

Proposed Sewer Group Job 806 Project

Biological Technical Report

September 2020 | SDD-31.05

Prepared for:

City of San Diego - Engineering and Capital Projects Department
525 B Street
San Diego, CA 92101

Attn: Mr. Santiago Crespo, P.E.
Project Manager

Prepared by:

Busby Biological Services, Inc.
4629 Cass Street #192
San Diego, CA 92109

This page intentionally left blank

Proposed Sewer Group Job 806 Project

Biological Technical Report

Prepared for:

City of San Diego – Engineering and Capital Projects Department
525 B Street
San Diego, CA 92101

Attn: Mr. Santiago Crespo, P.E.
Project Manager

Prepared by:

Busby Biological Services, Inc.
4629 Cass Street #192
San Diego, CA 92109

September 2020 | SDD-31.05

This page intentionally left blank

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
1.1 Project Description & Location	1
2.0 METHODS	3
2.1 Literature Review	3
2.2 Biological Reconnaissance Survey	3
2.3 Jurisdictional Wetland Delineation	3
2.4 Survey Limitations	4
2.5 Nomenclature	4
3.0 RESULTS	5
3.1 Regional Context	5
3.2 Surrounding Land Uses	5
3.3 Topography and Soils	5
3.4 Vegetation Communities and Land Cover Types	6
3.4.1 Diegan Coastal Sage Scrub (Tier II: Uncommon Uplands; Oberbauer Code 32510, Updated Holland Code 32500)	7
3.4.2 Disturbed Diegan Coastal Sage Scrub (Tier II: Uncommon Uplands; Oberbauer Code 32510, Updated Holland Code 32500)	8
3.4.3 Southern Mixed Chaparral – <i>Rhus integrifolia</i> Dominated (Tier IIIA: Common Uplands; Oberbauer Code 37120, Updated Holland Code 37120)	8
3.4.4 Southern Mixed Chaparral – <i>Ceanothus verrucosus</i> Dominated (Tier IIIA: Common Uplands; Oberbauer Code 37120, Updated Holland Code 37120)	9
3.4.5 Disturbed Southern Willow Scrub (Oberbauer Code 63320, Updated Holland Code 63320)	9
3.4.6 Disturbed Land (Tier IV: Other Uplands; Oberbauer Code 11300, No Holland Code)	10
3.4.7 Ornamental (Tier IV: Other Uplands; No Oberbauer Code, No Holland Code)	10
3.4.8 Bare Ground (No Tier; No Oberbauer Code, No Holland Code)	11
3.4.9 Developed Land (No Tier; Oberbauer Code 12000, No Holland Code)	11
3.5 Flora	11
3.6 Fauna	12

TABLE OF CONTENTS (cont.)

<u>Section</u>	<u>Page</u>
3.7 Sensitive Biological Resources.....	12
3.7.1 Sensitive Vegetation Communities and Environmentally Sensitive Lands (ESL)	12
3.7.2 Sensitive Plant Species.....	13
3.7.3 Sensitive Wildlife Species	17
3.7.4 Jurisdictional Resources and City Wetlands	20
3.7.5 Critical Habitat.....	22
3.7.6 Wildlife Movement Corridors and Nursery Sites.....	23
4.0 APPLICABLE REGULATIONS	24
4.1 Federal Regulations.....	24
4.1.1 Federal Endangered Species Act.....	24
4.1.2 Migratory Bird Treaty Act	24
4.1.3 Rivers and Harbors Act & Clean Water Act.....	24
4.2 State of California Regulations	25
4.2.1 California Environmental Quality Act.....	25
4.2.2 California Endangered Species Act.....	25
4.2.3 California Fish and Game Code	25
4.2.4 Water Quality Certification	25
5.0 MSCP CONSISTENCY ANALYSIS	25
5.1 City MSCP Subarea Plan Section 1.4.2 – General Planning Policies and Design Guidelines	26
5.1.1 Roads and Utilities – Construction and Maintenance Policies.....	27
5.1.2 Fencing, Lighting, and Signage.....	30
5.1.3 Materials Storage	31
5.2 City MSCP Subarea Plan Section 1.4.3 - Land Use Adjacency Guidelines	31
5.2.1 Drainage	31
5.2.2 Toxins	31
5.2.3 Lighting	32
5.2.4 Noise.....	32
5.2.5 Barriers to Incursion	33
5.2.6 Invasive Species	33
5.2.7 Brush Management.....	33
5.2.8 Grading/Land Development	34

TABLE OF CONTENTS (cont.)

<u>Section</u>	<u>Page</u>
5.3 City MSCP Subarea Plan Section 1.5.2 - General Management Directives	34
5.3.1 Mitigation	34
5.3.2 Restoration.....	35
5.3.3 Public Access, Trails, and Recreation	35
5.3.4 Litter/Trash and Materials Storage	37
5.4 Conditions of Coverage for Sensitive Species	38
5.4.1 Wart-stemmed Ceanothus	38
5.4.2 San Diego Barrel Cactus.....	38
5.4.3 Coast Horned Lizard	39
5.4.4 Orange-throated Whiptail	39
5.4.5 Cooper's Hawk.....	39
5.4.6 Coastal California Gnatcatcher	40
5.4.7 Southern Mule Deer	40
6.0 ANALYSIS OF PROPOSED PROJECT IMPACTS	41
6.1 Criterion 1	41
6.2 Criterion 2	43
6.3 Criterion 3	46
6.4 Criterion 4	47
6.5 Criterion 5	48
6.6 Criterion 6	48
6.7 Criterion 7	49
6.8 Criterion 8	49
7.0 AVOIDANCE AND MINIMIZATION MEASURES	49
7.1 General Avoidance and Minimization Measures.....	50
7.1.1 AMM-1: Prior to Construction.....	50
7.1.2 AMM-2: During Construction	51
7.1.3 AMM-3: Post-Construction Measures	52
7.1.4 AMM-4: Coastal California Gnatcatcher Measures	52
8.0 MITIGATION AND MONITORING REQUIREMENTS	54
9.0 REFERENCES	55

TABLE OF CONTENTS (cont.)

LIST OF APPENDICES

<u>No.</u>	<u>Title</u>
1	Figures
2	Plant Species Observed within the Biological Study Area
3	Wildlife Species Detected within the Biological Study Area
4	Sensitive Plant Species with a Potential to Occur within the Biological Study Area
5	Sensitive Wildlife Species with a Potential to Occur within the Biological Study Area
6	Representative Photographs

LIST OF TABLES

<u>No.</u>	<u>Title</u>	<u>Page</u>
1	Vegetation Communities and Land Cover Types within the Biological Study Area.....	6
2	Jurisdictional Resources and City Wetlands within the Biological Study Area....	21
3	Anticipated Proposed Project Impacts to Vegetation Communities	44
4	Anticipated Mitigation for Proposed Project Impacts to Vegetation Communities.....	45
5	Anticipated Impacts to Jurisdictional Resources.....	47

ACRONYMS AND ABBREVIATIONS

amsl	average mean seal level
BBS	Busby Biological Services
BCME	Biological Construction Mitigation/Monitoring Exhibit
BMPs	Best Management Practices
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFCG	California Fish and Game Code
City	City of San Diego
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Ranks
CSVR	Consultant Site Visit Record
CWA	Clean Water Act
CWC	California Water Code
dB(a)	decibel
ESA	Endangered Species Act
ESL	Environmentally Sensitive Lands
GIS	Geographic Information Systems
HELIX	HELIX Environmental Planning, Inc.
LF	linear feet
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MMC	Mitigation Monitoring Coordination
MSCP	Multiple Species Conservation Program
NRCS	Natural Resources Conservation Service
OHWM	ordinary high water mark
PUD	Public Utilities Department
proposed project	Sewer Group Job 806

ACRONYMS AND ABBREVIATIONS (cont.)

ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
sf	square feet
TCA	temporary construction area
TNWs	Traditional Navigable Waters
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Services
VC	vittrified clay
WoS	waters of the State
WoUS	waters of the U.S.

1.0 INTRODUCTION

Busby Biological Services, Inc. (BBS) was contracted by HELIX Environmental Planning, Inc. (HELIX) to prepare this biological technical report on behalf of the City of San Diego (City) for proposed Sewer Group Job 806 (proposed project), which is located in the City of San Diego, San Diego County, California (Attachment 1: Figures 1 through 3). The proposed project would replace-in-place, rehabilitate, upsize, or install new manholes and/or sewer pipeline within paved Right-of-Way (ROW), residential development, and undeveloped canyon areas (Attachment 1: Figure 3).

The purpose of this biological technical report is to describe the existing biological conditions within the biological study area and to analyze potential impacts to sensitive biological resources that may occur during implementation of the proposed project. This report, along with the attached figures and other supporting information, provides the City and other responsible agencies with the technical documentation necessary for a biological resources review under the California Environmental Quality Act (CEQA).

1.1 PROJECT DESCRIPTION & LOCATION

The proposed project would replace-in-place, rehabilitate, upsize, or install new manholes and/or sewer pipeline:

- Sewer Pipe
 - Replace-in-place approximately 1,527 linear feet (LF; 0.29 mile) of existing 6-inch vitrified clay (VC) sewer pipe
 - Upsize approximately 796 LF (0.15 mile) of existing 6-inch VC sewer pipe to 8-inch VC sewer pipe
 - Rehabilitate approximately 4,445 LF (0.84 mile) of existing 8-inch VC sewer pipe.
- Manholes
 - Replace 14 manholes
 - Install 3 new manholes
 - Rehabilitate 11 manholes

In addition, a permanent single lane truss bridge will be installed, and a temporary access path will be created. The permanent single lane truss bridge will be installed across a seasonal streambed to improve access for construction and maintenance to the sewer pipelines and manholes located along the City Public Utilities Department (PUD) access path that runs northeast from Yerba Santa Drive. The

bridge will be prefabricated and will feature four permanent truss bridge footings, which will be located outside of the seasonal streambed. The temporary access path will widen the existing PUD access path from 8 feet to 10 feet and will extend the access path east through the California Department of Transportation (Caltrans) ROW to terminate at Yerba Anita Drive. A central segment of the temporary access path will overlap with sections of pipeline that will be trenched for pipeline replacement. The other segments are needed for access to the pipeline replacement section and the truss bridge installation site. The proposed project will also include street resurfacing, traffic controls, and other associated activities.

Sewer pipe replace-in-place and upsizing will require trenching (width of 10 feet) through existing ROW, the PUD access path, and areas of native vegetation east of Yerba Santa Drive and northwest of Toyon Road. Sewer pipe replace-in-place and upsizing activities are expected to result in temporary impacts to native vegetation. Sewer pipe rehabilitation will be a trenchless construction activity, and impacts to native vegetation are not expected.

Temporary construction areas (TCAs) will be used to delineate limits of work around proposed project features and spoil/staging areas. TCA dimensions are generally as follows:

- Replace-in-place and new manholes will be a 5 feet by 10 feet
- Rehabilitated manholes will be a 5 feet by 5 feet
- Spoils/staging area will be 10 feet by 20 feet
- Temporary access path will be approximately 535 LF and will be 10 feet wide

The TCAs are expected to result in temporary impacts to areas within existing ROW, PUD access paths, and areas of native vegetation.

Access for the proposed project will be through the existing PUD access path, a temporary access path, and trails through private property. Trails through private property and the existing PUD access path are not anticipated to require vegetation trimming and will not constitute any temporary or permanent impacts. As such, these are not included in the impact calculations, and no mitigation would be required. The temporary access path partially overlaps with the existing PUD access path and will require vegetation removal outside of the exiting PUD access path.

Portions of the proposed project occur within the Multi-Habitat Planning Area (MHPA; Attachment 1: Figure 3). Construction of the proposed project may include the use of dump trucks, cement mixers, and other large vehicles.

2.0 METHODS

The methods used for the literature review, biological reconnaissance survey, and jurisdictional delineation are included in this section. In addition, the survey limitations and nomenclature used are discussed.

2.1 LITERATURE REVIEW

Prior to conducting the biological reconnaissance survey, BBS reviewed aerial imagery, the City Multiple Species Conservation Program (MSCP) Subarea Plan (City 1997), and pertinent information provided by HELIX, including U.S. Fish and Wildlife Service (USFWS) critical habitat maps (USFWS 2017a) as well as historical sensitive species information from the California Department of Fish and Wildlife (CDFW), California Natural Diversity Database (CNDDDB; CDFW 2017a), and the USFWS historical sensitive species occurrence records (USFWS 2017b).

2.2 BIOLOGICAL RECONNAISSANCE SURVEY

The biological reconnaissance survey, which included vegetation mapping and general habitat assessments, was conducted on foot by BBS biologist Darin Busby on July 18, 2017, to document the existing biological resources and assess the potential for sensitive biological resources to occur within the biological study area, which included the approximate proposed project location as well as a 100-foot survey buffer. Vegetation communities and land cover types within the biological study area were mapped by hand onto aerial imagery with a 1 inch equals 200 feet scale, noting dominant plant species within these vegetation communities. Mr. Busby conducted a follow up site visit on September 1, 2020, to confirm/update the existing conditions within the biological study area.

In addition, habitats within an appropriate buffer of the proposed project area were assessed to determine the potential for these areas to support sensitive plant and wildlife species. A 50-foot buffer was used for sensitive plant species; a 300-foot buffer was used for coastal California gnatcatcher (*Polioptila californica californica*); and a 500-foot buffer was used for raptors.

Digital photographs of representative areas were taken during the reconnaissance survey. The hand-drawn vegetation community and land cover type boundaries were provided to a HELIX GIS (Geographic Information Systems) Analyst and were digitized in the office using GIS software.

2.3 JURISDICTIONAL WETLAND DELINEATION

Prior to beginning fieldwork, HELIX biologists analyzed current aerial imagery (1 inch equals 100-foot scale), topographic maps (1 inch equals 100-foot scale), and

National Wetland Inventory maps to assist in determining the location of potential jurisdictional areas in the biological study area (USFWS 2013). On August 3, 2017, HELIX conducted the jurisdictional delineation and mapping on foot to determine if there are resources found to be potentially jurisdictional by U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act, CDFW pursuant to Section 1600 of the California Fish and Game Code, and/or the City pursuant to the City Biology Guidelines and the San Diego Municipal Code. The assessment was conducted by walking meandering transects throughout the biological study area and evaluating areas of the biological study area with potential topography and vegetation that could potentially support jurisdictional resources.

HELIX assessed potential USACE and RWQCB jurisdictional resources where it appears project impacts may occur and generally mapped jurisdictional resources in areas of the project where no impacts are anticipated. HELIX identified potentially jurisdictional areas by analyzing the hydrologic, vegetative, and geomorphic characteristics at two sample points following the technical guidelines provided in the USACE *Wetlands Delineation Manual* (Environmental Laboratory 1987) and USACE *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0; USACE 2008). Potential CDFW jurisdictional resources were assessed for the presence of a defined bed and bank and any associated riparian vegetation pursuant to criteria outlined in Section 1600 *et. seq.* of the California Fish and Game Code. Finally, potential City wetlands were assessed for the dominance of hydrophytic plant species pursuant to the definition of wetlands as outlined in the City Biology Guidelines.

2.4 SURVEY LIMITATIONS

Plant and wildlife species observed directly and/or detected indirectly through sign (e.g., scat, tracks, burrows, vocalization) within the biological study area were noted and are included as Attachments 2 and 3, respectively. However, these species lists do not provide a comprehensive list of all species that utilize the biological study area, because the biological surveys conducted to date were general, diurnal surveys and do not account for nocturnal species, secretive species, or species that may occur in the vicinity seasonally. Special-status plant and wildlife species that were observed or that have a potential to occur are included in Attachments 4 and 5, respectively.

2.5 NOMENCLATURE

Vegetation community and land cover classifications follow Holland (1986) as modified by Oberbauer (2008) to the extent that these resources provide appropriate classifications. Nomenclature for plants follows Baldwin et al. (2012),

and the plant species status was taken from CDFW's Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2019b). Nomenclature and status for wildlife species was taken from CDFW's Special Animals List (CDFW 2019c).

3.0 RESULTS

The following sections identify and briefly describe the existing conditions that were documented within the biological study area during the biological reconnaissance survey in 2017, the follow up site visit in 2020, and the jurisdictional delineation.

3.1 REGIONAL CONTEXT

The proposed project is located within the boundaries of the City MSCP Subarea Plan, and portions of the proposed project are also located within the MHPA, which is the City preserve system (Attachment 1: Figure 3). The site is located outside of the Coastal Overlay Zone, and no critical habitat occurs within or adjacent to the proposed project.

3.2 SURROUNDING LAND USES

The majority of the proposed project area is dominated by native upland vegetation communities in undeveloped urban canyons, with low-density residential areas surrounding these urban canyons. A portion of the proposed project area has been subject to continued disturbance due to maintenance of utility access paths, public use of trails, and adjacent development and public roads. Interstate 8 is located adjacent to the northern proposed project boundary, and Fairmont Avenue is located along the western proposed project boundary. In addition, the proposed project vicinity supports a variety of land uses, including commercial facilities (e.g., restaurants, shopping centers, hotels, car dealerships), high-density residential development, schools, and recreational facilities.

3.3 TOPOGRAPHY AND SOILS

The biological study area ranges in elevation from 92 feet above mean sea level (amsl) along Fairmont Avenue in the west to 368 feet amsl along the ridge top in the central portion of the biological study area.

The online query of the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey maps (USDA 2017) resulted in five soil type present within the biological study area: Olivenhain-Urban land complex, 2 to 9 percent slopes; Gaviota fine sandy loam, 30 to 50 percent slopes; Huerhuero-Urban land complex, 2 to 9 percent slopes; Terrace escarpments; and Made land. Olivenhain-Urban land complex, 2 to 9 percent slopes are well drained, moderately deep to deep cobbly loams with very cobbly clay subsoil within dissected marine

terraces. Gaviota fine sandy loam, 30 to 50 percent slopes, are moderately well-drained, shallow, fine sandy loams that have moderately rapid permeability, medium to rapid runoff, and that formed from weathered marine sandstone. Huerhuero-Urban land complex, 2 to 9 percent slopes, are moderately well-drained to somewhat poorly drained soils that have slow to medium run off, very slow permeability, and that formed from sandy marine sediments. Terrace escarpments are loamy or gravelly soil over soft marine sandstone, shale, or gravelly sediments that have rapid runoff and a high erosion hazard and typically occur between narrow floodplains and adjoining uplands and the steep sides of drainages that are entrenching into level uplands.

3.4 VEGETATION COMMUNITIES AND LAND COVER TYPES

BBS documented the following nine vegetation communities and land cover types within the biological study area – Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, southern mixed chaparral – *Rhus integrifolia* dominated, southern mixed chaparral – *Ceanothus verrucosus* dominated, disturbed southern willow scrub, disturbed land, ornamental, bare ground, and developed land (Attachment 1: Figure 4). These vegetation communities and land cover types are summarized in Table 1, below. The total acreages do not always add up to the sum of the approximate acreage breakdown within the proposed project footprint and within the 100-foot buffer; however, they represent the actual total without the rounding error(s).

Table 1
Vegetation Communities and Land Cover Types
within the Biological Study Area

MSCP Tier / Wetland Habitat Type		Vegetation Community/ Land Cover Type	Project Footprint (acres*)	100-foot Buffer (acres*)	Total (acres**)
Upland Habitats & Land Cover Types	Tier II Uncommon Uplands	Diegan Coastal Sage Scrub	0.242	10.055	10.298
		Diegan Coastal Sage Scrub - Disturbed	0.086	2.248	2.334
	Tier IIIA Common Uplands	Southern Mixed Chaparral – <i>Rhus integrifolia</i> Dominated	0.013	3.310	3.322
		Southern Mixed Chaparral – <i>Ceanothus verrucosus</i> Dominated	--	0.741	0.741
	Tier IV Other Uplands	Ornamental	0.025	4.765	4.790
		Disturbed Land	0.028	1.480	1.508
	N/A	Bare Ground	0.065	0.493	0.558
		Developed Land	0.208	9.084	9.292

MSCP Tier / Wetland Habitat Type		Vegetation Community/ Land Cover Type	Project Footprint (acres*)	100-foot Buffer (acres*)	Total (acres**)
Wetland Habitats	Riparian Scrub	Southern Willow Scrub – Disturbed	--	0.141	0.141
TOTAL**			0.667	32.317	32.984

*Acreages are approximate and rounded to the nearest thousandth of an acre.

