



An Employee-Owned Company

July 6, 2022

Ms. Kimberly Jones
County of San Diego, Department of Public Works
Environmental Services Unit MS O-332
5510 Overland Avenue, Suite 410
San Diego, CA 92123

Reference: Biological Resources Letter Report for the Los Coches Low Flow Urban Runoff Diversion to Sewer Project (DPW Project Number 1023735; RECON 9009-22)

Dear Ms. Jones:

The Biological Resources Letter Report was prepared for the County of San Diego Department of Public Works' Los Coches Low Flow Urban Runoff Diversion to Sewer Project (project). This report summarizes the biological resources survey and jurisdictional wetland/waters delineation methods and results, assessment for potential impacts on biological resources, and proposed mitigation for the project.

Summary

The County of San Diego (County) Department of Public Works (DPW) is proposing to capture and divert dry weather flows from an existing storm drain outfall to an existing County sanitary sewer by using a gravity flow system. Existing biological conditions within the survey area, potential impacts to biological resources that may result from implementation of the project and required mitigation and/or avoidance measures are summarized below.

Six sensitive vegetation communities and land cover types—coast live oak woodland, southern willow scrub, disturbed southern riparian scrub, non-native riparian, non-native grassland, and non-vegetated channel—were identified within the survey area. No special status plant species were observed or are expected to occur within the survey area.

Three special status wildlife species—monarch (*Danaus plexippus*), Belding's orange-throated whiptail (*Aspidoscelis hyperythra*), and least Bell's vireo (*Vireo bellii pusillus*)—were detected within or adjacent to the survey area. In addition, four special status reptile species (Coronado skink [*Plestiodon skiltonianus interparietalis*], San Diegan tiger whiptail [*Aspidoscelis tigris stejnegeri*], San Diegan legless lizard [*Anniella stebbinsi*], and San Diego ring-necked snake [*Diadophis punctatus similis*]), have a moderate potential to occur within the survey area, and one special status bird species, Cooper's hawk (*Accipiter cooperii*), has a moderate potential to nest within the survey area.

According to the 100 percent design plans provided by the County DPW on May 2, 2022, permanent and temporary impacts of 0.4 acre of vegetation communities/land cover types are proposed by the project. The project would have direct permanent impacts to 0.01 acre of southern willow scrub, a sensitive vegetation community. The project would have direct temporary impacts to three sensitive vegetation communities, 0.05 acre to southern willow scrub, less than 0.01 acre (103 square feet) to coast live oak woodland, and less than 0.01 acre (13 square feet) to a non-vegetated channel. The project would also have direct temporary and/or permanent impacts to 0.34 acre of two additional vegetation communities/land cover types that are not considered sensitive (urban/developed and the urban/developed portion of the non-vegetated channel/urban/developed).

Permanent impacts to southern willow scrub habitat will be mitigated at a 1:1 ratio in the form of either enhancement, restoration, and/or creation of habitat; deduction of credits from a County-approved mitigation area; or other off-site preservation. Temporary impacts to coast live oak woodland and southern willow scrub will be mitigated at a 1:1 ratio on-site through on-site restoration of temporarily impacted areas. Per the project demolition plan, two trees within the temporary impact area will be protected in place during construction. The proposed mitigation would reduce impacts to sensitive habitat to a level of less than significant.

Impacts to special status wildlife species would be avoided to a level of less than significant with mitigation measures. To avoid impacting special status avian species, grading, brush clearing, and all other construction activities within or adjacent to suitable nesting habitat would be conducted outside the combined avian and raptor breeding season, which occurs between January 15 and September 15, if feasible. If avoidance of the combined avian and raptor breeding season is not feasible, pre-construction surveys would be required to identify nesting birds and avoid active nests. In addition, if construction activities must take place during the least Bell's vireo breeding season (March 15 to September 15) and active vireo nests are detected, an acoustician shall work with the County to implement noise attenuation devices (e.g., noise walls), noise monitoring, and/or other methods to reduce noise levels at the edge of least Bell's vireo occupied habitat (southern willow scrub) such that noise impacts are less than significant.

Potential resources under U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) jurisdiction have been identified within the survey area and project boundary. Permanent impacts would occur to a total of 0.01 acre of CDFW riparian which occurs as a small patch south of Los Coches Road. Temporary impacts would occur to 0.0003 acre (13 square feet) of non-wetland waters (USACE, RWQCB, and CDFW streambed) and 0.05 acre of CDFW riparian. Project impacts to USACE non-wetland waters of the U.S., RWQCB non-wetland state waters, and CDFW streambed entirely overlap. Any impacts to USACE, CDFW, or RWQCB waters or wetlands would require a Section 404 permit authorization from USACE, a 1600 Streambed Alteration Agreement from CDFW, and a 401 State Water Quality Certification from RWQCB.

Mitigation for permanent impacts to jurisdictional resources is proposed at a ratio of 2:1 and would be achieved in the form of either enhancement, restoration, and/or creation of habitat; deduction of credits from a County-approved mitigation area; or other off-site preservation. Temporary impacts to non-wetland waters/streambed and wetland waters are proposed to be mitigated at a ratio of 1:1 through restoration of temporarily impacted areas. The proposed mitigation would reduce impacts to jurisdictional resources to a level of less than significant.

The proposed project would not impact the existing box culvert that runs underneath Los Coches Road and connects Los Coches Creek, which potentially provides local wildlife movement. As no new barriers to wildlife movement would be created as part of the project, no impacts to wildlife corridors or habitat linkages are anticipated to result from this project.

The proposed project would not conflict with any local policies, community plans, or ordinances. It has been designed for consistency with the County's Multiple Species Conservation Program (MSCP) Subarea Plan (County of San Diego 1997), as well as other applicable local, state, and federal regulations.

The letter report was prepared in accordance with the County's Biological Resources Report Format and Content Requirements (County of San Diego 2010a), the County's Guidelines for Determining Significance (2010b), and the County's Biological Mitigation Ordinance (County of San Diego 2010c).

1.0 Project Description, Location, and Setting

1.1 Project Location

The project is located within the unincorporated community of Lakeside in eastern San Diego County, along Los Coches Road and Via Diego, northwest of Interstate 8 (Figure 1). The project boundary is shown on the U.S. Geological Survey (USGS) El Cajon quadrangle, El Cajon Land Grant (Figure 2; USGS 1996). The survey area used for this study includes the project boundary, a 100-foot buffer for the vegetation survey area, and a 300-foot buffer for the wildlife survey area. An aerial photograph of the survey area is provided on Figure 3.

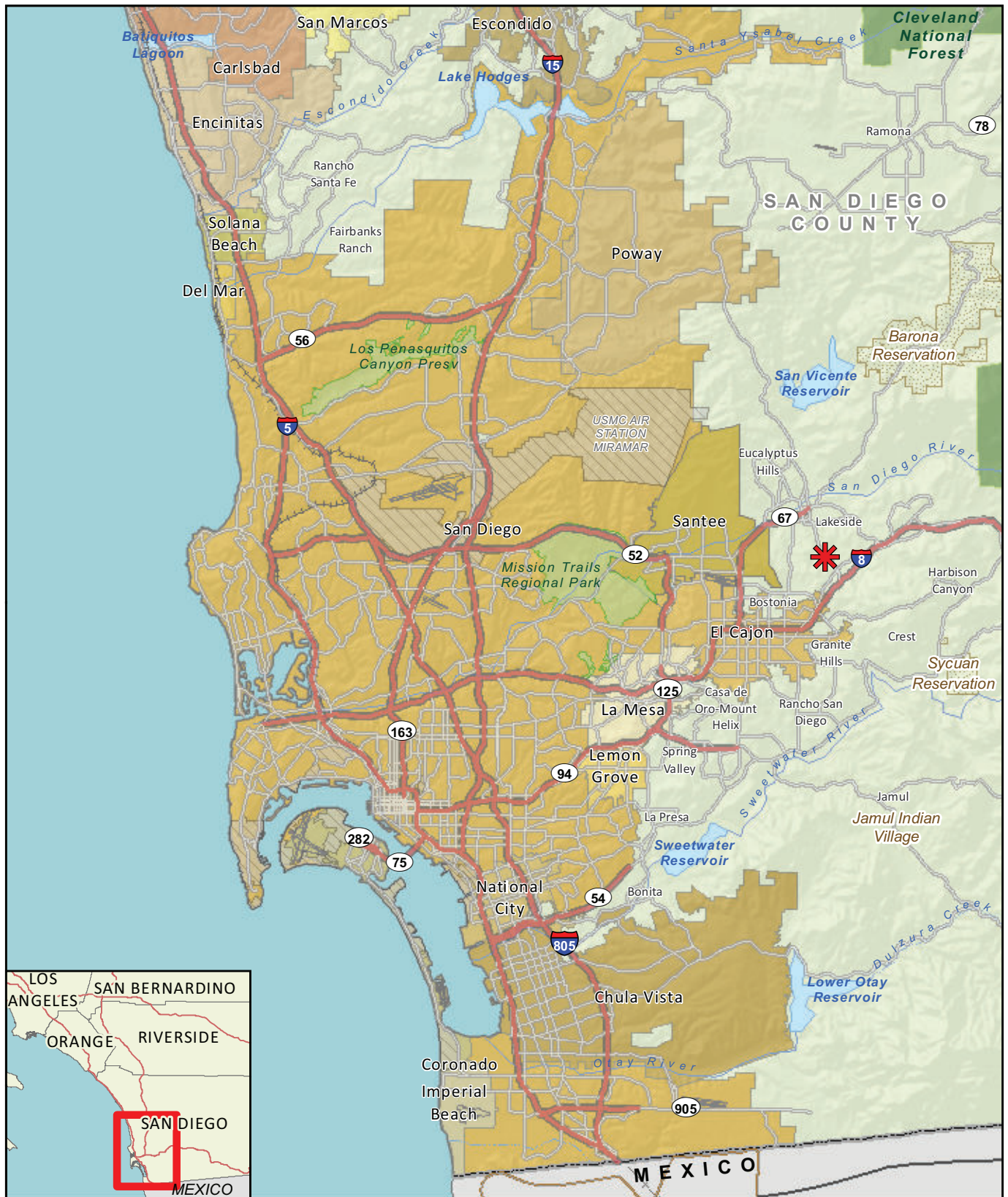
1.2 Project Description

The project is located on Los Coches Road between Via Diego and Ha Hana Road in the unincorporated community of Lakeside in San Diego County. An existing 30-inch reinforced concrete pipe (RCP) is located under Los Coches Road, which collects storm water runoff and discharges into a reinforced concrete triple box culvert at Los Coches Creek. During the dry season, runoff from irrigation and other urban sources flows into the 30-inch RCP without receiving water quality treatment. The proposed Los Coches Low Flow Urban Runoff Diversion to Sewer Project would capture and divert dry weather flows to an existing County sewer line using a gravity flow system allowing the runoff water to be treated.

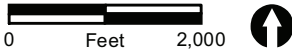
The goal of the project is to improve water quality by reducing the non-storm water flows from entering the municipal separate storm sewer system (MS4) within the County road right-of-way. Specifically, the project consists of installing a debris separating baffle box (DSBB) underneath Los Coches Road. As water passes through the DSBB, dry weather flows would be diverted to an existing sewer line where it would be routed for treatment. However, if the water flow rate exceeds five gallons per minute (i.e., during a moderate to heavy rain event), the stormwater would exit the DSBB through a new 36-inch RCP, which would outlet into Los Coches Creek. To facilitate proper drainage, an existing headwall at Los Coches Creek would be replaced to accommodate the new 36-inch RCP. Erosion control would be implemented in the disturbed area of the headwall and existing vegetation would be replaced in kind after construction of the new headwall is complete. Post-construction erosion control would include the installation of an energy dissipater (rip rap) as a best management practice (BMP) at the outlet of the new storm drainpipe that enters Los Coches Creek. Additional improvements would be made to the existing sidewalk, curb, gutter, and road surface. An island median would also be installed on Via Diego to properly direct traffic entering Los Coches Road. Lastly, existing utilities that are located within Via Diego and Los Coches Road, which conflict with the proposed system, would be relocated as part of the project.

