



Grantville Trolley Station/Alvarado Creek Enhancement Project

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A handwritten signature in black ink, appearing to read "B Parker". The signature is fluid and cursive, with the first name "B" and last name "Parker" clearly distinguishable.

Brian Parker, Associate Project Manager

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Acronyms

| | |
|-------|---|
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CWA | Clean Water Act |
| ESL | Environmentally Sensitive Lands Regulations |
| MBTA | Migratory Bird Treaty Act |
| MHPA | Multi-Habitat Planning Area |
| MSCP | Multiple Species Conservation Program |
| RWQCB | Regional Water Quality Control Board |
| USACE | U.S. Army Corps of Engineers |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | United States Geological Survey |
| WBWG | Western Bat Working Group |

1.0 Summary

The Grantville Trolley Station/Alvarado Creek Enhancement Project is a part of a grant-funded effort to revitalize the community of City of San Diego's Grantville community. It is designed to address flooding, storm water, and water quality issues; improve access to the Grantville Trolley Station and Alvarado Creek; enhance the creek as a public amenity; foster transit-oriented development; and explore concepts for parks along and adjacent to the creek. This report presents the results of a general biological survey, describes biological resources observed, and discusses potential biological constraints to development within the project area.

A total of 11 vegetation communities were mapped within the 102.26-acre project area: southern willow scrub, freshwater marsh, non-native riparian, arundo-dominated riparian, disturbed wetland, Diegan coastal sage scrub, non-native grassland, eucalyptus woodland, non-native woodland, disturbed land, and urban/developed land. Of these, seven are considered sensitive: southern willow scrub (wetland), freshwater marsh (wetland), non-native riparian (wetland), arundo-dominated riparian (wetland), disturbed wetland (wetland), Diegan coastal sage scrub (Tier II habitat), and non-native grassland (Tier III-B habitat).

A total of 98 plant species were identified within the project area, including 40 native and 58 non-native plant species. One of these plant species, singlewhorl burrobush (*Ambrosia monogyra*), is considered sensitive. Singlewhorl burrobush is identified as a California Native Plant Society California Rare Plant Rank 2B.2 species, defined as considered rare within California but is more common elsewhere. An additional 29 sensitive plant species were assessed for potential to occur in the project area. Three of these were determined to have moderate potential to occur: San Diego marsh-elder (*Iva hayesiana*), California adolphia (*Adolphia californica*), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*). None of these four species observed or with moderate potential to occur is state or federally listed or a City of San Diego Multiple Species Conservation Program (MSCP) covered species.

Fourteen animal species were identified during the biological survey, none of which is considered sensitive. Twenty sensitive animal species were assessed for potential to occur within the planning area. Seven sensitive species were determined to have moderate potential to occur: Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), red-diamond rattlesnake (*Crotalus ruber*), least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Polioptila californica californica*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), western mastiff bat (*Eumops perotis californicus*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Of these, least Bell's vireo is federally and state-listed as endangered, and coastal California gnatcatcher is federally listed as threatened and a California Department of Fish and Wildlife (CDFW) species of concern.

A formal jurisdictional delineation was not conducted; however this report presents a conservative estimate of potential jurisdictional wetlands and waters within the project area. There are approximately 3.17 acres potentially under the jurisdiction of United States Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) within the project area, including 1.92 acre of wetlands (0.81 acre of southern willow scrub, 0.03 acre of freshwater marsh, 0.16 acre of non-native riparian, and 0.92 acre of arundo-dominated riparian) and 1.25 acre of non-wetland waters. There are approximately 3.25 acres of potential CDFW and City of San Diego wetlands and waters within the survey area, including 2.00 acres of riparian (0.81 acre of southern willow scrub, 0.03 acre of freshwater marsh, 0.16 acre of non-native riparian, and 1.00 acre of arundo-dominated riparian) and 1.25 acres of streambed.

Any project impacts to sensitive vegetation communities would be considered significant and mitigated in accordance with the MSCP and the City's Biology Guidelines (City of San Diego 1997, 2012). According to these guidelines, typical mitigation ratios would be 2:1 for wetland/riparian vegetation communities and Diegan coastal sage scrub, 1:1–2:1 for disturbed wetland and streambeds and 0.5:1 for non-native grassland. During the permitting process for impacts to jurisdictional wetlands, USACE, RWQCB, and CDFW may require a higher mitigation ratio of 3:1 for jurisdictional water resources, including a minimum 1:1 ratio of habitat creation.

Project impacts to singlewhorl burrobush and to San Diego marsh-elder, California adolphia, and southwestern spiny rush, if present, would be mitigated through the habitat preservation required for sensitive vegetation communities mitigation described above.

Project impacts to individuals or occupied habitat of Belding's orange-throated whiptail, red-diamond rattlesnake, southern California rufous-crowned sparrow, or San Diego black-tailed jackrabbit would be mitigated through the habitat preservation required for impacted sensitive vegetation communities. Similarly, impacts to potential western mastiff bat foraging habitat would be mitigated with habitat preservation.

Protocol surveys for least Bell's vireo would be required during the California Environmental Quality Act (CEQA) review process for any project that would occur within or near southern willow scrub habitat within the project area. Mitigation measures for projects that might impact this species may include the following measures:

- Construction must be initiated outside the least Bell's vireo breeding season (March 15 to September 15);
- Construction noise adjacent to occupied habitat may be required to be monitored, and noise abatement measures may be required; and
- Monitoring and controlling of the brown-headed cowbird, as required per MSCP Conditions for Coverage.

Potential impacts to coastal California gnatcatcher may require avoidance and mitigation measures. Because the entire project area lies outside the Multi-Habitat Planning Area (MHPA), protocol surveys would likely not be required; however, projects that may impact the species would be required to time vegetation clearing to occur outside the breeding

season (March 1 to August 15). Mitigation for loss of suitable or occupied habitat is generally offset with the habitat-based mitigation described above.

2.0 Introduction

2.1 Project Location

The Grantville Trolley Station/Alvarado Creek Enhancement project (project) is located in the community of Grantville, in the City of San Diego (Figure 1). It is situated within the Mission San Diego Land Grant on the United States Geological Survey (USGS) 7.5-minute La Mesa quadrangle (USGS 1994). The project area is generally bounded by Mission Gorge Road in the west, Waring Road in the East, Interstate 8 in the south, and the residential neighborhoods along Twain Avenue and Elsa Road in the north (Figures 2, 3, and 4).

2.2 Project Description

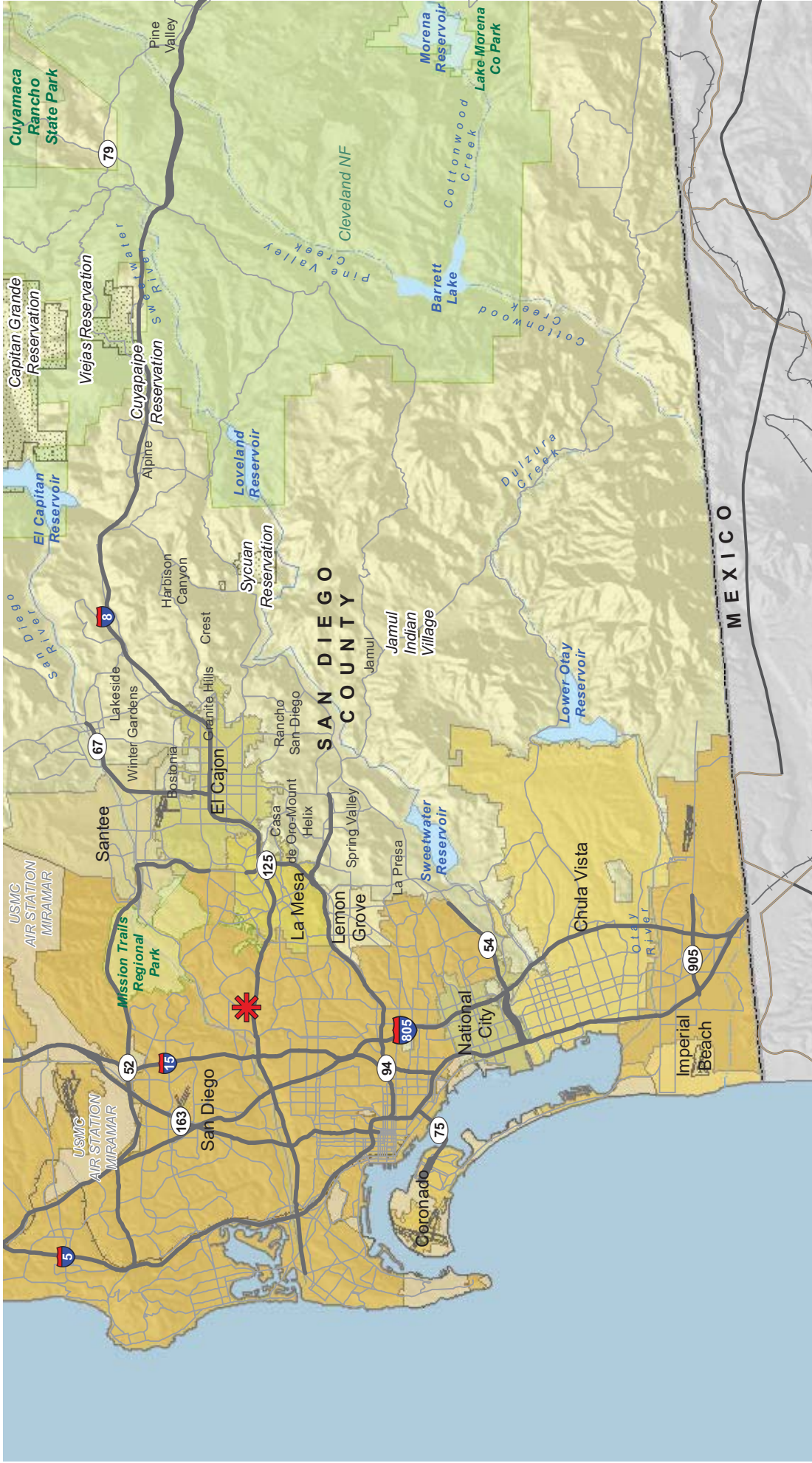
The Grantville Trolley Station/Alvarado Creek Enhancement Project is a critical element to the revitalization of the community of Grantville. This revitalization was primed by the recently completed Grantville Focused Plan Amendment to the Navajo Community Plan. The Focused Plan Amendment allows for a mix of land uses and provides supplemental design regulations that promote transit-oriented development in Grantville, an area currently developed with a mix of mostly older commercial and industrial buildings.

Alvarado Creek, which runs east to west through the project area and adjacent to the Grantville Trolley Station (see Figure 4), is a transit barrier and its realignment is central to Grantville's revitalization. Portions of Alvarado Creek are conveyed in a concrete-lined channel, an underground culvert, and a semi-natural channel. During storm events, the creek corridor and adjacent properties often flood, causing damage to businesses and transportation facilities. Alvarado Creek also does not offer a usable public amenity, and it presents a barrier to those accessing the Grantville Trolley Station from the northern reaches of the project area.

The primary objectives of this grant-funded project are:

- Address flooding, storm water, and water quality issues;
- Increase access to the Grantville Trolley Station and Alvarado Creek;
- Enhance Alvarado Creek as an amenity that includes pedestrian/bicycle trails;
- Foster transit-oriented development adjacent to the Grantville Trolley Station; and
- Explore concepts for parks along and adjacent to the creek.

