The Junipers Project Environmental Impact Report SCH No. 2018041032 - Project No. 586670

Appendix F

Biological Resources Letter Report

February 2020

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August 26, 2019

LEN-84

Mr. Ryan Green Carmel Land, LLC 16465 Via Esprillo, Suite 150 San Diego, CA 92127

Subject: Draft Biological Resources Letter Report for The Junipers Project

Dear Mr. Green:

At the request of Carmel Land, LCC (Applicant) and the City of San Diego (City), HELIX Environmental Planning, Inc. (HELIX) has completed this biological resources letter report for The Junipers Project (project), which is proposed within the Rancho Peñasquitos Community Planning Area in the City of San Diego, San Diego County, California. The project would generally consist of the construction of a residential development at the former Carmel Highland Golf Course.

The purpose of this report is to document the existing biological conditions within the approximately 112.3-acre project site and provide an analysis of potential impacts to sensitive biological resources with respect to local, state, and federal policy. This report provides the biological resources technical documentation necessary for review under the California Environmental Quality Act (CEQA) by the City and other responsible agencies for the project. Figures and other supporting information are provided as enclosures attached to this letter report.

INTRODUCTION

Project Location

The project site is located in the northeast portion of the City's Rancho Peñasquitos neighborhood, west of Interstate 15 (I-15), north of Carmel Mountain Road and east of Peñasquitos Drive (Figure 1). The site is depicted within Section 4 and an unsectioned portion of Township 14 South, Range 2 West of the Poway U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (Figure 2). The project site is specifically located immediately north of Carmel Mountain Road, south of Andorra Way, east of Peñasquitos Drive, and west of Interstate (I-) 15, primarily within the grounds of the former Carmel Highland Golf Course (Figure 3).

The site is within the boundary of the City's Multiple Species Conservation Program (MSCP) Subarea Plan but is not within the Multi-Habitat Planning Area (MHPA). The MHPA lands occur approximately 0.2 mile west of the site's westernmost boundary and are separated from the site by existing roadways and residential development (Figure 3). The site is located outside the Coastal Overlay Zone and is not within any lands identified as critical habitat by the U.S. Fish and Wildlife Service (USFWS).

Project Description

The proposed project consists of a Community Plan Amendment and residential development of the former golf course and adjacent land previously used as tennis courts associated with the Hotel Karlan (Figure 4). The project would entail development of the site with up to 536 age-qualified (55+) residences, including 455 multi-family attached and detached market rate residences and 81 senior affordable multi-family residential units, as well as a public park, private open space/parks, hydromodification/detention basins, and internal streets. An approximate 2.75-mile, publicly accessible "social loop" trail will be developed and privately maintained around the perimeter of the project.

An existing open man-made drainage ditch that extends into the site from the adjoining residential neighborhood and has been continually disturbed by the previous golf course use and on-going brush management, would be realigned and re-established (Figure 4). The upstream portion of the drainage would be placed in an underground drainage pipe and would flow into a soft-bottomed open channel along the eastern project boundary that will be planted with native wetland and riparian vegetation and placed within on-site open space.

METHODS

Literature Review

Prior to conducting field surveys, HELIX conducted a thorough review of relevant maps, databases, and literature pertaining to biological resources known to occur within the project vicinity. Recent and historical aerial imagery, USGS topographic maps, soils maps (U.S. Department of Agriculture [USDA] 2018), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting.

In addition, a query of special status species and habitats databases was conducted, including the USFWS species records, California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), Calflora database (Calflora 2018), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2018). The USFWS' National Wetlands Inventory (NWI) was also reviewed (USFWS 2018). Any recorded locations of species, habitat types, wetlands, and other resources were mapped and overlain onto aerial imagery using Geographic Information Systems.

General Biological Survey

An initial general biological survey of the project site was conducted by HELIX biologist Stacy Nigro on August 18, 2016. An updated survey was conducted by Ms. Nigro and HELIX biologist Erica Harris on March 9, 2018 to confirm existing conditions and vegetation mapping within the project impact area. Vegetation was mapped on a 1"=100' scale aerial of the site. A minimum mapping unit size of 0.10 acre



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was used when mapping upland habitat; 0.01 acre was used when mapping wetland and riparian habitat. The project site was surveyed on foot and with the aid of binoculars.

Plant and animal species observed or otherwise detected were recorded in field notebooks. Animal identifications were made in the field by direct, visual observation or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs. The locations of special status plant and animal species incidentally observed or otherwise detected were mapped. The project site was examined for evidence of potential jurisdictional waters and wetlands, including vernal pools. In addition to the general biological survey, HELIX conducted a formal jurisdictional delineation and a rare plant survey.

Rare Plant Survey

HELIX biologist Hannah Lo surveyed the project site for special status plant species on April 8, 2018. An additional survey for late-blooming species was conducted on June 4, 2018 by Ms. Harris. Special status plant species include species that are: listed as threatened, endangered, or proposed for listing by the USFWS or the CDFW; those with a California Rare Plant Rank (CRPR) 1 through 4 as designated by the CNPS; and those that are listed as narrow endemic under the City's Biological Guidelines (City 2018) and covered by the City MSCP Subarea Plan (City 1997). The surveys were conducted on foot and included 100 percent visual coverage of the study area. Special status plant species encountered were mapped using a hand-held Global Positioning System (GPS) unit and/or on an aerial photograph. HELIX also looked for special status plant species opportunistically during other surveys and recorded their numbers and locations when encountered.

Jurisdictional Delineation

HELIX biologists Ms. Nigro and Ms. Harris performed the jurisdictional delineation on March 9, 2018 concurrent with the updated general biological survey. Prior to conducting fieldwork, aerial photographs (1"=100' scale), topographic maps (1"=100' scale), and NWI maps were reviewed to assist in determining the presence or absence of potential jurisdictional areas within the project site. The delineation was conducted to identify and map any water and wetland resources potentially subject to U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act, and streambed and riparian habitat potentially subject to CDFW jurisdiction pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code). The delineation was also conducted to determine the presence or absence of City Environmentally Sensitive Lands (ESL) wetlands. Areas generally characterized by depressions, drainage features, and riparian and wetland vegetation were evaluated.

Waters of the U.S.

Potential USACE-jurisdictional Waters of the U.S. (WUS) were delineated using three criteria (vegetation, hydrology, and soils) established for wetland delineations as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Arid West Regional Supplement (USACE 2008a).

The results presented here are also consistent with relevant court decisions, as outlined and applied by the USACE (USACE 2007; Grumbles and Woodley 2007) and U.S. Environmental Protection Agency



(USEPA; 2007). These publications explain that the USEPA and USACE will assert jurisdiction over traditional navigable waters (TNW) and tributaries to TNWs that are a relatively permanent water body (RPW), which has year-round or continuous seasonal flow. For water bodies that are not RPWs, a significant nexus evaluation is used to determine if the non RPW is jurisdictional. As an alternative to the significant nexus evaluation process, a preliminary jurisdictional delineation (PJD) may be submitted to the USACE. The PJD treats all waters and wetlands on a site as if they are jurisdictional Waters of the U.S. (USACE 2008b).

Wetland affiliations of plant species follow the National Wetland Plant List (Lichvar et al. 2016). Soils information was taken from the USDA's Web Soil Survey (2018) and Bowman (1973). Soil samples were evaluated for hydric soil indicators (e.g., hydrogen sulfide [A4], sandy redox [S5], depleted matrix [F3], redox dark surface [F6], redox depressions [F8], and vernal pools [F9]). Soil chromas were identified according to Munsell's Soil Color Charts (Kollmorgen 1994).

Sampling points were inspected for primary (e.g., surface water [A1], saturation [A3], water marks [nonriverine, B1], sediment deposits [non-riverine, B2], drift deposits [non-riverine, B3], surface soil cracks [B6], inundation visible on aerial imagery [B7], salt crust [B11], aquatic invertebrates [B13], hydrogen sulfide odor [C1], and oxidized rhizospheres along living roots [C3]) and were also inspected for secondary (e.g., water marks [riverine, B1], sediment deposits [riverine, B2], drift deposits [riverine, B3], drainage patterns in wetlands [B10], shallow aquitard [D3], and positive FAC neutral test [D5]) wetland hydrology indicators.

Areas were determined to be potential non-wetland WUS if there was evidence of regular surface flow (e.g., bed and bank) but either the vegetation or soils criterion was not met. Jurisdictional limits for these areas were defined by the ordinary high water mark (OHWM), which is defined in 33 CFR Section 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas."

Two sampling points were studied, and soil pits were excavated at each of these. Standard USACE wetland delineation data forms were completed for each sampling point in the field, and are included in Attachment A. Photographs taken of the sampling points and study area are included in Attachment B. An overview of USACE wetlands and jurisdictional WUS definitions is presented in Attachment C.

Waters of the State

Potential RWQCB-jurisdictional Waters of the State (WS) were delineated in the same manner as potential WUS. All waters of the U.S. were considered waters of the State subject to RWQCB jurisdiction pursuant to CWA Section 401. Where features were determined to be geographically isolated, they were considered isolated waters of the State subject to RWQCB jurisdiction pursuant to Porter-Cologne.

Streambed and Riparian Habitat

Potential CDFW-jurisdictional streambed and riparian habitat were determined based on the presence of riparian vegetation or regular surface flow within a measurable bed and bank. Streambeds within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows



at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation" (Title 14, Section 1.72). Potential CDFW-jurisdictional unvegetated streambed encompasses the top-of-slope to top-of-slope width for the features within the project site. Vegetated streambed includes all riparian shrub or tree canopy extending within or beyond the banks of features within the project site. Definitions of CDFW jurisdictional areas are presented in Attachment D (Section II).

City Environmentally Sensitive Lands Wetlands

Potential ESL wetlands were determined based on the predominance of hydrophytic plant species. In addition, areas lacking naturally occurring wetland vegetation communities are still considered wetlands if hydric soil or wetland hydrology is present and past human activities have occurred to remove the historic vegetation. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands will be considered a wetland under the ESL and regulated accordingly. However, seasonal drainage patterns that are sufficient enough to etch the landscape would not satisfy the City's wetland definition unless wetland dependent vegetation is either present in the drainage or lacking due to past human activities. Naturally occurring wetland vegetation communities include saltmarsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodland, riparian scrub, and vernal pools.

Survey Limitations

Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the lists of species identified are not necessarily comprehensive accounts of all species that utilize the project site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed. Those species that are of special status and have potential to occur in the project site, however, are still addressed in this report.

Nomenclature

Nomenclature used in this report generally comes from the City MSCP Subarea Plan (City 1997), Holland (1986) and Oberbauer (2008) for vegetation; Jepson eFlora (2018) and Baldwin et al. (2012) for plants; Society for the Study of Amphibians and Reptiles (2018) for reptiles and amphibians; American Ornithological Society (2018) for birds; North American Butterfly Association (2018) for butterflies; and Bradley et al. (2014) for mammals. Plant species status is from the CNPS' Rare Plant Inventory (CNPS 2018), CDFW (2018a), and City (2012). Animal species status is from the CDFW (2018b) and City (2012).

RESULTS

Regional Context

The project site is generally located within the Central Coast Humid Temperate ecoregion of the City of San Diego (San Diego National History Museum [SDNHM] 2014). Mean annual precipitation is approximately 15 inches, and the mean annual temperature is approximately 61 degrees Fahrenheit. The frost-free season is 220 to 280 days.



Important biological resources in the region generally include core blocks of coastal sage scrub and chaparral surrounding Black Mountain. Diegan coastal sage scrub typifies the biological character of much of the area. The area immediately surrounding the site hosts populations of sensitive plants, such as California adolphia (*Adolphia californica*), in addition to important habitat for sensitive animals, such as coastal California gnatcatcher (*Polioptila californica californica*).

In the context of the City's MSCP Subarea Plan, the project site occurs outside of MHPA associated with the Black Mountain core area (Figure 3). Priority resources for this area include coastal sage scrub to provide live-in habitat and facilitate dispersal functions for the gnatcatcher.

General Land Uses

Since the 1960s, land uses at the project site have been confined to those associated with the Carmel Highland Golf Course. The golf course was closed in 2015 and is no longer active. The site is characterized primarily by disturbed land, consisting mostly of the abandoned golf fairways and greens, with non-native species mixed in, and interspersed areas of ornamental vegetation and cleared land. Developed land is also present including golf cart trails, maintenance sheds, and the existing tennis courts. Surrounding land uses include single- and multi-family residential to the west and north, and a hotel (Hotel Karlan). To the east across I-15 are commercial shopping centers. Further to the west is the Black Mountain Open Space Park.

Disturbance

The project site consists of an abandoned golf course and several tennis courts (still in use), maintenance sheds and appurtenant uses, and is surrounded by existing residential and commercial development, and a freeway corridor. The site is subject to a number of previous and ongoing anthropogenic related disturbances that include pedestrian use, domestic pet activity (i.e., dogs and cats), invasive species, and regular night lighting and noise. The former golf course portions of the site are enclosed with fencing and locked gates and are not open to the public.

The hydrology and vegetation composition of the site has evidently changed since the golf course operations have ceased. The man-made channel that occurs on-site is no longer maintained or supported by irrigation water from the golf course, and as a result, is mostly in a dysfunctional state.

Topography and Soils

The site is generally sloped from the west to the east, with an approximate low point of 650 feet above mean sea level (AMSL) at the eastern boundary and a high point of 750 feet AMSL at the western boundary.

Five soil types have been mapped within the study area (USDA 2018; Figure 5): Diablo Clay, 15 to 30 percent slopes; Diablo clay, 2 to 19 percent slopes; Diablo Clay, 9 to 15 percent slopes; Escondido very fine sandy loam, 5 to 9 percent slopes; and Exchequer rocky silt loam, 9 to 30 percent slopes. None of the named soils mapped in the project site are listed as hydric (Natural Resource Conservation Service [NRCS] 2018). According to the geotechnical report for the project (Geocon 2019), much of the site is underlain by undocumented fill associated with the previous golf course development.



