Appendix C

Biological Resources Technical Report for the Harmon Ranch Project

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 800.450.1818 F 760.632.0164

February 28, 2023 14452

Mr. David W. Shepherd
Director of Entitlements
Lennar – San Diego Division
16465 Via Esprillo, Suite 150
San Diego, California 92127

Subject: Biological Resources Technical Report for the Harmon Ranch Project, City of Poway, California

Dear Mr. Shepherd:

This biological resources letter report summarizes the existing biological conditions for the proposed residential development of the Harmon Ranch Project (project) site in the City of Poway, California. This report also describes and analyzes the results of the biological assessment conducted for the site, including general assessment of existing site conditions, vegetation and land cover mapping, rare plant survey, preliminary jurisdictional resources assessment, and an assessment for the presence of suitable habitat for special-status plant and animal species recognized by local, state, or federal wildlife agencies. Additionally, this report provides an analysis of direct and indirect impacts based on the proposed development scenario, analyzes the biological significance of the site with respect to regional biological resource planning, describes the impact controls that will avoid impacts to biological resources, and includes mitigation measures that will reduce significant biological impacts to a less-than-significant level consistent with federal, state, and local regulations. The project and potential impacts to special-status biological resources are analyzed in the context of the Poway Subarea Habitat Conservation Plan/Natural Community Conservation Plan.

1 Project Location

The project site is located along either side of Oak Knoll Road between Pomerado Road, which is slightly west of the site, and Carriage Road, which is slightly east. Poway Road is slightly north of the site, and Poway Creek runs east–west through the southern portion of the site, near the border. The project site is in the City of Poway, California (see Figure 1, Project Location). Much of the site is surrounded by residential development, except commercial development and open space associated with the Kumeyaay Ipai Interpretive Center to the north. The site is located approximately 2.75 miles east of Interstate 15. The project site is located within Township 14S, Range 2 West, and Section 14 on the Poway U.S. Geological Survey 7.5-minute quadrangle map (Figure 1); the approximate centroid of the site is longitude −117.05690° W and latitude 32.95181° N.

1.1 Site Description

The approximately 10.73-acre biological study area is divided into two parts; the larger parcel is located north of Oak Knoll Road and is approximately 8.91 acres and the smaller parcel is located south of Oak Knoll Road and is approximately 1.81 acres. Throughout the site topography ranges from about 440 to 510 feet

above mean sea level. The northern portion of the project site recently contained an San Diego Gas & Electric storage yard and several small, uninhabited buildings. There is also a small drainage that runs through the northwestern corner of the site, which has steep drops at the associated cement culverts at either end; one culvert is along the western project boundary and the other is along the northern project boundary. Also associated with the drainage is disturbed riparian and disturbed wetland habitat. The remainder of the northern portion of the project site consists primarily of disturbed habitat including non-native, invasive, and ornamental plant species.

The southern portion of the project boundary contains a small uninhabited residence and disturbed habitat adjacent to Oak Knoll Road. Further into the site, there are large stands of invasive arundo that surround Poway Creek, which runs east–west through the southern portion of the project site. Also along Poway Creek there is disturbed riparian habitat with a high proportion of non-native invasive plant species.

1.2 Soils

Four soils series are mapped on the project site: Placentia sandy loam, 2% to 9% slopes; Olivenhain cobbly loam, 2% to 9% slopes; Cieneba rocky coarse sandy loam, 9% to 30% slopes, and Visalia sandy loam, 0% to 2% slopes (USDA 2022a). Placentia soils are extensive and are well or moderately well drained, with slow to rapid runoff and very slow permeability. They are also nearly level to moderately sloping and are on fans and terraces at elevations of 50 to 2,500 feet. They formed in alluvium from granite and other rocks of similar composition and texture. Within the site, Placentia soils are located throughout the majority of the northern parcel, as well as most of the northern half of the southern parcel. Olivenhain soils are well drained, with slow or medium runoff and very slow permeability. They are gently sloping to strongly sloping and are on dissected marine terraces at elevations of 100 to 600 feet. Within the site, Olivenhain soils are located within the northern portion of the northern parcel. The Cieneba series consists of very shallow and shallow somewhat excessively drained soils that formed in material weathered from granitic rock. Cieneba soils are at elevations of 500 to 4,000 feet (USDA 2022a). Within the site, Cieneba soils are located in a very small part of the extreme northeastern corner of the northern parcel, which is the highest elevation on site. Visalia sandy loam, also known as Akers series, consists of very deep, well drained soils formed in alluvium derived from granitic rock with negligible runoff and moderate permeability. Akers soils are often found on terraces. Within the site, Visalia soils are found throughout the entire southern portion of the southern parcel around Poway Creek.

2 Project Description

Lennar Homes of California LLC (Applicant) is proposing a residential neighborhood on an approximate 11.5-acre project site (this number is slightly higher than the acreage total used throughout this biological technical report, as the already paved Oak Knoll Road was not included in the developed land cover calculations). The project site is comprised of approximately 5.7 acres designated for residential development, 3.2 acres of open space, 1.9 acres for private streets, and 0.5 acres of public right-of-way (Oak Knoll Road). The proposed project would include 63 single-family detached homes. The proposed project density (8.8 units/acre) is slightly higher than the density permitted in the existing RS-7 designation. Primary access to the project site is planned via existing Oak Knoll Road. Of the 63 homes, 59 are proposed to front newly constructed private streets, while 4 homes and an open space/overlook area would front existing Oak Knoll Road.

The Applicant is proposing a Specific Plan and Tentative Map to facilitate development of 63 single-family homes. The Harmon Ranch Specific Plan will establish three land use districts within the project site: Residential Single Family (R-S), Open Space (OS), and Open Space Recreation (OS-R). The Specific Plan will also provide development regulations and permitted uses for each land use district. No development is being proposed within the potential jurisdictional features.

The proposed project is comprised of 63 single-family homes on lots 42 feet wide and 85 to 90 feet deep, with standard two-car garages and 20-foot-deep driveways to accommodate off-street parking within the private lots and private fenced rear yards. The proposed project also includes 40 guest parking spaces along the private streets, approximately 1.0 acre of Open Space Recreation areas, approximately 2.2 acres of natural Open Space areas, and a segment of the General Plan Community Trail (approximately 1,000 feet) connecting the project site to the adjacent retail area located to the north. The overlook area located in the south portion of the project site is planned to provide public access and will be privately maintained.

3 Regulatory Setting

The following federal, state, and city agencies and programs regulate activities within waters, wetlands, and riparian areas throughout California: U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), the California Coastal Commission, Multiple Habitat Conservation Program (MHCP), and the City of Poway. The USACE Regulatory Program regulates activities in jurisdictional resources (i.e., wetlands and waters) under Section 404 of the Clean Water Act (CWA). CDFW regulates activities in wetlands and non-wetland waters under Sections 1600–1616 of the California Fish and Game Code. The RWQCB regulates activities in wetlands and non-wetland waters exhibiting surface water under Section 401 of the CWA and the Porter–Cologne Water Quality Control Act (Porter–Cologne Act).

Portions of the site described in this report are subject to resource agency jurisdiction over potential waters of the United States or wetlands associated with features within and adjacent to the project site. Descriptions of resource agency jurisdictions are provided in Sections 3.1 through 3.4.

3.1 U.S. Army Corps of Engineers

USACE regulates "discharge of dredged or fill material" into waters of the United States, which, pursuant to provisions of Section 404 of the CWA, include tidal waters, interstate waters, and all other waters that are part of a tributary system to interstate waters or to navigable waters of the United States, the use, degradation, or destruction of which could affect interstate or foreign commerce. Within rivers and stream systems, the limits of USACE jurisdiction extend to the ordinary high water mark. The USACE-jurisdictional wetlands as defined in the U.S. Army Corps of Engineers Wetland Delineation Manual (USACE 1987), the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008), and the Rapanos Guidance (USACE and EPA 2008) is determined by the presence of three parameters: (1) supporting a predominance of hydrophytic vegetation, (2) presence of hydric (i.e., anaerobic) soils, and (3) on-site evidence of hydrology.

3.2 California Department of Fish and Wildlife

In accordance with Section 1600 et seq. of the California Fish and Game Code (Streambed Alteration), CDFW regulates activities that "will substantially divert, obstruct, or substantially change the natural flow or bed, channel or bank, of any river, stream, or lake designated by the CDFW in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit." CDFW takes jurisdiction to the top of bank of a stream or the limit of the adjacent riparian vegetation. In Title 14 of the California Code of Regulations, Part 1.72, CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation."

Diversion, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife requires authorization from CDFW by means of entering into an agreement pursuant to Section 1602 of the California Fish and Game Code. CDFW may assert jurisdiction to adjacent wetlands areas (i.e., where there is a predominance of hydrophytic vegetation) that provide habitat for native species. Lakes, rivers, and streambeds, including any associated riparian habitat, are subject to regulation by CDFW pursuant to the California Fish and Game Code. Often, CDFW-jurisdictional streambeds and riparian areas are synonymous with waters of the United States, including wetlands, under USACE and RWQCB jurisdiction.

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.3 of the California Fish and Game Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs.

3.3 Regional Water Quality Control Board

The RWQCB regulates discharging waste, or proposing to discharge waste, within any region that could affect the waters of the state (California Water Code Section 13260[a]), pursuant to provisions of the Porter–Cologne Act. "Waters of the state" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). Although the Porter–Cologne Act definition of waters of the state may not apply on federally owned land, the RWQCB may still assert jurisdiction over qualifying aquatic resources on land owned by the United States where CWA Section 401 applies.

3.4 Local Regulations

Poway Subarea Habitat Conservation Plan/Natural Community Conservation Plan

The Poway Subarea Habitat Conservation Plan/Natural Community Conservation Plan (Poway Subarea HCP/NCCP) serves two general functions (Ogden 1996):

1. To create a sustainable interconnected network of habitat preserves throughout and ultimately beyond the City, and thus maintain functioning ecosystems and viable populations of biological resources.
2. To mitigate adverse impacts to biological resources from building the Scripps Poway Parkway Extension and implement the Poway General Plan and Paguay Redevelopment Plan.

The Poway Subarea HCP/NCCP is implemented primarily through the City's established land use regulatory process supplemented by new implementation regulations tailored to the plan's conservation objectives. The Poway Subarea HCP/NCCP also defines mitigation requirements for development projects inside and outside of a specified Mitigation Area, and methods for funding land acquisitions and preserve management within the Mitigation Area. The project site does not fall within the Poway Subarea HCP/NCCP Mitigation Area (Ogden 1996).

The project site is not located within the Poway Mitigation Area. This is due to the highly developed surroundings adjacent to the property and its isolation from adjacent undeveloped habitat areas by residential and commercial development. Both of these factors contribute to the project site not being an important wildlife linkage or containing critical habitat for regional species.

The proposed project therefore does not interfere with the City of Poway Subarea HCP, and the project would not interfere with long-range planning efforts.

4 Methods

Data regarding biological resources present in the project area were obtained through field reconnaissance and a review of pertinent literature; both are described in detail in Sections 4.1 through 4.6.

4.1 Literature Review

Special-status biological resources present or potentially present in the site were identified through a literature search conducted in 2021 and 2022 for the project site. The following sources were used during the literature review process.