**Figure 1:
Regional Location**



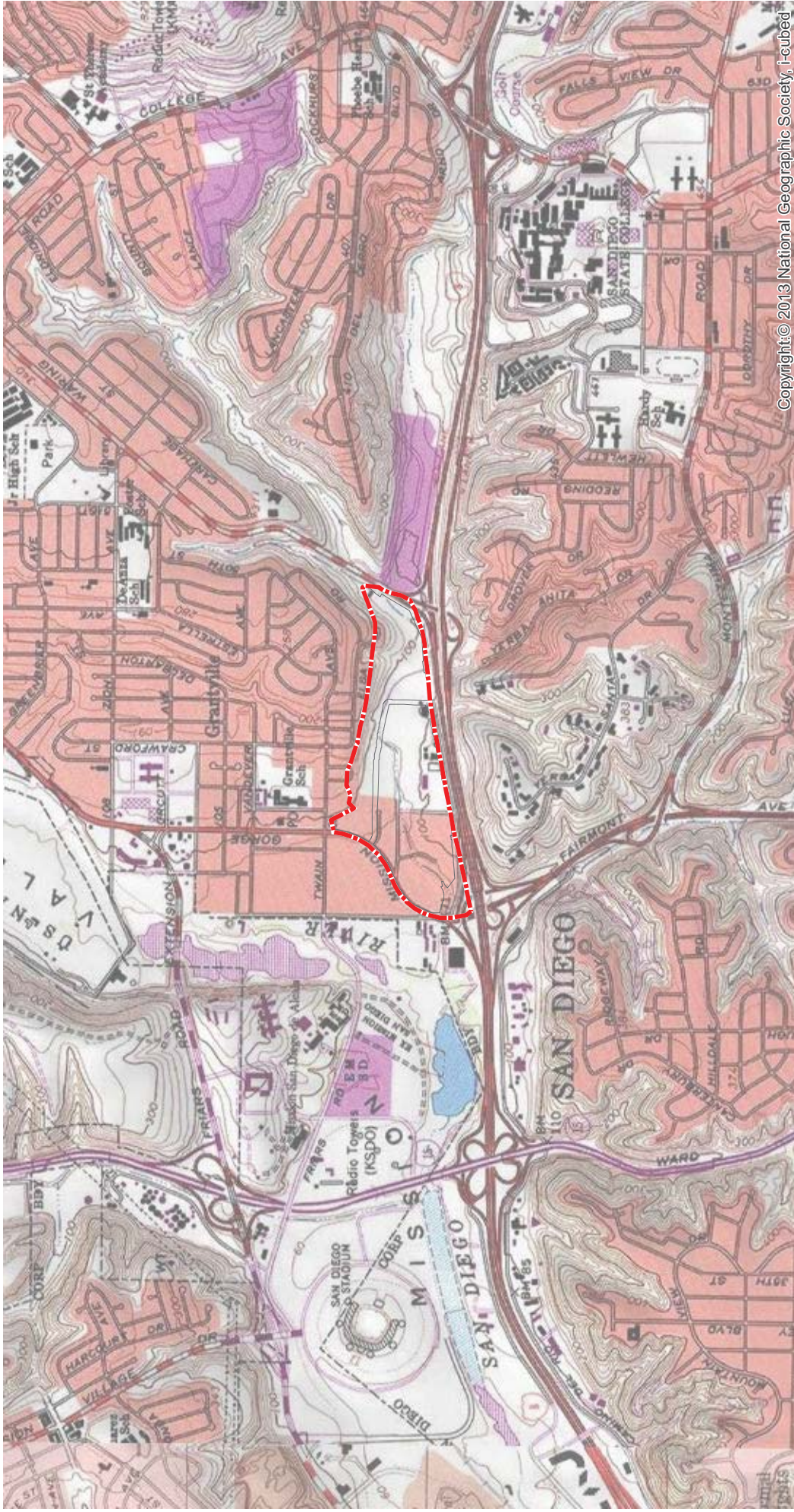
*** Project Location**



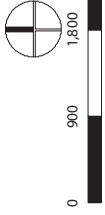
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**Figure 2:
Project Location on USGS Map**



 Alvarado Creek/
Grantville Planning Area



Data Source: City of San Diego, 2016; SANGIS/SANDAG
Regional GIS Data Warehouse, 2016. (www.sangis.org)
Dyett & Bhatia, 2016

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Figure 3:

Project Location on City 800' Map



Map Source: City of San Diego, Engineering and Development Department, City 800' Maps, Number 218-1737

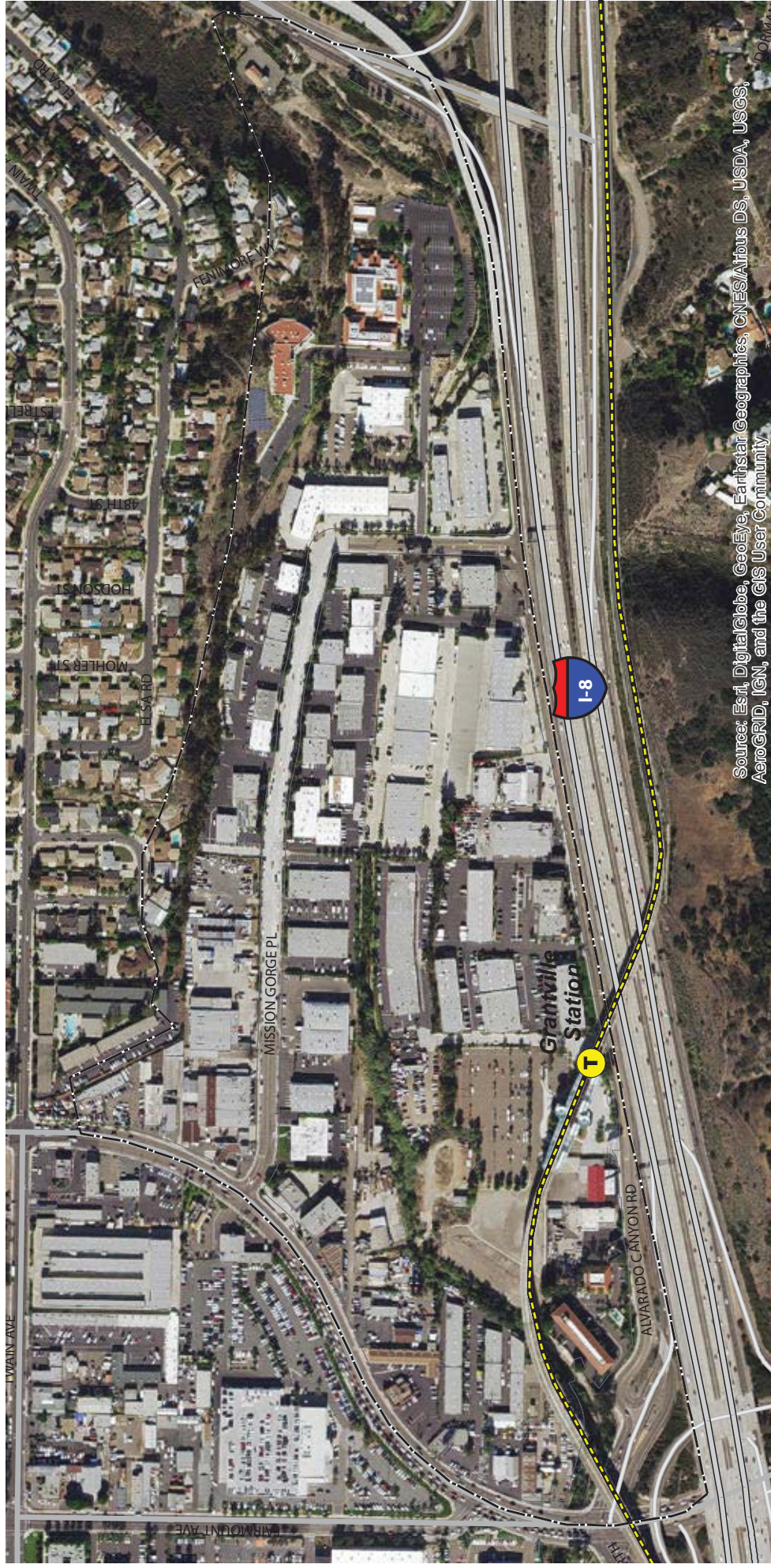
Alvarado Creek/
Grantville Planning Area



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**Figure 4:
Project Location on Aerial Photograph**



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3.0 Survey Methods

RECON biologists Brian Parker and J.R. Sundberg conducted a general biological survey of the approximately 102-acre project area on August 19, 2016. The project area is predominantly developed, so the survey focused on areas along Alvarado Creek and the undeveloped land within the Mission Valley Church of the Nazarene (Nazarene Church) property in the eastern portion of the project area (see Figure 4) and on the slopes in the northern portion of the project area. Much of the project area occurs within private property, with only limited access. In cases where no access was possible, biologists used binoculars from accessible areas, as well as interpretation of recent aerial imagery to identify plant species and vegetation communities present in inaccessible areas.

Vegetation communities were mapped according to City guidelines (City of San Diego 2012), with vegetation community classifications identified according to Holland (1986) and Oberbauer (2008).

Plants were identified by visual observation, and nomenclature for common native plants follows Hickman (1993) as updated by the Jepson Online Interchange (Jepson Flora Project 2016). Nomenclature for ornamental plants follows Brenzel (2001) and for sensitive plants follows the State of California Special Vascular Plants, Bryophytes, and Lichens List (2016a).

In addition to conducting on-site biological surveys, RECON conducted a review of the California Natural Diversity Database (CNDDDB; State of California 2016b), the All Species Occurrences GIS Database (U.S. Fish and Wildlife Service [USFWS] 2016), and the California Native Plant Society (CNPS) online inventory (CNPS 2016) for records of sensitive plant and animal species reported within two miles of the project area.

Determination of the potential occurrence for listed and sensitive species is based upon the site visits by RECON biologists as well as known ranges and habitat preferences for the species (Jennings and Hayes 1994; Unitt 2004; State of California 2016a, 2016c–d; CNPS 2016; Reiser 2001); existing topography and soils within the survey area (U.S. Department of Agriculture 1973); and species occurrence records from the CNDDDB (State of California 2016b) and the All Species Occurrences Database (USFWS 2016).

Animal species were identified by calls, tracks, scat, nests, or other sign. The ability to identify wildlife species was limited by seasonal and temporal factors. Nocturnal animals were not observed directly, as the survey was performed during the day. In addition, seasonally migratory species that are present within the area only at specified periods outside survey timing may not have been detected. Zoological nomenclature follows the American Ornithologists' Union checklist (2015) and Unitt (2004) for birds; Baker et al. (2003) for mammals; Crother et al. (2009) for amphibians and reptiles; and Opler and Wright (1999) and Evans (2007) for invertebrates.

A formal jurisdictional wetland delineation was not performed; however this report assesses potential jurisdictional features within the project area.