Future maintenance of the proposed gravity flow system would be accessed within the County's right-of-way for Los Coches Road and Via Diego with parking of maintenance vehicles along the roadways. Traffic control may be needed during routine maintenance; therefore, an Operations and Maintenance Plan (O&M), and Traffic Control Plan would be developed for ongoing maintenance as well as for construction activities. No road closures or night work will occur during construction activities. Lanes on Los Coches Road and Via Diego will remain open with traffic controls in place. The project's construction duration is estimated to be approximately three (3) months.

According to 100 percent engineering design plans provided by the County on May 2, 2022, the project's total impact area is approximately 0.40 acre, with 0.13 acre of permanent features and 0.27 acre of temporary work areas. The proposed construction staging area is planned to be next to the project site; however, located along the southwest side of Los Coches Road at the Via Diego intersection. The construction staging area is within existing paved, graded, or disturbed areas.



 Project Location



 Project Boundary

FIGURE 2
Project Location on USGS Map



-  Project Boundary
-  Vegetation Survey Area
-  Wildlife Survey Area



FIGURE 3
Aerial Photograph

1.3 Methods

Prior to conducting field surveys, RECON Environmental, Inc. (RECON) conducted an analysis of existing sensitive species data recorded within one mile of the project boundary. This analysis included searches of the U.S. Fish and Wildlife (USFWS) all-species occurrence database (USFWS 2022a) and critical habitat portal (USFWS 2022b), the SanBIOS database (County of San Diego 2022), and the California Natural Diversity Database (CNDDDB; CDFW 2022a), as well as reviews of the San Diego County Bird Atlas (Unitt 2004) and San Diego County Mammal Atlas (Tremor et al. 2017). Background research to assess the existing biological conditions also included a review of the USGS topographic map (USGS 1996), and U.S. Department of Agriculture (USDA) soil survey maps (USDA 1973).

A total of 3.98 acres were included within the survey area, which consisted of the project boundary, -a 100-foot vegetation buffer, and a 300-foot wildlife buffer around the project boundary. The survey area includes the entire project boundary identified in the 100 percent design plans for the project. Refer to Figure 3 for the survey area. The 100-foot and 300-foot off-site survey areas were used to assess the potential for indirect impacts to vegetation communities and assess the site's potential to support special status species that may be indirectly impacted by the proposed project.

RECON biologists Kayo Valenti and Jade Woll conducted the biological resources field survey and JR Sundberg conducted the jurisdictional wetland/waters delineation on April 7, 2022, between 9:00 a.m. and 12:15 p.m. The primary objective of the field surveys was to assess the existing conditions of the biological resources within the survey area. Fieldwork focused on four primary objectives: (1) vegetation mapping, (2) plant and wildlife species inventory, (3) assessment of the potential occurrence for special status species, and (4) delineation of jurisdictional wetlands and waters. Weather conditions during the survey consisted of approximately 0 percent cloud cover, 0 to 1 mile per hour winds, and 70 to 95 degrees Fahrenheit air temperature. The biologists conducted the survey on foot by meandering through the survey area where vegetation density and fence lines allowed access. Areas that were too densely vegetated or fenced off as privately-owned land were viewed using binoculars from the closest accessible areas. All biological resources detected within the survey area were recorded and mapped according to the County's Biological Resources Report Format and Content Requirements (County of San Diego 2010a), and sensitive species and resources were recorded using a submeter accurate global positioning system (GPS) unit. Photographs of representative areas were taken during the survey.

Vegetation communities and land cover types were mapped on a 1-inch-equals-100-feet scale aerial photograph (flown January 2022) within the vegetation survey area (herein referred to as survey area). Dominant plant species were noted for each vegetation community. Vegetation community classifications follow Holland (1986) as modified by Oberbauer et al. (2008).

Plant species observed within the survey area were noted. Plants that could not be identified in the field were identified later using taxonomic keys. The survey also included a directed search for sensitive plants that would have been apparent during the time of the survey. Potential limitations to the compilation of a comprehensive floral species list were imposed by seasonal factors, such as timing of emergence and/or blooming periods of annual species. Floral nomenclature follows the Jepson Flora Project (2020). In instances where common names are not provided in this resource, common names follow Rebman and Simpson (2014). Additional common names are from the USDA maintained database (USDA 2021) or the *Sunset Western Garden Book* (Brenzel 2001) for ornamental/horticultural plants.

Animal species observed directly or detected from calls, tracks, scat, nests, den/burrow, or carcass were noted. The general wildlife survey and the protocol surveys were limited by seasonal and temporal factors. As wildlife surveys were performed during the day, few nocturnal animals were detected. In addition, few fall or winter migrants were detected,

as surveys were conducted in the spring. Zoological nomenclature is in accordance with the American Ornithologists' Union Checklist (Chesser et al. 2021) for birds; Checklist of North American Mammals (Bradley et al. 2014) and American Society of Mammalogists (2021) for mammals; Crother et al. (2017) for amphibians and reptiles; and NatureServe (2021) and Evans (2008) for invertebrates.

Determination of the potential for occurrence of listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for the species (Jennings and Hayes 1994; Unitt 2004; Tremor et al. 2017; CDFW 2022b, 2022c, 2022d, and 2022e; California Native Plant Society [CNPS] 2021; Reiser 2001), existing topography and soils within the survey area (USGS 1996; USDA 1973), species occurrence records from the CNDDDB (CDFW 2022a), the All Species Occurrences Database (USFWS 2022a), and SanBIOS points from the SanGIS Data Warehouse (County of San Diego 2022).

RECON biologist JR Sundberg conducted a routine jurisdictional waters/wetland delineation within the project boundary with a 100-foot vegetation buffer on April 7, 2022, following the guidelines set forth by the USACE (1987 and 2008) to determine the presence and extent of wetlands and/or waters under the jurisdiction of USACE, CDFW, and RWQCB. Wetlands were examined according to the County's MSCP Subarea Plan (County of San Diego 1997) and criteria provided in the County Resource Protection Ordinance (County of San Diego 2007). Potential federal and state jurisdictional areas were examined to determine the presence and extent of any jurisdictional waters. Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. According to the USACE, indicators for all three parameters must be present to qualify an area as a wetland.

To determine presence of hydrophytic vegetation, a direct search was conducted for wetland vegetation or areas with dominant wetland plants, according to the National Wetland Plant List (USACE 2020). Hydrologic information for the site was obtained by reviewing USGS topographic maps and by directly observing hydrology indicators in the field. Sample points were selected within potential wetland areas and near the apparent boundary between wetland and upland. This boundary was inferred based on topography and changes in the composition of vegetation. The 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Arid Supplement; USACE 2008) was referenced during the delineation for a complete description of each of the hydric soil indicators. Methodology for delineating non-wetland waters is from *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008). The locations of jurisdictional resources were drawn on an aerial photograph (1 inch equals 50 feet) flown in with the aid of a submeter-accurate GPS unit. Wetland determination data forms from the Arid Supplement (USACE 2008) were completed at each sample point.

1.4 Environmental Setting

The survey area is located within a mosaic of rural residential development and undeveloped land. This mosaic of land use scattered around pockets of undeveloped land is consistent within the surrounding area. Los Coches Road is located within the majority of the survey area, as well as a portion of Via Diego (see Figure 3). Both undeveloped land and residential development occur on the eastern and western side of Los Coches Road within the survey area. Landscaping occurs along the eastern and western edge of Los Coches Road, as well as the southern edge of Via Diego. Landscaped vegetation is generally in the form of eucalyptus trees along the western edge of Los Coches Road and ornamental vegetation along the eastern edge of Los Coches Road and southern edge of Via Diego. A few paved driveways run north of Los Coches Road, leading to private residences. Los Coches Creek runs underneath Los Coches Road and connects to the San Diego River, a Traditional Navigable Water (TNW), approximately 2.0 miles north of the survey area.

Elevation of the survey area ranges from 455 to 565 feet above mean sea level, decreasing from south to north. The higher elevations exist within the southeast and southwest corners of the survey area and the lower elevations are within Los Coches Creek in the northwest and northeast corners of the survey area.

Three soil series—Ramona, Tujunga, and Vista—were mapped within the survey area (USDA 1973; Figure 4). Ramona sandy loam occurs on terraces and fans. This soil is formed in alluvium derived mostly from granitic and related rock sources. It consists of well-drained soil, with slow to rapid runoff, moderately slow permeability, and a slight to moderate erosion hazard (USDA 2022a). Ramona sandy loam (5 to 9 percent slopes) occurs in the western edge of the survey area. Tujunga sand, 0 to 5 percent slopes, is mapped within the northern portion of the survey area, near Los Coches Creek and the intersection of Los Coches Creek Road and Via Diego (see Figure 4). Tujunga sand, 0 to 5 percent slopes, can be a hydric soil when occurring in drainageways and flood plains (USDA 2022b). Vista coarse sandy loam, 15 to 30 percent slopes, and Vista rocky coarse sandy loam, 15 to 30 percent slopes, is mapped in the eastern segment of the survey area (see Figure 4).

2.0 Regional Context

The project is located within the boundaries of the MSCP. Specifically, the entire survey area occurs within unincorporated land in Metro-Lakeside-Jamul segment, which is outside of the Pre-Approved Mitigation Area (County of San Diego 1997; Figure 5).

As mentioned above, the northern portion of the survey area includes Los Coches Creek, a stream that supports riparian vegetation. Los Coches Creek has direct downstream hydrologic connectivity to the San Diego River, a TNW. The portion of Los Coches Creek that falls within the survey area is under the jurisdiction of USACE, CDFW, and RWQCB.

3.0 Habitats/Vegetation Communities

Eleven vegetation communities/land cover types—coast live oak woodland, southern willow scrub, disturbed southern riparian scrub, non-native riparian, non-vegetated channel, disturbed habitat, ornamental vegetation, urban/developed, eucalyptus woodland, non-native grassland, and non-vegetated channel/urban/developed—were identified within the survey area. Figure 6 provides locations of each vegetation community/land cover type in the survey area. Table 1 lists the vegetation communities/land cover types and their acreages within the survey area. Photographs 1 through 10 (shown in Attachment 1) provide representative images of the survey area taken during the biological resources survey.

3.1 Coast Live Oak Woodland

Coast live oak woodland habitat occurs in the northwest and southwest corners of the survey area (see Figure 6 and Photograph 1). This community within the survey area is dominated by coast live oak (*Quercus agrifolia*) with an understory dominated by non-native grasses such as ripgut grass (*Bromus diandrus*) and red brome (*Bromus rubens*) and native species such as wild cucumber (*Marah macrocarpa*). This vegetation community is considered high-quality habitat due to the dominance of mature native trees providing suitable foraging habitat along a wildlife corridor. Coast live oak woodland is considered a Tier I vegetation community under the MSCP Subarea Plan (County of San Diego 1997).

