and pine trees along the California coast and high-elevation forests in Mexico (Xerces Society 2017). Threats to this species include habitat loss, climate change, and agriculture.

Mature ornamental trees, including eucalyptus and pines, are present in the survey area and surrounding areas that would provide suitable overwintering habitat for monarch butterfly. No milkweed patches were observed in the survey area that would be suitable for monarch butterfly caterpillars to occupy, but numerous landscape/ornamental plants throughout the survey area could provide nectar sources for this species in addition to

Diegan coastal sage scrub species in the northern, eastern, and northeastern portions of the survey area. No historical locations occur within 1 mile of the survey area (CDFW 2023a).

Red Diamond Rattlesnake

Red diamond rattlesnake (*Crotalus ruber*) is a CDFW species of special concern. Red diamond rattlesnake can be found in the counties of San Bernardino, Riverside, and San Diego. Its habitat includes arid desert in rocky areas, coastal scrub, chaparral, woodland, and dense vegetation. This species can also occur from sea level up to 3,000 feet in elevation and is active from mid-spring into fall. The red diamond rattlesnake is successful as an ambush predator and will actively seek prey on the ground and in bushes. As temperatures increase throughout the season, this species becomes less active during the day and becomes fully nocturnal. Young are typically born from mid-August to October. Threats to red diamond rattlesnake include urban development, pest control, and off-road vehicle activity.

Suitable Diegan coastal sage scrub occurs in the northern, eastern, and northeastern portions of the survey area, particularly on the northeastern corner, where rocky habitat occurs just outside the survey area. The non-vegetated channels, which have connectivity to disturbed Diegan coastal sage scrub in the northern portion of the survey area and larger stretches of dense, undisturbed Diegan coastal sage scrub outside the survey area are also suitable habitat. Debris and litter from residential structures in the survey area could provide suitable shelter for this species. A historical location occurs approximately 0.6 mile northwest of the survey area but not within it (Figure 7) (CDFW 2023a).

Belding's Orange-Throated Whiptail

Belding's orange-throated whiptail (*Aspidoscelis hyperythra*), a CDFW Watch List and an MSCP-covered species, is a medium-sized lizard with an orange throat and a chest, which turns brighter orange during breeding season. Belding's orange-throated whiptail occurs in coastal sage scrub, chaparral, edges of riparian woodlands, washes, and weedy, disturbed areas adjacent to these habitats. This species eats small invertebrates, including spiders, scorpions, centipedes, termites, and small lizards (Nafis 2023). Threats to this species include development and habitat fragmentation.

Suitable Diegan coastal sage scrub with adjacent weedy disturbed areas is present in the northern, eastern, and northeastern portions of the survey area, which provide suitable habitat for Belding's orange-throated whiptail. One historical location occurs approximately 0.6 mile northwest of the survey area (Figure 7) (CDFW 2023a).

Blainville's Horned Lizard

Blainville's horned lizard (*Phrynosoma blainvillei*) is a CDFW Species of Special Concern. Blainville's horned lizard is a medium-sized horned lizard that ranges widely in coloration and has distinctive horns along its entire back and sides. This species occurs in riparian woodlands, coniferous forests, chaparral, coastal sage scrub, and annual grassland habitats with loose soils for burrowing. Blainville's horned lizard is found in the Sierra Nevada foothills and throughout the central and Southern California coasts at elevations up to 6,000 feet amsl. It feeds on the ground in open areas, primarily hunting native ants, although it will feed on other small invertebrates. Threats to Blainville's horned lizard include urban development, conversion of habitat to agriculture, and collection of individuals for the pet trade. In addition to these threats, the non-native and less palatable Argentine ant (*Iridomyrmex humile*) is displacing native ants, an important food source for this species, in many areas.

Suitable Diegan coastal sage scrub with loose soils and harvester ants (*Pogonomyrmex* sp.) present in the northern, eastern, and northeastern portions of the survey area have the potential to support Blainville's horned lizard. Historical locations occur approximately 0.7 mile north and 0.8 mile northwest of the survey area but not within it (Figure 7) (CDFW 2023a).

Coastal California Gnatcatcher

Coastal California gnatcatcher (*Polioptila californica californica*) is a federally threatened and MSCP covered species. The coastal California gnatcatcher is a small, gray, long-tailed insectivorous songbird that occurs almost exclusively in open coastal sage scrub vegetation with California sagebrush as the dominant or co-dominant

species, but the coastal California gnatcatcher can also be found in chaparral sage scrub intergrades and riparian habitats (mulefat scrub) (USFWS 2010). Coastal California gnatcatchers are endemic to Southern California and Baja California, Mexico, and they do not migrate in winter. In Southern California, this species ranges from the County of Ventura south to the County of San Diego and east to the County of San Bernardino. Males have dark blue–gray plumage on their upperparts and grayish white plumage on their underparts, while females and hatch-year juveniles have gray–brown plumage above and grayish white plumage below. The tail is mostly black above and below. Males have a distinctive black cap, which is absent during the winter. Both sexes have a distinctive white eye ring. They have a distinct call, which sounds like a kittenish "mew." The breeding season extends from February through August, with peak nesting activities occurring from mid-March through May (USFWS 2010). Both the male and female in a pair will incubate between 3 and 5 eggs, with the average clutch being 4; and both adults will feed hatchlings and fledglings. Males will vigorously patrol territories which range in size from 2 acres to upwards of 40 acres. Territories are held year-round and are smallest during the wintertime, likely when lower resources are required (no longer feeding juveniles). Although nonmigratory, juveniles disperse typically less than 3 kilometers but have been known to move upwards of 20 kilometers. The major threat to this species is the rapid loss of coastal sage scrub habitat to urbanization and agricultural development.

Suitable foraging habitat for coastal California gnatcatcher occurs in the Diegan coastal sage scrub (including disturbed) in the northern, eastern, and northeastern portions of the survey area, which further connect to larger, uninterrupted areas of high-quality Diegan coastal sage scrub. Although the survey area contains suitable foraging habitat, it does not provide high potential for nesting because of its size and immediate surrounding habitat (disturbed) on three out of four sides. Therefore, the Diegan coastal sage scrub within the survey area may be included in the overall larger territory for an established pair but has lower potential to contain a nest for a breeding pair. Therefore, while the survey area has moderate potential to support nesting coastal California gnatcatcher, the Diegan coastal sage scrub in the survey area provides adequate foraging and patrolling habitat for a breeding pair and or for dispersing juveniles. Therefore, the Diegan coastal sage scrub in the survey area has a high potential to provide foraging habitat for coastal California gnatcatcher.

Numerous documented occurrences of this species exist on all sides of the survey area. One location occurs immediately adjacent to the northwestern corner of the survey area (Figure 7) (CDFW 2023a), and critical habitat for this species occurs throughout the entire survey area (Figure 8, Critical Habitat).

Roosting Bats

The survey area contains suitable roosting and foraging habitat for common bat species. Although bats that avoid areas heavily used by humans may not be observed, the availability of suitable roosting habitat (i.e., residential buildings, sheds, trees) and suitable foraging habitat (i.e., open disturbed areas, ornamental plantings) indicate that bats more common to urban and suburban environments or habitat "generalist" species have potential to be found in the survey area. Common species including Mexican free-tailed bats (*Tadarida brasiliensis*), California myotis (*Myotis californicus*), big brown bat (*Eptesicus fuscus*), and hoary bat (*Lasiurus cinereus*), which can be found roosting in buildings, crevices, and trees and foraging over open space areas, have potential to be found in the survey area, particularly within structures, like sheds and residential homes, and ornamental trees throughout the survey area. The non-vegetated channels in the northwestern portion of the survey area (when flows are present) provide suitable foraging habitat for bats roosting in the area that forage over sources of open water, including fringed myotis (*Myotis thysanodes*). While no bats were observed using the survey area for roosting or foraging during the biological resource survey, no nighttime focused acoustic surveys were conducted, and the availability of suitable habitat indicates that bats have potential to roost and forage in the survey area.

Nesting Birds

While no active nests were observed in the survey area, a focused nesting bird survey was not conducted as part of the biological reconnaissance survey. In addition, the survey was conducted outside typical breeding season for most bird species. The project site provides potentially suitable nesting habitat for several bird species, including raptors, which are protected under the CFGC and MBTA.

Mature trees, including eucalyptus, Peruvian pepper, and pine species, are present throughout the survey area and in the non-native woodland on the eastern portion of the survey area, which are suitable for many species including hummingbirds and raptors such as red-shouldered hawk. Structures that have eaves, crevices, cracks, and other "cavities," including the sheds and residential structures in the northern, central, and southern portions of the survey area and the church in the southwestern portion of the survey area, may provide nesting opportunities for other nesting birds, such as black phoebes (*Sayornis nigricans*), which attach their nests to undersides of structures with mud. The Diegan coastal sage scrub in the northern, eastern, and northeastern portions of the survey area could support nesting for a variety of common species like California towhee (*Melozone crissalis*) or California thrasher (*Toxostoma redivivum*), and sensitive species like coastal California gnatcatcher.

Critical Habitat

The potential presence of critical habitat in the survey area and within a 1-mile radius was analyzed. Designated critical habitat for two sensitive wildlife species, coastal California gnatcatcher and Hermes copper butterfly (*Lycaena hermes*) occur within a 1-mile radius of the survey area. Critical habitat for these species is displayed on Figure 8.

Critical habitat for coastal California gnatcatcher occurs throughout the survey area, while critical habitat for Hermes copper butterfly occurs in a narrow strip on the western side of the survey area and surrounding areas further north, east, and west of the survey area.

Wildlife Corridors and Linkages

Wildlife corridors provide routes for local movement and also regional linkages and corridors, often following linear topographic, vegetation, or water features. These corridors can be continuous habitats, features, or "stepping stone" areas, providing critical rest and foraging areas, for example, for birds traveling along migratory routes. Local routes of movement provide constant connections to resources that include sources of water, home/cover sites, and foraging areas. Regional linkages and movement corridors provide larger patches of open space to allow relatively free movement of wildlife species along multiple paths between important resources. These areas allow for not only long-term genetic flow between subpopulations but also critical pathways of seasonal/migratory movements. Larger predatory mammals often use regional corridors for hunting and reproduction needs. Potential wildlife corridors can include streams, riparian areas, and culverts under roadways. Habitat characteristics considered include topography, habitat quality, and adjacent land uses.