**Total acreages represent the actual acreages without the rounding error.

A brief description of each vegetation community and land cover type, including the dominant plant species observed in each vegetation community, is provided below. In addition, the acreages that occur within the project footprint and within the 100-foot buffer are included for each vegetation community and land cover type.

3.4.1 Diegan Coastal Sage Scrub (Tier II: Uncommon Uplands; Oberbauer Code 32510, Updated Holland Code 32500)

Diegan coastal sage scrub is a vegetation community that consists mainly of low, soft-woody sub-shrubs (approximately 3 feet high) that are most actively growing in winter and early spring. Many taxa within this community are facultatively drought-deciduous. Stem- and leaf-succulents are also often present but are usually not conspicuously dominant species. Dominant shrub species in this vegetation type vary, depending on local site factors and levels of disturbance. Diegan coastal sage scrub is typically found on dry sites, such as steep, south-facing slopes or clay-rich soils ranging from coastal Los Angeles County into northern Baja California, Mexico.

Within the biological study area, the Diegan coastal sage scrub is moderately dense with shrub heights primarily ranging from 2 to 6 feet, and is dominated by species such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), bush sunflower (*Encelia californica*), black sage (*Salvia mellifera*), lemonadeberry (*Rhus integrifolia*), and laurel sumac (*Malosma laurina*). Some patches of this vegetation community contain higher concentrations of jojoba (*Simmondsia chinensis*), San Diego barrel cactus (*Ferocactus viridescens*), prickly pear cactus (*Opuntia littoralis*), coastal cholla (*Cylindropuntia prolifera*), and Mojave yucca (*Yucca schidigera*), but not in high enough concentrations and with the specific components and amounts to be identified as maritime succulent scrub.

A total of approximately 10.298 acres of Diegan coastal sage scrub is distributed throughout the biological study area, with approximately 0.242 acre within the proposed project footprint and approximately 10.055 acres in the 100-foot survey buffer (Attachment 1: Figure 4).

3.4.2 Disturbed Diegan Coastal Sage Scrub (Tier II: Uncommon Uplands; Oberbauer Code 32510, Updated Holland Code 32500)

Disturbed Diegan coastal sage scrub is similar to Diegan coastal sage scrub, described above, but it was classified as disturbed where mechanical or natural disturbance has reduced the overall cover of the community resulting in large areas colonized by herbaceous weedy species and/or bare ground. Some disturbance types include clearing, off-road vehicle damage, or illegal trash disposal.

Within the biological study area, the disturbed Diegan coastal sage scrub is low in density with shrub heights primarily ranging from 1 to 6 feet, and is dominated by many of the same species found in the undisturbed Diegan coastal sage scrub, such as California sagebrush, California buckwheat, bush sunflower, black sage, broom baccharis (*Baccharis sarothroides*), and lemonadeberry, but also contains a high proportion of invasive species such as fountain grass (*Pennisetum setaceum*), mustard (*Brassica* spp.), tocalote (*Centaurea melitensis*), and bromes (*Bromus* spp.). Some areas of disturbed Diegan coastal sage scrub have been altered by mechanical disturbance along dirt access paths and fuel modification zones adjacent to houses.

A total of approximately 2.334 acres of disturbed Diegan coastal sage scrub is distributed throughout the biological study area adjacent to the Diegan coastal sage scrub and within overgrown portions of existing access paths, with approximately 0.086 acre within the proposed project footprint and approximately 2.248 acres within the 100-foot survey buffer (Attachment 1: Figure 4).

3.4.3 Southern Mixed Chaparral – *Rhus integrifolia* Dominated (Tier IIIA: Common Uplands; Oberbauer Code 37120, Updated Holland Code 37120)

Southern mixed chaparral is a vegetation community typically dominated by broad-leaved sclerophyllous shrubs or small trees, and characteristically occupies protected north-facing and canyon slopes or ravines where moderately mesic conditions are present. This vegetation community typically forms dense, often nearly impenetrable stands of shrubs reaching 6 to 10 feet in height, with little or no understory cover. Species composition varies by location but can be dominated by species such as lemonadeberry, toyon (*Heteromeles arbutifolia*), laurel sumac, poison oak (*Toxicodendron diversilobum*), Nuttall's scrub oak (*Quercus dumosa*), ceanothus (*Ceanothus* spp.), and manzanita (*Arctostaphylos* spp.). Southern mixed chaparral typically is found in coastal foothills of San Diego County and northern Baja California.

Within the biological study area, the *Rhus integrifolia*-dominated southern mixed chaparral is dense, with shrub heights primarily ranging from 6 to 10 feet, and is

dominated by species such as lemonadeberry, toyon, Laurel sumac, poison oak, manzanita (*Arctostaphylos* sp.), and scrub oak (*Quercus* sp.).

A total of approximately 3.322 acres of *Rhus integrifolia*-dominated southern mixed chaparral occurs on many of the north-facing slopes in the central portion of the biological study area, with approximately 0.013 acre within the proposed project footprint and approximately 3.310 acres within the 100-foot survey buffer (Attachment 1: Figure 4).

3.4.4 Southern Mixed Chaparral – *Ceanothus verrucosus* Dominated (Tier IIIA: Common Uplands; Oberbauer Code 37120, Updated Holland Code 37120)

The general description of southern mixed chaparral is provided above. Within the biological study area, the *Ceanothus verrucosus*-dominated southern mixed chaparral is dense with shrub heights primarily ranging from 6 to 8 feet, and is almost entirely dominated by dense stands of wart-stemmed ceanothus (*Ceanothus verrucosus*). Other species present occurring in scattered locations include lemonadeberry, toyon, hollyleaf redberry (*Rhamnus ilicifolia*), fuchsia flowered gooseberry (*Ribes speciosum*), manzanita (*Arctostaphylos* sp.), and scrub oak (*Quercus* sp.).

A total of approximately 0.741 acre of *Ceanothus verrucosus*-dominated southern mixed chaparral occurs on two of the canyon slopes in middle of the biological study area (Attachment 1: Figure 4). All of the *Ceanothus verrucosus*-dominated southern mixed chaparral is outside the proposed project footprint.

3.4.5 Disturbed Southern Willow Scrub (Oberbauer Code 63320, Updated Holland Code 63320)

Southern willow scrub is a dense riparian community dominated by broad-leafed, winter- deciduous trees dominated by shrubby willows (*Salix* sp.) in association with mule fat (*Baccharis salicifolia*). This vegetation community is typically found along major drainages but also occurs in smaller drainages. Disturbed southern willow scrub occurs in areas where the community has been altered by mechanical disturbance, illegal trash disposal, natural disturbance, or invasion of invasive species.

Within the biological study area, the disturbed southern willow scrub is low in density with shrub and tree heights primarily ranging from 6 to 10 feet, and is dominated by species such as willow (*Salix* sp.), broom baccharis, tamarisk (*Tamarix* sp.), Brazilian pepper tree (*Schinus terebinthifolius*), and Mexican fan palm (*Washingtonia robusta*).

A total of approximately 0.141 acre of disturbed southern willow scrub occurs in a detention basin at the base of a canyon and adjacent to a housing development in the northeastern corner of the biological study area (Attachment 1: Figure 4). All of the disturbed southern willow scrub is outside of the proposed project footprint.

3.4.6 Disturbed Land (Tier IV: Other Uplands; Oberbauer Code 11300, No Holland Code)

Disturbed land includes areas that retain a soil substrate but have been physically disturbed by previous human activity. These areas are no longer recognizable as a native or naturalized vegetation community. Vegetation, if present, is typically composed of predominately non-native species introduced and established through human action. These areas are not typically artificially irrigated but receive water from precipitation and runoff. Examples of disturbed habitat include areas that have been graded, cleared for fuel management purposes, recently-graded firebreaks, graded construction pads and staging areas, off-road vehicle trails, and old home sites.

Within the biological study area, the disturbed land is composed of and is almost entirely dominated by invasive species such as fountain grass, mustard, tocalote, and bromes. These areas are often adjacent to or within areas that have been altered by human activity, including mechanical disturbance along dirt access paths and fuel modification zones adjacent to houses.

A total of approximately 1.508 acres of disturbed land occurs in small, scattered patches throughout the biological study area, with approximately 0.028 acre within the proposed project footprint and approximately 1.480 acres in the 100-foot survey buffer (Attachment 1: Figure 4).

3.4.7 Ornamental (Tier IV: Other Uplands; No Oberbauer Code, No Holland Code)

Ornamental vegetation is not recognized by Holland (1986) and typically consists of non-native landscape and/or garden plantings that have been planted in association with buildings, roads, or other development. San Diego County supports more than 250 different types of ornamental trees and numerous other shrubs and herbs that decorate urban areas.

Within the biological study area, ornamental vegetation occurs in small scattered patches, often adjacent to houses and roadways, and is composed of various species used for landscaping, such as Sydney golden wattle (*Acacia longifolia*), Peruvian pepper tree (*Schinus molle*), Brazilian pepper tree, Italian cypress (*Cupressus sempervirens*), gum tree (*Eucalyptus* sp.), Mexican fan palm, pampas grass (*Cortaderia* sp.), ice plant (*Carpobrotus* sp.), and pine trees (*Pinus* spp.)

A total of approximately 4.790 acres of ornamental vegetation occurs in small scattered patches throughout the biological study area, with approximately 0.025 acre within the proposed project footprint and approximately 4.765 acres within the 100-foot survey buffer (Attachment 1: Figure 4).

3.4.8 Bare Ground (No Tier; No Oberbauer Code, No Holland Code)

Bare ground lacks vegetation, typically because of recent and/or continuous clearing of vegetation. Not recognized by Holland (1986), these areas differ from “developed” because they do not support buildings, paved roads, parking lots, or ornamental plantings and typically the soil is exposed.

Within the biological study area, bare ground is dominated by regularly maintained areas, such as existing access paths, that are devoid of vegetation; however, scattered patches of invasive and weedy species may occur in low concentrations within the bare ground areas.

A total of approximately 0.558 acre of bare ground occurs in some of the dirt access paths and graded areas within the biological study area, with approximately 0.065 acre within the proposed project footprint and approximately 0.493 acre within the 100-foot survey buffer (Attachment 1: Figure 4).

3.4.9 Developed Land (No Tier; Oberbauer Code 12000, No Holland Code)

Developed land has been constructed upon or otherwise physically altered to the extent that native vegetation is no longer supported. These areas contain permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation.

Within the biological study area, developed land occurs as houses, roadway, and pathways.

A total of approximately 9.292 acres of developed land is distributed throughout the biological study area, with approximately 0.208 acre within the proposed project footprint and approximately 9.084 acres within the 100-foot survey buffer (Attachment 1: Figure 4).

3.5 FLORA

A total of 85 plant species were documented within the biological study area during the biological reconnaissance survey conducted on July 18, 2017, and the jurisdictional wetland delineation conducted on August 3, 2017, with 49 species (58 percent) considered native and the remaining 36 species (42 percent) considered non-native and/or naturalized into the area. No additional species were documented during the September 1, 2020, site visit. Dominant plant species are

discussed by vegetation community, above. A list of plant species observed within the biological study area is included as Attachment 2.

3.6 FAUNA

A total of 32 wildlife species were detected within the biological study area during the biological reconnaissance survey conducted on July 18, 2017. No additional species were detected during the follow up site visit on September 1, 2020.

Representative species detected are typical of the habitats present within and adjacent to the biological study area and included Anna's hummingbird (*Calypte anna*), western scrub-jay (*Aphelocoma californica*), California towhee (*Melospiza [Pipilo] crissalis*), house finch (*Haemorhous [Carpodacus] mexicanus frontalis*), California ground squirrel (*Spermophilus beecheyi*), and western fence lizard (*Sceloporus occidentalis*). A list of wildlife species detected within the biological study area is included as Attachment 3.

3.7 SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources include sensitive vegetation communities, sensitive plant and wildlife species, jurisdictional resources, critical habitat, and wildlife movement corridors and nursery sites. For purposes of this report, "sensitive species" are defined as species considered rare, threatened, endangered, endemic, and/or sensitive by USFWS, California Native Plant Society (CNPS), and/or CDFW; City MSCP-covered species; and avian species covered by the Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code (CFG) 3503.5.

Biological resource sensitivity determinations follow the guidelines presented in the Significance Determination Thresholds under CEQA, which is included as Appendix I to the City Biology Guidelines (City 2018).

Assessments for the potential occurrence of sensitive biological resources are based upon known ranges, habitat preferences for the species, historical species occurrence records from the CNDDDB (CDFW 2019a), and species occurrence records from the vicinity of the proposed project from other databases (County of San Diego 2019, CNPS 2019, USFWS 2019b). No focused sensitive species surveys were conducted for the proposed project. The following sections provide definitions for each of these sensitive biological resources and describe the sensitive biological resources that are known to occur or have a potential to occur within and/or adjacent to the proposed project.

3.7.1 Sensitive Vegetation Communities and Environmentally Sensitive Lands (ESL)

Sensitive vegetation communities are vegetation assemblages, associations, or sub-associations that have cumulative losses throughout the region, have relatively limited distribution, support or potentially support sensitive species, or have

particular value to other wildlife. Typically, sensitive vegetation communities are considered sensitive whether or not they have been disturbed. Sensitive vegetation communities are regulated by various local, state, and federal resource agencies.

Within the biological study area, the applicable ESL Regulations, as defined in the City Biology Guidelines, include those lands within the MHPA; wetlands and waters occurring within and outside of the MHPA; vegetation communities classified as Tier II and IIIA; habitat for sensitive species; and steep hillsides with a slope gradient of at least 25 percent over a vertical gain of at least 50 feet, or a slope gradient of at least 200 percent over a vertical gain of at least 10 feet (City 2004). Tier IV vegetation communities are not considered sensitive (City 2018).

The sensitive vegetation communities and ESL that occur within the biological study area include the following:

- Approximately 10.298 acres of Diegan coastal sage scrub (Tier II)
- Approximately 2.334 acres of disturbed Diegan coastal sage scrub (Tier II)
- Approximately 3.322 acres of southern mixed chaparral – *Rhus integrifolia* dominated (Tier IIIA)
- Approximately 0.741 acre of southern mixed chaparral – *Ceanothus verrucosus* dominated (Tier IIIA)
- Approximately 0.141 acre of disturbed southern willow scrub (disturbed wetland)
- Approximately 12.530 acres of MHPA occurs throughout the biological study area;
- Approximately 12.632 acres of suitable coastal California gnatcatcher habitat (i.e., Diegan coastal sage scrub and disturbed Diegan coastal sage scrub)
- Jurisdictional resources (as described, below)
- Steep hillsides where existing infrastructure occurs throughout the proposed project

3.7.2 Sensitive Plant Species

For purposes of this report, sensitive plant species include those that are (1) listed as threatened or endangered or proposed for listing by federal or state agencies; (2) California Rare Plant Ranks (CRPR) List 1 or List 2 (CNPS 2019); or (3) considered rare, endangered, or threatened by CDFW (CDFW 2019b) or other local conservation organizations or specialists (includes MSCP-covered species and narrow endemic species). Noteworthy plant species are considered to be those that are CRPR List 3 or List 4 (CNPS 2019).

The literature review and database search resulted in a list of 40 sensitive plant species that were analyzed for their potential to occur within the biological study area, because they have historically occurred or have a potential to occur within the biological study area or its vicinity, or are considered MSCP narrow endemics (CDFW 2019a, USFWS 2019b; Attachment 4). Of these 40 sensitive plant species analyzed for their potential to occur within the biological study area, four sensitive plant species were observed within the biological study area.

The following paragraphs provide more detailed information on the four species that were observed and five species with a high sensitivity status with a moderate to high potential to occur within the biological study area. Of the remaining 31 species analyzed for their potential to occur within the biological study area, 23 species are not expected to occur, two species have a high sensitivity status but a low potential to occur, and six species have a low sensitivity status and a low to moderate potential to occur within the biological study area. These 31 remaining species are presented in Attachment 4 but are not discussed further in this document.

Spineshrub (*Adolphia californica*)

Spineshrub is a CRPR 2B.1 species (seriously threatened in California but more common elsewhere). This short, spiny, perennial deciduous shrub in the buckthorn family occurs on clay soils in chaparral, coastal scrub, and valley and foothill grasslands. California adolphia is typically identifiable during a flowering period from January to April. It is also possible to identify this species outside of the flowering period because it has distinguishing cauline spines. Spineshrub is known from San Diego County as well as from Baja California, Mexico, at elevations between 20 and 655 feet amsl. This species is threatened primarily by development (CNPS 2019).

Spineshrub has a moderate potential to occur within the Diegan coastal sage scrub and southern mixed chaparral within the biological study area, as historical records of the species exist adjacent to the biological study area (CDFW 2019a). However, because the proposed project footprint is small and has been designed to occur within existing access paths, this species is not expected to occur within the proposed project footprint.

Singlewhorl Burrowbrush (*Ambrosia monogyra*)

Singlewhorl burrobrush is a CRPR 2B.1 species (seriously threatened in California but more common elsewhere). This species is shrub in the Asteraceae family that flowers between August and November. This species typically grows in chaparral. Singlewhorl burrobrush occurs primarily in southwestern San Diego County, with a few occurrences in Riverside and San Bernardino counties, at elevations between 15 and 950 feet amsl. This species is threatened primarily by development (CNPS 2019) but also by agricultural expansion, livestock grazing, off-road vehicles, pesticide spraying, road construction, and the introduction of exotic species.

Singlewhorl burrobrush has a high potential to occur within the disturbed Diegan coastal sage scrub in the western portion of the biological study area. This species was observed adjacent to the biological study area, and historical records exist adjacent to the proposed project (CDFW 2019a). However, because the proposed project footprint is small and has been designed to occur within existing access paths, this species is not expected to occur within the proposed project footprint.

San Diego Sunflower (*Bahiopsis laciniata*)

San Diego sunflower is a CRPR 4.2 species (limited distribution and moderately threatened in California). This species is perennial shrub in the Asteraceae family that flowers between February and June and, on rare occasions, as late as August. This species often grows in chaparral and coastal scrub. San Diego sunflower is known from San Diego, Orange, and Riverside Counties as well as Baja California, Mexico, at elevations between 195 and 2,460 feet amsl. This species is threatened primarily by development (CNPS 2019).

Although no historical records exist within two miles of the proposed project (CDFW 2019a), approximately 18 individuals of San Diego sunflower were observed in the Diegan coastal sage scrub in the western portion of the biological study area, both within and adjacent to the proposed project footprint.

Wart-Stemmed Ceanothus (*Ceanothus verrucosus*)

Wart-stemmed ceanothus is a CRPR 2B.2 species (moderately threatened in California but more common elsewhere) and an MSCP-covered species. It is an evergreen shrub in the Rhamnaceae family that typically blooms from December to May. This species is found in chaparral and coastal sage scrub, typically near the coast. Wart-stemmed ceanothus is known from Riverside and San Diego counties as well as from Baja California, Mexico, at elevations between 25 and 2,165 feet amsl. This species is threatened primarily by development (CNPS 2019).

Wart-stemmed ceanothus is the dominant species in the *Ceanothus verrucosus*-dominated southern mixed chaparral mapped within the biological study area, adjacent to but outside of the proposed project footprint. In addition, historical records exist adjacent to the biological study area (CDFW 2019a). However, the proposed project has been designed to avoid impacts to this species; therefore, this species is not expected to occur within the proposed project footprint.

Summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)

Summer-holly is a CRPR 1B.2 species (moderately threatened in California and elsewhere). It is an evergreen shrub in the Ericaceae family that typically blooms from April to June. This species is found in chaparral and cismontane woodland. Summer-holly is known from Orange, Riverside, Santa Barbara, and San Diego

counties as well as from Baja California, Mexico, at elevations between 100 and 2,690 feet amsl. This species is threatened by development and gravel mining (CNPS 2019).

Summer-holly has a moderate potential to occur within the southern mixed chaparral within the biological study area, as historical records of the species exist within two miles of the biological study area (CDFW 2019a). However, because the proposed project footprint is small and has been designed to occur within existing access paths, this species is not expected to occur within the proposed project footprint.

San Diego Barrel Cactus (*Ferocactus viridescens*)

Coast barrel cactus is a CRPR 2B.1 species (seriously threatened in California but more common elsewhere) and an MSCP-covered species. It is a stem succulent in the Cactaceae family that typically blooms from May to June. This species typically is found on dry, west and south facing slopes in chaparral, coastal sage scrub, grassland, and adjacent to vernal pools. Coast barrel cactus is known from Riverside and San Diego counties as well as from Baja California, Mexico, at elevations between 25 and 1,245 feet amsl. This species is threatened by development, non-native plant species, trampling by foot traffic, road maintenance, agricultural practices, grazing, vehicle activity, and illegal dumping (CNPS 2019).