4.0 Existing Conditions

4.1 Topography and Soils

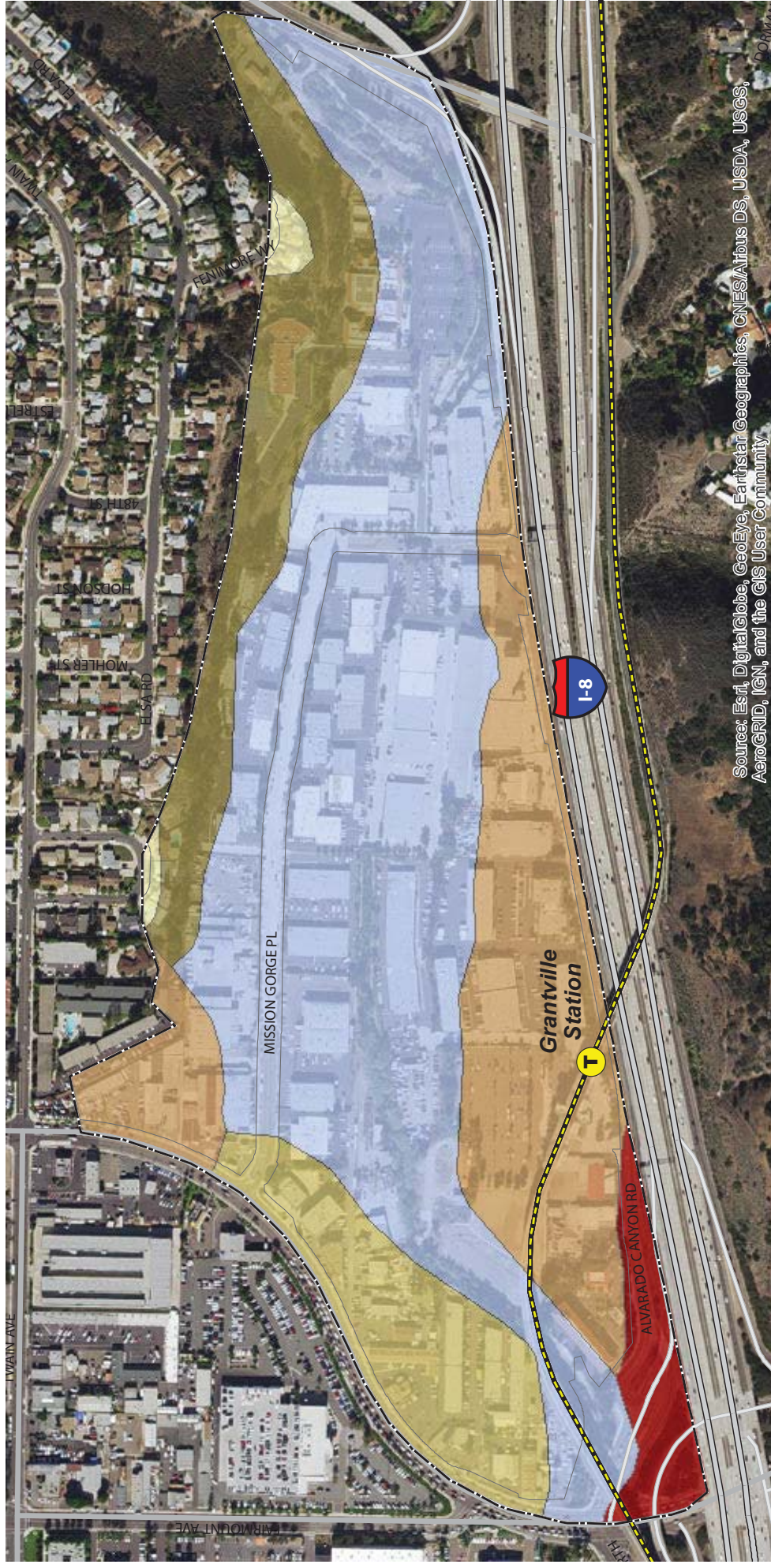
Topography within the project area is generally flat in the southern portion of the area, with moderate slopes at the northern boundary leading up to a mesa top and the community of Allied Gardens. The project area is bisected by Alvarado Creek, which enters the project area as an earthen-lined stream for approximately 600 feet, becomes a concrete-lined channel for approximately 200 feet, then enters a concrete culvert and runs beneath existing developments for approximately 1,300 feet. At this point it emerges and becomes a concrete-lined channel for 500 feet, and then becomes an earthen-lined channel for 600 feet, crosses a small private road via an Arizona crossing north of the Grantville Trolley Station, curves to the south as an earthen-lined channel for another 500 feet, and then swings back to the west as a concrete-lined channel for approximately 550 feet, where it enters a large box culvert and exits the project area beneath Mission Gorge Road and drains into the San Diego River 500 to 1,000 feet to the west. Elevation ranges from 20 feet above mean sea level within Alvarado Creek in the southern portion of the project area to 200 feet above mean sea level at the northern edge.

Six soil types are found within the project area: Huerhuero–Urban Land Complex, Olivenhain Cobbly Loam, Olivenhain–Urban Land Complex, Tujunga Sand, Riverwash, and Made Land (Figure 5). Riverwash is primarily found within the historical floodplain of Alvarado Creek, whereas Huerhuero–Urban Land Complex, Olivenhain Cobbly Loam, and Olivenhain–Urban Land Complex occur in the uplands to either side of the creek. Tujunga Sand is found at the edges of the mesa at the northern edge of the project area. Made Land consists of landfill material imported from lagoons, bays, and harbors (USDA 1973) and is found in the southwest corner of the project area.

4.2 Botany and Vegetation Communities

A total of 11 vegetation communities were mapped within the 102.26-acre project area: southern willow scrub, freshwater marsh, disturbed wetland, non-native riparian, arundo-dominated riparian, Diegan coastal sage scrub, non-native grassland, eucalyptus woodland, non-native woodland, disturbed land, and urban/developed land (Table 1; Figure 6). These vegetation communities are discussed below. Vegetation classification codes, as defined by Holland (1996) and Oberbauer (2008) are provided in parentheses.

**Figure 5:
Soils Map**



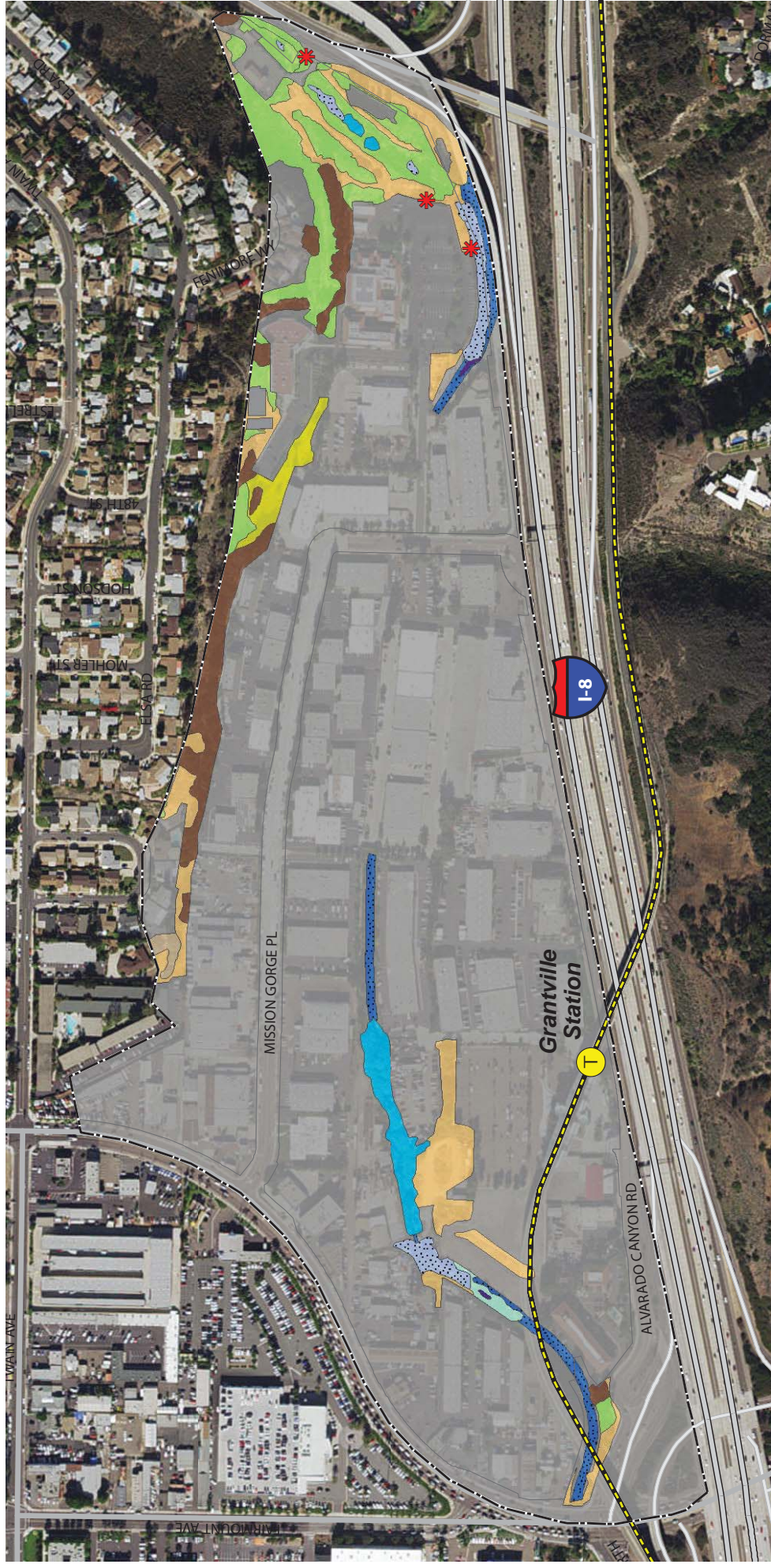
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- | | | | |
|--|--------------|--|--|
| | Trolley Stop | | Alvarado Creek/ Grantville Planning Area |
| | Light Rail | | Huerhuero-Urban Land Complex, 2 to 9 Percent Slopes |
| | Freeway | | Olivenhain Cobbly Loam, 30 to 50 Percent Slopes |
| | Ramps | | Olivenhain-Urban Land Complex, 2 to 9 Percent Slopes |
| | Major Roads | | Tujunga Sand, 0 to 5 Percent Slopes |
| | | | Riverwash |
| | | | Made Land |



**Figure 6:
Existing Biological Resources**



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| Vegetation Type | Acres |
|-----------------------------------|--------|
| Southern Willow Scrub (63320) | 0.81 |
| Freshwater Marsh (52400) | 0.03 |
| Non-native Riparian (65000) | 0.16 |
| Arundo-dominated Riparian (65100) | 1.00 |
| Disturbed Wetland (11200) | 1.15 |
| Diegan Coastal Sage Scrub (32510) | 4.09 |
| Non-native Grassland (42200) | 0.59 |
| Eucalyptus Woodland (79100) | 2.49 |
| Non-native Woodland (79000) | 0.22 |
| Disturbed Land (11300) | 4.38 |
| Urban/Developed Land (12000) | 87.34 |
| Total | 102.26 |

4.2.1 Southern Willow Scrub (63320)

Southern willow scrub is a dense riparian community dominated by broad-leaved, winter-deciduous trees such as willows (*Salix* spp.) and often scattered with Fremont cottonwoods (*Populus fremontii*), and sycamores (*Platanus racemosa*). This plant community is typically found along creeks and drainages. The high density of the willows typically prevents development of a substantial understory of smaller plants. Typically, this community occurs in areas with loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. This community requires repeated flooding to prevent succession to community dominated by sycamores and cottonwoods (Holland 1986). Southern willow scrub is considered a sensitive wetland habitat by California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and the City of San Diego (2012).

A total of 0.81 acre of southern willow scrub occurs within the project area (see Figure 6). Two large patches occur along Alvarado Creek, and three smaller patches occur on a small tributary drainage in the eastern portion of the project area. The westernmost patch of southern willow scrub along Alvarado Creek occurs on a privately owned parcel north of the Grantville Trolley Station, and direct access to the area was restricted. This area contains a mix of willow species (*Salix* spp.) with non-native riparian-compatible species, including giant reed (*Arundo donax*), Chinese elm (*Ulmus parvifolia*), and Mexican fan palm (*Washingtonia robusta*). Further to the east, a larger patch of southern willow scrub occurs on an earthen-lined segment of Alvarado Creek, just south the Mission Valley Church of the Nazarene, and north of the Waring Road on-ramp to westbound Interstate 8. This area is characterized primarily by a dense cover of Goodding's black willow (*S. gooddingii*) and arroyo willow (*Salix lasiolepis*). The two smaller patches of southern willow scrub were located on a tributary drainage south of the Mission Gorge Pump Station near Waring Road (location called out on Figure 4). These patches are characterized by small clusters of shrubby willows surrounded by primarily upland vegetation situated along the edge of the

drainage. Only one of these patches was directly accessible; the others were observed from Waring Road with the use of binoculars.

4.2.2 Freshwater Marsh (52400)

Freshwater marsh communities consist of perennial emergent monocots typically forming a closed canopy. This habitat occurs in open bodies of fresh water with little current flow, such as ponds, and to a lesser extent around seeps and springs. Freshwater marshes occur in areas of permanent inundation by freshwater without active stream flow. Freshwater marsh communities, as with all wetland habitats, have been greatly reduced throughout their entire range and continue to decline as a result of urbanization and are considered sensitive by state and federal resource agencies. Freshwater marsh is considered a sensitive wetland habitat by CDFW, USACE, RWQCB, and the City of San Diego (2012).