The survey area is a partially developed residential lot surrounded by a mixture of large, continuous stretches of high-quality Diegan coastal sage scrub to the north, east, and west, and other residential development. The open coastal scrub areas are designated as part of a core biological resource area in the County MSCP (County of San Diego 1998). Sycamore Canyon/Goodan Ranch County Preserve and Sycamore Canyon Open Space Preserve occur approximately 2.5 miles north of the survey area. Diegan coastal sage scrub in the northeastern and eastern portions of the survey area has direct connectivity to these preserves. Fully conserved land with connectivity to these preserves occurs northeast of the survey area, and Santee Lakes Recreation Preserve occurs approximately 1.4 miles west of the survey area. The San Diego River occurs approximately 1.9 miles south of the survey area but is separated from the survey area by heavy residential development.

Although the survey area is partially developed and bordered by dense developed areas to the south, the survey area contains patches of native habitat and open areas that have connections to open space within the Sycamore Canyon/Goodan Ranch County Preserve, Sycamore Canyon Open Space Preserve, and the Santee Lakes Recreation Preserve. Therefore, the survey area may be used as a movement corridor by large mammals and mesocarnivores looking to access open space and avoid more developed portions of this immediate area. The survey area also provides suitable nesting, foraging, and dispersal opportunities for both common and sensitive wildlife species, including avian and bat species, invertebrates, reptiles, mesocarnivores (i.e., raccoons [*Procyon lotor*]), and other smaller mammals as well as large mammals like mountain lions (*Felis concolor*).

The survey area holds value for migrating birds flying through to wintering grounds that are protected by the MBTA. The non-native woodland, Diegan coastal sage scrub, and ornamental vegetation and structures throughout the survey

area could support migrants and breeding pairs, particularly due to the proximity of the survey area to the San Diego River and nearby native habitat and Preserves.

Some movement to the west, towards the Santee Lakes Recreational Preserve may be slightly impeded due to the presence of Summit Avenue and a regularly mowed fire break immediately adjacent to the high-quality Diegan coastal sage scrub further west and outside the survey area. Movement may also be slightly impeded to the east, where another small area is developed for residential use, and to the south, where heavy urban development occurs. Therefore, the project site is likely to provide local movement opportunities but would not be considered a significant regional movement corridor due to the survey area's inability to serve as a major route of movement or as a critical linkage to larger open spaces.

Jurisdictional Aquatic Resources

A formal aquatic resources delineation was not conducted during the biological survey. As previously discussed in the Hydrology section, NWI and NHD database query results identified several aquatic features surrounding the survey area and one within it (Figure 5). The aquatic resource, a non-vegetated channel, identified in the NWI and NHD, results was observed in the survey area (AF-1) in addition to two other non-vegetated channels with connectivity to this feature (AF-2 and AF-3) (Figure 9, Potential Jurisdictional Aquatic Resources). All three aquatic resources occur in the northwestern portion of the survey area and were determined to be non-wetland waters that are tributaries to the San Diego River, a TNW. Therefore AF-1, AF-2, and AF-3 are all potentially under the jurisdiction of the USACE pursuant to the CWA Section 404. AF-1, AF-2, and AF-3 convey natural flows and urban stormwater through both developed land and open space, providing water quality and habitat functions for the San Diego River Watershed and, therefore, are potentially under the jurisdiction of the RWQCB and CDFW, pursuant to the CWA Section 401 and CFGC Section 1602, respectively.

The potential jurisdictional aquatic features observed in the survey area total approximately 0.03 acre, with approximately 0.01 acre occurring on the project site; however, these features will be avoided entirely during implementation of the project.

Significance of Project Impacts and Proposed Mitigation

Significance Criteria

Direct impacts occur when biological resources are altered or destroyed during the course of or as a result of project implementation. Examples of such impacts include removing or grading vegetation, filling wetland habitats, or severing or physically restricting the width of wildlife corridors. Other direct impacts may include loss of foraging or nesting habitat and loss of individual species as a result of habitat clearing. Indirect impacts may include elevated levels of noise or lighting, change in surface water hydrology within a floodplain, and increased erosion or sedimentation. These types of indirect impacts can affect vegetation communities or their potential use by sensitive species. Permanent impacts may result in irreversible damage to biological resources. Temporary impacts are interim changes in the local environment due to construction and would not extend beyond project-associated construction, including revegetation of temporarily disturbed areas adjacent to native habitats.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) define "significant effect on the environment" as a "substantial, or potentially substantial adverse change in the environment." Appendix G of the CEQA Guidelines further indicates that a significant effect on biological resources may occur if the project would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game [1] or U.S. Fish and Wildlife Service.
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

[1] As of January 1, 2012, the California Department of Fish and Game became the California Department of Fish and Wildlife.

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

Threshold A

Guidelines for Determination of Significance

A significant impact would result if the project had a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the CDFW or USFWS.

This guideline for significance is taken directly from the CEQA Guidelines, Appendix G, and is based on the CEQA Guidelines definition of mandatory findings of significance (Section 15065) and of endangered, rare, or threatened species (Section 15380).

Analysis

Potential direct and indirect impacts to sensitive plant and wildlife species are discussed in the following subsections.

Sensitive Plant Species

As discussed in the Results section, no sensitive plant species were observed or determined to have a high potential to occur in the survey area. Further, the areas containing Diegan coastal sage scrub (including disturbed), non-native woodland, non-vegetated channels, and disturbed habitat on the project site have a low potential to support sensitive plant species, and only portions of non-native woodland and disturbed and developed areas will be impacted on the project site (Table 2). Therefore, project implementation would not result in direct or indirect impacts to sensitive plant species. Impacts to sensitive plant species would be less than significant, and no mitigation is required.

Sensitive Wildlife Species

As discussed in the Results section, no sensitive wildlife species were observed in the survey area, but the project has the potential to result in direct and indirect impacts on sensitive wildlife species that have a high potential to occur in the survey area. Six sensitive species were determined to have a high potential to occur within the survey area. Although monarch butterfly was not observed within the survey area, and no observations have been documented within 1 mile of the survey area, presence of suitable habitat indicates that this species has a high potential to occur in the survey area. Potential direct and indirect impacts to sensitive wildlife species are discussed in the following subsections.

Direct Impacts

Two sensitive vegetation communities, Diegan coastal sage scrub (disturbed) and non-vegetated channel, which could support sensitive wildlife species, were observed on the project site; however, these areas will be avoided, and no impacts are expected during project implementation. Non-native woodland is not considered a sensitive vegetation community but may provide suitable nesting and foraging habitat for both common and sensitive species. The disturbed habitat and developed areas on the project site are also not considered sensitive vegetation communities; however, these areas may provide foraging habitat for sensitive species like red diamond rattlesnake and foraging and roosting habitat for common bat species (indirect impacts).

Table 3, Impacts on Sensitive Vegetation Communities, presents the total sensitive vegetation community acreages in the survey area and the permanent impacts from implementation of the project.

Table 3. Impacts on Sensitive Vegetation Communities

Vegetation Community and Land Cover Type	Project Site (acres)[1]	Permanent Impacts[1]
Aquatic		
Non-vegetated channel (64200)	0.01	0
Subtotal	*0.01*	*0*
Upland		
Diegan coastal sage scrub (including disturbed) (32500)	0.04	0
Subtotal	*0.04*	*0*
Total	**0.05**	**0**

Sources: Holland 1986; Oberbauer et al. 2008.
Notes:
[1] Acreages rounded up to one-hundredth

No permanent direct impacts to sensitive vegetation communities would occur as a result of project implementation, as impacts to these areas on the project site will be avoided (Figure 10, Impacts to Biological Resources); therefore, no mitigation is required.

Permanent impacts to approximately 0.02 acre of non-native woodland, 2.39 acres of disturbed habitat, and approximately 0.5 acre of urban/developed land would occur during project implementation (Figure 10). The non-native woodland consists of Peruvian pepper trees that could provide nesting and foraging habitat for a variety of common and sensitive species. The disturbed habitat on the project site is dominated by bare ground, black mustard, and dove weed with sparse amounts of non-native grasses and non-native annuals that may provide marginally suitable foraging habitat for raptors and other sensitive bird species, invertebrates, and reptiles. The landscaped and ornamental plants within the developed areas could provide foraging habitat for various reptile and invertebrate species like monarch butterfly and Belding's orange-throated whiptail. Removal of the potential foraging habitat could result in significant impacts to sensitive birds and raptors, invertebrates, and reptiles, and mitigation is required.

Indirect Impacts

Temporary construction-related indirect impacts to wildlife generally include noise, vibration, lighting, increased human activity, dust deposition, introduction or spread of non-native species, increased potential of exotic species invasion due to soil disturbance, hydrologic quality, increased turbidity, excessive sedimentation, flow interruptions, changes in water temperature, and trash and garbage, which can attract both introduced terrestrial and native terrestrial and avian predators (such as American crows [*Corvus brachyrhynchos*], common ravens [*Corvus corax*], coyotes [*Canis latrans*], domestic dogs [*Canis familiaris*], raccoons, and striped skunks [*Mephitis mephitis*]). These temporary construction-related indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on Belding's orange-throated whiptail, Blainville's horned lizard, coastal California gnatcatcher, Crotch's bumblebee, monarch butterfly, and red diamond rattlesnake, and mitigation would be required.

Nesting Birds

Project implementation has the potential to impact bird and raptor species that are protected under the MBTA and CFGC Section 3503. The Diegan coastal sage scrub on and surrounding the project site could provide suitable nesting habitat for both common and sensitive species, including coastal California gnatcatcher, although it is more likely that this species would nest further outside the survey area. Additionally, the non-native trees within disturbed habitat and developed areas surrounding the project site provide nesting habitat for many bird species. If construction is conducted during the general bird breeding season (January 15 through August 31), temporary direct impacts from disturbance and displacement of nesting birds during vegetation removal could result in significant direct impacts on bird species protected under the MBTA and CFGC, and mitigation is required. Indirect

impacts from construction noise and vibration during clearing, grubbing, and trenching activities, if conducted during the bird breeding season, could result in significant indirect impacts on bird species protected under the MBTA and CFGC, and mitigation is required.

Roosting Bats
As previously discussed, suitable roosting habitat for common bat species occurs primarily in the native and ornamental trees and structures in the survey area. No sensitive bat species were determined to have potential to roost or forage in the survey area. Therefore, no potential direct and indirect impacts to sensitive roosting bats would be expected to occur, and no mitigation is required.

Threshold B

Guidelines for Determination of Significance
A significant impact would result if the project had a substantial adverse effect to any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS.

