APPENDIX D

Biological Technical Report

(January 2021, Revised April 2023)

Biological Technical Report for the El Camino Real Assisted Living Facility Project

City of San Diego Project Number 666165

Prepared for:

PMB, LLC
3394 Carmel Mountain Road, Suite 200
San Diego, California 92121
Contact: Nolan Weinberg

Prepared by:

DUDEK
605 Third Street
Encinitas, California 92024
Contact: Cody Schaaf

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Executive Summary

The proposed El Camino Real Assisted Living Facility Project (project or proposed project) proposes to develop approximately 2.84 acres of an approximately 3.96-acre parcel at 13860 El Camino Real (Assessor's Parcel Number [APN] 304-650-37-00) in the northern section of the City of San Diego (City), California, south of the San Dieguito River and north of Del Mar Heights Road. The project is located within North City Future Urbanizing Area (NCFUA) Subarea II Community Planning Area and is within the City's Multiple Species Conservation Program (MSCP) Subarea Plan (City of San Diego 1997). The project footprint is directly adjacent to the City's Multiple Habitat Preservation Area (MHPA), which occurs to the east within the open space.

The proposed project consists of the construction of a 105,568 square-foot structure that will house an assisted living facility for the elderly with 87 assisted living units, 18 memory care units, and associated common facilities (dining room, kitchen, spa, pool, fitness center, etc.). The project will also install a parking lot, sidewalks, patios, and landscaping around the structure. The construction will occur on the western portion of an approximately 3.96-acre parcel located at 13860 El Camino Real (APN 304-650-37-00). The project site is within the Coastal Overlay Zone. The project would not encroach into the MHPA or the 100-foot wetland buffer around existing wetland habitat to the east of the project footprint. No permanent development would occur within the MHPA; however, the portion of development on the eastern boundary of the project footprint is considered adjacent to the MHPA, therefore the project is required to adhere to the City's MSCP Land Use Adjacency Guidelines.

Dudek biologists conducted a field reconnaissance and vegetation mapping survey of the project study area in 2020. The project study area includes the project impact footprint and a surrounding 300-foot survey limit. The purpose of this biological technical report is to provide context regarding the nature and status of biological resources occurring on site. This report will also identify those plant and animal species within the study area recognized as sensitive by local, state, or federal wildlife agencies and/or environmental organizations that a have a moderate to high potential to occur in the study area based on habitats present.

Based on species composition and general appearance, 11 vegetation communities and land covers were identified within the study area: coastal sage scrub, eucalyptus woodland, disturbed habitat, non-native woodland, non-native grassland (broadleaf-dominated), urban/developed land, mule fat scrub, southern willow scrub, disturbed herbaceous wetland, disturbed cismontane alkali marsh, and arundo-dominated riparian

The study area does support suitable habitat or substrate for special-status plant species; however, all this habitat occurs outside the project footprint within open space associated with the MHPA. Two special-status wildlife species were detected outside of the project footprint but within the study area during the field reconnaissance surveys: coastal California gnatcatcher (*Polioptila californica californica*) and yellow warbler (*Setophaga petechia*). The project will not impact habitat utilized by these species and will incorporate measures to reduce indirect project impacts to these species.

The results of the biological survey and an informal wetland delineation concluded that there are areas within the study area that would likely meet the definition of waters of the state, including wetlands, subject to review and regulation by the Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), and the California Coastal Commission (CCC); however, since no impacts are proposed in these areas, a formal delineation was not conducted. These areas would also be considered wetlands by the City based on a predominance of hydrophytic plant species, according to the City's Biology Guidelines (City of San Diego 2018).

Implementation of the project would consist of construction on a disturbed site and would result in direct impacts to disturbed habitat (Tier IV) only. Project impacts would not require mitigation according to the City's Biology Guidelines (City of San Diego 2018a). Since a portion of the proposed project impact footprint occurs adjacent to the MHPA, the project will comply with the MSCP Land Use Adjacency Guidelines. Additional measures to avoid impacts to sensitive biological resources include qualified biological monitoring, phasing construction to avoid the avian breeding season, where feasible, and performing pre-construction nesting bird surveys if construction is to occur during the bird breeding season.

1 Introduction

This technical report provides an analysis of potential biological resource impacts associated with the proposed El Camino Real Assisted Living Facility project located in the NCFUA Subarea II Community Planning Area in the City of San Diego, California. This analysis also includes all areas within 300 feet of the proposed project site (study area).

In accordance with the current City of San Diego (City) Biology Guidelines (City of San Diego 2018a), this report provides an introduction, a project description, a summary of the pertinent biological resource regulations, the project setting, survey methods, existing biological resources, special-status biological resources, project impacts (direct and indirect), and project mitigation. The project impacts, avoidance, and mitigation measures are discussed in accordance with the California Environmental Quality Act (CEQA), Clean Water Act (CWA), Migratory Bird Treaty Act (MBTA), California Fish and Game Code, the City of San Diego Final Multiple Species Conservation Program (MSCP) Subarea Plan (City of San Diego 1997), and the City of San Diego's (City's) Environmentally Sensitive Lands (ESLs) regulations.

1.1 Project Location

The project is located approximately 0.75 miles east of Interstate (I) 5 within the San Dieguito River watershed. The approximately 3.96-acre proposed project site (subject property) is located just east of 13885 El Camino Real and north of Rosecroft Way. Open space associated with the northern extent of Gonzales Canyon lies to the east of the project footprint and the San Dieguito River Park lies to the west of El Camino Real (Figure 1). The project is within the Coastal Overlay Zone and the Multiple Habitat Planning Area (MHPA), the "hardline preserve" developed by the City, is located directly east of the project footprint and to the west of El Camino Real.

1.2 Project Description

The proposed project consists of the construction of a 105,568 square-foot structure that will house an assisted living facility for the elderly with 87 assisted living units, 18 memory care units, and associated common facilities (dining room, kitchen, spa, pool, fitness center, etc.). The project will also install a parking lot, sidewalks, patios, and landscaping around the structure. The construction will occur on the western portion of an approximately 3.96-acre parcel located at 13860 El Camino Real (APN 304-650-37-00) (Figure 1). The project site is within the Coastal Overlay Zone.

The proposed project would include infrastructure improvements on the parcel, including installation of utilities, a private storm drain system, a parking lot and internal walkway and roadways. City wetland habitat exists to the east of the project footprint, but the proposed development will not encroach into the City -mandated "wetland buffer" which extends 100 feet from the boundaries of the wetland habitats. In accordance with City requirements, all drainage and stormwater runoff associated with the proposed development would be directed into a bioswale filtration basin before flowing into the off-site MHPA west of El Camino Real, far outside of the 100-foot wetland buffer to the east of the project footprint.

1.3 Regulatory Setting

1.3.1 Federal

National Environmental Policy Act

The National Environmental Policy Act (NEPA) established a national policy for protection of the environment. The objectives of NEPA are "to declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality" (42 United States Code [USC] 4321). To assist federal agencies in fulfilling the goals and effectively implementing the requirements of NEPA, in 1978 the Council on Environmental Quality issued regulations for implementing the procedural aspects of NEPA (40 Code of Federal Regulations [CFR] Part 1500–1508). Review of the proposed project under NEPA is not anticipated to be required.

1.3.1.1 Sensitive Species Protection

Federal Endangered Species Act

The federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration, and National Marine Fisheries Service. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. Under provisions of Section 9 (16 USC 1538[a][1][B]) of the federal ESA, it is unlawful to "take" any listed species. "Take" is defined in Section 3 (16 USC 1532[19]) of the federal ESA as, "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

The federal ESA allows for the issuance of "incidental take" permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Incidental take is defined as "take that results from, but is not the purpose of, carrying out an otherwise lawful activity" (USFWS 2004). Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive; the species are listed in Title 50 of CFR, Part 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species, and also includes any part, egg, or nest of such birds (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the ESA.

The MBTA prohibits the "take" of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities (16 U.S.C. 703 et seq.).

Project compliance with the MBTA is anticipated.

1.3.2 State

California Environmental Quality Act

CEQA requires identification of a project's potentially significant impacts on sensitive biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts. CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 California Code of Regulations [CCR] 15000 et seq.). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c). CEQA also requires identification of a project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

California Coastal Act

The California Coastal Commission (CCC) was established by voter initiative in 1972 and was made permanent by the California Legislature through the adoption of the California Coastal Act of 1976 (Public Resources Code Section 30000 et seq.). The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone (COZ). Under the California Coastal Act (CCA), cities and counties are responsible for preparing Local Coastal Programs (LCPs) in order to obtain authority to issue coastal development permits (CDPs) for projects within their jurisdiction. LCPs consist of land use plans, zoning ordinances, zoning maps, and other implementing actions that conform to the policies of the CCA. Until an agency has a fully certified LCP, the CCC is responsible for issuing CDPs.

The CCA provides the standard of review for the portions of a project within the COZ and requires findings of project consistency with specific policies related to public access and recreation, habitat protection, visual resources, and water quality, among others, for issuance of a coastal development permit. Section 30007.5 of the CCA requires the CCC to resolve conflicts between CCA policies in a manner that on balance is most protective of coastal resources.

Under the CCA, Section 30107.5, environmentally sensitive habitat areas are areas within the COZ that are "designated based on the presence of rare habitats or areas that support populations of rare, sensitive, or especially valuable species or habitats." In addition, the CCC regulates impacts to coastal wetlands defined in Section 30121 of the CCA as, "lands within the COZ which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and

fens." The CCA requires that most development avoid and buffer coastal wetland resources in accordance with Sections 301231 and 30233, including limiting the filling of wetlands to certain allowable uses.

The project would occur entirely within the COZ and is also partially within the Deferred Certification Zone. Therefore, it is assumed the project would require a CDP to be issued by the CCC and certified by the City to authorize construction activities.

California Fish and Game Code

Under the California Fish and Game Code, CDFW provides protection from "take" for a variety of species, including fully protected species. "Fully protected" is a legal protective designation administered by CDFW intended to conserve wildlife species that risk extinction within California. Lists have been created for birds, mammals, fish, amphibians, and reptiles.

According to Sections 3511 and 4700 of the Fish and Game Code, which regulate birds and mammals, respectively, a "fully protected" species may not be taken or possessed without a permit from the Fish and Game Commission, and "incidental takes" of these species are not authorized.

According to Section 3503, 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 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Finally, Section 3513 states that is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

For the purposes of these state regulations, CDFW currently defines an active nest as one that is under construction or in use and includes existing nests that are being modified. For example, if a hawk is adding to or maintaining an existing stick nest in a transmission tower, then it would be considered active and covered under these Fish and Game Code Sections.

Project compliance with the California Fish and Game Code is anticipated.

CCC Wetlands Regulation

As described above, the CCC regulates impacts to coastal wetlands, defined in Section 30121 of the CCA as, "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." The CCC interprets this definition to mean coastal wetlands exist in any area that meets at least one of three wetland parameters: hydrology, wetland vegetation, or hydric soils. Wetlands are considered Environmentally Sensitive Habitat Areas (ESHA) and shall be "protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." The CCA requires that most development avoid and buffer coastal wetland resources in accordance with Sections 301231 and 30233, including limiting the filling of wetlands to certain allowable uses.

Under the CCA, Section 30240, ESHAs shall be "protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." Areas that are considered as ESHAs under the CCA include areas within the Coastal Zone that support wetlands.

1.3.3 Regional

City of San Diego MSCP Subarea Plan

Within the City of San Diego, the MSCP is implemented through the City of San Diego MSCP Subarea Plan (Subarea Plan) (City of San Diego 1997). The Subarea Plan encompasses 206,124 acres within the MSCP study area. The Subarea Plan area is characterized by urban land uses with approximately three-quarters either built out or retained as open space/park system. The project study area is located within the Urban Area of the Subarea Plan.

The MSCP established an MHPA preserve system designed to conserve large blocks of interconnected habitat having high biological value. The City MHPA is a "hard line" preserve developed by the City in cooperation with the wildlife agencies, property owners, developers, and environmental groups. The MHPA identifies biological core resource areas and corridors targeted for conservation, in which only limited development may occur (City of San Diego 1997). The MHPA is considered an urban preserve that is constrained by existing or approved development, and is comprised of habitat linkages connecting several large core areas of habitat. The criteria used to define core and linkage areas involves maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside of the MSCP either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem will be maintained (City of San Diego 1997). Critical habitat linkages between core areas are conserved in a functional manner with a minimum of 75% of the habitat within identified linkages conserved (City of San Diego 1997). Urban habitat areas within the MHPA include existing designated open space such as Mission Bay, Tecolote Canyon, Marian Bear Memorial Park, Rose Canyon, San Diego River, the southern slopes along Mission Valley, Carroll and Rattlesnake Canyons, Florida Canyon, Chollas Creek, and a variety of smaller canyon systems. The Eastern area includes East Elliott and Mission Trails Regional Park.

This planning effort is designed to address cumulative impacts through development of a regional plan that addresses impacts to covered species and habitats in a manner that assures their conservation despite impacts of cumulative project over the long term. The ultimate goal of this plan is the establishment of biological reserve areas in conformance with the State of California Natural Communities Conservation Planning Act.

The MHPA lies immediately to the east of the project footprint and is also present west of El Camino Real in the San Dieguito River Park.

City of San Diego Biology Guidelines

The City of San Diego Development Services Department developed the Biology Guidelines presented in the Land Development Manual "to aid in the implementation and interpretation of the Environmentally Sensitive Lands Regulations (ESL), San Diego Land Development Code, Chapter 14, Division 1, Section 143.0101 et seq., and the Open Space Residential (OR-1-2) Zone, Chapter 13, Division 2, Section 131.0201 et seq." (City of San Diego 2018a). The guidelines also provide standards for the determination of impact and mitigation under CEQA and the CCA. Sensitive biological resources, as defined by the ESL Regulations, include lands within the MHPA, as previously discussed, as well as other lands outside of the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA, or IIIB; habitat for rare, endangered, or threatened species; or narrow endemic species.

The City's definition of wetlands is broader than the definition applied by the U.S. Army Corps of Engineers (USACE). The City uses the criteria listed in Section 320.4(b)(2) of the USACE General Regulatory Policies (33 CFR 320–330) to apply an appropriate buffer around wetlands that serves to protect the function and value of the wetland. Guidelines that supplement the development regulation requirements described in this section are provided in the City's Biology Guidelines (City of San Diego 2018a). The informal jurisdictional delineation surveyed the entire study area and included a survey of the 100-foot buffer surrounding existing potential wetland habitat. According to the City's Biology Guidelines, a wetland buffer is an area surrounding a wetland that helps protect the function and value of the adjacent wetland by reducing physical disturbance, provides a transition zone where one habitat phases into another, and acts to slow flood waters for flood and erosion control, sediment filtration, water purification, and groundwater recharge. The width of the buffer is determined by factors such as type and size of development, sensitivity of the wetland resource to edge effects, topography, and the need for upland transition, however, within the Coastal Zone, the minimum wetland buffer width is 100 feet (City of San Diego 2018a). Therefore, since the project boundary is within the Coastal Zone, a 100-foot buffer around all City wetlands was applied to the project design.