Approximately 10 individuals of coast barrel cactus were observed in the Diegan coastal sage scrub in the western portion of the biological study area, adjacent to but outside of the proposed project footprint. In addition, historical records exist adjacent to the biological study area (CDFW 2019a). However, the proposed project has been designed to avoid impacts to this species; therefore, this species is not expected to occur within the proposed project footprint.

Decumbent Goldenbush (*Isocoma menziesii* var. *decumbens*)

Decumbent goldenbush is a CRPR 1B.2 species (moderately threatened in California and elsewhere). It is a shrub in the Asteraceae family that typically blooms from April to November. This species typically is found in sandy, and often disturbed, areas in chaparral and coastal sage scrub. Decumbent goldenbush is known from southern California in Los Angeles, Orange, and San Diego counties as well as from San Clemente Island and Santa Catalina Island, and it is also known from Baja California, Mexico. It occurs at elevations between 0 and 1,475 feet amsl. This species is threatened by development (CNPS 2019).

Although no historical records exist within the proposed project vicinity (CDFW 2019a), decumbent goldenbush has a moderate potential to occur within the Diegan coastal sage scrub within the biological study area. However, because the proposed project footprint is small and has been designed to occur within existing

access paths, this species is not expected to occur within the proposed project footprint.

Nuttall's Scrub Oak (*Quercus dumosa*)

Nuttall's scrub oak is a CRPR 1B.1 species (seriously threatened in California and elsewhere). It is an evergreen shrub in the Fagaceae family that typically blooms from February to April. This species is found in sandy or clay loam soils in chaparral, coastal sage scrub, and closed-cone coniferous forest. Nuttall's scrub oak is known from southern California from Orange, Santa Barbara, San Diego, and Ventura counties as well as from Baja California, Mexico, at elevations between 45 and 6,855 feet amsl. This species is threatened by development, fire suppression, and vegetation/fuels management (CNPS 2019).

Nuttall's scrub oak has a high potential to occur within the southern mixed chaparral within the biological study area as historical records exist adjacent to the biological study area (CDFW 2019a), and scrub oak species were observed within the biological study area. However, because the proposed project footprint is small and has been designed to occur within existing access paths, this species is not expected to occur within the proposed project footprint.

Engelmann Oak (*Quercus engelmannii*)

Engelmann oak is a CRPR 4.2 (limited distribution and moderately threatened in California) species. It is a perennial deciduous tree in the Fagaceae family that typically blooms from March to June. This species is found in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland. Engelmann oak is known from Santa Catalina Island and Los Angeles, Orange, Riverside, and San Diego counties, at elevations between 400 and 4,300 feet amsl. This species is threatened by development, soil compaction, and grazing.

Approximately 10 individuals of Engelmann oak were observed in the southern mixed chaparral in the central portion of the biological study area, adjacent to but outside of the proposed project footprint. In addition, historical records exist adjacent to the biological study area (CDFW 2019a). However, because the proposed project footprint is small and has been designed to occur within existing access paths, this species is not expected to occur within the proposed project footprint.

3.7.3 Sensitive Wildlife Species

For purposes of this report, sensitive wildlife species include those that are (1) listed as threatened or endangered or proposed for listing by USFWS or CDFW; (2) designated as "fully protected" by CDFW, (3) considered "species of special concern" by CDFW, and/or (4) considered "taxa to watch" by CDFW (CDFW

2019c). In addition, species included on the MSCP-covered species list are also included as sensitive species. Species that are covered by the federal MBTA were also considered. As the list of species covered under the MBTA is extensive, these species are not included in the sensitive wildlife species table. However, they are addressed further in the Analysis of Proposed Project Impacts section, below.

The literature review and database search resulted in a list of 18 sensitive wildlife species that were analyzed for their potential to occur within the biological study area, because they have historically occurred or have a potential to occur within the biological study area or its vicinity (CDFW 2019a; Attachment 5). Of these 18 sensitive wildlife species analyzed for their potential to occur within the biological study area, two species – orange-throated whiptail (*Aspidoscelis hyperythra beldingi*) and Cooper's hawk (*Accipiter cooperii*) were observed during the biological reconnaissance survey in 2017. In addition, one species – coastal California gnatcatcher – has a high potential to occur within the biological study area. The disturbed southern willow scrub in the northeastern portion of the biological study area is not considered suitable habitat for the least Bell's vireo (*Vireo bellii pusillus*) because of its small size and because it is isolated from other riparian habitat.

Of the remaining 15 species, six species are not expected to occur, four species have a low potential to occur, and five species have a moderate potential to occur. All nine species with a low to moderate potential to occur have low sensitivity. Impacts to species with a low sensitivity status would not be significant. Thus, the species that are not expected to occur as well as the species with a low or moderate potential to occur are presented in Attachment 5 but are not discussed further in this document.

The following paragraphs provide more detailed information on the orange-throated whiptail, Cooper's hawk, and coastal California gnatcatcher.

Orange-throated Whiptail (*Aspidoscelis hyperythra beldingi*)

The orange-throated whiptail is a CDFW species of special concern and an MSCP-covered species. This subspecies ranges from southwestern San Bernardino County, south into Baja California, Mexico, and is found at elevations from sea level to 2,000 feet amsl. Belding's orange-throated whiptail is found in open coastal sage scrub, chaparral, and streamside growth with loose sandy soils (Stebbins 2003). It prefers sage scrub that covers approximately 50 percent of the ground without dense grasses in between, but it also inhabits dense to extremely open stands of sage scrub as well as chamise chaparral. It can also often be found in upland revegetation sites, because these areas provide the open habitat it prefers. Threats to the orange-throated whiptail include habitat loss and fragmentation caused by development (CAHerps 2019).

One individual orange-throated whiptail was detected in Diegan coastal sage scrub in the western portion of the biological study area. Historical records of the orange-throated whiptail exist within two miles (CDFW 2019a) of the proposed project and the species and the Diegan coastal sage scrub and southern mixed chaparral within the biological study area provide suitable habitat for this species.

Cooper's Hawk (*Accipiter cooperii*)

The Cooper's hawk is a CDFW taxa to watch and an MSCP-covered species. The Cooper's hawk is wholly endemic to North America, but widespread, with both migratory and resident populations ranging from southern Canada to southern Mexico. In California, the species is a resident, but migrants from its northern range substantially increase the population during the winter months (Curtis et al. 2006; Unitt 2004). Although this species was previously associated only with semi-dense woodlands, Cooper's hawks have adapted to urban landscapes, as they are often at least as numerous in urban habitats as in natural ones (Unitt 2004). The Cooper's hawk was listed in 1978 as a species of concern by CDFW because the population was in decline as a result of hunting, destruction of riparian woodland, and pesticide contamination (Remsen 1978). However, recent studies suggest that populations have recovered in many areas, as it has adapted to breeding in urban areas (Curtis et al. 2006; Unitt 2004). However, with the colonization of urban habitats also comes an increased incidence of collision with windows and disease (Curtis et al. 2006; Unitt 2004).

The Cooper's hawk was observed during the biological reconnaissance survey in 2017 and has a moderate potential to nest within the biological study area. Suitable nesting habitat for the species (e.g., large trees) is present throughout the biological study area, predominantly in the ornamental vegetation associated with the surrounding residential development.

Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is a federally listed threatened species, a CDFW species of special concern, and an MSCP-covered species. The California gnatcatcher (*Polioptila californica*) has one of the most limited distributions of any bird species in North America, limited to specific vegetation communities from coastal southern California to the southern tip of Baja California, Mexico. One of three subspecies, the coastal California gnatcatcher (*P.c. californica*) occurs from southern California south to Ensenada, Baja California, Mexico, and is mostly restricted to coastal sage scrub below 1,640 feet amsl (Atwood and Bontrager 2001; Mock 2004). The primary threat to this species is habitat loss resulting from agriculture and urban development (Unitt 2004).

The coastal California gnatcatcher has a high potential to nest and forage within the biological study area as historical records of the coastal California gnatcatcher exist

within two miles (CDFW 2019a, USFWS 2019b) of the proposed project and the Diegan coastal sage scrub within the biological study area provides high quality, suitable nesting habitat for this species.

3.7.4 Jurisdictional Resources and City Wetlands

Jurisdictional resources are considered sensitive biological resources and are regulated by the USACE, CDFW, RWQCB, and/or the City pursuant to federal, state, and local regulations, described below.

USACE regulates the discharge of dredged and/or fill material, both temporary and permanent, into wetland and non-wetland waters of the U.S. (WoUS), pursuant to Section 404 of the CWA. USACE non-wetland WoUS are delineated by the lateral and upstream/downstream extent of the ordinary high watermark (OHWM). USACE wetland WoUS are areas that contain wetland hydrology, hydric soils, and hydrophytic vegetation. Swales and erosional features (e.g., gullies; small washes characterized by low volume, infrequent, and short duration flow) are generally not considered WoUS because they are not tributaries or they do not have a significant nexus to downstream Traditional Navigable Waters (TNWs).

RWQCB regulates wastewater discharge, dredged and/or fill material, or other alterations of wetland and non-wetland waters of the State (WoS), including isolated waters such as vernal pools and other waters showing lack of connectivity to a TNW, pursuant to Section 401 of the CWA and Section 13000 et. seq. of the California Water Code (CWC) under the Porter-Cologne Water Quality Control Act.

CDFW regulates activities that would substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, pursuant to CFGC Section 1600 et. seq. CDFW typically extends its jurisdictional limit to the top of a stream, the bank of a lake, or the outer edge of the riparian vegetation, whichever is wider. CDFW Streambeds include watercourses having a surface or subsurface flow that supports riparian vegetation. In addition, CDFW asserts jurisdiction over vernal pools when California state threatened and/or endangered species are present.

The City regulates ESL, including wetlands (and other sensitive vegetation communities), under the San Diego Municipal Code, Chapter 14, Division 1, Section 143.0101. Naturally occurring wetland vegetation communities dominated by hydrophytic plant species are typically considered by the City to be characteristic of wetland areas. Areas lacking naturally occurring wetland vegetation communities are considered to be wetlands when (a) hydric soil or wetland hydrology are present and (b) either past human activities have occurred to remove the historical vegetation or catastrophic or recurring natural events preclude the establishment of wetland vegetation. The City does not regulate areas that contain wetland vegetation, soils, or hydrology created by human activities in historically non-

wetland areas unless they have been delineated as wetlands by the USACE and/or the CDFW.

The potentially jurisdictional resources that occur within the biological study area include non-wetland WoUS/WoS and riparian habitat (Attachment 1: Figures 4, 5, and 6). No wetland WoUS/WoS occur within the biological study area. The potentially jurisdictional resources within the biological study area are summarized in Table 2, below, and are discussed in further detail below. Potential jurisdictional status is preliminary, as the regulatory agencies will make a final determination of jurisdictional boundaries.

Table 2
Jurisdictional Resources and City Wetlands within the Biological Study Area

Resource	Jurisdiction		
	USACE/RWQCB (acres*)	CDFW (acres*)	City (acres*)
Riparian/Wetland (Disturbed Southern Willow Scrub)	--	0.141	0.141
Non-Wetland WoUS/WoS & Streambed (Unvegetated Channel)	0.127	0.293	--
TOTAL	0.127	0.434	0.141

*Acreages are approximate and rounded to the nearest thousandth of an acre.

USACE Jurisdiction

A total of approximately 0.127 acre (1,697 linear feet) of non-wetland WoUS occur within the biological study area (Attachment 1: Figures 4, 5, and 6). These non-wetland WoUS are potentially under the jurisdiction of USACE.

Temporary fills and discharges to these jurisdictional areas would be regulated by USACE under Section 404 of the CWA (33 USC 401 et seq.; 33 USC 1344; USC 1413; and Department of Defense, Department of the Army Corps of Engineers 33 CFR Part 323). If the proposed project would impact WoUS, it would require a CWA Section 404 permit from the USACE, San Diego District.

RWQCB Jurisdiction

Areas potentially under RWQCB jurisdiction are the same as those described for USACE, above. These include a total of approximately 0.127 acre (1,697 linear feet) of non-wetland WoS within the biological study area (Attachment 1: Figures 4, 5, and 6).

A CWA Section 401 Water Quality Certification administered by the State Water Resources Control Board (SWRCB) or RWQCB must be issued prior to any 404 Permit. If the proposed project would impact RWQCB WoS, submittal of Request

for Water Quality Certification would be required by the San Diego RWQCB prior to project activities. There are no isolated waters or wetlands under RWQCB jurisdiction within the biological study area that would be subject to the State Porter-Cologne Water Quality Control Act.

CDFW Jurisdiction

Approximately 0.293 acre (1,697 linear feet) of streambed (i.e., low-flow channels associated with several unnamed tributaries to the San Diego River) and approximately 0.141 acre of disturbed southern willow scrub occur within the biological study area (Attachment 1: Figures 4, 5, and 6), for a total of approximately 0.434 acre of streambed and riparian habitat potentially under the jurisdiction of CDFW.

CDFW regulates temporary and permanent alterations or impacts to streambeds, riparian areas, or lakes under California Fish and Game Code Section 1602. CDFW requires a Streambed Alteration Agreement (SAA) for projects that will divert or obstruct the natural flow of water; change the bed, channel, or bank of any stream; or use any material from a streambed. The SAA is a contract between the applicant and CDFW stating what activities can occur in the riparian zone and stream course (California Association of Resource Conservation Districts 2002). If the proposed project would impact streambeds or riparian habitat, Notification of Lake or Streambed Alteration would be required by the San Diego CDFW.

City Wetlands

City jurisdictional wetlands on site are synonymous with CDFW jurisdictional southern willow scrub and include 0.141 acre of disturbed southern willow scrub (Attachment 1: Figures 5 and 6). The non-vegetated streambeds are not considered City wetlands because they lack natural wetland vegetation.

A Site Development Permit would be needed for the proposed project if significant impacts to City wetlands are anticipated. Impacts must comply with the City ESL Regulations, which require that impacts to wetlands be avoided unless the activities meet specific exemption criteria established in the ordinance. Impacts to City-defined wetlands require approval of deviation findings as required by ESL regulations.

3.7.5 Critical Habitat

Under the federal Endangered Species Act (ESA), USFWS designates certain areas as “critical habitat” if they determine that these geographic areas are essential for the conservation and/or recovery of a federally listed threatened or endangered species, whether or not the species currently occupies the area. Critical habitat areas often require special management and protection to assure

they will remain suitable for the federally listed species for which they have been designated. While federally listed species are protected by the ESA whether or not they are in an area that is designated as critical habitat, projects proposed within or adjacent to “critical habitat” must demonstrate that implementation of the project would not destroy or significantly impact the functions and values of the critical habitat.

No critical habitat exists within or immediately adjacent to the biological study area. The only critical habitat located within a 2-mile radius of the proposed project is designated for San Diego fairy shrimp (*Branchinecta sandiegonensis*) and is located approximately 1.3 miles north of the proposed project (USFWS 2019a).

3.7.6 Wildlife Movement Corridors and Nursery Sites

Wildlife movement corridors are essential to maintain populations of healthy and genetically diverse plant and wildlife species. Wildlife corridors are considered sensitive by local, state, and federal resource and conservation agencies, because these corridors allow wildlife to move between adjoining open space areas that are becoming increasingly isolated as open space becomes fragmented from urbanization, rugged terrain, and/or changes in vegetation (Beier and Loe 1992).

Wildlife corridors can be classified as either regional corridors or local corridors. Regional corridors are defined as those linking two or more large areas of natural open space, and local corridors are defined as those allowing resident animals to access critical resources (e.g., food, cover, water) in a smaller area that might otherwise be isolated by some form of urban development (e.g., roads, housing tracts).

Within these wildlife corridors, wildlife movement activities typically fall into one of three movement categories: (1) dispersal (i.e., juvenile animals from natal areas or individuals extending range distributions), (2) seasonal migration, and (3) movement related to home range activities (e.g., foraging for food or water, defending territories, searching for mates).

The proposed project is dominated by urban canyons along the southern edge of heavily urbanized Mission Valley. Despite being surrounded by urban development, noise, and lighting, the urban canyons within the proposed project and vicinity contain small but vital patches of undeveloped open space that appear to provide limited yet sufficient connectivity to one another to be considered part of both a local and regional wildlife corridor.

4.0 APPLICABLE REGULATIONS

This section provides summary of regulations that are applicable to the proposed project.

4.1 FEDERAL REGULATIONS

Applicable federal regulations are discussed below.

4.1.1 Federal Endangered Species Act

The ESA, which is administered by USFWS, provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered 'take' under the ESA. Section 9(a) of the ESA defines 'take' as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct."

4.1.2 Migratory Bird Treaty Act

All migratory bird species that are native to the U.S. or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004. The MBTA prohibits the kill or transport of native migratory birds or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. No permit is issued under the MBTA, and the MBTA does not mandate specific protection. However, typical acceptable requirements include nesting bird surveys during the avian breeding season and avoidance measures if nesting birds are discovered within or adjacent to a project. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

4.1.3 Rivers and Harbors Act & Clean Water Act

The Rivers and Harbors Act of 1899 and the CWA regulate project activities within non-marine navigable waters and/or waters of the U.S. The discharge of any pollutant from a point source into navigable waters is illegal unless a permit under the CWA's provisions is acquired. Permitting for projects that include both permanent and temporary dredging and filling in wetlands and non-wetland WoUS is overseen by the USACE under Section 404 of the CWA. Projects can be permitted on an individual basis or be covered by one of several approved nationwide permits or regional general permits.

4.2 STATE OF CALIFORNIA REGULATIONS

Applicable state regulations are discussed below.

4.2.1 California Environmental Quality Act

CEQA requires an environmental review for projects with potentially adverse impacts on the environment. Adverse environmental impacts are typically mitigated in accordance with existing state laws and regulations.

4.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) is similar to the federal ESA in that it provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. CESA is administered by CDFW and allows “take” of listed plant and wildlife species either by concurring with a federal Incidental Take Permit under CFGC Section 2080.1 or, for species that are state-listed but not federally listed, issuing an Incidental Take Permit under CFGC Section 2081 if specific criteria are met. The City MSCP Plan is considered an Incidental Take Permit pursuant to CFGC Section 2081.

4.2.3 California Fish and Game Code

The CFGC provides protection for several types of sensitive biological resources. CDFC Section 3503 and 3513 protects avian species, their nests, and their eggs from being “taken” unless authorized by CDFW through implementation of appropriate avoidance, minimization, and/or mitigation measures. CFGC Sections 1600 through 1603 regulate project activities within wetlands and riparian habitats. CDFW can issue a Streambed Alteration Agreement for projects affecting riparian and wetland habitats.

4.2.4 Water Quality Certification

Project activities that fill or dredge within wetland and non-wetland WoUS as well as wetland and non-wetland WoS, including isolated waters such as vernal pools and other waters showing lack of connectivity to a Traditional Navigable Waters (TNW), require a Water Quality Certification by the RWQCB under Section 401 of the CWA and Section 13000 et seq. of the California Water Code (CWC) under the Porter-Cologne Water Quality Control Act.

5.0 MSCP CONSISTENCY ANALYSIS

The MSCP Implementing Agreement (City 1997) was adopted by USFWS, CDFW, and the City in July 1997 and allows incidental take of threatened and endangered

species as well as other sensitive species conserved by the MSCP. These MSCP-covered species include 85 sensitive plant and wildlife species, 15 of which are also listed as “Narrow Endemic Species” that have restricted geographic distributions, soil affinities, and/or habitats within the region. Under the MSCP, impacts to Narrow Endemic Species are to be avoided to the maximum extent practicable.

The MSCP designates regional preserves, classified as the MHPA, that conserve sensitive vegetation communities and undeveloped land to sustain the MSCP-covered plant and wildlife species while allowing development of other areas subject to MSCP requirements. The MSCP provides implementation strategies, preserve design, and management guidelines. Under the MSCP, wetland vegetation communities and rare/uncommon upland vegetation communities (i.e., Tiers I, II, IIIA, and Tier IIIB) are considered sensitive by the City, while common upland vegetation communities (Tier IV) are not considered sensitive by the City.