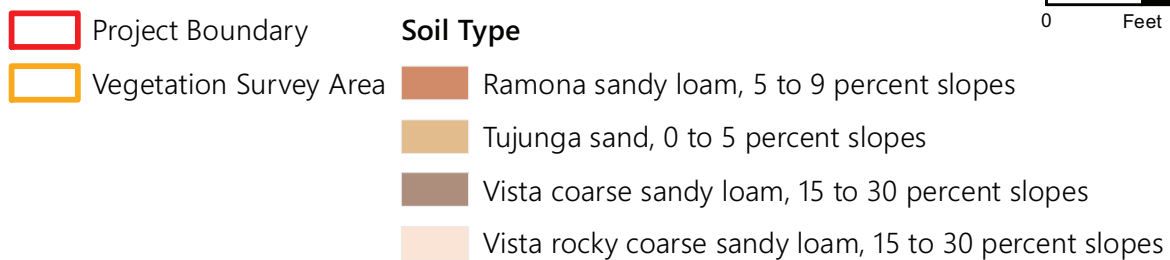
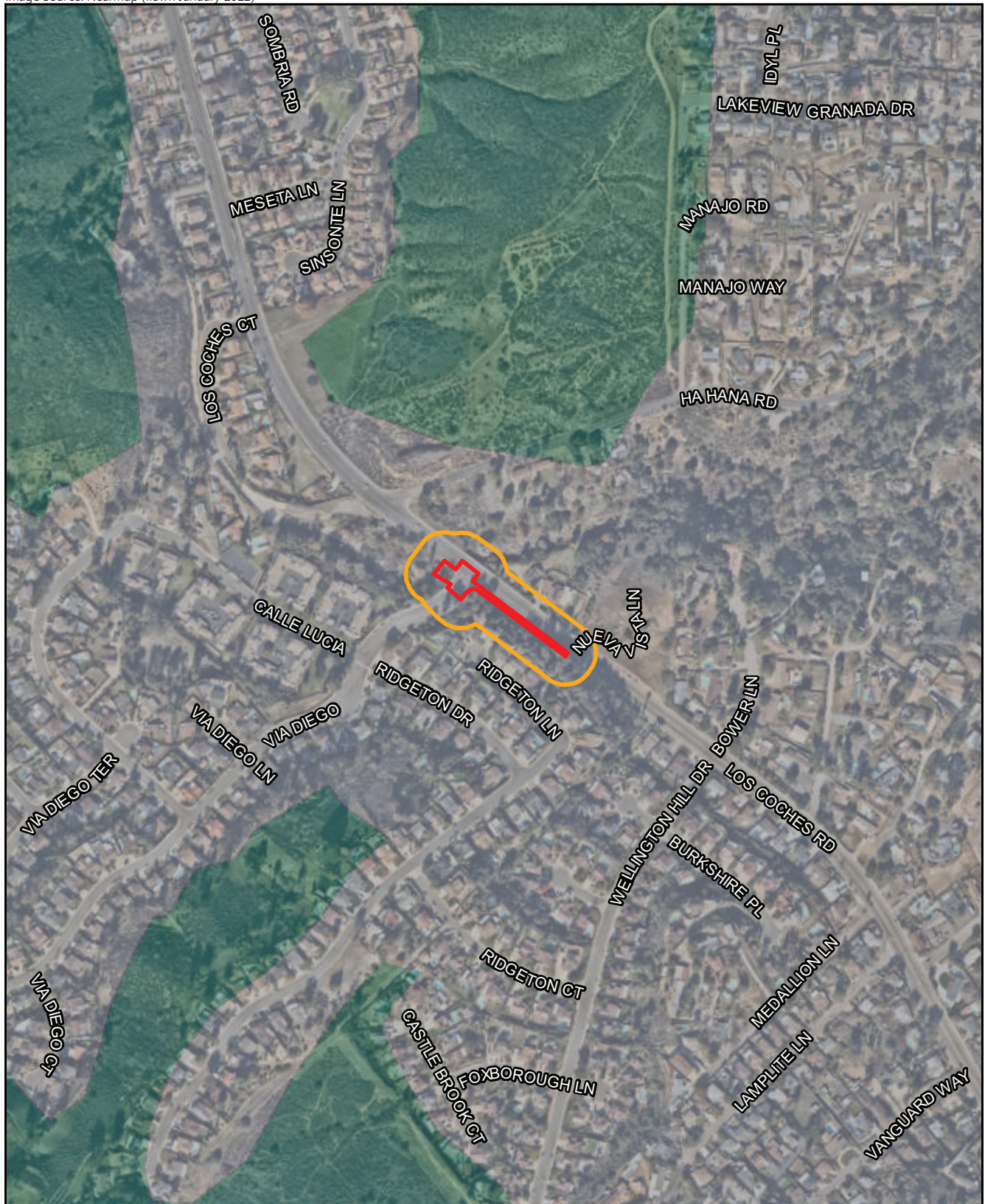


FIGURE 4
Soils Map



 Project Boundary

 Vegetation Survey Area

MSCP Designation

 Pre-Approved Mitigation Area

 Unincorporated Land in Metro-Lakeside-Jamul Segment





- Project Boundary
- Permanent Impacts
- Temporary Impacts
- Vegetation Survey Area
- Wildlife Survey Area
- Approximate Bridge Width
- Culverted Non-vegetated Channel
- Sensitive Species**
 - Belding's Orange-throated Whiptail
 - Least Bell's Vireo
 - Monarch

Vegetation Communities and Land Cover Types

- Coast Live Oak Woodland
- Southern Willow Scrub
- Disturbed Southern Riparian Scrub
- Non-native Riparian
- Non-native Grassland
- Non-vegetated Channel
- Eucalyptus Woodland
- Disturbed Habitat
- Urban/Developed



FIGURE 6

Vegetation Communities and Sensitive Species Observations

Table 1 Vegetation Communities/Land Cover Types within the Survey Area for Los Coches Low Flow Urban Runoff Diversion to Sewer Project		
Type or Community (Holland Code as modified by Oberbauer)	MSCP Tier	Survey Area (acres)
Coast Live Oak Woodland (71160)	I	0.26
Southern Willow Scrub (63320)	I	0.20
Disturbed Southern Riparian Scrub (63300)	I	0.18
Non-native Riparian (65000)	I	0.05
Non-native Grassland (42200)	III	0.06
Non-vegetated Channel (64200)	-- ^{1,2}	0.10
Eucalyptus woodland (79100)	IV	0.56
Disturbed Habitat (11000)	IV	0.25
Urban/Developed (12000) ⁴	-- ²	2.33
TOTAL		3.98³
¹ Considered sensitive by the State of California resource agencies as it is associated with Los Coches Creek a TNW.		
² No MSCP Subarea Plan assigned tier.		
³ Any discrepancies in totals are due to rounding.		
⁴ 0.11 acre of non-vegetated channel culverted beneath the road included in the total urban/developed acreage as no impacts will occur to the culvert below the road.		

3.2 Southern Willow Scrub

Southern willow scrub habitat occurs along the north and south banks of Los Coches Creek on the western side of Los Coches Road (see Figure 6 and Photograph 2). This community within the survey area occurs as a dense riparian thicket with a nearly closed canopy dominated by Goodding's black willow (*Salix gooddingii*) and red willow (*Salix laevigata*) with an understory containing scattered herbs. Additionally, two trees located within the temporary impact area will be protected in place during construction. This vegetation community is considered high-quality habitat due to the dominance of mature native trees. Southern willow scrub is a Tier I vegetation community under the MSCP subarea plan (County of San Diego 1997).

3.3 Disturbed Southern Riparian Scrub

Disturbed southern riparian scrub habitat occurs along the north and south banks of Los Coches Creek on the eastern side of Los Coches Road (see Figure 6 and Photograph 3). This community within the survey area occurs as a riparian zone dominated by small trees and shrubs, such as broom baccharis (*Baccharis sarothroides*) and mule fat (*Baccharis salicifolia*), with non-native vegetation such as short-pod mustard (*Hirschfeldia incana*) dominating the understory. It contains a patch of treated and removed giant reed (*Arundo donax*). This vegetation community is considered moderate-quality habitat due to the presence of native shrubs mixed with non-native vegetation. Disturbed southern riparian scrub is a Tier I vegetation community under the MSCP subarea plan (County of San Diego 1997).

3.4 Non-native Riparian

Non-native riparian habitat occurs in the southern edge of the survey area (see Figure 6 and Photograph 4). This community within the survey area occurs as a small riparian patch dominated by non-native, invasive species, such as Mexican fan palm (*Washingtonia robusta*) and stickywilly (*Galium aparine*). This vegetation community is considered

moderate-quality habitat as it occurs adjacent to large mature trees along Los Coches Road. Non-native riparian is a Tier I vegetation community under the MSCP subarea plan (County of San Diego 1997).

3.5 Non-native Grassland

Non-native grassland occurs in the southeastern corner of the survey area (see Figure 6 and Photograph 5). This community is dominated by ripgut grass, oats (*Avena* sp.), and red brome, with California buckwheat (*Eriogonum fasciculatum*) scattered throughout. A bare patch of soil occurs surrounding a utility pole in the center of the habitat, which appears to be maintained for utility access. The non-native grassland is considered moderate-quality habitat as it provides foraging habitat for raptors, which may nest in the eucalyptus woodland along the southern side of Los Coches Road. This habitat is considered a Tier III vegetation community under the MSCP subarea plan (County of San Diego 1997).

3.6 Non-vegetated Channel

Non-vegetated channel occurs within the Los Coches Creek streambed in the northern portion of the survey area, on the eastern and western side of Los Coches Road, which totals 0.10 acres (see Figure 6 and Photograph 6). While some vegetation is present within the channel, this community is dominated by an unvegetated, sandy channel. Additionally, a concrete triple box culvert is located under Los Coches Road, which allows Los Coches Creek to flow downstream under the roadway, which totals 0.11 acre (see Figure 6 and Photograph 7). For the purposes of this report, the 0.11 acre of culverted channel beneath the roadbed is included in the acreage of urban/developed land (see Table 1). The culvert contains little to no vegetation and trash and debris is present. Although a non-vegetated channel does not have an MSCP Tier, it would be considered sensitive because it is associated with Los Coches Creek, which would be considered waters of the U.S. under USACE jurisdiction and waters of the State under RWQCB and CDFW jurisdiction.

3.7 Eucalyptus Woodland

Eucalyptus woodland occurs along the southwestern side of Los Coches Road and is dominated by mature eucalyptus trees such as red iron bark (*Eucalyptus sideroxylon*) (see Figure 6 and Photograph 8). The understory contains non-native annuals such as red brome and greenstem filaree (*Erodium moschatum*). As the eucalyptus woodland is dominated by mature trees, it is considered high-quality nesting habitat for raptors and tree-cavity nesters. The eucalyptus woodland occurs as a narrow corridor along a busy roadway and lacks understory shrubs; however, this community provides low- to moderate-quality habitat for ground-dwelling species such as reptiles and mammals. This habitat is considered a Tier IV vegetation community under the MSCP subarea plan (County of San Diego 1997).

3.8 Disturbed Habitat

Disturbed habitat occurs along the southern edge of Via Diego and northeastern edge of Los Coches Road (see Figure 6 and Photograph 9). The vegetation found along the southern edge of Via Diego is dominated by ornamental vegetation, which is primarily pines (*Pinus* sp.). The northeastern edge of Los Coches Road is dominated by greenstem filaree, smooth cat's-ear (*Hypochaeris glabra*), and Italian thistle (*Carduus pycnocephalus*). Although the disturbed habitat along the northeastern edge of Los Coches Road is considered low-quality habitat due to the prevalence of non-native ruderal species, past soil disturbance, and adjacency to Los Coches Road, the ornamental trees found along the southern edge of Via Diego is considered moderate-quality habitat for raptors and tree-cavity nesters. Disturbed habitat (i.e., disturbed lands) is considered a Tier IV vegetation community under the MSCP Subarea Plan (County of San Diego 1997).

3.9 Urban/Developed Land

Urban/developed land occurs as a dominant land cover type within the survey area. Urban/developed land includes paved roads, such as Los Coches Road, Via Diego, and roads leading to private residences (see Figure 6 and Photograph 10). Additionally, as stated in Section 3.6, a concrete triple box culvert is located under Los Coches Road. While the culvert occurs beneath the developed roadbed of Los Coches Road, the project will only impact the roadbed above the culvert, and no impacts to the culverted non-vegetated channel will occur. Urban/developed land also includes residences in the southwestern edge and northeastern portion of the survey area and associated ornamental vegetation. Urban/developed land does not have an assigned Tier under the MSCP subarea plan (County of San Diego 1997).