- U.S. Fish and Wildlife Service National Wetlands Inventory geographic information system (GIS) data (USFWS 2022a) was accessed and reviewed April 2022.
- U.S. Fish and Wildlife Service Critical Habitat and Occurrence Data (USFWS 2022a) was consulted for data within 1 mile of the site.
- California Natural Diversity Database (CDFW 2022a) was queried to compile a list of potentially occurring special-status plants and wildlife in the Poway quadrangle and surrounding eight quadrangles.
- California Native Plant Society (CNPS) Inventory of Rare, Threatened, and Endangered Plants of California, 8th online edition (CNPS 2022), was searched to compose a list of potentially occurring flora in the Poway quadrangle and surrounding eight quadrangles.

4.2 Field Reconnaissance

Dudek Biologist Shana Carey conducted a general biological reconnaissance survey, vegetation mapping, and general jurisdictional assessment on November 30, 2021 (Table 1). No focused surveys were conducted. An additional visit was conducted with Hunsaker surveyors on December 15 to define the boundary of the potentially jurisdictional limits. A rare plant survey was conducted on April 20, 2022, by Charles Adams. Survey dates and conditions are listed in Table 1 and survey methods are described in the following sections.

Table 1. Survey Conditions

Date	Time	Staff	Survey Type	Survey Conditions
11/30/21	0900–1300	Shana Carey	General, reconnaissance survey, vegetation mapping, general jurisdictional assessment	62°F–74°F; 0%–20% cloud cover; 1–3 mph wind
12/15/21	0800–1000	Shana Carey	Jurisdictional resource boundary delineation with Hunsaker	59°F; 10% cloud cover, 0–1 mph winds
04/20/22	0706–1051	Charles Adams	Rare plant survey	65°F–70°F, 0%–10% cc, 0–4 mph winds

Notes: °F = degrees Fahrenheit; mph = miles per hour.

4.3 Vegetation Community and Land Cover Mapping

Vegetation community classifications used in this report follow Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), as modified by the County and noted in Draft Vegetation Communities of San Diego County (Oberbauer et al. 2008). Land covers on site were mapped in the field directly onto a 100-scale (1 inch = 100 feet) topographic base. Dudek GIS specialists digitized the mapped vegetation communities and jurisdictional resource boundaries into a GIS coverage using ArcGIS software.

The minimum mapping unit (MMU) utilized was 0.25 acres, meaning that breaks in the vegetation under 0.25 acres were not mapped as their own vegetation community. This 0.25-acre MMU is derived from the Survey of California Vegetation Classification and Mapping Standards Mapping, which states that MMUs vary with project size but are typically between 1 and 2 acres, with a 0.25-acre MMU typical for more sensitive communities such as wetlands (CDFW 2020). There are many plant species that can occur within a variety of vegetation communities. Therefore, an MMU helps to establish breaks in the vegetation communities where percent cover and assemblage of plant species result in a vegetation community change. The exception to this MMU was the mapping of riparian vegetation within the project site, which was mapped regardless of size.

4.4 Jurisdictional Aquatic Resources

A general jurisdictional assessment was conducted within the project boundary to identify areas under the jurisdiction of CDFW, pursuant to Section 1602 of the California Fish and Game Code; under the jurisdiction of USACE, pursuant to Section 404 of the federal CWA; and under the jurisdiction of the RWQCB, pursuant to CWA Section 401 and the Porter–Cologne Act.

Two drainages occur within the project site. One occurs in the northwestern corner of the site where water enters from a large cement culvert along the northern border and travels southwest, where it exits the site through another large cement culvert along the western border of the site. The western culvert has riprap installed along the edges of it, but much of the drainage looks to be earthen-bottom and heavily overgrown by thick riparian vegetation.

The other drainage is Poway Creek, which runs through the site east–west parallel to the southern border of the site. At the time of the site visit there was flowing fresh water in the creek. Running parallel to the creek on the south side, there is a flat, open area about 40–70 feet wide with very low growing, disturbed vegetation, which likely functions as a sort of floodplain for the creek during storm events. Immediately south of this is a large concrete

channel wall (approximately 6–7 feet high) that runs parallel to the creek and likely helps to contain the creek during heavy storm events. This is also where the southern site boundary is located. These features may be regulated by USACE, the RWQCB, and CDFW. No development is being proposed within the potential jurisdictional features; therefore, a full jurisdictional delineation was not conducted.

4.5 Plants

All native and naturalized plant species encountered on the project site were identified and recorded. Scientific and common names for plant species with a California Rare Plant Rank (formerly CNPS List) follow the CNPS Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2022). For plant species without a California Rare Plant Rank, scientific names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2022) and common names follow the U.S. Department of Agriculture Natural Resources Conservation Service Plants Database (USDA 2022b). A cumulative list of plant species observed in the project site is presented in Appendix A. This list is not all-inclusive in that it does not include a comprehensive list of all the ornamental species observed.

4.6 Wildlife

The entire site was surveyed to identify and record all wildlife species, as detected by sight, calls, tracks, scat, or other signs. Binoculars (7×50 power) were used to aid in the identification of observed wildlife. In addition to species observed, expected wildlife use of the site was determined according to known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. No trapping or focused surveys for special-status or nocturnal species were conducted. Latin and common names of animals follow Crother (2017) for reptiles and amphibians, American Ornithological Society (AOS 2018) for birds, Wilson and Reeder (2005) for mammals, and North American Butterfly Association (NABA 2016) or San Diego Natural History Museum (SDNHM 2002) for butterflies. A cumulative list of wildlife species observed within the site is presented in Appendix B.

5 Special-Status Species and/or Regulated Resources

Special-status biological resources are defined as follows: (1) species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes; (2) species and habitat types recognized by local and regional resource agencies as special status; (3) habitat areas or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; (4) wildlife corridors and habitat linkages; or (5) biological resources that may or may not be considered special status, but are regulated under local, state, and/or federal laws. Appendix C includes a list of special-status plants and their potential to occur on site and Appendix D includes a list of special-status wildlife species and their potential to occur on site.

Dudek conducted a focused survey for sensitive plants. No focused surveys were conducted for sensitive wildlife species such as coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), or southwestern willow flycatcher (*Empidonax traillii extimus*) as the proposed development footprint, site conditions, and site surroundings did not warrant them. There were no incidental detections of any sensitive wildlife species, either through sight, calls, tracks, scat, or other signs. A summary of the dates and site conditions for the field efforts performed as part of this biological report are presented above in Table 1. The following sections provide specific details regarding each survey.

5.1 Focused Survey for Sensitive Plants

A focused survey for sensitive plant species was conducted on April 20, 2022, by Dudek Biologist Charles Adams (Table 1). Prior to field surveys, distribution information for sensitive plant species potentially occurring within the project area was reviewed.

Field survey methods and mapping of sensitive plants generally conformed to CNPS Botanical Survey Guidelines (CNPS 2001), General Rare Plant Survey Guidelines (Cypher 2002), and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018).

6 Results

6.1 Vegetation Communities and Land Covers

There are a total of seven vegetation communities and land cover types throughout the site. Of these, five are predominantly non-native vegetation communities and land covers, including disturbed habitat, arundo-dominated riparian, non-native riparian, disturbed wetland, and urban/developed. There are two native land covers present within the project site: fresh water (Poway Creek) and southern willow scrub (both of which are assumed regulated by USACE, RWQCB, CDFW, and the City of Poway). Acreages of vegetation communities and land covers are listed in Table 2, and their spatial distribution is depicted in Figure 2, Biological Resources.

Table 2. Vegetation Communities and Land Covers within the Project Site

Vegetation Community/Land Cover	Habitat Code	Acreage
Non-Native Vegetation Communities, Land Covers, and Unvegetated Habitat		
Disturbed Wetland	11200	0.18
Disturbed Habitat	11300	7.94
Urban/Developed	12000	1.45
Non-native Riparian	65000	0.59
Arundo-dominated Riparian	65100	0.40
Native Vegetation Community		
Southern Willow Scrub	63320	0.02
Fresh Water	64140	0.14
	Total	**10.73**

Disturbed Wetland

According to Holland (1986), this habitat type is common throughout San Diego County and includes portions of wetlands with artificial structures such as concrete linings, culverts, barricades, and riprap. It includes areas that are permanently or periodically inundated by water that have been significantly modified by human activity.

Within the site, the area mapped as disturbed wetland habitat is present within the drainage that runs through the northwestern corner of the northern parcel and encompasses approximately 0.18 acres. During the initial site

reconnaissance visit, there was a small amount of water in the drainage. The dominant species within this habitat on site include broadleaf cattail (*Typha latifolia),* Mexican fan palm (*Washingtonia robusta*), willows (*Salix sp.*), and castor bean (*Ricinus communis*).

Disturbed Habitat

Disturbed habitat refers to areas that are not developed but are no longer recognizable as a native or naturalized vegetation association, but continue to retain a soil substrate. This habitat is generally the result of severe or repeated mechanical perturbation, often with heavily disturbed, compacted soils.

Within the site, disturbed habitat is the most common habitat type and encompasses approximately 7.94 acres. It is located around the San Diego Gas & Electric storage yard and the northeastern corner of the northern parcel, as well as the northern and southern portions of the southern parcel. Vegetation in this area contains mostly ruderal, non-native species such as iceplant (*Carpobrotus edulis*), Russian thistle (*Salsola tragus*), white horehound *(Marrubium vulgare*), Australian saltbush *(Atriplex semibaccata*), Scutch grass (*Cynodon dactylon*), fountaingrass (*Pennisetum setaceum*), cheeseweed mallow (*Malva parviflora*), stinkwort (*Dittrichia graveolens*), doveweed (*Croton setiger*), western ragweed (*Ambrosia psilostachya*), horseweed (*Erigeron canadensis*), common dandelion (*Taraxacum officinale*), Maltese star-thistle (*Centaurea melitensis*), shortpod mustard (*Hirschfeldia incana*), and wild oat (*Avena fatua*) and various brome species.

Urban/Developed Land

Developed land consists of areas that have been constructed upon and typically consists of buildings, structures, homes, and maintained areas with paved or other impermeable surfaces. Developed areas do not support native vegetation. Ornamental plantings often tend to occur in and around developments and are therefore included within the developed land cover category.

Within the site, developed areas encompass approximately 1.45 acres and are present throughout the majority of the northern parcel as the San Diego Gas & Electric staging yard and buildings along Oak Knoll Road. Within the southern parcel, developed land is present within the northeastern corner also along Oak Knoll Road.

Fresh Water

According to Holland (1986), this unvegetated habitat type is characterized by year-round water bodies of fresh water that have very low salinity, typically in the form of lakes, streams, ponds, or rivers. There is also minimal vegetative cover (less than 10%) associated with this habitat type.

The area mapped as fresh water occurs within the southern portion of the site as Poway Creek. The creek flows east to west and runs parallel to Oak Knoll Road. There is some vegetation present within and along the edge of the creek including broadleaf cattail; however, during storm events this creek often floods and the high velocity of water frequently uproots, washes away, or flattens vegetation.

Non-Native Riparian

According to Holland (1986), this habitat type is common along major rivers of coastal Southern California and is found in a variety of wetland habitats where there has been previous disturbance. It is characterized by densely vegetated riparian thickets dominated by non-native, invasive species, where these species account for greater than 50% of the total vegetative cover.

Within the site, the area mapped as non-native riparian is about 0.59 acres and includes the area along both sides of the drainage in the northwestern corner of the site, as well as an area adjacent to Poway Creek in the southern portion of the site. The dominant species within this habitat on-site include Mexican fan palm, willows, castor bean, Fremont cottonwood (*Populus fremontii)*, Brazilian peppertree (*Schinus molle*), Peruvian peppertree (*Schinus terebinthifolius*), and pampas grass (*Cortaderia jubata*).