Vegetation Communities/Habitat Types

Four vegetation communities or land uses occur within the project site, as presented in Table 1 and shown on Figure 6. Additionally, three vegetation communities or land uses are located within the California Department of Transportation (Caltrans) right-of-way (ROW) area, located south of the project site and north of Carmel Mountain Road (Figure 6), that will be disturbed as part of project implementation. The numeric codes in parentheses following each community/habitat type name are from the City's Land Development Code Biology Guidelines (City 2018), with further guidance from the Holland classification system (Holland 1986) and as expanded by Oberbauer (2008). The communities/habitat types are presented in Table 1 in order by MSCP Tier.

Vegetation Community/ Land Use Type	MSCP Tier ¹	Area ² (acres)					
		On-Site	Off-Site ³				
Uplands							
Eucalyptus Woodland	IV	<0.1					
Non-Native Vegetation	IV	19.3	0.3				
Disturbed Land	IV	84.5	<0.1				
Developed Land	IV	8.5	<0.1				
TOTAL		112.3	0.4				
1 Tiors refer to City MSCD Subaroa Plan babitat classification system							

Table 1 EXISTING VEGETATION COMMUNITIES/LAND USE TYPES

¹ Tiers refer to City MSCP Subarea Plan habitat classification system.

 2 $\,$ Acreages rounded to the nearest 0.1 acre; total reflects rounding.

³ Includes improvements within the adjacent California Department of Transportation Right-of-Way located south of the project site and north of Carmel Mountain Road, and within the existing drainage easement adjacent to the northwestern project boundary..

Eucalyptus Woodlands

Eucalyptus woodland is dominated by eucalyptus (*Eucalyptus* sp.), an introduced species that has often been planted purposely for wind blocking, ornamental, and hardwood production purposes. Most groves are monotypic with the most common species being either the blue gum (*Eucalyptus gunnii*) or red gum (*E. camaldulensis* ssp. *obtusa*). The understory within well-established groves is usually very sparse due to the closed canopy and allelopathic nature of the abundant leaf and bark litter. If sufficient moisture is available, this species becomes naturalized and is able to reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, as a wildlife habitat, these woodlands provide potential nesting sites for a variety of raptors. Eucalyptus woodland covers approximately 0.02 acre of the project site.

Non-Native Vegetation

Non-native vegetation is a category describing stands of naturalized or ornamental trees and shrubs, many of which are also used in landscaping. Ornamental vegetation within the project site consists primarily of planted trees, mainly eucalyptus (*Eucalyptus* sp.) and pine (*Pinus* sp.), scattered throughout the former golf course. Approximately 19.3 acres of non-native vegetation occurs within the project site, and 0.3 acres occur within the Caltrans ROW and adjacent off-site drainage easement.



Disturbed Land

Disturbed habitat or disturbed land includes land cleared of vegetation (e.g., dirt roads), land containing a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), and land showing signs of past or present human or animal usage that removes any capability of providing viable habitat. The majority of the site consists of disturbed land with Bermuda grass (*Cynodon dactylon*), Russian thistle (*Salsola tragus*), sow-thistle (*Sonchus oleraceus*), and wild lettuce (*Lactuca serriola*) comprising the dominant species. Approximately 84.5 acres of disturbed land is mapped within the project site, and less than 0.1 acre is mapped within the Caltrans ROW.

Developed Land

Developed land includes areas that have been constructed upon or otherwise covered with a permanent, unnatural surface and may include, for example, structures, pavement, irrigated landscaping, or hardscape to the extent that no natural land is evident. These areas no longer support native or naturalized vegetation. Developed land within the project site consist of paved golf cart paths, buildings, and other areas of hardscape or maintained landscaping. Approximately 8.5 acres of urban/ developed lands are mapped within the project site, and less than 0.1 acre is mapped within the Caltrans ROW.

Flora

HELIX identified a total of 77 plant species in the project site, of which 63 (82 percent) are non-native species (Attachment E).

Fauna

A total of 36 animal species were observed or otherwise detected in the project site during the biological surveys, including 3 invertebrate, 1 reptile, 28 bird, and 4 mammal species (Attachment F).

Sensitive Vegetation Communities/Habitat Types

Sensitive vegetation communities/habitat types are defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the State CEQA Guidelines. The City defines sensitive habitat as ESL in their Land Development Code Biology Guidelines. In the context of the City's MSCP Subarea Plan, Tier IIIB types and higher are considered sensitive requiring compensatory mitigation.

No sensitive vegetation communities/habitat types occur within the project site. Although Bermuda grass is a species that can be associated with non-native grassland habitat, which is a Tier IIIB sensitive habitat requiring mitigation under the City's Biology Guidelines, areas of the site that are dominated by this species were not considered grassland as this species was installed as a turf grass for the golf course. As such, it is not a naturalized community on the project site and is considered disturbed land, particularly given the invasion by Russian thistle and other invasive weeds.



Special Status Plant Species

Special status plant species have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City (e.g., MSCP narrow endemic species) and may also be included in the CNPS Inventory of Rare and Endangered Plants. Their status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be more or less abundant but occur only in very specific habitats. Lastly, a species may be widespread but exist naturally in small populations.

No special status plant species were observed during the April and June 2018 rare plant surveys or the August 2016 and March 2018 general biological surveys. A total of 38 special status plant species known to the region were analyzed for their potential to occur within the study area (Attachment G). None of the special status plant species known to the region have a high potential to occur within the project site due primarily to the lack of suitable conditions, habitat conversion and disturbances from previous golf course uses, and prevalence of non-native vegetation.

Special Status Animal Species

Special status animal species include those that have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City. In general, the principal reason an individual taxon (species or subspecies) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss.

One sensitive animal species was detected on site: Western bluebird (*Sialia mexicana*). The western bluebird is a MSCP-covered species. A single individual was observed perched within a tree and foraging during the March 2018 survey. A total of 25 special status animal species known to the region were analyzed for their potential to occur within the study area (Attachment H). Only one other special status species was determined to have a high potential to occur: Cooper's hawk (*Accipiter cooperii*).

Nesting Birds

The site contains trees and shrubs that provide potentially suitable nesting habitat for a variety of bird species, including raptors.

Raptor Foraging

Raptor species that have shown the ability to adapt to suburban environments may use the site for foraging opportunities. These include Cooper's hawk, red-tailed hawk (*Buteo jamaicensis*), and red-shouldered hawk (*Buteo lineatus*). However, they would not be expected to use the project site as a primary foraging area. The habitat within the project site does not provide high quality raptor foraging habitat due to the urban setting of the site and surrounding area. As the site was an active golf course for decades, it has likely not functioned as a local or regional foraging resource of importance for raptors. Other more expansive areas occur in the local area and region that provide better quality foraging habitat, such as the Black Mountain Open Space Park to the east.



Jurisdictional Waters and Wetlands

The site supports a single jurisdictional feature in the form of a man-made ditch, which would be subject to USACE, RWQCB, and CDFW jurisdiction. The ditch enters the site from the adjacent residential area near the northwestern site boundary and continues in a mostly north-to-south alignment to the eastern site boundary, where it exits the site into a culvert, passes underneath I-15, and presumably drains into Chicarita Creek east of I-15. Chicarita Creek flows in a southerly direction eventually connecting to Peñasquitos Creek to the south of Poway Road, which then flows to the west toward Los Peñasquitos Lagoon. The man-made ditch has an earthen bottom along its northern two-thirds, transitioning to a concrete-lined v-ditch in the southern third of its length.

Waters of the U.S.

Potential USACE jurisdiction within the project site includes 0.10 acre (2,593 linear feet) of non-wetland WUS, as summarized below in Table 2 and depicted on Figure 6.

Jurisdictional Resource	Area ¹ (acres)	Length ¹ (feet)	
Non-wetland Waters of the U.S./State (Man-Made Earthen Channel)	0.08	1682	
Non-wetland Waters of the U.S./State (Man-Made Concrete Channel)	0.02	911	
TOTAL	0.10	2,593	

Table 2 WATERS OF THE U.S./STATE

¹ Acres rounded to the nearest 0.01 and feet rounded to the nearest foot.

Waters of the State

Potential RWQCB-jurisdiction within the project site includes 0.10 acre (2,593 linear feet) of non-wetland WS, as summarized below in Table 2 and depicted on Figure 6.

California Department of Fish and Wildlife Streambed and Riparian Habitat

Potential CDFW jurisdiction within the project site includes 0.15 acre (2,593 linear feet) of unvegetated streambed, as summarized below in Table 3 and depicted on Figure 6.

Table 3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE STREAMBED HABITAT

Jurisdictional Resource	Area ¹ (acres)	Length ¹ (feet)	
Unvegetated Streambed			
Man-Made Earthen Channel	0.11	1682	
Man-Made Concrete Channel	0.04	911	
TOTAL	0.15	2,593	

¹ Acres rounded to the nearest 0.01 and feet rounded to the nearest foot.



City Environmentally Sensitive Lands Wetlands

There are no areas within the project site that meet the criteria to be considered City ESL wetlands. The on-site ditch is man-made and ephemeral in nature being fed primarily by urban runoff from the adjacent residential development. The ditch is characterized by non-native, disturbed habitat dominated by Bermuda grass and sow-thistle. The ditch lacks sufficient hydrology to support significant and self-sustaining stands of wetland-dependent vegetation. Scattered individuals of tall flatsedge (*Cyperus eragrostis*) and slender creeping spike-rush (*Eleocharis montevidensis*) were present within portions of the ditch during surveys; however, these individuals were not present in sufficient numbers, coverage, or area to represent a functioning stand of wetland habitat or to support wetland conditions. Therefore, no portions of the ditch meet the criteria for a City ESL wetland.

Habitat Connectivity and Wildlife Corridors

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of plants and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of a fragmented archipelago arrangement of habitat over a linear distance.

The project site does not occur within any known corridors or linkages. No portions of the project site function as linkage or corridor habitat. The site is surrounded by existing development, and as such, does not by itself function as a wildlife corridor or linkage. Black Mountain Open Space Park is the nearest undeveloped block of habitat and is located approximately 0.2 acre to the west. This area is separated from the project site by existing roadways and residential homes. The site is further characterized by open, exposed areas that lack suitable cover and resources that are typically associated with wildlife movement areas. Common birds and mammals might move through the site to forage and during dispersal activities; however, they would not be expected to use the site as a wildlife corridor, linkage, or specific travel route to and from important resources.

APPLICABLE REGULATIONS

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

Federal Government

Federal Endangered Species Act

Administered by the USFWS, the Federal Endangered Species Act (FESA) 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 a "take" under the FESA. Section 9(a) of the FESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat.

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. Section 10(a) generally describes a process for preparation of a Habitat Conservation Plan (HCP) and issuance of an incidental take permit. Pursuant to Section 10(a), the City was issued a take permit for its adopted MSCP Subarea Plan.

Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

Clean Water Act (Section 404)

Under Section 404 of the CWA, the USACE is charged with regulating the discharge of dredge and fill materials into jurisdictional waters of the U.S. The terms "WUS" and "jurisdictional waters" have a broad meaning that includes special aquatic sites, such as wetlands. WUS, as defined by regulation and refined by case law include: (1) the territorial seas; (2) coastal and inland waters, lakes, rivers, and streams that are navigable WUS, including their adjacent wetlands; (3) tributaries to navigable WUS, including adjacent wetlands; and (4) interstate waters and their tributaries, including adjacent isolated wetlands and lakes, intermittent and ephemeral streams, prairie potholes, and other waters that are not a part of a tributary system to interstate waters or navigable WUS, the degradation or destruction of which could affect interstate commerce.

Section 401 of the CWA requires that any applicant for a federal license or permit to conduct any activity that may result in a discharge to WUS must obtain a Water Quality Certification, or a waiver thereof, from the state in which the discharge originates. In California, the RWQCB issues Water Quality Certifications.



State of California

California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

California Endangered Species Act

The California Endangered Species Act (CESA) established that it is State policy to conserve, protect, restore, and enhance State endangered species and their habitats. Under State law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For State-only listed species, Section 2081 of CFG Code authorizes the CDFW to issue an Incidental Take Permit for State-listed threatened and endangered species if specific criteria are met. The City was issued a take permit for its adopted MSCP Subarea Plan pursuant to Section 2081.

California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Sections 1600 et seq. of CFG Code require notification and, if required, a Streambed Alteration Agreement (SAA) for any activity that would alter the flow, change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require notification or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

The CFG Code provides specific protection and listing for several types of biological resources. Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and RWQCB regulate the discharge of waste into waters of the State via the 1969 Porter-Cologne Water Quality Control Act (Porter-Cologne) as described in the California Water Code. The California Water Code is the State's version of the federal CWA.



Waste, according to the California Water Code, includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

State waters that are not federal waters may be regulated under Porter-Cologne. A Report of Waste Discharge must be filed with the RWQCB for projects that result in discharge of waste into waters of the State. The RWQCB will issue Waste Discharge Requirements (WDRs) or a waiver. The WDRs are the Porter-Cologne version of a CWA Section 401 Water Quality Certification.

City of San Diego

Environmentally Sensitive Lands

Impacts to biological resources in the City must comply with the City's Environmentally Sensitive Lands Regulations. The purpose of the regulations is to "protect, preserve, and, where damaged restore, the environmentally sensitive lands of San Diego and the viability of the species supported by those lands." Environmentally sensitive lands are defined to include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains.

The ESL regulations 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. Impacts to wetlands must be mitigated in accordance with Section III(B)(1)(a) of the Land Development Manual Biology Guidelines (City 2018). The ESL regulations also require that buffers be maintained around all wetlands (as appropriate) to protect their functions and values. Buffer widths may either be increased or decreased as determined on a case-by-case basis, taking into consideration the size and type of project proposed, sensitivity of the wetland resource to detrimental edge effects, topography, specific functions and values of the wetland, as well as the need for transitional upland habitat.

In addition to restricting impacts to wetland habitats, the ESL regulations restrict development within the MHPA, including required impact avoidance areas around raptor nesting locations (specifically, Cooper's hawk, northern harrier [*Circus cyaneus*], golden eagle [*Aquila chrysaetos*], and burrowing owl [*Athene cunicularia*]), and known locations of coastal California gnatcatcher and southwestern pond turtle (*Actinemys pallida*). The ESL regulations also impose seasonal restrictions on grading where development may impact the following bird species: western snowy plover (*Charadrius nivosus nivosus*), southwestern willow flycatcher (*Empidonax traillii extimus*), California least tern (*Sternula antillarum browni*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), least Bell's vireo (*Vireo bellii pusillus*), and tricolored blackbird (*Agelaius tricolor*).