In addition, ESL regulations protect, preserve, and, where damaged, restore the ESLs within the City (City 2018). ESL areas include lands within or partially within the MHPA; wetlands occurring within or outside the MHPA; vegetation communities classified as Tier I, II, IIIA, or IIIB; habitat for sensitive species; coastal beaches; coastal bluffs; and Special Flood Hazard Areas. ESL also includes steep hillside regulations in areas (1) with a natural slope gradient of at least 25 percent (25 feet of vertical rise for every 100 feet of horizontal distance) with an increase in vertical elevation of at least 50 feet, or (2) where a portion of the site has a slope gradient of at least 200 percent (200 feet of vertical rise for every 100 feet of horizontal distance) with an increase in elevation of at least 10 feet (City 2004). Tier IV vegetation communities are not considered ESL (City 2018).

All proposed City projects are required to demonstrate consistency with the MSCP. Consistency with the MSCP can be accomplished through proposed project design features or by creating restrictions on construction timing or methods through avoidance and minimization measures (AMMs; see Section 7.0, below). This section addresses the applicable MSCP sections to demonstrate that the proposed project is consistent with the MSCP.

5.1 CITY MSCP SUBAREA PLAN SECTION 1.4.2 – GENERAL PLANNING POLICIES AND DESIGN GUIDELINES

This section provides the General Planning Policies and Design Guidelines outlined in the City MSCP Subarea Plan Section 1.4.2, discusses their applicability to the proposed project, and describes how the proposed project conforms to them. Because *Mining, Extraction, and Processing Facilities* or *Flood Control* are not included as part of the proposed project, these are not applicable to the proposed project and, therefore, are not included in this analysis.

5.1.1 Roads and Utilities – Construction and Maintenance Policies

1. *All proposed utility lines (e.g., sewer, water) should be designed to avoid or minimize intrusion to the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights-of-way, and disturbed areas, minimizing habitat fragmentation.*

The proposed project cannot avoid impacts within the MHPA; however, the proposed project was designed to minimize impacts within the MHPA. As designed, the proposed project utilizes existing access paths and disturbed areas where possible. No habitat fragmentation is expected to result from implementation of the proposed project, as all temporary impacts will be revegetated. All unavoidable impacts to ESL will be mitigated to below a level of significance through implementation of Mitigation Measure **BIO-1** (see Section 8.0, below). Delineation of the work areas and avoidance areas will be implemented as part of AMM-1 and monitoring during construction will be implemented as part of AMM-2. No additional AMMs or mitigation measures would be required.

2. *All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located, and constructed to minimize environmental impacts. All such activities must avoid disturbing the habitat of MSCP-covered species and wetlands. If avoidance is infeasible, mitigation will be required.*

The proposed project components within the MHPA are existing, not new utilities. The proposed project has been designed to avoid wetlands and minimize impacts to habitats of MSCP-covered species. To the extent feasible, the proposed project will occur in existing access paths and disturbed areas. Where impacts to habitats of MSCP-covered species are unavoidable, mitigation will occur through deduction of credits from the City PUD Otay Mesa Mitigation Site and revegetation of temporary disturbance areas will occur once construction is completed (see Mitigation Measure **BIO-1** in Section 8.0, below). Therefore, no additional AMMs or mitigation measures would be required.

3. *Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for, the disturbed area after project completion will be required.*

The proposed project has been designed to minimize permanent and temporary impacts to existing sensitive habitats within and adjacent to the proposed project footprint. Unavoidable temporary and permanent impacts to approximately 0.340 acre of sensitive habitats will occur to facilitate access to manholes, replacement pipelines, and the truss bridge installation area and are necessary to complete the proposed project. Sensitive habitat will be revegetated following construction and will be mitigated. Impacts will be mitigated to below a level of significance through implementation of Mitigation Measure **BIO-1** (see Section 8.0, below). Therefore, no additional AMMs or mitigation measures would be required.

4. *Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage. Environmental documents and mitigation monitoring and reporting programs covering such development must clearly specify how this will be achieved, and construction plans must contain all the pertinent information and be readily available to crews in the field. Training of construction crews and field workers must be conducted to ensure that all conditions are met. A responsible party must be specified.*

The proposed project is located in an urban canyon that is surrounded by residential development and busy roadways. To the extent feasible, the proposed project has been designed to stay in existing access paths and minimize impacts to native habitats. In addition, no nighttime work or lighting is proposed as part of project construction. Environmental documents and construction plans will contain all pertinent information outlined in the AMMs (see Section 7.0, below) as well as in Mitigation Measure **BIO-1**, (see Section 8.0, below) and a contractor training program will be developed to educate all construction personnel on the sensitive resources within and adjacent to the proposed project area and the importance of adherence to the proposed project AMMs and mitigation measures. With implementation of the above measures, no impacts to wildlife corridors are anticipated. Therefore, no additional AMMs or mitigation measures would be required.

5. *Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads. Local streets should not cross the MHPA except where needed to access isolated development areas.*

No permanent new roads are proposed as part of the proposed project. The proposed project has been designed to utilize the existing access paths to the extent feasible. A temporary access path is required for construction of the permanent truss bridge and for trenching for the replacement pipeline. Revegetation will occur to re-establish habitat. Through implementation of

Mitigation Measure **BIO-1**, (see Section 8.0, below) all potential temporary proposed project impacts will be mitigated to below a level of significance. Therefore, no additional AMMs or mitigation measures would be required.

6. *Development of roads in canyon bottoms should be avoided whenever feasible. If an alternative location outside the MHPA is not feasible, then the road must be designed to cross the shortest length possible of the MHPA in order to minimize impacts and fragmentation of sensitive species and habitat. If roads cross the MHPA, they should provide for fully-functional wildlife movement capability. Bridges are the preferred method of providing for movement, although culverts in selected locations may be acceptable. Fencing, grading and plant cover should be provided where needed to protect and shield animals, and guide them away from roads to appropriate crossings.*

No permanent new roads are proposed as part of the proposed project. The proposed project has been designed to utilize the existing access paths to the extent feasible. A temporary access path is required for construction of the permanent truss bridge and for trenching for the replacement pipeline. An alternate road outside of the MHPA is not feasible. Through implementation of Mitigation Measure **BIO-1**, (see Section 8.0, below) all potential temporary proposed project impacts will be mitigated to below a level of significance. Therefore, no additional AMMs or mitigation measures would be required.

7. *Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas. Roads must be located in lower quality habitat or disturbed areas to the extent possible.*

The proposed project has been designed to minimize permanent impacts to sensitive habitats to below the significance threshold and to minimize temporary impacts to sensitive habitats by utilizing the existing access path and widening this path only when necessary to accommodate proposed construction activities. All of the potential permanent impacts and the majority of the potential temporary impacts occur to non-sensitive vegetation communities and land cover types (i.e., bare ground, developed, disturbed land, and ornamental vegetation). The proposed project is not anticipated to result in habitat fragmentation or in disruption of wildlife movement and breeding areas. Through implementation of Mitigation Measure **BIO-1**, (see Section 8.0, below) all unavoidable impacts to sensitive habitats will be mitigated to below a level of significance. Therefore, no additional AMMs or mitigation measures would be required.

For the most part, existing roads and utility lines are considered a compatible use within the MHPA and therefore will be maintained. Exceptions may occur where underutilized or duplicative road systems are determined not to be necessary as identified in the Framework Management Section 1.5.

The proposed project would utilize an existing access path that is considered a compatible use within the MHPA. The access path will remain unpaved. No alternate access routes were feasible. The temporary impacts associated with the construction of the temporary access path needed for construction of the truss bridge and trenching for the replacement pipeline would be mitigated to below a level of significance through implementation of Mitigation Measure **BIO-1** (see Section 8.0, below). Therefore, no additional AMMs or mitigation measures would be required.

5.1.2 Fencing, Lighting, and Signage

1. *Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).*

The proposed project occurs within and adjacent to the MHPA, largely in native habitat areas. Existing access paths currently exist in the project area, which appears to be used occasionally by the public. This area is not part of a wildlife corridor and construction of the project is not expected to disrupt wildlife movement and is not expected to result in an increase in human intrusion into the MHPA. Therefore, no AMMs or mitigation measures are proposed, and no fencing or other barriers are considered necessary.

2. *Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low- sodium or similar lighting. Signage will be limited to access and litter control and educational purposes.*

No lighting is included in the proposed project design. The proposed project will be constructed during daylight hours. Therefore, no lighting will be used during the proposed project construction. As such, no impacts from lighting are anticipated, and no AMMs or mitigation measures would be required.

5.1.3 Materials Storage

Prohibit storage of materials (e.g., hazardous or toxic, chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, especially due to potential leakage.

No proposed project staging areas or equipment storage will occur within the MHPA. If the proposed project staging areas and equipment storage are located adjacent to the MHPA, they have the potential to result in a release of toxics such as trash, oil, gasoline, or other construction-related materials into the MHPA. This unanticipated release could result in impacts to MHPA if not contained properly. The proposed project has been designed to include Best Management Practices (BMPs) that will prevent impacts within or adjacent to the MHPA, and additional BMPs would be implemented as outlined in the Storm Water Pollution Prevention Plan (SWPPP) to reduce the potential impacts to below a level of significance. In addition, implementation of AMMs (see Section 7.0, below) will provide additional resource protection.

5.2 CITY MSCP SUBAREA PLAN SECTION 1.4.3 - LAND USE ADJACENCY GUIDELINES

This section provides the Land Use Adjacency Guidelines outlined in the City MSCP Subarea Plan Section 1.4.3, discusses their applicability to the proposed project, and describes how the proposed project conforms to them.

5.2.1 Drainage

All new and proposed development adjacent to the MHPA must not drain directly into the preserve, and 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.

The proposed project will include BMPs during construction and compliance with the City landscape regulations, both of which will prevent drainage from the proposed project directly into the MHPA. In addition, installation of BMPs during construction will prevent toxins and other foreign materials from entering the MHPA. As such, no additional AMMs or mitigation measures would be required.

5.2.2 Toxins

Land uses such as recreation and agriculture that use chemicals or generate byproducts that are potentially toxic or harmful to wildlife, habitat, or water quality must incorporate measures to reduce the impact of application or drainage of such materials into the MHPA.

No proposed project staging areas or equipment storage will occur within the MHPA. While the proposed project will not use chemicals or generate by-products that are potentially toxic or harmful to habitats, wildlife, and water quality, proposed project staging areas or equipment storage adjacent to the MHPA would have the potential to result in a release of toxics such as trash, oil, gasoline, or other construction-related materials into the MHPA. If staging areas and equipment storage are planned adjacent to the MHPA, appropriate BMPs would be implemented as outlined in the SWPPP to reduce the potential impacts to below a level of significance. As such, no additional AMMs or mitigation measures would be required.

5.2.3 Lighting

Lighting must be directed away from the MHPA and, if necessary, adequately shielded to protect the MHPA and sensitive species from night lighting.

Because there are existing homes within and immediately adjacent to the proposed project area, construction of the proposed project will be limited to daylight hours and is not anticipated to require the use of artificial light sources. In addition, the proposed project does not include any permanent lighting sources. Therefore, the proposed project is not anticipated to introduce night lighting into the MHPA. As such, no additional AMMs or mitigation measures would be required for project-generated lighting.

5.2.4 Noise

Uses adjacent to the MHPA must be designed to minimize noise that might impact or interfere with wildlife utilization of the MHPA.

Suitable coastal California gnatcatcher breeding habitat occurs within 300 feet of the proposed project, and suitable Cooper's hawk breeding habitat occurs within 300 feet of the proposed project; therefore, construction noise could result in significant impacts to these species if they are present within the habitat that occurs within the MHPA.

Potential noise impacts on Cooper's hawk would be reduced to below a level of significance through implementation of AMMs (see Section 7.0, below), which state that removal of habitat that supports active nests should either occur outside of the breeding season (February 1 to September 15) or a pre-construction survey will be conducted within 10 days of vegetation removal. If Cooper's hawk is detected, additional measures will be implemented, such as follow up surveys, nest monitoring, and/or construction setback buffers. No mitigation measures or additional AMMs would be required.

Potential proposed project impacts on coastal California gnatcatcher would be reduced to below a level of significance through implementation of AMMs (see Section 7.0, below), which state that clearing, grubbing, grading, and other construction activities shall avoid the coastal California gnatcatcher breeding season (March 1 and August 15) or pre-construction surveys would be completed to determine if the species is present within the MHPA. If the coastal California gnatcatcher is present within the MHPA, construction noise will be kept below 60 decibels [db(a)] hourly average (or above current ambient noise levels if ambient noise levels exceed 60db[a]). Noise monitoring would be conducted to demonstrate that construction noise stays below the threshold. No mitigation measures or additional AMMs would be required.

5.2.5 Barriers to Incursion

New development adjacent to the preserve may be required to provide barriers along MHPA boundaries to redirect public access to appropriate locations and reduce domestic animal predation in the preserve.

The majority of the proposed project would include replacement or rehabilitation of existing sewer. While the proposed project will include three new manholes, these will be installed in areas where existing infrastructure is located. The proposed project is not anticipated to result in an increase in human activity or domestic animal predation. Therefore, no additional AMMs or mitigation measures would be required to prevent public access or to reduce domestic animal predation.

5.2.6 Invasive Species

No invasive plant species shall be introduced into areas adjacent to the MHPA.

The proposed project will not introduce any invasive plant species to the area. In addition, any on-site revegetation will include a native plant palette and will not include any non-native and/or invasive plant species. Therefore, no additional AMMs or mitigation measures would be required for invasive species.

5.2.7 Brush Management

New residential development located adjacent to and topographically above the MHPA must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zone 2 may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. Zone 2 will be increased by 30 feet, except in areas with a low fire hazard severity rating where no Zone 2 would be required.

The proposed project does not include residential development and, thus, will not

result in the creation of brush management zones. Therefore, no additional AMMs or mitigation measures would be required for brush management.

5.2.8 Grading/Land Development

Manufactured slopes associated with project development must be included in the project footprint.

No manufactured slopes are included as part of the proposed project. Therefore, no additional AMMs or mitigation measures would be required for grading/land development.

5.3 CITY MSCP SUBAREA PLAN SECTION 1.5.2 - GENERAL MANAGEMENT DIRECTIVES

This section provides the General Management Directives outlined in the City MSCP Subarea Plan Section 1.5.2, discusses their applicability to the proposed project, and describes how the proposed project conforms to them. These General Management Directives include Priority 1 and Priority 2 directives. Priority 1 refers to directives that protect the resources in the MHPA, including management actions that are necessary to ensure that MSCP-covered species are adequately protected. Priority 2 refers to directives other than those required for MSCP-covered species status and other long-term items that may be implemented during the life of the City MSCP Subarea Plan as funding becomes available.

This section provides the applicable General Management Directives, discusses their applicability to the proposed project, and describes how the proposed project conforms to them. Because *Adjacency Management Issues*, *Invasive Exotic Control and Removal*, and *Flood Control* are not included as part of the proposed project, these are not applicable to the proposed project and, therefore, are not included in this analysis.

5.3.1 Mitigation

Mitigation, when required as part of project approvals, shall be performed in accordance with the City ESL Ordinance and City Biology Guidelines.

The proposed project has been designed to include AMMs (see Section 7.0, below) to reduce proposed project impacts to below a level of significance to the extent feasible. For unavoidable significant impacts, Mitigation Measure **BIO-1** (see Section 8.0, below) will be implemented. Mitigation Measure **BIO-1** is consistent with the City ESL Ordinance and City Biology Guidelines and includes on-site revegetation of temporary proposed project impacts through implementation of a City-approved revegetation plan that includes a 25-month monitoring period as well as a deduction

of credits from the City PUD Otay Mesa Mitigation Site. No additional AMMs or mitigation measures would be required.

5.3.2 Restoration

Restoration or revegetation undertaken in the MHPA shall be performed in a manner acceptable to the City. Where covered species status identifies the need for reintroduction and/or increasing the population, the covered species will be included in restoration/revegetation plans, as appropriate. Restoration or revegetation proposals will be required to prepare a plan that includes elements addressing financial responsibility, site preparation, planting specifications, maintenance, monitoring and success criteria, and remediation and contingency measures. Wetland restoration/revegetation proposals are subject to permit authorization by federal and state agencies.

The proposed project is not anticipated to result in significant impacts to jurisdictional resources; therefore, it does not include any wetland restoration or revegetation. Mitigation Measure **BIO-1** (see Section 8.0, below) includes on-site revegetation of temporary proposed project impacts to upland vegetation communities through implementation of a City-approved revegetation plan that includes a 25-month monitoring period as well as a deduction of credits from the City PUD Otay Mesa Mitigation Site. Proposed project impacts to several San Diego sunflower individuals cannot be avoided. While these impacts are not significant and this species is not an MSCP-covered species, San Diego sunflower was added to the Diegan coastal sage scrub seed mix included in the City-approved revegetation plan developed for the proposed project. In addition, the City-approved revegetation plan includes the required elements listed above, including site preparation and Plant Establishment Period (PEP) requirements, success criteria, maintenance and monitoring frequency, and remediation and contingency measures. No additional AMMs or mitigation measures would be required.

5.3.3 Public Access, Trails, and Recreation

Priority 1:

1. *Provide sufficient signage to clearly identify public access to the MHPA. Barriers such as vegetation, rocks/boulders or fencing may be necessary to protect highly sensitive areas. Use appropriate type of barrier based on location, setting and use. For example, use chain link or cattle wire to direct wildlife movement, and natural rocks/boulders or split rail fencing to direct public access away from sensitive areas. Lands acquired through mitigation may preclude public access in order to satisfy mitigation requirements.*
2. *Locate trails, view overlooks, and staging areas in the least sensitive areas of the MHPA. Locate trails along the edges of urban land uses adjacent to the*

MHPA, or the seam between land uses (e.g., agriculture/habitat), and follow existing dirt roads as much as possible rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types (ecotones) for longer than necessary due to the typically heightened resource sensitivity in those locations.

- 3. In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance as needed. Undertake measures to counter the effects of trail erosion including the use of stone or wood crossjoints, edge plantings of native grasses, and mulching of the trail.*
- 4. Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than four feet in core areas or wildlife corridors. Exceptions are in the San Pasqual Valley where other agreements have been made, in Mission Trails Regional Park, where appropriate, and in other areas where necessary to safely accommodate multiple uses or disabled access. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.*
- 5. Limit the extent and location of equestrian trails to the less sensitive areas of the MHPA. Locate staging areas for equestrian uses at a sufficient distance (e.g., 300-500 feet) from areas with riparian and coastal sage scrub habitats to ensure that the biological values are not impaired.*
- 6. Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except for law enforcement, preserve management or emergency purposes. Restore disturbed areas to native habitat where possible or critical, or allow to regenerate.*
- 7. Limit recreational uses to passive uses such as birdwatching, photography and trail use. Locate developed picnic areas near MHPA edges or specific areas within the MHPA, in order to minimize littering, feeding of wildlife, and attracting or increasing populations of exotic or nuisance wildlife (opossums, raccoons, skunks). Where permitted, restrain pets on leashes.*
- 8. Remove homeless and itinerant worker camps in habitat areas as soon as found pursuant to existing enforcement procedures.*
- 9. Maintain equestrian trails on a regular basis to remove manure (and other pet feces) from the trails and preserve system in order to control cowbird invasion and predation. Design and maintain trails where possible to drain into a gravel bottom or vegetated (e.g., grass-lined) swale or basin to detain runoff and remove pollutants.*

The proposed project does not include public access, trails (e.g., hiking, equestrian, off-road vehicle), and/or recreation. The proposed project was

designed to use existing access paths and, upon completion of the proposed project, to revegetate the temporary access paths required to complete the proposed project through implementation of a City-approved revegetation plan. Thus, the proposed project is not anticipated to increase or encourage public access, trails, or recreation within the MHPA. As such, no additional AMMs or mitigation measures would be required.

5.3.4 Litter/Trash and Materials Storage

Priority 1:

1. *Remove litter and trash on a regular basis. Post signage to prevent and report littering in trail and road access areas. Provide and maintain trash cans and bins at trail access points.*
2. *Impose penalties for littering and dumping. Fines should be sufficient to prevent recurrence and also cover reimbursement of costs to remove and dispose of debris, restore the area if needed, and to pay for enforcement staff time.*
3. *Prohibit permanent storage of materials (e.g., hazardous and toxic chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, due to potential leakage.*
4. *Keep wildlife corridor undercrossings free of debris, trash, homeless encampments, and all other obstructions to wildlife movement.*

Priority 2:

1. *Evaluate areas where dumping recurs for the need for barriers. Provide additional monitoring as needed (possibly by local and recreational groups on a "Neighborhood Watch" type program), and/or enforcement.*

The proposed project is not anticipated to result in an increase in litter, trash, or dumping within or adjacent to the MHPA. Construction personnel will maintain a clean worksite and will remove all construction-related litter and trash. No temporary or permanent storage or any materials are planned within the MHPA. All construction-related staging will occur outside the MHPA, and no long-term storage is included as part of the proposed project. In addition, no wildlife undercrossings are included in the proposed project, and the proposed project is not anticipated to obstruct wildlife movement. Therefore, no additional AMMs or mitigation measures would be required.