Arundo-Dominated Riparian

According to Holland (1986), arundo-dominated riparian is characterized by densely vegetated riparian thickets dominated almost exclusively by giant reed (*Arundo donax*), often in areas with loose, sandy, or fine alluvium near stream channels. This designation should only be used in environments where this species accounts for at least 50% of the total vegetative cover.

Within the site, arundo-dominated riparian habitat is only present in the southern portion of the site north of Poway Creek but south of the disturbed habitat and encompasses approximately 0.4 acres.

Southern Willow Scrub

According to Holland (1986), southern willow scrub has been described as a dense, broad-leaved, winter-deciduous riparian thicket dominated by several species of willow, with scattered emergent Fremont cottonwood and western sycamore (*Platanus racemosa*). Most stands are too dense to allow much understory development. This habitat is considered seral due to repeated disturbance/flooding and is therefore unable to develop into the taller southern cottonwood–willow riparian forest.

Southern willow scrub on site is limited to the overgrowth of arroyo willows (*Salix lasiolepis*) and red willows (*Salix laevigata*) associated with the adjacent off-site drainage. The canopy of the willows in the off-site drainage extends over the chain-link fence along the northern property boundary and encroaches onto the northern portion of the project site. Beneath the portions of the willow canopy on site, the understory is relatively limited and includes species found in the adjacent disturbed area, such as hottentot fig (*Carpobrotus edulis*). This area totals 0.02 acres on site.

6.2 Plants and Wildlife

A total of 108 species of vascular plants, 41 native and 67 non-native species, were recorded during the biological reconnaissance survey (Appendix B). The diversity of native plant species is low due to the historical use of the site for residential, commercial, and industrial purposes and operations, as well as the urban setting of the vicinity. This list does not include a comprehensive list of all the ornamental species observed.

A total of 18 wildlife species were recorded in the site during the surveys (Appendix C). The wildlife species observed are generally common, disturbance-adapted species typically found in urban and suburban settings, such as Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), and mourning dove (*Zenaida macroura*). One mammal species was observed within the site—brush rabbit (*Sylvilagus bachmani*). One reptile species was observed during the survey—western fence lizard (*Sceloporus occidentalis*). There is minimal suitable habitat for small non-avian wildlife species (e.g., reptiles, amphibians, and small mammals) within the site due to the disturbed nature of the site, proximity to residential/urban land cover, and limited connectivity of the surrounding habitat to larger expanses of native lands.

No raptor nests were detected on or adjacent to the project area; however, some of the larger trees on site and along the project boundary could potentially support raptor nests.

6.3 Special-Status Species

A search of CNPS and California Natural Diversity Database records was utilized to develop matrices of special-status plant and wildlife species that may have potential to occur on site due to the presence of suitable habitat (taking into consideration vegetation communities, soils, elevation, and geographic range, life form/blooming period, etc.). These two matrices of special-status plant and wildlife species (i.e., federally, state, or locally listed species), their favorable habitat conditions, and their potential to occur on site based on the findings of the field investigations are presented in Appendices C and D, respectively. Species covered under the San Diego Multiple Species Conservation Plan and MHCP are also included in these appendices.

There is no federally designated critical habitat (USFWS 2022b) located within the project site.

6.3.1 Special-Status Plant Species

No plant species listed or proposed for listing as rare, threatened, or endangered by either CDFW or the U.S. Fish and Wildlife Service were detected on site. No plant species considered special status by CNPS were observed.

Appendix C lists special-status plant species that may occur in the vicinity of the site (CDFW 2022b, 2022c; CNPS 2022; USFWS 2022b) or are covered under the Habitat Conservation Plan/Natural Community Conservation Plan. For each species listed, a determination is made regarding the potential for the species to occur on site based on information gathered during the field reconnaissance including the location of the site, habitats or land covers present, current site conditions, historical land use, soils, and topography. No species were determined to have a moderate or high potential to occur given the lack of suitable habitat and disturbed nature of the site.

6.3.2 Special-Status Wildlife Species

Appendix D lists special-status wildlife species that are known to occur in the vicinity of the site (CDFW 2022d, 2022e; USFWS 2022b) or are covered under the Multiple Species Conservation Plan and/or MHCP. No federally or state-listed species or other special-status species were observed during any of the site visits. No species were determined to have a moderate or high potential to occur given the lack of suitable habitat and disturbed nature of the site.

Other special status species that have not been detected on site, but have a low to moderate potential to occur include Cooper's hawk *(Accipiter cooperii)*, Costa's hummingbird (*Calypte costae*), white-tailed kite (*Elanus leucurus),* vermilion flycatcher (*Pyrocephalus rubinus),* yellow warbler (*Setophaga petechia*), least Bell's vireo, spotted bat (*Euderma maculatum*), western red bat (*Lasiurus blossevillii*), western small-footed myotis (*Myotis ciliolabrum*), long-eared myotis (*Myotis evotis*), Yuma myotis (*Myotis yumanensis*), and San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*).

6.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the

adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping stones for wildlife dispersal.

The vicinity of the project site is situated between a commercial area and suburban areas consisting of a mix of mid- to high-density residential developments and roadways. The site is not within a Biological Core and Linkage Area and is isolated from areas proposed for preservation under the MHCP. The small amount of riparian habitat on site continues off site, but is composed of a small amount of habitat and is disturbed. Regardless of size, this patch of riparian habitat does attract wildlife, but almost all of the riparian habitat is located off site and is lacking management. Connectivity to the project site is not likely to benefit wildlife movement due the extent of surrounding development and lack of native habitat on site. Therefore, the project site is unlikely to serve as a wildlife corridor. However, the site, since it currently is vacant, may provide stopover function for migrants or a local patch of habitat.

7 Impacts Analysis

This section addresses direct, indirect, and cumulative impacts to biological resources that would result from implementation of the proposed project.

Direct impacts include the permanent loss of on-site habitat and the plant and wildlife species that it contains due to grading and the development of the site (Figure 3, Impacts). Direct permanent impacts were quantified by overlaying the proposed project footprint onto the biological resources map. All biological resources within the impact limits were considered directly and permanently impacted. Direct impacts include permanent impacts to 8.23 acres.

Indirect impacts refer to off-site and on-site effects that are short-term impacts (i.e., temporary) due to project construction or long-term (i.e., permanent) design of the project and the effects it may have on adjacent resources. For the proposed project, it is assumed that the potential indirect impacts resulting from construction activities include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and runoff. With respect to these latter factors, however, all project grading will be subject to the typical restrictions (e.g., best management practices) and requirements that address erosion and runoff, including the federal Clean Water Act, National Pollution Discharge Elimination System, and preparation of a stormwater pollution prevention plan.

7.1 Vegetation Communities and Land Covers

Direct impacts to vegetation are shown in Table 3. All biological resources within the impact limits were considered directly impacted. Figure 3 illustrates the distribution of biological resources in the project site and the extent of the proposed impacts.

Table 3. Impacts to Vegetation Communities and Land Covers within the Project Site

Vegetation Community/Land Cover	Habitat Code	Acreage	Impacts (Acres)
Non-Native Vegetation Communities, Land Covers, and Unvegetated Habitat			
Disturbed Wetland	11200	0.18	—
Disturbed Habitat	11300	7.94	6.75
Urban/Developed	12000	1.45	1.45
Non-native Riparian	65000	0.59	—

Table 3. Impacts to Vegetation Communities and Land Covers within the Project Site

Vegetation Community/Land Cover	Habitat Code	Acreage	Impacts (Acres)
Arundo-dominated Riparian	65100	0.40	0.02
Native Vegetation Community			
Southern Willow Scrub	63320	0.02	—
Fresh Water	64140	0.14	—
	Total	**10.73**	**8.22**

Proposed impacts to disturbed habitat and urban/developed land are not considered significant because these land covers are not considered special status; they are non-native and provide little biological resource value. Proposed impacts to arundo-dominated riparian habitat, a highly invasive land cover that provides little biological resource value, would be minimal. The arundo-dominated riparian associated with Poway Creek currently extends over the property line and therefore would need to be trimmed back to the property line resulting in a potential temporary loss of 0.02 acres of this vegetation community. It is anticipated that the vegetation will grow back following construction and therefore no mitigation is proposed for impacts to this invasive plant community. Mitigation measures BIO-1, BIO-2, BIO-4, and BIO-5 would be established to prevent direct and mitigate for indirect impacts to sensitive habitats. After mitigation, these impacts would be considered less than significant.

7.2 Potential Jurisdictional Aquatic Resources

Impacts to 0.02 acres of non-native, invasive, arundo-dominated riparian habitat may occur as a result of project implementation. Since this vegetation is associated with Poway Creek, it is assumed that the vegetation is regulated by USACE, RWQCB, and CDFW, however it should be noted that a formal jurisdictional delineation was not conducted. The impacts would only be to the arundo branches that overhang the fence of the property line. The current fence line/property line is proposed to be maintained as the boundary of the new development. These branches may be preserved as they are tall and most of their stalks are outside of the impact footprint and would likely not be affected by grading or construction activities. Typically, removal of this species (*Arundo donax*) is targeted for restoration projects as it is highly invasive, provides minimal habitat value for wildlife, and often outcompetes native vegetation. Trimming of the vegetation would not trigger permits from USACE or RWQCB since the project would not result in any removal or fill of this resource. As discussed further in Section 7.3, the project has been reviewed with CDFW staff to obtain their concurrence on impact avoidance. Given the disturbed nature of this portion of Poway Creek, the surrounding development and the invasive properties of Arundo, CDFW stated that the minor impacts to 0.02 acres of Arundo would not result in a significant impact from their perspective.

The remainder of the arundo-dominated habitat, disturbed wetland habitat, fresh water, and non-native riparian habitat will be preserved, and no direct impacts are anticipated to occur to the latter habitat types. The only native vegetation community on site, southern willow scrub habitat, is located completely outside of and away from the project grading footprint and will not be affected by project construction.

Indirect impacts to the wetland and riparian habitat could potentially occur and would be significant requiring mitigation. Mitigation measures BIO-1, BIO-2, BIO-4, and BIO-5 would be established to protect and mitigate direct and indirect impacts to jurisdictional resources. After mitigation, these impacts would be less than significant.

7.3 Buffers and Setbacks

The project will not result in any impacts to Poway Creek nor will it impact the unnamed tributary. A minimum of 100 feet from the top of slope is provided to avoid any indirect impacts to Poway Creek which is a USGS blueline stream. A setback from the top of slope for the tributary is not provided as it is not a blueline stream. The proposed project development footprint will avoid all of the wetland habitat and the vast majority of the riparian habitat on site, much of which is already highly disturbed and of limited habitat value and quality for resident and migratory wildlife. Additionally, a 50-foot buffer does not currently exist between the wetland and riparian habitats and many of the existing developments within the surrounding areas. Under the proposed project, no wetland or riparian buffer is warranted due to the already highly disturbed nature of the riparian and wetland habitats on site, and the fact that the site is already situated in a heavily developed area.

Dudek biologists met with representatives from CDFW to review the project on July 22, 2022. During this meeting the proposed avoidance of Poway creek and an unnamed tributary were discussed. CDFW staff concurred that the proposed project provides adequate avoidance of the two waterways and did not suggest or request that the project provide additional buffers beyond what is currently proposed.

7.4 Special-Status Plants and Sensitive Habitat

No special-status plants were detected within the site. The majority of the impact area is disturbed habitat and already developed land covers, although the site does include sensitive riparian and wetland habitat. Due to the extent of vegetative disturbance, existing anthropogenic developments, and lack of suitable substrate, special-status plant species are not expected to occur in this area. Therefore, no significant direct or indirect impacts to special-status plants are anticipated.