4.0 Special Status Species

Plant or wildlife species are considered special status if they are (1) on List A, B, C, or D of the County of San Diego Sensitive Plant List or in Group 1 or 2 of the County of San Diego Sensitive Animal List (County of San Diego 2010b); (2) covered or listed as a narrow endemic under the MSCP subarea plan (County of San Diego 1997); (3) listed by state or federal agencies as threatened or endangered or are proposed for listing; (4) included on CNPS California Rare Plant Ranks 1, 2, 3, or 4 (CNPS 2021); or (5) considered rare, endangered, or threatened by local conservation organizations or specialists.

Under Section 3503 of the California Fish and Game Code (CFGF; CDFW 1991), it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 of the CFGF prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs (CDFW 1991).

4.1 Special Status Plant Species

No special status plant species were observed or are expected to occur within the survey area. Attachment 2 provides a complete list of plant species identified within the survey area during the biological resources survey. A comprehensive list of sensitive plant species with potential for occurrence within the BSA based on the records search results is presented in Attachment 3 and includes those species with potential for occurrence based on species range and habitat conditions.

4.2 Special Status Wildlife Species

Three special status species—monarch, Belding’s orange-throated whiptail, and least Bell’s vireo—were detected during the biological resources survey (see Figure 6). In addition, four special status reptile species—Coronado skink, San Diegan tiger whiptail, San Diegan legless lizard, and San Diego ring-necked snake—have a moderate potential to occur within the survey area, and one special status bird species, Cooper’s hawk, has a moderate potential to nest within the survey area. Attachment 4 provides a complete list of wildlife species identified on-site during the biological resources survey. A comprehensive list of sensitive wildlife species with potential for occurrence within the BSA based on the records search results is presented in Attachment 5 and includes those species with potential for occurrence based on species range and habitat conditions.

4.2.1 Special Status Wildlife Species Observed

Monarch is a federal candidate species and recognized by the CDFW as sensitive (CDFW 2022e). The California overwintering population is imperiled or vulnerable (CDFW 2022e). There is a population of monarch butterflies that

has been known to roost in lemon-scented gum (*Eucalyptus citriodora*) and Canary Island pine trees (*Pinus canariensis*) within Presidio Park since the 1920s. Population size data for the site has been tracked since 1984 (CDFW 2022e).

One monarch was observed within the coast live oak woodland (see Figure 6).

Belding's orange-throated whiptail is a CDFW watch list species, an MSCP covered species, and a County of San Diego Group 2 species (CDFW 2022d; County of San Diego 1997, 2010b). This species range extends from the coast to the Peninsular Mountain ranges from the Santa Ana River in Orange County and Colton in San Bernardino County, south to the tip of Baja California, Mexico (Stebbins and McGinnis 2018). The species is found in a variety of habitats and is most common in sandy areas of low, open sage scrub or chaparral, particularly where there is California buckwheat, sage (*Salvia* spp.), or chamise (*Adenostoma fasciculatum*; Lemm 2006). The Belding's orange-throated whiptail feeds primarily on termites (*Reticulitermes* sp.), which comprise 86 percent or more of the diet (Bostic 1966). It is active during spring and summer, but is largely dormant during the fall and winter, when temperatures drop (Jennings and Hayes 1994). Breeding occurs in spring and eggs are laid in June and July. The decline of this species is attributed to habitat loss and fragmentation, with approximately 75 percent of its historic range lost to development (McGurty 1980; Stebbins and McGinnis 2018). Two Belding's orange-throated whiptails were observed during the biological resources survey. One individual was observed within the urban/developed land within the vegetation survey area between the sidewalk and coast live oak woodland along Via Diego. The other individual was observed within the wildlife survey area along the non-vegetated channel (see Figure 6).

Least Bell's vireo is federally, and state listed as endangered, an MSCP covered species, and a County of San Diego Group 1 species (CDFW 2022d; County of San Diego 1997, 2010b). Its historical breeding range once extended from northwestern Baja California, Mexico, to interior northern California, as far north as Red Bluff in Tehama County, California (Franzreb 1989). The species is exclusively found in riparian habitats, including cottonwood–willow woodlands and forests, oak woodlands, and mule fat scrub, and requires dense canopy for foraging and a dense understory for nesting (Unitt 2004; USFWS 1998). Least Bell's vireos migrate to San Diego County arriving at the breeding grounds in mid-March and remain until September or October. Populations are concentrated in the coastal lowlands of the County and are scattered within the foothills (Unitt 2004). Populations of least Bell's vireo have declined drastically due to extensive loss of riparian habitat from urban development, including flood control and damming, introduction of non-native invasive plant species such as giant reed and saltcedar (*Tamarix ramosissima*), and nest parasitism by brown-headed cowbird (*Molothrus ater*) (USFWS 2009). The population has increased as a result of extensive brown-headed cowbird trapping programs (Unitt 2004). Least Bell's vireos respond well to restored riparian woodland, especially if it is adjacent to mature riparian habitat, and also to cowbird trapping. There is no USFWS designated critical habitat for least Bell's vireo within the survey area. One least Bell's vireo was heard within the southern willow scrub of the survey area during the biological resources survey (see Figure 6). This species has a potential to nest within the southern willow scrub of the survey area.

4.2.2 Special Status Wildlife Species Not Observed with Potential to Occur

Coronado skink is a CDFW species of special concern and a County of San Diego Group 2 species. The Coronado skink breeding range extends from central Riverside County south to Baja California, Mexico (Jennings and Hayes 1994). In San Diego County, the Coronado skink is found in a variety of plant communities including grassland, open woodland, forest, and broken chaparral habitats and is often associated with mesic areas. The Coronado skink is diurnal and most active from early spring until fall and breeding occurs in June or July (Jennings and Hayes 1994). The diet of the Coronado skink consists of moths, beetles, crickets, grasshoppers, and leafhoppers. This species is threatened by habitat loss and fragmentation resulting from urbanization and agriculture. The Coronado skink has a

moderate potential to occur within the survey area due the presence of non-native grasslands and coastal live oak woodland north of Los Coches Road and in the northwest and southwest corners of the survey area, respectively.

San Diegan legless lizard is a CDFW species of special concern and a County Group 2 species. This species breeding range extends from Contra Costa County south along the California Coast, Transverse, and Peninsular ranges into Baja California, Mexico, from sea level to 5,900 feet (Jennings and Hayes 1994). It is a nocturnal species that occurs in coastal scrub, chaparral, and open riparian habitats, where it tends to be found in leaf litter and loose soil with a relatively higher moisture level (Zeiner et al. 1988-1990). It uses sandy washes and beach dunes for burrowing and logs and leaf litter for cover and feeding. Breeding occurs between early spring and July. The California legless lizard is insectivorous, and its diet consists of larval insects, adult beetles, termites (*Reticulitermes* sp.), and spiders. Threats to this species include urbanization, agricultural and pesticide use, livestock grazing, and recreational activities in habitat.

The San Diegan legless lizard has a moderate potential to occur in the survey area due to the presence of herbaceous layers with loose soil in southern willow scrub, disturbed southern riparian scrub, and a non-vegetated channel east and west of Los Coches Road.

San Diegan tiger whiptail has no official state or federal status but was formerly a federal candidate for listing (USFWS 1994) and is a County Group 2 species. The San Diegan tiger whiptail ranges predominantly on the coastal slope from Santa Barbara County south into northwestern Baja California, Mexico (Stebbins and McGinnis 2018). In San Diego County, the whiptail occurs in coastal sage scrub and chaparral, as well as in woodlands and stream sides. Its diet consists of a wide variety of insects, spiders, scorpions, and other lizards. The decline of populations of San Diegan tiger whiptail is attributed to habitat loss and fragmentation.

This species has a moderate potential to occur in the survey area due to the presence of the non-vegetated channel of Los Coches Creek on the eastern and western side of Los Coches Road.

San Diego ring-necked snake is a County Group 2 species. The San Diego ring-necked snake breeding range extends from San Diego County along the coast and into the Peninsular range, barely into northern Baja California, Mexico, and in southwestern Riverside County (Blanchard 1923). Its diet consists of a wide variety of small salamanders, tadpoles, small frogs, small snakes, lizards, worms, slugs, and insects (Blanchard 1923). The decline of the populations of San Diego ring-necked snake is attributed to habitat loss.

This species has a moderate potential to occur in the survey area due to the presence of rocky areas in wet locales, such as the southern willow scrub east of Los Coches Road.

Cooper's hawk is a CDFW watch list species (nesting), an MSCP covered species, and a County of San Diego Group 1 species (CDFW 2022d; County of San Diego 1997, 2010b). The Cooper's hawk's year-round range extends throughout most of the United States. Its wintering range extends south to Central America, and its breeding range extends north to southern Canada (Curtis et al. 2006). Breeding birds are widespread over San Diego County's coastal slope and most abundant in lowland and foothill canyons and in urban areas. It is a common breeder in both oak and willow riparian woodlands and urban environments, with eucalyptus trees used nearly as often as oaks (Unitt 2004). Additionally, this species has been known to nest within planted trees including pine (Unitt 2004). Breeding occurs from March to June, and nests are typically located high in the tree but under the canopy. This hawk forages primarily on medium-sized birds but is also known to eat small mammals such as chipmunks and other rodents (Curtis et al. 2006). Although urbanization and loss of habitat have contributed to the decline of this species, the Cooper's hawk acclimation to city living over the last 20 years has generously increased their numbers (Unitt 2004).

This species has a moderate potential to occur and nest within the survey area due the presence of suitable trees for nesting within the coast live oak woodland, eucalyptus woodland, and ornamental vegetation on the southern side of Los Coches Road.

5.0 Jurisdictional Wetlands and Waterways

Potential jurisdictional wetlands and waterways were delineated on-site according to USACE, CDFW, and RWQCB regulations. The results from the Aquatic Resource Delineation Report (RECON 2022) prepared for the project are summarized in Table 2 and discussed in this section. Figure 7 shows the locations of aquatic resources identified in the survey area. The non-wetland waters consist of Los Coches Creek and a small drainage running parallel to Los Coches Road in the southern portion of the survey area. The non-wetland waters would be considered USACE waters of the U.S., RWQCB non-wetland waters of the State, and CDFW Streambed. The riparian consists of the following vegetation communities: southern willow scrub, coast live oak woodland, disturbed southern riparian scrub, and non-native riparian. The riparian would be considered CDFW riparian. The wetlands were determined to be exempt from the Resource Protection Ordinance, as the project consists of improvements to a County-owned storm drain outfall, which is an essential public facility.

Table 2 Potential Jurisdictional Resources within the Project Survey Area		
Jurisdictional Resource	Acres (Existing)	Linear Feet (Existing)
USACE Waters of the U.S.		
(a)(2) Tributaries	0.21	387
USACE Total Jurisdiction	0.21	387
RWQCB Jurisdiction		
Non-wetland waters of the state	0.21	387
RWQCB Total Jurisdiction	0.21	387
CDFW Jurisdiction		
Riparian	0.62	n/a
Streambed	0.21	387
CDFW Total Jurisdiction	0.83*	387
n/a = Not applicable		
*Any discrepancies in totals are due to rounding.		

5.1 Potential USACE Waters of the U.S.

Potential USACE non-wetland waters of the U.S. within the survey area include those areas mapped as non-vegetated channel (0.10 acre), as well as the extent of that channel that has been culverted beneath Los Coches Road (0.11 acre), totaling 0.21 acre (387 linear feet) (see Figure 7). Potential USACE non-wetland waters on-site include Los Coches Creek and one additional small unnamed drainage that is a tributary to Los Coches Creek in the southern portion of the survey area. The riparian areas within the survey area would not be considered under the jurisdiction of USACE because they occur outside the OHWM and active floodplain of the on-site drainages and do not meet the three parameters for the USACE definition of a wetland. Therefore, these riparian areas would not be regulated by USACE as waters of the U.S.