Multiple Species Conservation Program

In July 1997, the USFWS, CDFW, and City adopted the Implementing Agreement for the MSCP. This program allows the incidental take of threatened and endangered species as well as regionally-sensitive species that are conserved by it (covered species). The MSCP designates regional preserves that are intended to be mostly void of development activities, while allowing development of other areas subject



to the requirements of the program. Impacts to biological resources are regulated by the City's ESL regulations.

The City's MSCP Subarea Plan has been prepared to meet the requirements of the California Natural Communities Conservation Planning Act of 1992. This Subarea Plan describes how the City's portion of the MSCP Preserve, the MHPA, will be implemented.

ANALYSIS OF PROJECT EFFECTS AND PROPOSED MITIGATION MEASURES

In accordance with the City's Biology Guidelines (City 2018) and Significance Determination Guidelines (City 2011), a project would result in a significant or potentially significant biological resources impact if it would result in:

- 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 the USFWS or CDFW;
- 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, or regulations, or by USFWS or CDFW;
- A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through the direct removal, filling, hydrological interruption, or other means;
- Substantial interference 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 impediment of the use of native wildlife nursery sites;
- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- An introduction of land use within an area adjacent to the MHPA that would result in adverse edge effects;
- A conflict with any local policies or ordinances protecting biological resources, or
- An introduction of invasive plant species into a natural open space area.

Issue 1 – Special Status Species

Would the 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?



Issue 1 Impact Analysis

<u>Special Status Species</u>

Project development has been specifically targeted within existing disturbed and developed land, or land within the disturbed grounds of the previous golf course. No special status plant species were observed within the project site during the April and June 2018 rare plant surveys. Special status plant species that are known to the region would not be expected to occur within the project because of the general lack of suitable habitat; disturbed nature of the site due to remnant exotic landscaping and developed features from previous golf course operation; current periodic site maintenance activities (i.e., mowing/fuel management controls); and large distance from natural open space areas, with intervening existing development. The portions of the site mapped with underlying Diablo clay are characterized by disturbed surface soils that have been substantially augmented due to the previous golf course uses. Therefore, special status plant species are not likely to occur and no impacts are anticipated.

One special status animal species, western bluebird, was observed within the project site in March 2018 and one special status animal species has high potential to occur, Cooper's hawk. Potential significant impacts would occur to western bluebird and Cooper's hawk if they were determined to be nesting within the project site during project construction. Compliance with the MBTA and CFG Code would ensure that no direct impacts would occur to western bluebird or Cooper's hawk.

Raptor Foraging

In its current state, the project site provides marginal and relatively low-quality foraging opportunities for common raptors that are resident and migratory to the region. The ornamental trees provide suitable perching habitat and the remnant golf course fairways provide open habitat for hunting. There is likely the presence of prey items for certain raptor species. Taller, weedy species cover a good portion of the ground and would likely make foraging more difficult. Although the project site provides some function and value for raptor foraging, it previously served as a golf course for decades and has likely not functioned as a local or regional foraging resource of importance for raptors. Other more expansive areas occur in the local area and region that provide high-quality foraging habitat, such as the Black Mountain Open Space Preserve located approximately 0.2 mile west of the site. Impacts are expected to be less than significant.

Nesting Birds

The project site contains trees, shrubs, and other vegetation that provide suitable nesting habitat for birds, including raptors, protected under the (MBTA and CFG Code. Significant impacts could occur to nesting birds if suitable nesting habitat is removed during the general bird breeding season (January 15 to July 15 for raptors; February 15 to August 31 for all other avian species). As a regulatory requirement, the project must comply with the regulations and guidelines of the MBTA and CFG Code.

Issue 1 Mitigation Measures

The project is required to comply with the MBTA and CFG Code; no mitigation measures are proposed.



Conclusions

Project implementation could result in significant impacts to nesting birds, including special status passerines (e.g., western bluebird) and raptors, with the potential to nest within the project site. The project is required to comply with the MBTA and CFG Code, which would ensure that no significant impacts on nesting birds would occur, including western bluebird and raptors.

Issue 2 – Riparian Habitat and Sensitive Natural Communities

Would the 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?

Issue 2 Impact Analysis

The project site is characterized by disturbed and developed land associated with the former Carmel Highland Golf Course. Native and naturalized habitat is absent from the site. The project would only impact non-sensitive Tier IV habitats including non-native vegetation, disturbed habitat, and developed land (Figure 7). Therefore, no impacts to sensitive habitat would occur as a result of project construction.

Issue 2 Mitigation Measures

No mitigation required.

Conclusion

The project would not result in impacts to sensitive vegetation communities, and no mitigation is required.

Issue 3 – Jurisdictional Wetlands and Waterways

Would the 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?

Issue 3 Impact Analysis

A man-made drainage ditch occurs within the northeastern portion of the project site that was previously created for conveyance of storm water and irrigation, as well as aesthetic water features for the former golf course. Water that flows through this ditch is largely controlled through a series of small culverts and pipes, ultimately discharging into an existing storm drain and culvert that runs beneath I-15 (Figure 6). The ditch qualifies as a non-wetland WUS/WS subject to USACE and RWQCB jurisdiction and a streambed subject to CDFW jurisdiction. The ditch lacks wetland-dependent vegetation and, therefore, does not meet the criteria for a City ESL wetland. No impacts to City ESL wetlands would occur.



Unavoidable impacts would occur to non-wetland waters of the U.S./State and CDFW-juridictional streambed habitat in order to realign and enhance the existing man-made drainage ditch from its current configuration and disturbed condition. The realignment and enhancement activities would require permanent impacts to the existing ditch, including 0.10 acre of USACE/RWQCB-juridictional non-wetland waters of the U.S./State and 0.15 acre of CDFW-jurisdictional streambed (Figure 7; Table 4).

Jurisdictional Resource	Existing Acres (Feet) ¹	Impact Acres (Feet) ¹	Proposed Ratio (Method)	Mitigation Required Acres (Feet) ¹	
USACE/RWQCB Jurisdiction					
Non-Wetland Waters of the U.S./State (Man-Made Earthen channel)	0.08 (1,682)	0.08 (1,682)	1:1 (Establishment / Re-	0.10 (2,593)	
Non-Wetland Waters of the U.S./State (Man-Made Concrete channel)	0.02 (911)	0.02 (911)	Establishment)		
TOTAL	0.10 (2,593)	0.10 (2,593)		0.10 (2,593)	
CDFW Jurisdiction ²					
Man-Made Earthen Channel	0.11 (N/A)	0.11 (N/A)	1:1		
Man-Made Concrete Channel	0.04 (N/A)	0.04 (N/A)	(Establishment / Re- Establishment, Restoration / Rehabilitation, Enhancement, or Preservation) None	0.15 (N/A)	
TOTAL	0.15 (N/A)	0.15 (N/A)		0.15 (N/A)	

Table 4 JURISDICTIONAL IMPACTS AND MITIGATION

¹ Acres rounded to the nearest 0.01, linear feet rounded to the nearest foot.

² Mitigation for loss of linear feet not required by CDFW.

Pursuant to regulatory requirements, the project would notify the USACE and, if required, request authorization pursuant to a Section 404 Nationwide Permit, to comply with the CWA Section 404. The project will also notify RWQCB with a Request for Water Quality Certification in compliance with CWA Section 401. Lastly, the project would notify the CDFW and, if required, obtain a SAA in compliance with CFG Code Sections 1600 et seq. The project would be required to implement any compensatory mitigation, additional mitigation measures, and permit conditions prescribed by the USACE, RWQCB, and CDFW in permits.

Issue 3 Mitigation Measures

Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce the impacts to USACE, RWQCB, and CDFW juridictional resources to below the level of significance. Mitigation is proposed at standard ratios and methods consistent with those required by the Regulatory Agencies. Final mitigation



requirements will be identified as conditions in the regulatory permits and approvals issued with the USACE, RWQCB, and CDFW.

- BIO-1 Impacts to 0.10 acre of USACE- and RWQCB-jurisdictional non-wetland waters of the U.S./State shall be mitigated at a minimum 1:1 ratio through one or a combination of the following: on-and/or off-site establishment, re-establishment, rehabilitation, and/or enhancement of a minimum of 0.10 acre waters of the U.S./State; and/or off-site purchase of waters of the U.S./State credits at an approved mitigation bank, such as the Brook Forest Conservation/Mitigation Bank, or other location deemed acceptable by the USACE and RWQCB. Impacts to waters of the U.S./State would require notification to the USACE for issuance of a Section 404 CWA permit and notification to the RWQCB for issuances of a Section 401 CWA permit from the RWQCB.
- **BIO-2** Impacts to 0.15 acre of CDFW-jurisdictional streambed will be mitigated at a minimum 1:1 ratio through one or a combination of the following: on- and/or off-site establishment, re-establishment, rehabilitation, and/or enhancement of a minimum of 0.15 acre riparian and/or stream habitat; and/or off-site purchase of riparian and/or stream credits at an approved mitigation bank, such as the Brook Forest Conservation/Mitigation Bank, or other location deemed acceptable by the CDFW. Impacts to CDFW-jurisdictional resources would require notification to the CDFW for a CFG Section 1602 Streambed Authorization Agreement.

Conclusion

Project implementation would result in significant impacts to jurisdiction resources. Implementation of the mitigation measures BIO-1 and BIO-2 would reduce impacts to a less than significant level.

Issue 4 – Wildlife Movement and Nursery Sites

Would the 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?

Issue 4 Impact Analysis

The project site is surrounded by existing development, and as such, does not by itself function as and does not contribute to any wildlife corridors or linkages, or native wildlife nursery sites. The project, therefore, would not impede the movement of any native, resident, or migratory fish or wildlife species; interfere with established native, resident, or migratory wildlife corridors, including linkages identified in the MSCP Plan; and would not impede the use of native wildlife nursery sites.

Impacts would be less than significant.

Issue 4 Mitigation Measures

None required.



Conclusion

Project implementation would not result in significant impacts on wildlife movement and nursery sites. No impact would occur, and mitigation is not required.

Issue 5 – Adopted Plans

Would the project conflict with the provisions of an adopted HCP, 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?

Issue 5 Impact Analysis

The project site is located outside the MHPA and all impacts would be entirely restricted to disturbed and developed lands. However, as stated within Issue 1 above, the project could result in potential significant impacts to nesting birds, including MSCP-covered species. Compliance with existing regulations, including the MBTA and CFG Code, would ensure project consistency with the adopted City MSCP Subarea Plan. No other adopted HCP, Resource Management Plan, Special Area Management Plan, Watershed Plan, or other regional planning efforts are applicable to the project.

Issue 5 Mitigation Measures

Compliance with existing regulations would ensure project consistency with the MSCP.

Conclusion

The project would result in potential significant impacts to nesting birds, including MSCP-covered species. Compliance with the MBTA and CFG Code would be reduce impacts to below a level of significance and achieve consistency with the adopted City MSCP Subarea Plan.

Issue 6 - Land Use Adjacency

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

Issue 6 Impact Analysis

The project would not introduce land use within an area adjacent to the MHPA that would result in adverse edge effects. The site is located 0.2 mile east of the nearest MHPA boundary (Figure 3). In between the site and the MHPA boundary are a row of single-family homes and Peñasquitos Drive. Given this distance and the land uses in between, development at the site would not impact the City's MHPA and would not come under the MHPA adjacency guidelines.

Issue 6 Mitigation Measures

No mitigation required.



Conclusion

The project site is located 0.2 mile east of the nearest MHPA boundary and is separated from the MHPA by residential development. The project would not introduce land use within an area adjacent to the MHPA that would result in adverse edge effects. No impact would occur, and mitigation is not required.

Issue 7 - Local Policies or Ordinances

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

Issue 7 Impact Analysis

As described above, the project has been specifically designed to minimize impacts to biological resources addressed in the City's MSCP Subarea Plan and Land Development Code. Compliance with existing regulations, including MBTA and CDF Code, would ensure project consistency with the MSCP and that impacts to species and ESL are avoided in accordance with Land Development Code requirements.

Issue 7 Mitigation Measures

Compliance with existing regulations would ensure project consistency with the MSCP and Land Development Code pertaining to biological resources.

Conclusion

The project could result in significant impacts to nesting birds, including MSCP-covered species addressed in the City's MSCP Subarea Plan and Land Development Code. Compliance with the MBTA and CFG Code would reduce impacts to less than significant.

Issue 8 – Invasive Species

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

Issue 8 Impact Analysis

The project would not result in the introduction of invasive species of plants into a natural open space area. The project area is surrounded by urban development and non-native plant species are prevalent on adjacent lands. Furthermore, any landscaping associated with the project would not include plant species identified as invasive by the California Invasive Plant Council (2006).

Issue 8 Mitigation Measures

None required.



Conclusion

The project would not result in the introduction of invasive species of plants into a natural open space area, thus no significant impact would occur. No mitigation is required.

CLOSING

I certify that the information in this report and enclosures are correct and accurately represent my work. Please do not hesitate to contact Karl Osmundson or me at (619) 462-1515 if you have any questions or require further assistance.