Direct Impacts

Direct impacts to non-native, invasive riparian habitat may be significant. Mitigation measures **BIO-1** and **BIO-2** provide for the protection of the majority of the disturbed riparian habitat and all of the disturbed wetland habitat on site through the installation of silt fencing around the sensitive habitat and around the perimeter of the construction/grading footprint. It also requires environmental awareness meetings to discuss and educate about sensitive habitats, as well as construction monitoring to help ensure sensitive habitat is protected. After mitigation, these impacts would be less than significant.

Indirect Impacts

Indirect impacts to sensitive habitat may be significant without mitigation. Construction activities may result in the generation of fugitive dust; changes in hydrology, including sedimentation and erosion; and the release of chemical pollutants. Implementation of mitigation measures **BIO-4** and **BIO-5** would reduce these impacts to less than significant.

7.5 Special-Status Wildlife

No special-status wildlife species were detected within the site. The majority of the impact area consists of disturbed habitat and already developed land covers. Due to the extent of vegetative disturbance and existing and

surrounding anthropogenic developments, very limited special-status species are expected to occur in this area. The following special-status species have not been detected on site but do have a low to moderate potential to occur: Cooper's hawk, white-tailed kite, vermilion flycatcher, yellow warbler, least Bell's vireo, spotted bat, western red bat, and San Diegan tiger whiptail.

There is potential for raptors and other birds to nest on site.

Direct Impacts

Direct impacts to potentially occurring special-status species, including Cooper's hawk, white-tailed kite, vermilion flycatcher, yellow warbler, least Bell's vireo, spotted bat, western red bat, and San Diegan tiger whiptail may be significant. Mitigation measures BIO-1 and BIO-3 state that environmental awareness training and nesting bird surveys are to be conducted prior to construction, and should nests be present, an avoidance buffer will be implemented. Vegetation clearing during the breeding season should avoided unless absolutely necessary, in which case, a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. After mitigation, these impacts would be less than significant.

Indirect Impacts

Special-status wildlife, including Cooper's hawk, white-tailed kite, vermilion flycatcher, yellow warbler, least Bell's vireo, spotted bat, western red bat, and San Diegan tiger whiptail may be indirectly impacted during construction by impacts such as the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the release of chemical pollutants. Special-status wildlife may also be indirectly affected in the short and long term by noise and lighting, which can disrupt normal activities and subject wildlife to higher predation risks. Implementation of BIO-4 and BIO-5 would reduce these impacts to less than significant.

The small scale of the habitat loss would not appreciably reduce the population of sensitive species in the area. However, nesting birds can be significantly affected by short-term construction-related noise, resulting in decreased reproductive success or abandonment of an area as nesting habitat. Breeding passerine and raptor species likely utilize the various habitats on site for nest construction and foraging. Indirect impacts from construction-related noise may occur to sensitive wildlife if construction occurs during the breeding season (i.e., February 15 through September 1). Potential impacts, including noise, lighting, and increased human presence and vehicle traffic within the site, could significantly affect nesting birds and would be considered significant. Mitigation measure BIO-3 would be implemented in order to avoid impacts to nesting birds. This mitigation measure would reduce potential impacts to a level that is less than significant.

7.6 Wildlife Corridor and Habitat Linkages

As mentioned, the project site is located in a highly urbanized environment. The site is not within a Poway Mitigation Area and is isolated from areas proposed for preservation under the MHCP. Although Poway Creek in the southern portion of the site may have limited value as a movement corridor for some riparian birds, small mammals, and reptiles, the proposed project would not permanently change the functionality of this area. Therefore, there would be no significant impact to areas facilitating wildlife movement. For upland predominantly disturbed habitat use, the site may function as a stepping stone type habitat linkage. However, the vegetation on site is highly dominated by non-native species and still has remnants of the previous developments. Based on the Poway Subarea Habitat

Conservation Plan, due to the lack of designation as a Focused Planning Area and its location outside of Poway Mitigation Areas, the impacts to wildlife movement would be less than significant.

7.7 Consistency with the Multiple Habitat Conservation Program and Multiple Species Conservation Plan

As mentioned, the project site is not located within or immediately adjacent to any Poway Mitigation Areas, and the majority of impacts will occur to disturbed lands and existing developed land. Therefore, the project will not impact the goals and objectives of the Poway Subarea Habitat Conservation Plan. Minimal impacts will occur to invasive, riparian habitat, and no impacts will occur to existing wetlands or native habitat.

8 Mitigation

This section describes the mitigation measures required to offset and avoid direct and indirect impacts to sensitive vegetation communities, jurisdictional resources, and special-status wildlife in the short and long term. These measures will reduce identified and potentially significant impacts to a level that is less than significant.

BIO-1 Staking and silt fencing shall be installed along the entire perimeter of the construction footprint/area proposed for grading. Additionally, pre-construction environmental awareness educational meetings for the team and crews, as well and biological monitoring during vegetation clearing and grading activities, shall occur. Construction/contractor personnel shall complete a Workers Environmental Awareness Program to ensure compliance with environmental/permit regulations and mitigation measures. Construction-limits staking and biological monitoring shall prevent inadvertent impacts to special-status vegetation or potential special-status wildlife species and their habitat.

BIO-2 Prior to construction permit issuance, grading and building plans shall ensure that the wetland and riparian area is protected with on-site construction fencing. The construction fencing shall be portrayed on the construction plans. The construction plans shall specify that construction fencing shall be maintained for the entire duration of construction activity until the permanent, outer wall proposed for the new development has been constructed, protecting the adjacent riparian and wetland habitats.

BIO-3 In accordance with the Migratory Bird Treaty Act of 1918 and Section 3503.5 of the California Fish and Game Code, to avoid any direct impacts to raptors and/or any native/migratory birds, removal of habitat that supports active nests in the proposed project site should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey shall be conducted not more than 72 hours prior to the start of construction activities (including removal of vegetation). If any active nests are detected, the area will be flagged and mapped on the construction plans along with a 300- to 500-foot (for raptors) avoidance buffer, and will be avoided until the nesting cycle is complete or it

is determined that the nest has failed. Noise monitoring may also be required. The final buffer will be determined by the biologist(s).

BIO-4 Prior to construction permit issuance, grading and building plans shall specify the following:

- Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint.
- To avoid attracting predators, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site.
- Any lighting installed for project construction should be faced away from riparian and wetland habitat.
- Appropriate dust control measures (water trucks) should be implemented to reduce the amount of fugitive dust created by the project.
- Pets of project personnel shall not be allowed on the project site.

BIO-5 All construction activity adjacent to wetland habitat areas shall be required to adhere to measures outlined in the Poway General Plan and Poway Grading Ordinance to avoid degradation to wetland and riparian habitat from erosion. These measures include restrictions on the timing and amount of grading. For example, grading shall be prohibited during the rainy season (October 1st through April 15th) without an approved erosion control plan and program in place. Grading or vegetation removal shall be prohibited adjacent to wetland areas during the rainy season unless determined to be allowable on a site-specific basis with the provision of all necessary erosion control devices, which must be in place and maintained throughout the grading period.

If you have any questions or comments regarding the content of this letter, please do not hesitate to email me at scarey@dudek.com or call me at 760.334.1993.

Sincerely,

Shana Carey

Shana Carey
Biologist

Att: *Figures 1–3*
Appendix A, List of Plant Species Detected on Site
Appendix B, List of Wildlife Species Detected on Site
Appendix C, Special-Status Plant Species Potential to Occur
Appendix D, Special-Status Wildlife Species Potential to Occur

9 References Cited

AOS (American Ornithological Society). 2018. "Check-List of North and Middle American Birds." Accessed June 2022. http://checklist.aou.org/.

CDFW (California Department of Fish and Wildlife). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. March 20, 2018. Accessed June 2022. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

CDFW. 2020. Survey of California Vegetation Classification and Mapping Standards Mapping. June 22, 2020. https://wildlife.ca.gov/data/vegcamp/publications-and-protocols.

CDFW. 2022a. California Natural Diversity Database (CNDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed June 2022. http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp.

CDFW. 2022b. *Special Vascular Plants, Bryophytes, and Lichens List*. California Natural Diversity Database. October 2015. Accessed June 2022. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW. 2022c. "State and Federally Listed Endangered, Threatened, and Rare Plants of California." California Natural Diversity Database. CDFW, Biogeographic Data Branch. Accessed June 2022. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW. 2022d. "State and Federally Listed Endangered and Threatened Animals of California." California Natural Diversity Database. CDFW, Biogeographic Data Branch. Accessed June 2022. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

CDFW. 2022e. "Special Animals List (905 taxa)." California Natural Diversity Database. CDFW, Biogeographic Data Branch. Accessed June 2022. http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

City of San Diego. 1997. Multiple Species Conservation Program. https://www.sandiego.gov/sites/default/files/legacy//planning/programs/mscp/pdf/subareafullversion.pdf

CNPS (California Native Plant Society). 2001. *Botanical Survey Guidelines*.

CNPS. 2022. *Inventory of Rare and Endangered Plants of California* (online edition, version 9-01). Sacramento, California: CNPS, Rare Plant Program. Accessed June 2022. www.rareplants.cnps.org.

Crother, B.I. 2017. *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding*, edited by J.J. Moriarty. 8th ed. Society for the Study of Amphibians and Reptiles (SSAR); Herpetological Circular No. 43. https://ssarherps.org/wp-content/uploads/2017/10/8th-Ed-2017-Scientific-and-Standard-English-Names.pdf.

Cypher, E.A. 2002. "General Rare Plant Survey Guidelines." Bakersfield, California: California State University, Stanislaus, Endangered Species Recovery Program. Revised July 2002. http://www.fws.gov/sacramento/ES/Survey-Protocols-Guidelines/Documents/rare_plant_protocol.pdf.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California.* Nongame-Heritage Program, California Department of Fish and Game. October 1986.

Jepson Flora Project. 2022. "Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California." Berkeley, California: University of California. Accessed June 2022. http://ucjeps.berkeley.edu/interchange/I_status_1+2.html.

NABA (North American Butterfly Association). 2016. "Checklist of North American Butterflies Occurring North of Mexico." Adapted from North American Butterfly Association (NABA) Checklist & English Names of North American Butterflies, eds. B. Cassie, J. Glassberg, A. Swengel, and G. Tudor. 2nd ed. Morristown, New Jersey: NABA. Accessed June 2022. http://www.naba.org/pubs/enames2_3.html

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. http://www.sdcanyonlands.org/pdfs/veg_comm_sdcounty_2008_doc.pdf.

Ogden. 1996. Poway Subarea Habitat Conservation Plan/Natural Community Conservation Plan. April 1996. https://docs.poway.org/WebLink/DocView.aspx?id=23936&openfile=true&cr=1

SDNHM (San Diego Natural History Museum). 2002. "Butterflies of San Diego County." Revised September 2002. Accessed June 2022. http://www.sdnhm.org/archive/research/entomology/sdbutterflies.html.

USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetland Delineation Manual.* Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. http://www.fedcenter.gov/Bookmarks/index.cfm?id=6403&pge_id=1606.

USACE. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-13. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. http://el.erdc.usace.army.mil/elpubs/pdf/trel08-13.pdf.

USACE and EPA (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency). 2008. "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*." December 2, 2008. http://water.epa.gov/lawsregs/guidance/wetlands/upload/2008_12_3_wetlands_CWA_Jurisdiction_Following_Rapanos120208.pdf.