- Project Boundary
- Permanent Impacts
- Temporary Impacts
- Review Area
- Approximate Bridge Width
- Culvert (3-foot diameter)

Aquatic Resources

- Non-wetland Waters
- Riparian

0 Feet 100



5.2 Potential RWQCB Waters of the State

Potential RWQCB non-wetland waters of the state within the survey area total 0.21 acre (387 linear feet) (see Figure 7). The non-wetland waters entirely match the potential USACE waters of the U.S described above.

5.3 Potential CDFW Waters of the State

Potential CDFW streambed and riparian within the survey area include Los Coches Creek, a small unnamed drainage that is a tributary to Los Coches Creek, and the associated riparian vegetation (i.e., southern willow scrub, disturbed southern riparian scrub, coast live oak woodland, and non-native riparian; see Figure 7). Potential CDFW jurisdiction within the survey area totals 0.83 acres and includes 0.62 acre of potential CDFW riparian and 0.21 acre (387 linear feet) of potential CDFW streambed. The potential CDFW streambed entirely overlaps with the potential USACE non-wetland waters of the U.S. and potential RWQCB non-wetland state waters described above. Potential CDFW riparian encompasses the vegetation associated with the creek and drainage such as southern willow scrub, disturbed southern riparian scrub, coast live oak woodland, and non-native riparian which lack wetland soils. Majority of coast live oak woodland is considered CDFW riparian, however a portion of the coast live oak woodland (0.07 acre) in the southeastern portion of the survey area is not included as it occurs on a steep slope and outside of a floodplain or extended riparian zone.

6.0 Other Unique Features/Resources

Wildlife movement corridors and habitat linkages are areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Corridors are generally local pathways connecting short distances usually covering one or two main types of vegetation communities. Linkages are landscape level connections between very large core areas and generally span several thousand feet and cover multiple habitat types. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors and linkages for wildlife travel. The habitat connectivity provided by corridors and linkages is important in providing access to mates, food, and water, allowing the dispersal of individuals away from population high-density areas, and facilitating the exchange of genetic traits between populations (Beier and Loe 1992).

Los Coches Creek, which is partially within the project boundary, provides a route for local movement of terrestrial wildlife. A concrete triple box culvert, each entrance is 10 feet wide and 15 feet tall, runs beneath Los Coches Road, which provides easy access for wildlife to move through the project area (see Photograph 10). This culvert system is large enough to allow for passage of large-sized terrestrial wildlife. While the culvert is anticipated to facilitate local wildlife movement into off-site areas of undeveloped land, the project site as a whole is not anticipated to contribute to regionally significant wildlife movements as it is primarily bounded by the residential development and is not located within a regionally significant wildlife movement corridor identified by the MSCP Subarea Plan. Additionally, while modifications will be made to Los Coches Road, no modifications will be made to the existing box culvert; therefore, no impacts would be made to the wildlife corridor.

7.0 Significance of Project Impacts and Proposed Avoidance and Mitigation

All criteria in the Guidelines for Determining Significance (County of San Diego 2010b) were assessed and only those with potential for significant impacts are discussed below. The following avoidance and mitigation measures are recommended based on the County's MSCP Subarea Plan and Guidelines (1997 and 2010b).

7.1 Habitats/Vegetation Communities

The proposed project would cause permanent and temporary impacts, which when combined total 0.40 acre of impacts to vegetation communities/land cover types (Table 3). Permanent impacts include the reconstruction of a new headwall and new outfall connection of the 36-inch RCP from the DSBB. Temporary impacts include the surrounding workspace to be used during construction.

The project would cause direct permanent impacts to 0.01 acre of southern willow scrub and 0.12 acre of urban/developed. The project would cause direct temporary impacts to five vegetation communities/land cover types: 0.05 acre of southern willow scrub, less than 0.01 acre (103 square feet) of coast live oak woodland, less than 0.01 acre (13 square feet) of non-vegetated channel, 0.01 acre of non-vegetated channel/urban/developed, and 0.21 acre of urban/developed. Impacts to southern willow scrub, coast live oak woodland, and non-vegetated channel would be significant and require mitigation.

Impacts to urban/developed would not be considered significant, as this land cover type is not considered sensitive. In addition, impacts to non-vegetated channel/urban/developed would be less than significant as project impacts would be limited to the urban/developed portion of the roadway and would not encroach into the non-vegetated channel underlying the roadway.

Permanent impacts to southern willow scrub habitat will be mitigated in the form of either enhancement, restoration, and/or creation of habitat; deduction of credits from a County-approved mitigation area; or other off-site preservation. Temporary impacts will be mitigated on-site through restoration of temporarily impacted areas. The mitigation requirements are based on the impact area not qualifying as a Biological Resource Core Area, as the project site is located outside of a pre-approved mitigation area and regional corridor, and project impacts are not anticipated to impact the long-term survival of special status species. The proposed mitigation would reduce impacts to sensitive habitat to a level of less than significant.

M-BIO-1: In-kind mitigation for 0.01 acre of permanent impacts to southern willow scrub are required to occur at a 1:1 ratio (County of San Diego 2010b). This compensatory mitigation shall be accomplished in the form of either enhancement, restoration, and/or creation of habitat; deduction of credits from a County-approved mitigation area; or other off-site preservation totaling 0.01 acre of in-kind of better habitat. Mitigation for impacts to temporarily impacted sensitive vegetation communities shall occur via the restoration of these temporary impact areas to their pre-impact conditions.

Table 3 Mitigation for Impacts within the Proposed Los Coches Low Flow Urban Runoff Diversion to Sewer Project					
Vegetation Community/ Land Cover Type	Existing in Vegetation Survey Area (acres)	Permanent Impacts (acres)	Temporary Impacts (sq. ft. or acres) ¹	Mitigation Ratio for Permanent Impacts ²	Mitigation Required for Permanent Impacts (acres)
Coast Live Oak Woodland (71160)	0.26	-	<0.01 ac (103.00 sq. ft.)	1:1	-
Southern Willow Scrub (63320)	0.20	0.01 ac	0.05 acre	1:1	0.01
Disturbed Southern Riparian Scrub (63300)	0.18	-	-	1:1	-
Non-native Riparian (65000)	0.05	-	-	1:1	-
Non-native Grassland (42200)	0.06	-	-	1:1	-
Non-vegetated Channel (64200)	0.10	-	<0.01 ac (13.00 sq. ft.)	1:1	-
Eucalyptus woodland (79100)	0.56	-	-	-	-
Disturbed Habitat (11000)	0.25	-	-	-	-
Urban/Developed (12000) ³	2.33	0.12 ac	0.22 ac	-	-
TOTAL	2.89	0.13	0.27 acre	N/A	0.01
N/A = not applicable sq. ft. = square feet ¹ Areas of temporary impacts to coast live oak woodland, southern willow scrub, and non-vegetated channel would be restored to their pre-impact conditions. ² Ratio for permanent impacts is based on the location of impact being outside of a Biological Core Resource Area, and the mitigation occurring within a Biological Core Resource Area. ³ 0.11 acre of non-vegetated channel culverted beneath the road included in the total urban/developed acreage as no impacts will occur to the culvert below the road.					

7.2 Special Status Species

Direct impacts and indirect impacts to nesting least Bell's vireo may occur if vegetation clearing, grubbing, grading, or construction is conducted during this species nesting season of March 15 to September 15 (County of San Diego 2010b). Therefore, avoidance measures are discussed below and would avoid direct impacts and reduce the potential indirect impacts to a level of less than significant.

M-BIO-2: To avoid impacts to least Bell's vireo, grading, brush clearing, and all other construction within or adjacent to (within 300 feet of southern willow scrub) occupied habitat should be conducted between September 16 and March 14. However, if construction must occur within 300 feet of southern willow scrub between March 15 and September 15, the following actions would be required:

- As least Bell's vireo was detected within the southern willow scrub during the biological resource survey, a qualified biologist shall conduct a pre-construction clearance survey for nesting birds within suitable habitat to determine whether avian species are nesting within 300 feet of the construction area.
- If least Bell's vireo are nesting within vegetation to be removed, no grading or clearing of said vegetation shall occur within 300 feet of the active nest until the young have fledged and are independent of the nest.

- If least Bell's vireo are nesting within vegetation not to be removed, construction activity should be avoided within 300 feet of the active nest, if possible. If construction must occur within 300 feet of an active nest, temporary sound barriers may be required, or grading may be restricted in construction areas near the nest site to reduce noise levels. Temporary sound barriers must be placed within or surrounding the project footprint and not in the habitat outside the project boundary. In addition, an acoustician shall measure noise levels during construction activities at the edge of the project footprint near the occupied habitat closest to the nest. Generally, noise levels are required by the County to be less than 60 decibels (dB) averaged over a one-hour period on an A-weighted decibel (dB[A]) scale (i.e., 1 hour $L_{eq}/dB[A]$) or the ambient noise level, whichever is greater.
- If no least Bell's vireo are observed nesting within 300 feet of the project boundary, no grading or construction restrictions associated with least Bell's vireo would apply. In addition, no restrictions are required for this species outside its nesting season.

Direct impacts to migratory and nesting birds, including Cooper's hawk, could result from the accidental destruction of nests through removal of disturbed land, if construction were to occur during the general bird breeding season (between January 15 and September 15). Therefore, avoidance measures are discussed below, and would prevent direct impacts to migratory and nesting birds, including Cooper's hawk.

M-BIO-3: If construction initiation occurs between January 15 and September 15, a pre-construction nesting bird and raptor survey of the project impact area shall be completed by a qualified biologist prior to vegetation removal. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). If any active nests are detected, the area will be flagged and mapped along with a buffer as recommended by the qualified biologist. The buffer area(s) established by the qualified biologist will be avoided until the nesting cycle is complete or it is determined that the nest is no longer active. The qualified biologist shall be a person familiar with bird breeding behavior and capable of identifying the bird species of San Diego County by sight and sound and determining alterations of behavior as a result of human interaction. Buffers will be based on species-appropriate buffers and/or local topography and line of sight, species behavior and tolerance to disturbance, and existing disturbance levels, as determined appropriate by the qualified biologist.

Sensitive Reptiles. Direct impacts to San Diegan legless lizard, San Diegan tiger whiptail, Coronado skink, Belding's orange-throated whiptail, and San Diegan ring-necked snake could result from vegetation clearing, grubbing, grading, and construction activities within suitable coast live oak woodland, southern willow scrub, and non-vegetated channel. Because these impacts would occur to a small amount of habitat (0.06 acre) relative to the amount of coast live oak woodland, southern willow scrub, and non-vegetated channel in the survey area, this loss is not anticipated to impact the local or regional long-term survival of these species and, therefore, would not be considered significant. In addition, mitigation for impacts to coast live oak woodland, southern willow scrub, and non-vegetated channel are anticipated to offset any impacts to these species' habitat.

Monarch. Direct impacts to the monarch butterfly could result from vegetation clearing, grubbing, grading, and construction activities within suitable coast live oak woodland. Because these impacts would occur to a small amount of habitat (13 square feet), this loss is not anticipated to impact the local or regional long-term survival of these species and, therefore, would not be considered significant. Furthermore, the project is not anticipated to result in impacts to any significant roosting or overwintering sites. Mitigation for impacts to coast live oak woodland are anticipated to offset any impacts to this species' habitat.

7.3 Jurisdictional Wetlands and Waterways

7.3.1 Direct Impacts

The proposed project would directly impact aquatic resources under the jurisdiction of USACE (waters of the U.S.), RWQCB (waters of the state), and CDFW (streambed and riparian) through vegetation removal and fill (see Figure 7).