Sincerely,

Erica Harris Biologist

Attachments:

- Figure 1: Regional Location
- Figure 2: USGS Topography
- Figure 3: Aerial Photograph
- Figure 4: Site Plan
- Figure 5: Soils
- Figure 6: Vegetation and Jurisdictional Resources
- Figure 7: Vegetation and Jurisdictional Resources/Impacts
- Attachment A Jurisdictional Delineation Worksheet
- Attachment B Representative Site Photos
- Attachment C Federal Jurisdictional Information
- Attachment D State Jurisdictional Information
- Attachment E Plant Species Observed
- Attachment F Animal Species Observed or Detected
- Attachment G Special Status Plant Species with Potential to Occur
- Attachment H Special Status Animal Species with Potential to Occur



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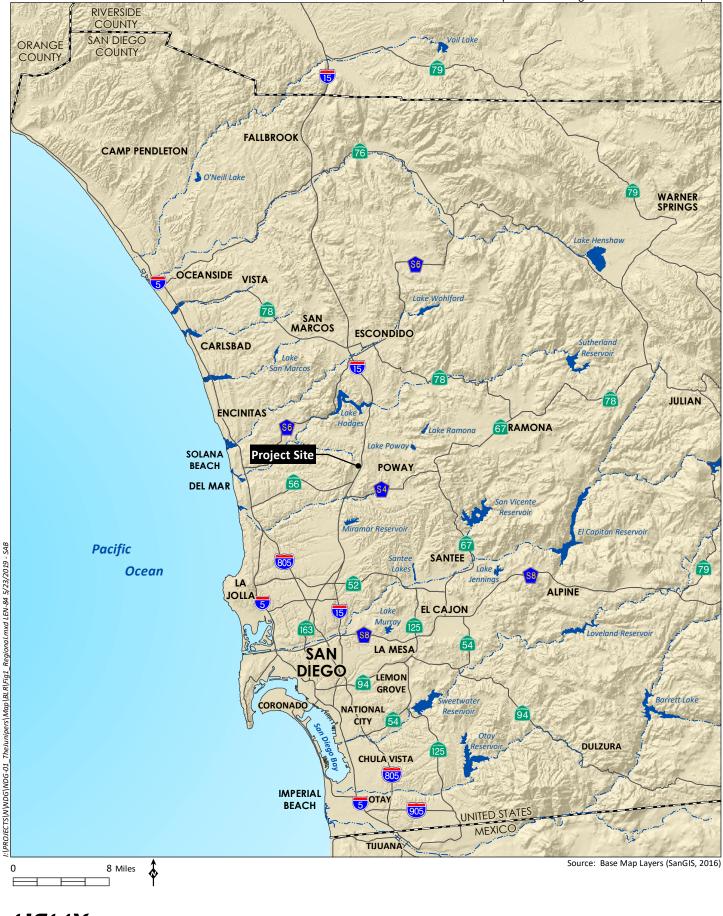
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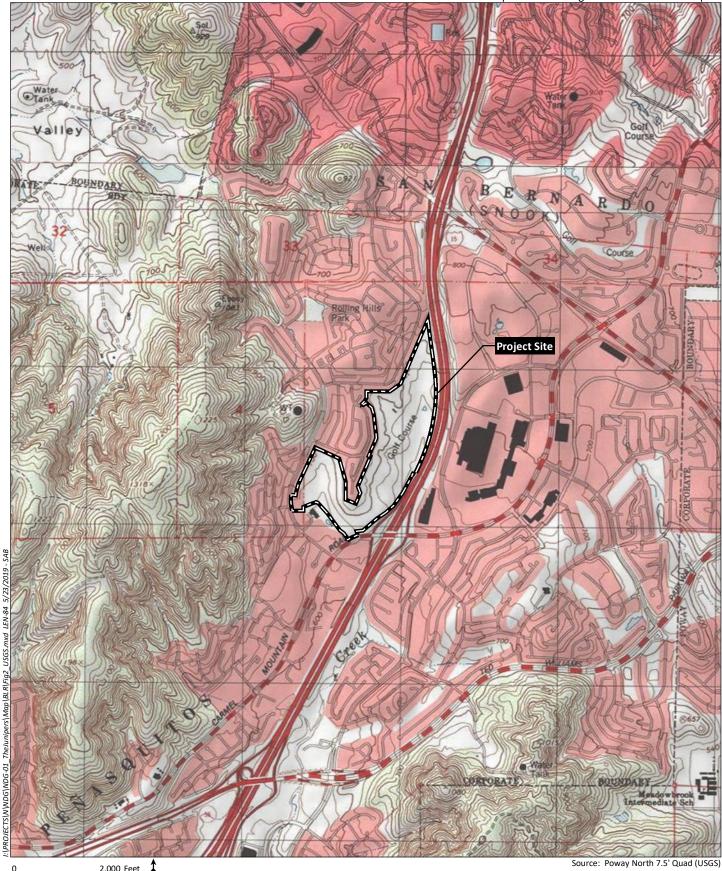
The Junipers Draft Biological Resources Letter Report





Regional Location

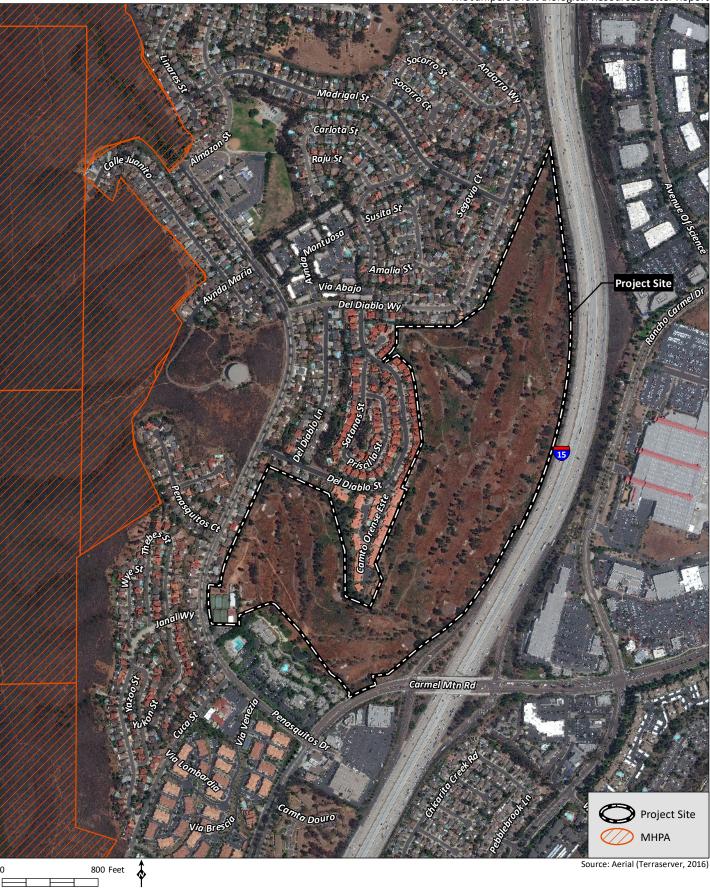
Figure 1



Source: Poway North 7.5' Quad (USGS)



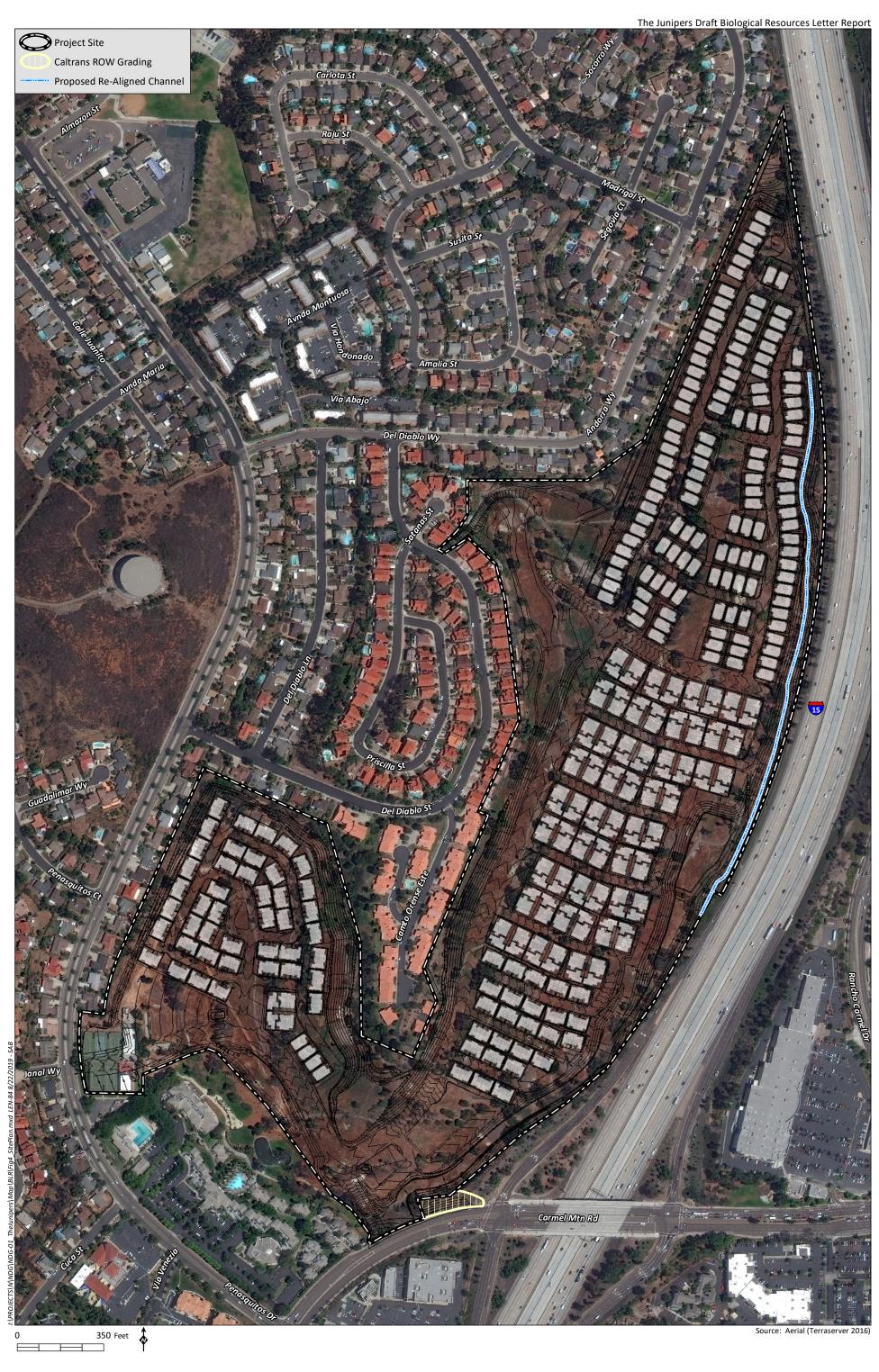
USGS Topography



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Aerial Photograph

Figure 3





Site Plan Figure 4





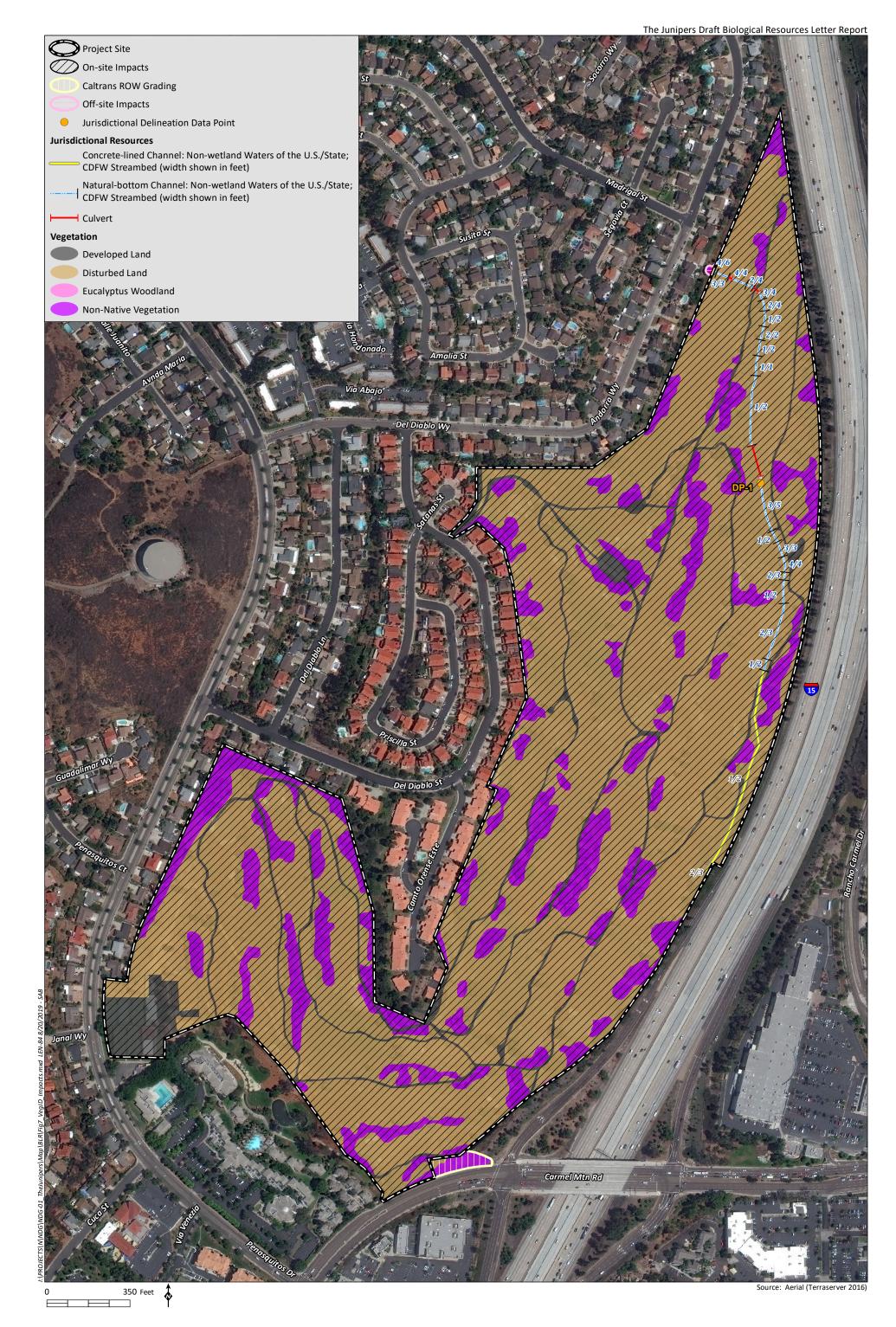
Soils Figure 5





Vegetation and Jurisdictional Resources

Figure 6





Vegetation and Jurisdictional Resources Impacts

Figure 7

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Junipers (HELIX JO#	NDG-01)	City/County: <u>City of San Diego</u> , San Diego Sampling Date: <u>Marc</u>				<u>h 9, 2018</u>	
Applicant/Owner:			State	e: <u>CA</u>	_ Sampling	Point:	1
Investigator(s): Stacy Nigro, Erica Har	ris	Section, Townsh	nip, Range:				
Landform (hillslope, terrace, etc.): chan	nel bottom	Local relief (cor	icave, convex, non	ie): <u>concave</u>	9	_ Slope (%):
Subregion (LRR): C	Lat:	32.986859	Long: <u>11</u>	7.084177		Datum: W	GS 84
Soil Map Unit Name: Diablo clay, 2 to	9 percent slopes			NWI classifi	ication: <u>N/A</u>		
Are climatic / hydrologic conditions on th	e site typical for this time c	of year? Yes 🖌	_ No (If no	o, explain in f	Remarks.)		
Are Vegetation, Soil, or H	lydrology significa	ntly disturbed?	Are "Normal Circ	umstances"	present? Y	es _ 🗸 🔤 I	No
Are Vegetation, Soil, or H	lydrology naturally	problematic?	(If needed, expla	in any answ	ers in Remar	ks.)	
SUMMARY OF FINDINGS - At	tach site map show	ing sampling p	oint locations	, transects	s, importa	ant featur	es, etc.
			`				
Hydrophytic Vegetation Present?			ampled Area				
Hydric Soil Present?	,	within a	Wetland?	Yes	No	✓	
Wetland Hydrology Present?	Yes No						
Remarks:							
Sampling point is within non	wetland waters						

VEGETATION – Use scientific names of plants.