The San Diego Municipal Code also ranks upland habitat values by rarity and sensitivity. The most sensitive habitats are Tier I, and the least sensitive are Tier IV. The varying mitigation ratios and requirements that mitigation be either in-tier or in-kind are based on the sensitivity of the habitat being affected. The proposed project would involve redeveloping an existing apartment complex and would not result in any new impacts to Tier I through IIIB habitats.

2 Survey Methods and Limitations

Data regarding biological resources present were obtained through a review of pertinent literature and field reconnaissance, both of which are described in detail as follows. The project study area is comprised of the proposed project footprint and the corresponding 300-foot survey limit (study area). Survey areas were determined based on suitable habitat for the resource for which the survey was conducted.

2.1 Literature Review

The following data sources were reviewed to assist with the biological resources analysis:

- U.S. Department of Agriculture Web Soil Survey (USDA 2019a)
- CDFW California Natural Diversity Database–Special Animals List (CDFW 2018a)
- CDFW California Natural Diversity Database–RareFind, Version 5 (CDFW 2018b)
- The Calflora Database (Calflora 2019)
- California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2019)
- MSCP Subarea Plan (City of San Diego 1997)
- San Diego Municipal Code, Land Development Code—Biology Guidelines (City of San Diego 2018a)
- USFWS Species Occurrence Data (USFWS 2019)
- San Diego Natural History Museum (SDNHM 2012)
- SanGIS Parcel Lookup Tool and Geographic Boundary Viewer from the San Diego Association of Governments (SANDAG 2020)
- Aerial imagery (Google Earth 2020)

2.2 Field Reconnaissance

Biological field surveys for the project were conducted in 2020 by Dudek biologist Cody Schaaf. An additional site visit was conducted in 2023 by Dudek biologist Dylan Ayers and confirmed that existing conditions did not change. Table 1 lists the survey dates, times, surveying biologists, and weather conditions during the surveys.

All biological surveys were conducted in accordance with the City's Guidelines for Conducting Biological Surveys (Appendix II in City of San Diego 2018a).

Table 1. Schedule of Surveys

Date	Time	Personnel	Survey Type	Conditions
08/10/2020	11:15–14:10	Cody Schaaf	Reconnaissance and Preliminary Vegetation Mapping	72°–73°F, 0% cloud cover, 1–5 mph winds
08/12/2020	10:35–12:30	Cody Schaaf	Final Vegetation Mapping	72°F, 0%–10% cloud cover, 1–5 mph winds
04/07/2023	08:30 - 09:47	Dylan Ayers	Vegetation Mapping Update	57°- 60°F, 10%–0% cloud cover, 1–3 mph winds

Note: mph = miles per hour.

2.2.1 Resource Mapping

Vegetation communities and land covers on the subject property and within the survey area that extends 300 feet from the outer perimeter of the property were mapped in the field using an ArcGIS mobile application (ESRI 2020). Once in ArcGIS, the acreage of each vegetation community and land cover present within the study area was determined.

As adopted in the City's Biology Guidelines (City of San Diego 2018a), the vegetation community and land cover mapping follows the 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). Some vegetation communities were given additional descriptions by Dudek biologists in order to identify highly dominant species within the community. These habitats were then assigned to their corresponding community in the City Biology Guidelines (City of San Diego 2018a).

2.2.2 Flora and Fauna

All plant species encountered during the field survey were identified and recorded directly into a field notebook. Those species that could not be identified immediately were brought into the laboratory for further investigation. A compiled list of plant species observed in the project alternatives study area is presented in Appendix A. Latin and common names for plant species with a California Rare Plant Rank (CRPR) follow the California Native Plant Society (CNPS) Online Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2019). For plant species without a CRPR, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2019) and common names follow the California Natural Community List (CDFW 2018c) or the United States Department of Agriculture (USDA) Natural Resources Conservation Service Plants Database (USDA 2019b).

All wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly into a field notebook. Binoculars (10×30) were used to aid in the identification of wildlife. Latin and common names of any animals detected follow Crother (2017) for reptiles and amphibians, American Ornithologists' Union (AOU) (2018) for birds, Wilson and Reeder (2005) for mammals, and North American Butterfly Association (NABA) (2016) or SDNHM (2002) for butterflies. In addition to species actually detected during the surveys, expected wildlife use of the site was determined by known habitat preferences of local species and knowledge of their relative distributions in the area. A list of wildlife species observed in the study area is presented in Appendix B.

2.2.3 Wetland Delineation

A formal jurisdictional delineation of the extent of jurisdictional aquatic features was not conducted. However, an informal delineation of the subject property and the larger study area was conducted during the field reconnaissance survey based on the presence of hydrology and/or hydrophytic (wetland) vegetation, as defined by the 1987 USACE Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008) (for purposes of this report, hydric soils were assumed where hydrology and hydrophytic vegetation was present and no wetland determination points were taken). The delineation defined areas under the jurisdiction of the CDFW pursuant to Sections 1600–1603 of the California

Fish and Game Code; under the jurisdiction of USACE pursuant to Section 404 of the federal CWA; under the jurisdiction of RWQCB pursuant to CWA Section 401 and the Porter–Cologne Act; wetlands defined under the City's Biology Guidelines (City of San Diego 2018a); and coastal wetlands defined under the California Coastal Act and regulated by the CCC.

Collectively, areas under the jurisdiction of one or all of the resource agencies (USACE, RWQCB, and CDFW), and/or the City and the CCC are referenced in this report as jurisdictional aquatic resources. Potentially jurisdictional aquatic resources were assessed and mapped in the field during the field reconnaissance and vegetation mapping surveys. The extent of wetland features was determined during the vegetation mapping effort; unique vegetation communities or features dominated by hydrophytic vegetation and/or showing evidence of hydrology were noted and mapped as wetlands in an ArcGIS mobile application (ESRI 2020).

Section 114 of the San Diego Municipal Code describes specific development regulations pertaining to sensitive biological resources, including wetlands. The City's definition of wetlands is provided in the Biology Guidelines (City of San Diego 2018a).

Under the City's definition, wetlands can include vegetation communities such as freshwater marsh, riparian forest, riparian scrub, or vernal pools. They may also include areas that have hydric soil or wetland hydrology, but human activities have resulted in a lack of hydrophytic vegetation (e.g., channelized streambeds) or recurring natural events. However, some seasonal drainage patterns that are sufficient enough to etch the landscape (i.e., ephemeral/intermittent drainages) may not be sufficient enough to support wetland dependent vegetation. These types of drainages would not satisfy the City's wetland definition unless wetland dependent vegetation is either present in the drainage or lacking due to past human activities. Seasonal drainage patterns may constitute "waters of the United States," which are regulated by the Army Corps of Engineers and/or the California Department of Fish and Game".

2.3 Survey Limitations

Site visits were conducted during daylight hours. Complete inventories of biological resources present on a site often require numerous focused surveys at different times of day during different seasons. Some species such as annual plants are present in only spring or summer, and nocturnal animals are difficult to detect during the day. Other species may be present in such low numbers that they could be missed. Due to such timing and seasonal variations, survey results are not an absolute list of all species that the study area may support. Sensitive species with potential to occur are described in Sections 3.2.5 and 3.2.6 of this report and in Appendices C and D.

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3 Results

3.1 Physical Characteristics

The physical characteristics and quantification of biological resources described herein pertains to the study area, which is comprised of the project footprint and a surrounding 300-foot survey limit. The physical characteristics are analyzed in the following sections.

3.1.1 Topography and Drainage

Topography is generally flat in the central and western portion of the study area but a short, steep hill to the east of the project footprint drops into the MHPA and associated woodland, scrub and wetland habitats to the east (Figure 2). The elevation in the study area ranges from approximately 15 feet to 60 feet above mean sea level. The eastern boundary of the project footprint is located immediately adjacent to the MHPA and the 100-foot wetland buffer. The northern section of the 300-foot study area immediately north of the project footprint is currently an active construction site related to the 2014 St. John Garabed Church project. The entire project study area is within the City Coastal Zone.

Current land uses within and immediately surrounding the study area include existing single-family residential development, the Harvest Evangelical Church, an active construction site, El Camino Real and other neighborhood streets, sidewalks, traffic (vehicle and pedestrian), and open space associated with the MHPA to the east and the San Dieguito River Park to the west (Figure 2). Most of the disturbed land within the study area has been recently mowed, graded or used to store heavy machinery and equipment associated with the construction of the St. John Garabed Church on the parcel to the north.

3.1.2 Soils

According to the USDA Web Soil Survey (USDA 2019a), three soil types, including Las Flores loamy fine sand (5% to 9% slopes, eroded), Corralitos loamy sand (0% to 5% slopes), and Salinas clay loam (0% to 2% slopes) are mapped within the study area.

3.2 Biological Resources

The following discussion describes the existing biological conditions within the project study area, provided as biological resource descriptions.

3.2.1 Vegetation Communities and Land Cover Types

The vegetation communities and land covers were mapped according to Holland (1986) and Oberbauer et al. (2008), with a few exceptions. Some vegetation communities were given additional descriptions to identify highly dominant species within the community. Based on plant assemblages, each habitat was also assigned the most closely corresponding community listed in the City's Biology Guidelines (City of San Diego 2018a). Four non-native vegetation communities/land cover types, and one wetland community was mapped on the property:

eucalyptus woodland, disturbed habitat, non-native woodland, urban/developed, and arundo-dominated riparian. Additional communities mapped within the larger study area included Diegan coastal sage scrub, non-native grassland (broadleaf-dominated), land, mule fat scrub, southern willow scrub, disturbed herbaceous wetland, and disturbed cismontane alkali marsh. All native vegetation communities observed within the study area are located within the MHPA.

The vegetation communities and land cover types recorded on the property are described in detail below and their acreages are presented in Table 2. Their spatial distributions are presented on the Biological Resources Map (Figure 2). Vegetation communities present on the property are described first followed by descriptions of habitat located off-site but within the study area.

Table 2. Vegetation Communities and Land Cover Types on the Project Site

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Tier	Acreage on Project Site (Subject Parcel)
Disturbed Habitat	Disturbed Land	IV	3.11
Eucalyptus Woodland	Eucalyptus Woodland	IV	0.79
Non-Native Woodland	Ornamental Plantings	IV	0.01
Urban/Developed Land	N/A	N/A	0.02
Arundo-dominated Riparian	Disturbed Wetland	Wetland	0.03
		Total	**3.96**

Source: City of San Diego 2018.

3.2.1.1 Diegan Coastal Sage Scrub

Coastal sage scrub is present in a small patch just southeast of the project site and on the western side of El Camino Real; this community is not present on the property or within the project footprint, but occurs tin the study area. Coastal sage scrub is a native vegetation community that, according to Oberbauer et al. (2008), is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*).

Coastal sage scrub in the study area consists of California sagebrush, black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), broom baccharis (*Baccharis sarothroides*), and mule fat (*Baccharis salicifolia* ssp. *salicifolia*). This vegetation community is considered a Tier II habitat by the City's Biology Guidelines (City of San Diego 2018a).

3.2.1.2 Disturbed Habitat/Land

Disturbed land comprises majority of the project site, the active construction site to the north of the project site, and small strips of land around the existing development to the south. Disturbed lands are areas which have been subject to extensive physical anthropogenic disturbance and as a result cannot be identified as a native or naturalized vegetation association. However, these areas typically still have a recognizable soil substrate. The existing vegetation is typically composed of non-native ornamental or exotic species (Oberbauer et al. 2008).

Although some stands of non-native vegetation occur within the disturbed land in the study area, historical aerial imagery shows that the project footprint and most of the land to the north has been used as active agricultural land within the past 5 years (Google Earth 2020). Most of the disturbed land within the study area has been recently graded or used to store heavy machinery and equipment associated with the construction of the St. John Garabed Church on the parcel to the north; disturbed lands within the project footprint are consistently mowed. This land cover is ranked as Tier IV and is not considered sensitive under the City's Biology Guidelines (City of San Diego 2018a).

3.2.1.3 Eucalyptus Woodland

Eucalyptus Woodland occurs in the far eastern portion of the project site, outside of the project footprint, and is contiguous with eucalyptus woodland in the larger study area. Eucalyptus Woodland, according to Oberbauer et al. (2008), includes eucalyptus species (*Eucalyptus globulus*, *E. camaldulensis*, or *E*. spp.) planted as trees, groves, and windbreaks that form thickets with minimal shrubby understory to scattered trees with a well-developed understory. In most cases, however, eucalyptus trees form dense stands with closed canopies where the understory is either depauperate or absent owing to shade and the possible allelopathic (toxic) properties of the eucalyptus leaf litter. Although eucalyptus woodlands are of limited value to most native plants and animals, they frequently provide nesting and perching sites for several raptor species.

The understory of the eucalyptus woodland in the study area is quite mixed and consists of poison oak (*Toxicodendron diversilobum*), tree tobacco (*Nicotiana glauca*), lemonadeberry, blue elderberry (*Sambucus nigra* ssp. *caerulea*), Canary Island date palm (*Phoenix canariensis*), and hottentot-fig (*Carpobrotus edulis*). Eucalyptus woodland is classified as a Tier IV vegetation community under the City's Biology Guidelines (City of San Diego 2018a).

3.2.1.4 Non-native woodland

Non-native woodland occurs in a small portion on the northeastern edge of the project site and extends north of the site into the larger study area. This vegetation community refers to areas of exotic trees, usually intentionally planted, which are not maintained or artificially irrigated (Oberbauer et al. 2008).

There are scattered olive (*Olea europaea*) and Mexican fan palm (*Washingtonia robusta*) trees in this community with an understory of non-native weedy species like black mustard (*Brassica nigra*). This vegetation community is not listed in the City's Biology Guidelines (City of San Diego 2018a) but most closely matches ornamental plantings which is ranked as Tier IV.

3.2.1.5 Arundo-Dominated Riparian/Disturbed Wetland

Arundo-dominated riparian comprises one dense stand of giant reed (*Arundo donax*) south of the Eucalyptus woodland in the far eastern portion of the project site and the larger study area. Arundo-dominated riparian is composed of monotypic or nearly monotypic stands of giant reed that are fairly widespread in Southern California. Typically, it occurs on moist soils and in streambeds and may be related directly to soil disturbance or the introduction of propagates by grading or flooding.

This land cover is considered synonymous with disturbed wetland according to the City's Biology Guidelines (City of San Diego 2018a).

3.2.1.6 Urban/Developed Land

Within the study area, urban/developed land includes the existing residential neighborhood, church, parking lots, associated roadways and other human-made structures; a small portion of this community falls along the project site boundaries. According to Oberbauer et al. 2008, urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

This land cover is not ranked under the City's Biology Guidelines (City of San Diego 2018a) but is assumed to be considered Tier IV.

3.2.2 Vegetation Communities Located Off-site but within the Study Area

3.2.2.1 Mule Fat Scrub

Mule fat scrub occurs along the edges of disturbed wetland habitat within the MHPA, within the larger study area and outside of the project site to the east. According to Oberbauer et al. (2008), mule fat scrub is a tall, herbaceous scrub dominated by mulefat that is characterized by frequent flooding along intermittent stream channels with coarse substrate and moderate depth to the water table.

The City's Biology Guidelines (City of San Diego 2018a) classify riparian scrub as a wetland habitat.