5.4 CONDITIONS OF COVERAGE FOR SENSITIVE SPECIES

The following MSCP-covered species were observed within the biological study area or were determined to have a moderate to high potential to occur within the biological study area.

5.4.1 Wart-stemmed Ceanothus

The Conditions of Coverage for wart-stemmed ceanothus include:

- Revegetation efforts within appropriate habitats must include restoration of this species.
- Area specific management directives for the protected populations must include specific measures to increase populations. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.
- Any newly found populations should be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.

Project Conformance: This species occurs within the biological study area, adjacent to and completely outside of the proposed project footprint. Potential impacts to wart-stemmed ceanothus have been avoided through project design, by utilizing existing PUD access paths to the extent feasible and avoiding impacts to this species. In addition, implementation of AMMs (see Section 7.0, below), such as resource delineation and presence of a biological monitor, will assure that the proposed project does not impact this species. Therefore, impacts to this species as a result of this project are not anticipated, and no additional AMMs or mitigation measures would be required.

5.4.2 San Diego Barrel Cactus

The Conditions of Coverage for San Diego barrel cactus include:

- Area specific management directives for the protected populations must include specific measures protect this species from edge effects and unauthorized collection. Area specific management directives must include fire management/control practices to protect against a too frequent fire cycle.

Project Conformance: This species occurs within the biological study area, adjacent to and completely outside of the proposed project footprint. Potential impacts to San Diego barrel cactus have been avoided through project design, by utilizing existing PUD access paths to the extent feasible and avoiding impacts to this species. In addition, implementation of AMMs (see Section 7.0, below), such as resource

delineation and presence of a biological monitor, will assure that the proposed project does not impact this species. Therefore, impacts to this species as a result of this project are not anticipated, and no additional AMMs or mitigation measures would be required.

5.4.3 Coast Horned Lizard

The Conditions of Coverage for coast horned lizard include:

- Area specific management directives must include specific measures to maintain native any species, discourage the Argentine ant, and protect against detrimental edge effects to this species.

Project Conformance: This species has moderate potential to occur within the biological study area due to suitable habitat conditions and nearby historical observations. Potential impacts to coast horned lizard have been avoided through project design, by utilizing existing PUD access paths to the extent feasible and limiting the creation of new, temporary access paths to reduce potential edge effects. In addition, implementation of AMMs (see Section 7.0, below), such as the presence of a biological monitor and requirements for construction-related trash removal, will assure that the proposed project does not impact this species. Therefore, impacts to this species as a result of this project are not anticipated, and no additional AMMs or mitigation measures would be required.

5.4.4 Orange-throated Whiptail

The Conditions of Coverage for orange-throated whiptail include:

- Area specific management directives must address edge effects.

Project Conformance: This species was observed within the biological study area during the biological reconnaissance survey. Potential impacts to orange-throated whiptail have been avoided through project design, by utilizing existing PUD access paths to the extent feasible and limiting the creation of new, temporary access paths to reduce potential edge effects. In addition, implementation of AMMs (see Section 7.0, below), such as the presence of a biological monitor and resource delineation, will assure that the proposed project does not impact this species. Therefore, impacts to this species as a result of this project are not anticipated, and no additional AMMs or mitigation measures would be required.

5.4.5 Cooper's Hawk

The Conditions of Coverage for Cooper's hawk include:

- 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.

Project Conformance: This species was observed within the biological study area during the biological reconnaissance survey. Potential impacts to Cooper's hawk have been avoided through project design, by utilizing existing PUD access paths to the extent feasible and avoiding impacts to suitable nesting habitats. In addition, implementation of AMMs (see Section 7.0, below) – such as the presence of a biological monitor, avoidance of nesting bird season, and pre-construction nesting bird surveys – will assure that the proposed project does not impact this species. Therefore, impacts to this species as a result of this project are not anticipated, and no additional AMMs or mitigation measures would be required

5.4.6 Coastal California Gnatcatcher

The Conditions of Coverage for the Coastal California gnatcatcher include:

- 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 clearing or occupied habitat within the City MHPA and within the County's Biological Resource Core Areas may occur between March 1 and August 15.

Project Conformance: This species has high potential to occur within the biological study area due to occurrence of suitable habitat and nearby historical observations, but historical observations occur completely outside of the proposed project footprint. Potential impacts to coastal California gnatcatcher have been avoided through project design, by utilizing existing PUD access paths to the extent feasible and avoiding impacts to suitable nesting habitats. In addition, implementation of AMMs (see Section 7.0, below) – such as the presence of a biological monitor, avoidance of nesting bird season, and pre-construction protocol-level surveys – will assure that the proposed project does not impact this species. Therefore, impacts to this species as a result of this project are not anticipated, and no additional AMMs or mitigation measures would be required.

5.4.7 Southern Mule Deer

No Conditions of Coverage are included for southern mule deer.

Project Conformance: This species has moderate potential to occur within the biological study area due to suitable habitat and nearby historical observations, but

historical observations occur completely outside of the proposed project footprint. Potential impacts to southern mule deer have been avoided through project design, by utilizing existing PUD access paths to the extent feasible and avoiding impacts to wildlife movement corridors, nursery sites, habitat linkages, and core areas. Therefore, impacts to this species as a result of this project are not anticipated, and no additional AMMs or mitigation measures would be required.

6.0 ANALYSIS OF PROPOSED PROJECT IMPACTS

The City CEQA Significance Determination Thresholds (City 2018) are used to establish whether a proposed project may result in a ‘significant effect.’ A ‘significant effect’ is defined as a “substantial or potentially substantial adverse change in the environment.” Impacts to biological resources are evaluated by City staff through the CEQA review process, the ESL Regulations, and the City Biology Guidelines (City 2018), as well as through the review of a project’s consistency with the City MSCP Subarea Plan. For projects within the City or carried out by the City that may affect sensitive biological resources, potential impacts to such sensitive biological resources must be evaluated using the eight significance criteria outlined in the City CEQA Significance Determination Thresholds (City 2018). Each of these criteria is addressed in this section.

6.1 CRITERION 1

Would the proposed project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies, or regulations, or by CDFW or USFWS?

No federally or state-listed plant or wildlife species were observed or detected during the biological reconnaissance survey in 2017 or during the follow up site visit conducted in 2020; however, the coastal California gnatcatcher – a federally listed threatened species, a CDFW species of special concern, and an MSCP-covered species – has a high potential to nest and forage within the biological study area and is discussed in the wildlife section, below.

No focused sensitive plant or wildlife surveys have been conducted for the proposed project. Potential impacts to the other sensitive plant and wildlife species that were observed during the biological reconnaissance survey in 2017 and/or during the follow up site visit in 2020 or that have a potential for occurrence are discussed, below.

Sensitive Plant Species

Four sensitive plant species were observed during the biological reconnaissance survey in 2017 and during the follow up site visit in 2020 – San Diego sunflower (CRPR 4.2), wart-stemmed ceanothus (CRPR 2B.2), San Diego barrel cactus (CRPR 2B.1), and Engelmann oak (CRPR 4.2). Three of these species – wart-stemmed ceanothus, San Diego barrel cactus, and Engelmann oak – are located outside of the proposed project footprint and are not anticipated to be impacted by the proposed project. In addition, three sensitive plant species – spineshrub, summer-holly, and decumbent goldenbush – have a moderate potential to occur within the biological study area, and one sensitive plant species – Nuttall's scrub oak – has a high potential to occur within the biological study area; however, these species are not expected to occur within the proposed project footprint, because the proposed project footprint is small and has been designed to utilize the existing access paths and disturbed areas to avoid impacts to native habitats to the extent feasible. Therefore, impacts to these species are not expected.

Approximately 10 San Diego sunflower individuals are located within and immediately adjacent to the proposed project footprint and would be impacted by the proposed project.

To the extent feasible, the proposed project will avoid impacts to sensitive plant species. Through implementation of AMMs (see Section 7.0, below), a biologist will be present to delineate site limits prior to construction to assist with AMMs and to provide specific guidance should any sensitive plant species be identified within the proposed project impact area within the MHPA. While the proposed project is anticipated to impact approximately 10 San Diego sunflower individuals, a species with relatively low sensitivity, this sensitive plant species is well preserved within other portions of the MHPA. Therefore, the proposed project is not anticipated to result in significant impacts to any sensitive plant species based on the data collected during the biological reconnaissance survey in 2017 and the follow up site visit in 2020. Additionally, San Diego sunflower was added to the Diegan coastal sage scrub seed mix included with the 25-month revegetation plan included in Mitigation Measure **BIO-1** (see Section 8.0, below).

Sensitive Wildlife Species

The proposed project could result in impacts to two sensitive wildlife species that were observed during the biological reconnaissance survey in 2017 – orange-throated whiptail and Cooper's hawk. In addition, the proposed project could result in impacts to coastal California gnatcatcher as well as other bird species covered under the MBTA.

Potential impacts to orange-throated whiptail would not be considered significant, because suitable habitat within the proposed project footprint comprises a small

fraction of the habitat for the local herpetofauna populations, and is contiguous with habitat extending south along the canyon slopes. The proposed project is not expected to reduce the populations of these species to below a self-sustaining level. Therefore no significant impacts to sensitive herpetofauna species would occur, and no mitigation is required.

The proposed project could result in impacts to Cooper's hawk and other MBTA-covered species if construction occurs during the nesting season (February 1 to September 15). Direct impacts to these species could result from vegetation clearing during the nesting season, which could impact active nests. In addition, indirect impacts could occur from an increase in noise resulting from construction activities, which could displace some birds and impact their breeding success. Both direct and indirect impacts to nesting Cooper's hawk and other MBTA-covered species would be considered significant. Therefore, construction of the proposed project should occur outside of the nesting season. However, if the proposed project cannot avoid the nesting season, pre-construction nesting surveys and avoidance buffers would be required. Implementation of AMMs (see Section 7.0, below) would assure that impacts to Cooper's hawk and other MBTA-covered species are reduced to below a level of significance.

Suitable coastal California gnatcatcher breeding habitat occurs within 300 feet of the proposed project, and the proposed project could result in impacts to this species if construction occurs during the breeding season (March 1 to August 15). Direct impacts to this species could result from vegetation clearing during the nesting season, which could impact active nests. In addition, indirect impacts could occur from an increase in noise resulting from construction activities, which could displace some birds and impact their breeding success. Direct impacts to coastal California gnatcatcher would be considered significant, and indirect impacts to coastal California gnatcatcher within the MHPA would be considered significant. Implementation of AMMs (see Section 7.0, below) would assure that impacts to coastal California gnatcatcher are reduced to below a level of significance.

6.2 CRITERION 2

Would the proposed project have a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

The proposed project is anticipated to result in both permanent and temporary impacts. A permanent impact is an impact that results in the permanent, irreversible removal or displacement of biological resources. Permanent impacts associated with the proposed project include the single-lane truss bridge and three new

manholes. A temporary impact is an impact that occurs during construction and is considered to have reversible effects on biological resources, so that the resources can be restored to pre-construction conditions after construction is completed. Temporary impacts associated with the proposed project include TCAs (i.e., manhole work areas, spoils/staging area) and the temporary access path associated with the single-lane truss bridge construction. Trails through private property and the existing PUD access path are not considered impacts, as vegetation trimming and/or grading are not anticipated. Thus, these temporary impacts would not require additional AMMs or mitigation measures.

The proposed project is anticipated to result in permanent impacts to sensitive vegetation communities within the MHPA, including approximately 0.001 acre of disturbed Diegan coastal sage scrub and less than 0.001 acre (approximately 19 square feet [sq. ft.]) of southern mixed chaparral – *Rhus integrifolia* dominated. In addition, the proposed project would result in temporary impacts to sensitive vegetation communities within the MHPA, including approximately 0.129 acre of Diegan coastal sage scrub, 0.060 acre of disturbed Diegan coastal sage scrub, and 0.012 acre of southern mixed chaparral – *Rhus integrifolia* dominated, and temporary impacts to sensitive vegetation communities outside of the MHPA, including 0.113 acre of Diegan coastal sage scrub and 0.024 acre of disturbed Diegan coastal sage scrub (Attachment 1: Figure 5). All anticipated proposed project impacts are summarized in Table 3, below.

Table 3
Anticipated Proposed Project Impacts to Vegetation Communities

MSCP Tier / Wetland Habitat Type		Vegetation Community/Land Cover Type	Vegetation Community/Land Cover Impacts				
			Within MHPA (acres*)		Outside MHPA (acres*)		Total (acres**)
			Perm	Temp	Perm	Temp	
Upland Habitats & Land Cover Types	Tier II Uncommon Uplands	Diegan Coastal Sage Scrub	--	0.129	--	0.113	0.242
		Diegan Coastal Sage Scrub - Disturbed	0.001	0.060	--	0.024	0.085
	Tier IIIA Common Uplands	Southern Mixed Chaparral – <i>Rhus integrifolia</i> Dominated	<0.001 (19 sq. ft.)	0.012	--	--	0.013
		Southern Mixed Chaparral – <i>Ceanothus verrucosus</i> Dominated	--	--	--	--	--
	Tier IV	Ornamental	--	--	<0.001(7 sq. ft.)	0.025	0.025

MSCP Tier / Wetland Habitat Type		Vegetation Community/Land Cover Type	Vegetation Community/Land Cover Impacts				
			Within MHPA (acres*)		Outside MHPA (acres*)		Total (acres**)
			Perm	Temp	Perm	Temp	
	Other Uplands	Disturbed Land	0.001	0.024	--	0.003	0.029
	N/A	Bare Ground	--	0.061	--	0.004	0.065
		Developed Land	--	--	--	0.208	0.208
Wetland Habitats	Riparian Scrub	Southern Willow Scrub – Disturbed	--	--	--	--	--
TOTAL **			0.003	0.286	<0.001 (7 sq. ft.)	0.378	0.667

*Acreages are approximate and rounded to the nearest thousandth of an acre or square feet if less than 0.001 acre.

**Total acreages represent the actual acreages without the rounding error.

Impact avoidance and minimization will be achieved through implementation of AMMs (see Section 7.0, below). Unavoidable impacts are anticipated to approximately 0.340 acre of sensitive vegetation communities (i.e., Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and southern mixed chaparral – *Rhus integrifolia* dominated). Temporary and permanent impacts to 0.340 acre of sensitive vegetation communities would require revegetation with a 25-month maintenance and monitoring period. The impacts are considered significant; therefore, mitigation would be required at a ratio of 1:1 for 0.190 acre of Tier II (i.e., Diegan coastal sage scrub and disturbed Diegan coastal sage scrub) impacts and a ratio of 1:1 for 0.013 acre of Tier IIIA (i.e., southern mixed chaparral – *Rhus integrifolia* dominated) impacts inside the MHPA. For areas outside of the MHPA, mitigation would be required at a ratio of 1:1 for 0.138 acre of Tier II (i.e., Diegan coastal sage scrub and disturbed Diegan coastal sage scrub) impacts. Anticipated mitigation for impacts to vegetation communities is described in Table 4 below and all mitigation will occur within the MHPA. These mitigation measures have been included below as Mitigation Measure **BIO-1** (see Section 8.0, below)..

Table 4
Anticipated Mitigation for Proposed Project Impacts to Vegetation Communities*

MSCP Tier		Vegetation Community	Vegetation Community Impacts & Mitigation Ratios						Total Acres***
			Within MHPA			Outside MHPA			
			Acres**	Ratio	Total	Acres**	Ratio	Total	
Upland Habitats	Tier II Uncommon Uplands	Diegan Coastal Sage Scrub	0.129	1:1	0.129	0.113	1:1	0.113	0.242
		Diegan Coastal Sage	0.061	1:1	0.061	0.024	1:1	0.024	0.085

MSCP Tier		Vegetation Community	Vegetation Community Impacts & Mitigation Ratios						Total Acres***
			Within MHPA			Outside MHPA			
			Acres**	Ratio	Total	Acres**	Ratio	Total	
		Scrub - Disturbed							
	Tier IIIA Common Uplands	Southern Mixed Chaparral – <i>Rhus integrifolia</i> Dominated	0.013	1:1	0.013	--	0.5:1	--	0.013
TOTAL ***			0.203	--	0.203	0.138	--	0.138	0.340

*All mitigation for significant vegetation impacts will occur within the MHPA.

**Acreages are approximate and rounded to the nearest thousandth of an acre or square feet if less than 0.001 acre.

***Total acreages represent the actual acreages without the rounding error.

Total mitigation for temporary and permanent impacts would be 0.340 acre. Because these proposed impacts are small, isolated, and have a lower long-term conservation value, the proposed project impacts would be mitigated through implementation of Mitigation Measure **BIO-1** (see Section 8.0, below), which includes a deduction of credits from the City PUD Otay Mesa Mitigation Site.

6.3 CRITERION 3

Would the proposed project have a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

The proposed project has been designed to avoid impacts to wetlands and to minimize impacts to below the significance threshold for other jurisdictional resources (Attachment 1: Figure 6; Table 3, above). The use of trenchless pipe rehabilitation would be implemented in several locations to minimize impacts. The project will also use existing PUD access paths to minimize temporary impacts.

Despite the AMMs implemented to protect wetlands, the project cannot fully avoid jurisdictional resources because a section of proposed sewer upsizing will require construction of a trench across an unvegetated ephemeral drainage (Table 5). The project is expected to temporarily impact USACE, RWQCB, and CDFW jurisdictional habitats based on HELIX's jurisdictional delineation and the analysis of the proposed project impact footprint. The project would temporarily impact approximately 0.001 acre (44 sq. ft.) of USACE/RWQCB non-wetland WoUS/WoS and approximately 0.002 acre of CDFW streambed (87 sq. ft.; Figures 5 and 6). These impacts occur both within and outside of an established PUD access path (Attachment 1: Figures 5 and 6; Attachment 6: Representative Photos). The

proposed project will not result in any impacts to wetland WoUS/WoS or CDFW riparian habitat. The proposed project would not impact City Wetlands.

Impacts to 0.001 acre of non-wetland WoUS/WoS and impacts to 0.002 acre of CDFW streambed are not considered significant because they would not result in a substantial adverse impact to wetlands. Therefore, no additional AMMs or mitigation would be required. City staff will coordinate with USACE, RWQCB, and CDFW to determine if the agencies will require permit applications to be submitted for anticipated proposed project impacts to this unvegetated drainage.

Table 5
Anticipated Impacts to Jurisdictional Resources

Type	Temporary Impact (Acres*/square feet)		Permanent Impacts (Acres*/square feet)	
	Within PUD Access Path	Outside PUD Access Path	Within PUD Access Path	Outside PUD Access Path
USACE/RWQCB				
Non-Wetland WoUS/WoS (Unvegetated Channel ¹)	0.001 (32 sq. ft)	<0.001 (12 sq. ft)	--	--
TOTAL (USACE and RWQCB)	0.001 (44 sq. ft)		--	
CDFW				
Streambed (Unvegetated Channel ¹)	0.002 (72 sq. ft)	<0.001 (15 sq. ft)	--	--
TOTAL (CDFW)	0.002 (87 sq. ft)		--	

¹The unvegetated channel is included in the Diegan coastal sage scrub (DCSS) community acreage impacts listed in Table 3 because the DCSS vegetation overhangs the unvegetated channel.

*Acreages are approximate and rounded to the nearest thousandth of an acre or square feet if less than 0.001 acre.

6.4 CRITERION 4

Would the proposed project interfere substantially with the movement of any native, resident, or migratory fish or wildlife species or with established native, resident, or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

The proposed project is not anticipated to interfere substantially with the movement of any native, resident, or migratory fish or wildlife species or with native, resident, or migratory wildlife corridors. In addition, the proposed project is not anticipated to interfere with linkages as identified in the MSCP Plan or with use of native wildlife nursery sites. While the proposed project may temporarily deter wildlife movement in the area, long-term use of the area would return to normal after project completion. As such, no additional AMMs or mitigation measures would be required.