	Absolute			Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>n/a</u>) 1		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
23				Total Number of Dominant Species Across All Strata:1(B)
4				· · · · ·
		= Total Co	ver	Percent of Dominant Species That Are OBL, FACW, or FAC:0(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				$\begin{array}{c} \hline \\ \hline $
3				
4				FACW species 15 x 2 = 30
5				FAC species 25 $x_3 = 75$
Herb Stratum (Plot size: <u>5' x 20'</u>)	0	= Total Co	ver	FACU species 55 x 4 = 220
	50	v	EACH	UPL species <u>0</u> x 5 = <u>0</u>
1. <u>Cynodon dactylon</u>				Column Totals: <u>95</u> (A) <u>325</u> (B)
2. <u>Paspalum dilatatum</u>				Prevalence Index = B/A = 3.4
3. <u>Cyperus eragrostis</u>				
4. <u>Ambrosia psilostachya</u>				Hydrophytic Vegetation Indicators:
5. <u>Sonchus asper</u>	5		FAC	Dominance Test is >50%
6. <u>Rumex crispus</u>	3		FAC	Prevalence Index is ≤3.0 ¹
7. Eleocharis montevidensis	5		FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8. <u>Helminthotheca echioides</u>	2		FAC	. ,
	95	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:n/a)				1
1			. <u></u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				
		= Total Co		Hydrophytic Vegetation
% Bare Ground in Herb Stratum5 % Cover	of Biotic C	rust <u>0</u>)	Present? Yes No
Remarks:				
Upland vegetation is dominant, hydrophyt	ic vegeta	ation crit	erion no	ot met.
	-			

SOIL

Samp	lina	Point:	

SOIL								Sampling Point:1
Profile Description	on: (Describe t	o the depth	needed to docur	nent the ir	ndicator	or confirm	the abs	sence of indicators.)
Depth	Matrix		Redo	x Features				
	Color (moist)	%	Color (moist)	%	_Type ¹ _	_Loc ²	Textu	ure Remarks
<u>0-16 10Y</u>	(R 2/2	100 -	-				clay lo	oam
······		<u> </u>						
	<u></u>			·				
		<u> </u>						
······			~					
			Reduced Matrix, CS			ed Sand Gr		² Location: PL=Pore Lining, M=Matrix.
-	ators: (Applica	able to all L	RRs, unless othe		ed.)			ators for Problematic Hydric Soils ³ :
Histosol (A1)	(Sandy Red	• •				1 cm Muck (A9) (LRR C)
Histic Epiped			Stripped Ma	. ,				2 cm Muck (A10) (LRR B)
Black Histic (/	,		Loamy Muc Loamy Gley					Reduced Vertic (F18) Red Parent Material (TF2)
Hydrogen Sul	ers (A5) (LRR C	' 1	Depleted M		(FZ)			Other (Explain in Remarks)
1 cm Muck (A		')	Redox Dark		F6)			
(ow Dark Surface	e (A11)	Depleted D	•	,			
Thick Dark Su			Redox Dep				³ Indic	cators of hydrophytic vegetation and
Sandy Mucky	Mineral (S1)		Vernal Poo					etland hydrology must be present,
Sandy Gleyed	d Matrix (S4)						unl	less disturbed or problematic.
Restrictive Layer	r (if present):							
Туре:								
Depth (inches)	:		-				Hydrid	c Soil Present? Yes No∕
Remarks:							L	
Hydric soil no	ot present.							
HYDROLOGY								
Wetland Hydrolo	gy Indicators:							
Primary Indicators	s (minimum of o	ne required;	check all that appl	y)				Secondary Indicators (2 or more required)
Surface Wate	er (A1)		Salt Crust	(B11)				Water Marks (B1) (Riverine)
High Water T	able (A2)		Biotic Cru	st (B12)				Sediment Deposits (B2) (Riverine)
Saturation (A	3)		Aquatic In	vertebrates	s (B13)			✓ Drift Deposits (B3) (Riverine)
Water Marks	(B1) (Nonriveri	ne)	Hydrogen	Sulfide Od	lor (C1)			Drainage Patterns (B10)
Sediment De	posits (B2) (Nor	nriverine)	Oxidized I	Rhizospher	es along	Living Roc	ots (C3)	Dry-Season Water Table (C2)
Drift Deposits	s (B3) (Nonriver	ine)	Presence	of Reduce	d Iron (C	4)		Crayfish Burrows (C8)
Surface Soil (Cracks (B6)		Recent Irc	on Reductio	on in Tille	d Soils (Ce	5) .	Saturation Visible on Aerial Imagery (C9)
Inundation Vi	sible on Aerial II	magery (B7)	Thin Mucl	Surface (C7)			Shallow Aquitard (D3)
Water-Staine	d Leaves (B9)		Other (Ex	plain in Re	marks)			FAC-Neutral Test (D5)
Field Observatio	ns:							
Surface Water Pre	esent? Ye	es N	o 🗹 Depth (in	ches):				
Water Table Pres	ent? Ye	es N	o 🗹 Depth (in	ches):				
Saturation Preser			o Depth (in			1	and Hvd	Irology Present? Yes No∕
(includes capillary	/ fringe)							
Describe Recorde	ed Data (stream	gauge, mon	itoring well, aerial	photos, pre	evious ins	spections),	if availab	ble:
Remarks:								
No primary in	ndicators an	d only o	he secondary	indicate	n wet	land hvo	drology	y criterion not met.
	alcators di		.e secondary	manual	,			,



Sampling Point 1. Looking north (upstream) at U.S. Army Corps of Engineers (USACE)/Regional Water Quality Control Board (RWQCB) non-wetland Waters of the U.S. (WUS)/Waters of the State (WS) and California Department of Fish and Wildlife (CDFW) jurisdictional habitat in earthen bottom drainage located in the central-east portion of the project site.



Representative Site Photos

G:\PROJECTS\N\NDG-ALL\NDG-01_The Junipers_Reports_BLR\Attachments\Attachment B_Photos

Attachment B



Photo 2. Storm drain outlet at northwestern portion of site that disperses into the site's drainage. Facing upstream.



Photo 3. Earthen bottom drainage in eastern portion of site. Facing downstream .



Attachment B



Photo 4. Site drainage transitioning from earthen bottom to concrete lined in central-east portion of site. Facing upstream.



Photo 5. Downstream portion of concrete-lined drainage existing southern portion of site under Interstate 15 into storm drain inlet. Facing downstream.





Photo 6. Disturbed habitat within golf course dominated by Russian thistle.



Photo 7. Disturbed habitat dominated by planted turf grass within golf course.



Attachment B



Photo 8. Non-native vegetation consisting of planted non-native trees within golf course.



WETLANDS AND "WATERS OF THE U.S." DEFINITIONS

WETLANDS

The U.S. Army Corps of Engineers (USACE; 33 CFR 328.3) and the Environmental Protection Agency (EPA; 40 CFR 230.3) jointly define wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Environmental Laboratory 1987).

WATERS OF THE U.S.

The official definition of "Waters of the U.S." and their limits of jurisdiction (as they may apply) are defined by the USACE' Regulatory Program Regulations (33 CFR 328.3, paragraphs [a] 1-3 and [e], and Section 328.4, paragraphs [c] 1 and 2) as follows:

- 1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- 2. All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters,
 - i. which are or could be used by interstate or foreign travelers for recreation or other purposes; or
 - ii. from which fish or shellfish are or could be taken and sold in interstate commerce; or
 - iii. which are used or could be used for industrial purpose by industries in interstate commerce;
- 4. All impoundments of waters otherwise defined as waters of the United States under the definition;
- 5. Tributaries of waters;
- 6. The territorial seas;
- 7. Wetlands adjacent to waters (other than waters that are themselves wetlands)...

C-2

Attachment C Federal Jurisdictional Information

NON-TIDAL WATERS OF THE U.S.

The limits of jurisdiction in non-tidal waters: In the absence of adjacent wetlands, the jurisdiction extends to the OHWM, or when adjacent wetlands are present, the jurisdiction extends to the limit of the adjacent wetlands.

The term OHWM refers to that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation (scouring), the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Waters of the U.S. must exhibit an OHWM or other evidence of surface flow created by hydrologic physical changes. These physical changes include (Riley 2005):

- Natural line impressed on the bank
- Shelving
- Changes in the character of soil
- Destruction of terrestrial vegetation

• Vegetation matted down, bent, or absent

- Presence of litter and debris
- Wracking

- Sediment sorting
- Leaf litter disturbed or washed away
- Scour
- Deposition
- Multiple observed flow events
- Bed and banks
- Water staining

• Change in plant community

Further guidance on identifying the OHWM in the Arid Southwest (Lichvar and McColley 2008). This publication provided geomorphic and vegetation OHWM indicators specific to the Arid Southwest.

Jurisdictional areas also must be connected to Waters of the U.S. (Guzy and Anderson 2001; U.S. Supreme Court 2001).

As a consequence of the U.S. Supreme Court decision in Rapanos v. United States, a memorandum was developed regarding Clean Water Act jurisdiction (Grumbles and Woodley 2007). The memorandum states that the EPA and the USACE will assert jurisdiction over traditional navigable waters (TNW), wetlands adjacent to TNW, tributaries to TNWs that are a relatively permanent water body (RPW), and wetlands adjacent to TNW. An RPW has year-round flow or a continuous seasonal flow (i.e., typically for three months or longer). Jurisdiction over other waters (i.e., non TNW and RPW) will be based on a fact-specific analysis to determine if they have a significant nexus to a TNW.

Pursuant to the USACE Instructional Guidebook (USACE and EPA 2007), the significant nexus evaluation will cover the subject reach of the stream (upstream and downstream) as well as its adjacent wetlands (Illustrations 2 through 6, USACE and EPA 2007). The evaluation will include the flow characteristics, annual precipitation, ability to provide habitat for aquatic species, ability to retain floodwaters and filter pollutants, and proximity of the subject reach to a TNW, drainage area, and the watershed.

WETLAND CRITERIA

Wetland boundaries are determined using three mandatory criteria (hydrophytic vegetation, wetland hydrology, and hydric soil) established for wetland delineations and described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). Following is a brief discussion of the three criteria and how they are evaluated.

Vegetation

"Hydrophytic vegetation is defined herein as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present" (Environmental Laboratory 1987).

The wetland indicator status (obligate upland, facultative upland, facultative, facultative wetland, obligate wetland, or no indicator status) of the dominant plant species of all vegetative layers is determined. Species considered to be hydrophytic include the classifications of facultative, facultative wetland, and obligate wetland as defined in the current list of wetland plants of the Arid Southwest (Lichvar, et al. 2016; Table A-1). The percent of dominant wetland plant species is calculated. The hydrophytic vegetation criterion is considered to be met if it meets the "Dominance Test," "Prevalence Index," or the vegetation has morphological adaptations for prolonged inundation.

Indicator Categories	Abbreviation	Qualitative Description	
Obligate	OBL Almost always occur in wetlands		
Facultative Wetland	FACW	V Usually occur in wetlands but may occur in non-wetlands	
Facultative	FAC Occur in wetlands and non-wetlands		
Facultative Upland	FACU	Usually occur in non-wetlands but may occur in wetlands	
Upland	UPL	Almost never occur in wetlands	

Table A-1 DEFINITIONS OF PLANT INDICATOR CATEGORIES

Hydrology

"The term 'wetland hydrology' encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic reducing conditions, respectively" (Environmental Laboratory 1987).

Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year (approximately 18 days for most of low-lying southern California). Hydrology criteria are evaluated based on the characteristics listed below (USACE 2008). Where positive indicators of wetland hydrology are present, the limit of the

OHWM (or the limit of adjacent wetlands) is noted and mapped. Evidence of wetland hydrology is met by the presence of a single primary indicator or two secondary indicators.

Primary

- surface water (A1)
- high water table (A2)
- saturation (A3)
- water marks (B1; non-riverine)
- sediment deposits (B2; non-riverine)
- drift deposits (B3; non-riverine
- surface soil cracks (B6)
- inundation visible on aerial imagery (B7)
- water-stained leaves (B9)

Secondary

- watermarks (B1; riverine)
- sediment deposits (B2; riverine)
- drift deposits (B3; riverine)
- drainage patterns (B10)
- dry-season water table (C2)

- salt crust (B11)
- biotic crust (B12)
- aquatic invertebrates (B13)
- hydrogen sulfide odor (C1)
- oxidized rhizospheres along living roots (C3)
- presence of reduced iron (C4)
- recent iron reduction in tilled soils (C6)
- thin muck surface (C7)
- crayfish burrows (C8)
- saturation visible on aerial imagery (C9)
- shallow aquitard (D3)
- FAC-neutral test (D5)

In the absence of all other hydrologic indicators and in the absence of significant modifications of an area's hydrologic function, positive hydric soil characteristics are assumed to indicate positive wetland hydrology. This assumption applies unless the site visit was done during the wet season of a normal or wetter-than-normal year. Under those circumstances, wetland hydrology would not be present.