3.2.2.2 Southern Willow Scrub

Southern willow scrub occurs south of the Eucalyptus woodland within the MHPA, within the larger study area and outside of the project site to the east. According to Oberbauer et al. (2008), southern willow scrub is a dense, broad-leafed, winter-deciduous riparian thicket dominated by several willow species.

The area mapped as southern willow scrub is dominated by arroyo willow (*Salix lasiolepis*) with scattered saltcedar (*Tamarix ramosissima*) and mule fat. The City's Biology Guidelines (City of San Diego 2018a) classify riparian scrub as a wetland habitat.

3.2.2.3 Disturbed Herbaceous Wetland

Herbaceous wetland is present within the southern portion of the MHPA open space to the east of the project site within the larger study area. According to Oberbauer et al. (2008), herbaceous wetland is a seasonal wetland habitat that supports a variety of herbaceous annual species like annual beard grass (*Polypogon monspeliensis*).

Disturbed herbaceous wetland in the study area is dominated by one non-native, hydrophytic plat species: bristly ox-tongue (*Helminthotheca echioides*). The complete lack of native plant species in this community implies that this area should be classified as disturbed wetland according to the City's Biology Guidelines (City of San Diego 2018a).

3.2.2.4 Disturbed Cismontane Alkali Marsh

Cismontane alkali marsh is present in the northeastern corner of the study area to the east of the project site within the larger study area and the MHPA. Cismontane alkali marsh is a wetland habitat dominated by low, perennial, herbaceous plants adapted to places where standing water or saturated soils are present for a considerable portion of the year (Oberbauer et al. 2008). High evaporation and low input of freshwater render these marshes somewhat alkaline, especially during the summer. Plant species composition within this community tends to consist of halophytes such as southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), and certain sedges over the typical cattail-bulrush mix of freshwater marsh.

This habitat is considered disturbed in the study area since it is dominated by non-native wetland species like prostrate spearscale (*Atriplex prostrata*), bristly ox-tongue, broad-leaf peppergrass (*Lepidium latifolium*), curly dock (*Rumex crispus*), and annual beard grass. Several native wetland species like Pacific pickleweed (*Salicornia pacifica*), alkali mallow (*Malvella leprosa*), cocklebur (*Xanthium strumarium*), California bulrush (*Schoenoplectus californicus*), and salt grass (*Distichlis spicata*) are present within this community as well. Many of these species are salt-loving and the overall composition of this community suggests a mix between coastal salt marsh and freshwater marsh; cismontane alkali marsh was considered the best classification for this area since this marsh does not physically connect to the San Dieguito River/Lagoon to the north. Despite moderate disturbance, the presence of several native wetland species and the lack of human modification in the area since 2003 (Google Earth 2020) implies that this community should be classified as freshwater marsh in the City's Biology Guidelines (City of San Diego 2018a); it is considered a wetland community.

3.2.2.5 Non-Native Grassland: Broadleaf-Dominated

Non-native grassland (broadleaf-dominated) occurs northeast and southeast of the project site on slopes adjacent to historical dirt roads and development; this community is not present on site and only occurs in the study area. Non-native grassland (broadleaf-dominated) is a subset of non-native grassland that is dominated by one or several non-native, invasive broadleaf species like black mustard, short-pod mustard (*Hirschfelida incana*) and fennel (*Foeniculum vulgare*) (Oberbauer et al. 2008).

Within the study area, this vegetation community is dominated by black mustard, fennel and tree tobacco. The City's Biology Guidelines (City of San Diego 2018a) do not distinguish between this variety and general non-native grassland; therefore, it is considered synonymous with non-native grassland, a Tier IIB habitat.

3.2.3 Floral Diversity

A total of 63 species of vascular plants, 28 native (44%) and 35 non-native (56%), were recorded during the biological reconnaissance survey for the project. A cumulative list of all common and sensitive plant species observed in the study area are provided in Appendix A.

3.2.4 Special-Status Plants

Plant species are considered sensitive if they have been listed or proposed for listing by the federal or state government as rare, endangered, or threatened ("listed species"); have a CRPR of 1–4; are listed as a MSCP-covered species; and/or have been adopted by the City as narrow endemic. An evaluation of known records in the

Del Mar quadrangle, and the surrounding quadrangles including Encinitas, Rancho Santa Fe, Poway, La Mesa, Escondido, and La Jolla (CDFW 2018b; CNPS 2019; USFWS 2019) was conducted to determine which species have been recorded in the project vicinity. In addition, Dudek's knowledge of biological resources and regional distribution of each species and results from 2020 reconnaissance surveys, as well as elevation, habitat, and soils present within the project footprint and study area, were evaluated to determine the potential for various special-status species to occur.

No naturally occurring special-status plant species were observed on the project site or in the study area. No special-status plant species are expected to occur within the site due to its heavily disturbed condition. In the adjacent study area, sensitive plant species with a moderate potential to occur in coastal sage scrub or the disturbed cismontane alkali marsh include sand-loving wallflower (*Erysimum ammophilum*), beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*) and Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*). These species are described in further detail in Appendix C. Only one ornamental special-status plant species was directly observed within the study area during field reconnaissance in 2020 and is described in detail below:

Torrey Pine (*Pinus torreyana*)

Torrey pine has a CRPR 1B.2 and is a MSCP Covered species. Torrey pine is a California native gymnosperm that naturally occurs in a narrow range within the San Diego County (Calflora 2019). This species is found in chaparral and closed-coned coniferous forest. Torrey pine naturally occurs at an elevation of 95 to 525 feet above mean sea level.

Several ornamental Torrey pine individuals were observed within the study area in the parking lot of Harvest Evangelical Church, immediately to the west of the project footprint. These individuals were artificially planted as ornamental landscaping and are not considered to be natural occurrences that deem coverage as special-status plants.

3.2.5 Wildlife Diversity

The project study area supports habitat primarily for coastal sage scrub, woodland, grassland and riparian/wetland wildlife species within coastal sage scrub, eucalyptus woodland, non-native grassland, cismontane alkali marsh, disturbed wetland, and riparian scrub (southern willow scrub and mule fat scrub) located east of the project footprint within the MHPA (Figure 2). These habitats provide foraging and nesting habitat for migratory and resident bird species and other wildlife species, including sensitive riparian species. Areas of these vegetated communities within the study area also likely provides cover and foraging opportunities small reptiles and other mammal species.

A total of nine wildlife species were recorded during the biological reconnaissance surveys in the project study area. Of the nine wildlife species observed during field surveys, two are considered special status and are described in further detail in Section 3.2.6. A cumulative list of wildlife species observed in the study area during field surveys is provided in Appendix B.

3.2.6 Special-Status Wildlife

Sensitive/special-status wildlife species are those listed as federal/state endangered or threatened, proposed for listing, fully protected by CDFW, California Watch List (WL), California Species of Special Concern (SSC), or MSCP-covered Species. An evaluation of known records in the Del Mar quadrangle, and the surrounding quadrangles including Encinitas, Rancho Santa Fe, Poway, La Mesa, Escondido, and La Jolla (CDFW 2018b; CNPS 2019; USFWS

2019) was conducted. In addition, Dudek's knowledge of biological resources and regional distribution of each species, as well as elevation, habitat, and soils present within the study area were evaluated to determine the potential for various special-status species to occur.

Sensitive wildlife species determined to have moderate potential to occur within the study area include western spadefoot (*Spea hammondii*), southern California legless lizard (*Anniella stebbinsi*), orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), red diamondback rattlesnake (*Crotalus ruber*), and least Bell's vireo (*Vireo bellii pusillus*). Sensitive wildlife species determined to have moderate potential to occur within the project site and study area include Cooper's hawk (*Accipiter cooperii*) and white-tailed kite (*Elanus leucurus*). California horned lark (*Eremophila alpestris actia*) is the only sensitive wildlife species with moderate potential to occur within the project footprint. These species are described in further detail in Appendix D. No sensitive wildlife species were determined to have high potential to occur within the study area or project site.

Two special-status bird species (coastal California gnatcatcher and yellow warbler) were detected within the study area during field reconnaissance in 2020.

Sensitive/special-status wildlife species with moderate potential to occur in the study area and in proximity to the project site/footprint are described in detail below:

Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher occurs in coastal Southern California and Baja California year-round, where it depends on a variety of arid coastal scrub habitats. The California gnatcatcher occurs mainly on cismontane slopes (coastal side of the mountains) in Southern California, ranging from Ventura and northern Los Angeles counties south through the Palos Verdes Peninsula to Orange, Riverside, San Bernardino, and San Diego counties (Attwood 1990). California gnatcatchers also occur in chaparral, grassland, and riparian vegetation communities where the coastal scrub community is close by (Bontrager 1991). California gnatcatchers are federally threatened and an MSCP-covered species.

One coastal California gnatcatcher individual was observed within the study area in the coastal sage scrub to the southeast of the project footprint (Figure 2). This individual is likely a resident of this small patch of sage scrub and utilizes the area for foraging and potentially breeding. This habitat is outside of the project footprint. A second California gnatcatcher individual was observed to the west of the study area in coastal sage scrub associated with the San Dieguito River Park (Figure 2); this habitat is over 300 feet from the proposed project site as it is on the western side of El Camino Real.

Least Bell's Vireo (*Vireo bellii pusillus*)

Least Bell's vireo is an MSCP-covered species that is also federally and state endangered; it is a summer resident of California primarily within southern California, but also within the central coast, and the central valley. This species inhabits low riparian woodland, forest, or scrub habitats in the vicinity of water or in dry river bottoms below 2000 feet (CDFW 2018b).

Although not observed during field surveys, riparian habitat within the study area (though limited in size and quality) could support this species. A known occurrence of this species has been recorded just west of the study area near

the San Dieguito River. Accordingly, this species is assumed present in suitable southern willow scrub and mulefat scrub habitat in the study area.

Yellow Warbler (*Setophaga petechia*)

The yellow warbler occurs near rivers, streams, lakes, or wet meadows that contain riparian vegetation nearby (Lowther et al. 1999; Heath 2008). They can also be associated with agricultural areas and, more specifically, are associated with willows (*Salix* spp.) (Strusis-Timmer 2009). The yellow warbler is not federally or state-listed as threatened or endangered but is listed as a California SSC. It is not an MSCP-covered species.

One yellow warbler individual was heard calling within the eucalyptus woodland on the far eastern boundary of the study area (Figure 2). This individual is likely associated with the riparian habitat that exists just south of the eucalyptus woodland and utilizes the woodland, wetland and riparian areas east of the project footprint for foraging and breeding. This woodland and riparian habitat is outside of the project footprint.

Cooper's Hawk (*Accipiter cooperii*)

Cooper's hawk is a state WL and an MSCP-covered species. Cooper's hawks inhabit live oak, riparian deciduous, and other forest habitats near water. Nesting and foraging usually occur near open water or riparian vegetation. Nests are built in dense stands with moderate crown depths, usually in second-growth conifer or deciduous riparian areas. Nests in deciduous trees are typically located in crotches 20 to 50 feet above the ground; in conifers, nests are on horizontal branches or in the main crotch. Cooper's hawks use patchy woodlands and edges with snags for perching and hunting small birds, small mammals, reptiles, and amphibians (Zeiner et al. 1990). Cooper's hawks are diurnally active and are year-round residents. Breeding occurs from March through August, with peak activity in May through July. Males defend an area of about 330 feet around potential nest sites (Zeiner et al. 1990).

Cooper's hawk could use eucalyptus woodland to the east of the site for nesting and scrub habitats for foraging. The species was not observed within the study area during field surveys but is known to occur in the vicinity; an occurrence of this species has been recorded within 10 miles of the study area.

California Horned Lark (*Eremophila alpestris actia*)

California horned lark is a state WL species. It is not an MSCP-covered species. It occurs on the state's southern and coastal slope and in the San Joaquin Valley. California horned lark nests and forages in grasslands, disturbed lands, agriculture, and beaches (Zeiner et al. 1990).

California horned lark has moderate potential to nest and forage in disturbed habitat within the project footprint and study area in non-native grassland in the study area, outside of the project site.

White-Tailed Kite (*Elanus leucurus*)

White-tailed kite is a CDFW fully protected species. It is not an MSCP-covered species. It nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands (Zeiner et al. 1990).

White-tailed kite has moderate potential to nest in eucalyptus woodland within study area and project site, east of the project footprint.

Western Spadefoot (*Spea hammondii*)

The western spadefoot is a California SSC and MSCP-covered species. It is known to occupy primarily grassland and vernal pools, but also ephemeral wetlands that persist at least 3 weeks in mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, river floodplains, alluvial fans, playas, and alkali flats (Holland and Goodman 1998).

Western spadefoot has moderate potential to occur in disturbed cismontane alkali marsh and herbaceous wetland in the study area, outside of the project site.

Southern California Legless Lizard (*Anniella stebbinsi*)

Southern California legless lizard is a California SSC. It is not an MSCP-covered species. It occupies coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, scrubs, pine, oak, and riparian woodlands and is associated with sparse vegetation and moist sandy or loose, loamy soils (Papenfuss and Parham 2013).

Southern California legless lizard has moderate potential to occur in mule fat scrub and southern willow scrub habitats with moist soil in the study area, outside of the project site.

Orange-Throated Whiptail (*Aspidoscelis hyperythra beldingi*)

Orange-throated whiptail is a state WL and MSCP-covered species. It inhabits semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral (Stebbins 2003).

Orange-throated whiptail has moderate potential to occur in coastal sage scrub and riparian scrub within the study area, outside of the project site.

Red Diamondback Rattlesnake (*Crotalus ruber*)

Red diamondback rattlesnake is a California SSC. It is not an MSCP-covered species. It occupies arid coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats (Stebbins 2003).

Red diamondback rattlesnake has moderate potential to occur in coastal sage scrub and non-native grassland within the study area, outside of the project site.

3.2.7 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the immigration and emigration of animals. Wildlife corridors contribute to population viability by (1) assuring the continual exchange of genes between populations, which helps maintain genetic diversity; (2) providing access to adjacent habitat areas, representing additional territory for foraging and mating; (3) allowing for a greater carrying capacity; and (4) providing routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes (e.g., fires).

Habitat linkages are patches of native habitat that function to join two larger patches of habitat. They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation; they represent a potential route for gene flow and long-term dispersal. Habitat linkages may serve as both habitat and avenues of

gene flow for small animals such as reptiles and amphibians. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat "islands" that function as "stepping-stones" for dispersal.

The project footprint has historically been utilized for agriculture (since at least 2003–2016) (Google Earth 2020) and is currently heavily disturbed with frequent mowing and heavy equipment storage. It is unlikely to provide substantial refuge or cover for wildlife species and their movements. Although the City's MHPA is directly adjacent to the project footprint to the east, the project footprint is not considered to be within a biological core or linkage area since the site is bounded by an active construction site, residential development, parking lots and roads, with the exception of the eastern section (Figure 2). Project compliance with the MSCP Land Use Adjacency Guidelines is discussed in Section 4.1.

3.2.8 Wetlands Delineation

One wetland community (arundo-dominated riparian) exists at the eastern edge of the site and is potentially regulated by RWQCB, CDFW, the City, and CCC (Figure 3); this area is assumed to be a wetland given the predominance of hydrophytic vegetation.