Analysis

Direct Impacts
As previously discussed under Threshold A, direct temporary and permanent impacts to sensitive vegetation communities on the project site are not anticipated as these habitats will be avoided during project implementation (Table 3; Figure 10); therefore, no mitigation is required.

Indirect Impacts
Indirect impacts to sensitive vegetation communities on the project site could result from invasion and spread of exotic species, exposure to construction-related pollutant discharges, and trampling by humans. These temporary construction-related indirect impacts to sensitive vegetation communities would be significant, and mitigation is required.

Threshold C

Guidelines for Determination of Significance
A significant impact would result if the project had a substantial adverse impact on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means. Impacts to state or federally jurisdictional aquatic resources would be considered significant and would require permits from the USACE and the RWQCB. Aquatic resources delineations would be required for any impacts to potential jurisdictional aquatic resources.

Analysis
As discussed in the Results section, three non-vegetated channels, AF-1, AF-2, and AF-3, were observed in the survey area (Figure 9). All three channels were determined to be non-wetland waters that have connectivity to each other and the San Diego River, a TNW. Therefore, AF-1, AF-2 and AF-3 are likely under the jurisdiction of the USACE, RWQCB, and CDFW pursuant to Sections 404 and 401 of the CWA and Section 1602 of the CFGC; however, only the USACE, RWQCB, and CDFW can make a final determination of jurisdictional boundaries.

Direct Impacts
As discussed in the Project Location and Description section, only portions of the project site would be developed, and the aquatic features AF-1, AF-2, and AF-3 located in the northwestern portion of the project will be avoided (Figure 10). Therefore, no permanent direct impacts will occur to potentially federal and state jurisdictional aquatic resources, and no mitigation is required.

Indirect Impacts

Most of the indirect impacts to sensitive plant species and sensitive vegetation communities described under Thresholds A and B would also result in potentially significant indirect impacts to the potential jurisdictional aquatic resources on the project site and require mitigation. Indirect impacts to potential jurisdictional aquatic resources can result from generation of fugitive dust, changes in hydrology resulting from construction (including sedimentation and erosion), and exposure to construction-related pollutant discharges. Mitigation is required.

Threshold D

Guidelines for Determination of Significance

The project would have a significant impact on wildlife movement and nursery sites if its development interfered substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impedes the use of native wildlife nursery sites.

Analysis

As discussed in the Results section, the project site likely functions mainly as a local movement corridor for both sensitive and common wildlife species rather than a larger-scale route for migratory animals because of the presence of Diegan coastal sage scrub and non-vegetated channels within the survey area and project site, and their proximity to large, continuous stretches of high-quality Diegan coastal sage scrub to the north, east, and west. These areas are all designated as part of a core biological resource area in the County MSCP (including Sycamore Canyon/Goodan Ranch County Preserve, and Sycamore Canyon Open Space Preserve, Santee Lakes Recreation Preserve, and fully conserved land to the northeast). Small areas of development to the east and west and larger developed areas to the south are likely to somewhat impede movement for mammals, reptiles, and amphibians. However, the survey area still likely provides movement opportunities and suitable nesting, foraging, and dispersal areas for both common and sensitive wildlife species and connections to nearby open space within core biological resource areas and high-quality habitat.

The high-quality Diegan coastal sage scrub present on the project site provides live-in and breeding habitat for a number of sensitive wildlife species, including Belding's orange-throated whiptail, Blainville's horned lizard, coastal California gnatcatcher, Crotch's bumblebee, monarch butterfly, and red diamond rattlesnake. However, no impacts are anticipated to this vegetation community as a result of project implementation. Non-native woodland has the potential to support nesting, roosting, and foraging habitat primarily for avian and common bat species. However, the majority of trees within the non-native woodland habitat will not be removed and will continue to provide suitable habitat for these species. Project implementation is likely to temporarily impede local movement of wildlife species; however, it is unlikely to inhibit regional or major movement of wildlife species within the area, and no mitigation is required.

Threshold E

Guidelines for Determination of Significance

A significant impact would result if the project conflicted with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Analysis

The project would comply with the local policies or ordinances protecting biological resources identified in Santee's General Plan and the MSCP (County of San Diego 1998). Therefore, no impacts to local policies or ordinances would occur from implementation of the project, and no mitigation is required.

Threshold F

Guidelines for Determination of Significance

A significant impact would result if the project conflicted with the provisions of an adopted Habitat Conservation Plan, natural community conservation plan, or other approved local, regional, or state Habitat Conservation Plan.

Analysis

The Santee MSCP Subarea Plan has not been approved or published yet, but the project would comply with the County MSCP. Therefore, no impacts to local conservation plans would occur from the implementation of the project, and no mitigation is required.

Proposed Mitigation

The following biological resources mitigation measures would be implemented during construction.

Sensitive Wildlife

BIO-1: Qualified Biologist. A qualified biologist provided by the City of Santee (or their designee) shall be on site periodically during construction activities that require implementation of specific measures. The qualified biologist shall be responsible for implementing the following measures:

a. Prior to commencement of construction, the limits of the project work area shall be clearly delineated with high visibility temporary fencing by a survey crew and checked by a qualified biologist before initiation of vegetation grubbing or removal.
b. The qualified biologist shall periodically inspect staging areas and stored construction materials (especially open pipes) for sensitive species throughout construction. The biologist shall also inspect any dirt stockpiles, pipes, and other construction materials temporarily stored on the project site to confirm they are covered and secured to prevent erosion and use by wildlife species.
c. The qualified biologist shall inspect the construction site to ensure that steep trenches, holes, and excavations during construction to ensure they are covered at night with backfill, plywood, metal plates, or other means, and the edges covered with soils and plastic sheeting such that small wildlife cannot access them. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected by construction personnel or the monitor when on site, twice daily (i.e., each morning and before sealing the exposed area), to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.
d. Worker Environmental Awareness Program shall be implemented during construction. Training for the Worker Environmental Awareness Program shall be provided by the qualified monitoring biologist to all personnel working on site. The training shall include a review of all special-status and protected species that occur or have a high potential to occur, all project design features and protection measures, the responsibilities of each worker, and a reporting framework.
e. The qualified biologist shall be present during construction activities that occur within 100 feet of aquatic features in the northwestern portion of the survey area to ensure proper use of Best Management Practices and avoidance of non-vegetated channels.

BIO-2: Pre-Construction Sensitive Avian Surveys. If construction activities are planned to occur during the coastal California gnatcatcher breeding season (February 15 to September 15), then prior to initiating construction activities, a qualified biologist shall be retained to conduct a minimum of three pre-construction surveys to confirm the presence or absence of the species on the project site and within a 500-foot buffer. The surveys shall begin a maximum of 14 days prior to project construction, and one survey shall be conducted the day immediately prior to the initiation of work. If coastal California gnatcatcher are confirmed to be absent within 500 feet of planned construction areas, then no additional measures shall be required. If coastal California gnatcatcher are confirmed to be present, the following mitigation measures shall be implemented:

a. **Avoidance of Breeding Season.** If the results of pre-construction surveys determine presence of coastal California gnatcatcher within 500 feet of the planned construction area, then construction activities within 500 feet of active nesting sites shall be completed outside the species breeding

seasons. If activities at these locations cannot avoid the species breeding seasons, then Mitigation Measure BIO-2.b shall be implemented.

b. **Construction Noise Attenuation.** If construction begins during the breeding season (February 15 to September 15), construction noise could affect the breeding of coastal California gnatcatcher. No loud construction noise (exceeding an hourly average of 60 A-weighted decibels, or 3 A-weighted decibels above hourly average ambient noise levels at the nesting site, whichever is higher) may take place within 500 feet of active nesting sites during the breeding seasons (February 15 to September 15). Noise levels may be mitigated with sound control barriers that are approximately 10 feet in height and placed between construction operations and sensitive habitat. The barriers shall be solid and made of plastic, masonry, wood, fiberglass, steel, or any combination of those materials or other suitable sturdy materials with no cracks or gaps in the walls. Cracks must be filled or caulked. Noise blankets or other covers may be used, provided that they are appropriate to implement noise control.

c. **Consultation with U.S. Fish and Wildlife Service.** If after implementation of Mitigation Measures BIO-2.a and BIO-2.b, construction noise levels cannot be reduced below a 60-A-weighted-decibel hourly average from the edge of occupied breeding coastal California gnatcatcher habitat, then the project proponent shall consult with the U.S. Fish and Wildlife Service regarding project-related adverse effects to these species. Consultation shall include a U.S. Fish and Wildlife Service-approved plan to avoid disturbing nesting coastal California gnatcatcher. The plan should include measures to avoid disturbing nesting individuals, including noise monitoring and biological monitoring (i.e., nest monitoring).

BIO-3: Nesting Bird Survey. If construction is proposed during the general bird breeding season (January 15 through August 31), a pre-construction survey shall be performed by a qualified biologist approved by the City (or their designee) to determine if any birds are nesting in or immediately adjacent to the project impact area. The pre-construction nesting bird surveys shall be conducted by a qualified biologist experienced in bird species identification and behavior to ensure that nesting birds are not present on site. The survey shall be conducted no more than 3 days prior to starting project activities. If surveys show that nesting birds are present, a no-work buffer shall be placed around the nest. The buffer size shall be determined by the qualified biologist and may vary based on site conditions and types of work to be conducted. The no-work buffer shall be maintained until the end of the bird breeding season or until surveys by a qualified biologist confirm that fledglings are no longer dependent on the nest. If no nesting birds are detected during pre-construction surveys, no restrictions shall be necessary, and construction may proceed as planned.

BIO-4: Pre-Construction Overwintering Monarch Butterfly Survey. If grubbing, trimming, or clearing of vegetation occurs during the winter (November 1 through February 28), a qualified biologist, as approved by the City, shall perform a pre-construction overwintering monarch butterfly survey no more than 48 hours before the start of vegetation grubbing, trimming, or clearing to confirm that no overwintering monarch butterflies occupy vegetation on the project site. If overwintering monarch butterflies are found during the pre-construction survey, a 50-foot buffer around the occupied vegetation shall be established, and no disturbance shall be allowed within the buffer until a qualified biologist determines that monarch butterflies are no longer occupying the vegetation. If no overwintering monarch butterflies are on the project site, grubbing, trimming, or clearing shall proceed.