Soils

The USACE and EPA, in their administration of Section 404 of the Clean Water Act, rely on the National Technical Committee for Hydric Soils (NTCHS) for a definition of hydric soils. According to the NTCHS, "A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." (Federal Register 1994)

Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation. Soil matrix and mottle colors are identified at each sampling plot using a Munsell soil color chart (Kollmorgen 1994). Generally, an 18-inch or deeper pit is excavated with a shovel at each sampling plot unless refusal occurs above 18 inches.

Soils in each area are closely examined for hydric soil indicators, including the characteristics listed below. Hydric soil indicators are presented in three groups. Indicators for "All Soils" (A) are used in any soil regardless of texture, indicators for "Sandy Soils" (S) area used in soil layers with USDA textures of

loamy fine sand or coarser, and indicators for "Loamy and Clayey Soils" (F) are used with soil layers of loamy very fine sand and finer (USACE 2008 and Vasilias et al. 2017).

- histosols (A1)
- histic epipedons (A2)
- black histic (A3)
- hydrogen sulfide (A4)
- stratified layers (A5)
- 1 cm muck (A9)
- depleted below dark surface (A11)
- thick dark surface (A12)
- sandy mucky mineral (S1)
- sandy gleyed matrix (S4)
- sandy redox (S5)

- stripped matrix (S6)
- loamy mucky mineral (F1)
- loamy gleyed matrix (F2)
- depleted matrix (F3)
- redox dark surface (F6)
- depleted dark surface (F7)
- redox depressions (F8)
- vernal pools (F9)
- 2 cm muck (A10)
- reduced vertic (F18)
- red parent material (TF2)

Hydric soils may be assumed to be present in plant communities that have complete dominance of obligate or facultative wetland species. In some cases, there is only inundation during the growing season and determination must be made by direct observation during that season, recorded hydrologic data, testimony of reliable persons, and/or indication on aerial photographs.

NON-WETLAND WATERS OF THE U.S.

The non-wetland Waters of the U.S. designation is met when an area has periodic surface flows but lacks sufficient indicators to meet the hydrophytic vegetation and/or hydric soils criteria. For purposes of delineation and jurisdictional designation, the non-wetland Waters of the U.S. boundary in non-tidal areas is the OHWM as described in the Section 404 regulations (33 CFR Part 328).

U.S. Geological Survey Mapping

The U.S. Geological Survey (USGS) quad maps are one of the resources used to aid in the identification and mapping of jurisdictional areas. Their primary uses include understanding the subregional landscape position of a site, major topographical features, and a project's position in the watershed.

In our experience, the designation of watercourse as a blue-line stream (intermittent or perennial) on USGS maps has been unreliable and typically overstates the hydrology of most streams. This has also been the experience of others, including the late Dr. Luna Leopold. Dr. Leopold was a hydrologist with USGS from 1952 to 1972, professor in the Department of Geology and Geophysics and Department of Landscape Architecture, University of California, Berkeley from 1972 to 1986, and Professor Emeritus from 1987 until his death in 2006. In regard to USGS maps, Dr. Leopold wrote, "I tried to devise a way of defining hydrologic criteria for the channels shown on topographic maps and developed some promising procedures. None were acceptable to the topographers, however. I learned that the blue lines on a map are drawn by non-professional, low-salaried personnel. In actual fact, they are drawn to fit a rather personalized aesthetic" (Leopold 1994).

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Attachment D State Jurisdictional Information

CALIFORNIA FISH AND WILDLIFE REGULATIONS

The California Department of Fish and Wildlife (CDFW) regulates alterations or impacts to streambeds or lakes (wetlands) under Fish and Game Code Sections 1600 through 1616 for any private, state, or local government or public utility-initiated projects. The Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, and streams as well as lakes in the state.

In order to notify the CDFW, a person, state, or local governmental agency or public utility must submit a complete notification package and fee to the CDFW regional office that serves the county where the activity will take place (CDFW 2016). A fee schedule is included in the notification package materials. Under the Permit Streamlining Act (Government Code Sections 65920 et seq.), the CDFW has 30 days to determine whether the package is complete. If the requestor is not notified within 30 days, the application is automatically deemed to be complete.

Once the notification package is deemed to be complete, the CDFW will determine whether the applicant will need a Lake or Streambed Alteration Agreement (SAA) for the activity, which will be required if the activity could substantially adversely affect an existing fish and wildlife resource. If an SAA is required, the CDFW will conduct an on-site inspection, if necessary, and submit a draft SAA that will include measures to protect fish and wildlife resources while conducting the project. If the applicant is applying for a regular SAA (less than five years), the CDFW will submit a draft SAA within 60 calendar days after notification is deemed complete. The 60-day time period does not apply to notifications for long-term SAAs (greater than five years).

After the applicant receives the SAA, the applicant has 30 calendar days to notify the CDFW whether the measures in the draft SAA are acceptable. If the applicant agrees with the measures included in the draft SAA, the applicant will need to sign the SAA and submit it to the CDFW. If the applicant disagrees with any measures in the draft SAA, the applicant must notify the CDFW in writing and specify the measures that are not acceptable. Upon written request, the CDFW will meet with the applicant within 14 calendar days of receiving the request to resolve the disagreement. If the applicant fails to respond in writing within 90 calendar days of receiving the draft SAA, the CDFW may withdraw that SAA. The time periods described above may be extended at any time by mutual agreement.

After the CDFW receives the signed draft SAA, the CDFW will make it final by signing the SAA; however, the CDFW will not sign the SAA until it both receives the notification fee and ensures that the SAA complies with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.). After the applicant receives the final agreement, the applicant may begin the project, provided that the applicant has obtained any other necessary federal, state, and/or local authorizations.

Attachment D State Jurisdictional Information

WATER RESOURCE CONTROL BOARD REGULATIONS

SECTION 401 WATER QUALITY CERTIFICATION

Whenever a project requires a federal Clean Water Act (CWA) Section 404 permit or a Rivers and Harbors Act Section 10 permit, it must first obtain a CWA Section 401 Water Quality Certification. The Regional Water Quality Control Board (RWQCB) administers the 401 Certification program. Federal CWA Section 401 requires that every applicant for a Section 404 permit must request a Water Quality Certification that the proposed activity will not violate state and federal water quality standards.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The State Water Resource Control Board (SWRCB) and the RWQCB regulate the discharge of waste to waters of the State via the 1969 Porter-Cologne Water Quality Control Act (Porter-Cologne) as described in the California Water Code (SWRCB 2017). The California Water Code is the State's version of the federal CWA. Waste, according to the California Water Code, includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal. State waters that are not federal waters may be regulated under Porter-Cologne. A Report of Waste Discharge must be filed with the RWQCB for projects that result in discharge of waste into waters of the State. The RWQCB will issue Waste Discharge Requirements (WDRs) or a waiver. The WDRs are the Porter-Cologne version of a CWA 401 Water Quality Certification.

Attachment D State Jurisdictional Information

REFERENCES

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State Water Resources Control Board. 2017. Laws and Regulations. Sacramento, CA: State Water Resources Control Board, California Environmental Protection Agency. Available from: <u>http://www.waterboards.ca.gov/laws_regulations/</u> This page intentionally left blank

Attachment E Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Habitat ¹
Aizoaceae	Aptenia cordifolia*	red apple ice plant	NNV
	Carpobrotus edulis*	hottentot-fig	NNV
Amaranthaceae	Amaranthus albus*	tumbleweed	DH
Anacardiaceae	Malosma laurina	laurel sumac	DH
	Schinus molle*	Peruvian pepper tree	DH, NNV
	Schinus terebinthifolius*	Brazilian pepper tree	DH, NNV
Apiaceae	Foeniculum vulgare*	fennel	DH
Arecaceae	Syagrus romanzoffiana*	Queen palm	NNV
	Washingtonia robusta*	Mexican fan palm	DH, NNV
Asteraceae	Ambrosia psilostachya	western ragweed	DH
	Artemisia californica	California sagebrush	DH
	Baccharis salicifolia	mule fat	DH
	Baccharis sarothroides	broom baccharis	DH
	Cirsium vulgare*	bull thistle	DH
	Cynara cardunculus*	artichoke thistle	DH
	Dittrichia graveolens*	stinkwort	DH
	Erigeron bonariensis	flax-leaf fleabane	DH
	Erigeron canadensis	horseweed	DH
	Glebionis coronaria*	garland daisy	DH
	Helminthotheca echioides*	bristly ox-tongue	DH
	Hypochaeris glabra*	smooth catsear	DH
	Lactuca serriola*	wild lettuce	DH
	Pseudognaphalium sp.	cudweed	DH
	Sonchus asper*	prickly sow thistle	DH
	Sonchus oleraceus*	common sow thistle	DH
	Stephanomeria virgata*	virgate wreath-plant	DH
Bignoniaceae	Jacaranda mimosifolia*	Black poui	DH
Brassicaceae	Brassica sp.*	mustard	DH
	Capsella bursa-pastoris*	shepherd's purse	DH
	Hirschfeldia incana*	short-pod mustard	DH
	Lepidium didymum*	wart cress	DH
	Raphanus sativus*	wild radish	DH
Chenopodiaceae	Chenopodium murale*	nettle-leaf goosefoot	DH
	Salsola tragus*	Russian thistle	DH
Convolvulaceae	Convolvulus sp.	bindweed	DH
Cupressaceae	Cupressus sempervirens*	Italian cypress	DH
Cyperaceae	Cyperus eragrostis	tall flatsedge	DH
	Cyperus involucratus*	umbrella plant	DH
	Eleocharis montevidensis	slender creeping spike-rush	DH
Euphorbiaceae	Euphorbia peplus*	petty spurge	DH
	Ricinus communis*	castor bean	DH
Fabaceae	Acacia cyclops*	coastal wattle	DH
	Acacia longifolia*	golden wattle	DH
	Acacia podalyrifolia*	pearl wattle	DH
	Medicago polymorpha*	burclover	DH
Lamiaceae	Marrubium vulgare*	horehound	DH
Malvaceae	Malva parviflora*	cheeseweed	DH
Moraceae	Ficus carica*	common fig	DH
Myrsinaceae	Lysimachia arvensis*	scarlet pimpernel	DH

Attachment E Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Habitat ¹
Myrtaceae	Callistemon citrinus*	common bottle brush	DH, NNV
	Eucalyptus sp.*	eucalyptus	DH, NNV, EW
	Melaleuca sp.*	paperbark	DH
Nyctaginaceae	Bougainvillea spectabilis*	great bougainvillea	DH
Oleaceae	Fraxinus uhdei*	shamel ash	DH, NNV
	Ligustrum sinense*	Chinese privet	DH
Pinaceae	Pinus sp.*	Pine	DH, NNV
Plantaginaceae	Plantago major*	common plantain	DH
Platanaceae	Platanus racemosa	western sycamore	DH
Plumbaginaceae	Plumbago sp.*	leadwort	DH
Poaceae	Arundo donax*	giant reed	DH
	Avena sp.*	oats	DH
	Brachypodium distachyon*	false brome	DH
	Bromus diandrus*	ripgut brome	DH
	Bromus madritensis ssp. rubens*	red brome	DH
	Cortaderia sp.*	pampas grass	DH
	Cynodon dactylon*	Bermuda grass	DH
	Festuca perennis*	Italian ryegrass	DH
	Hordeum sp.*	barley	DH
	Paspalum dilatatum*	dallis grass	DH
	Polypogon monspeliensis*	annual beardgrass	DH
	Stipa miliacea*	smilo grass	DH
Polygonaceae	Rumex crispus*	curly dock	DH
Salicaceae	Populus fremontii	Fremont cottonwood	DH
Sapindaceae	Cupaniopsis anacardioides*	carrotwood	DH
Saururacaea	Anemopsis californica	yerba mansa	DH
Solanaceae	Nicotiana glauca*	tree tobacco	DH
Solanaceae	Solanum aviculare*	New Zealand nightshade	DH
Tamaricaceae	Tamarix ramosissima*	saltcedar	DH
Typhaceae	Typha sp.	cattail	DH
Verbenaceae	Lantana camara*	lantana	DH

*Non-native

+Sensitive

¹DH=Disturbed habitat; EW=Eucalyptus woodland; NNV=Non-native vegetation.