The study area east of the property supports wetland communities potentially regulated by RWQCB, CDFW, the City, and CCC. These include mule fat scrub, southern willow scrub, disturbed cismontane alkali marsh, disturbed herbaceous wetland, and arundo-dominated riparian (Table 3); these areas are also assumed wetlands given the hydrophytic vegetation they displayed.

It was assumed that no wetlands within the study area would be regulated by the USACE since there is no observable connection or significant nexus surface connection between the potential wetland resources in the study area and downstream traditional navigable waters (i.e., San Diego River/Lagoon to the north/west). No non-wetland waters (i.e. features with a defined bed/bank or other ordinary high water mark indicators) were identified within the study area. RWQCB, CDFW, the City, and CCC typically regulate isolated wetland features and riparian habitats that may be excluded from USACE jurisdiction. Given the informal delineation conducted on the project site and within the survey area, all riparian habitats or vegetation communities dominated by hydrophytic plant species were assumed to be wetlands regulated by these agencies.

Wetland Buffer

The proposed wetland buffer between the project footprint and the wetland resources to the east (Figure 3) extends over 100 feet wide from the eastern limit of proposed development and consists of eucalyptus woodland, non-native woodland, non-native grassland (broadleaf-dominated), coastal sage scrub and disturbed land. This wetland buffer provides protection for the functions and values of the City wetlands since it limits human encroachment and acts to slow flood waters for flood and erosion control, sediment filtration, water purification, and groundwater recharge. The proposed buffer (Figure 3) will follow the City's Biology Guidelines (City of San Diego 2018a), which require a wetland buffer width of at least 100 feet within the COZ.

Figure 3 shows the extent of the jurisdictional resource boundaries and wetland buffer within the study area, in relation to the proposed project footprint. Hydrophytic vegetation classifications follow Lichvar et al. (2016).

Table 3. Potential Jurisdictional Resources on the Project Site and within Study Area

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Wetlands on Project Site/ Subject Parcel (Acreage)	Wetlands in Study Area (Acreage)
Mule Fat Scrub	Riparian Scrub	—	0.18
Sothern Willow Scrub	Riparian Scrub	—	0.38
Disturbed Herbaceous Wetland	Disturbed Wetland	—	0.11
Disturbed Cismontane Alkali Marsh	Freshwater Marsh	—	1.10
Arundo-dominated Riparian	Disturbed Wetland	0.03	0.10
	Total	**0.03**	**1.87**

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4 Consistency with the City's MSCP

The project is a compatible land use within and adjacent to the MHPA and follows the siting criteria outlined in Section 1.4.2 of the MSCP.

4.1 Project Consistency with MSCP Land Use Adjacency Guidelines

Since a portion of the proposed project impact footprint occurs adjacent to the MHPA, the project is required to document compliance with the MSCP Land Use Adjacency Guidelines (MSCP LUAG).

Prior to issuance of Notice to Proceed, the owner/permittee shall depict the following requirements within the contract specifications and depict on construction documents (as necessary) for the project site.

4.1.1 Drainage

MSCP LUAG: *All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate..*

The proposed project would involve the installation of impervious surfaces associated with the new structure, parking lot, and sidewalks. All drainage from these surfaces would be intercepted and conveyed off the site via a private storm drain system that will be directed into a gently sloped bioswale filtration area along the western boundary of the parcel immediately north of the project footprint; this bioswale will be shared with the St. John Garabed Church development immediately to the north. The bioswale will be composed of various layers of natural "filters" that runoff will pass through prior to entering a perforated pipe and flowing north into outfalls on the west side of El Camino Real within the San Dieguito River valley and the MHPA. The bioswale will actively filter stormwater runoff as it passes through native vegetation and mulch followed by a thicker soil layer where water will be slowed so that potential pollutants can settle out or be naturally filtered by soil microbes. A final layer of gravel will control water infiltration rates into the perforated pipe prior to discharging into the San Dieguito River valley. This system will be maintained at least annually through the testing and replacement of any soils saturated with heavy metals/toxins and the removal of exotic plant materials/ trash. The bioswale will ensure that all runoff from the site will pass through this natural filtration system prior to entering the MHPA on the western side of El Camino Real; no drainage from the site will enter the off-site MHPA and 100-foot wetland buffer to the east of the project footprint.

Installment of the project will be consistent with the City Stormwater Standards and flows toward the MHPA shall be minimized to the extent feasible.

4.1.2 Toxics/Project Staging Areas/Equipment Storage

MSCP LUAG: *Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as pesticides, herbicides, and animal waste, and other substances that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.*

No hazardous construction materials storage method would be allowed which could impact the adjacent MHPA (including fuel) and any drainage from the construction site must be clear of such materials. Consistent with the City Stormwater Standards, existing previously legal drainage which flows toward the MHPA shall be minimized.

The contractor shall ensure all areas for staging, storage of equipment and materials, trash, equipment maintenance, and other construction related activities are within the limits of the project site. After construction, operation of the project will include a SWPP that outlines spill prevention plans and avoidance measures. The functioning bioswale mentioned in the previous section will also ensure that no toxic chemicals or by-products enter the MHPA through stormwater runoff or other site drainage.

4.1.3 Lighting

MSCP LUAG: *Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting..*

The project will include exterior lighting and light fixtures to aide in the functions of providing safety for residents, but these would be shielded or directed away from the MHPA.

All exterior lighting on the building façade and elsewhere on the property will be designed to be directed downward or away from the MHPA. The 100-foot wetland buffer along the eastern project boundary will provide additional protection of MHPA from light from the development.

4.1.4 Noise

MSCP LUAG: *Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.*

Construction noise that exceeds the maximum levels allowed (60 decibels [dB(a)] or greater at the beginning edge of the habitat) shall be avoided during the breeding seasons for the following: coastal California gnatcatcher (March 1 and August 15). If construction is proposed during the breeding season for the species the following measures are required:

Coastal California Gnatcatcher (Federally Threatened)

Prior to the issuance of any grading permit, the City Manager (or appointed designee) shall verify that the Multiple Habitat Planning Area (MHPA) boundaries and the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur between March 1 and August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the city manager:

A. A qualified biologist (possessing a valid endangered species act section 10(a)(1)(a) recovery permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 dB(a) hourly average for the presence of the coastal California gnatcatcher. Surveys for the coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If gnatcatchers are present, then the following conditions must be met:

   I. Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and

   ii. Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB (a) hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB (a) hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the city manager at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or

   iii. At least 2 weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB(a) hourly average at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring[1]

[1] Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB (A) hourly average or to the ambient noise level if it already exceeds 60 dB (A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB (a) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16).

B. If coastal California gnatcatchers are not detected during the protocol survey, the qualified biologist shall submit substantial evidence to the city manager and applicable resource agencies which demonstrates whether or not mitigation measures such as noise walls are necessary between March 1 and August 15 as follows:
   I. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then condition A.III shall be adhered to as specified above.
   II. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

Once project construction is complete, the assisted living facility is not expected to produce noise at levels that could indirectly impact MSCP-covered and special-status species within the habitats adjacent to the project footprint.

4.1.5 Barriers

MSCP LUAG: *New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.*

A portion of the project footprint runs along the boundary of the MHPA and barriers would be installed to discourage public access and domestic animal activity within the MHPA.

The 100-foot wetland buffer will provide a buffer between the development and the MHPA. A fence will also be constructed along the eastern project boundary between the project footprint and the MHPA. The fence material would consist of either chain link, wood, or concrete, depending on the final project design.

4.1.6 Invasives

MSCP LUAG: *No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.*

The project will incorporate landscaping around the structure and parking lot that will be lightly vegetated with a primarily native species palette.

The contractor shall permanently revegetate any graded, disturbed, or eroded areas within the project footprint that will not be permanently covered by structures, impervious surfaces, or landscaping with native species appropriate for the region.

Where project activities involve impacts to non-native invasive plant species (as identified by the California Invasive Plant Council), these plants shall be entirely removed where feasible, and the removal shall be monitored by a Qualified Monitoring Biologist, as defined in the City's Biology Guidelines (City of San Diego 2018a), to ensure that

dispersal of propagules (e.g., seeds, stems) are avoided or minimized. If aboveground plant material cannot be removed (e.g., due to limited access), herbicides shall be applied by a licensed applicator, using chemicals permitted as safe within aquatic environments.

4.1.7 Brush Management

MSCP LUAG: *Brush management zones will not be greater in size that is currently required by the City's regulations (this includes use of approved alternative compliance). Within Zone 2 the amount of woody vegetation clearing shall not exceed 50% of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area will be the responsibility of a home-owner's association or other private party.*

The project will have a 100-foot wetland buffer and is sited above and adjacent to the MHPA. The project would incorporate at least a 35-foot Zone 1 brush management area extending from the edge of the proposed structure to the MHPA boundary on the eastern side of the project footprint. No Zone 2 brush management area is proposed. Therefore, no impacts from brush management would occur within the MHPA.

4.1.8 Grading/Land Development

MSCP LUAG: *Within or adjacent to the MHPA, all manufactured slopes associated with site development shall be included within the development footprint.*

The project grading would be entirely within a flat, disturbed pad of land and does not included any proposed manufactured slopes.

Although there would be direct impacts adjacent to MHPA lands as part of the project, the impacts would be within the least sensitive portion of the site (i.e., disturbed land). In addition, all City Land Use Adjacency Guidelines compliance measures described above would be implemented as conditions of project approval, therefore the project would not impact the goals and objectives of the City's Subarea Plan and it would be consistent with the guidelines and policies of the City's MSCP.

4.1.9 Area Specific Management Directives

Coastal California Gnatcatcher

MSCP LUAG: *Area specific management directives must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. No cleaning of occupied habitat within the cities' MHPAs and within the County's Biological Resource Core Areas may occur between March 1 and August 15.*

One coastal California gnatcatcher individual was observed within the MHPA in the study area, southeast of the project footprint (Figure 2). A second California gnatcatcher individual was observed to the west of the study area in the MHPA, within the San Dieguito River Park.

Edge effects and disturbance to this species would be reduced and minimized through compliance with the Land Use Adjacency Guidelines, as described above. A 35-foot Zone 1 brush management area extending from the edge of the proposed structure to the MHPA boundary on the eastern side of the project footprint will reduce the potential for habitat degradation due to unplanned fire (Figure 2). In addition, since the project impact footprint would not overlap with the City's MHPA, no clearing of occupied habitat within the MHPA would occur as a result of the project.

Least Bell's Vireo

Area specific management directives must include measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the nesting period).

Although not observed during field surveys, riparian habitat in the study area within the MHPA could support least Bell's vireo. A known occurrence of this species has been recorded just west of the study area near the San Dieguito River, also within the MHPA. Thus, it is possible that this species could move into southern willow scrub and mulefat scrub within the MHPA and the study area, east of project site.

An upland buffer (wetland buffer) of approximately 100 feet will be established between the project impact footprint and adjacent suitable habitat for least Bell's vireo. Focused surveys were not conducted for this species, but there are known California Natural Diversity Database occurrences within 1 mile of the study area. Thus, this species is assumed present in suitable southern willow scrub and mulefat scrub habitat in the study area. The project impact footprint has been sited outside of all riparian habitat within the study area, therefore no clearing of occupied habitat would occur as part of the project.

Cooper's Hawk

Area specific management directives must include 300-foot impact avoidance areas around the active nests, and minimization of disturbance in oak woodlands and oak riparian forests.

Cooper's hawk was not observed within the study area during field surveys but is known to occur in the vicinity and may nest within the MHPA in the study area; an occurrence of this species has been recorded within 10 miles of the study area (CDFW 2018b). The study area contains eucalyptus woodland and scrub habitats within the MHPA (and adjacent to the project site) that could be utilized for nesting and foraging, respectively.

The following measure would be applied to comply with the area specific management directive for Cooper's hawk and would be a condition of project approval:

To avoid any indirect impacts to Cooper's hawk, construction within 300 feet of suitable habitat, including brush management activities, shall occur outside of the breeding season for this species (February 1 to September 15). If construction/brush management must occur during the breeding season, a qualified biologist shall conduct a pre-construction survey within suitable habitat to determine the presence or absence of nesting birds within any portion of the potentially occupied habitat within 300 of the project footprint. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities. The applicant shall submit the results of the preconstruction survey to the City of San Diego's (City's) Development Services Department (DSD) for review and approval prior to initiating any construction activities.

If Cooper's hawk is detected, then an appropriate impact avoidance area (a 300-foot buffer) shall be established around the active nest using orange fencing or other clear demarcation method. The radius of this avoidance buffer shall be determined through coordination with the project biologist and authorized by the City's project manager and DSD and shall use orange fencing or other clear demarcation method to define the approved buffer.

4.2 Project Consistency with MSCP Subarea Plan General Management Directives

Since the project site is within the MSCP Subarea Plan, the project is required to document compliance with the MSCP Subarea Plan General Management Directives.

Mitigation

All project mitigation will be performed in accordance with the City's ESL and Biology Guidelines.

Restoration

No restoration or revegetation will be undertaken in the MHPA related to this project.

Public Access, Trails and Recreation

Project consistency with the aforementioned barrier requirements per the MSCP Land Use Adjacency Guidelines will ensure that barriers will exist between the project footprint and the MHPA. These barriers will prevent public access to the MHPA.

Litter/Trash and Materials Storage

During and after construction, litter and trash will be removed on a regular basis. Trash cans will be provided and maintained on the property throughout construction and during operation of the assisted living facility. Littering and dumping will not be permitted on the property and penalties for violations will be enforced.

Storage of materials adjacent to the MHPA is not anticipated. Regardless, the aforementioned drainage requirements per the MSCP Land Use Adjacency Guidelines will prevent the drainage of any hazardous materials into the MHPA.

Adjacency Management Issues

The project applicant will enforce, prevent and remove all illegal intrusions into the MHPA on an annual and complaint basis.

Residents of the facility will be informed of the adjacent MHPA to heighten environmental awareness of sensitive habitat and the need for appropriate plantings, pet exclusion and aforementioned barriers between the project and the MHPA.

Invasive Exotics Control and Removal

Project consistency with the aforementioned invasives requirements per the MSCP Land Use Adjacency Guidelines will ensure that invasive non-native species are not introduced into the MHPA.

Flood Control

Project consistency with the aforementioned drainage requirements per the MSCP Land Use Adjacency Guidelines will ensure that maintenance is performed on the proposed bioswale. The project applicant will ensure that this maintenance occurs outside of the nesting season of sensitive birds or wildlife utilizing the habitat there.

4.3 MHPA Conveyance

Prior to recordation of the first final map and/or issuance of any grading permits, the on-site MHPA shall be conveyed to the City's MSCP preserve through either fee title to the City, covenant of easement granted in favor of the City and wildlife agencies or dedication of land in fee title to the City. Conveyance of any land in fee to the City shall require approval from the Park and Recreation Department Open Space Division Deputy Director and shall exclude detention basins or other stormwater control facilities, brush management areas, landscape/revegetation areas, and graded slopes. To facilitate MHPA conveyance, any non-fee areas shall have covenant of easements for MHPA lands placed over them if located in the MHPA, and be maintained in perpetuity by the owner/Permittee/Applicant unless otherwise agreed to by the City for acceptance of dedicated land in fee title.