BIO-5: Standard Construction Best Management Practices. Standard construction best management practices shall be implemented to avoid potential indirect impacts to sensitive biological resources. These best management practices shall include but are not limited to the following:

- Dust suppression measures
- Trash containment
- Use of weed-free erosion control products during all phases of construction

- Prohibition of activities including staging areas and disposal or temporary placement of excess fill within aquatic resources
- Minimization of erosion and siltation into off-site areas during construction
- Construction access via existing developed areas or within the right-of-way of proposed road and drainage improvements
- Storage of soil or fill materials from the project site in developed areas
- Location of construction staging areas and equipment re-fueling areas on existing developed areas to avoid impacts to sensitive and aquatic resources

BIO-6: Stormwater Pollution Prevention Plan. Prior to notice to proceed with any construction, including clearing, grubbing, and/or grading, a Stormwater Pollution Prevention Plan shall be prepared, pursuant to National Pollution Discharge Elimination System General Construction Permit (Water Quality Order 99-08-DWQ). The Stormwater Pollution Prevention Plan shall address the potential sources and locations of stormwater contamination, characteristics and impacts of specific contaminants, and temporary and permanent erosion-control practices and shall include water sampling data, construction practices that minimize stormwater contamination, coordination of best management practices with planned construction activities, and compliance with local, state, and federal regulations. The Stormwater Pollution Prevention Plan shall include best management practices that shall be clearly stated on project plans and design documents. The implementation of the Stormwater Pollution Prevention Plan shall protect adjacent aquatic resources, habitats, and sensitive species during construction to the maximum extent practicable with the goal of providing multiple beneficial uses. Post-construction, the project shall incorporate water quality protection design standards that will reduce, capture, and treat runoff from the project site, with an emphasis on protecting the adjacent aquatic resources.

Level of Significance after Mitigation

As discussed in Threshold A, implementation of the project would not result in potentially significant direct impacts to sensitive plant species.

As discussed in Threshold A, implementation of the project could result in potentially significant direct and indirect impacts to sensitive wildlife species and sensitive nesting birds and raptors. With implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, and BIO-6, temporary and permanent direct and indirect impacts from project implementation to sensitive wildlife species, including roosting bats, nesting birds, and raptors, would be reduced to a less than significant level.

As discussed in Threshold B, implementation of the project will not result in permanent or temporary direct impacts to the sensitive vegetation communities that occur on the project site, including Diegan coastal sage scrub (including disturbed) and non-vegetated channel, as these areas will be avoided during construction. However, indirect impacts to sensitive vegetation communities are considered significant and mitigation is required. Implementation of Mitigation Measure BIO-1 would require delineation of the work area to avoid impacts to sensitive vegetation communities within and outside the project site, implementation of Mitigation Measure BIO-5 would prevent potential indirect impacts to sensitive vegetation communities through the use of standard construction best management practices, and Mitigation Measure BIO-6 would require a Stormwater Pollution Prevention Plan to be implemented to reduce impacts to sensitive aquatic resources on the project site.

As discussed in Threshold C, implementation of the project will not result in significant direct impacts to AF-1, AF-2, and AF-3, all potential jurisdictional aquatic resources that occur on the project site because impacts to these areas will be avoided during construction; therefore, no mitigation is required. However, indirect impacts to sensitive vegetation communities are considered significant, and mitigation is required. Implementation of Mitigation Measure BIO-1 would require delineation of the work area to avoid impacts to sensitive aquatic resources within and outside the project site and the presence of a monitor for all work conducted within 100 feet of aquatic resources on the project site. Implementation of Mitigation Measures BIO-5 and BIO-6 would prevent potential indirect impacts to sensitive vegetation communities through the use of standard construction best management practices and the implementation of a Stormwater Pollution Prevention Plan.

As discussed in Thresholds D, implementation of the project will not result in significant direct and indirect impacts to wildlife corridors and habitat linkages, and no mitigation is required.

As discussed in Thresholds E and F, the project would not result in conflicts with local policies and ordinances or regional conservation planning, and no mitigation is required.

Cumulative Impacts

The project, as well as other cumulative projects, would be required to conform to federal, state, and local guidelines and provide protection measures as appropriate. Mitigation Measures BIO-1, Qualified Biologist; BIO-2, Pre-Construction Sensitive Avian Surveys, BIO-3, Nesting Bird Survey; BIO-4, Pre-Construction Overwintering Monarch Butterfly Survey; BIO-5, Standard Construction Best Management Practices, and BIO-6 Storm Water Pollution Prevention Plan are proposed to reduce project-level direct impacts on sensitive plants and wildlife, migratory birds and raptors, sensitive vegetation communities, and potentially federal and state jurisdictional aquatic resources. Implementation of these mitigation measures would reduce project-level impacts to a less than significant level and ensure that the project would not contribute to cumulatively significant impacts to biological resources. Thus, no significant cumulative impacts would occur from implementation of the project.

Conformance with MSCP Findings

The project is within the Draft Santee MSCP Subarea Plan. The Santee Subarea Plan is currently in development and has not yet been adopted; therefore, the project site is not within a Habitat Conservation Plan and is not subject to the Santee Subarea Plan.

Preparers

Harris & Associates

If you have any questions regarding this biological resources analysis, please do not hesitate to contact Emily Mastrelli at Emily.Mastrelli@WeAreHarris.com or (619) 510-5372.

Sincerely,

Emily Mastrelli (Senior Review)
Principal Biologist/Senior Project Manager

Kelly Otto (Author/Analyst)
Biologist

Attachments
1, Figures
2, Plant and Wildlife Species Observed

References

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, eds. 2012. The Jepson Manual: Vascular Plants of California. 2nd ed. Berkeley, California: University of California Press. January.

Calflora. 2023. Calflora Database. Accessed November 2023. http://www.calflora.org/.

City of Santee 2002. Santee General Plan. Updated 2020. Accessed November 2023. General Plan | Santee, CA (cityofsanteeca.gov).

City of Santee. 2023. Notice of Preparation of a DRAFT Program Environmental Impacts Report, Notic of Public Scoping Meeting. Accessed November 2023. https://www.cityofsanteeca.gov/home/showpublisheddocument/23338.

CNPS (California Native Plant Society). 2023. Inventory of Rare and Endangered Plants of California. Online edition, v9-01 1.5. Accessed November 2023. http://www.rareplants.cnps.org/.

CCH (Consortium of California Herbaria). 2023. "Consortium of California Herbarium." Accessed November 2023. https://ucjeps.berkeley.edu/consortium/about.html.

CDFW (California Department of Fish and Wildlife). 2019. Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Vees as Endangered Under the California Endangered Species Act. Accessed November 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline

CDFW. 2023a. California Natural Diversity Database (CNDDB), RareFind 5, commercial version. Accessed November 2023. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data.

CDFW. 2023b. Biogeographic Information and Observation System (BIOS). Database. Accessed November 2023. https://apps.wildlife.ca.gov/bios.

CDFW. 2023c. "Threatened and Endangered Species Protected under the California Endangered Species Act." Accessed November 2023. https://wildlife.ca.gov/Conservation/CESA.

CDFW. 2023d. "Species of Special Concern." Accessed November 2023. https://wildlife.ca.gov/Conservation/SSC.

County of San Diego. 1998. County of San Diego MSCP Plan. Final Multiple Species Conservation Program. Approved August.

Historic Aerials. 2023. Accessed November 2023. NETR Online: Historic Aerials.

Holland, Robert F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game. October.

JepsonOnline. 2023. The Jepson Herbarium. Accessed November 2023. https://ucjeps.berkeley.edu/eflora/filter_keys.html.

Nafis, Gary. 2023. A Guide to the Amphibians and Reptiles of California. Accessed November 2023. https://californiaherps.com/.

NRCS (National Resources Conservation Service). 2023. National Water and Climate Center: WETS Table. Accessed November 2023. http://agacis.rcc-acis.org/?fips=06073.

Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on Preliminary Descriptions of the Terrestrial Natural Communities of California prepared by Robert F. Holland, PhD, in October 1986. Codes revised by Thomas Oberbauer in February 1996, revised and expanded by Meghan Kelly in August 2006, and further revised and reorganized by Jeremy Buegge in March 2008. Accessed November 2023. https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19_OberbauerTM2008.pdf.

Project Clean Water. 2023. "San Diego River WMA." Accessed November 2023. https://projectcleanwater.org/watersheds/carlsbad-wma/.

San Diego Natural History Museum. 2012. San Diego County Bird Atlas. Accessed November 2023. https://sdplantatlas.org/BirdAtlas/BirdPages.aspx.

USACE (U.S. Army Corps of Engineers). 1987. Corps of Engineers Wetlands Delineation Manual. Final report. Wetlands Research Program Technical Report Y-87-1 (online edition). Prepared by Environmental Laboratory, U.S. Army Corps of Engineers, Waterways Experiment Station. Wetlands Research Program. January. Accessed November 2023. http://www.cpe.rutgers.edu/Wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf.

USACE. 2023. "TNWs & Navigable Waters in Los Angeles District." Accessed November 2023. https://www.spl.usace.army.mil/Missions/Regulatory/Jurisdictional-Determination/Navigable-Waterways/.

USDA (U.S. Department of Agriculture). 2019. Web Soil Survey. Natural Resources Conservation Service, Soil Survey Staff. Last modified July 31. Accessed November 2023. http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

USFWS (U.S. Fish and Wildlife Service). 2010. Coastal California Gnatcatcher (*Polioptila californica californica*) 5-Year Review: Summary and Evaluation. Carlsbad Fish and Wildlife Office.

USFWS. 2023a. National Wetlands Inventory Wetlands Mapper. Accessed November 2023. https://www.fws.gov/wetlands/data/Mapper.html.

USFWS. 2023b. Information for Planning and Consultation (IPaC). Accessed November 2023. https://ecos.fws.gov/ipac/.

USFWS. 2023c. U.S. Fish and Wildlife Service Endangered Species. Accessed November 2023. https://www.fws.gov/endangered/.

USFWS. 2023d. "Assessing the Status of the Monarch Butterfly." Last updated January 26. Accessed November 2023.

USGS (U.S. Geological Survey). 2023. National Hydrography Data. Accessed November 2023. https://www.arcgis.com/home/webmap/viewer.html?url=https://hydro.nationalmap.gov/arcgis/rest/services/nhd/MapServer&source=sd.

Xerces Society for Invertebrate Conservation (Xerces Society). 2017. "New Guidelines for Protecting California's Butterfly Groves." Prepared by Emma Pelton. November 8. Accessed November 2023. https://xerces.org/press/new-guidelines-for-protecting-californias-monarch-butterfly-groves.