USDA (U.S. Department of Agriculture). 2022a. Web Soil Survey. USDA, Natural Resources Conservation Service, Soil Survey Staff. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

USDA. 2022b. "California." State PLANTS Checklist. Accessed June 2022. http://plants.usda.gov/dl_state.html.

USFWS. 2022a. *National Wetlands Inventory (NWI) Wetlands Mapper*. Accessed May 2022. https://www.fws.gov/wetlands/Data/Mapper.html.

USFWS. 2022b. "Critical Habitat and Occurrence Data" [map]. USFWS Geospatial Services. Accessed June 2022. http://www.fws.gov/data.

Wilson, D.E., and D.M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press.

SOURCE: San GIS 2017; Google Earth 2021

DUDEK

0 70 140 Feet

FIGURE 1

Project Location

Harmon Ranch

SOURCE: SAN GIS 2017

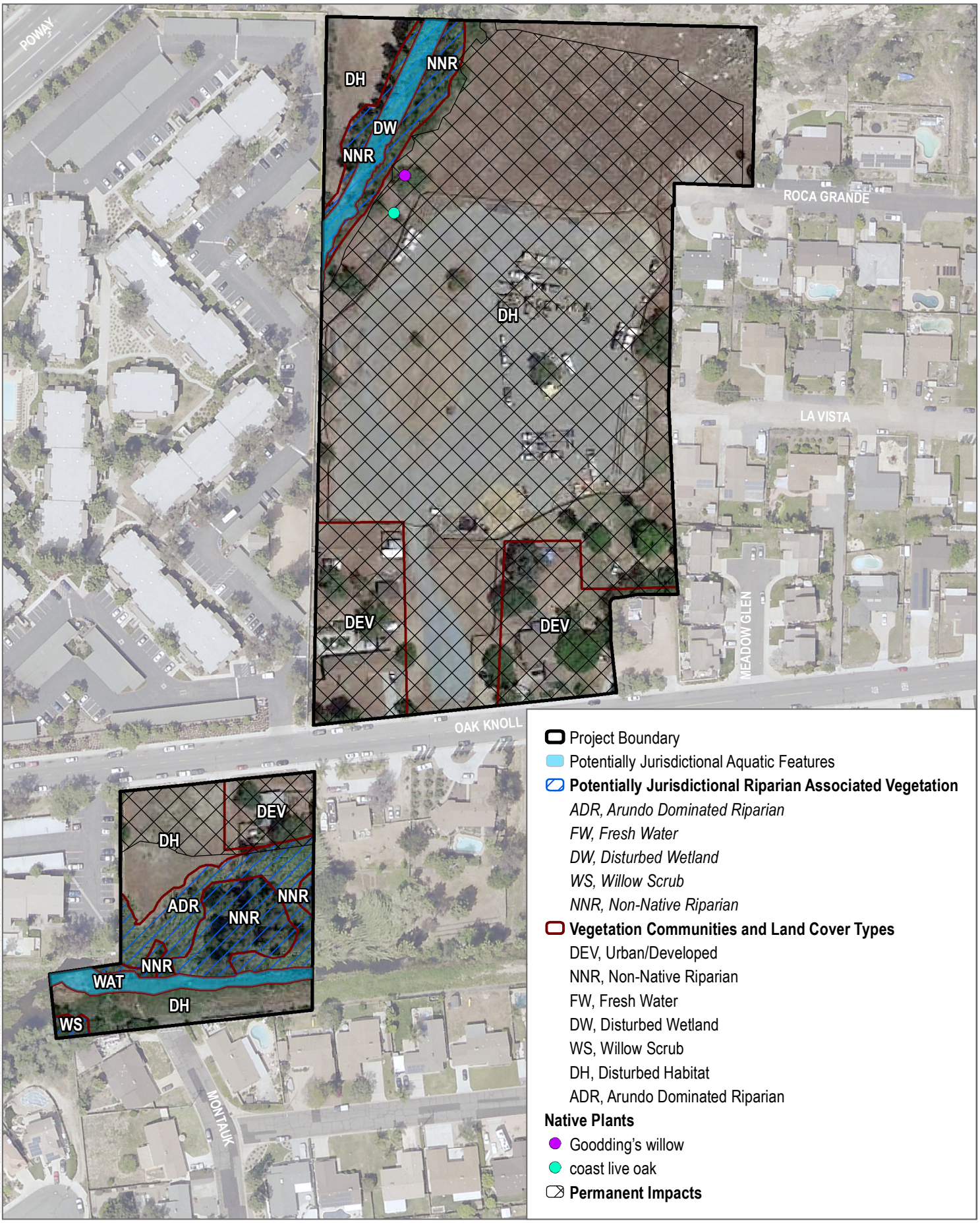
DUDEK

0 80 160 Feet

FIGURE 2

Biological Resources

Harmon Ranch



SOURCE: Hunsaker & Associates San Diego, Inc.

DUDEK

0 80 160 Feet

FIGURE 3

Impacts

Harmon Ranch

Appendix A

List of Plant Species Detected on Site

Plant Species

Angiosperms: Magnoliids-Piperales

SAURURACEAE – LIZARD'S TAIL FAMILY

Anemopsis californica – yerba mansa

Angiosperms: Eudicots

AIZOACEAE – FIG-MARIGOLD FAMILY

* *Carpobrotus edulis* – hottentot-fig

AMARANTHACEAE – AMARANTH FAMILY

Malosma laurina – laurel sumac

* *Schinus molle* – Peruvian pepper tree
* *Schinus terebinthifolius* – Brazilian pepper tree

APIACEAE – CARROT FAMILY

* *Apium graveolens* – common celery
* *Foeniculum vulgare* – sweet fennel

ASTERACEAE – SUNFLOWER FAMILY

Ambrosia psilostachya – western ragweed
Artemisia douglasiana – Douglas mugwort
Baccharis salicifolia ssp. salicifolia – mule-fat, seep-willow
Baccharis sarothroides – broom baccharis
Brickellia californica – California brickellbush
Deinandra fasciculata – fascicled tarweed
Erigeron canadensis – horseweed
Pseudognaphalium biolettii – bicolor cudweed
Xanthium strumarium – cocklebur

* *Centaurea melitensis* – tocalote
* *Dittrichia graveolens* – stinkwort
* *Helminthotheca echioides* – bristly ox-tongue
* *Hypochaeris glabra* – smooth cat's ear
* *Lactuca serriola* – prickly lettuce
* *Matricaria discoidea* – common pineapple-weed
* *Sonchus oleraceus* – common sow-thistle

Baccharis pilularis – chaparral broom, coyote brush
Hazardia squarrosa – sawtooth goldenbush

* *Hedypnois cretica* – crete hedypnois

BORAGINACEAE – BORAGE FAMILY

Amsinckia intermedia – rancher's fiddleneck
Heliotropium curassavicum var. *oculatum* – salt heliotrope

BRASSICACEAE – MUSTARD FAMILY

Lepidium nitidum – shining peppergrass
* *Brassica nigra* – black mustard
* *Cardamine hirsuta* – hairy bittercress
* *Hirschfeldia incana* – short-pod mustard
* *Raphanus sativus* – wild radish
* *Sisymbrium irio* – London rocket

CARYOPHYLLACEAE – PINK FAMILY

* *Spergularia rubra* – ruby sand-spurrey

CHENOPODIACEAE – GOOSEFOOT FAMILY

Atriplex prostrata – prostrate spearscale
* *Atriplex semibaccata* – Australian saltbush
* *Salsola tragus* – prickly russian-thistle, tumbleweed

CONVOLVULACEAE – MORNING-GLORY FAMILY

Calystegia macrostegia – morning-glory

EUPHORBIACEAE – SPURGE FAMILY

Croton setiger – doveweed
* *Euphorbia maculata* – spotted spurge

FABACEAE – LEGUME FAMILY

* *Acacia longifolia* – sydney golden wattle
* *Lotus tenuis* – slender trefoil
* *Medicago polymorpha* – California burclover
* *Melilotus albus* – white sweetclover
* *Melilotus indicus* – Indian sweetclover
* *Vicia sativa* – spring vetch

FAGACEAE – OAK FAMILY

Quercus agrifolia – coast live oak, encina

GERANIACEAE – GERANIUM FAMILY

* *Erodium cicutarium* – red-stem filaree/storksbill
* *Geranium dissectum* – cut-leaf geranium

LAMIACEAE – MINT FAMILY

* *Marrubium vulgare* – horehound
* *Mentha aquatica* – watermint

MALVACEAE – MALLOW FAMILY

* *Malva parviflora* – cheeseweed

MYRSINACEAE – MYRSINE FAMILY

* *Anagallis arvensis* – scarlet pimpernel, poor man's weatherglass

MYRTACEAE – MYRTLE FAMILY

* *Eucalyptus camaldulensis* – river red gum

OLEACEAE – OLIVE FAMILY

Fraxinus cf. *dipetala* – California ash
* *Fraxinus uhdei* – shamel ash
* *Olea europaea* – olive

ONAGRACEAE – EVENING-PRIMROSE FAMILY

Oenothera elata ssp. *hookeri* – Hooker's evening-primrose

OXALIDACEAE – OXALIS FAMILY

* *Oxalis pes-caprae* – bermuda-buttercup

PAPAVERACEAE – POPPY FAMILY

Eschscholzia californica – California poppy

PLANTAGINACEAE – PLANTAIN FAMILY

* *Plantago lanceolata* – English plantain, rib-grass
* *Plantago major* – common plantain

Antirrhinum nuttallianum – Nuttall's snapdragon

POLYGONACEAE – BUCKWHEAT FAMILY

Persicaria lapathifolia – willow smartweed, willow weed
* *Rumex crispus* – curly dock
* *Polygonum aviculare* – common knotweed, doorweed

ROSACEAE – ROSE FAMILY

Heteromeles arbutifolia – toyon, Christmas berry

Rubus ursinus – California blackberry
* *Rubus armeniacus* – Himalayan blackberry

SALICACEAE – WILLOW FAMILY

Populus fremontii ssp. *fremontii* – western cottonwood
Salix gooddingii – Goodding's black willow
Salix laevigata – red willow
Salix lasiolepis – arroyo willow
Salix exigua – narrow-leaf willow

SAPINDACEAE – SOAPBERRY FAMILY

* *Cupaniopsis anacardioides* – carrotwood

THEOPHRASTACEAE – THEOPHRASTA FAMILY

Samolus parviflorus – water-pimpernel, seaside brookweed

ULMACEAE – ELM FAMILY

* *Ulmus parvifolia* – Chinese elm

URTICACEAE – STINGING NETTLE FAMILY

* *Urtica urens* – dwarf nettle

VITACEAE – GRAPE FAMILY

Vitis girdiana – Southern California wild grape

Angiosperms: Monocots

ALLIACEAE – ONION FAMILY

* *Nothoscordum gracile* – yellow false-garlic

ARECACEAE – PALM FAMILY

* *Washingtonia robusta* – Mexican fan palm

ASPARAGACEAE – ASPARAGUS FAMILY

* *Asparagus asparagoides* – florist's-smilax
* *Asparagus officinalis* ssp. *officinalis* – garden asparagus

CYPERACEAE – SEDGE FAMILY

Bolboschoenus maritimus ssp. *paludosus* – prairie bulrush
Carex spissa – San Diego sedge
Eleocharis palustris – common spike-rush
Schoenoplectus acutus var. *occidentalis* – viscid bulrush
Schoenoplectus americanus – Olney's bulrush