Attachment F Animal Species Observed or Detected

Taxon			Common Neme
Order	Family	Scientific Name ⁺	Common Name
INVERTEBRATES	·	·	
Coleoptera	Scarabaeidae	Cotinis mutabilis	figeater beetle
Lepidoptera	Pieridae	Colias sp.	unidentified sulphur
	Lycaenidae	Brephidium exila	western pygmy-blue
VERTEBRATES	·	·	
Reptiles			
Squamata	Phrynosomatidae	Sceloporus occidentalis	western fence lizard
Birds			
Accipitriformes	Accipitridae	Buteo jamaicensis	Red-tailed Hawk
		Buteo lineatus	Red-shouldered Hawk
Apodiformes	Trochilidae	Calypte anna	Anna's Hummingbird
Columbiformes	Columbidae	Zenaida macroura	Mourning Dove
Falconiformes	Falconidae	Falco sparverius	American Kestrel
Passeriformes	Aegithalidae	Psaltriparus minimus	Bushtit
	Bombycillidae	Bombycilla cedrorum	Cedar Waxwing
	Corvidae	Corvus brachyrhynchos	American Crow
	Estrildidae	Lonchura punctulate	Scaly-breasted Munia
	Fringillidae	Haemorhous mexicanus	House Finch
		Spinus psaltria	Lesser Goldfinch
	Icteridae	Icterus cucullatus	Hooded Oriole
	Mimidae	Mimus polyglottos	Northern Mockingbird
	Parulidae	Setophaga coronata	Yellow-rumped Warbler
	Passerellidae	Melospiza melodia	Song Sparrow
	Passeriformes	Melozone crissalis	California Towhee
	Regulidae	Regulus calendula	Ruby-crowned Kinglet
	Sturnidae	Sturnus vulgaris	European Starling
	Troglodytidae	Troglodytes aedon	House Wren
		Thryomanes bewickii	Bewick's Wren
	Turdidae	Sialia mexicana†	Western Bluebird
		Turdus migratorius	American Robin
	Tyrannidae	Sayornis nigricans	Black Phoebe
		Sayornis saya	Say's Phoebe
		Tyrannus verticalis	Western Kingbird
		Tyrannus vociferans	Cassin's Kingbird
Piciformes	Picidae	Colaptes auratus	Northern Flicker
		Picoides nuttallii	Nuttall's Woodpecker

Attachment F Animal Species Observed or Detected

Taxon			Common Name
Order Family		Scientific Name ⁺	
Mammals			
Carnivora	Canidae	Canis latrans	coyote
Lagomorpha	Leporidae	Sylvilagus audubonii	desert cottontail
Rodentia	Geomyidae	Thomomys bottae	Botta's pocket gopher
	Sciuridae	Otospermophilus beecheyi	California ground squirrel

+Special-Status Species

Species	Status ¹	Habitat Associations	Potential to Occur ²
San Diego thorn-mint (Acanthomintha ilicifolia)	FT/SE CRPR 1B.1 MSCP NE	Annual herb. Associated with vernal pools and clay depressions on mesas. Elevation ranges between 30 to	None. Suitable depressions and vernal pools are not found in the project site.
California adolphia (Adolphia californica)	/ CRPR 2B.1	960 meters. Blooms April to June. Shrub. Most often found in coastal sage scrub but occasionally occurs in peripheral chaparral habitats, particularly hillsides near creeks. Usually associated with xeric locales where shrub canopy reaches 4 or 5 feet. Elevation ranges between 6 to 200 meters. Blooms December to May.	Low. Records of the species occur within the project vicinity, but suitable coastal sage scrub habitat is absent from the project site. Perennial shrub that would have been observed if present.
Del Mar manzanita (Arctostaphylos glandulosa ssp. crassifolia)	FE/ CRPR 1B.1 MSCP Covered	Shrub. Occurs in relatively open, coastal chaparral. At occasional inland sites it occurs in denser mixed chaparral vegetation. Elevation range of less than 100 meters. Blooms December to June.	None. Suitable chaparral habitat is not present within the project site. Perennial shrub that would have been observed if present.
San Diego sagewort (Artemisia palmeri)	/ CRPR 4.2	Shrub. Occurs along stream courses, often within coastal sage scrub and southern mixed chaparral. Elevation range of less than 600 meters. Blooms May to October.	Low. Suitable sage scrub and chaparral absent from the project site. Perennial shrub that would have been observed if present.
western spleenwort (Asplenium vespertinum)	/ CRPR 4.2	Fern. This cryptic fern is sometimes found at the shaded base of overhanging boulders. Preferred habitats are chaparral, woodland, coastal sage scrub, and rocky areas with semi-shaded but seasonally arid conditions. Elevation ranges between 200 - 1000 meters. Blooms February to June.	None. Suitable rocky habitat not present within the project site. No recent records of the species occur within the vicinity.
Coulter's saltbush (<i>Atriplex coulteri</i>)	/ CRPR 1B.2	Perennial herb. Found in alkaline or clay soils within coastal bluff scrub, coastal dunes, valley and foothill grasslands, and desert dunes. Elevation ranges between 3 to 460 meters. Blooms March to August.	Low. Suitable clay soils occur within the project site, but the site is highly disturbed because of past activities related to the golf course operation One historical sighting from the 1970's is present within the project area; however, no recent records of the species occur within the project vicinity.
South Coast saltbush (Atriplex pacifica)	/ CRPR 1B.2	Annual herb. Found in xeric, often mildly disturbed locales of coastal bluff scrub. Usually surrounding habitat is an open coastal sage scrub, though it is found on alkaline flats in areas devoid of taller shrubs. Elevation ranges between 0 to 140 meters. Blooms March to October.	Low. Suitable coastal bluff scrub and sage scrub absent from the project site. No known records of the species occur within the project vicinity.
Encinitas baccharis (Baccharis vanessae)	FT/SE CRPR 1B.1 MSCP Covered	Shrub. Primary habitat is mature but relatively low-growing chaparral. Also found in southern maritime and southern mixed chaparrals. Elevation ranges between 80 to 910 meters. Blooms August to November.	None. Suitable chaparral habitat is absent from the project site. Perennial shrub that would have been observed if present.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Encinitas baccharis	FT/SE	Shrub. Primary habitat is mature but	None. Suitable chaparral habitat is
(Baccharis vanessae)	CRPR 1B.1	relatively low-growing chaparral. Also	absent from the project site. Perennial
	MSCP Covered	found in southern maritime and southern	ashrub that would have been observed if
		mixed chaparrals. Elevation ranges	present.
		between 80 to 910 meters. Blooms	
		August to November.	
San Diego goldenstar	/	Perennial herb. Found in valley	Low. Suitable clay soils occur within the
(Bloomeria clevelandii)	CRPR 1B.1	grasslands, particularly near mima	project site, but the site lacks suitable
	MSCP Covered	mound topography or in the vicinity of	mima mounds, vernal pools, coastal
		vernal pools. Clay soils on dry mesas and	sage scrub, and chaparral. No records of
		hillsides in coastal sage scrub or	the species occur within the project
		chaparral. This plant typically grows in	vicinity.
		rather in somewhat open locales.	
		Elevation ranges between 50 to 465	
		meters. Blooms April to May.	
thread-leaved brodiaea	FT/SE	Perennial bulbiferous herb. Typically	Low. Clay soils occur within the project
(Brodiaea filifolia)	CRPR 1B.1	occurs in clay soils in vernally moist	site, but the site lacks suitable moist
	MSCP Covered	grasslands and vernal pool periphery.	habitats required to support the species.
		Elevation ranges between 25 to 860	
		meters. Blooms March to June.	
Orcutt's brodiaea	/	Perennial bulbiferous herb. Occurs in	Low. The site lacks vernal pools and
(Brodiaea orcuttii)	CRPR 1B.1	grasslands near streams and vernal pool	perennial streams. There are no records
	MSCP Covered	settings. Elevation ranges between	of the species within the project vicinity.
		100 and 1,700 meters. Blooms April	
		to July.	
wart-stemmed ceanothus	/	Shrub. Found in dry, rocky slopes within	None. Suitable chaparral habitat is not
(Ceanothus verrucosus)	CRPR 2B.2	chaparral. Elevation range of less than 350	present within the project site. Perennial
	MSCP Covered	meters. Blooms January to April.	shrub that would have been observed if
			present.
southern mountain misery	/	Shrub. Occurs in chaparral with gabbro	None. Suitable chaparral habitat and soil
(Chamaebatia australis)	CRPR 4.2	and metavolcanic soils. Elevation ranges	types to support the species are not
		between 300 and 1,230 meters. Blooms	found in the project site.
		November to May.	
long-spined spineflower	/	Annual herb. Often found on clay soils	Low. Clay soils occur within the project
(Chorizanthe polygonoides	CRPR 1B.2	largely devoid of shrubs. Can be	site, but the site lacks vernally moist
var. longispina)		occasionally seen on vernal pool and	habitats such as vernal pools and seeps.
		even montane meadows peripheries	No records of the species occur within
		near vernal seeps. Elevation ranges	the project vicinity.
		between 30 and 1,500 meters. Blooms	
		April to June.	
delicate clarkia	/	Annual Herb. Found on gabbroic soils	None. Suitable soils and habitat absent
(Clarkia delicata)	CRPR 1B.2	within oak woodland and chaparral	from project site. No records of the
		habitats. Elevation range of less than	species within the project vicinity.
		1,000 meters. Blooms April to June.	
summer holly	/	Shrub. Occurs on mesic north-facing	None. Suitable chaparral habitat is
(Comarostaphylis	CRPR 1B.2	slopes in southern mixed chaparral are	absent from the project site. Perennial
diversifolia ssp. diversifolia)		the preferred habitat of this large, showy	shrub that would have been observed if
		shrub. Rugged steep drainages seem to	present.
		be a preferred location for isolated	
		shrubs. Elevation ranges between 100 and 550 meters. Blooms April to June.	

Species	Status ¹	Habitat Associations	Potential to Occur ²
small-flowered morning-glory (<i>Convolvulus simulans</i>)	/ CRPR 4.2	Annual herb. Occurs on clay soils, occasionally serpentine, within openings of chaparral, coastal sage scrub, and grasslands. Elevation ranges between 30 and 740 meters. Blooms March to July.	Low. Suitable habitat and soils occur within the project site, but the site is highly disturbed because of past activities related to the golf course operation. No sign of the species was observed during surveys; however, the species cannot be excluded with certainty.
San Diego sand aster (<i>Corethrogyne filaginifolia</i> var. <i>incana</i>)	/ CRPR 1B.1	Perennial herb. Primarily occurs in coastal sage scrub, chaparral and grassland habitats. Elevation ranges between 3 and 115 meters. Blooms June to September.	Low . The site is highly disturbed because of past activities related to the golf course operation. There are no records of the species within the project vicinity.
Western dichondra (<i>Dichondra occidentalis</i>)	/ CRPR 4.2	Perennial herb. Found among rocks within coastal scrub, chaparral, woodland, and grassland. Elevation ranges between 50 and 500 meters. Blooms March to July.	Low . Suitable rocky habitat does not occur within the project site. No recent records occur within the project vicinity.
variegated Dudleya (<i>Dudleya variegata</i>)	/ CRPR 1B.2 MSCP Covered MSCP NE	Perennial herb. Occurs on clay soils on dry hillsides and mesas. Found within coastal scrub, chaparral, woodland, grasslands, and vernal pools. Elevation ranges 3 to 580 meters. Blooms April to June	High . Suitable habitat and soils occur within the project site, but the site is highly disturbed because of past activities related to the golf course operation. No sign of the species was observed during surveys; however, the species cannot be excluded with certainty.
San Diego button-celery (Eryngium aristulatum var. parishii)	FE/SE CRPR 1B.1 MSCP Covered	Perennial herb. Occurs in vernal pools or mima mound areas with vernally moist conditions are preferred habitat. Elevation range of less than 705 meters. Blooms April to June.	None. No vernal pools, basins, or similar vernally moist habitat occur within the project site.
San Diego barrel cactus (Ferocactus viridescens)	/ CRPR 2.1 MSCP Covered	Shrub (stem succulent). Occurs in sandy to rocky areas within coastal scrub, chaparral, grassland, and vernal pools. Elevation ranges between 10 and 150 meters. Blooms May to June.	Low. The species is known to occur within the project vicinity; however, the project is highly disturbed because of past activities related to the golf course operation. Perennial shrub that would most likely have been observed if present.
Campbell's liverwort (Geothallus tuberosus)	/ CRPR 1B.1	Annual herb. Occurs within mesic coastal scrub and vernal pools. Elevation ranges 10 to 600 meters.	Low. Suitable coastal sage and vernal pools do not occur within the project site. No recent records of the species occur within the project vicinity.
San Diego gumplant (<i>Grindelia hallii</i>)	/ CRPR 1B.2	Perennial herb. Occurs in meadows, dry slopes, and open pine/oak woodlands. Elevation ranges between 800 and 1,700 meters. Blooms July to October.	None. The project site is lower than the known range of the species. No records of the species occur within the project vicinity.
Palmer's grapplinghook (Harpagonella palmeri)	/ CRPR 4.2	Annual herb. Occurs in clay soils in annual grasslands and coastal sage scrub. Elevation range of less than 1,000 meters. Blooms March to May.	Low. Suitable clay soils occur within the project site but there are no recent records of the species within the project vicinity.

Species	Status ¹	Habitat Associations	Potential to Occur ²
graceful tarplant	/	Annual herb. Occurs in coastal mesas and	Low. The site is highly disturbed
(Holocarpha virgata ssp.	CRPR 4.2	foothills with grassland habitats. Elevation	because of past activities related to the
elongata)		ranges between 60 to 1,100 meters.	golf course operation. There are no
		Blooms May to November.	records of the species within the project
			vicinity.
vernal barley	FE/CE	Annual grass. Occurs in saline flats and	None. Suitable vernally moist habitat,
(Hordeum intercedens)	CRPR 3.2	depressions in grasslands or in vernal pool	depressions, and vernal pools are
		basins. Elevation ranges between 5 to	absent from the project site.
		1,000 meters. Blooms March to June.	
decumbent goldenbush	/	Perennial shrub. Occurs in coastal sage	Low. Suitable clay soils occur within the
(Isocoma menziesii var.	CRPR 1B.2	scrub habitat intermixed with grassland	project site, but the site is highly
decumbens)		and is more partial to clay soils than	disturbed because of past golf course
		other closely related varieties. Elevation	activities and lacks coastal sage scrub.
		range of less than 200 meters. Blooms	Perennial shrub that would most likely
		April to November.	have been observed if present.
San Diego marsh-elder	/	Perennial herb. Occurs on alkaline flats,	Low. Suitable streambed habitat occurs
(Iva hayesiana)	CRPR 2B.2	depressions, streambanks, marshes, and	within the project site, but the site is
		swamps. Elevation ranges between 10	highly disturbed because of past golf
		and 500 meters. Blooms March to	course activities. Perennial shrub that
		October.	would most likely have been observed if
			present.
Robinson's pepper-grass	/	Annual herb. Occurs in dry, disturbed	Low. Suitable habitat and soils occur
(<i>Lepidium virginicum</i> var.	CRPR 4.3	areas including riverbanks, meadows,	within the project site, but the site is
robinsonii)		pastures, coastal scrub, and chaparral.	highly disturbed because of past
		Wide ranging species found throughout	activities related to the golf course
		California. Elevation ranges between 1 to	operation. No sign of the species was
		885 meters. Blooms January to July.	observed during surveys; however, the
			species cannot be excluded with
	/		certainty.
willowy monardella	FE/SE	Perennial herb. Found in rocky washes	Low. Site lacks suitable rocky habitat
(Monardella viminea)	CRPR 1B.1	with cobbles of alluvial ephemeral washes	within the ephemeral drainage and is
	MSCP Covered	within coastal sage scrub, chaparral, and	highly disturbed because of past golf
		riparian habitats. Elevation ranges	course activities. No records of the
		between 5 to 225 meters. Blooms June to	species occur within the project vicinity.
	1	August.	Level The construction back in highly.
Golden-rayed Pentachaeta	/	Annual herb. Occurs in a wide variety of	Low. The project site but is highly
(Pentachaeta aurea ssp.	CRPR 4.2	habitats including coastal sage scrub,	disturbed because of past golf course
aurea)		chaparral, woodlands and forests, and	activities. No records of the species occur within the project vicinity.
		grasslands. Elevation ranges between 80	occur within the project vicinity.
San Diago mosa mint	FE/SE	and 1,850 meters. Blooms March to July. Annual herb. Found on coastal terraces	None. No vernal pools occur within the
San Diego mesa mint	CRPR 1B.1		project site. No records of the species
(Pogogyne abramsii)	MSCP NE	within vernal pools. Elevation ranges between 90 and 200 meters. Blooms	
	IVISCP INE	March to July.	occur within the project vicinity.
Nuttall's scrub oak	/	Shrub. Occurs in chaparral with a	None. Suitable chaparral habitat is not
		-	-
(Quercus dumosa)	CRPR 1B.1	relatively open canopy cover is the preferred habitat in flat terrain (also	found within the project site. Perennial shrub that would have been observed
		found in coastal scrub). On north-facing slopes, may grow in dense monotypic	if present.
		stands. Elevation range of less than 200	
		meters. Blooms February to March.	
		meters. Biodins repludiy to March.	