Xerces Society 2018. A Petition to the State of California Fish and Game Commission. Accessed November 2023. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline

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Attachment 1. Figures

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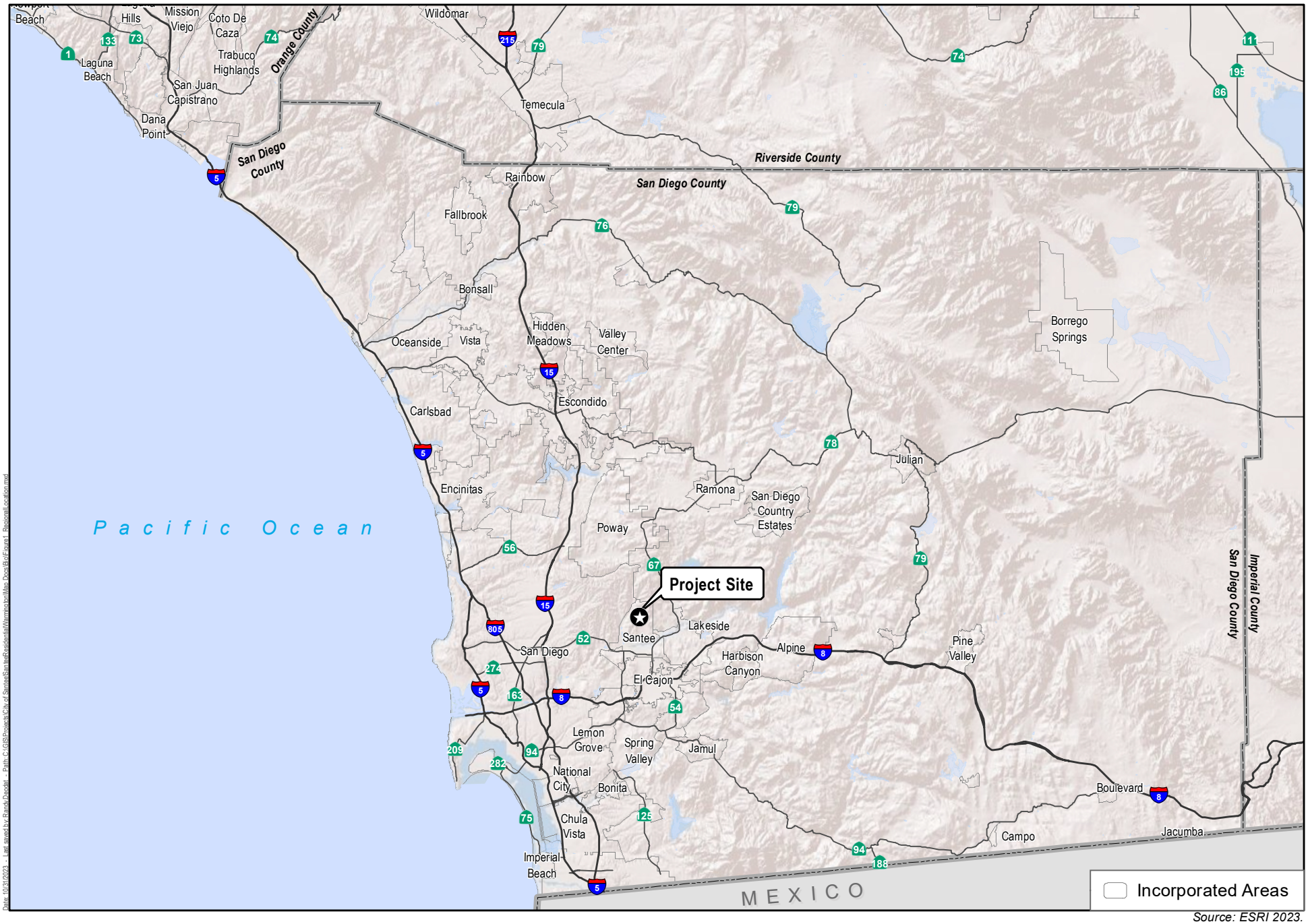

Source: ESRI 2023.

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Figure 1

Regional Location

Warmington Santee Residential Project

Source: Maxar Imagery 2022.

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N

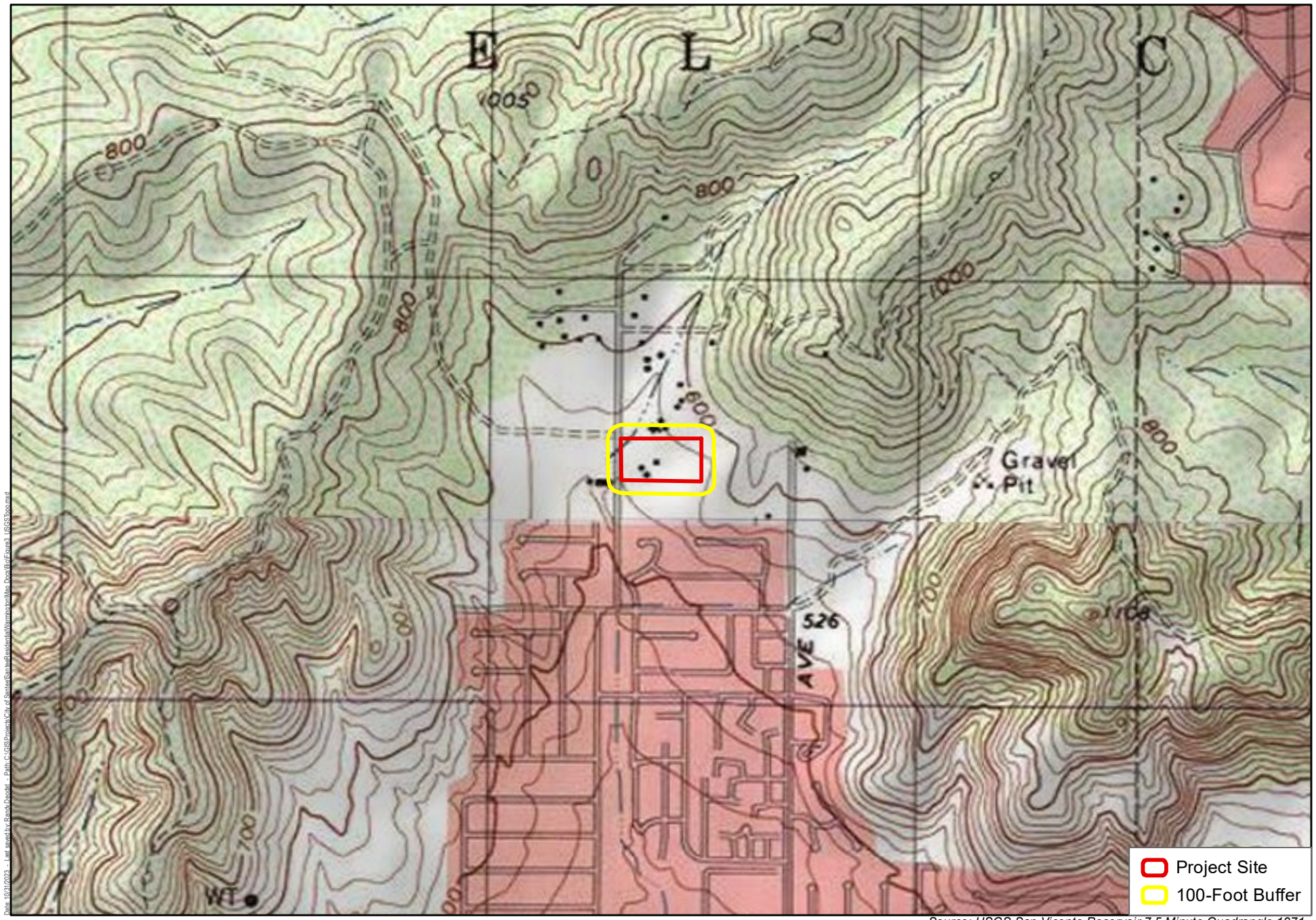
0 100 200

Feet

Figure 2

Project Site

Warmington Santee Residential Project



Source: USGS San Vicente Reservoir 7.5 Minute Quadrangle 1971.

Harris & Associates

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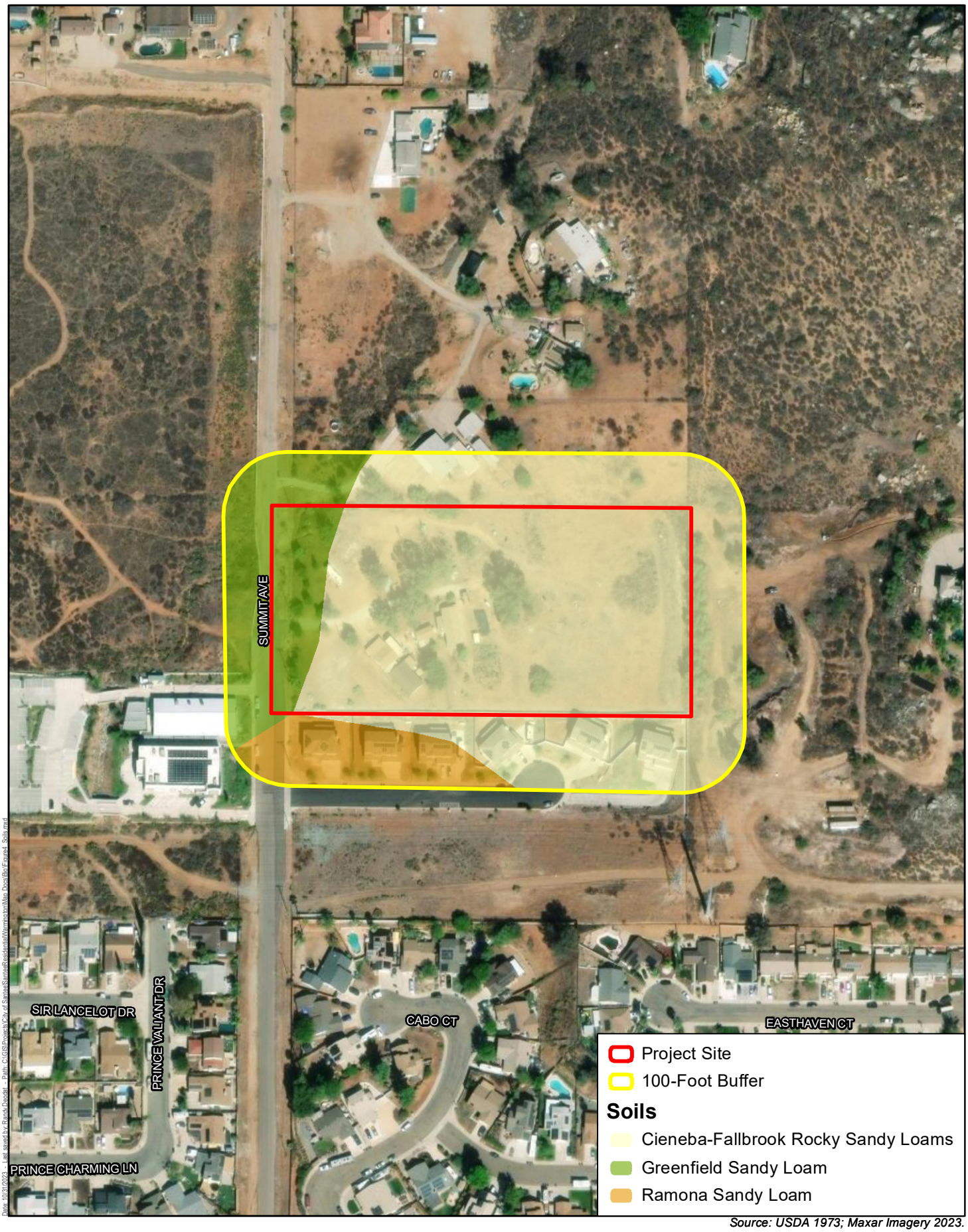
Figure 3

USGS Topographic Map

Warmington Santee Residential Project



Source: USDA 1973; Maxar Imagery 2023.