5 Impacts Analysis

The purpose of Section 5 is to describe the direct, indirect, and cumulative impacts of the proposed project on special-status biological resources. The significance determinations for proposed or potential impacts are described in Section 5.

5.1 Definition of Impacts

Based upon the project description (Section 1.2), direct impacts, indirect (short-term and long-term), and cumulative impacts are defined as follows.

Direct Impacts include both the permanent loss of on-site habitat and the plant and wildlife species that it contains and the temporary loss of on-site habitat. Direct impacts associated with the project would occur from the preparation/ grading of the site, building of the new structure and installation of all included amenities (parking lots, sidewalks, landscaping, fountains, lighting, fencing, utilities, storm drain system, etc.). Impacts were quantified by overlaying the proposed impact alignment onto the biological resources map and evaluating the impacts by vegetation community. No temporary direct project impacts are expected.

Indirect Impacts refer to off-site and on-site effects that are short-term impacts (i.e., temporary) due to the project construction or long-term (i.e., permanent) design of the project and the effects it may have to adjacent resources. For this project, it is assumed that the potential short-term indirect impacts resulting from construction activities may include dust, noise, construction-related soil erosion/runoff, and general human presence that may temporarily disrupt species and habitat vitality. Since the project is surrounded by existing residential development and two churches (one existing and one under construction), habitat around the project footprint is already subject to minor long-term indirect human impacts; through compliance with the City's Land Use Adjacency Guidelines, additional long-term indirect impacts associated with the project are not expected to occur.

For development within the Coastal Zone, the City requires a 100-foot-wide avoidance buffer surrounding wetland resources to ensure the value and function of the wetland is maintained (City of San Diego 2018a). Activities permitted within wetland buffers in the Coastal Zone include public access paths, fences, restoration and enhancement activities, and other improvements necessary to protect wetlands.

Cumulative impacts refer to the combined environmental effects of the proposed project and other relevant projects. In some cases, the impact from a single project may not be significant, but when combined with other projects, the cumulative impact may be significant.

In an effort to eliminate cumulative impacts to sensitive biological resources throughout San Diego, the City is participating in the San Diego MSCP. The MSCP is a long-term regional conservation plan established to protect sensitive species and habitats in San Diego County. The MSCP is divided into subarea plans that are implemented separately from one another.

This planning effort is designed to address cumulative impacts through development of a regional plan that addresses impacts to covered species and habitats in a manner that assures their conservation despite impacts of cumulative projects over the long term. The ultimate goal of this plan is the establishment of biological reserve areas in conformance with the State of California Natural Communities Conservation Planning Act.

The study area is within the City of San Diego Subarea Plan and portions of the project footprint are adjacent to the MHPA. Cumulative impacts to sensitive vegetation communities from implementation of the project are not expected to be significant since all construction activities proposed are within disturbed lands and in conformance with the regional and City plans previously described. In addition, no vernal pools or native grassland habitat would be impacted as part of the project.

5.2 Direct Impacts

5.2.1 Vegetation Communities and Land Cover Types

Implementation of the project will result in direct permanent impacts to a total of 2.84 acres of disturbed land (Figure 2). Impacts would occur from one main type of project activity: development of the assisted living complex and associated amenities. Table 4 provides a list of the corresponding City Biology Guidelines (City of San Diego 2018) habitats, as well as a summary of these impacts by type and further analysis of the proposed impacts are provided below. Since all proposed impacts within the project footprint would be to Tier IV vegetation communities or land covers, no significant impacts are expected to occur.

Table 4. Direct Impacts to Vegetation Communities and Land Cover Types in the Project Study Area

Vegetation Community/Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier	Project Construction Impact (Acreage)
Native Vegetation Communities and Land Covers			
Disturbed Land	Disturbed Land	IV	2.84
		Total	**2.84**

5.2.2 Waters of the United States, including Wetlands

Implementation of the project will not result in any direct impacts to City wetlands or potential waters of the U.S. or state, including wetlands; therefore, no significant impacts to wetlands are expected to occur.

The wetland buffer to be established for this project provides 100 feet of width or more around the wetlands east of the project footprint and project site. The wetland buffer does not overlap the impact footprint and the project would not result in direct impacts to the buffer. This wetland buffer width, along with characteristics of the buffer area (e.g. vegetation communities present, etc.), provides protection for the functions and values of the City wetlands, according to the City's Biology Guidelines (City of San Diego 2018a) and Section 320.4(b)(2) of the USACE General Regulatory Policies, as follows:

a. Wildlife habitat: the eucalyptus woodland, coastal sage scrub, disturbed and non-native woodland habitat provide nesting and foraging habitat for wildlife species in the area, including birds, and would be sufficiently wide enough (i.e. 100 feet or more) to be utilized by these species.
b. Food Chain Productivity: similar to functions related to wildlife habitat, the wetland buffer would provide food chain productivity through establishing areas, both native and non-native, where wildlife, including

birds, can forage. The buffer would also be sufficiently wide enough (i.e. 100 feet or more) to contribute to food chain productivity in the area.

c. Water Quality: the wetland buffer is sufficiently wide (i.e. 100 feet or more) and is also densely vegetated with native and non-native species to provide effective water quality protection function to the adjacent City wetland habitats through natural filtering of surface flows that would move through the wetland buffer during storm events and eventually enter adjacent City wetlands.
d. Ground Water Recharge: in addition to protecting water quality as surface flows travel across the area, the wetland buffer would also provide opportunity for ground water recharge in the area since the 100-foot width would provide sufficient opportunity for some of the surface flows to percolate through the Salinas clay loam and Corralitos loamy sand soils into the groundwater table.
e. Protection from Storm and Flood Waters: the 100-foot extent and vegetation coverage in the wetland buffer are both wide and dense enough, respectively, to provide protection to surrounding areas, including the proposed assisted living facility, from storm and flood waters that may occur during high storm events based on the site topography and frequency of flows through the study area.

Therefore, the existing buffer characteristics are in compliance with the City's Biology Guidelines (City of San Diego 2018a) and would ensure the avoidance of project impacts to adjacent City wetlands. The buffer would adequately protect the wildlife habitat, food chain productivity, water quality, ground water recharge and storm and floodwater functions and values of the City wetlands as described above.

5.2.3 Direct Impacts to Special-Status Plants

No naturally occurring sensitive plants were detected within the study area during the 2020 surveys. The project footprint is heavily disturbed and has been utilized for agriculture until at least 2016 (Google Earth 2020). There is no potential for special-status plants to occur within the project footprint or be directly impacted by the project. Therefore, no significant impacts to special-status plants are expected to occur.

5.2.4 Direct Impacts to Special-Status Wildlife

California horned lark is the only special-status wildlife species identified as having moderate potential to occur within the project footprint. As described in Section 1.3, direct impacts to this species would be avoided through compliance with state and federal regulations. Due to the lack of suitable habitat within the project impact area, no direct impacts are anticipated to any other special-status wildlife species identified as having moderate to high potential to occur in the study area.

5.3 Indirect Impacts

5.3.1 Vegetation Communities and Land Covers

Short-term indirect impacts associated with dust, erosion, invasive plant species, temporary access impacts, and increased human presence would be avoided through compliance with Land Use Adjacency Guidelines (Section 4.1) for MHPA areas. Indirect impacts to vegetation communities adjacent to the project site would also be avoided through the standard construction measures including delineation of the project footprint, installation of silt fencing,

pre-construction meetings/education, and biological monitoring (Section 6.1). Additional features of the project design that would avoid indirect impacts (runoff, erosion, sediment, etc.) to special-status vegetation communities east of the project footprint, described in Section 1.2, include a 100-foot wetland buffer and a bioswale filtration basin that would slow and filter stormwater flows before they enter into the off-site MHPA west of El Camino Real.

Since the project footprint is already heavily disturbed and adjacent to existing residential development and a church, no additional long-term indirect impacts are anticipated.

5.3.2 Waters of the United States, including Wetlands

Waters of the state and City wetlands are typically affected in the short-term by dust, invasive plant species, increased human presence and in the long term by changes in the velocity of runoff during and following construction, which could adversely affect the integrity of downstream resources causing erosion and sedimentation. No indirect impacts to waters of the U.S. or wetlands are anticipated from the proposed project. As described in Section 5.2.2, the nearest wetland resource is more than 100 feet east of the project impact area (Figure 3). The project would maintain this wetland buffer thereby preserving the current wetland functions and values defined by the City's Biology Guidelines (City of San Diego 2018a). Additionally, indirect impacts from site runoff would be avoided via a bioswale filtration basin that would slow and filter stormwater flows before they enter into the off-site MHPA west of El Camino Real.

5.3.3 Special-Status Plant Species

Indirect impacts to off-site sensitive plant species are not anticipated. Though sand-loving wallflower, beach goldenaster, and Coulter's goldfields have a moderate potential to occur in coastal sage scrub and disturbed cismontane alkali marsh in the larger study area, indirect impacts to these species would be avoided through the establishment of the 100-foot wetland buffer and a bioswale filtration basin that would slow and filter stormwater flows before they enter into the off-site MHPA west of El Camino Real. This would ensure that fugitive dust, competition from invasive plant species, changes in hydrology resulting from construction, and project site sediment/erosion would not affect coastal sage scrub or disturbed cismontane alkali marsh potentially harboring these sensitive plants. In addition, standard construction practices adjacent to biological resources such as delineation of the project footprint, installation of silt fencing, pre-construction meetings/education, and biological monitoring would ensure the avoidance of indirect impacts to sensitive plants likely to occur in the study area.

5.3.4 Special-Status Wildlife Species

Indirect impacts (associated with potential dust, erosion, runoff, invasive plant species, and increased human presence during construction) to western spadefoot, southern California legless lizard, orange-throated whiptail, and red diamondback rattlesnake would be avoided though these species have the potential to occur in the study area outside of the project site. No significant indirect impact to these species will result as edge effects will be avoided through the construction practices identified above and in Section 6.1 including delineation of project impact footprint, installation of silt fencing, pre-construction meetings/education and biological monitoring. The 100-foot wetland buffer and bioswale will also ensure that the habitats adjacent to the project site most likely to support and harbor these species are not indirectly impacted by project activities.

Avian species may be indirectly affected in the short-term by construction-related noise, which can disrupt normal activities and subject wildlife to higher predation risks. Indirect impacts to Cooper's hawk and coastal California gnatcatcher will be avoided through compliance with Area Specific Management Directives (Section 4.1.9) and MSCP Land Use Adjacency Guidelines (Section 4.1.4), respectively. However, breeding California horned lark, yellow warbler, least Bell's vireo and white-tailed kite can be significantly affected by short-term construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities.

Indirect impacts from construction-related noise may occur to breeding wildlife if construction occurs during the breeding season (i.e., February 1 through September 15). Wildlife that would be significantly affected by noise, based on suitable habitat in the project vicinity and in accordance with the City Biology Guidelines (City of San Diego 2018a), may occur up to 500 feet from the project work areas. Species whose breeding/nesting may be significantly impacted by noise include white-tailed kite, California horned lark, yellow warbler, and least Bell's vireo. These impacts would be considered significant and mitigation would be provided (Section 6.3.4).

5.4 Cumulative Impacts

The study area, including the project impact footprint, is within the City of San Diego subarea plan and portions of the project impact footprint are adjacent to the MHPA. Cumulative impacts to sensitive vegetation communities from implementation of the project are not expected to be significant since all activities proposed are in conformance with the regional and City plans previously described, particularly the City's MSCP (Sections 4.1 and 4.2). In addition, no vernal pools or native grassland habitat would be impacted as part of the project.

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6 Project Requirements and Mitigation Measures

This section describes proposed project protocols and mitigation and avoidance measures that would avoid or mitigate adverse and significant impacts to biological resources resulting from the proposed project activities. The Avoidance and Minimization Measures are elements of the project design that are required for compliance with existing guidelines and are required as a condition of project approval. The mitigation measures address the project's significant direct and indirect effects on sensitive vegetation, sensitive plant and wildlife species, and jurisdictional aquatic resources. With implementation of the proposed measures, identified direct and indirect impacts would be reduced to a level below significant.

6.1 Biological Resources General Requirements

The following measures shall be included on project plans and in contract specifications to ensure compliance with the City's MSCP/MHPA and ESL regulations.

Measures Prior to Construction

Biologist Verification -The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City of San Diego's Biological Guidelines (2018a), has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.

Preconstruction Meeting - The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.

Biological Documents - The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, MSCP, ESL, project permit conditions; CEQA; ESAs; and/or other local, state or federal requirements.

BCME -The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents noted in the previous section. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/ barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.

Resource Delineation - Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall

include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.

Education – Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

During Construction

Monitoring - All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR). The CSVR shall be e-mailed to MMC on the 1st day of monitoring, the 1st week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.

Subsequent Resource Identification - The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on site (e.g., flag plant specimens for avoidance during access, etc.). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

Post Construction Measures

Follow-Up Reporting - In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, State CEQA, and other applicable local, state and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

Water Pollution Control Plan: The City's Stormwater Standards require the development of a *Water Pollution Control Plan* (WPCP) that outlines the BMPs and pollution prevention measures that will be implemented prior to and during construction activities (City of San Diego 2018b). A project-specific WPCP will be developed prior to construction, which will be tailored to address project-specific water quality conditions and BMP requirements, based on the actual construction activities that will be performed. The BMP categories that will be addressed in the WPCP include the following:

- Project planning
- Good site management "housekeeping"
- Non-storm-water management
- Erosion control
- Sediment control
- Run-on and run-off control

Consistent with the Stormwater Standards and regulatory requirements, the WPCP shall include objectives, responsibilities, maintenance and inspection standards to ensure adherence to pollution prevention standards.

The project will be required to meet National Pollution Discharge Elimination System (NPDES) regulations. During construction, silt fencing should be placed around the project boundary to prevent runoff from construction activities from entering the adjacent canyon and drainage. Spill prevention and clean-up measures shall be practiced on site. Fuel and equipment shall be stored at least 100 feet from jurisdictional resources.

Prior to construction mobilization, the project contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP, in accordance with the state's General Construction Stormwater Permit – 99-08-DWQ) and implement the plan during construction. Specific measures to be incorporated into the SWPPP include but are not limited to the following:

a. All equipment will be maintained in accordance with manufacturer's recommendations and requirements.
b. Equipment and containers will be inspected daily for leaks.
c. Contractor will utilize off-site maintenance and repair shops as much as possible for maintenance and repair of equipment.
d. If maintenance of equipment occurs on site, within all areas, fuel/oil pans, absorbent pads, or appropriate containment will be used to capture spills/leaks.

This measure is in accordance with the City's Subarea Plan and pursuant to the San Diego RWQCB Municipal Permit and the City's Stormwater Standards Manual (City of San Diego 2018b).

6.2 Mitigation Measures for Direct Impacts

The proposed project would not result in direct impacts to sensitive vegetation communities or special-status species within the proposed project footprint; therefore, no mitigation for direct impacts is required.

6.3 Mitigation Measures for Indirect Impacts

To offset potential indirect impacts to sensitive resources, the following mitigation measures would be implemented.