A total of 0.03 acre of freshwater marsh occurs within the project area (see Figure 6). It occurs in two small patches along Alvarado Creek. One patch consists of broad-leaved cattail (*Typha latifolia*) and southern bulrush (*Schoenoplectus californicus*) growing on the southern edge of an earthen-lined segment of the creek, just northwest of the Grantville Trolley Station. The second patch is found in a concrete channel just south of the Mission Valley Church of the Nazarene. This area is on a concrete-lined portion of Alvarado Creek and lies just downstream of an earthen-lined stretch that supports southern willow scrub. Slow-moving water and sedimentation from upstream appears to have provided conditions amenable to growth of emergent wetland plants. Species present within the freshwater marsh include broad-leaved cattail intermixed with great marsh evening primrose (*Oenothera elata* ssp. *hirsutissima*), salt marsh fleabane (*Pluchea odorata*), spike rush (*Eleocharis* sp.) and castor bean (*Ricinis communis*). Freshwater marsh is shown on Photographs 1 and 2.

4.2.3 Non-native Riparian (65000)

Non-native riparian consists of a densely vegetated riparian thicket dominated by non-native, invasive species. Generally, non-native species account for greater than 50 percent of total cover. This vegetation community typically occurs in wetland areas and along streams and creeks, where disturbance has occurred (Oberbauer 2008). Although dominated by non-native invasive species, non-native riparian is a potential wetland and generally treated as a sensitive vegetation community by CDFW and may also be regulated as a wetland by USACE, RWQCG, and the City of San Diego (2012) because it is associated with Alvarado Creek and provides wetland functions.

A total of 0.16 acre of non-native riparian occurs within the project area (see Figure 6). It is situated on Alvarado Creek, just north of the Grantville Trolley Station. Within the project area, this community is dominated by a dense cover of Chinese elm (*Ulmus parvifolia*), Mexican fan palm, and giant reed. The creek in this area is earthen-lined, with rip-rap slopes. The understory was primarily vegetated in areas where the canopy was not complete. Understory species in these areas includes non-natives such as sprouting



PHOTOGRAPH 1
Facing Southwest Across Patch of Freshwater Marsh Growing Above
Concrete-lined Portion of Alvarado Creek South of Nazarene Church



PHOTOGRAPH 2
Facing Southeast Toward Patch of Freshwater Marsh within
Larger Area of Non-native Riparian Vegetation within Alvarado Creek

Mexican fan palm, Chinese elm, castor bean, smilo grass (*Stipa miliacea* var. *miliaceae*), white sweetclover (*Melilotus albus*), and annual beard grass (*Polypogon monspeliensis*). This area is shown in the background of Photograph 2.

4.2.4 Arundo-dominated Riparian (65100)

Arundo-dominated riparian is a type of non-native riparian community that consists almost exclusively of a dense thicket of giant reed. Although dominated by a non-native, invasive species, this vegetation community is a potential wetland and generally treated as a sensitive vegetation community by CDFW and may also be regulated as a wetland by USACE, RWQCG, and the City of San Diego (2012).

Arundo-dominated riparian occurs in two general locations within the project area, totaling 1.00 acre (see Figure 6). One patch of dense giant reed occurs on Alvarado Creek to the north of the Grantville Trolley Station. The second location is along a tributary drainage within an undeveloped portion of the Mission Valley Church of the Nazarene property. Both of these locations are on gated private property, so they were mapped from accessible areas with the use of binoculars. It was not possible to directly observe understory species. The density of the giant reed in these areas was sufficiently dense that there is assumed to be little understory.

4.2.5 Disturbed Wetland (11200)

Disturbed wetlands are areas that are permanently or periodically inundated by water and that have been significantly modified by human activity. Such areas include wetlands with obvious artificial structures, such as concrete lining, barricades, and rip-rap energy dissipators within drainages. Although often unvegetated, these areas may contain scattered native or non-native vegetation (Oberbauer 2008). Such areas, despite the presence of artificial structures or prevalence of non-native species, may be considered sensitive if determined to be USACE, CDFW, RWQCB, or City of San Diego wetlands.

Within the project area, the areas where Alvarado Creek is a concrete-lined channel are considered disturbed wetland (see Figure 6). These areas total 1.15 acres and are largely unvegetated but contain scattered nutsedge (*Cyperus* sp.), white sweetclover, annual beard grass, and occasional broad-leaved cattail. A typical view of the concrete channel mapped as disturbed wetland is shown in Photograph 3.

4.2.6 Diegan coastal sage scrub (32510)

Diegan coastal sage scrub is the southern form of coastal sage scrub, a plant community consisting of low-growing, aromatic, drought-deciduous soft-woody shrubs that have an average height of approximately three to four feet. The plant community is typically dominated by drought deciduous shrubs and subshrubs. It typically is found on xeric sites with steep slopes or clay rich soils that are slow to release stored water. These sites often include drier south- and west-facing slopes and occasionally north-facing slopes, where the



PHOTOGRAPH 3
Facing Southwest at Concrete-lined Portion
of Alvarado Creek Mapped as Disturbed Wetland



PHOTOGRAPH 4
Facing Northeast within Unnamed Tributary
Drainage Supporting Disturbed Diegan Coastal
Sage Scrub Near Eastern Edge of Project Area

community can act as a successional phase of chaparral development. Diegan coastal sage scrub often intergrades at higher elevations with chaparral or in drier more inland areas with Riversidean sage scrub or big sagebrush scrub. The coastal form of Diegan coastal sage scrub, such as that found within the project area, is typically found at lower elevations, below 1,000 feet. Diegan coastal sage scrub is considered sensitive by federal and state resource agencies, and is considered a Tier II (Uncommon Upland) by the City of San Diego Biology Guidelines (City of San Diego 2012).

A total of 4.09 acres of Diegan coastal sage scrub occur within the project area (see Figure 6). The largest area of Diegan coastal sage scrub occurs within the undeveloped portion of the Mission Valley Church of the Nazarene property, as well as the slopes to the north. Because the church property is private and fenced, access was restricted and the survey was conducted using binoculars from accessible areas. Dominant species in this area include California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), and California buckwheat (*Eriogonum fasciculatum*). Based on a review of historical aerial photographs, this area appears to have been historically disturbed by vehicular access. More recently, it was disturbed by construction activities. Other areas of Diegan coastal sage scrub include the slopes around and above the Junior Achievement Finance Park (location called out in Figure 4). Vegetation in these sloped areas is similar in composition to that on the church property, but they also support coast cholla (*Cylindropuntia prolifera*) and coast prickly-pear (*Opuntia littoralis*). One patch of Diegan coastal sage scrub occurs in the western portion of the project area, just north of Alvarado Canyon Road on a north-facing slope leading to Alvarado Creek. This area consists of a dense patch of laurel sumac. Photographs 4 and 5 show areas of Diegan coastal sage scrub within project area.

4.2.7 Non-native Grassland (42200)

Non-native grassland is a vegetation community characterized by a dense to sparse cover of annual grasses, which may be mixed with non-native annual forbs as well as native wildflowers, particularly in years of high rainfall. Typically, non-native annual grasses comprise at least 50 percent of the total herbaceous cover (City of San Diego 2000). These annual grasses germinate with the onset of the rainy season and set seed and senesce in the late winter or spring. This vegetation community is usually found on fine-textured, usually clay soils, and are found in valleys and foothills throughout most of California at elevations below 3,000 to 4,000 feet (Holland 1986). Non-native grassland is considered a Tier IIIB (Common Upland) by the City of San Diego's Biology Guidelines (City of San Diego 2008).

One patch of non-native grassland, totaling 0.59 acre, occurs within the project area, on a south-facing slope located west of the Junior Achievement Finance Park (see Figure 6). This area is characterized by a moderate cover by fountain grass (*Pennisetum* sp.), mixed with scattered short-pod mustard (*Hirschfeldia incana*), laurel sumac, and broom baccharis (*Baccharis pilularis*). This area is shown in the foreground of Photograph 5.



PHOTOGRAPH 5
Facing Northwest at Eucalyptus Woodland
in North-central Portion of Project Area



PHOTOGRAPH 6
Facing Northwest Across Non-native Grassland and Eucalyptus
Woodland Toward Diegan Coastal Sage Scrub West of Junior
Achievement Finance Park in Northeastern Portion of Project Area

4.2.8 Eucalyptus Woodland (79100)

Eucalyptus woodland is a vegetation community dominated by introduced tree species of the genus *Eucalyptus*. These trees were historically planted in San Diego County for ornamental landscaping or for hardwood production and now persist as naturalized stands in many areas. Because eucalyptus leaf litter has allelopathic qualities that can restrict growth of other plant species, it often has a very sparse understory. It is considered a Tier IV (Other Upland) vegetation community (City of San Diego 2012).

A total of 2.49 acres of eucalyptus woodland occur within the project area, primarily along the south-facing slopes in the northern portion, although there are smaller patches scattered throughout the project area (see Figure 6). These areas typically had a canopy consisting of various species of eucalyptus (*E. camalduensis*, *E. polyanthemos*, and *E. sideroxylon*), as well as Peruvian pepper (*Schinus molle*) and carrotwood (*Cupaniopsis anacardioides*). The understory is fairly sparse, but contains a number of non-native invasive or ornamental species, such as fountain grass (*Pennisetum* sp.), horehound (*Marrubium vulgare*), vanilla-scented wattle (*Acacia redolens*), and freeway iceplant (*Carpobrotus edulis*). A typical view of the eucalyptus woodland is found in Photograph 5. One area of eucalyptus woodland northwest of the Junior Achievement Finance Park contains scattered coast cholla (*Cylindropuntia prolifera*), a native species found in the nearby Diegan coastal sage scrub. A view of this area is found in Photograph 6.

4.2.9 Non-native Woodland (79000)

Non-native woodland is an upland community characterized by exotic trees, usually intentionally planted, and that are not irrigated or otherwise maintained. It is considered a Tier IV (Other Upland) vegetation community (City of San Diego 2012).

A total of 0.22 acre of non-native woodland was mapped within the project area. It occurs in a small grove of Peruvian pepper trees near the Mission Gorge Pump Station at the eastern edge of the project area. This area contains a modest understory consisting of short-pod mustard, non-native grasses, and several broom baccharis shrubs.

4.2.10 Disturbed Land (11300)

Disturbed land is composed of areas that have been previously disturbed and no longer function as a native or naturalized vegetation community. Vegetation, if present, is dominated by opportunistic non-native species. Disturbed land can also include previously graded lands such as fire breaks, off-road vehicle trails, and construction staging sites (Oberbauer et al. 2008). It is considered a Tier IV (Other Upland) vegetation community (City of San Diego 2012).

A total of 4.38 acres of disturbed land occurs in a number of areas scattered throughout the project area (see Figure 6). In the western portion of the project area, disturbed land occurs on the slopes above a concrete-lined segment of Alvarado Creek, in several vacant or unused lots north and west of the Grantville Trolley Station. In the northern portion of the

project area, disturbed land occurs on south-facing slopes between the light industrial developments and the nearby homes. In the eastern portion of the project area, disturbed land consists of graded areas or those subject to moderate vehicular use. Typical plant species found within the disturbed land include tocalote (*Centaurea melitensis*), prickly lettuce (*Lactuca serriola*), short-pod mustard, Russian thistle (*Salsola tragus*), castor bean, white sweetclover, and numerous non-native grasses. One area of disturbed land just west of the Waring Road on-ramp to Interstate 8 contains a row of planted western sycamore trees. Although these trees are native plants typical of riparian habitats, they are found in an upland area and were likely planted a visual and auditory barrier between the freeway and the nearby church property. Therefore, they were determined to be a part of the surrounding disturbed land rather than a separate woodland habitat.

4.2.11 Urban/Developed Land (12000)

Areas characterized as urban/developed land include those that have been subject to construction or have been otherwise altered such that they no longer support native vegetation. They include areas with permanent structures, hardscape, landscaped areas, and ornamental vegetation. Urban/developed land is considered a Tier IV (Other Upland) vegetation community (City of San Diego 2012).