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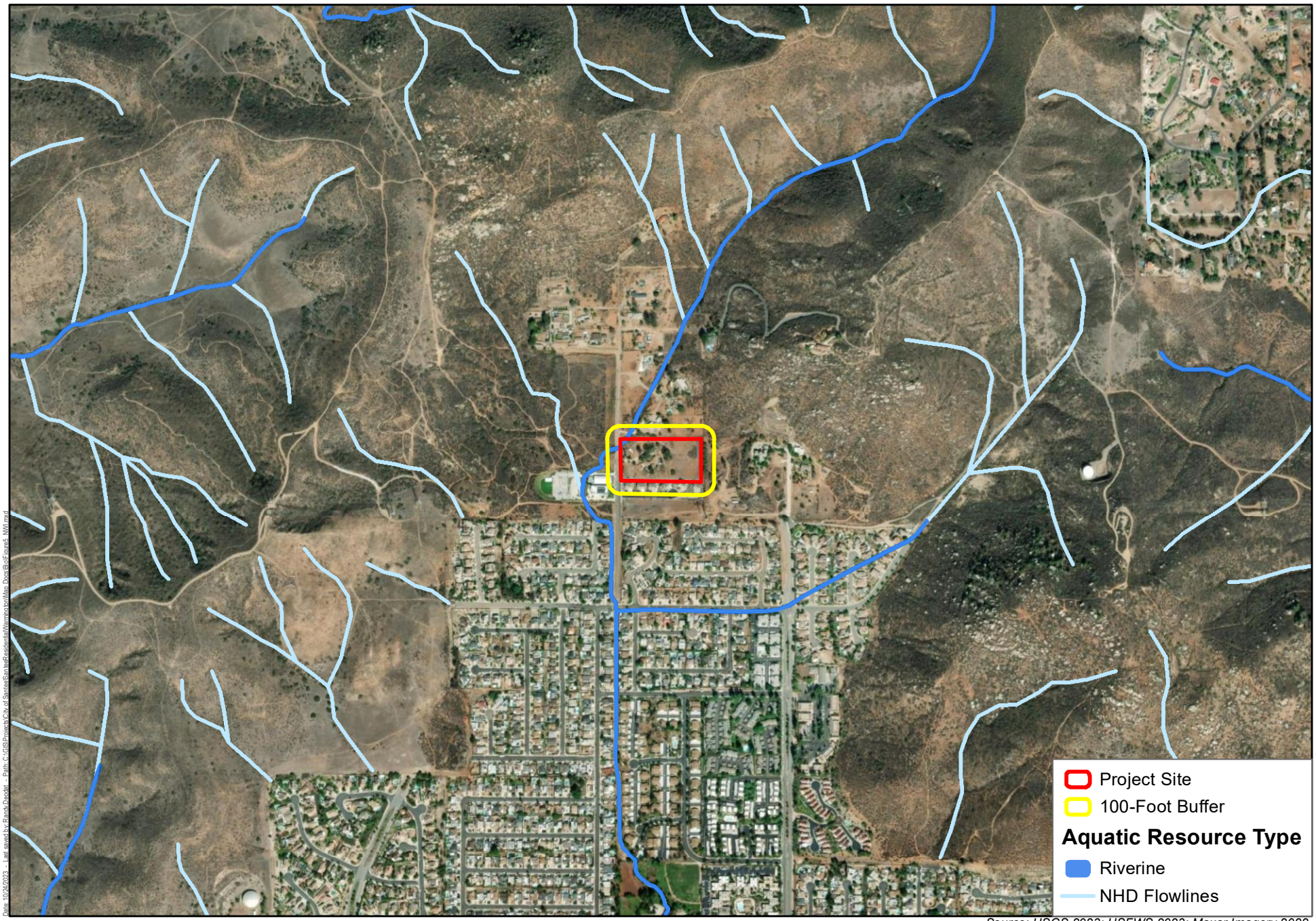
Figure 4

Soils

Warmington Santee Residential Project



Source: USGS 2023; USFWS 2023; Maxar Imagery 2022.

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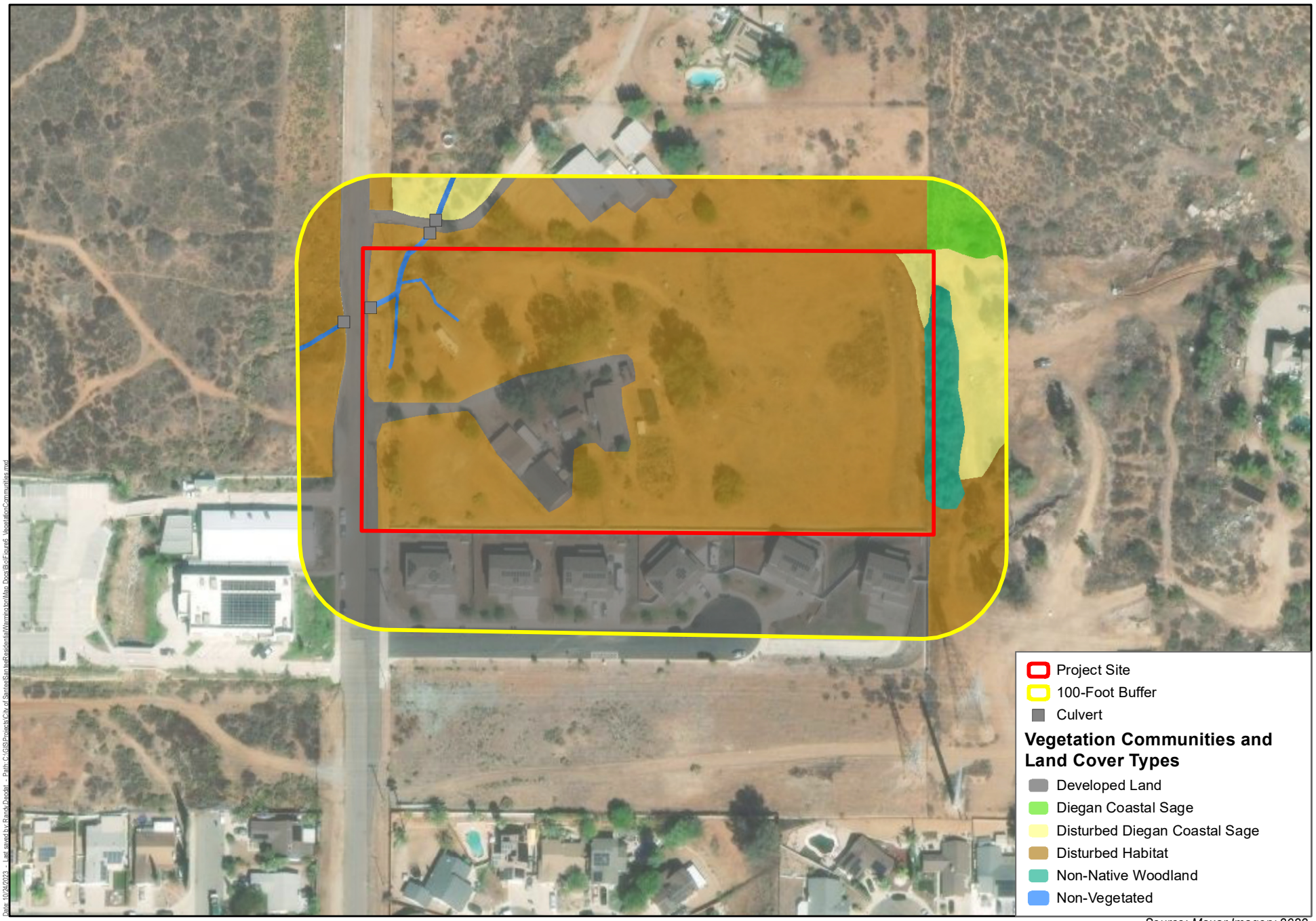
Figure 5

Hydrology

Warmington Santee Residential Project



Source: Maxar Imagery 2022.