POACEAE – GRASS FAMILY

Distichlis spicata – salt grass
* *Arundo donax* – giant reed
* *Avena fatua* – wild oat
* *Bromus diandrus* – ripgut grass
* *Bromus hordeaceus* – soft chess
* *Bromus madritensis* – compact brome
* *Cortaderia selloana* – selloa pampas grass
* *Cynodon dactylon* – bermuda grass
* *Ehrharta erecta* – panic veldt grass
* *Festuca myuros* – rat-tail fescue
* *Festuca perennis* – perennial rye grass
* *Melinis repens* ssp. *repens* – natal grass
* *Poa annua* – annual blue grass
* *Polypogon monspeliensis* – annual beard grass
* *Polypogon viridis* – water beardgrass
* *Stipa miliacea* var. *miliacea* – smilo grass
* *Cenchrus setaceus* – African fountain grass
* *Hordeum murinum* – barley

TYPHACEAE – CATTAIL FAMILY

Typha latifolia – broad-leaf cattail

* signifies introduced (non-native) species

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Appendix B

List of Wildlife Species Detected on Site

Wildlife Species

Birds

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Spinus psaltria – lesser goldfinch

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

Sayornis nigricans – black phoebe

Sayornis saya – Say's phoebe

Hummingbirds

TROCHILIDAE – HUMMINGBIRDS

Calypte anna – Anna's hummingbird

Jays, Magpies and Crows

CORVIDAE – CROWS AND JAYS

Aphelocoma californica – California scrub-jay

Corvus brachyrhynchos – American crow

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura – mourning dove

Wood Warblers and Allies

PARULIDAE – WOOD-WARBLERS

Geothlypis trichas – common yellowthroat

Setophaga coronata – yellow-rumped warbler

Woodpeckers

PICIDAE – WOODPECKERS AND ALLIES

Dryobates nuttallii – Nuttall's woodpecker

Wrens

TROGLODYTIDAE – WRENS

Troglodytes aedon – house wren

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

Melospiza melodia – song sparrow
Melozone crissalis – California towhee
Pipilo maculatus – spotted towhee
Zonotrichia leucophrys – white-crowned sparrow

Mammals

Hares and Rabbits

LEPORIDAE – HARES AND RABBITS

Sylvilagus bachmani – brush rabbit

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Sceloporus occidentalis – western fence lizard

Appendix C

Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/ State/CRPR)	City of San Diego MSCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet above mean sea level)	Potential to Occur
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE/1B.1	Narrow Endemic	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay, openings/annual herb/Apr–June/ 35–3,145	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Acmispon prostratus	Nuttall's acmispon	None/None/1B.1	Covered	Coastal dunes, coastal scrub/annual herb/Mar–June (July)/ 0–35	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Adolphia californica	California adolphia	None/None/2B.1	None	Chaparral, coastal scrub, valley and foothill grassland; clay/perennial deciduous shrub/ Dec–May/35–2,425	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Agave shawii var. *shawii*	Shaw's agave	None/None/2B.1	Narrow Endemic	Coastal bluff scrub, coastal scrub/ perennial leaf/Sep–May/10–395	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2	None	Chaparral, Sonoran desert scrub; sandy/ perennial shrub/Aug–Nov/35–1,640	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1	Narrow Endemic	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; alkaline (sometimes), clay (sometimes), disturbed areas (often), sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/65–1,360	Not expected to occur. Although the project site does contain ample disturbed habitat, if this species was present it would have been detected during the rare plant survey.
Aphanisma blitoides	aphanisma	None/None/1B.2	Narrow Endemic	Coastal bluff scrub, coastal dunes, coastal scrub; gravelly (sometimes), sandy (sometimes)/annual herb/Feb–June/ 5–1,000	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Arctostaphylos glandulosa ssp. *crassifolia*	Del Mar manzanita	FE/None/1B.1	Covered	Chaparral/perennial evergreen shrub/June–Apr/0–1,195	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Artemisia palmeri	San Diego sagewort	None/None/4.2	None	Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; mesic, sandy/perennial deciduous shrub/(Feb) May–Sep/50–3,000	Not expected to occur. Although riparian habitat is present on site, it is highly disturbed and likely does not support this species. If this species was present it would have been detected during the rare plant survey.
Asplenium vespertinum	western spleenwort	None/None/4.2	None	Chaparral, cismontane woodland, coastal scrub; rocky/perennial rhizomatous herb/Feb–June/590–3,280	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Astragalus deanei	Dean's milk-vetch	None/None/1B.1	None	Chaparral, cismontane woodland, coastal scrub, riparian forest/perennial herb/Feb–May/245–2,280	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Astragalus oocarpus	San Diego milk-vetch	None/None/1B.2	None	Chaparral, cismontane woodland/perennial herb/ May–Aug/1,000–5,000	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Astragalus tener var. *titi*	coastal dunes milk-vetch	FE/SE/1B.1	Narrow Endemic	Coastal bluff scrub, coastal dunes, coastal prairie/ annual herb/Mar–May/5–165	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Atriplex coulteri	Coulter's saltbush	None/None/1B.2	None	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; Alkaline (sometimes), clay (sometimes)/perennial herb/Mar–Oct/10–1,505	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Atriplex pacifica	south coast saltscale	None/None/1B.2	None	Coastal bluff scrub, coastal dunes, coastal scrub, playas/ annual herb/Mar–Oct/0–460	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Atriplex parishii	Parish's brittlescale	None/None/1B.1	None	Chenopod scrub, playas, vernal pools; Alkaline/annual herb/June–Oct/80–6,230	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Baccharis vanessae	Encinitas baccharis	FT/SE/1B.1	Covered	Chaparral, cismontane woodland; sandstone/ perennial deciduous shrub/Aug–Nov/195–2,360	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Bergerocactus emoryi	golden-spined cereus	None/None/2B.2	None	Chaparral, closed-cone coniferous forest, coastal scrub; sandy/perennial stem/May–June/10–1,295	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1	Covered	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay/perennial bulbiferous herb/Apr–May/165–1,525	Not expected to occur. The project site does not contain the habitat necessary to support this species.

Scientific Name	Common Name	Status (Federal/ State/CRPR)	City of San Diego MSCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet above mean sea level)	Potential to Occur
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1	Covered	Chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; clay (often)/perennial bulbiferous herb/Mar–June/80–3,670	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Brodiaea orcuttii	Orcutt's brodiaea	None/None/1B.1	Covered	Chaparral, cismontane woodland, Closed-cone coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools; clay, mesic/perennial bulbiferous herb/ May–July/100–5,550	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Calandrinia breweri	Brewer's calandrinia	None/None/4.2	None	Chaparral, coastal scrub; burned areas, disturbed areas, loam (sometimes), sandy (sometimes)/annual herb/ (Jan)Mar–June/35–4,000	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ceanothus cyaneus	Lakeside ceanothus	None/None/1B.2	Covered	Chaparral, closed-cone coniferous forest/perennial evergreen shrub/Apr–June/770–2,475	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ceanothus otayensis	Otay Mountain ceanothus	None/None/1B.2	None	Chaparral/perennial evergreen shrub/Jan–Apr/1,965–3,605	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ceanothus verrucosus	wart-stemmed ceanothus	None/None/2B.2	Covered	Chaparral/perennial evergreen shrub/Dec–May/5–1,245	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1B.1	None	Marshes and swamps, valley and foothill grassland, vernal pools/annual herb/May–Nov/0–1,570	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1	None	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; Alkaline/annual herb/ Apr–Sep/0–2,095	Not expected to occur. Although riparian habitat is present on site, it is highly disturbed and likely does not support this species. If this species was present it would have been detected during the rare plant survey.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	None/None/1B.1	None	Coastal bluff scrub, coastal dunes/annual herb/Jan–Aug/ 0–330	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Chamaebatia australis	southern mountain misery	None/None/4.2	None	Chaparral/perennial evergreen shrub/Nov–May/985–3,345	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/SE/1B.2	Covered	Coastal dunes, marshes and swamps/annual herb (hemiparasitic)/May–Oct (Nov)/0–100	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Chorizanthe orcuttiana	Orcutt's spineflower	FE/SE/1B.1	None	Chaparral, closed-cone coniferous forest, coastal scrub; openings, sandy/annual herb/Mar–May/10–410	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	None/None/1B.2	None	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools; clay (often)/annual herb/ Apr–July/100–5,015	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Clarkia delicata	delicate clarkia	None/None/1B.2	None	Chaparral, cismontane woodland; gabbroic (often)/annual herb/Apr–June/770–3,280	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Clinopodium chandleri	San Miguel savory	None/None/1B.2	Covered	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland; gabbroic (sometimes), rocky (sometimes)/perennial shrub/Mar–July/395–3,525	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	None/None/1B.2	None	Chaparral, cismontane woodland/perennial evergreen shrub/ Apr–June/100–2,590	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Convolvulus simulans	small-flowered morning-glory	None/None/4.2	None	Chaparral, coastal scrub, valley and foothill grassland; clay, seeps, serpentinite/annual herb/Mar–July/100–2,425	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Corethrogyne filaginifolia var. *incana*	San Diego sand aster	None/None/1B.1	None	Chaparral, coastal bluff scrub, coastal scrub/perennial herb/ June–Sep/10–375	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Corethrogyne filaginifolia var. *linifolia*	Del Mar Mesa sand aster	None/None/1B.1	Covered	Chaparral, coastal bluff scrub, coastal scrub; sandy/perennial herb/May–Sep/15–490	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Cylindropuntia californica var. *californica*	snake cholla	None/None/1B.1	Narrow Endemic	Chaparral, coastal scrub/perennial stem/Apr–May/100–490	Not expected to occur. The project site does not contain the habitat necessary to support this species.