A total of 87.34 acres within the project area has been developed (see Figure 6). The majority of vegetation within the urban/developed land consists of ornamental species planted as part of street or property landscaping.

4.3 Wildlife Species

The biological survey was designed to provide a very general overview of the biological resources present and included a relatively large survey area during a single site visit. As a result, many of the wildlife species identified were detected incidentally to vegetation mapping. In total, 14 wildlife species were detected, including three butterflies, one reptile, and 10 birds. Most of the wildlife species detected within the project area are species adapted living in urban or disturbed areas. A list of the wildlife species observed within the project area is presented in Attachment 2.

5.0 Sensitive Biological Resources

5.1 Regulatory Setting

The **Migratory Bird Treaty Act** (16 United States Code 703 et seq.), or MBTA, is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive, and is listed at 50 Code of Federal Regulations (CFR) 10.13. The regulatory definition of “migratory bird” is broad and includes any mutation or hybrid of a listed species and any part, egg, or nest of such birds (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the Endangered Species

Act. The MBTA, which is enforced by USFWS, makes it unlawful “by any means or in any manner, to pursue, hunt, take, capture, [or] kill” any migratory bird, or attempt such actions, except as permitted by regulation. The take, possession, import, export, transport, sale, purchase, barter, or offering of these activities is prohibited except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

Section 3503 from the **California Fish and Game Code** applies to projects in the state. This section states that 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,” and Section 3503.5 states that it is “unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird” unless authorized (State of California 1991).

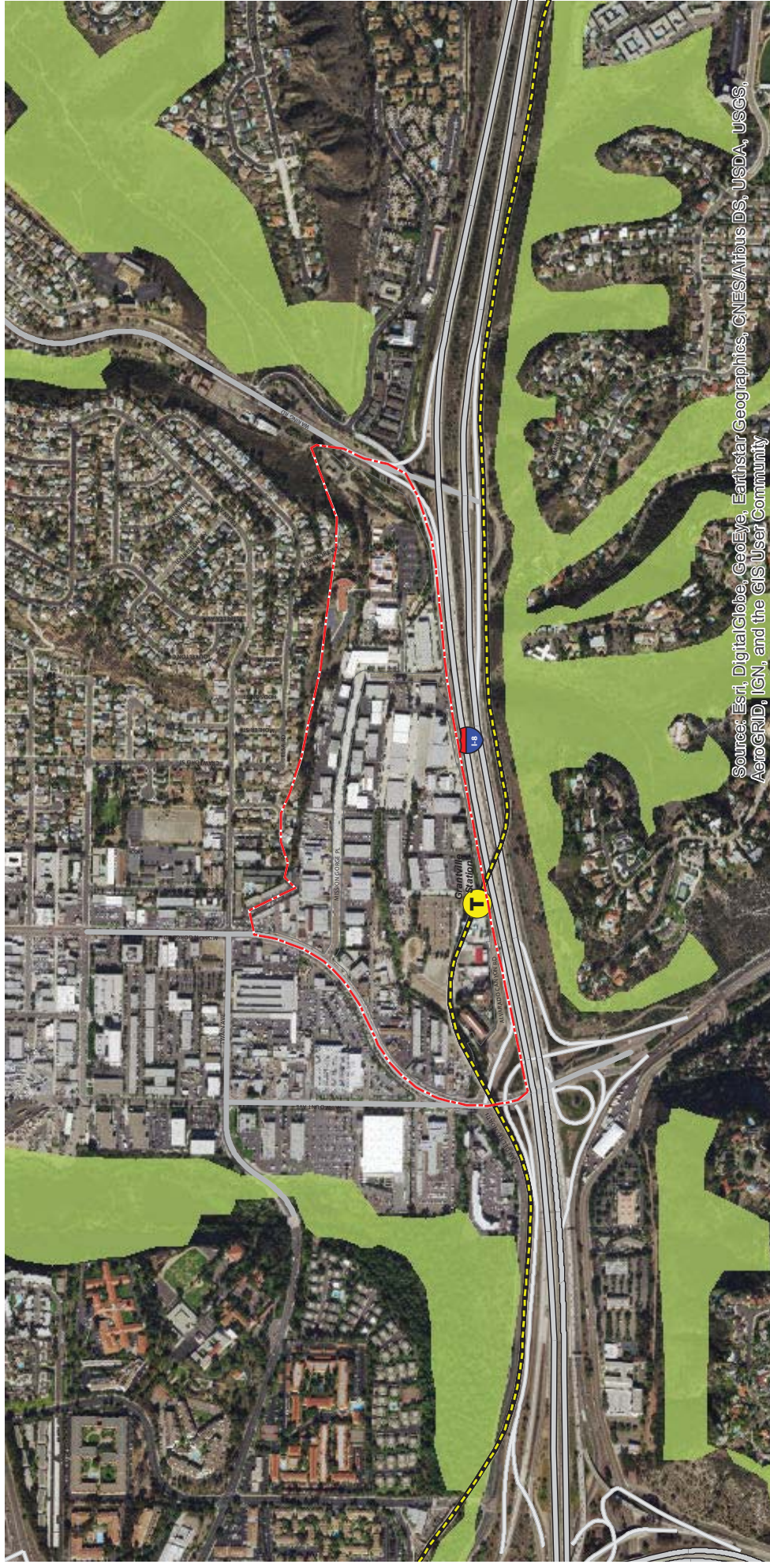
One of the primary objectives of the City’s Multiple Species Conservation Program (**MSCP Subarea Plan**) is to identify and maintain a preserve system, which allows for animals and plants to exist at both the local and regional levels. The MSCP has identified large blocks of native habitat having the ability to support a diversity of plant and animal life known as “core biological resource areas.” “Linkages” between these core areas provide for wildlife movement. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region. Input from responsible agencies and other interested participants resulted in creation of the City’s MHPA. The MHPA is the area within which the permanent MSCP preserve would be assembled and managed for its biological resources. No preserved lands within the MHPA occur within the project area, although segments of the MHPA occur within Alvarado and Navajo canyons to the east, and along the San Diego River to the west (Figure 7).

The **City of San Diego Biology Guidelines** (2012) were formulated to aid in the implementation and interpretation of the Environmentally Sensitive Lands Regulations (ESL), San Diego Land Development Code, Chapter 14, Division 1, Section 143.0101. Section III of the Guidelines (Biological Impact Analysis and Mitigation Procedures) also serve as standards for the determination of impacts and mitigation under California Environmental Quality Act (CEQA). The ESL defines sensitive biological resources as those lands included within the MHPA as identified in the City of San Diego’s MSCP Subarea Plan (City of San Diego 1997) and other lands outside the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA or IIIB; habitat for rare, endangered or threatened species; or narrow endemic species.

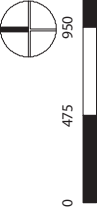
5.2 Sensitivity Criteria

For purposes of this report, species will be considered sensitive if they are: (1) listed by state or federal agencies as threatened or endangered or are proposed for listing; (2) designated by the City of San Diego as a narrow endemic species (City of San Diego 2012); (3) covered species under the City of San Diego MSCP; or (4) on California Rare Plant Rank 1B (considered endangered throughout its range) or California Rare Plant Rank 2 (considered endangered in California but more common elsewhere) of the CNPS *Inventory*

**Figure 7:
Project in Relation to MSCP Preserve Area**



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of *Rare and Endangered Vascular Plants of California* (2016). Noteworthy plant species are considered to be those that are on California Rare Plant Rank 3 (more information about the plant's distribution and rarity needed) and California Rare Plant Rank 4 (plants of limited distribution) of the CNPS *Inventory*. Sensitive vegetation communities are those identified by Holland (1986) or identified by the City of San Diego (2012).

5.3 Sensitive Vegetation Communities

Pursuant to the City's Biology Guidelines, seven sensitive vegetation communities occur within the survey area: southern willow scrub (wetland), freshwater marsh (wetland), non-native riparian (wetland), arundo-dominated riparian (wetland), disturbed wetland (wetland), Diegan coastal sage scrub (Tier II habitat), and non-native grassland (Tier III-B habitat). Most of these communities are dominated by native plant species; however non-native riparian, arundo-dominated riparian and disturbed wetland are characterized primarily by non-native or invasive species. These three communities are all part of Alvarado Creek or tributary drainages. Although Alvarado Creek has been channelized, culverted, and concrete-lined, both it and the tributary drainage are historically occurring streams and therefore meet the wetlands criteria according to the City's Biology Guidelines (2012).

5.4 Sensitive Plants

No MSCP covered plant species, narrow endemic species, or federal or state listed species were detected within the project area; however, one CNPS listed plant species was detected: singlewhorl burrobush (*Ambrosia monogyra*). No critical habitat for any federally listed species has been designated within the project area. Several Torrey pines (*Pinus torreyana*) were observed in landscaped portions of the project area. Although Torrey pine is an MSCP covered species, individuals planted in landscaping are not generally considered sensitive or protected.

Singlewhorl burrobush is identified by the CNPS as a California Rare Plant Rank 2B.2 species. This rank designates a species that the CNPS considers at risk of extirpation from California but may be more common outside the state. It is a perennial dicot that grows to one to four meters in height. Its range includes southwestern California, east to Texas, and south in to Mexico. This species was found in three locations within the project area (see Figure 6). Two of the patches were found adjacent to the Mission Valley Church of the Nazarene parking lot. Both of these patches numbered approximately 50 individuals and occurred in disturbed areas that were otherwise either unvegetated or characterized by non-native, invasive plant species. The third patch consists of approximately 30 small plants within Diegan coastal sage scrub adjacent to Waring Road at the eastern edge of the project area.

In addition to the one sensitive plant species detected in the project area described above, 30 sensitive plants are assessed for potential to occur within the project area in Attachment 3. These include the 15 Narrow Endemic species identified in the Biology Guidelines (City

of San Diego 2012), as well as 15 additional species reported to the CNDDDB in the vicinity of the project area (State of California 2016b).

5.5 Sensitive Wildlife

5.5.1 Sensitive Wildlife Observed

No federal or state listed or MSCP covered wildlife species, or narrow endemic species were detected within the project area.

5.5.2 Sensitive Wildlife with Potential to Occur

Attachment 4 assesses the potential for 20 sensitive wildlife species to occur within the project area. Of these, seven have moderate potential to occur within the project area: Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), red-diamond rattlesnake (*Crotalus ruber*), least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Polioptila californica californica*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), western mastiff bat (*Eumops perotis californicus*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

Belding's Orange-throated Whiptail (*Aspidoscelis hyperythra beldingi*). This is a California CDFW species of special concern and an MSCP-covered species (State of California 2016c; City of San Diego 1997). This species ranges from the coast to the Peninsular mountain ranges from Orange and southwestern San Bernardino counties to the tip of Baja California, Mexico (Stebbins 2003). It occurs 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 (Lemm 2006). 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 from May through July. Belding's orange-throated whiptails feed primarily on insects such as termites (*Reticulitermes* sp.). The decline of this species is attributed to habitat loss and fragmentation (McGurty 1980).

This species has moderate potential to occur in the coastal sage scrub on the Nazarene Church property and on some of the hillsides in the north of the project area. The CNDDDB does not have any records of this species within two miles of the project area; however, this is a fairly widespread species and may not always be reported when found.

Red-diamond rattlesnake (*Crotalus ruber*). This is a CDFW species of special concern (State of California 2016c). This species occurs from sea level to about 4,000 to 5,000 feet on both sides of the Peninsular Ranges from southern San Bernardino County south through western Riverside and San Diego counties to Baja California, Mexico (Jennings and Hayes 1994). It inhabits coastal sage scrub, chaparral, and pinyon-juniper woodland particularly where there are abundant rock outcrops (Jennings and Hayes 1994; Lemm 2006). This species is active year round with peak activity occurring in April and May, and breeding from February through September (Jennings and Hayes 1994). Its diet consists principally of small mammals, lizards, birds, and other snakes. Population declines of the red-diamond

rattlesnake are generally attributable to a reduction of habitat in the snake's restricted range due to urbanization and agriculture.