6.3.1 Sensitive Vegetation Communities

No project impacts to sensitive vegetation communities are anticipated. No mitigation is required.

6.3.2 Jurisdictional Aquatic Resources

No project impacts to jurisdictional aquatic resources are anticipated. No mitigation is required.

6.3.3 Special-Status Plants

No project impacts to special status plant species are anticipated. No mitigation is required.

6.3.4 Special-Status Wildlife

Proposed project implementation has the potential to indirectly impact special-status birds including California horned lark, yellow warbler, least Bell's vireo, and white-tailed kite potentially nesting adjacent to the project footprint.

Special-Status Avian Species

To avoid any indirect impacts to California horned lark, yellow warbler, and white-tailed kite, construction within 300 feet of suitable habitat, including brush management activities, shall occur outside of the breeding season for these species (February 1 to September 15). If construction/brush management must occur during the breeding season, a qualified biologist shall conduct a pre-construction survey within suitable habitat to determine the presence or absence of nesting birds within any portion of the potentially occupied habitat within 300 feet of the project footprint. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities. The applicant shall submit the results of the preconstruction survey to the City's DSD for review and approval prior to initiating any construction activities.

If California horned lark, yellow warbler, or white-tailed kite are detected, a letter report or mitigation plan in conformance with the City's Biology Guidelines and applicable state and federal law (i.e., appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that the disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City DSD for review and approval and implemented to the satisfaction of the City. The biologist, in concert with the City, shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

If California horned lark, yellow warbler or white-tailed kite nesting is detected, then an appropriate impact avoidance area (typically a 300-foot buffer) shall be included in the mitigation plan and this buffer shall be established around the active nest using orange fencing or other clear demarcation method. The radius of this avoidance buffer shall be determined through coordination with the project biologist and authorized by the City's project manager and DSD and shall use orange fencing or other clear demarcation method to define the approved buffer.

Least Bell's Vireo

Construction within 300 feet of any sensitive coastal or riparian areas with suitable habitat may have adverse direct and indirect impacts on least Bell's vireo if construction occurs during the breeding season (March 15 through September 15) for this species. Given the federal protection of least Bell's vireo, specific mitigation will be required to prevent take of this species as outlined below:

Prior to the preconstruction meeting, the Environmental Designee (ED)/MMC shall verify that MHPA boundaries and the requirements regarding the least Bell's vireo, as specified below, are shown on the biological monitoring exhibit and construction plans.

No clearing, grubbing, grading, or other construction activities shall occur during least Bell's vireo breeding season (March 15 through September 15) until the following requirements have been met to the satisfaction of the ED/MMC:

1. A Qualified Biologist (possessing a valid Endangered Species Act Section 10[a][1][a] Recovery Permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 decibels [dB(A)] hourly average for the presence of the least Bell's vireo. Surveys for least Bell's vireo, shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If least Bell's vireo are present, then the following conditions must be met:
    a. March 15 through September 15 for least Bell's vireo, no clearing, grubbing, or grading of occupied habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; and
    b. March 15 through September 15 for least Bell's vireo no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB(A) hourly average at the edge of occupied habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(A) hourly average at the edge of occupied habitat must be completed by a Qualified Acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the ED/MMC at least 2 weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a Qualified Biologist; or

        At least 2 weeks prior to the commencement of construction activities, under the direction of a Qualified Acoustician, attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities would not exceed 60 dB(A) hourly average at the edge of habitat occupied by the least Bell's vireo. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that levels do not exceed 60 dB(A) hourly average. If the noise attenuation techniques implemented are determined to be inadequate by the Qualified Acoustician or Biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (September 16). Construction noise monitoring shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the ED/MMC, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

2. If least Bell's vireo are not detected during the protocol surveys, the Qualified Biologist shall submit substantial evidence to the ED/MMC and applicable resource agencies that demonstrates whether or not mitigation measures such as noise walls are necessary from March 15 through September 15 for least Bell's vireo, adherence to the following is required:
   a. If this evidence indicates that the potential is high for least Bell's vireo to be present based on historical records or site conditions, then Condition 1(a) shall be adhered to as specified above.
   b. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

7 Acknowledgements

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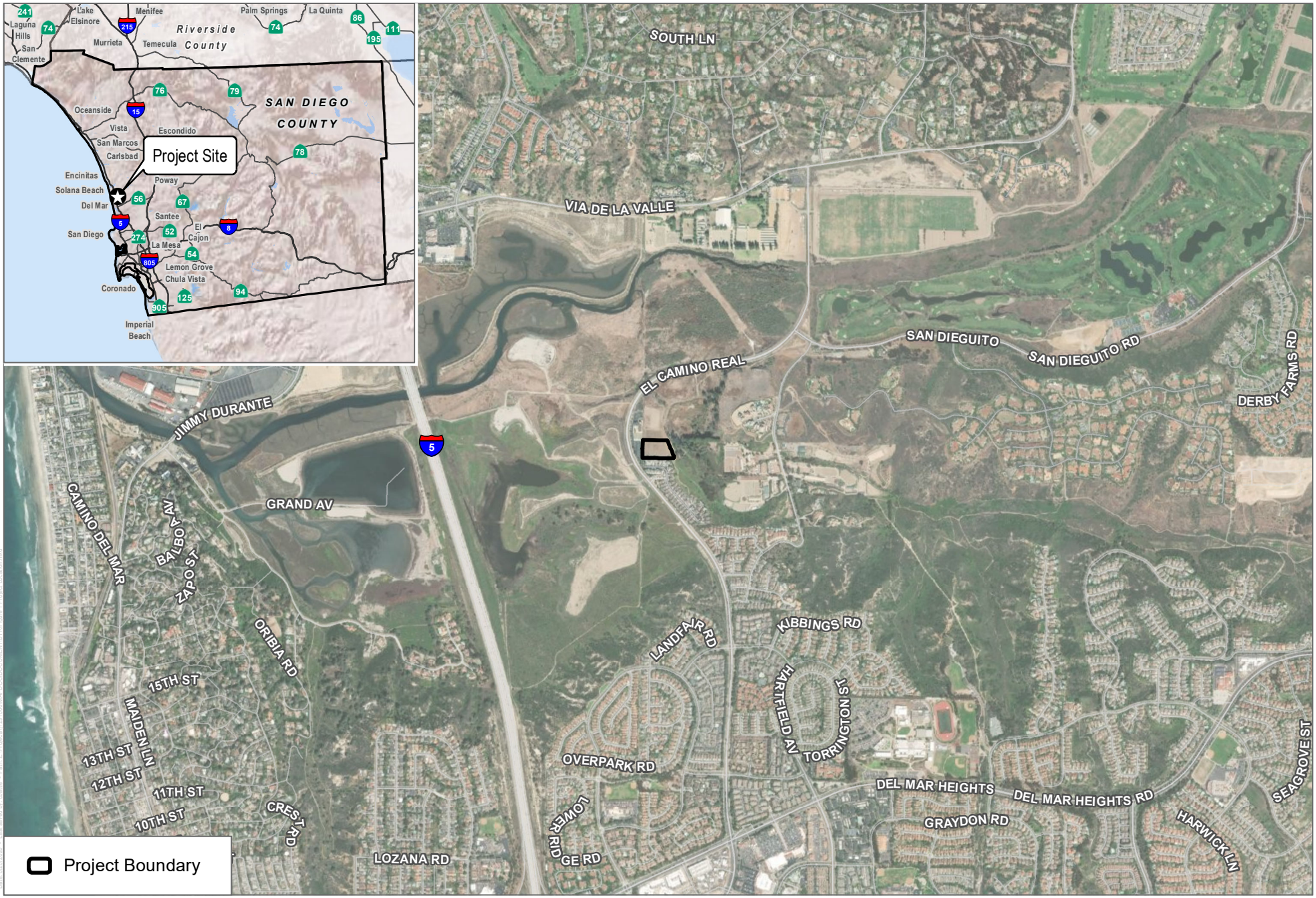

SOURCE: DigitalGlobe 2017

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

El Camino Real Assisted Living BTR

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SOURCE: SANGIS 2017

DUDEK

0 50 100 Feet

FIGURE 2

Biological Resources

El Camino Real Assisted Living BTR

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SOURCE: SANGIS 2017

DUDEK

0 55 110 Feet

FIGURE 3

Potential Jurisdictional Resources

El Camino Real Assisted Living BTR

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Appendix A

Plant Compendium

Conifers

PINACEAE – PINE FAMILY

Pinus torreyana ssp. *torreyana* – Torrey pine

Angiosperms: Eudicots

ADOXACEAE – ADOXA FAMILY

Sambucus nigra ssp. *caerulea* – blue elderberry

AIZOACEAE – FIG-MARIGOLD FAMILY

* *Carpobrotus edulis* – hottentot-fig

* *Mesembryanthemum crystallinum* – crystalline iceplant

AMARANTHACEAE – AMARANTH FAMILY

Rhus integrifolia – lemonadeberry

Toxicodendron diversilobum – western poison-oak

* *Schinus molle* – Peruvian pepper tree

APIACEAE – CARROT FAMILY

* *Foeniculum vulgare* – sweet fennel*

ASTERACEAE – SUNFLOWER FAMILY

Ambrosia psilostachya – western ragweed

Artemisia californica – coastal sagebrush

Baccharis salicifolia ssp. *salicifolia* – mule-fat, seep-willow

Baccharis sarothroides – broom baccharis

Deinandra fasciculata – fascicled tarweed

Encelia californica – California encelia

Erigeron canadensis – horseweed

Isocoma menziesii var. *menziesii* – spreading goldenbush

Xanthium strumarium – cocklebur

* *Centaurea melitensis* – tocalote

* *Cynara cardunculus* ssp. *cardunculus* – artichoke

* *Glebionis coronaria* – garland/crown daisy

* *Helminthotheca echioides* – bristly ox-tongue

* *Lactuca serriola* – prickly lettuce

* *Sonchus asper* ssp. *asper* – prickly sow-thistle

Baccharis pilularis – chaparral broom, coyote brush

BORAGINACEAE – BORAGE FAMILY

Heliotropium curassavicum var. *oculatum* – salt heliotrope

BRASSICACEAE – MUSTARD FAMILY

* *Brassica nigra* – black mustard

* *Hirschfeldia incana* – short-pod mustard

* *Lepidium latifolium* – broad-leaf peppergrass

* *Raphanus raphanistrum* – jointed charlock

CHENOPODIACEAE – GOOSEFOOT FAMILY

Atriplex lentiformis – big saltbush

Atriplex prostrata – prostrate spearscale

Salicornia pacifica – Pacific pickleweed

* *Chenopodium album* – lamb's quarters

* *Salsola tragus* – prickly russian-thistle, tumbleweed

EUPHORBIACEAE – SPURGE FAMILY

Euphorbia albomarginata – white-margin sandmat

* *Ricinus communis* – castor bean

GERANIACEAE – GERANIUM FAMILY

* *Erodium cicutarium* – red-stem filaree/storksbill

LAMIACEAE – MINT FAMILY

Salvia mellifera – black sage

* *Marrubium vulgare* – horehound

MALVACEAE – MALLOW FAMILY

Malvella leprosa – alkali mallow

MYRTACEAE – MYRTLE FAMILY

* *Eucalyptus camaldulensis* – river red gum

OLEACEAE – OLIVE FAMILY

* *Olea europaea* – olive

PLATANACEAE – PLANE TREE OR SYCAMORE FAMILY

Platanus racemosa – western sycamore

PLUMBAGINACEAE – LEADWORT FAMILY

* *Limonium perezii* – Perez's marsh-rosemary

POLYGONACEAE – BUCKWHEAT FAMILY

* *Rumex crispus* – curly dock

SALICACEAE – WILLOW FAMILY

Salix lasiolepis – arroyo willow

SOLANACEAE – NIGHTSHADE FAMILY

Datura wrightii – western jimson weed
* *Nicotiana glauca* – tree tobacco
* *Solanum elaeagnifolium* – white/silver-leaf horsenettle
* *Solanum nigrum* – black nightshade

TAMARICACEAE – TAMARISK FAMILY

* *Tamarix ramosissima* – saltcedar

Angiosperms: Monocots

ARECACEAE – PALM FAMILY

* *Phoenix canariensis* – Canary Island date palm
* *Washingtonia robusta* – Mexican fan palm

CYPERACEAE – SEDGE FAMILY

Bolboschoenus maritimus ssp. *paludosus* – prairie bulrush
Cyperus eragrostis – tall flatsedge
Schoenoplectus californicus – California bulrush

POACEAE – GRASS FAMILY

Distichlis spicata – salt grass
* *Arundo donax* – giant reed
* *Avena barbata* – slender wild oat
* *Bromus diandrus* – ripgut grass
* *Bromus hordeaceus* – soft chess
* *Polypogon monspeliensis* – annual beard grass
* *Hordeum murinum* – barley

* signifies introduced (non-native) species

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Appendix B

Wildlife Compendium

Birds

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Spinus psaltria – lesser goldfinch

Hummingbirds

TROCHILIDAE – HUMMINGBIRDS

Calypte anna – Anna's hummingbird

Old World Warblers and Gnatcatchers

POLIOPTILIDAE – GNATCATCHERS

Polioptila californica californica – coastal California gnatcatcher

Wood Warblers and Allies

PARULIDAE – WOOD-WARBLERS

Setophaga petechia – yellow warbler

Wrens

TROGLODYTIDAE – WRENS

Troglodytes aedon – house wren

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

Melospiza melodia – song sparrow

Melozone crissalis – California towhee

Typical Warblers, Parrotbills, Wrentit

SYLVIIDAE – SYLVIID WARBLERS

Chamaea fasciata – wrentit

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Appendix C

Special-Status Plant Species Potentially Occurring within the Biological Study Area

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia maritima	red sand-verbena	None/None/4.2/ None	Coastal dunes/perennial herb/Feb–Nov/0–330	Not expected to occur. No suitable coastal dune habitat present.
Acanthominth a ilicifolia	San Diego thorn-mint	FT/SE/1B.1/ Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay, openings/annual herb/Apr–June/30–3,145	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. The only recorded occurrences near the study area are over 3 miles away.
Acmispon prostratus	Nuttall's acmispon	None/None/1B.1/ Covered	Coastal dunes, Coastal scrub (sandy)/annual herb/ Mar–June(July)/0–35	Low potential to occur. No suitable coastal dune habitat is present and coastal sage scrub in the study area is limited in size and quality.
Adolphia californica	California adolphia	None/None/2B.1/ None	Chaparral, Coastal scrub, Valley and foothill grassland; Clay/perennial deciduous shrub/Dec–May/30–2,425	Not expected to occur. Coastal sage scrub in the study area is limited in size and quality. This perennial species would have been observed during reconnaissance surveys if present.
Agave shawii var. *shawii*	Shaw's agave	None/None/2B.1/ None	Coastal bluff scrub, Coastal scrub; Maritime succulent scrub/perennial leaf succulent/Sep–May/5–395	Not expected to occur. Coastal sage scrub in the study area is limited in size and quality. This perennial species would have been observed during reconnaissance surveys if present.
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2/ None	Chaparral, Sonoran desert scrub; sandy/perennial shrub/ Aug–Nov/30–1,640	Not expected to occur. No suitable chaparral or Sonoran desert scrub present.
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1/ Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; sandy loam or clay, often in disturbed areas, sometimes alkaline/perennial rhizomatous herb/Apr–Oct/65–1,360	Low potential to occur. Suitable disturbed alkaline wetland habitat occurs within the study area and could support this species but it was not observed during reconnaissance surveys. No known occurrences have been recorded within 4 miles of the study area.
Aphanisma blitoides	aphanisma	None/None/1B.2/ None	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy or gravelly/annual herb/Feb–June/0–1,000	Low potential to occur. No suitable coastal dune habitat is present and coastal sage scrub in the study area is limited in size and quality.
Arctostaphylos glandulosa	Del Mar manzanita	FE/None/1B.1/ Covered	Chaparral (maritime, sandy) /perennial evergreen shrub/Dec–June/0–1,195	Not expected to occur. No suitable chaparral present.