Species	Status ¹	Habitat Associations	Potential to Occur ²
ashy spike-moss	/	Perennial herb. Found in sunny spots or	Low. The project site lacks coastal sage
(Selaginella cinerascens)	CRPR 4.3	under shrubs, often in "red clay". Occurs	scrub and chaparral. No records of the
		in coastal sage scrub and chaparral	species occur within the project vicinity.
		habitats. Elevation ranges between 20	
		and 640 meters. Blooms February	
		to March.	
Chaparral ragwort	/	Annual herb. Occurs on alkaline flats, in	None. Suitable alkaline habitat and
(Senecio aphanactis)	CRPR 2B.2	dry open rocky areas of coastal sage	rocky areas are absent found the project
		scrub, chaparral, and cismontane	site. No records of the species occur
		woodland. Elevation ranges between 15	within the project vicinity.
		and 800 meters. Blooms January to May.	
purple Stemodia	/	Perennial herb. Occurs on wet sand or	Low. Suitable streambed habitat occurs
(Stemodia durantifolia)	CRPR 2B.1	rocks within riparian habitats as drying	within the project site, but no records of
		streambeds. Elevation ranges between	the species occur within the project
		180 and 300 meters. Blooms all year.	vicinity.
rush-like bristleweed	/	Perennial herb. Found on dry hillsides	Low. The site lacks suitable coastal sage
(Xanthisma junceum)	CRPR 4.3	within coastal sage scrub and chaparral	scrub and chaparral habitat. No records
		habitats. Elevation ranges between 240	of the species occur within the project
		and 1,000 meters. Blooms May to	vicinity.
		January.	

¹ F = Federal; S = State of California; E = Endangered; T = Threatened; R = Rare

CRPR = California Native Plant Society Rare Plant Rank: 1A – presumed extirpated in California and either rare or extinct elsewhere; 1B – rare, threatened, or endangered in California and elsewhere; 2A – presumed extirpated in California, but more common elsewhere; 2B – rare, threatened, or endangered in California, but more common elsewhere; 3 – more information needed; 4 – watch list for species of limited distribution. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – not very endangered.

City of San Diego Sensitivity Status: MSCP Covered – Covered Species under City MSCP Subarea Plan; NE = Narrow Endemic Species under City MSCP Subarea Plan.

² Potential to Occur is assessed as follows. None: Species is either sessile (i.e. plants) or so limited to a particular habitat that it cannot disperse on its own, and habitat suitable for its establishment and survival does not occur in the project site; Not Expected: Species moves freely and might disperse through or across the project site, but suitable habitat for residence or breeding does not occur in the project site; Low: Suitable habitat is present in the project site but no sign of the species was observed during surveys, however the species cannot be excluded with certainty; High: Suitable habitat occurs in the project site and the species has been recorded recently on or near the study area, but was not observed during project surveys; Present: The species was observed during biological surveys for the project and is assumed to occupy the project site; Presumed Absent: Species would be visible all year and would have been observed if present.

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Species	Status ¹	Habitat Associations	Potential to Occur ²
Invertebrates	•		
San Diego fairy shrimp (Branchinecta sandiegonensis)	FE/ MSCP Covered	Found in seasonally astatic pools which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.	None. Suitable vernal pools or basins absent from the project site.
Amphibians			
Western spadefoot toad (<i>Spea hammondii</i>)	/SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeding and egg laying occur in shallow, temporary pools formed by heavy winter rains. Grasslands with shallow temporary pools are optimal habitats for the western spadefoot.	None. Suitable temporary pools absent from the project site.
Reptiles			I
California glossy snake (Arizona elegans occidentalis)	/SSC	Most common in desert habitats but also occur in chaparral, coastal sage scrub, valley- foothill hardwood and pine-juniper woodlands, and grasslands. Prefer open sandy areas with scattered brush, but also found in rocky areas.	Low. Suitable sandy and rocky habitat absent from the project site. No recent records of the species occur within the project vicinity.
Belding's orange-throated whiptail (Aspidoscelis hyperythra beldingi)	/WL MSCP Covered	Inhabits low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks.	Low. Washes and sandy areas absent from the project site. Recent records for the species are over 5 miles from the project site.
San Diegan tiger whiptail (Aspidoscelis tigris stejnegeri)	/SSC	Occurs in wide variety of habitats including grasslands, coastal sage scrub, chaparral, woodlands, and riparian areas. Often found associated with sandy areas along gravelly arroyos or washes.	Low. Washes and sandy areas absent from the project site. Recent records for the species are over 5 miles from the project site.
Red diamond rattlesnake (Crotalus ruber)	/SSC	Found in chaparral, coastal sage scrub, woodlands and arid desert habitats in rocky areas and in dense vegetation.	Low. Suitable rocky habitat does not occur within the project site. No recent records of the species occur within the project vicinity.
Blainville's horned lizard (Phrynosoma blainvillii)	/SSC MSCP Covered	Occurs in coastal sage scrub and open areas in chaparral, oak woodlands, and coniferous forests with sufficient basking sites, adequate scrub cover, and areas of loose soil. Require native ants, especially harvester ants (<i>Pogonomyrmex</i> sp.), and are generally excluded from areas invaded by Argentine ants (<i>Linepithema humile</i>).	Low. Suitable habitat does not occur on site. Recent records for the species are over 5 miles from the project site.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Reptiles (cont.)			
Coronado skink (Plestiodon skiltonianus interparietalis)	/WL	Found in grassland, woodlands, pine forests, chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers. Prefers rocky areas near streams with lots of vegetation. Also found in areas away from water.	Not Expected The project site lacks creeks and rivers. No recent records of the species occur within the project vicinity.
Two-striped gartersnake (Thamnophis hammondii)	/SSC	Occurs along permanent and intermittent streams bordered by dense riparian vegetation, but occasionally associated with vernal pools or stock ponds.	Not Expected. Suitable streams and temporary pools absent from the project site.
Birds			
Cooper's hawk (Accipiter cooperii)	/WL MSCP Covered	Found in dense stands of oak woodlands, riparian habitat, and evergreen forests. Tolerant of human disturbance and habitat fragmentation, increasingly found breeding in suburban and urban areas.	High. Suitable habitat present on site and the species is known to occur within the area.
Tricolored blackbird (<i>Agelaius tricolor</i>)	BCC/SCE, SSC MSCP Covered	Highly colonial species that breeds in dense colonies. Breeding habitat typically characterized by emergent freshwater marsh dominated by tall, dense cattails (<i>Typha</i> spp.) and bulrush (<i>Schoenoplectus</i> spp.), though the species also utilizes willows (<i>Salix</i> spp.), blackberries (<i>Rubus</i> spp.), thistles <i>Cirsium</i> and <i>Centaurea</i> spp.), nettles (<i>Urtica</i> sp.), and agricultural crops. Forages in grasslands and cropland habitats adjacent to breeding site.	Not Expected. The project site lacks suitable freshwater marsh habitat to support the species. No recent records of the species occur within the project vicinity.
Southern California rufous- crowned sparrow (Aimophila ruficeps canescens)	/WL MSCP Covered	Typical habitat includes mixed chaparral and coastal scrub habitats, especially coastal sage scrub, on moderate to steep, dry, rocky slopes. Slopes vegetated by scattered shrubs interspersed with patches of grasses, forbs, and bare ground.	Low. Suitable rocky slopes and scrub habitat absent from the project site.
Coastal cactus wren (Campylorhynchus brunneicapillus sandiegensis)	BCC/SSC MSCP Covered	Occupies native scrub vegetation with thickets of mature cacti consisting of cholla (<i>Cylindropuntia</i> spp.) or prickly-pear cactus (<i>Opuntia littoralis</i>). Cacti must be tall enough to support and protect the bird's nest (typically 3 feet or more in height). Surrounding vegetation usually consists of coastal sage scrub habitat with shrubs normally below the level of nest placement.	Not Expected. The project site lacks suitable cacti thickets required by the species.
California horned lark (Eremophila alpestris actia)	/WL	Typically found in open habitats, usually where trees and large shrubs are absent. Suitable habitat types include coastal strand, arid grasslands, and sandy desert floors.	Low. The project site is generally flat and open, but the species has not been recorded within the project vicinity.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Birds (cont.)			·
Coastal California gnatcatcher (Polioptila californica californica)	FT/SSC MSCP Covered	Occupies open coastal scrub habitat with California sagebrush (<i>Artemisia californica</i>) as a dominant or co-dominant species. Found in arid washes, on mesas, and on slopes of coastal hills. Mostly absent from coastal areas dominated by white sage (<i>Salvia</i> <i>leucophylla</i>) or lemonadeberry (<i>Rhus</i> <i>integrifolia</i>).	Not Expected. The project site lacks coastal sage scrub habitat required by the species.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE MSCP Covered	Found in early to mid-successional riparian habitat that supports a dense shrub cover and structurally diverse canopy. Typically breeds in willow riparian forest supporting a dense, shrubby understory of mulefat (<i>Baccharis salicifolius</i>) and other species. Oak woodland with a willow riparian understory is also used in some areas. Winters in southern Baja California, Mexico.	Not Expected. The project site lacks suitable riparian habitat required by the species.
Western bluebird (<i>Sialia mexicana</i>)	/ MSCP Covered	Typically occurs in open coniferous woodlands, riparian areas, grasslands, and farmlands.	Present . Species observed foraging within the project site during the March 2018 site visit.
Mammals		-	
Mexican long-tongued bat (Choeronycteris mexicana)	/SSC	Found in arid scrub, mixed forest, and canyons in mountain ranges rising from the desert. Roosts in in caves and mines, but sometimes in buildings.	Low. Suitable roosting habitat absent from the project site, though the species could forage on site. No recent records of the species occur within the project vicinity.
Townsend's big-eared bat (Corynorhinus townsendii)	/SSC	Found in a variety of habitas deserts scrubs to pine and piñon-juniper forests. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting.	Low. Suitable roosting habitat absent from the project site, though the species could forage on site. No recent records of the species occur within the project vicinity.
Western mastiff bat (<i>Eumops perotis californicus</i>)	SSC	Found in a wide variety of open semi-arid to arid habitats, including coastal scrub, chaparral, desert scrub, grasslands, conifer and deciduous woodlands, and palm oases. Associated with areas with roosting sites that are established in crevices in rocky canyons and cliffs that are vertical or nearly vertical as well as trees and tunnels.	Low. Suitable rocky canyons and cliffs absent from the project site and surrounding area. No recent records of the species occur within the project vicinity.
Western yellow bat (<i>Lasiurus xanthinus</i>)	/SSC	Roosts and forages in riparian forests and woodlands, desert riparian, desert wash, and palm oasis habitats. Uncommon in California.	None. Suitable riparian habitat does not occur within the project site.

Species	Status ¹	Habitat Associations	Potential to Occur ²
Mammals (cont.)			
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	/SSC	Occurs primarily in open habitats including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas if there is at least some shrub cover present.	Not Expected. The project site lack suitable habitat and is surrounded by urban development. No recent records of the species occur within the project vicinity.
San Diego desert woodrat (Neotoma lepida intermedia)	/SSC	Occurs in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca.	Low. Suitable shrub habitat and rocky outcrops absent from the project site.
Pocketed free-tailed bat (Nyctinomops femorosaccus)	/SSC	Occurs in woodlands and desert habitats, and palm oasis. Prefers rocky desert areas with high cliffs or rock outcrops. Rare in California.	Low. Suitable rocky habitat does not occur within the project site. No recent records of the species occur within the project vicinity.
Big free-tailed bat (Nyctinomops macrotis)	/SSC	Prefers rugged, rocky canyons roosting in crevices in high cliffs or rock outcrops. Also known to roosts in buildings, caves, and occasionally holes in trees. Rare in California.	Low. Suitable rocky habitat does not occur within the project site. No recent records of the species occur within the project vicinity.

¹ F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare; BCC = Federal Bird of Conservation Concern; SSC = State Species of Special Concern; FP = State Fully Protected

City of San Diego Sensitivity Status: MSCP Covered Species – Covered Species under City MSCP Subarea Plan.

² Potential to Occur is assessed as follows. None: Species is so limited to a particular habitat that it cannot disperse on its own, and habitat suitable for its establishment and survival does not occur in the project site; Not Expected: Species moves freely and might disperse through or across the project site, but suitable habitat for residence or breeding does not occur in the study area; Low: Suitable habitat is present in the project site but no sign of the species was observed during surveys, however the species cannot be excluded with certainty; High: Suitable habitat occurs in the study area and the species has been recorded recently on or near the study area, but was not observed during project surveys; Present: The species was observed during biological surveys for the project and is assumed to occupy the project site.