Although no red-diamond rattlesnakes were detected, this species has moderate potential to occur in the project area. The Diegan coastal sage scrub on the Nazarene Church property appears to be only marginally suitable due to frequent human disturbance; however the surrounding habitat on the slopes to the north is of higher quality and could provide a source of dispersing individuals.

Least Bell's vireo (*Vireo bellii pusillus*). Least Bell's vireo is federally and state listed as endangered, and an MSCP covered species (State of California 2016c; City of San Diego 1997). 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 vegetation communities, including cottonwood–willow woodlands and forests, oak woodlands, and mule fat scrub. It requires a 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 breeding grounds in mid-March, and remain until September or October.

No least Bell's vireo were observed during the general biological survey; however this species has moderate potential to occur within the project area. Although the CNDDDB does not have any records of this species within the project area, it does have records of this species from 2010 on the San Diego River approximately 1,200 and 2,400 feet east of the project area. There are two patches of suitable southern willow scrub habitat along Alvarado Creek within the project area. These areas are likely subject to periodic vegetation maintenance for flood control purposes, but at the time of the biological survey they supported mature riparian habitat that appeared suitable for vireo foraging and breeding.

Coastal California gnatcatcher (*Polioptila californica californica*). The coastal California gnatcatcher is federally listed as threatened, a CDFW species of special concern, and an MSCP covered species (State of California 2016c; City of San Diego 1997). The coastal California gnatcatcher is a non-migratory, resident species found on the coastal slopes of southern California ranging from Ventura County southward through Los Angeles, Orange, Riverside, and San Diego counties into Baja California, Mexico (Atwood and Bontrager 2001; USFWS 2010). In San Diego County, the eastern limits of the coastal scrub vegetation communities used by the gnatcatcher are largely bound by mountainous areas and colder winters (Unitt 2004).

Coastal California gnatcatchers typically occur in or near mature coastal sage scrub habitat (Atwood and Bontrager 2001). This vegetation generally comprises low (less than 3 feet) shrub and sub-shrub species. Gnatcatchers tend to use higher-quality coastal sage scrub over low-quality kind and defend breeding territories ranging in size from 2 to 14 acres (USFWS 2010a). This species' ideal host shrub is California sagebrush, but it is also found nesting in coast California buckwheat, common encelia (*Encelia californica*), and broom baccharis (*Baccharis sarothroides*) (Unitt 2004). Other habitats used by coastal California

gnatcatcher include chaparral, grassland, and riparian scrub; disturbed habitats are used where they occur adjacent to sage scrub (Atwood and Bontrager 2001).

This species has moderate potential to occur within the project area. The coastal sage scrub on the Nazarene Church property and surrounding the Mission Gorge Pump Station, as well as on slopes east of Junior Achievement Finance Park are potentially suitable. Although the CNDDDB does not have any records of the coastal California gnatcatcher within the project area, there are numerous records of it in Alvarado Canyon and Navajo Canyon just to the east.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). This is a CDFW watch list species, an MSCP covered species (State of California 2016c; City of San Diego 1997). This subspecies of rufous-crowned sparrow is a San Diego County resident and ranges throughout southern California from Los Angeles County to Baja California, Mexico (Collins 1999). Southern California rufous-crowned sparrows are found in sage scrub, broken or burned chaparral habitats, and grasslands with scattered shrubs. The species exhibits a strong preference for moderate to steep, south-facing, dry, rocky slopes with a 50 percent cover of low shrubs (Unitt 2004; Collins 1999). Breeding occurs from March through June, and pair bonds are formed that may last year-round (Collins 1999). Loss of habitat due to urbanization and habitat fragmentation has decreased the amount of suitable habitat for southern California rufous-crowned sparrows (Unitt 2004).

Although this species was not detected during the biological survey, habitat within the project area is moderately suitable. The coastal sage scrub on the Nazarene Church property may be too disturbed to support a stable territory; however, the habitat on the hills to the north is denser and of much higher quality for this species. Thus, any individuals or pairs occupying the surrounding habitat would likely use the coastal sage scrub in the project area as part of their territories.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). This is a CDFW species of special concern (State of California 2016c). It ranges from near the Kern-Ventura county line southward and west of the Peninsular Range into Baja California (Hall 1981). This species can be found throughout southern California, with the exception of the high-altitude mountains. It occupies open or semi-open habitats, such as coastal sage scrub and open chaparral areas. Forested and thick chaparral regions are not suitable (Bond 1977). The San Diego black-tailed jackrabbit breeds throughout the year, with the greatest number of births occurring from April through May. The black-tailed jackrabbit is strictly herbivorous, preferring habitat with ample forage such as grasses and forbs. Declines in San Diego black-tailed jackrabbit populations are due to a decline in suitable habitat as a result of urban development.

Although San Diego black-tailed jackrabbit was not detected during surveys, most of the coastal sage scrub in the project area could potentially provide suitable habitat for this species. Thus, there is moderate potential for this species to occur in the project area.

Western mastiff bat (*Eumops perotis californicus*). The western mastiff bat is a state species of special concern (State of California 2016c). It occurs in much of the southwestern U.S.

from California to western Texas and south into central Mexico. It occurs most commonly in arid scrub habitats, chaparral, oak woodland, ponderosa pine and mixed conifer forests, and meadows. It is strongly tied to areas with cliffs and other significant rock features, which are required for roosting (WBWG 2016). It feeds primarily on moths, but will also eat beetles, crickets, and katydids. Western mastiff bats emerge from their cliff roosts just after dark, and they may fly long distances to forage.

Although no suitable cliffs are present within the project area for roosting habitat, this species was recorded in 1995 foraging over the San Diego River about 1.4 miles west of the project area (State of California 2016b). Suitable foraging habitat is abundant on Alvarado Creek. Thus, individuals that roost in the vicinity have moderate potential to forage over Alvarado Creek for moths or other invertebrates.

5.6 Jurisdictional Waters/Wetlands

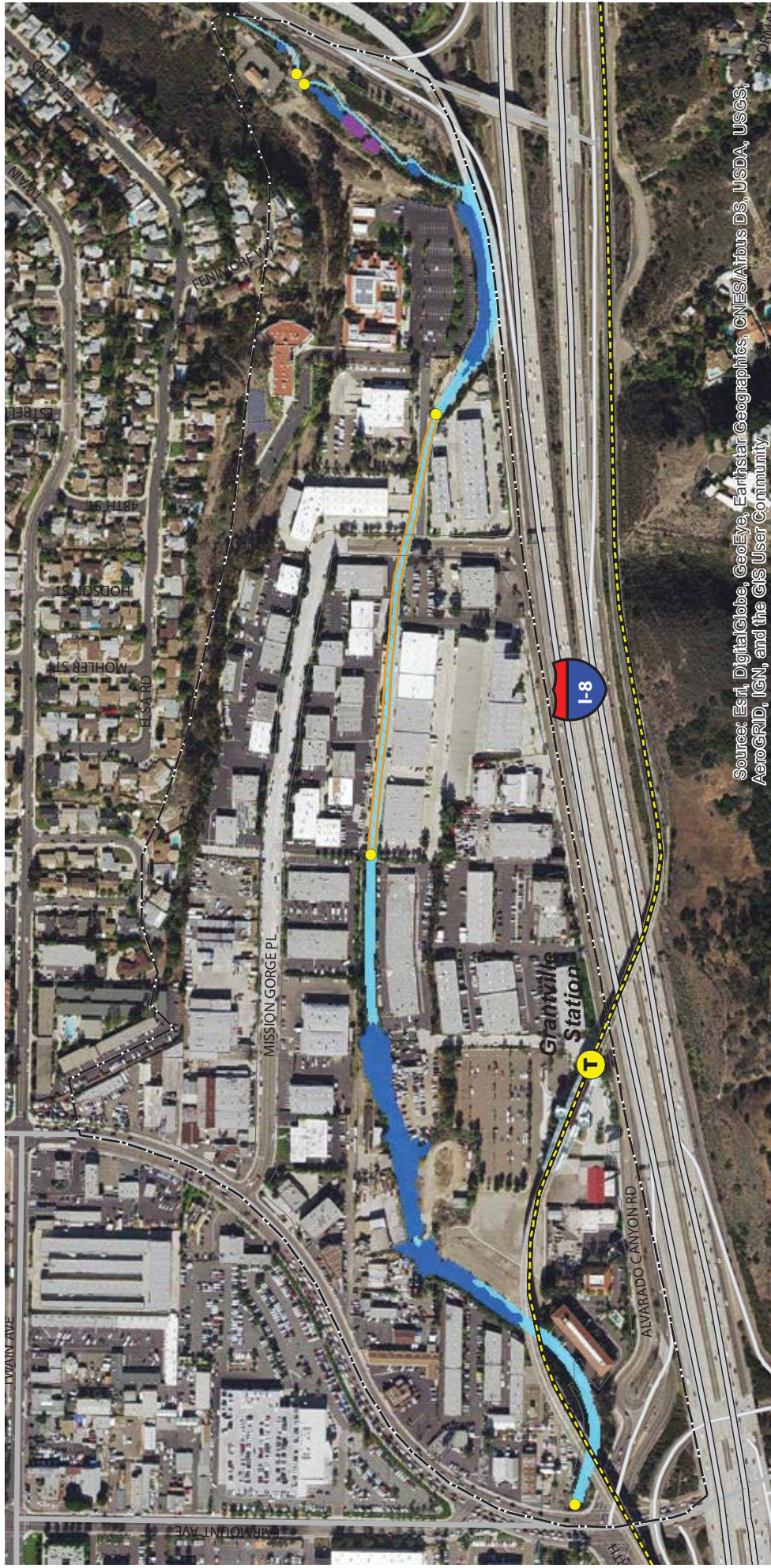
A formal jurisdictional delineation was not conducted; however this report presents a conservative estimate of potential jurisdictional wetlands and waters within the project area. CEQA review of any project that proposes to impact jurisdictional waters or wetlands would need to include a formal delineation and impacts assessment.

USACE Jurisdictional Waters. In accordance with Section 404 of the Clean Water Act (CWA), USACE regulates the discharge of dredged or fill material into waters of the United States. The term “waters of the United States” is defined as:

- All waters currently used, or used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation, or destruction of which could affect foreign commerce including any such waters, (1) which could be used by interstate or foreign travelers for recreational or other purposes; or (2) from which fish or shellfish are, or could be, taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industries in interstate commerce;
- All other impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified above;
- The territorial seas; and
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the paragraphs above (33 CFR Part 328.3(a)).

A total of 3.17 acres potentially under the jurisdiction of USACE occur within the project area. This includes 1.92 acres of wetlands (0.81 acre of southern willow scrub, 0.03 acre of freshwater marsh, 0.16 acre of non-native riparian, and 0.92 acre of arundo-dominated riparian) and 1.25 acres of non-wetland waters, which comprises the concrete-lined channel (mapped as disturbed wetland) and the tributary drainage (Figure 8 and Table 2).

Figure 8:
Jurisdictional Resources



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- T** Trolley Stop
- Alvarado Creek/Grantville Planning Area
- Underground Portion of Alvarado Creek (assumed approximately 20 feet wide) Culvert
- USACE Non-wetland Waters of the State/CDFW Streambed
- USACE/RWQCB/CDFW Wetlands
- CDFW Wetlands Only
- Freeway
- Ramps
- Major Roads

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| Table 2 | |
|---|-------|
| Potential Jurisdictional Waters within the Project Area¹ | |
| Jurisdictional Waters | Acres |
| USACE Jurisdiction | |
| Wetlands ² | 1.92 |
| Non-wetland Waters | 1.25 |
| USACE Total Jurisdiction | 3.17 |
| RWQCB Jurisdiction | |
| Wetland Waters of the State ² | 1.92 |
| Non-wetland Waters of the State | 1.25 |
| RWQCB Total Jurisdiction | 3.17 |
| CDFW Jurisdiction | |
| Riparian ² | 2.00 |
| Streambed | 1.25 |
| CDFW Total Jurisdiction | 3.25 |
| City of San Diego | |
| Wetlands ² | 2.00 |
| Streambed | 1.25 |
| City Total Jurisdiction | 3.25 |
| USACE = U.S. Army Corps of Engineers; CDFW = California Department of Fish and Wildlife ; RWQCB = Regional Water Quality Control Board; City = City of San Diego | |
| ¹ These resources are considered potentially jurisdictional because a formal delineation was not conducted. | |
| ² Freshwater marsh, southern willow scrub, non-native riparian, and the large patch of arundo-dominated riparian are likely USACE wetlands, CDFW Riparian, RWQCB wetlands, and City wetlands. Two small patches of arundo-dominated riparian in the east of the project area are only CDFW riparian. The disturbed wetland and the tributary drainage are likely USACE non-wetland waters of the U.S., CDFW streambeds, and RWQCB non-wetland waters of the state. | |

RWQCB Jurisdictional Areas. RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes waters of the state as mandated by both the federal CWA Section 401 and the California Porter-Cologne Water Quality Control Act.