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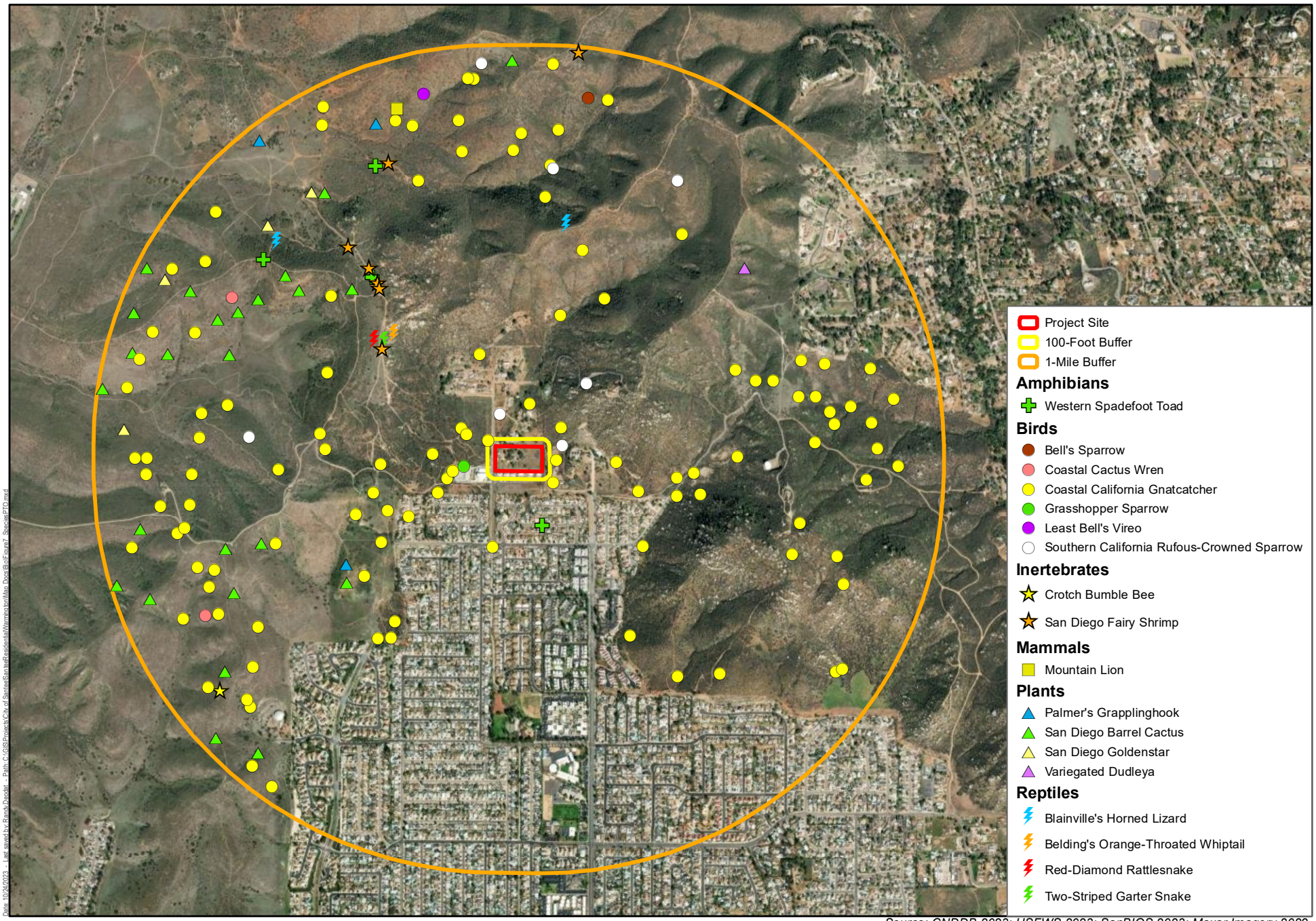
Figure 6

Vegetation Communities and Land Cover Types

Warmington Santee Residential Project



Source: CNDDB 2023; USFWS 2023; SanBIOS 2023; Maxar Imagery 2022.

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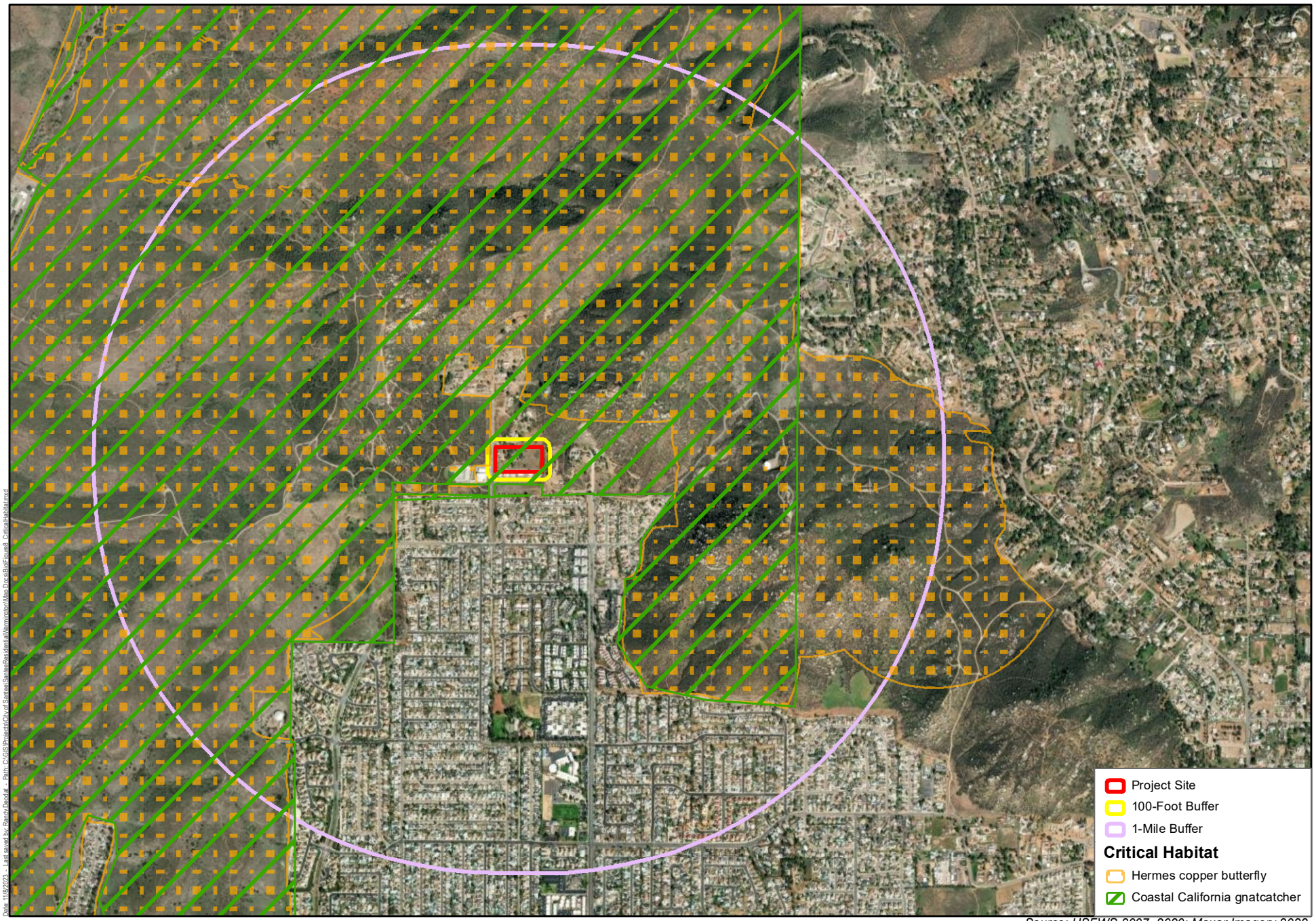
Feet

Figure 7

Species with Potential to Occur

Warmington Santee Residential Project



Date: 11/8/2023 Last saved by: Randy Doodt Path: C:\GIS Projects\City of Santee\SanteeResidential\Warmington\Map Docs\BioFigure8_CriticalHabitat.mxd

Source: USFWS 2007, 2020; Maxar Imagery 2022.

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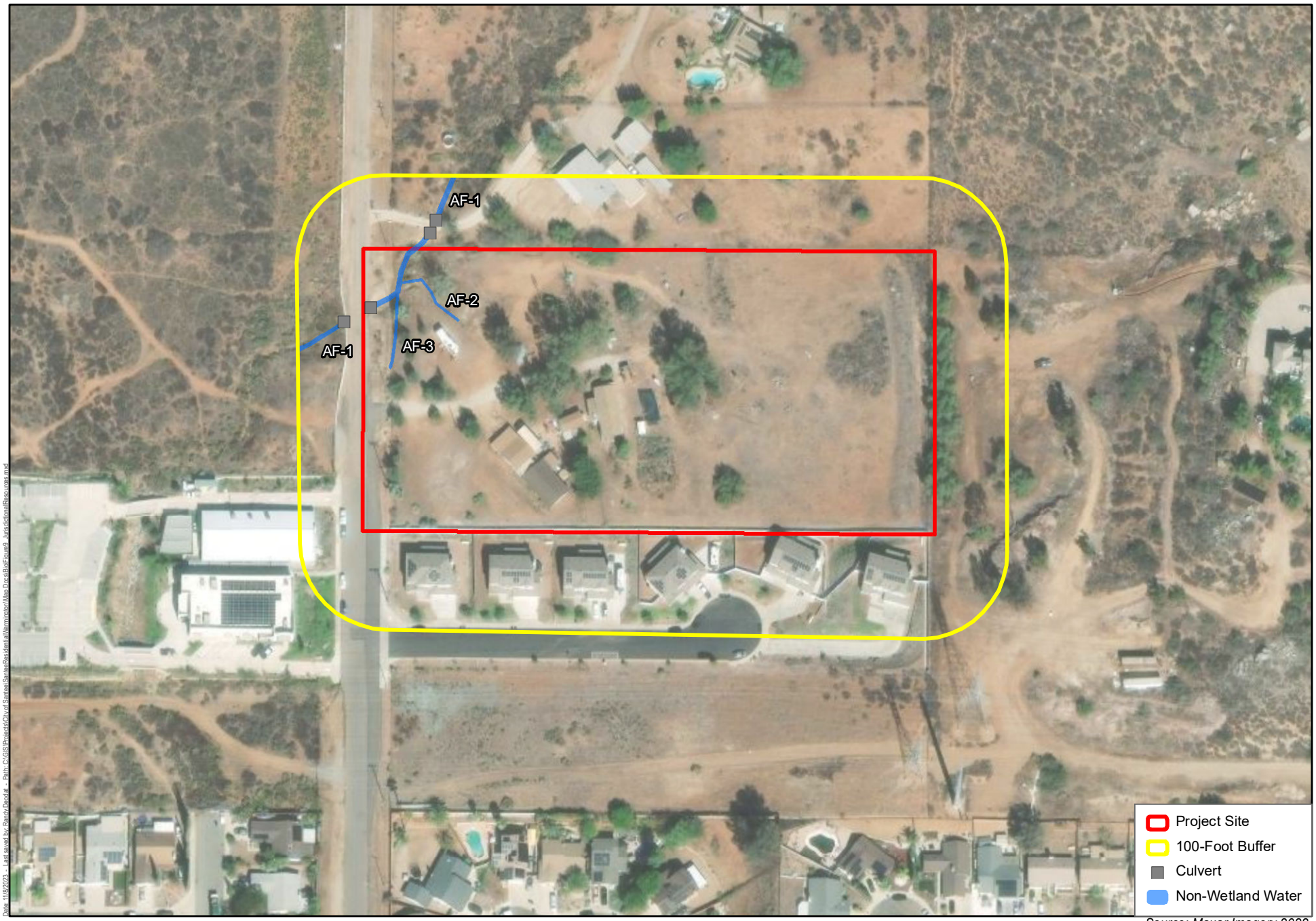
Figure 8

Critical Habitat

Warmington Santee Residential Project



Source: Maxar Imagery 2022.