Permanent impacts would occur to 0.01 acre of CDFW riparian which occurs as a small patch south of Los Coches Road. Temporary impacts may occur to 0.0003 acre (13 square feet) of non-wetland waters (USACE, RWQCB, and CDFW streambed) and 0.05 acre of CDFW riparian. Project impacts to potential USACE non-wetland waters of the U.S., RWQCB non-wetland state waters, and CDFW streambed entirely overlap. Impacts to jurisdictional resources would be significant and require mitigation at a ratio of 2:1 to achieve no-net-loss of jurisdictional resources (Table 4). The proposed mitigation would reduce impacts to jurisdictional resources to a level of less than significant.

M-BIO-4: The project would result in the permanent loss of the following jurisdictional resources: 0.01 acre of CDFW riparian. In order to mitigate these permanent impacts, mitigation will be in the form of either enhancement, restoration, and/or creation of habitat; deduction of credits from a County-approved mitigation area; or other off-site preservation. This is the same 0.01 acre proposed for the habitat-based mitigation described in M-BIO-1 above; however, mitigation is at a higher ratio (2:1) for permanent impacts to CDFW jurisdiction. Mitigation for proposed temporary impacts to a total of 0.0003 acre (13 square feet) of wetland waters of the U.S./CDFW streambed and an additional 0.05 acre of CDFW riparian would occur via the restoration of these temporary impact areas to their pre-impact conditions. Final detailed mitigation ratios and configuration would be determined through negotiation with USACE through the Section 404 Permit Program, the CDFW through a 1602 Streambed Alteration Agreement, and the RWQCB through a 401 State Water Quality Certification.

Table 4
Jurisdictional Resources, Impacts, and Anticipated Mitigation within the
Proposed Los Coches Low Flow Urban Runoff Diversion to Sewer Project

Jurisdictional Resources	Existing Acres (lf) ¹	Permanent Impact (acres)	Temporary Impact ² (acres or sq. ft.)	Mitigation Ratio (permanent)	Mitigation Required for Permanent Impacts (acres)
USACE Jurisdiction					
Non-wetland waters of the U.S.	0.21 ac (387 lf)	-	0.0003 ac (13 sq. ft.) ¹	2:1	-
RWQCB Jurisdiction					
Non-wetland waters of the State	0.21 ac (387 lf)	-	0.0003 ac (13 sq. ft.) ¹	2:1	-
CDFW Jurisdiction					
Streambed	0.21 ac (387 lf)	-	0.0003 ac (13 sq. ft.) ¹	2:1	-
Riparian Habitat	0.73 ac	0.01 ac	0.05 ac	2:1	0.02 ac
TOTAL MITIGATION					0.02 ac
lf = linear feet; ac = acre; sq. ft. = square feet					
¹ USACE non-wetland waters of the U.S., RWQCB non-wetland state waters, and CDFW streambed entirely overlap.					
² Areas of temporary impacts to coast live oak woodland, southern willow scrub, and non-vegetated channel would be restored to their pre-impact conditions.					

7.3.2 Indirect Impacts

Indirect impacts to adjacent jurisdictional resources may occur as a result of altered hydrology, fugitive dust, chemical and particulate pollution, and introduction of non-native plant species during construction activities. Therefore, avoidance measures are discussed below and would prevent indirect impacts to jurisdictional wetlands and waterways.

M-BIO-5: Prior to any grading, clearing, or construction activities, a qualified biologist will be retained to provide periodic biological monitoring during project construction to prevent inadvertent disturbance to potentially jurisdictional wetlands and waters. The project biologist shall verify the implementation of the following BMPs during construction:

- Prior to any grading, clearing, or construction activities, the project applicant shall install prominently colored Environmentally Sensitive Area fencing or silt fencing wherever the limits of grading are adjacent to potential jurisdictional wetlands and waters, as identified by the qualified biologist. Fencing shall remain in place during all construction activities.
- During construction, the project shall use silt fences, fiber rolls, gravel bags, and soil stabilization measures such as erosion control mats and hydroseeding as necessary and applicable.
- Staging/storage areas for construction equipment and materials will not be located in jurisdictional wetlands or waters.
- No spoils, debris, rubbish, cement, or concrete, or washing thereof, oil, or petroleum products will be stored where it may be washed by rainfall or runoff into jurisdictional waters.
- No equipment maintenance or fueling will be performed within or near jurisdictional wetlands or waters, where petroleum products or other pollutants from the equipment may enter these areas. Any equipment or vehicles driven and/or operated adjacent to a jurisdictional water will be checked and maintained by the operator daily to prevent leaks of oil or other petroleum products.
- When construction operations are completed, any excess materials or debris will be removed from the work area.

7.4 Wildlife Movement Corridors

The project is located in a developed area outside of any regional wildlife movement corridors and, therefore, is not anticipated to result in impacts to regional wildlife movement. Furthermore, the project would capture and divert dry weather flows from an existing storm drain outfall and would retain the existing culvert on-site, allowing for local wildlife movement to continue through the culvert. Therefore, impacts to wildlife movement would be less than significant and no mitigation would be required.

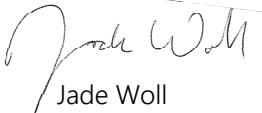
8.0 Cumulative Impacts

The proposed project's potential impacts to sensitive habitats and species would be avoided through specific design considerations or mitigated to a level of less than significant. The project would comply with resource agencies no-net-loss policy for wetlands/waters, so there would be no cumulative loss of wetlands/waters. Therefore, when considered in conjunction with past and present projects located in the vicinity of the proposed project boundary, the proposed project would not contribute to a cumulatively considerable impact.

Ms. Kimberly Jones
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July 6, 2022

If you have any questions regarding this letter report or the biological resources present on the site, please do not hesitate to contact me (jwoll@reconenvironmental.com or 619-308-9333 x117).

Sincerely,



Jade Woll
Biologist

JCW:sh

Attachments

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11.0 Attachments

1. Photographs
2. Plants Species Observed
3. Sensitive Plant Species Observed or with the Potential to Occur
4. Wildlife Species Observed
5. Sensitive Wildlife Species Occurring or with the Potential to Occur

ATTACHMENTS

ATTACHMENT 1

Photographs



PHOTOGRAPH 1
View of Coast Live Oak Woodland, Looking West



PHOTOGRAPH 2
View of Southern Willow Scrub, Looking Northwest



PHOTOGRAPH 3
View of Disturbed Southern Riparian Scrub, Looking Northeast



PHOTOGRAPH 4
View of Non-native Riparian, Looking Southeast



PHOTOGRAPH 5
View of Non-native Grassland, Looking Southeast



PHOTOGRAPH 6
View of Non-vegetated Channel, Looking East



PHOTOGRAPH 7
View of Concrete Triple Box Culvert, Looking West



PHOTOGRAPH 8
View of Eucalyptus Woodland, Looking Southwest



PHOTOGRAPH 9
View of Disturbed Habitat, Looking East



PHOTOGRAPH 10
View of Urban/Developed Land, Looking Northwest

ATTACHMENT 2

Plant Species Observed

Attachment 2
Plant Species Observed

Major Plant Group	Family	Scientific Name/Common Name	Occupied Habitat	Origin
Angiosperms: Eudicots	Anacardiaceae / Sumac or Cashew Family	<i>Schinus molle</i> / Peruvian pepper tree	UD	I
	Asteraceae / Sunflower Family	<i>Ambrosia psilostachya</i> / western ragweed	DSRS, NVC, UD, SWS	N
		<i>Artemisia californica</i> / California sagebrush	DSRS, DH, NNG	N
		<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i> / mule fat, seep-willow	DSRS, DH, NNG, SWS	N
		<i>Baccharis sarothroides</i> / broom baccharis	O, SWS, DSRS	N
		<i>Carduus pycnocephalus</i> / Italian thistle	DH, SWS, UD, DSRS	I
		<i>Cynara cardunculus</i> ssp. <i>flavescens</i> / cardoon, artichoke thistle	EW	I
		<i>Erigeron</i> [= <i>Coryza</i>] <i>canadensis</i> / horseweed	SWS, DH	N
		<i>Hedynois cretica</i> / Crete weed	UD	I
		<i>Helminthotheca</i> [= <i>Picris</i>] <i>echioides</i> / bristly ox-tongue	DSRS, SWS	I
		<i>Heterotheca grandiflora</i> / telegraph weed	UD	N
		<i>Hypochaeris glabra</i> / smooth cat's-ear	UD, DH, EW	I
		<i>Lactuca serriola</i> / prickly lettuce	DH, EW	I
		<i>Silybum marianum</i> / milk thistle	DSRS	I
		<i>Sonchus asper</i> ssp. <i>asper</i> / prickly sow thistle	UD	I
		<i>Taraxacum officinale</i> / common dandelion	EW	I
		<i>Xanthium strumarium</i> / cocklebur	DSRS, NVC, SWS	N
	Boraginaceae / Borage Family	<i>Amsinckia menziesii</i> / common fiddleneck, small-flowered fiddleneck, rancher's fireweed	DSRS	N
		<i>Eucrypta chrysanthemifolia</i> / eucrypta	SWS	N
	Brassicaceae (Cruciferae) / Mustard Family	<i>Hirschfeldia incana</i> / short-pod mustard	UD, DSRS, SWS	I

Attachment 2
Plant Species Observed

Major Plant Group	Family	Scientific Name/Common Name	Occupied Habitat	Origin
Angiosperms: Eudicots	Brassicaceae (Cruciferae) / Mustard Family	<i>Nasturtium officinale</i> [=Rorippa nasturtium-aquaticum] / water cress	NVC	N
		<i>Raphanus sativus</i> / radish	DH, DSRS	I
		<i>Sisymbrium orientale</i> / hare's-ear cabbage	EW	I
	Caprifoliaceae / Honeysuckle Family	<i>Lonicera japonica</i> / Japanese honeysuckle	UD	I
	Caryophyllaceae / Pink Family	<i>Stellaria media</i> / common chickweed	NNR	I
	Chenopodiaceae / Goosefoot Family	<i>Chenopodium murale</i> / nettle-leaf goosefoot	CLOW	I
	Cistaceae / Rock-Rose Family	<i>Cistus incanus</i> [=Cistus creticus] / purple rock-rose	O	I
	Cucurbitaceae / Gourd Family	<i>Cucurbita foetidissima</i> / buffalo gourd, calabazilla	UD	N
		<i>Marah macrocarpa</i> / wild cucumber	DH, CLOW	N
	Euphorbiaceae / Spurge Family	<i>Euphorbia peplus</i> / petty spurge	NNR	I
		<i>Ricinus communis</i> / castor bean	DSRS, DH, NVC, SWS	I
	Fabaceae (Leguminosae) / Legume Family	<i>Acacia</i> sp. / acacia	EW	I
		<i>Acmispon americanus</i> var. <i>americanus</i> [=Lotus purshianus var. <i>purshianus</i>] / Spanish-clover	UD	N
		<i>Lupinus bicolor</i> / miniature lupine	UD	N
		<i>Melilotus</i> sp. / sweetclover	DSRS, NVC	I
		<i>Parkinsonia aculeata</i> / Mexican palo verde	NVC	I
	Fagaceae / Oak Family	<i>Quercus agrifolia</i> / coast live oak, encina	CLOW, EW, DH	N
	Geraniaceae / Geranium Family	<i>Erodium cicutarium</i> / redstem filaree	UD, DH	I
		<i>Erodium moschatum</i> / greenstem filaree	UD, DH	I
	Malvaceae / Mallow Family	<i>Malva neglecta</i> / common mallow, cheeses	EW	I
	Myrsinaceae / Myrsine Family	<i>Lysimachia</i> [=Anagallis] <i>arvensis</i> / scarlet pimpernel	EW	I
	Myrtaceae / Myrtle Family	<i>Eucalyptus camaldulensis</i> / red gum, river red gum	EW	I
		<i>Eucalyptus sideroxylon</i> / red iron bark	EW	I