A total of 3.17 acres potentially under the jurisdiction of the RWQCB occur within the project area. This includes 1.92 acres of wetlands (0.81 acre of southern willow scrub, 0.03 acre of freshwater marsh, 0.16 acre of non-native riparian, and 0.92 acre of arundo-dominated riparian) and 1.25 acres of non-wetland waters, which comprises the concrete-lined channel (mapped as disturbed wetland) and the tributary drainage (see Figure 8 and Table 2).

CDFW Jurisdictional Areas. Under Sections 1600–1607 of the Fish and Game Code, CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFW has jurisdiction over riparian habitats (e.g., southern willow scrub) associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider.

A total of 3.25 acres likely under the jurisdiction of CDFW occur within the survey area. This includes 2.00 acres of riparian (0.81 acre of southern willow scrub, 0.03 acre of freshwater marsh, 0.16 acre of non-native riparian, and 1.00 acre of arundo-dominated riparian) and 1.25 acres of streambed in the ephemeral drainage (see Figure 8 and Table 2).

City Wetlands. According to the City's Municipal Code (City of San Diego 2012), wetlands are areas which are characterized by any of the following conditions: (1) all areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation; (2) areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation; or (3) areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands.

A total of 3.25 acres of potential City wetlands occur within the project area. They include 2.00 acres of wetlands (0.81 acre of southern willow scrub, 0.03 acre of freshwater marsh, 0.16 acre of non-native riparian, and 1.00 acre of arundo-dominated riparian) and 1.25 acres of ephemeral drainage (Figure 8 and Table 2).

5.7 Multi-Habitat Planning Area

The entire project area lies outside the City's MHPA; however a segment of the MHPA lies within Navajo and Alvarado canyons approximately 250 feet east of the project area, as well as on the slopes south of Interstate 8, leading down into Kensington (see Figure 5).

5.8 Wildlife Movement Corridors

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important, because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife movement corridors are considered sensitive by resource and conservation agencies.

Although Alvarado Creek is a relatively substantial drainage and has some areas with dense vegetation, its function as a wildlife corridor is constrained because it contains large segments that are underground or in culverts, and aboveground portions within the project area that are channelized, partially concrete lined, and subject to vegetation clearing for flood control maintenance. Nonetheless, between vegetation clearing events, the riparian vegetation can grow quite quickly, especially in earthen-lined segments, and can develop a substantial canopy, providing migratory birds a temporary location to rest and forage during their migration.

6.0 Biological Constraints

The presence and potential occurrence of several sensitive biological resources can result in potential constraints on any proposed development within the project area. Impacts to these resources would potentially be considered significant and may require avoidance or mitigation measures. The following recommendations are typical mitigation requirements of the MSCP. They are subject to approval from the USFWS and CDFW.

6.1 Sensitive Vegetation Communities

As previously noted, the project site supports seven sensitive vegetation communities: southern willow scrub, freshwater marsh, non-native riparian, arundo-dominated riparian, disturbed wetland, Diegan coastal sage scrub, and non-native grassland. Impacts to sensitive upland vegetation communities are typically mitigated on a project-by-project basis with preservation of habitat at the ratios presented in Table 3. This habitat preservation may occur through dedication of a conservation easement, purchase of mitigation credits at an approved mitigation bank, or contribution to the City’s Habitat Acquisition Fund. In some cases mitigation may be achieved through habitat restoration within an existing preserved area. Impacts to wetland vegetation communities are also subject to mitigation as indicated by the ratios in Table 3, which include restoration of impacted wetlands and waters at a minimum 1:1 ratio in compliance with federal “no net loss” policies.

| Vegetation Community | City of San Diego Tier | Mitigation Ratio ¹ (City of San Diego 2012) |
|---------------------------|-------------------------------|---|
| Southern Willow Scrub | Wetland/Riparian ² | 2:1 to 3:1 ³ |
| Freshwater Marsh | Wetland/Riparian ² | 2:1 to 3:1 ³ |
| Non-native Riparian | Wetland/Riparian ² | 2:1 |
| Arundo-dominated Riparian | Wetland/Riparian ² | 2:1 |
| Disturbed Wetland | Wetland/Riparian ² | 1:1 to 2:1 ⁴ |
| Diegan Coastal Sage Scrub | II | 2:1 |
| Non-native Grassland | IIIB | 0.5:1 |

¹ Ratios prescribed by the MSCP. The final ratios would be determined in consultation with the wildlife agencies.

² Impacts to wetlands would also require federal and state agency resource permitting.

³ City Biology Guidelines require a 2:1 mitigation ratio; however USACE and CDFW may require a 3:1 mitigation ratio, including a minimum 1:1 ratio of habitat creation.

⁴ City Biology Guidelines require a 2:1 mitigation ratio for disturbed wetland; however this ratio may be reduced to 1:1 because disturbed wetland is a concrete-lined channel and is expected to be replaced in kind or better for any proposed project.

6.2 Sensitive Plant Species

As previously mentioned, the project site supports or has moderate to high potential to support four sensitive plant species: singlewhorl burrobush (observed), San Diego marsh-

elder (moderate potential), California adolphia (moderate potential), and southwestern spiny rush (moderate potential). None of these species is federally or state listed, or is a City of San Diego covered species. However, all four are identified as rare or sensitive by CNPS. Typically, impacts to these species or their occupied habitat are mitigated via the required habitat preservation to mitigate impacts to sensitive vegetation communities, which is described in Section 6.1, above.

6.3 Sensitive Wildlife Species

No sensitive wildlife species were detected during the general survey; however seven have moderate potential to occur within the project area: Belding's orange-throated whiptail, red-diamond rattlesnake, least Bell's vireo, coastal California gnatcatcher, southern California rufous-crowned sparrow, western mastiff bat, and San Diego black-tailed jackrabbit.

Belding's orange-throated whiptail, red-diamond rattlesnake, southern California rufous-crowned sparrow, and San Diego black-tailed jackrabbit are considered sensitive species, but are not state or federally listed, and impacts to these species are mitigated via the required habitat preservation to mitigate impacts to the occupied habitat, which is described in Section 6.1, above.

Western mastiff bat, while it has potential to forage within the project area, is not expected to roost nearby and is not expected to be directly impacted by any development within the project area.

Least Bell's vireo has moderate potential to occur in the southern willow scrub habitats within the project area. Protocol surveys for least Bell's vireo would be required during the CEQA review process for any project that would occur within or near southern willow scrub habitat within the project area. Construction projects that would remove occupied habitat would be required to be initiated outside the least Bell's vireo breeding season (March 15 to September 15). Any work near occupied vireo habitat may be required to investigate construction and operational noise levels to assess potential noise-related impacts on the species. Impacts associated with construction noise may be avoided by timing construction outside the breeding season for the species (March 15 to September 15) or by installing temporary noise barriers to reduce the noise levels within occupied habitat. Depending on noise levels generated during operation of the site, it may be necessary to install permanent noise-attenuation measures, such as noise walls or berms. Additionally, the MSCP identifies Conditions for Coverage of this species, which include monitoring and controlling of the brown-headed cowbird, a non-native bird species that is a nest parasite of native riparian birds, including the least Bell's vireo.

Coastal California gnatcatcher has moderate potential to occur within the Diegan coastal sage scrub within and to the north the Nazarene Church and Mission Gorge Pump Station properties. If coastal California gnatcatchers are present within or in the vicinity of any development project, avoidance and mitigation measures could be required. Because the entire project area lies outside the MHPA, projects would likely not be required to conduct

protocol surveys for coastal California gnatcatcher during the CEQA review process. Nonetheless, projects may be required to time vegetation clearing to occur outside the breeding season (March 1 to August 15).

6.4 Jurisdictional Wetlands and Waters

If any development project would impact USACE, RWQCB, or CDFG wetlands or waters, the following agency permits may be required:

1. A Clean Water Act, Section 404/401 permit issued by the USACE and the California RWQCB (respectively) for all project-related disturbances of waters of the U.S. and/or associated wetlands.
2. A Section 1602 Streambed Alteration Agreement issued by the CDFW for all project-related disturbances of any streambed.

Additionally, USACE and RWQCB typically require “no net loss” of wetlands and waters under their jurisdiction. Under this standard, impacts to USACE and RWQCB jurisdictional areas are generally mitigated with a minimum 1:1 creation component, with the remainder mitigated via enhancement and/or preservation.

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ATTACHMENTS

ATTACHMENT 1
Plant Species Observed

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Plant Species Observed**

| Scientific Name | Common Name | Habitat | Origin |
|---|---------------------------|---------------------------|--------|
| GYMNOSPERMS | | | |
| CUPRESSACEAE | CYPRESS FAMILY | | |
| <i>Cupressus sempervirens</i> | Mediterranean cypress | DL | I |
| <i>Juniperus chinensis "Torulosa"</i> | Hollywood juniper | DEV | I |
| Pinaceae | PINE FAMILY | | |
| <i>Pinus canariensis</i> | Canary Island pine | DEV | I |
| <i>Pinus halapensis</i> | Aleppo pine | EUC | I |
| <i>Pinus torreyana</i> Parry ex Carrière ssp. <i>torreyana</i> | Torrey pine | DL | N |
| PODOCARPACEAE | FERN PINE FAMILY | | |
| <i>Podocarpus</i> sp. | plum pine | EUC | I |
| ANGIOSPERMS: MAGNOLIIDS-LAURALES | | | |
| LAURACEAE | LAUREL FAMILY | | |
| <i>Cinnamomum camphora</i> | Camphor tree | DEV | I |
| ARECACEAE | PALM FAMILY | | |
| <i>Phoenix canariensis</i> Chabaud | Canary Island palm | EUC | I |
| <i>Syagrus romanzoffiana</i> (Cham.) Glassman | queen palm | DEV | I |
| <i>Washingtonia robusta</i> H. Wendl. | Mexican fan palm | SWS, DW, DL, DEV | I |
| ASPAGACEAE | ASPARAGUS FAMILY | | |
| <i>Asparagus densiflorus</i> (Kunth) Jessop | Sprenger's asparagus-fern | DEV | I |
| CYPERACEAE | SEDGE FAMILY | | |
| <i>Cyperus</i> sp. | nutsedge, galingale | DW | I |
| <i>Eleocharis</i> sp. | spike-rush | FWM | N |
| <i>Schoenoplectus [=Scirpus] californicus</i> (C.A. Mey.) Soják | southern bulrush | DW, NNR | N |
| POACEAE (GRAMINEAE) | GRASS FAMILY | | |
| <i>Arundo donax</i> L. | giant reed | SWS, ARU | I |
| <i>Avena barbata</i> Pott ex Link | slender wild oat | DL | I |
| <i>Bothriochloa barbinodis</i> (Lag.) Herter | cane bluestem | DCSS | N |
| <i>Cynodon dactylon</i> (L.) Pers. | Bermuda grass | FWM, DL | I |
| <i>Pennisetum</i> sp. | fountain grass | DW, DCSS, NNG, DL, EUC | I |
| <i>Poa annua</i> L. | annual blue grass | DL | I |