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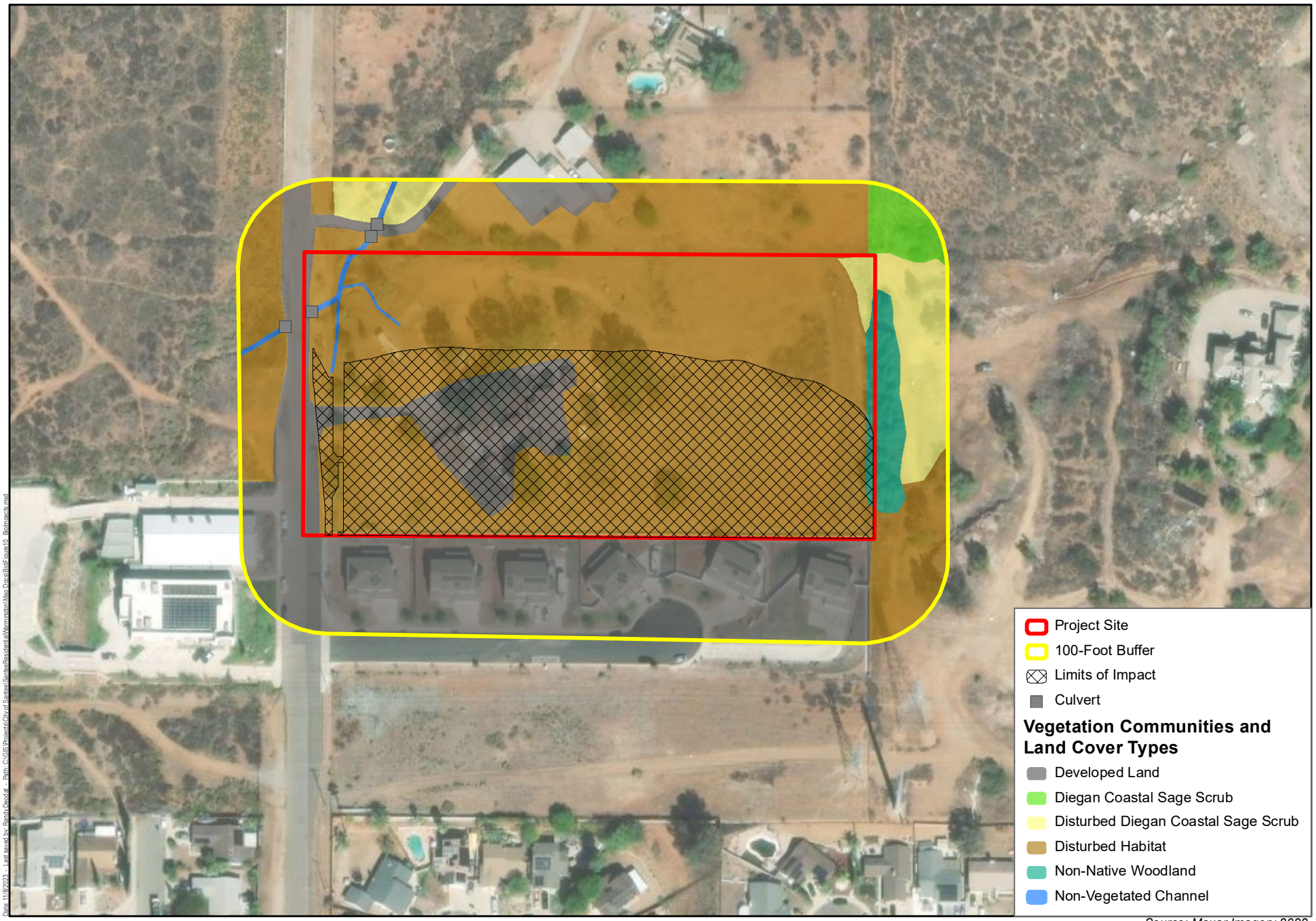
Feet

Figure 9

Potential Jurisdictional Aquatic Resources

Warmington Santee Residential Project



Source: Maxar Imagery 2022.

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Figure 10

Impacts to Biological Resources

Warmington Santee Residential Project

Attachment 2. Plant and Wildlife Species Observed

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Plant Species Observations

	Scientific Name	Common Name	Special Status
	EUDICOTS		
	Apocynaceae - Dogbane family		
*	*Vinca major*	Greater periwinkle	
	Asteraceae - Sunflower family		
*	*Grindelia papposa*	Spanish gold	
	Crassulaceae - Stonecrop family		
*	*Crassula ovata*	Jade plant	
	Cupressaceae - Cypress family		
*	*Cupressus sempervirens*	Mediterranean cypress	
	GYMNOSPERMS		
	Pinaceae - Pine family		
*	*Pinus* sp.	Pine	
	EUDICOTS		
	Aizoaceae - Fig-marigold family		
*	*Carpobrotus* sp.	Fig	
	Anacardiaceae - Sumac Or Cashe		
	Malosma laurina	Laurel sumac	
*	*Schinus molle*	Peruvian pepper tree	
	Apiaceae - Carrot family		
*	*Foeniculum vulgare*	Fennel	
	Apocynaceae - Dogbane family		
*	*Nerium oleander*	Oleander	
	Asteraceae - Sunflower family		
	Artemisia californica	California sagebrush	
	Baccharis sarothroides	Broom baccharis	
*	*Centaurea* sp.	Starthistle	
*	*Cynara cardunculus* ssp. *cardunculus*	Artichoke	
	Heterotheca grandiflora **Brassicaceae**	Telegraph weed	
	- Mustard family		
*	*Brassica nigra*	Black mustard	
	Cactaceae - Cactus family		
	Echinocereus engelmannii	Engelmann's hedgehog cactus	
*	*Opuntia ficus-indica* **Chenopodiaceae**	Mission prickly pear	
	- Goosefoot fami *Kochia* sp.	Fireweed	

	Scientific Name	Common Name	Special Status
	Convolvulaceae - Morning-glory f		
	Cuscuta sp.	Dodder	
	Euphorbiaceae - Spurge family		
	Croton setigerus	Doveweed	
*	*Euphorbia maculata*	Spotted spurge	
*	*Ricinus communis*	Castorbean	
	Fabaceae - Legume family		
*	*Acacia* sp.	Acacia	
	Geraniaceae - Geranium family		
	Geranium sp.	Geranium	
	Myrsinaceae - Myrsine family		
*	*Anagallis arvensis*	Scarlet pimpernel	
	Myrtaceae - Myrtle family		
*	*Eucalyptus sideroxylon*	Red River gum	
*	*Eucalyptus* sp.	Gum	
*	*Melaleuca citrina*	Crimson bottlebrush	
	Oleaceae - Olive family		
*	*Olea europaea*	Olive	
	Platanaceae - Plane Tree, Sycamo		
	Platanus racemosa	Western sycamore	
	Polygonaceae - Buckwheat family		
	Eriogonum fasciculatum **Rhamnaceae**	California buckwheat	
	- Buckthorn family *Rhamnus crocea*		
	Tamaricaceae - Tamarisk family	Spiny redberry	
*	*Tamarix* sp.	Tamarix	
	Vitaceae - Grape family		
	Vitis sp.	Grape	
	MONOCOTS		
	Agavaceae - Century Plant family		
*	*Agave americana*	American century plant	
	Poaceae - Grass family		
	Avena sp.	Oat	
	Bromus sp.	Brome	

Scientific Name	Common Name	Special Status

Legend

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened

CRPR – California Rare Plant Rank
1A. Presumed extinct in California and elsewhere
1B. Rare or Endangered in California and elsewhere
2A. Presumed extinct in California, more common elsewhere
2B. Rare or Endangered in California, more common elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

Threat Ranks
.1 - Seriously endangered in California
.2 – Fairly endangered in California
.3 – Not very endangered in California

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Wildlife Species Observed

Scientific Name	Common Name	Special Status
INVERTEBRATES		
Insects		
Formicidae - Ant Family		
Pheidole sp.	Harvester ant	
Moths, Skippers and Butterflies		
Pieridae - White and Sulphur Family		
Pontia protodice	Checkered white	
VERTEBRATES		
Reptiles		
Phrynosomatidae - Spiny Lizard Family		
Uta stansburiana elegans	Western side-blotched lizard	
Birds		
Odontophoridae - New World Quail Family		
Callipepla californica	California quail	
Cathartidae - New World Vulture Family		
Cathartes aura	Turkey vulture	
Accipitridae - Hawk Family		
Buteo lineatus	Red-shouldered hawk	
Columbidae - Pigeon and Dove Family		
Zenaida macroura	Mourning dove	
Trochilidae - Hummingbird Family		
Calypte anna	Anna's hummingbird	
Selasphorus sasin	Allen's hummingbird	
Picidae - Woodpecker Family		
Picoides nuttallii	Nuttall's woodpecker	
Tyrannidae - Tyrant Flycatcher Family		
Sayornis nigricans	Black phoebe Cassin's	
Tyrannus vociferans	Kingbird	
Corvidae - Jay and Crow Family		
Corvus brachyrhynchos	American crow	
Corvus corax	Common raven	
Troglodytidae - Wren Family		
Troglodytes aedon	House wren	
Thryomanes bewickii	Bewick's wren	

Scientific Name	Common Name	Special Status
Mimidae - Thrasher Family		
Mimus polyglottos	Northern mockingbird	
Emberizidae - Sparrow Family		
Melozone crissalis	California towhee	
Fringillidae - Finch Family		
Haemorhous mexicanus	House finch	
Carduelis psaltria	Lesser goldfinch	
Mammals		
Leporidae - Hare and Rabbit Family		
Sylvilagus audubonii	Desert cottontail	
Sciuridae - Squirrel Family		
Spermophilus beecheyi	California ground squirrel	

Legend

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened
CSC = California Species of Special Concern
CFP = California Fully Protected Species