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
ssp. *crassifolia*				
Artemisia palmeri	San Diego sagewort	None/None/4.2/ None	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland; sandy, mesic/perennial deciduous shrub/(Feb)May–Sep/45–3,000	Low potential to occur. Suitable riparian habitats occur within the study area and could support this species but this perennial shrub was not observed during reconnaissance surveys.
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 site is outside of the species' known elevation range.
Astragalus tener var. *titi*	coastal dunes milk-vetch	FE/SE/1B.1/None	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie (mesic); often vernally mesic areas/annual herb/Mar–May/ 0–165	Not expected to occur. No suitable coastal bluff or dune habitat present.
Atriplex coulteri	Coulter's saltbush	None/None/1B.2/ None	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; alkaline or clay/perennial herb/Mar–Oct/ 5–1,505	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. This species is known to occur just over 3 miles to the north but was not observed during reconnaissance surveys.
Atriplex pacifica	South Coast saltscale	None/None/1B.2/ None	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/ 0–460	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. There is a recorded occurrence of this species one mile to the north of the study area.
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. No suitable chenopod scrub, playa, or vernal pool habitat present.
Bergerocactus emoryi	golden-spined cereus	None/None/2B.2/ None	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy/perennial stem succulent/May–June/5–1,295	Not expected to occur. No suitable Torrey pine forest or maritime chaparral habitat present. Coastal sage scrub in the study area is limited in size and quality.

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1/ None	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; clay/perennial bulbiferous herb/Apr–May/160–1,525	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. The only recorded occurrences near the study area are over 3 miles away.
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1/ Covered	Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; often clay/perennial bulbiferous herb/Mar–June/80–3,670	Low potential to occur. This species is known only from occurrences well over 5 miles from the study area.
Brodiaea orcuttii	Orcutt's brodiaea	None/None/1B.1/ None	Closed-cone coniferous forest, Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools; mesic, clay/perennial bulbiferous herb/May–July/95–5,550	Low potential to occur. Riparian woodland and wetland habitat present within the study area is moderately disturbed. The only recorded occurrences near the study area are over 3 miles away.
Calandria breweri	Brewer's calandrinia	None/None/4.2/ None	Chaparral, Coastal scrub; sandy or loamy, disturbed sites and burns/annual herb/(Jan)Mar–June/30–4,000	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences have been recorded within 5 miles of the study area.
Calochortus dunnii	Dunn's mariposa lily	None/SR/1B.2/ None	Closed-cone coniferous forest, Chaparral, Valley and foothill grassland; gabbroic or metavolcanic, rocky/perennial bulbiferous herb/(Feb) Apr–June/ 605–6,000	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat present.
Camissoniopsis lewisii	Lewis' evening-primrose	None/None/3/ None	Coastal bluff scrub, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland; sandy or clay/annual herb/Mar–May(June)/0–985	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. One occurrence has been recorded within 2 miles of the study area.

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
Ceanothus cyaneus	Lakeside ceanothus	None/None/1B.2/ None	Closed-cone coniferous forest, Chaparral/perennial evergreen shrub/Apr–June/770–2,475	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat present.
Ceanothus otayensis	Otay Mountain ceanothus	None/None/1B.2/ None	Chaparral (metavolcanic or gabbroic)/perennial evergreen shrub/Jan–Apr/1,965–3,605	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat present.
Ceanothus verrucosus	wart-stemmed ceanothus	None/None/2B.2/ Covered	Chaparral/perennial evergreen shrub/Dec–May/0–1,245	Not expected to occur. No suitable chaparral present.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1B.1/ None	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/annual herb/May–Nov/ 0–1,570	Low potential to occur. Suitable marsh habitat exists within the study area but this species was not observed during reconnaissance surveys. Several occurrences of this species have been recorded within one mile of the study area.
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	Low potential to occur. Suitable alkali marsh habitat exists within the study area but this species was not observed during reconnaissance surveys. No known occurrences of this species have been recorded within 5 miles of the study area.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	None/None/1B.1/ None	Coastal bluff scrub (sandy), Coastal dunes/annual herb/ Jan–Aug/0–330	Not expected to occur. No suitable bluff or dune habitat present.
Chamaebatia australis	southern mountain misery	None/None/4.2/ None	Chaparral (gabbroic or metavolcanic)/perennial evergreen shrub/Nov–May/ 980–3,345	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/SE/1B.2/None	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/ May–Oct(Nov)/0–100	Not expected to occur. No suitable coastal salt marsh or dune habitat present. No known occurrences of this species have been recorded within 5 miles of the study area.
Chorizanthe orcuttiana	Orcutt's spineflower	FE/SE/1B.1/ Covered	Closed-cone coniferous forest, Chaparral (maritime), Coastal	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. Several occurrences of this species exist within 2 miles of

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
			scrub; sandy openings/ annual herb/Mar–May/5–410	the study area in higher quality maritime chaparral and coastal sage scrub.
Clarkia delicata	delicate clarkia	None/None/1B.2/ None	Chaparral, Cismontane woodland; often gabbroic/annual herb/ Apr–June/770–3,280	Not expected to occur. The site is outside of the species' known elevation range.
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	None/None/1B.2/ Covered	Chaparral, Cismontane woodland/perennial evergreen shrub/Apr–June/95–2,590	Low potential to occur. Woodland within the study area is disturbed and this perennial shrub was not observed during reconnaissance surveys.
Convolvulus simulans	small-flowered morning-glory	None/None/4.2/ None	Chaparral (openings), Coastal scrub, Valley and foothill grassland; clay, serpentinite seeps/annual herb/ Mar–July/95–2,425	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 5 miles of the study area.
Corethrogyne filaginifolia var. *incana*	San Diego sand aster	None/None/1B.1/ None	Coastal bluff scrub, Chaparral, Coastal scrub/perennial herb/June–Sep/5–375	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. This species was not observed during reconnaissance surveys.
Corethrogyne filaginifolia var. *linifolia*	Del Mar Mesa sand aster	None/None/1B.1/ Covered	Coastal bluff scrub, Chaparral (maritime, openings), Coastal scrub; sandy/perennial herb/May,July,Aug,Sep/45–490	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. This species was not observed during reconnaissance surveys.
Cryptantha wigginsii	Wiggins' cryptantha	None/None/1B.2/ None	Coastal scrub; often clay/annual herb/Feb–June/65–900	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 5 miles of the study area.
Cylindropuntia californica var. *californica*	snake cholla	None/None/1B.1/ None	Chaparral, Coastal scrub/perennial stem succulent/Apr–May/95–490	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. This perennial species was not observed during reconnaissance surveys.
Dichondra occidentalis	western dichondra	None/None/4.2/ None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/perennial rhizomatous herb/(Jan)Mar–July/160–1,640	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality and most woodland is disturbed and dominated by non-native

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
				species. Several occurrences of the species have been recorded within 3 miles of the study area.
Diplacus aridus	low bush monkeyflower	None/None/4.3/ None	Chaparral (rocky), Sonoran desert scrub/perennial evergreen shrub/Apr–July/2,460–3,935	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable habitat present.
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's dudleya	None/None/1B.1/ Covered	Coastal bluff scrub, Chaparral, Coastal scrub, Valley and foothill grassland; rocky, often clay or serpentinite/perennial herb/ Apr–June/15–1,475	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 5 miles of the study area.
Dudleya brevifolia	short-leaved dudleya	None/SE/1B.1/ Covered	Chaparral (maritime, openings), Coastal scrub; Torrey sandstone/perennial herb/Apr–May/95–820	Low potential to occur. Torrey sandstone soils are not present within the study area and coastal sage scrub in the study area is limited in size and quality.
Dudleya variegata	variegated dudleya	None/None/1B.2/ None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; clay/perennial herb/Apr–June/ 5–1,900	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 4 miles of the study area.
Dudleya viscida	sticky dudleya	None/None/1B.2/ Covered	Coastal bluff scrub, Chaparral, Cismontane woodland, Coastal scrub; rocky/perennial herb/May–June/30–1,800	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality and most woodland is disturbed and dominated by non-native species. No known occurrences of this species have been recorded within 4 miles of the study area.
Eriodictyon sessilifolium	sessile-leaved yerba stanta	None/None/2B.1/ None	Coastal scrub; volcanic/perennial shrub/July/555–560	Not expected to occur. The site is outside of the species' known elevation range.
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	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 4 miles of the study area.
Erysimum ammophilum	sand-loving wallflower	None/None/1B.2/ None	Chaparral (maritime), Coastal dunes, Coastal scrub; sandy,	Moderate potential to occur. Coastal sage scrub in the study area is limited in size and quality. Several

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
			openings/perennial herb/ Feb–June/0–195	occurrences of the species have been recorded within one mile of the study area.
Erythranthe diffusa	Palomar monkeyflower	None/None/4.3/ None	Chaparral, Lower montane coniferous forest; sandy or gravelly/annual herb/Apr–June/4,000–6,000	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Euphorbia misera	cliff spurge	None/None/2B.2/ Covered	Coastal bluff scrub, Coastal scrub, Mojavean desert scrub; rocky/perennial shrub/ Dec–Aug(Oct)/30–1,640	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. Several occurrences of the species have been recorded within 3 miles of the study area. This perennial species was not observed during reconnaissance surveys.
Ferocactus viridescens	San Diego barrel cactus	None/None/2B.1/ Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/perennial stem succulent/May–June/5–1,475	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. The sole occurrence of the species recorded within 3 miles of the study area was recorded in 1962. This perennial species was not observed during reconnaissance surveys.
Geothallus tuberosus	Campbell's liverwort	None/None/1B.1/ None	Coastal scrub (mesic), Vernal pools; soil/ephemeral liverwort/N.A./30–1,965	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 4 miles of the study area.
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	None/None/3.1/ None	Chaparral (mesic, disturbed areas)/annual herb/ Apr–June/1,475–2,295	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Harpagonella palmeri	Palmer's grapplinghook	None/None/4.2/ None	Chaparral, Coastal scrub, Valley and foothill grassland; Clay; open grassy areas within shrubland/annual herb/ Mar–May/65–3,130	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality and does not offer open grassy areas. One occurrence of this species was recorded within 3 miles of the study area.
Hazardia orcuttii	Orcutt's hazardia	None/ST/1B.1/ Covered	Chaparral (maritime), Coastal scrub; often clay/perennial evergreen shrub/Aug–Oct/ 260–280	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 4 miles of the study area. This perennial species was not observed during reconnaissance surveys.

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
Heterotheca sessiliflora ssp. *sessiliflora*	beach goldenaster	None/None/1B.1/ None	Chaparral (coastal), Coastal dunes, Coastal scrub/perennial herb/Mar–Dec/0–4,015	Moderate potential to occur. Coastal sage scrub in the study area is limited in size and quality. Several occurrences of the species have been recorded within one mile of the study area. This perennial species was not observed during reconnaissance surveys but it is a relatively small plant that could blend in with surrounding vegetation.
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	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 4 miles of the study area.
Hordeum intercedens	vernal barley	None/None/3.2/ None	Coastal dunes, Coastal scrub, Valley and foothill grassland (saline flats and depressions), Vernal pools/annual herb/ Mar–June/15–3,280	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. The sole occurrence of the species recorded within 3 miles of the study area was recorded in 1888.
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 site is outside of the species' known elevation range.
Iva hayesiana	San Diego marsh-elder	None/None/2B.2/ Covered	Marshes and swamps, Playas/perennial herb/Apr–Oct/ 30–1,640	Low potential to occur. Some suitable alkali marsh habitat present. No known occurrences of this species have been recorded within 3 miles of the study area. This perennial species was not observed during reconnaissance surveys.
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	None/None/4.2/ None	Coastal dunes (mesic), Meadows and seeps (alkaline seeps), Marshes and swamps (coastal salt)/perennial rhizomatous herb/(Mar)May–June/5–2,950	Not expected to occur. Suitable alkali marsh habitat exists within the study area but no known occurrences of this species have been recorded within 3 miles of the study area. This obvious perennial shrub was not observed during surveys.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1/ None	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/0–4,000	Moderate potential to occur. Some suitable alkali marsh habitat present. An occurrence of the species has been recorded within 3 miles of the study area, in 1999.

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
Lepechinia cardiophylla	heart-leaved pitcher sage	None/None/1B.2/ None	Closed-cone coniferous forest, Chaparral, Cismontane woodland/perennial shrub/Apr–July/1,705–4,490	Not expected to occur. The site is outside of the species' known elevation range.
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3/ None	Chaparral, Coastal scrub/annual herb/Jan–July/0–2,900	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. Two occurrences have been recorded within 3 miles of the study area.
Microseris douglasii ssp. *platycarpha*	small-flowered microseris	None/None/4.2/ None	Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; clay/annual herb/Mar–May/ 45–3,510	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality and most woodland is dominated by non-native species. No known occurrences of this species have been recorded within 3 miles of the study area.
Mobergia calculiformis	light gray lichen	None/None/3/ None	Coastal scrub (?); On rocks/crustose lichen (saxicolous)/N.A./30–35	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 5 miles of the study area.
Monardella hypoleuca ssp. *lanata*	felt-leaved monardella	None/None/1B.2/ None	Chaparral, Cismontane woodland/perennial rhizomatous herb/June–Aug/980–5,165	Not expected to occur. The site is outside of the species' known elevation range.
Monardella viminea	willowy monardella	FE/SE/1B.1/None	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland; alluvial ephemeral washes/perennial herb/June–Aug/160–740	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality and most riparian habitat is dominated by non-native species. No known occurrences of this species have been recorded within 5 miles of the study area.
Myosurus minimus ssp. *apus*	little mousetail	None/None/3.1/ Covered	Valley and foothill grassland, Vernal pools (alkaline)/annual herb/Mar–June/65–2,095	Low potential to occur. Some suitable alkali wetland present but no known occurrences of this species have been recorded within 5 miles of the study area. The only known records of this species are from Otay Mesa area well south of the project site (SDNHM 2012).
Navarretia fossalis	spreading navarretia	FT/None/1B.1/ Covered	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal	Low potential to occur. Some suitable alkali marsh habitat present but only one known occurrence of

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
			pools/annual herb/Apr–June/ 95–2,145	this species has been recorded approximately 5 miles from the study area.
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1B.2/ None	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/ 5–3,965	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 5 miles of the study area.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1/ Covered	Vernal pools/annual herb/ Apr–Aug/45–2,165	Not expected to occur. No vernal pools present.
Orobanche parishii ssp. *brachyloba*	short-lobed broomrape	None/None/4.2/ None	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy/perennial herb (parasitic)/Apr–Oct/5–1,000	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 3 miles of the study area.
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	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality and most woodland is dominated by non-native species. No known occurrences of this species have been recorded within 5 miles of the study area.
Phacelia stellaris	Brand's star phacelia	None/None/1B.1/ None	Coastal dunes, Coastal scrub/annual herb/Mar–June/ 0–1,310	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 3 miles of the study area.
Pinus torreyana ssp. torreyana	Torrey pine	None/None/1B.2/ Covered	Closed-cone coniferous forest, Chaparral; Sandstone/perennial evergreen tree/N.A./95–525	Not expected to occur naturally. No suitable vegetation present. Several ornamental specimens of this species occur to the west of the project footprint.
Piperia cooperi	chaparral rein orchid	None/None/4.2/ None	Chaparral, Cismontane woodland, Valley and foothill grassland/perennial herb/ Mar–June/45–5,200	Low potential to occur. No suitable chaparral habitat present. Woodland habitat is dominated by non-native species. Several occurrences of this species have been recorded within 5 miles of the study area. This perennial species was not observed during reconnaissance surveys.