6.5 CRITERION 5

Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

As discussed in Section 5.0: MSCP Consistency Analysis, above, the proposed project has been designed to comply with the City MSCP Subarea Plan Section 1.4.2 – General Planning Policies and Design Guidelines, City MSCP Section 1.4.3 – Land Use Adjacency Guidelines, the City MSCP Subarea Plan Section 1.5.2 - General Management Directives and the City MSCP Conditions of Coverage for MSCP-covered species. Through this consistency analysis as well as through implementation of the AMMs in Section 7.0, below, and the mitigation measures in Section 8.0, below, the proposed project is not anticipated to conflict with the requirements of any local, regional, or state conservation plans, including the City MSCP Subarea Plan. The proposed project involves replacement and rehabilitation of existing sewer lines and associated infrastructure and is consistent with the City MSCP Subarea Plan. As such, no additional AMMs or mitigation measures would be required.

6.6 CRITERION 6

Would the proposed project introduce land use within an area adjacent to the MHPA that would result in adverse edge effects?

As discussed in Section 5.0: MSCP Consistency Analysis, above, the proposed project has been designed to comply with the City MSCP Subarea Plan Section 1.4.2 – General Planning Policies and Design Guidelines, City MSCP Section 1.4.3 – Land Use Adjacency Guidelines, the City MSCP Subarea Plan Section 1.5.2 - General Management Directives, and the City MSCP Conditions of Coverage for MSCP-covered species.

The proposed project has been designed to minimize indirect impacts to sensitive resources within the MHPA and, thus, maintain the functions and values of the preserve while reducing edge effects. The proposed project also has been designed to avoid disturbance to native habitats to the maximum extent feasible, including avoiding impacts to the oak species that occur adjacent to the proposed project footprint. In addition, no new facilities are proposed within or adjacent to the MHPA. To the extent feasible, the proposed project has been designed to occur in existing access paths and minimize impacts to native habitats and other sensitive biological resources. Implementation of AMMs (see Section 7.0, below) as well as Mitigation Measure **BIO-1** (see Section 8.0, below) would reduce impacts to below a level of

significance. As such, no additional AMMs or mitigation measures would be required.

6.7 CRITERION 7

Would the proposed project conflict with any local policies or ordinances protecting biological resources?

The proposed project has been designed to minimize impacts to sensitive biological resources addressed in the City MSCP Subarea Plan and Land Development Code (Attachment 1: Figure 6). Section 5.0: MSCP Consistency Analysis, above, demonstrates how the proposed project conforms to the City MSCP Subarea Plan Requirements. Thus, the proposed project would not conflict with any local policies or ordinances that protect these biological resources. Implementation of the AMMs (see Section 7.0, below) and Mitigation Measure **BIO-1** (see Section 8.0, below) would ensure that the proposed project would assure there are no conflicts with local policies and ordinances. As such, no additional AMMs or mitigation measures would be required.

6.8 CRITERION 8

Would the proposed project result in an introduction of invasive species of plants into a natural open space area?

The proposed project is not anticipated to result in the introduction of invasive plant species into a natural open space area. The proposed project is surrounded by urban development and associated ornamental vegetation, which includes a prevalence of non-native plant species. Implementation of Mitigation Measure **BIO-1** (see Section 8.0, below) would assure that any revegetation following project completion would include a native plant palette and would not include any non-native and/or invasive species. In addition, weed abatement would be included as a component of the revegetation plan. Implementation of the AMMs (see Section 7.0, below) and Mitigation Measure **BIO-1** (see Section 8.0, below) would reduce any potential impacts to below a level of significance. As such, no additional AMMs or mitigation measures would be required to avoid the introduction of invasive plant species into natural open space.

7.0 AVOIDANCE AND MINIMIZATION MEASURES

The proposed project has been designed to include the following measures to avoid or minimize potential proposed project impacts to the maximum extent feasible.

7.1 GENERAL AVOIDANCE AND MINIMIZATION MEASURES

7.1.1 AMM-1: Prior to Construction

Biologist Verification – The owner/permittee shall provide a letter to the City Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist), as defined in the City Biology Guidelines (2018), 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.

Pre-Construction Meeting – The Qualified Biologist shall attend the pre-construction 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 Ordinance, project permit conditions, CEQA, ESAs, and/or other local, state, or federal requirements.

Biological Construction Mitigation/Monitoring Exhibit – The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME), which includes the biological documents in item C above. In addition, it shall include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions), 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.

Avian Protection Requirements – To avoid any direct impacts to California coastal gnatcatcher and Cooper's hawk, and any species identified as a listed, candidate, sensitive, or special status species in the MSCP, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting

birds within the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including vegetation removal). The applicant shall submit the results of the pre-construction survey to City review and approval prior to initiating any construction activities. If California coastal gnatcatcher, Cooper's hawk, sensitive or MSCP-covered birds are detected, a letter report or mitigation plan in conformance with the City Biology Guidelines and applicable state and federal laws (e.g., appropriate follow up surveys, monitoring schedules, construction setback buffers) shall be prepared and shall include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City MMC Section and Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

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 to 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, clarify acceptable access routes/methods and staging areas).

7.1.2 AMM-2: During Construction

Monitoring – All construction activities (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on “Exhibit A” of the construction drawings 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 (CSV). The CSV shall be e-mailed to MMC on the first day of monitoring, the first 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). 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.

7.1.3 AMM-3: Post-Construction Measures

A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL and MSCP, 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.

7.1.4 AMM-4: Coastal California Gnatcatcher Measures

Prior to the issuance of any grading permit, the City Manager (or appointed designee) shall verify that the MHPA boundaries and the 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 ESA 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 (or above current ambient noise levels if ambient noise levels exceed 60db[a]) 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 coastal California gnatcatchers are present, then the following conditions must be met:

I. Between March 1 and August 15, no clearing, grubbing, or grading of occupied coastal California 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 (or above current ambient noise levels if ambient noise levels exceed 60db[a]) at the edge of occupied coastal California gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB(a) hourly average (or above current ambient noise levels if ambient noise levels exceed 60db[a]) 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 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

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 (or above current ambient noise levels if ambient noise levels exceed 60db[a]) 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 shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB(a) hourly average (or above current ambient noise levels if ambient noise levels exceed 60db[a]). 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. 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.

C. 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 additional avoidance, minimization, or mitigation measures would be necessary.

8.0 MITIGATION AND MONITORING REQUIREMENTS

The following mitigation measure shall be implemented to reduce potential proposed project impacts to below a level of significance.

BIO-1: Impacts to sensitive vegetation communities have been avoided and minimized to the extent feasible. Unavoidable temporary and permanent impacts are anticipated to approximately 0.340 acre of sensitive vegetation communities (i.e., Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and southern mixed chaparral – *Rhus integrifolia* dominated) and would require mitigation through deduction of credits from the City PUD Otay Mesa Mitigation Site. The impacts are considered significant; therefore, mitigation would be required at a ratio of 1:1 for 0.190 acre of Tier II (i.e., Diegan coastal sage scrub and disturbed Diegan coastal sage scrub) impacts and 1:1 for 0.013 acre of Tier IIIA (i.e., southern mixed chaparral – *Rhus integrifolia* dominated) impacts inside the MHPA. For areas outside of the MHPA, mitigation would be required at a ratio of 1:1 for 0.138 acre of Tier II (i.e., Diegan coastal sage scrub and disturbed Diegan coastal sage scrub) impacts.

9.0 REFERENCES

- Atwood, J.L., and D.R. Bontrager. 2001. California Gnatcatcher (*Poliioptila californica*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/574>. Accessed October 2014.
- Baldwin, B.G., Goldman, D.H., Keil D.J., Patterson R., Rosatti, T.J. and Wilken, D.H. (eds.). 2012. The Jepson Manual: Vascular Plants of California. Second edition. Berkeley, CA: University of California Press. 1,568 pp.
- Beier, P. and S. Loe. 1992. A checklist for evaluating impacts to wildlife movement corridors. Wildl. soc. bull. 20: 434-440.
- California Association of Resource Conservation Districts. 2002. Guide to Watershed Project Permitting for the State of California. URL: <http://www.carcd.org/permitting/pguide.pdf>.
- California Department of Fish and Wildlife (CDFW). 1991. California Fish and Game Code. Available at: <https://wildlife.ca.gov/>. Accessed October 2014.
- 2017a. Natural Diversity Data Base. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento.
- 2017b. Biogeographic Data Branch, California Natural Diversity Database. Special Vascular Plants, Bryophytes, and Lichens List from <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf>. March 2017.
- 2017c. Biogeographic Data Branch, California Natural Diversity Database. Special Animals List. Available at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spanimals.pdf>. January 2017.
- 2019a. Natural Diversity Data Base. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento.
- 2019b. Biogeographic Data Branch, California Natural Diversity Database. Special Vascular Plants, Bryophytes, and Lichens List from <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf>. August 2019.

- 2019c. Biogeographic Data Branch, California Natural Diversity Database. Special Animals List. Available at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spanimals.pdf>. August 2019.
- California Native Plant Society (CNPS). 2019. Inventory of Rare and Endangered Vascular Plants of California from <http://www.rareplants.cnps.org/>. Accessed March 2017.
- California Herpetological Society (CAHerps). 2019. A Guide to the Amphibians and Reptiles of California. Available at: <http://www.californiaherps.com/>. Accessed March 2017.
- City of San Diego (City). 1997. City of San Diego MSCP Subarea Plan. Prepared by the City of San Diego Community and Economic Development Department.
2004. San Diego Municipal Code, Land Development Code, Steep Hillside Guidelines. Amended August 2004.
2009. San Diego Municipal Code, Land Development Code, Landscape Regulations: Landscape Standards. Amended November 27, 2009.
2018. San Diego Municipal Code, Land Development Code, Biology Guidelines. Amended February 2018.
- County of San Diego. 2019. SanBIOS GIS Database. Created in 2009. Available at: <http://www.sangis.org/>. Accessed October 2017.
- Curtis, O. E., R. N. Rosenfield and J. Bielefeldt. 2006. Cooper's Hawk. (*Accipiter cooperii*). The Birds of North America Online (A. Poole, ed.). Ithaca: Cornell Laboratory of Ornithology; Retrieved from The Birds of North American Online database: http://bna.birds.cornell.edu/BNA/account/Coopers_Hawk/.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. with Appendices.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, California.
- Mock, P. 2004. California Gnatcatcher (*Poliophtila californica*). In The Coastal Scrub and Chaparral Bird Conservation Plan: a strategy for protecting and managing coastal scrub and chaparral habitats and associated birds in

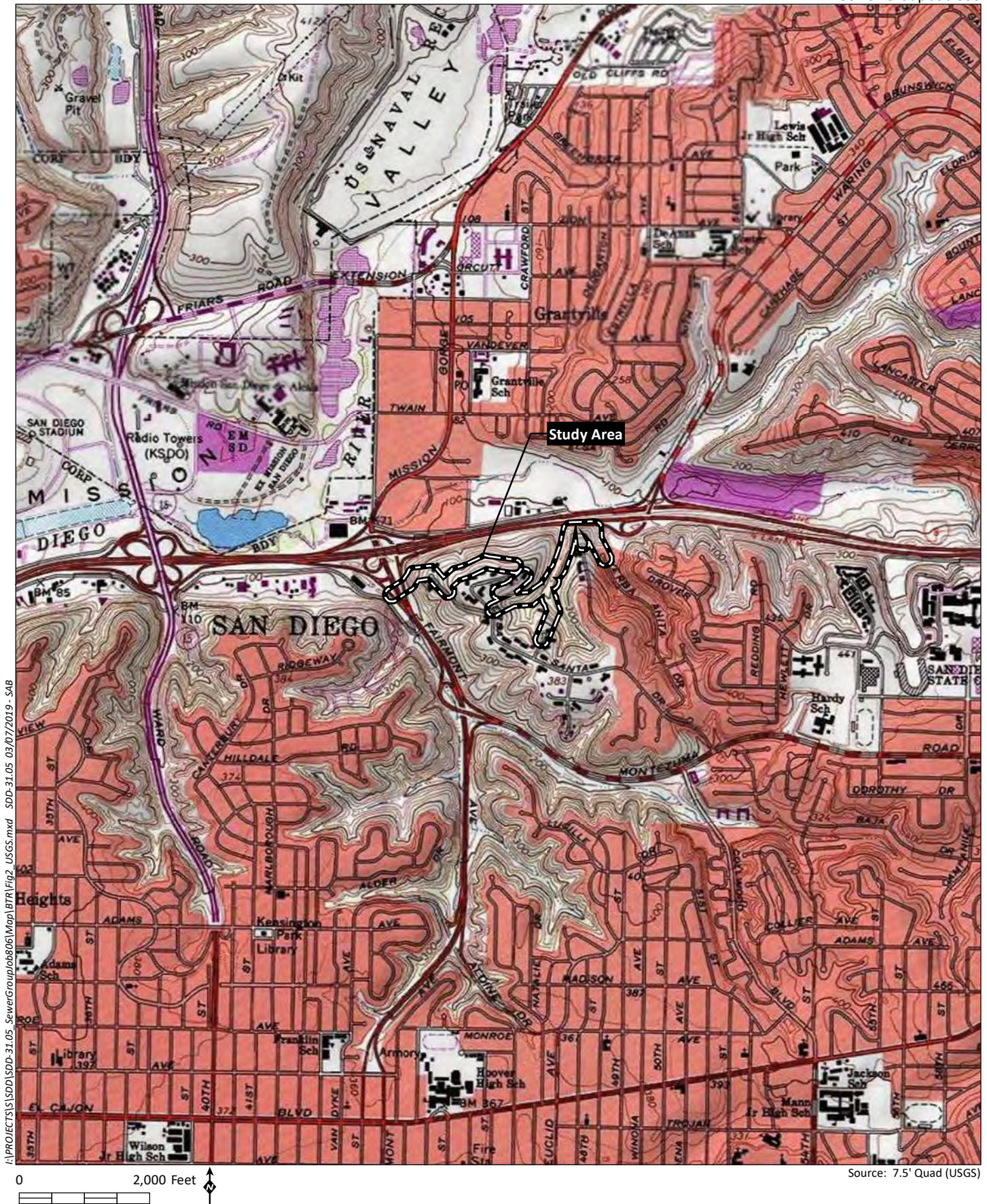
- California. California Partners in Flight.
<http://www.prbo.org/calpif/html/docs/scrub.html>. Accessed October 2014.
- Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California", Robert F. Holland, Ph.D., October 1986.
- Remsen, J. V., Jr. 1978. Bird species of special concern in California. Calif. Dept. of Fish and Game, Sacramento. Wildl. Manage. Admin. Rep. No. 78-1. 54pp.
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians, 3rd ed. Houghton Mifflin, Boston
- United States Army Corps of Engineers (USACE). 1987. U.S. Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.
2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. U.S. Army Engineer Research and Development Center, Vicksburg, MS
2010. Updated Datasheet for the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States. Katherine E. Curtis and Robert W. Lichvar. ERDC/CRREL TN-10-1. U.S. Army Engineer Research and Development Center, Hanover, NH.
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2017. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions [Online WWW]. Available at:
<http://soils.usda.gov/technical/classification/osd/index.html>.
Accessed March 2017.
- United States Fish and Wildlife Service (USFWS). 2013. National Wetlands Inventory. <http://www.fws.gov/wetlands/index.html>
- 2019a. Critical Habitat Portal. Available at:
<https://ecos.fws.gov/ecp/report/table/critical-habitat.html>.
Accessed March 2017.

2019b. Species Occurrence Metadata within 2 miles of the Proposed Balboa and I-15 Canyon Long Term Access Project. Carlsbad Fish and Wildlife Office. March.

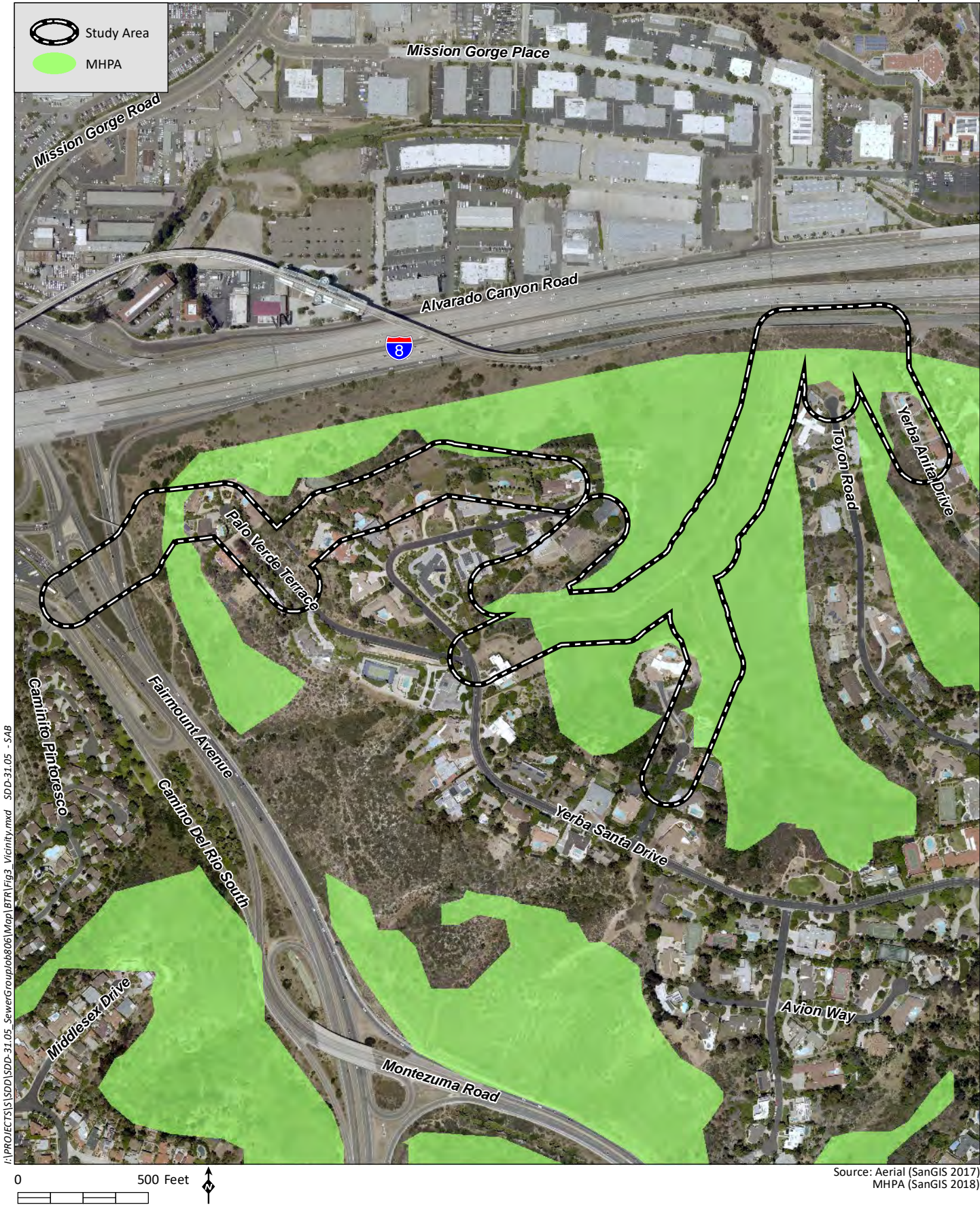
Unitt, P.A. 2004. San Diego County Bird Atlas. San Diego Natural History Museum. San Diego, CA.