Scientific Name	Common Name	Status (Federal/ State/CRPR)	City of San Diego MSCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet above mean sea level)	Potential to Occur
Dichondra occidentalis	western dichondra	None/None/4.2	None	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/perennial rhizomatous herb/(Jan) Mar–July/ 165–1,640	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's dudleya	None/None/1B.1	None	Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland; clay (often), rocky, serpentinite/perennial herb/Apr–June/15–1,475	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Dudleya brevifolia	short-leaved dudleya	None/SE/1B.1	Narrow Endemic	Chaparral, coastal scrub; sandstone/perennial herb/ Apr–May/100–820	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Dudleya variegata	variegated dudleya	None/None/1B.2	Narrow Endemic	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools; clay/perennial herb/ Apr–June/10–1,900	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Dudleya viscida	sticky dudleya	None/None/1B.2	Covered	Chaparral, cismontane woodland, coastal bluff scrub, coastal scrub; rocky/perennial herb/May–June/35–1,800	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ericameria palmeri var. *palmeri*	Palmer's goldenbush	None/None/1B.1	Covered	Chaparral, coastal scrub; mesic/perennial evergreen shrub/ (July)Sep–Nov/100–1,965	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Eriodictyon sessilifolium	sessile-leaved yerba santa	None/None/2B.1	None	Coastal scrub; volcanic/perennial shrub/July/560–560	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/SE/1B.1	Covered	Coastal scrub, valley and foothill grassland, vernal pools; mesic/annual/perennial herb/Apr–June/65–2,030	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Erysimum ammophilum	sand-loving wallflower	None/None/1B.2	Covered	Chaparral, coastal dunes, coastal scrub; openings, sandy/perennial herb/Feb–June(July–Aug)/0–195	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Euphorbia misera	cliff spurge	None/None/2B.2	None	Coastal bluff scrub, coastal scrub, Mojavean desert scrub; rocky/perennial shrub/(Oct)Dec–Aug/35–1,640	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ferocactus viridescens	San Diego barrel cactus	None/None/2B.1	Covered	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/perennial stem/May–June/10–1,475	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Geothallus tuberosus	Campbell's liverwort	None/None/1B.1	None	Coastal scrub, vernal pools/ephemeral liverwort//35–1,965	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	None/None/3.1	None	Chaparral/annual herb/Apr–June/1,475–2,295	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Grindelia hallii	San Diego gumplant	None/None/1B.2	None	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland/perennial herb/May–Oct/ 605–5,725	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Harpagonella palmeri	Palmer's grapplinghook	None/None/4.2	None	Chaparral, coastal scrub, valley and foothill grassland; clay, openings/annual herb/Mar–May/65–3,130	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Hazardia orcuttii	Orcutt's hazardia	None/ST/1B.1	None	Chaparral, coastal scrub; clay (often)/perennial evergreen shrub/Aug–Oct/260–280	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Heterotheca sessiliflora ssp. *sessiliflora*	beach goldenaster	None/None/1B.1	None	Chaparral, coastal dunes, coastal scrub/perennial herb/ Mar–Dec/0–4,015	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Holocarpha virgata ssp. *elongata*	graceful tarplant	None/None/4.2	None	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/annual herb/May–Nov/195–3,605	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Horkelia truncata	Ramona horkelia	None/None/1B.3	None	Chaparral, cismontane woodland; clay, gabbroic/perennial herb/May–June/1,310–4,265	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Isocoma menziesii var. *decumbens*	decumbent goldenbush	None/None/1B.2	None	Chaparral, coastal scrub/perennial shrub/Apr–Nov/35–445	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Iva hayesiana	San Diego marsh-elder	None/None/2B.2	None	Marshes and swamps, playas/perennial herb/Apr–Oct/ 35–1,640	Not expected to occur. The project site does not contain the habitat necessary to support this species.

Scientific Name	Common Name	Status (Federal/ State/CRPR)	City of San Diego MSCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet above mean sea level)	Potential to Occur
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	None/None/4.2	None	Coastal dunes, marshes and swamps, meadows and seeps/perennial rhizomatous herb/(Mar)May–June/ 10–2,950	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1	None	Marshes and swamps, playas, vernal pools/annual herb/ Feb–June/5–4,000	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Lathyrus splendens	pride-of-California	None/None/4.3	None	Chaparral/perennial herb/Mar–June/655–5,000	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Lepechinia cardiophylla	heart-leaved pitcher sage	None/None/1B.2	Covered	Chaparral, cismontane woodland, closed-cone coniferous forest/perennial shrub/Apr–July/1,705–4,490	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3	None	Chaparral, coastal scrub/annual herb/Jan–July/5–2,900	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Leptosyne maritima	sea dahlia	None/None/2B.2	None	Coastal bluff scrub, coastal scrub/perennial herb/Mar–May/ 15–490	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Monardella hypoleuca ssp. *lanata*	felt-leaved monardella	None/None/1B.2	Covered	Chaparral, cismontane woodland/perennial rhizomatous herb/June–Aug/985–5,165	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Monardella viminea	willowy monardella	FE/SE/1B.1	Covered	Chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland/perennial herb/June–Aug/165–740	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Myosurus minimus ssp. *apus*	little mousetail	None/None/3.1	None	Valley and foothill grassland, vernal pools/annual herb/ Mar–June/65–2,095	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Navarretia fossalis	spreading navarretia	FT/None/1B.1	Narrow Endemic	Chenopod scrub, marshes and swamps, playas, vernal pools/ annual herb/Apr–June/100–2,145	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1B.2	None	Coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools/annual herb/Apr–July/10–3,965	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Nemacaulis denudata var. *denudata*	coast woolly-heads	None/None/1B.2	None	Coastal dunes/annual herb/Apr–Sep/0–330	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Ophioglossum californicum	California adder's-tongue	None/None/4.2	None	Chaparral, valley and foothill grassland, vernal pools/perennial rhizomatous herb/Jan–June(Dec)/ 195–1,720	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Narrow Endemic	Vernal pools/annual herb/Apr–Aug/50–2,165	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Orobanche parishii ssp. *brachyloba*	short-lobed broomrape	None/None/4.2	None	Coastal bluff scrub, coastal dunes, coastal scrub/perennial herb (parasitic)/Apr–Oct/10–1,000	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Packera ganderi	Gander's ragwort	None/SR/1B.2	None	Chaparral/perennial herb/Apr–June/1,310–3,935	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Pentachaeta aurea ssp. *aurea*	golden-rayed pentachaeta	None/None/4.2	None	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley and foothill grassland/annual herb/Mar–July/260–6,065	Not expected to occur. Although riparian habitat is present on site, it is highly disturbed and likely does not support this species. If this species was present it would have been detected during the rare plant survey.
Phacelia stellaris	Brand's star phacelia	None/None/1B.1	None	Coastal dunes, coastal scrub/annual herb/Mar–June/ 5–1,310	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Pogogyne abramsii	San Diego mesa mint	FE/SE/1B.1	Narrow Endemic	Vernal pools/annual herb/Mar–July/295–655	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Pogogyne nudiuscula	Otay Mesa mint	FE/SE/1B.1	Narrow Endemic	Vernal pools/annual herb/May–July/295–820	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2	None	Chaparral, cismontane woodland, coastal scrub, riparian woodland/perennial herb/(July)Aug–Nov(Dec)/0–6,885	Not expected to occur. Although riparian habitat is present on site, it is highly disturbed and likely does not support this species. If this species was present it would have been detected during the rare plant survey.

Scientific Name	Common Name	Status (Federal/ State/CRPR)	City of San Diego MSCP	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet above mean sea level)	Potential to Occur
Quercus cedrosensis	Cedros Island oak	None/None/2B.2	None	Chaparral, closed-cone coniferous forest, coastal scrub/ perennial evergreen tree/Apr–May/835–3,145	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1	None	Chaparral, closed-cone coniferous forest, coastal scrub/perennial evergreen shrub/Feb–Apr(May–Aug)/ 50–1,310	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Quercus engelmannii	Engelmann oak	None/None/4.2	None	Chaparral, cismontane woodland, riparian woodland, Valley and foothill grassland/perennial deciduous tree/Mar–June/ 165–4,265	Not expected to occur. Although riparian habitat is present on site, it is highly disturbed and likely does not support this species. If this species was present it would have been detected during the rare plant survey.
Salvia munzii	Munz's sage	None/None/2B.2	None	Chaparral, coastal scrub/perennial evergreen shrub/Feb–Apr/ 375–3,490	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Selaginella cinerascens	ashy spike-moss	None/None/4.1	None	Chaparral, coastal scrub/perennial rhizomatous herb/ N.A./65–2,095	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Senecio aphanactis	chaparral ragwort	None/None/2B.2	None	Chaparral, cismontane woodland, coastal scrub/annual herb/ Jan–Apr (May)/50–2,620	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	None	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas/perennial herb/Mar–June/ 50–5,015	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Sphaerocarpos drewei	bottle liverwort	None/None/1B.1	None	Chaparral, coastal scrub/ephemeral liverwort/N.A./ 295–1,965	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Stemodia durantifolia	purple stemodia	None/None/2B.1	None	Sonoran desert scrub/perennial herb/(Jan) Apr–Dec/ 590–985	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Stylocline citroleum	oil neststraw	None/None/1B.1	None	Chenopod scrub, coastal scrub, valley and foothill grassland/annual herb/Mar–Apr/165–1,310	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Suaeda esteroa	estuary seablite	None/None/1B.2	None	Marshes and swamps/perennial herb/(Jan–May) July–Oct/ 0–15	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Tetracoccus dioicus	Parry's tetracoccus	None/None/1B.2	Covered	Chaparral, coastal scrub/perennial deciduous shrub/ Apr–May/540–3,280	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Viguiera laciniata	San Diego County viguiera	None/None/4.3	None	Chaparral, coastal scrub/perennial shrub/Feb–June (Aug)/ 195–2,460	Not expected to occur. The project site does not contain the habitat necessary to support this species.
Xanthisma junceum	rush-like bristleweed	None/None/4.3	None	Chaparral, coastal scrub/perennial herb/Jan–Oct/785–3,280	Not expected to occur. The project site does not contain the habitat necessary to support this species.

Status Legend
Federal
FE: Federally listed as endangered
FT: Federally listed as threatened
State
SE: State listed as endangered
ST: State listed as threatened
CRPR: California Rare Plant Rank
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere
3: Plants about which more information is needed – A Review List
4: Plants of Limited Distribution – A Watch List
Threat Rank
0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 – Moderately threatened in California (20%–80% occurrences threatened/moderate degree and immediacy of threat)
0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

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Appendix D

Special-Status Wildlife Species Potential to Occur

Species	Common Name	Status (Federal/ State)	City of San Diego MSCP Subarea Plan	Habitat	Potential to Occur
Amphibians					
Anaxyrus californicus	arroyo toad	FE/SSC	Covered	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur, outside of range. Riparian habitat is too fragmented and site located within a heavily developed area. This species has extremely specialized habitat needs which do not exist on the site or in the surrounding vicinity.
Spea hammondii	western spadefoot	BCC/SSC	None	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Not expected to occur due to lack of suitable vernal pools or ephemeral wetlands used for reproduction present. Site is highly disturbed and surrounded by anthropogenic development.
Birds					
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Covered	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	Low potential to occur. Somewhat suitable but fragmented nesting habitat present in disturbed riparian woodlands near water. This species prefers dense stands of native trees, however the non-native riparian habitat on site is poor quality, highly disturbed, and surrounded by anthropogenic development.
Agelaius tricolor (nesting colony)	tricolored blackbird	None/SSC, ST	Covered	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. Very minimal cattail reeds on site for nesting habitat which are situated in a riparian area with a high percentage of other non-native vegetation species Site is highly disturbed and surrounded by anthropogenic development.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL	Covered	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Ammodramus savannarum (nesting)	grasshopper sparrow	BCC/SSC	None	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches	Not expected to occur. There is not suitably expansive, open grassland habitat present within the project site to support this species. The site is highly disturbed and surrounded by anthropogenic development.
Aquila chrysaetos (nesting and wintering)	golden eagle	None/FP, WL	Covered	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to occur. The project site is surrounded by development and there is no suitable open foraging habitat present to support this species. Site is surrounded by by anthropogenic development.
Artemisiospiza belli belli	Bell's sage sparrow	None/WL	None	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Asio otus (nesting)	long-eared owl	BCC/SSC	None	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats	Not expected to occur. Riparian habitat on site is highly disturbed and surrounded by anthropogenic development.
Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	None/SSC	Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur. The project site is highly disturbed and there is no suitable open habitat present to support this species.
Buteo swainsoni (nesting)	Swainson's hawk	None/ST	Covered	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. The project site is surrounded by development and there is no suitable open foraging habitat present to support this species.