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
Pogogyne abramsii	San Diego mesa mint	FE/SE/1B.1/None	Vernal pools/annual herb/ Mar–July/295–655	Not expected to occur. No suitable vegetation present.
Pogogyne nudiuscula	Otay Mesa mint	FE/SE/1B.1/None	Vernal pools/annual herb/ May–July/295–820	Not expected to occur. No suitable vegetation present.
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1/ Covered	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam/perennial evergreen shrub/Feb–Apr(May–Aug)/ 45–1,310	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No suitable maritime chaparral habitat present. Several occurrences of this species have been recorded within 5 miles of the study area. This perennial species was not observed during reconnaissance surveys.
Quercus engelmannii	Engelmann oak	None/None/4.2/ Covered	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland/perennial deciduous tree/Mar–June/ 160–4,265	Not expected to occur. Woodland habitat is generally dominated by non-native species. No known occurrences of this species have been recorded within 5 miles of the study area. This large perennial species was not observed during reconnaissance surveys.
Selaginella cinerascens	ashy spike-moss	None/None/4.1/ None	Chaparral, Coastal scrub/perennial rhizomatous herb/N.A./65–2,095	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. Several occurrences of this species have been recorded within 5 miles of the study area. This perennial species was not observed during reconnaissance surveys.
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2/ None	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/45–5,015	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 5 miles of the study area. This perennial species was not observed during reconnaissance surveys.
Sphaerocarpos drewei	bottle liverwort	None/None/1B.1/ None	Chaparral, Coastal scrub; openings, soil/ephemeral liverwort/N.A./295–1,965	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No known occurrences of this species have been recorded within 3 miles of the study area.
Stylocline citroleum	oil neststraw	None/None/1B.1/ None	Chenopod scrub, Coastal scrub, Valley and foothill grassland;	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. No suitable chenopod scrub habitat present. No known

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
			clay/annual herb/Mar–Apr/ 160–1,310	occurrences of this species have been recorded within 3 miles of the study area.
Suaeda taxifolia	woolly seablite	None/None/4.2/ None	Coastal bluff scrub, Coastal dunes, Marshes and swamps (margins of coastal salt)/perennial evergreen shrub/Jan–Dec/0–165	Low potential to occur. Suitable alkali marsh habitat exists within the study area. Several occurrences of this species have been recorded in San Dieguito Lagoon, within one mile of the study area. This perennial species was not observed during reconnaissance surveys.
Texosporium sancti-jacobi	woven-spored lichen	None/None/3/ None	Chaparral (openings); On soil, small mammal pellets, dead twigs, and on Selaginella spp/crustose lichen (terricolous)/ N.A./195–2,165	Not expected to occur. No suitable vegetation present.
Bahiopsis (Viguiera) laciniata	San Diego County viguiera	None/None/4.3/ None	Chaparral, Coastal scrub/perennial shrub/Feb–June (Aug)/195–2,460	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. One occurrence of this species has been recorded in San Dieguito Lagoon, within one mile of the study area. This perennial species was not observed during reconnaissance surveys.

Scientific Name	Common Name	Status (Federal/State/CRPR/MSCP)	Primary Habitat Associations/ Life Form/Blooming Period/ Elevation Range (feet)	Potential to Occur
Xanthisma junceum	rush-like bristleweed	None/None/4.3/ None	Chaparral, Coastal scrub/perennial herb/May–Jan/ 785–3,280	Not expected to occur. The site is outside of the species' known elevation range.

Status Legend

Federal

FE: Federally listed as endangered
FT: Federally listed as threatened
FC: Federal candidate for listing as threatened or endangered

State

SE: State listed as endangered
ST: State listed as threatened
SR: State listed as rare

CRPR (California Rare Plant Rank)

CRPR 1A: Plants presumed extinct in California and either rare or extinct elsewhere
CRPR List 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR List 2A: Plants rare, threatened, or endangered in California but common elsewhere
CRPR List 2B: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3: Review List: Plants about which more information is needed
CRPR 4: Watch List: Plants of limited distribution
.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 Not very threatened in California (<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 Potentially Occurring within the Biological Study Area

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
Amphibians				
Spea hammondii	western spadefoot	None/SSC/Covered	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	Moderate potential to occur if the wetland habitat within the study area is inundated long enough to support this species during the wet season. No recent occurrences, however a dated 1967 CNDDB occurrence of this species was recorded within one mile of the study area.
Reptiles				
Actinemys marmorata	northwestern pond turtle	None/SSC/Covered	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. No permanent water bodies are present within the study area. No known occurrences of this species have been recorded within five miles of the study area.
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	Moderate potential to occur. Riparian scrub/woodland is present but limited in size and includes many non-native species. Several occurrences of this species have been recorded within five miles of the study area.
Arizona elegans occidentalis	California glossy snake	None/SSC/None	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas	Low potential to occur. Vegetation and habitat consist primarily of non-native vegetation and is disturbed. Several occurrences of this species have been recorded within ten miles of the study area.
Aspidoscelis hyperythra beldingi	orange-throated whiptail	None/WL/Covered	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood.	Moderate potential to occur. Coastal sage scrub in the study area is limited in size and quality but several occurrences of this species have been recorded within one mile of the study area.

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
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. Woodland and riparian habitats are densely vegetated. Several occurrences of this species have been recorded within ten miles of the study area.
Crotalus ruber	red diamondback rattlesnake	None/SSC/None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Moderate potential to occur. Coastal sage scrub and non-native grasslands in the study area is limited in size and quality. Several occurrences of this species have been recorded within ten miles of the study area.
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	Low potential to occur. Coastal sage scrub and riparian habitat in the study area is limited in size and quality. Several occurrences of this species have been recorded within ten miles of the study area.
Plestiodon skiltonianus interparietalis	Coronado skink	None/WL/None	Woodlands, grasslands, pine forests, and chaparral; rocky areas near water	Low potential to occur. Woodland habitat is dominated by non-native species. Three occurrences of this species have been recorded within ten miles of the study area.
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. No suitable vegetation present.
Thamnophis hammondii	two-striped gartersnake	None/SSC/None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. Streams and creeks do not occur within the study area. No known occurrences of this species have been recorded within five miles of the study area.
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	Moderate potential to nest. Eucalyptus woodland habitat within the study area could serve as nesting habitat for this urban bird species. One occurrence of this species has been recorded within 10 miles of the study area.
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST/None	Nests near freshwater, emergent wetland with cattails or tules, but also	Not expected to nest. No suitable vegetation for nesting is present. Two occurrence of this

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
			in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	species have been recorded within 10 miles of the study area.
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	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality, and not likely to support nesting. Several occurrences of the species have been recorded within ten miles of the study area.
Artemisiospiza belli belli	Bell's sage sparrow	BCC/WL/Covered	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	Low potential to nest. Coastal sage scrub in the study area is limited in size and quality, and not likely to support nesting. One occurrence of this species has been recorded within one mile of the study area.
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC/Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur. Disturbed lands within the study area previously supported agriculture but no suitable burrows were observed during surveys and no recent occurrences are recorded within 5 miles of the study area.
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST/None	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. Species does not nest in Southern California. No suitable foraging habitat on site. No known occurrences of this species have been recorded within ten miles of the study area.
Campylorhynchus brunneicapillus sandiegensis (San Diego & Orange Counties only)	coastal cactus wren	BCC/SSC/Covered	Southern cactus scrub patches	Not expected to occur. No suitable vegetation present.
Charadrius alexandrinus 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 or nest. No sandy or barren flats exist near open water within the study area.

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT, BCC/SE/None	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present.
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	Moderate potential to nest in eucalyptus woodland within study area. One occurrence of this species has been observed within five miles of the study area.
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 nest. Riparian habitat is of limited size and quality. No known occurrences of this species have been recorded within ten miles of the study area.
Eremophila alpestris actia	California horned lark	None/WL/None	This subspecies of horned lark occurs on the state's southern and central coastal slope and in the San Joaquin Valley. Nests and forages in grasslands, disturbed lands, agriculture, and beaches.	Moderate potential to nest/occur in disturbed habitat and non-native grasslands onsite. One occurrence of this species has been recorded within five miles of the study area.
Falco mexicanus (nesting)	prairie falcon	BCC/WL/None	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to nest. No suitable expansive open habitats present.
Icteria virens (nesting)	yellow-breasted chat	None/SSC/Covered	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Low potential to nest. Riparian habitat is of limited size and quality. No known occurrences of this species have been recorded within five miles of the study area.
Ixobrychus exilis (nesting)	least bittern	BCC/SSC/None	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Not expected to nest. Vegetation and habitat are limited in size and quality. No known occurrences of this species have been recorded within 10 miles of the study area.
Laterallus jamaicensis coturniculus	California black rail	BCC/FP, ST/None	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats	No potential to occur. This species has been documented as being extirpated from San Diego County.

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
			are often supplied by canal leakage in Sierra Nevada foothill populations	
Passerculus sandwichensis beldingi	Belding's savannah sparrow	None/SE/Covered	Nests and forages in coastal saltmarsh dominated by pickleweed (Salicornia spp.)	Low potential to occur. Alkaline marsh is limited in size and quality. Although some pickleweed present in the study area, this species requires thicker stands that are immediately adjacent to saltmarsh.
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 or nest. The site is outside of the species' known geographic range.
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	Occurs within study area outside of project footprint. This species was observed within the small patch of coastal sage scrub in the study area during reconnaissance surveys. Numerous CNDDB occurrences have been recorded within one mile of the study area.
Rallus obsoletus levipes	Ridgway's rail	FE/SE, FP/Covered	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Low potential to occur. Wetlands in the study are limited in size and quality and are not connected to the San Dieguito River or Lagoon. Two occurrences of this species have been recorded within one mile of the study area, in and around the San Dieguito Lagoon.
Setophaga petechia (nesting)	yellow warbler	BCC/SSC/None	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Occurs within study area outside of project footprint. This species was observed within the eucalyptus woodland and riparian habitat in the study area during reconnaissance surveys.
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE/Covered	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to nest. No suitable beach or tidal flats within the study area.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE/Covered	Nests and forages in low, dense riparian thickets along water or along	Moderate potential to nest. Riparian habitat within the study area is limited in size and

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
			dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	quality but could support this species. A known occurrence of this species has been recorded just west of the study area near the San Dieguito River.
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	Low potential to occur. Eucalyptus woodlands and non-native grassland habitat within the study area are limited in size and quality. No known occurrences of this species have been recorded within ten miles of the study area.
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	Low potential to occur in coastal sage scrub and disturbed habitat within the study area. No known occurrences of this species have been recorded within 5 miles of the study area.

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC/Covered	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland	Low potential to occur. Coastal sage scrub and grassland habitat within the study area are limited in size and quality. Two known occurrences of this species have been recorded within 10 miles of the study area.
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 occur. No suitable habitat for foraging, and no caves/mines for roosting present.
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	Low potential to forage on site. Not expected to roost on site. Eucalyptus woodlands and riparian habitat within the study area are limited in size and quality. No known occurrences of this species have been recorded within ten miles of the study area.
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	Not expected to occur. No suitable vegetation present.
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	Low potential to forage on site. Not expected to roost on site. Coastal sage scrub and eucalyptus woodland within the study area are limited in size and quality. Several known occurrences of this species have been recorded within five mile of the study area.
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. Eucalyptus woodland within the study area is limited in size and quality. One known occurrence of this species has been recorded within 10 miles of the study area.
Lasiurus xanthinus	western yellow bat	None/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 occur. No suitable desert riparian habitat present. No known occurrences of this species have been recorded within ten miles of the study area.

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/SSC/Covered	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Not expected to occur. No suitable vegetation present.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Low potential to occur. Coastal sage scrub in the study area is limited in size and quality. Several occurrences of this species have been recorded within five miles of the study area.
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 habitat (i.e., Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, palm oases) present. No rocky canyons/cliffs present for roosting present. One known occurrence of this species has been recorded within two miles of the study area.
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	Low potential to occur. Eucalyptus woodland within the study area is limited in size and quality. One known occurrence of this species has been recorded within five miles of the study area.
Perognathus longimembris pacificus	Pacific pocket mouse	FE/SSC/None	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium	Not expected to occur. No suitable vegetation present.
Taxidea taxus	American badger	None/SSC/None	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. Grasslands and disturbed habitats are limited in size and adjacent to highly developed areas. One known occurrence of this species within 10 miles of the study area.
Invertebrates				
Bombus crotchii	Crotch bumble bee	None/PSE/None	Open grassland and scrub communities supporting suitable floral resources.	Not expected to occur. Grassland and scrub within the study area is limited in size and quality and lacking native floral diversity.

Row Labels	Common Name	Status (Federal/State/ MSCP)	Habitat	Potential to Occur
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None/Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No suitable vernal pools or non-vegetated ephemeral pools present within the study area.
Euphydryas editha quino	quino checkerspot butterfly	FE/None/Covered	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex)	Not expected to occur. The site is outside of the species' known geographic range.
Lycaena hermes	Hermes copper	FC/None/None	Mixed woodlands, chaparral, and coastal scrub	Not expected to occur. The site is outside of the species' known geographic range and there is no suitable vegetation present.
Panoquina errans	wandering skipper	None/None/Covered	Saltmarsh	Low potential to occur. Alkaline marsh habitat within the study area is limited in size and quality. No known occurrences of this species have been recorded within 10 miles of the study area.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None/Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No suitable vernal pools or non-vegetated ephemeral pools present within the study area.

Status Legend

Federal

BCC:Bird of Conservation Concern
FC: Candidate for federal listing as threatened or endangered
FDL: Federally delisted; monitored for 5 years
FE: Federally listed endangered
FT: Federally listed as threatened

State

PSE: Proposed state listing as endangered
SDL: State delisted
SSC: Species of Special Concern
FP: California Department of Fish and Wildlife Protected and Fully Protected Species
SE: State listed as endangered
ST: State listed as threatened

References

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