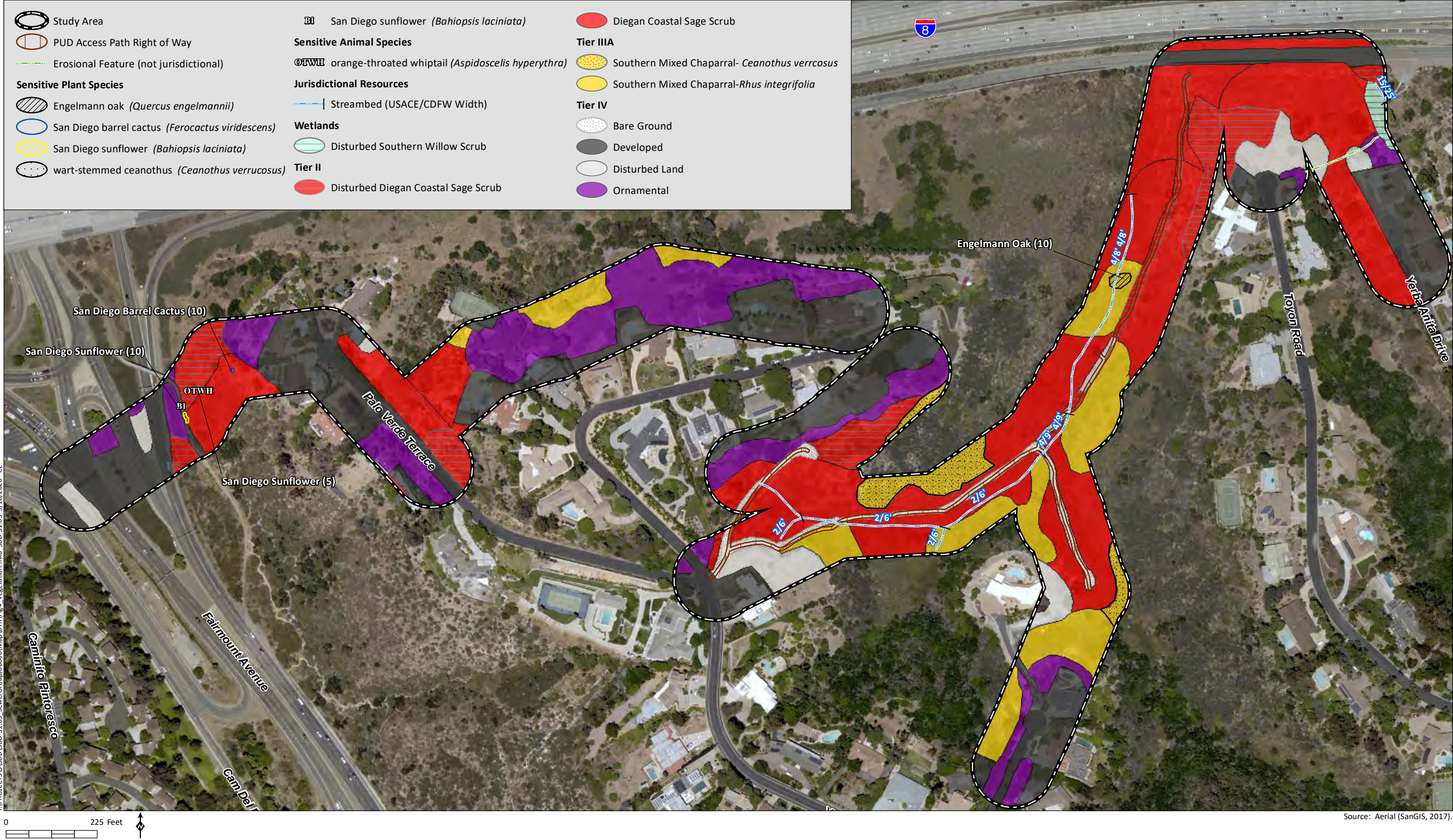
Attachment 1

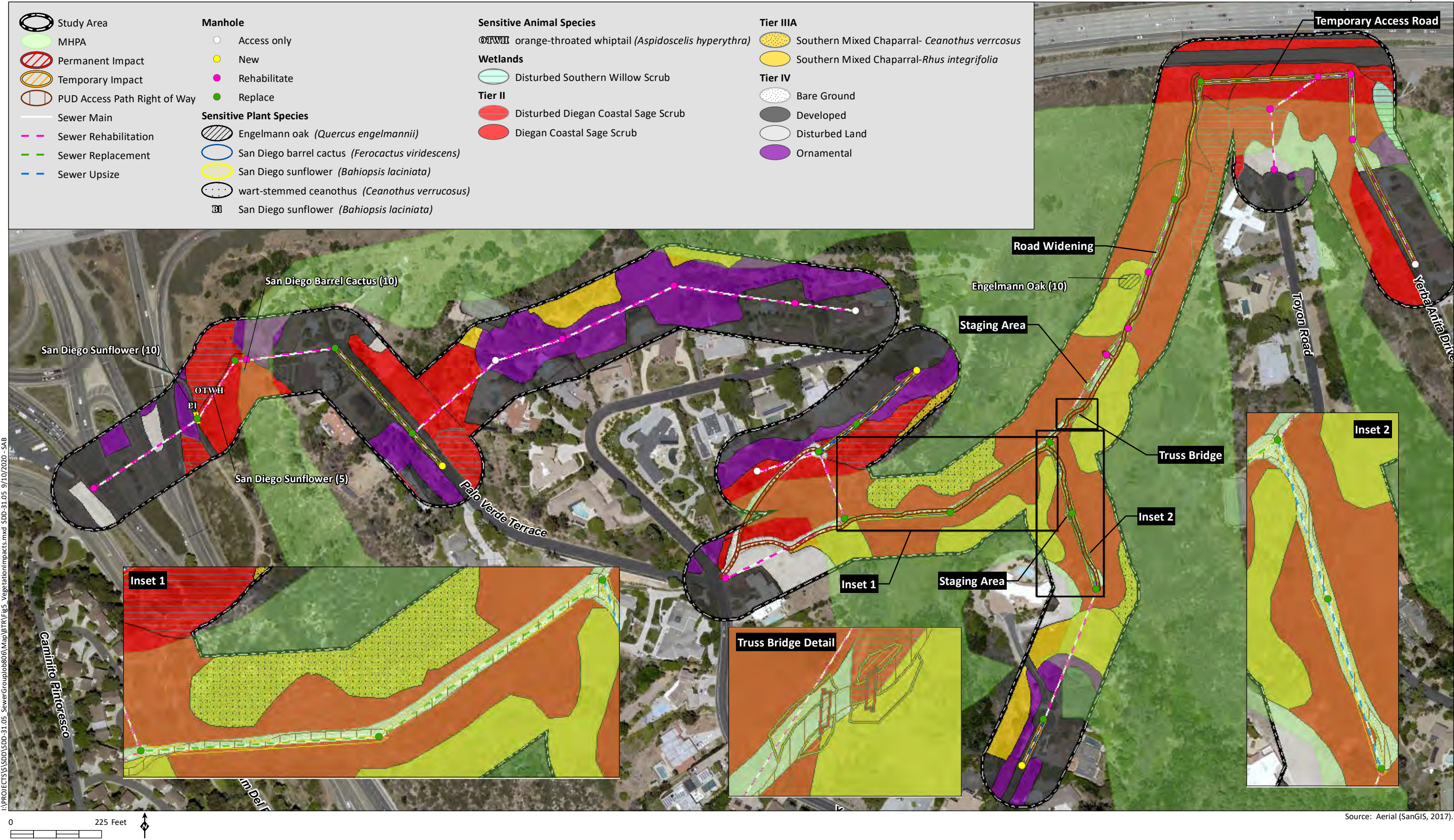
Figures



I:\PROJECTS\SD-31.05 SewerGroupJob806\Map\BTR\Fig2 USGS.mxd SDD-31.05 03/07/2019 - SAB









This page intentionally left blank

Attachment 2

Plant Species Observed within the
Biological Study Area

ATTACHMENT 2 – Plant Species Observed within the Biological Study Area

FAMILY	SCIENTIFIC NAME	COMMON NAME	VEGETATION COMMUNITY/LAND COVER TYPE
Adoxaceae	<i>Sambucus nigra</i> ssp. <i>caerulea</i>	Blue Elderberry	SWS-D, CSS
Agavaceae	<i>Yucca schidigera</i>	Mohave Yucca	CSS
	* <i>Agave</i> sp.	Agave	ORN
Aizoaceae	* <i>Carpobrotus edulis</i>	Iceplant	CSS-D, DIST, ORN
Anacardiaceae	<i>Malosma laurina</i>	Laurel Sumac	CSS, CSS-D, SMC-R
	<i>Rhus integrifolia</i>	Lemonadeberry	CSS, CSS-D, SMC-R
	* <i>Schinus molle</i>	Peruvian Pepper Tree	CSS-D, SWS-D, ORN
	<i>Toxicodendron diversilobum</i>	Western Poison-Oak	CSS, SMC-R
Apiaceae	* <i>Conium maculatum</i>	Common Poison Hemlock	CSS-D, DIST
	* <i>Foeniculum vulgare</i>	Sweet Fennel	CSS-D, DIST
Arecaceae	* <i>Washingtonia robusta</i>	Mexican Fan Palm	CSS-D, SWS-D, ORN
Asteraceae	<i>Ambrosia psilostachya</i>	Western Ragweed	CSS, DIST
	<i>Ambrosia monogyra</i>	Singlewhorl Burrobush	CSS
	<i>Artemisia californica</i>	Coastal Sagebrush	CSS, CSS-D
	<i>Baccharis pilularis</i>	Coyote Brush	CSS
	<i>Baccharis sarothroides</i>	Broom Baccharis	CSS, CSS-D, SWS-D, DIST
	<i>Bahiopsis laciniata</i>	San Diego Sunflower	CSS, CSS-D
	* <i>Centaurea melitensis</i>	Tocalote	CSS, CSS-D, DIST
	* <i>Cynara cardunculus</i> ssp. <i>flavescens</i>	Artichoke Thistle, Cardoon	DIST
	<i>Encelia californica</i>	California Encelia	CSS
	<i>Erigeron canadensis</i>	Horseweed	CSS, CSS-D, DIST
	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	Long-Stem Golden-Yarrow	CSS
	<i>Hazardia squarrosa</i> var. <i>grindelioides</i>	Southern Sawtooth Goldenbush	CSS
	* <i>Helminthotheca echioides</i>	Bristly Ox-Tongue	DIST
	<i>Heterotheca grandiflora</i>	Telegraph Weed	CSS, CSS-D, SWS-D, DIST
	<i>Isocoma menziesii</i> var. <i>menziesii</i>	Spreading Goldenbush	CSS
	* <i>Lactuca serriola</i>	Prickly Lettuce	CSS, CSS-D, DIST
	<i>Pseudognaphalium californicum</i>	California Everlasting	CSS
Brassicaceae	* <i>Brassica nigra</i>	Black Mustard	CSS-D, DIST
	* <i>Hirschfeldia incana</i>	Short-Pod Mustard	CSS-D, DIST
Cactaceae	<i>Cylindropuntia prolifera</i>	Coast Cholla	CSS, CSS-D
	<i>Ferocactus viridescens</i> var. <i>viridescens</i>	Coast Barrel Cactus	CSS
	<i>Opuntia littoralis</i>	Coast Prickly-Pear	CSS, CSS-D
Caprifoliaceae	<i>Lonicera subspicata</i>	Johnston's Honeysuckle var. <i>denudata</i>	CSS
Crassulaceae	* <i>Crassula ovata</i>	Jade Plant	ORN
Cucurbitaceae	<i>Marah macrocarpus</i>	wild cucumber	CSS
Cupressaceae	* <i>Cupressus sempervirens</i>	Italian Cypress	ORN
Ericaceae	<i>Arctostaphylos</i> sp.	Del Mar Manzanita	SMC-R, SMC-C
	<i>Xylococcus bicolor</i>	Mission Manzanita	SMC-C, SMC-R

FAMILY	SCIENTIFIC NAME	COMMON NAME	VEGETATION COMMUNITY/LAND COVER TYPE
Euphorbiaceae	<i>*Euphorbia maculata</i>	Spotted Spurge	DIST
	<i>*Ricinus communis</i>	Castor Bean	CSS-D, DIST
Fabaceae	<i>*Acacia cyclops</i>	Western Coastal Wattle	ORN, CSS-D
	<i>*Acacia redolens</i>	Desert Carpet	ORN, CSS-D
	<i>Acmispon glaber</i> var. <i>glaber</i>	Deerweed	CSS, CSS-D
	<i>Astragalus trichopodus</i> var. <i>lonchus</i>	Ocean Locoweed	CSS, CSS-D
	<i>*Melilotus indicus</i>	Indian Sweetclover	DIST
	<i>*Parkinsonia aculeata</i>	Mexican palo verde	ORN
Fagaceae	<i>Quercus engelmannii</i>	Engelmann Oak	CSS-R
	<i>Quercus</i> sp.	Scrub Oak	CSS-R, CSS-C
Geraniaceae	<i>*Erodium cicutarium</i>	Red-Stem Filaree/Storksbill	CSS-D, DIST
Grossulariaceae	<i>Ribes speciosum</i>	Fuchsia-Flower Gooseberry	CSS, SMC-C
Iridaceae	<i>Sisyrinchium bellum</i>	Blue-Eyed-Grass	CSS
Lamiaceae	<i>Marrubium vulgare</i>	Horehound	CSS, CSS-D, DIST
	<i>*Rosmarinus officinalis</i>	Rosemary	ORN
	<i>Salvia apiana</i>	White Sage	CSS
	<i>Salvia mellifera</i>	Black Sage	CSS, CSS-D
Malvaceae	<i>Malva parviflora</i>	Cheeseweed	DIST
Myrtaceae	<i>*Eucalyptus globulus</i>	Tasmanian bluegum	CSS, CSS-D, ORN
Oxalidaceae	<i>*Oxalis pes-caprae</i>	Bermuda-Buttercup	DIST
Phrymaceae	<i>Mimulus aurantiacus</i>	Monkey Flower Bush	CSS
Pinaceae	<i>*Pinus</i> sp.	Pine	CSS-D, SMC-R, ORN
Poaceae	<i>*Avena fatua</i>	Wild Oat	CSS-D
	<i>*Bromus diandrus</i>	Ripgut Grass	CSS, CSS-D, DIST
	<i>*Bromus madritensis</i> ssp. <i>rubens</i>	Foxtail Chess, Red Brome	CSS, CSS-D, DIST
	<i>*Cortaderia selloana</i>	Selloa Pampas Grass	CSS, CSS-D, DIST, ORN
	<i>*Cynodon dactylon</i>	Bermuda Grass	ORN
	<i>Elymus condensatus</i>	Giant Wild-Rye	CSS
	<i>*Pennisetum setaceum</i>	Crimson Fountain Grass	CSS-D, DIST, ORN
	<i>Stipa pulchra</i>	Purple Needlegrass	CSS
Polemoniaceae	<i>Navarretia hamata</i>	Skunkweed	CSS-D
Polygonaceae	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	Coast California Buckwheat	CSS, CSS-D
	<i>*Rumex crispus</i>	Curly Dock	SWS-D
Primulaceae	<i>*Anagallis arvensis</i>	Scarlet Pimpernel, Poor Man's Weatherglass	CSS, CSS-D, DIST
Rhamnaceae	<i>Ceanothus verrucosus</i>	Wart-Stem-Lilac	SMC-C
	<i>Rhamnus crocea</i>	Spiny Redberry	CSS, SMC-R
	<i>Rhamnus ilicifolia</i>	Hollyleaf Redberry	SMC-R, SMC-C
Rosaceae	<i>Adenostoma fasciculatum</i>	Chamise	CSS, SMC-R
	<i>Heteromeles arbutifolia</i>	Toyon, Christmas Berry	CSS, CSS-D, SMC-R
Salicaceae	<i>Salix lasiolepis</i>	Arroyo Willow	SWS-D
Scrophulariaceae	<i>Scrophularia californicus</i>	California Bee Plant	CSS
	<i>*Myoporum laetum</i>	Lollypop Tree	ORN
Simmondsiaceae	<i>Simmondsia chinensis</i>	Jojoba	CSS, CSS-D
Solanaceae	<i>*Nicotiana glauca</i>	Tree Tobacco	CSS, DIST
	<i>Solanum parishii</i>	Parish's Nightshade	CSS, DIST

FAMILY	SCIENTIFIC NAME	COMMON NAME	VEGETATION COMMUNITY/LAND COVER TYPE
Tamaricaceae	* <i>Tamarix ramosissima</i>	Saltcedar	SWS-D

* = Non-native species

Vegetation Community/Land Cover Type:

CSS = Diegan coastal sage scrub
 CSS-D = disturbed coastal sage scrub
 SMC-R = southern mixed chaparral – *Rhus integrifolia* dominated
 SMC-C = southern mixed chaparral – *Ceanothus verrucosus* dominated
 SWS-D = disturbed southern willow scrub
 DIST = disturbed habitat
 ORN = ornamental

Attachment 3

Wildlife Species Detected within the
Biological Study Area

ATTACHMENT 3 – Wildlife Species Detected within the Biological Study Area

SCIENTIFIC NAME	COMMON NAME	METHOD OF IDENTIFICATION
INVERTEBRATES		
Class: Insecta	Insects	
Order: Lepidoptera	Butterflies	
<i>Danaus plexippus</i>	Monarch Butterfly	O
<i>Pieris rapae</i>	Cabbage White	O
<i>Junonia coenia grisea</i>	Common Buckeye	O
<i>Adelpha bredowii californica</i>	California Sister	O
VERTEBRATES		
Class: Sauropsida	Reptiles	
<i>Sceloporus occidentalis</i>	Western Fence Lizard	O
<i>Aspidoscelis hyperythra</i>	Orange-Throated Whiptail	O
Class: Aves	Birds	
Order Galliformes	Gallinaceous Birds	
<i>Accipiter cooperii</i>	Cooper's hawk	O, V
<i>Larus occidentalis</i>	Western Gull	O, V
Order Columbiformes	Pigeons and Doves	
<i>Zenaida macroura</i>	Mourning Dove	O
Order Apodiformes	Swifts and Hummingbirds	
<i>Calypte anna</i>	Anna's Hummingbird	O, V
<i>Selasphorus sasin</i>	Allen's Hummingbird	O, V
Order Piciformes	Woodpeckers and Allies	
<i>Picoides nuttallii</i>	Nuttall's Woodpecker	V
Order Passeriformes	Perching Birds	
<i>Sayornis nigricans</i>	Black Phoebe	O
<i>Tyrannus verticalis</i>	Western Kingbird	O, V
<i>Aphelocoma californica</i>	Western Scrub-Jay	O, V
<i>Corvus brachyrhynchos</i>	American Crow	O, V
<i>Corvus corax</i>	Common Raven	O, V
<i>Psaltiriparus minimus</i>	Bushtit	O, V
<i>Thryomanes bewickii</i>	Bewick's Wren	O, V
<i>Chamaea fasciata</i>	Wrentit	V
<i>Mimus polyglottos</i>	Northern Mockingbird	O, V
<i>Toxostoma redivivum</i>	California Thrasher	V
<i>Vermivora celata</i>	Orange-Crowned Warbler	V
<i>Geothlypis trichas</i>	Common Yellowthroat	V
<i>Pipilo maculatus</i>	Spotted Towhee	O, V
<i>Pipilo crissalis</i>	California Towhee	O, V
<i>Melospiza melodia</i>	Song Sparrow	O, V
<i>Icterus bullockii</i>	Bullock's Oriole	O, V
<i>Carpodacus mexicanus</i>	House Finch	O, V
<i>Carduelis psaltria</i>	Lesser Goldfinch	O, V

SCIENTIFIC NAME	COMMON NAME	METHOD OF IDENTIFICATION
Class: Mammalia	Mammals	
Order Rodentia	Rodents	
<i>Otospermophilus beecheyi</i>	California Ground Squirrel	O
Order Carnivora	Carnivores	
<i>Canis latrans</i>	Coyote	S

Method of Identification:

O = observed

V = vocalization

S = scat

This page intentionally left blank

Attachment 4

Sensitive Plant Species with a
Potential to Occur within the
Biological Study Area

ATTACHMENT 4

Sensitive Plant Species with a Potential to Occur within the Biological Study Area

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
San Diego thornmint (<i>Acanthomintha ilicifolia</i>)	FT SE CRPR 1B.1 MSCP narrow endemic	Annual herb. Blooms Apr-Jun. Clay soils associated with vernal pools in chaparral, coastal sage scrub, and grassland. Elev 30-3,150ft.	Not expected. Although historical records exist adjacent to the proposed project (CDFW 2017a), these records are from 1949 and no vernal pool habitat or clay soils are present onsite.
spineshrub (<i>Adolphia californica</i>)	CRPR 2B.1	Deciduous shrub. Blooms Dec-May. Chaparral, coastal sage scrub, grassland. Elev 20-655ft.	Moderate potential. Historical records exist adjacent to the proposed project (CDFW 2017a) and potentially suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
Shaw's agave (<i>Agave shawii</i> var. <i>shawii</i>)	CRPR 2B.1 MSCP narrow endemic	Leaf succulent. Blooms Sep-May. Coastal bluff scrub, coastal sage scrub. Elev 35-395ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a), and this species is restricted to immediate coast (Calflora 2017).
singlewhorl burrobrush (<i>Ambrosia monogyra</i>)	CRPR 2B.2	Shrub. Blooms Aug-Nov. Chaparral. Elev 15-905ft.	High. Observed adjacent to but outside of the biological survey area during the biological reconnaissance survey. Historical records exist adjacent to the proposed project (CDFW 2017a) and suitable habitat is present within the southern mixed chaparral.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE CRPR 1B.1 MSCP narrow endemic	Rhizomatous herb. Blooms Apr-Oct. Often in disturbed areas with sandy loam or clay soils, sometimes alkaline areas, in chaparral, coastal sage scrub, grassland, vernal pools. Elev 100-2,000ft.	Not expected. Although historical records exist within 2 miles of the proposed project (CDFW 2017a), no vernal pool habitat or clay soils are present onsite

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
aphanisma (<i>Aphanisma blitoides</i>)	CRPR 1B.2 MSCP narrow endemic	Annual herb. Blooms Mar-Jun. Coastal bluff scrub, coastal dunes, coastal sage scrub. Elev 15-195ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and this species is restricted to the immediate coast (Calflora 2017).
San Diego sagewort (<i>Artemisia palmeri</i>)	CRPR 4.2	Deciduous shrub. Blooms May-Sep. Sandy, mesic areas in riparian habitats found within chaparral and coastal sage scrub. Elev 15-3,545ft.	Moderate potential. Although no historical records exist within the proposed project vicinity (CDFW 2017a), potentially suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
western spleenwort (<i>Asplenium vespertinum</i>)	CRPR 4.2	Fern. Detectable Feb-Jun. Chaparral, coastal sage scrub, southern oak woodland. Elev 295- 7,515ft.	Moderate potential. Although no historical records exist within the proposed project vicinity (CDFW 2017a), potentially suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
coastal dunes milk-vetch (<i>Astragalus tener</i> var. <i>titi</i>)	FE SE CRPR 1B.1 MSCP narrow endemic	Annual herb. Blooms Mar-May. Vernally mesic areas in coastal dunes, coastal bluff scrub, coastal prairie. Elev 15-195ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and this species is restricted to immediate coast (Calflora 2017).
South Coast saltscale (<i>Atriplex pacifica</i>)	CRPR 1B.2	Annual herb. Blooms Mar-Oct. Playas, coastal dunes, coastal bluff scrub, coastal sage scrub. Elev 35 to 1,575ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and suitable soils are not present (Calflora 2017).