Species	Common Name	Status (Federal/ State)	City of San Diego MSCP Subarea Plan	Habitat	Potential to Occur
Calypte costae (nesting)	Costa's hummingbird	BCC/None	None	Nests and forages in desert wash, edges of riparian and valley–foothill riparian, coastal scrub, desert scrub, desert succulent scrub, lower-elevation chaparral, and palm oasis	Low potential to occur. Suitable fragmented habitat is present for nesting and foraging opportunities; however the rest of the site is highly disturbed and surrounded by anthropogenic development.
Campylorhynchus brunneicapillus sandiegensis (San Diego and Orange Counties only)	coastal cactus wren	None/SSC	Covered	Southern cactus scrub patches	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Charadrius montanus (wintering)	mountain plover	BCC/SSC	Covered	Winters in shortgrass prairies, plowed fields, open sagebrush, and sandy deserts	Not expected to occur. There is no suitable habitat present to support this species and the site is highly disturbed and surrounded by anthropogenic development.
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC	Covered	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not expected to occur. There is no suitable habitat present to support this species and the site is highly disturbed and surrounded by anthropogenic development.
Chlidonias niger (nesting colony)	black tern	BCC/SSC	None	Freshwater marsh with emergent vegetation; in the Central Valley primarily nests and forages in rice fields and other flooded agricultural fields with weeds and other residual aquatic vegetation	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE	None	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. No suitable expansive and high-quality riparian habitat is present to support this species. Site is highly disturbed and surrounded by anthropogenic development.
Contopus cooperi (nesting)	olive-sided flycatcher	BCC/SSC	None	Nests in mixed-conifer, montane hardwood–conifer, Douglas-fir, redwood, red fir, and lodgepole pine habitats; usually close to water	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Coturnicops noveboracensis	yellow rail	BCC/SSC	None	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Cypseloides niger (nesting)	black swift	BCC/SSC	None	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Dryobates nuttallii	Nuttall's woodpecker	BCC/None	None	Primarily oak woodlands, but also riparian woodland, chaparral, and rarely conifer forests	Not expected to occur. No suitable vegetation present and site is highly disturbed and surrounded by anthropogenic development.
Elanus leucurus (nesting)	white-tailed kite	None/FP	None	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to occur. Not expected to nest on site. Could use site for foraging. Site and adjacent lands are heavily disturbed and developed.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE	Covered	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. There are no records of this species near the site. Also, there is no suitable expansive and high-quality riparian habitat present to support this species.
Falco mexicanus (nesting)	prairie falcon	None/WL	None	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Gavia immer (nesting)	common loon	BCC/SSC	None	Extirpated as a breeder from California; winters in coastal waters such as bays, channels, coves, and inlets; also winters inland at large, deep lakes and reservoirs	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Gelochelidon nilotica (nesting colony)	gull-billed tern	BCC/SSC	None	Nests at the Salton Sea and in estuaries in San Diego County; forages in emergent wetland, lakes, mudflats, cropland, and grassland	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.

Species	Common Name	Status (Federal/ State)	City of San Diego MSCP Subarea Plan	Habitat	Potential to Occur
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	BCC/SSC	None	Nests and forages in emergent wetlands including woody swamp, brackish marsh, and freshwater marsh	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Haliaeetus leucocephalus (nesting and wintering)	bald eagle	FPD/FP, SE	Covered	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	Not expected to occur. No suitable habitat present to support this species, and site is highly disturbed and surrounded by anthropogenic development.
Icteria virens (nesting)	yellow-breasted chat	None/SSC	None	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to occur. No suitable expansive and high-quality riparian habitat is present to support this species.
Ixobrychus exilis (nesting)	least bittern	None/SSC	None	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Not expected to occur. No suitable freshwater marsh habitat present to support this species.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	None	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to occur. No suitable habitat present to support this species.
Limnodromus griseus	short-billed dowitcher	BCC/None	None	Coastal mud flats and brackish lagoons	Not expected to occur. No suitable habitat present to support this species.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	BCC/SE	Covered	Nests and forages in coastal saltmarsh dominated by pickleweed (*Salicornia* spp.)	Not expected to occur. No coastal salt marsh habitat is present in the project site to support this species.
Plegadis chihi (nesting colony)	white-faced ibis	None/WL	Covered	Nests in shallow marshes with areas of emergent vegetation; winter foraging in shallow lacustrine waters, flooded agricultural fields, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields, and estuaries	Not expected to occur. No suitable habitat present to support a nesting colony of this species.
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Covered	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. No suitable habitat present to support this species.
Pyrocephalus rubinus (nesting)	vermilion flycatcher	None/SSC	None	Nests in riparian woodlands, riparian scrub, and freshwater marshes; typical desert riparian with cottonwood, willow, mesquite adjacent to irrigated fields, ditches, or pastures	Low potential to occur. Suitable fragmented habitat is present for nesting and foraging opportunities; however the rest of the site is highly disturbed and surrounded by anthropogenic development.
Rallus obsoletus levipes	Ridgway's rail	FE/FP, SE	Covered	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur. No suitable habitat present to support this species.
Rynchops niger (nesting colony)	black skimmer	BCC/SSC	None	Nests on barrier beaches, shell banks, spoil islands, and saltmarsh; forages over open water; roosts on sandy beaches and gravel bars	Not expected to occur. No suitable habitat present to support this species.
Setophaga petechia (nesting)	yellow warbler	None/SSC	None	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Low potential to occur. There is marginally suitable riparian habitat present in the project site. There is more potential for this species to forage within the project site than to nest.
Toxostoma redivivum	California thrasher	BCC/None	None	Primarily chaparral, but also coastal scrub, riparian woodland, oak woodland, piñon and juniper woodland, Joshua tree woodland, lower desert scrub, Great Basin scrub, and mesquite thickets	Not expected to occur. No suitable vegetation present and site is highly disturbed and surrounded by anthropogenic development.
Tringa semipalmata	willet	BCC/None	None	Breeds in and adjacent to wetlands. Overwinters in mudflat, marsh, sandy beach, and rocky coast habitats.	Not expected to occur. Wetland habitat on site is highly disturbed and surrounded by anthropogenic development.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Covered	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Low potential to occur. Riparian habitat is disturbed which limits nesting and foraging opportunities; site is surrounded by anthropogenic development. Most recent CNDDB occurrence is from 2017 about 1 mile away from the site.

Species	Common Name	Status (Federal/ State)	City of San Diego MSCP Subarea Plan	Habitat	Potential to Occur
Invertebrates					
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None	Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. There is no vernal pool habitat or other suitable ephemerally-pooling habitat present to support this species.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None	Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. There is no vernal pool habitat or other suitable ephemerally-pooling habitat present to support this species.
Mammals					
Antrozous pallidus	pallid bat	None/SSC	None	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Not likely to roost due to lack of suitable rocky areas present on site.
Chaetodipus californicus femoralis	Dulzura pocket mouse	None/SSC	None	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level	Not likely to inhabit. Limited suitable coastal scrub habitat present on site.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC	None	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland	Not likely to inhabit due to lack of suitable gravelly or rocky soil used for burrows present on site.
Choeronycteris mexicana	Mexican long-tongued bat	None/SSC	None	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon–juniper woodland; roosts in caves, mines, and buildings	Not expected to roost. Lack of suitable roosting habitat.
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Not expected to roost. Lack of suitable roosting habitat.
Dasypterus xanthinus	western yellow bat	BCC/SSC	None	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms.	Not expected to roost. Riparian habitat on site is disturbed, therefore there is a lack of suitable roosting habitat.
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	None	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Euderma maculatum	spotted bat	None/SSC	None	Foothills, mountains, desert regions of southern California, including arid deserts, grasslands, and mixed-conifer forests; roosts in rock crevices and cliffs; feeds over water and along washes	Low potential to roost. May use buildings for roosting, but site is in a suburban/urban setting which limits foraging opportunities.
Eumops perotis californicus	western mastiff bat	None/SSC	None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Not likely to roost due to lack of suitable rocky canyons and cliffs present on site.
Lasiurus blossevillii	western red bat	None/SSC	None	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Low potential to occur. Roosts primarily in trees adjacent to streams and urban areas. Although trees are present, the project site is highly disturbed.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/None	None	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Not expected to occur. No suitable vegetation present and site is highly disturbed and surrounded by anthropogenic development.
Myotis ciliolabrum	western small-footed myotis	None/None	None	Arid woodlands and shrublands, but near water; roosts in caves, crevices, mines, abandoned buildings	Moderate potential to occur. May use adjacent man-made structures for roosting habitat.
Myotis evotis	long-eared myotis	None/None	None	Brush, woodland, and forest habitats from sea level to 9,000 feet above MSL; prefers coniferous habitats; forages along habitat edges, in open habitats, and over water; roosts in buildings, crevices, under bark, and snags; uses caves as night roosts	Moderate potential to occur. May use adjacent man-made structures for roosting habitat.

Species	Common Name	Status (Federal/ State)	City of San Diego MSCP Subarea Plan	Habitat	Potential to Occur
Myotis yumanensis	Yuma myotis	None/None	None	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees	Moderate potential to occur. May use adjacent man-made structures for roosting habitat.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Not expected to occur. There is no suitable scrub or chaparral habitat, and the site is highly disturbed and surrounded by anthropogenic development.
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	None	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Not expected to occur. No suitable desert habitat present.
Nyctinomops macrotis	big free-tailed bat	None/SSC	None	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	Not likely to roost due to lack of suitable rocky outcrops and high cliffs present on site.
Perognathus longimembris pacificus	Pacific pocket mouse	FE/SSC	None	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium	Not likely to inhabit due to lack of suitable open coastal area or coastal dune habitat present on site. Thought to be extirpated except for very close to the coast in a few remaining locations. Closest location is at Camp Pendleton.
Taxidea taxus	American badger	None/SSC	Covered	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. There is a small amount of open, undeveloped habitat present within the project site, but this species is not expected to occur in developed areas with high levels of human disturbance.
Reptiles					
Anniella stebbinsi	southern California legless lizard	None/SSC	None	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Not expected to occur. There is very little suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Arizona elegans occidentalis	California glossy snake	None/SSC	None	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	Not expected to occur. There is very little suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Aspidoscelis hyperythra	orange-throated whiptail	None/WL	Covered	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood	Not expected to occur. There is no suitable coastal sage scrub and very little adjacent open habitat present in the project site to support this species.
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	None	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Low potential to occur. There is small amount of disturbed habitat present in the project site. Potential to occur is lower due to the project site being surrounded by anthropogenic development.
Coleonyx variegatus abbotti	San Diego banded gecko	None/SSC	None	Rocky areas within coastal scrub and chaparral	Not expected to occur. There is no suitable rocky habitat present to support this species, and the site is highly disturbed and surrounded by anthropogenic development.
Crotalus ruber	red diamondback rattlesnake	None/SSC	None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.
Diadophis punctatus similis	San Diego ringneck snake	None/None	None	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed-conifer forest, and woodland habitats	Not expected to occur. No suitable habitat present and site is highly disturbed and surrounded by anthropogenic development.

Species	Common Name	Status (Federal/ State)	City of San Diego MSCP Subarea Plan	Habitat	Potential to Occur
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Covered	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Not expected to occur. The project site is disturbed and partially developed, which generally results in high presence of non-native Argentine ants and lack of native harvester ants.
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Not expected to occur. There is no suitable coastal sage scrub present, and the site is highly disturbed and surrounded by anthropogenic development.
Thamnophis hammondii	two-striped gartersnake	None/SSC	None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. Site is highly disturbed and surrounded by anthropogenic development.

Status Legend
Federal
BCC: USFWS—Birds of Conservation Concern
FE: Federally listed as endangered
FT: Federally listed as threatened
FPD: Federally proposed for delisting
State
FP: CDFW Fully Protected species
SE: State listed as endangered
ST: State listed as threatened
SSC: California Species of Special Concern
WL: CDFW Watch List species