Attachment 2
Plant Species Observed

Major Plant Group	Family	Scientific Name/Common Name	Occupied Habitat	Origin
Angiosperms: Eudicots	Myrtaceae / Myrtle Family	<i>Eucalyptus</i> sp. / gum tree	O, EW, DSRS, SWS	I
	Nyctaginaceae / Four O'clock Family	<i>Bougainvillea</i> sp. / bougainvillea	UD	I
	Onagraceae / Evening-Primrose Family	<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i> / willow herb	NVC	N
	Polygonaceae / Buckwheat Family	<i>Eriogonum fasciculatum</i> / California buckwheat	NNG, DH, UD	N
	Rubiaceae / Madder Family	<i>Galium aparine</i> / goose grass, stickywilly	CLOW, NNR, NVC	N
	Salicaceae / Willow Family	<i>Populus fremontii</i> ssp. <i>fremontii</i> / Fremont cottonwood, alamo	NVC, DSRS, NNR	N
		<i>Salix gooddingii</i> / Goodding's black willow	SWS	N
		<i>Salix laevigata</i> / red willow	SWS, DSRS, NNR	N
	Vitaceae / Grape Family	<i>Vitis girdiana</i> / desert wild grape	NNR	N
Angiosperms: Monocots	Araceae / Arum Family	<i>Zantedeschia aethiopica</i> / calla-lily	NVC	I
	Arecaceae / Palm Family	<i>Washingtonia robusta</i> / Mexican fan palm	NNR	I
	Cyperaceae / Sedge Family	<i>Cyperus eragrostis</i> / tall flatsedge	NNR, SWS	N
	Poaceae (Gramineae) / Grass Family	<i>Arundo donax</i> / giant reed	NVC	I
		<i>Avena</i> sp. / oats	NVC, UD, NNG	I
		<i>Bromus diandrus</i> / ripgut grass	UD, DH, NNG, DSRS, NVC, CLOW, SWS	I
		<i>Bromus rubens</i> [= <i>Bromus madritensis</i> ssp. <i>rubens</i>] / red brome	UD, DSRS, EW, CLOW, SWS	I
		<i>Cynodon dactylon</i> / Bermuda grass	UD	I
		<i>Ehrharta erecta</i> / panic veldt grass	NNR, EW	I
		<i>Ehrharta longiflora</i> / long-flowered veldt grass, annual veldt grass	DH, DSRS, NVC, EW, SWS	I

Attachment 2
Plant Species Observed

Major Plant Group	Family	Scientific Name/Common Name	Occupied Habitat	Origin
Angiosperms: Monocots	Poaceae (Gramineae) / Grass Family	<i>Festuca</i> [= <i>Vulpia</i>] <i>myuros</i> / rattail sixweeks grass	UD, DH,EW	I
		<i>Festuca perennis</i> [= <i>Lolium multiflorum</i> and <i>Lolium perenne</i>] / rye grass	NVC, DH	I
		<i>Hordeum murinum</i> / wall barley	UD, NVC, DH	I
		<i>Lamarckia aurea</i> / golden-top	DH	I
		<i>Schismus barbatus</i> / Mediterranean schismus	UD	I
		<i>Stipa miliacea</i> var. <i>miliacea</i> [= <i>Piptatherum miliaceum</i> ssp. <i>miliaceum</i> and <i>Oryzopsis miliacea</i>] / smilo grass	NNR	I
Conifers	Pinaceae / Pine Family	<i>Pinus canariensis</i> / Canary Island pine	CLOW	I
		<i>Pinus halepensis</i> / Aleppo pine	EW	I
		<i>Pinus</i> sp. / pine	O	N/I

NOTE: Scientific and common names were primarily derived from Jepson eFlora (Jepson Flora Project 2020). In instances where common names were not provided in this resource, common names were obtained from Rebman and Simpson (2014). Additional common names were obtained from the USDA maintained database (USDA 2021) or the *Sunset Western Garden Book* (Brenzel 2001), the Integrated Taxonomic Information System database (ITIS 2022), the Plant Finder (Missouri Botanical Garden 2022), or SelecTree (Urban Forest Ecosystems Institute at Cal Poly 2022) for ornamental/horticultural plants. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2022a.

ORIGIN

N =Native to locality.

I = Introduced species from outside locality.

HABITATS

CLOW= Coast Live Oak Woodland

SWS= Southern Willow Scrub

DSRS= Disturbed Southern Riparian Scrub

DH= Disturbed Habitat

EW= Eucalyptus Woodland

NNG = Non-native grassland

UD= Urban/Developed

O= Ornamental Vegetation

NNR= Non-native Riparian

NVC= Non-vegetated Channel

ATTACHMENT 3

Sensitive Plant Species Observed
or with the Potential to Occur

Attachment 3
Sensitive Plant Species Observed or with the Potential to Occur

Major Plant Group	Family	Scientific Name/Common Name	Federal Status	State Status	CNPS Rare Plant Rank	County of San Diego	Habitat Preference/Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Angiosperms: Eudicots	Asteraceae / Sunflower Family	<i>Ericameria palmeri</i> var. <i>palmeri</i> / Palmer's goldenbush			1B.1	SCMSCP, NE, List B	Perennial evergreen shrub; chaparral coastal sage scrub, typically in mesic areas; blooms July–November; elevation less than 2,000 feet. Known in California from sixteen occurrences all of which are in San Diego County. Additional populations in Baja California, Mexico.	U	This species is unlikely to occur due to the lack of chaparral coastal sage scrub. This perennial evergreen shrub likely would have been detected if present. This species has been known to occur within a 1-mile buffer of the survey area CDFW 2022a.
		<i>Isocoma menziesii</i> var. <i>decumbens</i> / decumbent goldenbush			1B.2	List A	Perennial shrub; chaparral, coastal sage scrub; sandy soils, often in disturbed areas; blooms April–November; elevation less than 500 feet.	L	This species has a low potential to occur. This perennial shrub likely would have been detected if present. This species has been known to occur within a 1-mile buffer of the survey area CDFW 2022a.

NOTE: Scientific and common names were primarily derived from Jepson eFlora (Jepson Flora Project 2020). In instances where common names were not provided in this resource, common names were obtained from Rebman and Simpson (2014). Additional common names were obtained from the USDA maintained database (USDA 2021) or the *Sunset Western Garden Book* (Brenzel 2001), the Integrated Taxonomic Information System database (ITIS 2022), the Plant Finder (Missouri Botanical Garden 2022), or SelecTree (Urban Forest Ecosystems Institute at Cal Poly 2022) for ornamental/horticultural plants. Common names denoted with * are from County of San Diego 2010 and ** are from Western Riverside County Regional Conservation Authority 2003. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2022a.

STATUS CODES

POTENTIAL TO OCCUR ON-SITE

California Native Plant Society (CNPS): California Rare Plant Ranks (CRPR)

L = Low

1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.

U = Unexpected

0.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).

County of San Diego

SCMSCP = Multiple Species Conservation Program County of San Diego Subarea Plan (South County Plan) covered species.

NE = Narrow Endemic species that have limited distributions in the region and require focused evaluations during project review.

List A = Plants rare, threatened or endangered in California and elsewhere.

List B = Plants rare, threatened or endangered in California but more common elsewhere.

ATTACHMENT 4

Wildlife Species Observed

Attachment 4
Wildlife Species Observed

Major Wildlife Group	Family	Scientific Name / Common Name	Origin	Occupied Habitat	Evidence of Occurrence
Invertebrates	Pieridae / Whites & Sulphurs	<i>Anthocharis sara sara</i> / Pacific Sara orangetip	N	CLOW	O
		<i>Pieris rapae</i> / cabbage white	I	CLOW	O
	Nymphalidae / Brush-footed Butterflies	<i>Danaus plexippus</i> / monarch	N	CLOW	O
		<i>Vanessa atalanta rubria</i> / red admiral	N	CLOW	O
Amphibians	Hylidae / Tree Frogs	<i>Pseudacris hypochondriaca</i> / Baja California treefrog	N	NVC	H
Reptiles	Phrynosomatidae / Spiny Lizards	<i>Sceloporus occidentalis longipes</i> / Great Basin fence lizard	N	UD, CLOW, DSRS	O
		<i>Uta stansburiana elegans</i> / western side-blotched lizard	N	UD, CLOW	O
	Teiidae / Whiptail Lizards	<i>Aspidoscelis hyperythra beldingi</i> [= <i>Cnemidophorus hyperythrus</i>] / Belding's orange-throated whiptail	N	UD, NVC	O
Birds	Odontophoridae / New World Quail	<i>Callipepla californica</i> / California quail	N	DSRS	O
	Accipitridae / Hawks, Kites, & Eagles	<i>Buteo jamaicensis</i> / red-tailed hawk	N	FO	FO
	Columbidae / Pigeons & Doves	<i>Zenaida macroura</i> / mourning dove	N	FO	FO
	Trochilidae / Hummingbirds	<i>Calypte anna</i> / Anna's hummingbird	N	SWS	O
	Picidae / Woodpeckers & Sapsuckers	<i>Melanerpes formicivorus</i> / acorn woodpecker	N	SWS, CLOW	O
	Tyrannidae / Tyrant Flycatchers	<i>Empidonax difficilis</i> / Pacific-slope flycatcher	N	SWS	H
		<i>Sayornis nigricans</i> / black phoebe	N	UD	O
		<i>Tyrannus vociferans</i> / Cassin's kingbird	N	SWS	H
	Vireonidae / Vireos	<i>Vireo bellii pusillus</i> / least Bell's vireo	N	SWS	H
	Corvidae / Crows, Jays, & Magpies	<i>Corvus brachyrhynchos</i> / American crow	N	FO	FO
		<i>Corvus corax</i> / common raven	N	FO	FO
	Troglodytidae / Wrens	<i>Thryomanes bewickii</i> / Bewick's wren	N	SWS	H
	Sylviidae / Babblers	<i>Chamaea fasciata</i> / wrentit	N	SWS	H
	Mimidae / Mockingbirds & Thrashers	<i>Mimus polyglottos</i> / northern mockingbird	N	SWS	O
	Parulidae / Wood Warblers	<i>Setophaga</i> [= <i>Dendroica</i>] <i>coronata</i> / yellow-rumped warbler	N	SWS	O
	Passerellidae / New World Passerines	<i>Melospiza melodia</i> / song sparrow	N	DSRS	O
		<i>Pipilo maculatus</i> / spotted towhee	N	DSRS	H
		<i>Zonotrichia leucophrys</i> / white-crowned sparrow	N	SWS,	H

**Attachment 4
Wildlife Species Observed**

Major Wildlife Group	Family	Scientific Name / Common Name	Origin	Occupied Habitat	Evidence of Occurrence
Birds	Fringillidae / Finches	<i>Haemorhous</i> [= <i>Carpodacus</i>] <i>mexicanus</i> / house finch	N	UD, SWS, CLOW	H
		<i>Spinus</i> [= <i>Carduelis</i>] <i>psaltria</i> / lesser goldfinch	N	SWS	H
Mammals	Leporidae / Rabbits & Hares	<i>Sylvilagus audubonii</i> / desert cottontail	N	DSRS	O
	Sciuridae / Squirrels & Chipmunks	<i>Otopermophilus</i> [= <i>Spermophilus</i>] <i>beecheyi</i> / California ground squirrel	N	CLOW, DSRS	H

NOTE: Zoological nomenclature for invertebrates is in accordance with the NatureServe 2021 and Evans 2008; for fish with NatureServe 2021; for reptiles and amphibians with Crother et. al (2017); for birds with Chesser et al. 2021; for mammals with Bradley et al. (2014), American Society of Mammalogists 2021. Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for species follows Eriksen and Belk 1999, Nature Festivals of San Diego County 2002, Evans 2008, Page et al. 2013, Jennings and Hayes 1994, Unitt 2004, Tremor et. al. 2017, Western Bat Working Group 2017, and Harvey et. al 2011. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2022a.