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
Encinitas baccharis (<i>Baccharis vanessae</i>)	FT SE CRPR 1B.1 MSCP narrow endemic	Deciduous shrub. Blooms Aug-Nov. Maritime chaparral. Elev 260- 2,920ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and suitable habitat is not present.
San Diego sunflower (<i>Bahiopsis laciniata</i>)	CRPR 4.2	Perennial shrub. Blooms Feb-Aug. Dry slopes in coastal sage scrub and chaparral. Elev 195-2,460 ft.	Present. Although no historical records exist within 2 miles of the proposed project (CDFW 2017a), approximately 18 individuals of San Diego sunflower were observed in the Diegan coastal sage scrub in the western and central portion of the proposed project during the biological reconnaissance survey on July 18, 2017.
San Diego goldenstar (<i>Bloomeria clevelandii</i>)	CRPR 1B.1	Bulbiferous herb. Blooms Apr-May. Typically clay soils in vernal pools associated with chaparral, coastal sage scrub, grassland. Elev 195- 1,970ft.	Not expected. Although historical records exist within 2 miles of the proposed project (CDFW 2017a), suitable vernal pool habitat and clay soils are not present.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	CRPR 1B.1 MSCP	Bulbiferous herb. Blooms May-Jul. Typically mesic, clay soils (sometimes serpentine) in vernal pools associated with chaparral, cismontane woodland, closed-cone coniferous forest, meadows & seeps, grassland. Elev 330-5,740ft.	Not expected. Although historical records exist within 2 miles of the proposed project (CDFW 2017a), suitable vernal pool habitat and clay soils are not present.

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
wart-stemmed ceanothus (<i>Ceanothus verrucosus</i>)	CRPR 2B.2 MSCP	Evergreen shrub. Blooms Jan-Apr. Chaparral. Elev 25-2,165ft.	Present. Historical records exists adjacent to the proposed project (CDFW 2017a) and this is a dominant species throughout the <i>Ceanothus verrucosus</i> -dominated southern mixed chaparral as observed during the biological reconnaissance survey on July 18, 2017.
summer-holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	CRPR 1B.2	Evergreen shrub. Blooms Apr-Jun. Chaparral. Elev 100-2,690ft.	Moderate potential. Historical records exist within 2 miles of the proposed project (CNPS 2017a) and potentially suitable habitat is present within the southern mixed chaparral.
small-flowered morning-glory (<i>Convolvulus simulans</i>)	CRPR 4.2	Annual herb. Blooms Mar-Jul. Grasslands, coastal sage scrub, seeps. Elev 35-2,755ft.	Moderate potential. No historical records exist within the proposed project vicinity (CDFW 2017a) and potentially suitable habitat is present within the Diegan coastal sage scrub.
snake cholla (<i>Cylindropuntia californica</i> var. <i>californica</i>)	CRPR 1B.1 MSCP narrow endemic	Stem succulent. Blooms Apr-Jul. Sandy soils or sandy loam soils in chaparral and coastal sage scrub. Elev 50-2,525ft. (Calflora 2017, NatureServe 2017)	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and the project is outside of known range for species.

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
Otay tarplant (<i>Deinandra conjugens</i>)	FT SE MSCP narrow endemic	Annual herb. Blooms May-Jun. Clay soils in grassland and coastal sage scrub. Elev 195-1,015ft. (Calflora 2017, NatureServe 2017)	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a), project is outside of known range for this species, and suitable soils not present.
western dichondra (<i>Dichondra occidentalis</i>)	CRPR 4.2	Perennial rhizomatous herb. Blooms May-Jul. Chaparral, grassland, coastal sage scrub, foothill woodland. Elev 15-2,065ft.	Moderate potential. No historical records exist within the proposed project vicinity (CDFW 2017a) and potentially suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
short-leaved dudleya (<i>Dudleya brevifolia</i>)	SE CRPR 1B.1 MSCP narrow endemic	Perennial herb. Blooms Apr-May. Sandstone, openings in maritime chaparral, coastal sage scrub. Elev 95-820ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a), and this species is very rare and well documented with no occurrences documented in the immediate project vicinity (Calflora 2017).
variegated dudleya (<i>Dudleya variegata</i>)	CRPR 1B.2 MSCP narrow endemic	Perennial herb. Blooms Apr-Jun. Clay soils associated with vernal pools in chaparral, foothill woodland, coastal sage scrub, and grassland. Elev 195-3,970ft.	Not expected. Historical records exist adjacent to the proposed project (CDFW 2017a) but suitable soils are not present. Species is perennial and likely would have been detected during biological reconnaissance survey.
Palmer's goldenbush (<i>Ericameria palmeri</i> var. <i>palmeri</i>)	CRPR 1B.1 MSCP	Shrub. Blooms Sep-Nov. Coastal sage scrub. Elev 165-1,705ft.	Not expected. Historical records exist adjacent to the proposed project (CDFW 2017a) but suitable soils are not present. Species is perennial and likely would have been detected during biological reconnaissance survey.

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	FE SE CRPR 1B.1 MSCP narrow endemic	Annual/perennial herb. Blooms Apr-Jun. Vernal pools in coastal sage scrub, grassland. Elev 395-2,525ft.	Not expected. Although historical records exist within 2 miles of the proposed project (CDFW 2017a), suitable vernal pool habitat is not present and project is outside elevation range of this species.
San Diego barrel cactus (<i>Ferocactus viridescens</i>)	CRPR 2B.1 MSCP	Stem succulent. Blooms May-Jun. Found in sandy or gravelly soils in chaparral, coastal sage scrub, grassland. Elev 25-1,245ft.	Present. Historical records exist adjacent to the proposed project vicinity (CDFW 2017a) and approximately 10 individuals of this species were observed in the Diegan coastal sage scrub in the western portion of the proposed project during the biological reconnaissance survey on July 18, 2017.
graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	CRPR 4.2	Annual herb. Blooms May-Nov. Chaparral, grassland, coastal sage scrub, foothill woodland. Elev 260-3,280ft.	Low potential. Although no historical records exist within the proposed project vicinity (CNPS 2017a) and potentially suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	CRPR 1B.2	Shrub. Blooms Apr-Nov. Sandy, often disturbed, areas in coastal sage scrub. Elev 0-1,475ft.	Moderate potential. Although no historical records exist within the proposed project vicinity (CDFW 2017a), potentially suitable habitat is present within the Diegan coastal sage scrub.
San Diego marsh-elder (<i>Iva hayesiana</i>)	CRPR 2B.2	Perennial herb. Blooms Apr-Oct. Marshes, playas. Elev 0-2,885ft.	Not expected. Although historical records exist within 2 miles of the proposed project (CDFW 2017a), suitable is not present.
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	CRPR 4.3	Annual herb. Blooms Jan-Jul. Chaparral, coastal sage scrub. Elev 65-4,395ft.	Moderate potential. Although no historical records exist within the proposed project vicinity (CDFW 2017a), potentially suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
willowy monardella (<i>Monardella viminea</i>)	FE SE CRPR 1B.1 MSCP	Perennial herb. Blooms Jun-Aug. Sandy soils along alluvial, ephemeral washes in chaparral, coastal sage scrub, riparian habitats. Elev 65-2,100ft.	Low potential. Although no historical records exist within the proposed project vicinity (CDFW 2017a), marginally suitable habitat is present within the drainages in the Diegan coastal sage scrub and southern mixed chaparral.
spreading navarretia (<i>Navarretia fossalis</i>)	FT CRPR 1B.1 MSCP narrow endemic	Annual herb. Blooms Apr-Jun. Clay soils associated with marshes, playas, vernal pools. Elev 295-3,510ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and suitable habitat is not present.
California Orcutt grass (<i>Orcuttia californica</i>)	FE SE CRPR 1B.1 MSCP narrow endemic	Annual grass. Blooms Apr-Aug. Vernal pools. Elev 195-2,165ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and suitable habitat is not present.
San Diego mesa mint (<i>Pogogyne abramsii</i>)	FE SE CRPR 1B.1 MSCP narrow endemic	Annual herb. Blooms Mar-Jul. Vernal pools in chaparral and coastal sage scrub. Elev 330-1,410ft.	Not expected. Although historical records exist adjacent to the proposed project vicinity (CDFW 2017a), these records are from 1941 and suitable habitat is not present.

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
Otay Mesa mint (<i>Pogogyne nudiuscula</i>)	FE SE CRPR 1B.1 MSCP narrow endemic	Annual herb. Blooms May-Jul. Vernal pools in chaparral and coastal sage scrub. Elev 395-690ft.	Not expected. No historical records exist within the proposed project vicinity (CDFW 2017a) and suitable habitat is not present.
Nuttall's scrub oak (<i>Quercus dumosa</i>)	CRPR 1B.1	Evergreen shrub. Blooms Feb-Apr. Sandy or clay loam soils associated with chaparral and coastal sage scrub. Elev 45-6,855ft.	High potential. Historical records exist adjacent to the proposed project vicinity (CDFW 2017a), scrub oak species were observed, and potentially suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
Engelmann oak (<i>Quercus engelmannii</i>)	CRPR 4.2	Perennial deciduous tree. Blooms March to June. Chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland. Elev 400-4,300ft.	Present. Although no historical records exist within the proposed project vicinity (CDFW 2017a), approximately 10 individuals of this species were observed in the <i>Rhus integrifolia</i> - dominated southern mixed chaparral in the central portion of the proposed project during the biological reconnaissance survey on July 18, 2017.
ashy spike moss (<i>Selaginella cinerascens</i>)	CRPR 4.1	Rhizomatous fern. Chaparral, coastal sage scrub. Elev 25-2,035ft.	Moderate potential. No historical records exist within the project vicinity (CDFW 2017a) and suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
chaparral ragwort (<i>Senecio aphanactis</i>)	CRPR 2B.2	Annual herb. Blooms Jan-Apr. Alkaline flats, dry open rocky areas in coastal sage scrub and foothill woodlands. Elev 50-3,905ft.	Not expected. Although historical records exist within 2 miles of the proposed project vicinity (CDFW 2017a), suitable habitat is not present.

SPECIES NAME	STATUS	HABITAT DESCRIPTION	POTENTIAL FOR OCCURRENCE
purple stemodia (<i>Stemodia durantifolia</i>)	CRPR 2B.1	Perennial herb. Blooms year-round. Wetland, riparian. Elev 165-5,775ft.	Not expected. Although historical records exist within 2 miles of the proposed project vicinity (CDFW 2017a), suitable habitat is not present.
oil neststraw (<i>Stylocline citroleum</i>)	CRPR 1B.1	Annual herb. Blooms Mar-Apr. Sandy and clay soils in coastal sage and shadscale scrub. Elev 160- 1,315ft.	Not expected. Although historical records exist adjacent to the proposed project vicinity (CDFW 2017a), these records are from 1883 and suitable habitat and soils are not present.

STATUS CODES

Federal

FE = Federal-listed endangered species
FT = Federal-listed threatened species

State

SE = State-listed endangered species

California Native Plant Society Rare Plant Ranking

- 1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
- 2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
- 3 = A review list for plants about which more information is needed. These species lack necessary data to assign them to another list or reject them.
- 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.
- .1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
- .2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
- .3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

City of San Diego

MSCP = City of San Diego Multiple Species Conservation Program covered species

Attachment 5

Sensitive Wildlife Species with a
Potential to Occur within the
Biological Study Area

ATTACHMENT 5

Sensitive Wildlife Species with a Potential to Occur within the Biological Study Area

COMMON NAME	STATUS	HABITAT ASSOCIATION	POTENTIAL FOR OCCURRENCE
Invertebrates			
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	FE MSCP	Vernal pools, swales, ditches, road ruts. Adult emerge typically mid-December to early May.	Not expected. Although historical records exist within 2 miles (CDFW 2017a, USFWS 2017) and the proposed project is within the known range of the species, suitable habitat is not present.
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE	Open, dry areas in foothills, mesas, lake margins where principal larval host plants dot-seed plantain, and secondary host plants woolly plantain, white snapdragon, thread-leaved bird's beak, and purple owl's clover occurs. Adult emergence mid-January to April.	Not expected. Although historical records exist immediately adjacent to the proposed project (USFWS 2017), these records are from 1948. No current records for this species exist (CDFW 2017a, USFWS 2017), and the proposed project is outside of the current USFWS Recommended Survey Area for the species.
Amphibians			
western spadefoot (<i>Spea hammondi</i>)	SSC	Breeds in temporal pools and slow-moving sections of streams. Washes, river floodplains, alluvial fans, playas, alkali flats, temporary ponds, vernal pools, mixed woodlands, grasslands, coastal sage scrub, and chaparral.	Not expected. Although historical records exist within 2 miles (CDFW 2017a) and the proposed project is within the known range of the species, suitable habitat is not present.
Reptiles			
coast horned lizard (<i>Phrynosoma blainvillii</i>)	SSC MSCP	Open chaparral, coastal sage scrub with sandy, loose soil. Partially dependent on harvester ants for forage.	Moderate potential. Historical records exist within 2 miles (CDFW 2017a), the proposed project is within the known range of the species, and moderately suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.

COMMON NAME	STATUS	HABITAT ASSOCIATION	POTENTIAL FOR OCCURRENCE
orange-throated whiptail (<i>Aspidoscelis hyperythra beldingi</i>)	MSCP	Pristine open coastal sage scrub, chaparral, and streamside growth with loose sandy soils, revegetation sites.	Present. Historical records exist within 2 miles (CDFW 2017a), and the species was detected during the biological reconnaissance survey on July 18, 2017.
red diamond rattlesnake (<i>Crotalus ruber</i>)	SSC	Coastal sage scrub, open chaparral, woodland, grassland, and cultivated areas.	Moderate potential. Although no historical records exist within 2 miles (CDFW 2017a), suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
California glossy snake (<i>Arizona elegans occidentalis</i>)	SSC	Arid scrub, rocky washes, grasslands, chaparral.	Not expected. Although historical records exist immediately adjacent to the proposed project (CDFW 2017a), the most recent records are from 1937. No current records for this species exist (CDFW 2017a, USFWS 2017).
Birds			
Cooper's hawk (<i>Accipiter cooperii</i>)	WL MSCP (Nesting)	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas.	Present. Moderate potential to nest. Although no historical records exist within 2 miles (CDFW 2017a, USFWS 2017), this species was observed during the biological reconnaissance survey and suitable nesting habitat is present within the large trees predominantly occurring in the ornamental vegetation throughout the proposed project.
burrowing owl (<i>Athene cunicularia</i>)	SSC MSCP (Burrow sites and some wintering sites)	Grassland, agricultural land, coastal dunes. Declining resident.	Not expected. While the proposed project is within the known range of the species, no historical records exist within 2 miles (CDFW 2017a, USFWS 2017), and suitable habitat is extremely limited and surrounded by dense vegetation and development.

COMMON NAME	STATUS	HABITAT ASSOCIATION	POTENTIAL FOR OCCURRENCE
least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE SE MSCP (Nesting)	Willow-dominated successional woodland or scrub, <i>Baccharis</i> scrub, mixed oak/willow woodland, and elderberry scrub in riparian habitat. Nests and forages in vegetation along streams and rivers that measures approximately 3 to 6 feet in height and has a dense, stratified canopy.	Not expected. Although historical records exist within 2 miles (USFWS 2017) and the proposed project is within the known range of the species, suitable habitat is not present within or adjacent to the proposed project.
coastal cactus wren (<i>Campylorhynchus brunneicapillus sandiegensis</i>)	SSC MSCP	Maritime succulent scrub, coastal sage scrub with <i>Opuntia</i> thickets. Rare localized resident.	Low potential. No historical records exist within 2 miles (CDFW 2017a, USFWS 2017), and – while there is marginally suitable habitat within the proposed project – the habitat is isolated and surrounded by development.
coastal California gnatcatcher (<i>Polioptila californica californica</i>)	FT SSC MSCP	Coastal sage scrub, maritime succulent scrub. Resident.	High potential. Historical records exist within 2 miles (CDFW 2017a, USFWS 2017), the proposed project is within the known range of the species, and high quality, suitable habitat is present within the various coastal sage scrub communities within the proposed project.

COMMON NAME	STATUS	HABITAT ASSOCIATION	POTENTIAL FOR OCCURRENCE
Mammals			
pallid bat (<i>Antrozous pallidus</i>)	SSC	Open scrub, grasslands, shrub lands, woodlands, and forests. Roosts in rock crevices, caves, mines, tree hollows, and buildings. Occurs near water, colonial. Audible echolocation signal.	Low potential. No historical records exist within 2 miles (CDFW 2017a), and suitable roosting and foraging habitat is limited and surrounded by development.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SSC	Caves, mines, buildings. Found in a variety of habitats, arid and mesic. Individual or colonial. Extremely sensitive to disturbance.	Low potential. No historical records exist within 2 miles (CDFW 2017a), and suitable roosting and foraging habitat is limited and surrounded by development.
western mastiff bat (<i>Eumops perotis californicus</i>)	SSC	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in vertical cliff faces, high buildings, trees, and tunnels, and travels widely when foraging.	Low potential. While historical records exist within 2 miles (CDFW 2017a), suitable roosting and foraging habitat is limited and surrounded by development.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	SSC	Open areas of scrub, grasslands, agricultural fields.	Moderate potential. Although no historical records exist within 2 miles (CDFW 2017a), suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.

COMMON NAME	STATUS	HABITAT ASSOCIATION	POTENTIAL FOR OCCURRENCE
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	SSC	Coastal sage scrub and chaparral	Moderate potential. Although no historical records exist within 2 miles (CDFW 2017a), suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.
southern mule deer (<i>Odocoileus hemionus</i>)	MSCP	Requires relatively large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/shrub habitats.	Moderate potential. Although no historical records exist within 2 miles (CDFW 2017a), suitable habitat is present within the Diegan coastal sage scrub and southern mixed chaparral.

STATUS CODES

Federal

FE = Federal-listed endangered species

FT = Federal-listed threatened species

Other

BGEPA= Bald and Golden Eagle Protection Act

MSCP = City of San Diego Multiple Species Conservation Program covered species

State

SE = State-listed endangered species

ST = State-listed threatened species

SSC = Species of special concern

FP = Fully protected species

WL = CDFW watch list species

Attachment 6

Representative Photos

ATTACHMENT 6

Representative Photos



Proposed sewer upsizing will require construction of a trench across an unvegetated ephemeral drainage. A steel plate is placed over the drainage for PUD access. Photo facing northwest.



Proposed sewer upsizing will require construction of a trench across an unvegetated ephemeral drainage. A steel plate is placed over the drainage for PUD access. Photo facing southeast.



Drainage to the northeast of the steel plate.



Drainage to the southwest of the steel plate.