ORIGIN

N =Native to locality.

I = Introduced species from outside locality.

EVIDENCE OF OCCURRENCE

FO = Fly Over

H = Heard

O = Observed

HABITATS

CLOW= Coast Live Oak Woodland

SWS= Southern Willow Scrub

DSRS= Disturbed Southern Riparian Scrub

UD= Urban/Developed

ATTACHMENT 5

Sensitive Wildlife Species Occurring
or with the Potential to Occur

Attachment 5
Sensitive Wildlife Species Occurring or with the Potential to Occur

Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	County of San Diego	Habitat Preference / Requirements	Potential to Occur On-Site (Observed or L/M/H/U)	Basis for Determination of Occurrence Potential
Invertebrates	Nymphalidae / Brush-footed Butterflies	<i>Danaus plexippus</i> / monarch	FC		Group 2	Wide variety of habitats, including urban areas. Host plant is milkweed (<i>Asclepias</i> sp.).	Observed	This species was observed on-site within the coast live oak woodland.
Amphibians	Pelobatidae / Spadefoot Toads	<i>Spea hammondi</i> / western spadefoot		SSC	Group 2	Vernal pools, floodplains, and alkali flats within areas of open vegetation.	L	This species has a low potential to occur due to the lack of vernal pool and alkali flat habitat. Although an intermittent creek occurs within the survey area, the species requires ponded water. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
Reptiles	Phrynosomatidae / Spiny Lizards	<i>Phrynosoma blainvillii</i> [= <i>P. coronatum</i> coastal population], <i>Phrynosoma coronatum blainvillei</i> / Blainville's horned lizard, coast horned lizard, San Diego horned lizard		SSC	SCMSCP, Group 2	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.	U	This species is unexpected to occur due to the lack of chaparral and coastal sage scrub. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Scincidae / Skinks	<i>Plestiodon</i> [= <i>Eumeces</i>] <i>skiltonianus interparietalis</i> / Coronado skink		WL	Group 2	Grasslands, open woodlands and forest, broken chaparral. Rocky habitats near streams.	M	This species has a moderate potential to occur due to the presence of grasslands, open woodlands and forest. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Teiidae / Whiptail Lizards	<i>Aspidoscelis hyperythra beldingi</i> [= <i>Cnemidophorus hyperythrus</i>] / Belding's orange-throated whiptail		WL	SCMSCP, Group 2	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	Observed	This species was observed on-site adjacent to Via Diego, within the urban/developed land and the non-vegetated channel.

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Reptiles	Teiidae / Whiptail Lizards	<i>Aspidoscelis tigris stejnegeri</i> / San Diegan tiger whiptail		SSC	Group 2	Coastal sage scrub, chaparral, woodlands, and streamsides where plants are sparsely distributed.	M	This species has a moderate potential to occur due to the presence of streamsides where plants are sparsely distributed. This species has been known to occur within a 1-mile buffer of the survey area (County of San Diego 2022).
	Anniellidae / Legless Lizards	<i>Anniella stebbinsi</i> [=Anniella pulchra] / San Diegan [=silvery] legless lizard		SSC	Group 2	Herbaceous layers with loose soil in coastal scrub, chaparral, and open riparian. Prefers dunes and sandy washes near moist soil.	M	This species has a moderate potential to occur due to the presence of herbaceous layers with loose soil in open riparian areas. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Colubridae / Colubrid Snakes	<i>Arizona elegans occidentalis</i> / California glossy snake		SSC		Scrub and grassland habitats, often with loose or sandy soils.	L	This species has a low potential to occur due to the lack of scrub and grassland habitats. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
		<i>Diadophis punctatus similis</i> / San Diego ring-necked snake			Group 2	Rocky areas in wet locales, such as swamps, damp forests, or riparian woodlands.	M	This species has a moderate potential to occur due to the presence of rocky areas in wet locales, such as riparian woodlands. This species has been known to occur within a 1-mile buffer of the survey area (County of San Diego 2022).
		<i>Salvadora hexalepis virgultea</i> / coast patch-nosed snake		SSC	Group 2	Grasslands, chaparral, sagebrush, desert scrub. Found in semi-arid brushy areas.	U	This species is unlikely to occur due to the lack of chaparral, sagebrush, and desert scrub. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).

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Reptiles	Colubridae / Colubrid Snakes	<i>Thamnophis hammondi</i> / two-striped gartersnake		SSC	Group 1	Permanent freshwater streams with rocky bottoms. Mesic areas.	L	This species has a low potential to occur due to the lack of permanent freshwater streams with rocky bottoms. This species has been known to occur within a 1-mile buffer of the survey area (County of San Diego 2022).
	Ardeidae / Herons & Bitterns	<i>Ardea herodias</i> / great blue heron			Group 2	Bays, lagoons, ponds, lakes. Non-breeding year-round visitor, some localized breeding.	L	This species has a low potential to occur due to the lack of bays, lagoons, ponds, and lakes. This species has been known to occur within a 1-mile buffer of the survey area (County of San Diego 2022).
Birds	Accipitridae / Hawks, Kites, & Eagles	<i>Accipiter cooperii</i> / Cooper's hawk		WL	SCMSCP, Group 1	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas.	M	This species has a moderate potential to occur due to the presence of mature trees and adjacency to residential areas. The species has a moderate potential to nest within the eucalyptus woodland.
		<i>Accipiter striatus</i> / sharp-shinned hawk		WL	Group 1	Open deciduous woodlands, forests, edges, parks, residential areas. Migrant and winter visitor.	L (forage) U (nest)	This species has low potential to forage within the survey area during the fall/winter months. It is not expected to nest within the survey area. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Vireonidae / Vireos	<i>Vireo bellii pusillus</i> / least Bell's vireo	FE	SCE	SCMSCP, NE, Group 1	Willow riparian woodlands. Summer resident.	Detected	This species was detected within the southern willow scrub.

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Birds	Troglodytidae / Wrens	<i>Campylorhynchus brunneicapillus sandiegensis</i> / coastal cactus wren		SSC	SCMSCP, NE, Group 1	Maritime succulent scrub, coastal sage scrub with Opuntia thickets. Rare localized resident.	U	This species is unlikely to occur due to the lack of maritime succulent scrub and coastal sage scrub with cactus thickets. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Poliopitilidae / Gnatcatchers	<i>Poliopitila californica californica</i> / coastal California gnatcatcher	FT	SSC	SCMSCP, Group 1	Coastal sage scrub, maritime succulent scrub. Resident.	U	This species is unlikely to occur due to the lack of coastal sage scrub and maritime succulent scrub. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Passerellidae / New World Passerines	<i>Aimophila ruficeps canescens</i> / southern California rufous-crowned sparrow		WL	SCMSCP, Group 1	Coastal sage scrub, chaparral, grassland. Resident.	U	This species is unlikely to occur due to the lack of coastal sage scrub and chaparral habitat. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
Mammals	Vespertilionidae / Vesper Bats	<i>Antrozous pallidus</i> / pallid bat		SSC	Group 2	Arid deserts and grasslands. Day and night roosts in rock crevices in outcrops and cliffs, caves, mines, trees, bridges, and other human structures. Roosts tend to be warm and elevated. Forage for large-bodied arthropods over open shrublands, grasslands, and orchards.	U	This species unlikely to occur due to the lack of arid deserts. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).

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Mammals	Vespertilionidae / Vesper Bats	<i>Lasiurus xanthinus</i> / western yellow bat		SSC		Active year-round. Roosts in the foliage of trees in arid habitats, particularly in native and exotic palm trees. Forage for a variety of flying insects over streams and ponds. Ranges from southern California and Arizona into western Mexico.	L (foraging and roosting)	This species has low potential to roost or forage on-site. The fan palms of the non-native riparian may provide marginally suitable roost sites. However, this species is considered uncommon in San Diego county. It is historically a desert species. While it is increasingly found west of the mountains due to use of fan palms in landscaping, most observations are from the foothills, with very few in the urban areas. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
		<i>Myotis yumanensis</i> / Yuma myotis			Group 2	It is found in a wide variety of upland and lowland habitats, including riparian, desert scrub, moist woodlands, and forests, usually near open water.	L (foraging and roosting)	This species has a low potential to roost or forage on-site. Although the survey area contains riparian habitat it lacks a permanent water source. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Molossidae / Free-tailed Bats	<i>Nyctinomops macrotis</i> / big free-tailed bat		SSC	Group 2	Ranges from South America up into the southwestern United States. Primarily a winter migrant to San Diego County. Maternity colonies are formed in June, when the species mainly out of our range. Roosts in crevices in vertical cliffs in scrub, riparian, and forest habitats. Feeds on moths (Tremor et al. 2017).	L (foraging and roosting)	This species has a low potential to roost or forage on-site. occur due to the presence of suitable roosting and foraging habitat. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).

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Mammals	Leporidae / Rabbits & Hares	<i>Lepus californicus bennettii</i> / San Diego black-tailed jackrabbit		SSC	Group 2	Open areas of scrub, grasslands, agricul-tural fields.	L	This species has a low potential to occur due to the lack of open areas of scrub and agricul-tural fields. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Mustelidae / Weasels, Otters, & Badgers	<i>Taxidea taxus</i> / American badger		SSC	SCMSCP, Group 2	Grasslands, Sonoran desert scrub.	U	This species unlikely to occur due to the lack of Sonoran desert scrub. This species has been known to occur within a 1-mile buffer of the survey area (CDFW 2022a).
	Felidae / Cats	<i>Puma</i> [=Felis] <i>concolor</i> / mountain lion		SCT	SCMSCP, Group 2	Many habitats.	L	This species is not expected to occur as it prefers open space habitat that is not immediately surrounded by residential development. This species has been known to occur within a 1-mile buffer of the survey area (County of San Diego 2022).

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I= Introduced species

NOTE: Zoological nomenclature for invertebrates is in accordance with the NatureServe 2021 and Evans 2008; for fish with NatureServe 2021; for reptiles and amphibians with Crother et. al (2017); for birds with Chesser et al. 2021; for mammals with Bradley et al. (2014), American Society of Mammalogists 2021. Determination of the potential occurrence for listed, sensitive, or noteworthy species is based upon known ranges and habitat preferences for species follows Eriksen and Belk 1999, Nature Festivals of San Diego County 2002, Evans 2008, Page et al. 2013, Jennings and Hayes 1994, Unitt 2004, Tremor et. al. 2017, Western Bat Working Group 2017, and Harvey et. al 2011. Federal and state listing status is based on California Department of Fish and Wildlife, Natural Diversity Database (CDFW) 2022a.

STATUS CODES

Federal Status

FE = Listed as endangered by the federal government

FT = Listed as threatened by the federal government

FC = Federal candidate for listing (taxa for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support proposals to list as endangered or threatened; development and publication of proposed rules for these taxa are anticipated)

State Status

SCE = State candidate for listing as Endangered

SCT = State candidate for listing as Threatened

SSC = California Department of Fish and Wildlife species of special concern

WL = California Department of Fish and Wildlife watch list species

County of San Diego

SCMSCP = Multiple Species Conservation Program County of San Diego Subarea Plan (South County Plan) covered species

NE = Narrow Endemic species that have limited distributions in the region and require focused evaluations during project review

Group 1 = County wildlife species with a very high level of sensitivity, either because they are listed as threatened or endangered or because they have very specific natural history requirements that must be met

Group 2 = County wildlife species that are becoming less common, but are not yet so rare that extirpation or extinction is imminent without immediate action

POTENTIAL TO OCCUR ON-SITE

L = Low

M = Medium

U = Unexpected