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Plant Species Observed**

| Scientific Name | Common Name | Habitat | Origin |
|--|---|-------------------|--------|
| <i>Polypogon monspeliensis</i> (L.) Desf. | annual beard grass, rabbitfoot grass | FWM, NNR | I |
| <i>Stipa miliacea</i> (L.) Hoover var. <i>miliacea</i> [= <i>Piptatherum miliaceum</i> ssp. <i>miliaceum</i> and <i>Oryzopsis miliacea</i>] | smilo grass | NNR, DW, DL | I |
| STRELITZIACEAE | BRODIAEA FAMILY | | |
| <i>Strelitzia nicolai</i> | Giant bird of paradise | DEV | I |
| <i>Strelitzia reginae</i> | bird of paradise | DEV | I |
| TYPHACEAE | CATTAIL FAMILY | | |
| <i>Typha latifolia</i> L. | broad-leaved cattail | SWS, FWM | N |
| ANGIOSPERMS: DICOTS | | | |
| ADOXACEAE | ADOXA FAMILY | | |
| <i>Sambucus nigra</i> L. ssp. <i>caerulea</i> (Raf.) Bolli [= <i>Sambucus mexicana</i>] | blue elderberry | DCSS | N |
| AIZOACEAE | FIG-MARIGOLD FAMILY | | |
| <i>Carpobrotus edulis</i> (L.) N.E. Br. | freeway iceplant | EUC | I |
| <i>Delosperma cooperii</i> | Trailing iceplant | DEV | I |
| ANACARDIACEAE | SUMAC OR CASHEW FAMILY | | |
| <i>Malosma laurina</i> Nutt. ex Abrams | laurel sumac | DCSS, DL, DEV | N |
| <i>Rhus integrifolia</i> (Nutt.) Benth. & Hook. f. ex Rothr. | lemonade berry | DCSS, DL, DEV | N |
| <i>Schinus molle</i> L. | Peruvian pepper tree | EUC, NNNW, DEV | I |
| <i>Schinus terebinthifolius</i> Raddi | Brazilian pepper tree | SWS, DW, DEV | I |
| APIACEAE (UMBELLIFERAE) | CARROT FAMILY | | |
| <i>Apium graveolens</i> L. | celery | FWM, DW | I |
| <i>Foeniculum vulgare</i> Mill. | fennel | DCSS, DL | I |
| APOCYNACEAE | DOGBANE FAMILY | | |
| <i>Carissa macrocarpa</i> | Natal plum | DEV | N |
| <i>Vinca major</i> L. | greater periwinkle | SWS, DL | I |
| ARALIACEAE | GINSENG FAMILY | | |
| <i>Hedera helix</i> L. | English ivy | DL | I |

**Attachment 1
Plant Species Observed**

| Scientific Name | Common Name | Habitat | Origin |
|---|--------------------------------|---------------------|--------|
| ASTERACEAE | SUNFLOWER FAMILY | | |
| <i>Ambrosia</i> [=Hymenoclea] <i>monogyra</i> (Torr. & A. Gray) Strother & B.G. Baldwin | singlewhorl burrobrush | DCSS, DL | N |
| <i>Artemisia californica</i> Less. | California sagebrush | DCSS | N |
| <i>Baccharis pilularis</i> DC. | chaparral broom, coyote brush | DCSS, EUC | N |
| <i>Baccharis salicifolia</i> (Ruiz & Pav.) Pers. ssp. <i>salicifolia</i> | mule fat, seep-willow | DW | N |
| <i>Baccharis sarothroides</i> A. Gray | broom baccharis | DCSS, NNG, NNW, DEV | N |
| <i>Carduus pycnocephalus</i> L. | Italian thistle | DCSS | I |
| <i>Centaurea melitensis</i> L. | totalote, Maltese star-thistle | DCSS, DL | I |
| <i>Erigeron</i> [=Conyza] <i>canadensis</i> L. | horseweed | DEV | N |
| <i>Glebionis coronaria</i> (L.) Spach [=Chrysanthemum coronarium] | garland, crown daisy | DL | I |
| <i>Helminthotheca</i> [=Picris] <i>echioides</i> (L.) Holub | bristly ox-tongue | DW | I |
| <i>Heterotheca grandiflora</i> Nutt. | telegraph weed | DL | N |
| <i>Isocoma menziesii</i> (Hook. & Arn.) G.L. Nesom | coastal goldenbush | DCSS | N |
| <i>Lactuca serriola</i> L. | prickly lettuce | DL | I |
| <i>Sonchus oleraceus</i> L. | common sow thistle | I | I |
| <i>Pluchea odorata</i> (L.) Cass. | salt marsh fleabane | FWM | N |
| <i>Xanthium strumarium</i> L. | cocklebur | DW | N |
| BERBERIDACEAE | BARBERRY FAMILY | | |
| <i>Berberis</i> sp. | Ornamental barberry | DEV | I |
| BETULACEAE | BIRCH FAMILY | | |
| <i>Alnus rhombifolia</i> Nutt. | white alder | DW | N |
| BIGNONIACEAE | BIGNONIA FAMILY | | |
| <i>Jacaranda mimosifolia</i> D. Don | blue jacaranda | DEV | I |
| <i>Pandoera jasminoides</i> | Bower vine | DEV | I |
| BRASSICACEAE (CRUCIFERAE) | MUSTARD FAMILY | | |
| <i>Hirschfeldia incana</i> (L.) Lagr.-Fossat | short-pod mustard | NNW, DL | I |
| <i>Nasturtium officinale</i> [=Rorippa nasturtium-aquaticum] W.T. Aiton | water cress | NNR | N |
| CACTACEAE | CACTUS FAMILY | | |
| <i>Cylindropuntia</i> [=Opuntia] <i>prolifera</i> (Engelm.) F.M. Knuth | coast cholla | DCSS, EUC | N |

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Plant Species Observed**

| Scientific Name | Common Name | Habitat | Origin |
|--|-------------------------------------|--------------------------|--------|
| <i>Opuntia ficus-indica</i> (L.) Mill. | mission prickly-pear, Indian fig | EUC | I |
| <i>Opuntia littoralis</i> (Engelm.) Cockerell. | coast prickly-pear, shore cactus | DCSS, NNG | N |
| CAPRIFOLIACEAE | HONEYSUCKLE FAMILY | | |
| <i>Lonicera japonica</i> Thunb. ex Murray | Japanese honeysuckle | DEV | I |
| CHENOPODIACEAE | GOOSEFOOT FAMILY | | |
| <i>Salsola tragus</i> L. | Russian thistle, tumbleweed | DCSS, DL | I |
| CONVOLVULACEAE | MORNING-GLORY FAMILY | | |
| <i>Calystegia macrostegia</i> (Greene) Brummitt | morning-glory | DEV, DL | N |
| EUPHORBIACEAE | SPURGE FAMILY | | |
| <i>Euphorbia</i> [= <i>Chamaesyce</i>] <i>maculata</i> L. | spotted spurge | DL | I |
| <i>Euphorbia pulcherrima</i> | Poinsettia | DEV | I |
| <i>Ricinus communis</i> L. | castor bean | SWS, FWM, NNR, DW, DL | I |
| FABACEAE (LEGUMINOSAE) | LEGUME FAMILY | | |
| <i>Acacia</i> sp. | acacia | DL | I |
| <i>Acacia decurrens</i> Willd. | green wattle | EUC | I |
| <i>Acacia longifolia</i> (Andrews) Willd. | Sydney golden wattle | DEV | I |
| <i>Acacia redolens</i> Maslin | vanilla-scented wattle | EUC | I |
| <i>Melilotus albus</i> Medik. | white sweetclover | SWS, DW, DL | I |
| <i>Tipuana tipu</i> | Tipu tree | DEV | I |
| FAGACEAE | OAK FAMILY | | |
| <i>Quercus agrifolia</i> Née | coast live oak, encina | DEV | N |
| JUGLANDACEAE | WALNUT FAMILY | | |
| <i>Carya illinoensis</i> | Pecan | DEV | I |
| LAMIACEAE | MINT FAMILY | | |
| <i>Marrubium vulgare</i> L. | horehound | EUC | I |
| <i>Roamarinus officinalis</i> | rosemary | DEV | I |
| <i>Salvia mellifera</i> Greene | black sage | DCSS | N |
| LYTHRACEAE | LOOSESTRIFE FAMILY | | |
| <i>Punica granatum</i> L. | pomegranate | DEV | I |

**Attachment 1
Plant Species Observed**

| Scientific Name | Common Name | Habitat | Origin |
|---|--------------------------------------|----------------|--------|
| MAGNOLIACEAE | MAGNOLIA FAMILY | | |
| <i>Magnolia sp.</i> | Magnolia | DEV | I |
| MYRTACEAE | MYRTLE FAMILY | | |
| <i>Eucalyptus sp.</i> | gum tree | EUC | I |
| <i>Eucalyptus camaldulensis</i> Dehnh. | red gum, river red gum | EUC | I |
| <i>Eucalyptus polyanthemus</i> Schauer | silver dollar gum, red box | EUC | I |
| <i>Eucalyptus sideroxylon</i> A. Cunn. ex Woolls | red iron bark | EUC, DEV | I |
| <i>Melaleuca viminatis</i> (Sol. ex Gaertn.) Bymes | weeping bottlebrush | EUC, DEV | I |
| <i>Metrosideros excels</i> | New Zealand Christmas tree | DEV | I |
| NYCTAGINACEAE | FOUR O'CLOCK FAMILY | | |
| <i>Bougainvillea sp.</i> | Bougainvillea | DEV | I |
| OLEACEAE | OLIVE FAMILY | | |
| <i>Fraxinus uhdei</i> (Wenz.) Lingelsh. | shamel ash | NNR | I |
| <i>Olea europaea</i> L. | olive | DEV | I |
| ONAGRACEAE | EVENING-PRIMROSE FAMILY | | |
| <i>Epilobium sp.</i> | willow herb, fireweed | FWM | N |
| <i>Oenothera elata</i> Kunth ssp. <i>hirsutissima</i> (S. Watson) W. Dietr. | great marsh evening-primrose | FWM | N |
| <i>Oenothera speciose</i> | Mexican evening primrose | DEV | I |
| PLATANACEAE | PLANE TREE OR SYCAMORE FAMILY | | |
| <i>Platanus racemosa</i> Nutt. | western sycamore | RW, DL | N |
| PLUMBAGINACEAE | LEADWORT FAMILY | | |
| <i>Plumbago auriculata</i> | Cape leadwort | NNR | I |
| POLYGONACEAE | BUCKWHEAT FAMILY | | |
| <i>Eriogonum fasciculatum</i> Benth. var. <i>fasciculatum</i> | coast California buckwheat | DCSS, NNG, EUC | N |
| <i>Rumex crispus</i> L. | Curly dock | NNR | I |
| PROTEACEAE | BUTTERCUP FAMILY | | |
| <i>Grevillea robusta</i> | Silk oak | DL, DEV | N |

**Attachment 1
Plant Species Observed**

| Scientific Name | Common Name | Habitat | Origin |
|--|------------------------------|----------|--------|
| RHAMNACEAE | BUCKTHORN FAMILY | | |
| <i>Frangula sp.</i> | coffeeberry | DEV | N |
| ROSACEAE | ROSE FAMILY | | |
| <i>Pyracantha coccinea</i> M. Roem. | firethorn, scarlet firethorn | DEV | I |
| <i>Rhaphiolepis indica</i> (L.) Lindl. ex Ker Gawl. | Indian hawthorn | | I |
| SALICACEAE | WILLOW FAMILY | | |
| <i>Populus fremontii</i> S. Watson ssp. <i>fremontii</i> | Fremont cottonwood, alamo | NNR, DEV | N |
| <i>Salix laevigata</i> Bebb | red willow | SWS, DW | N |
| <i>Salix lasiolepis</i> Benth. | arroyo willow | SWS, DW | N |
| SAPINDACEAE | SOAPBERRY FAMILY | | |
| <i>Cupaniopsis anacardioides</i> | Carrotwood | EUC | I |
| SOLANACEAE | NIGHTSHADE FAMILY | | |
| <i>Nicotiana glauca</i> Graham | tree tobacco | DL | I |
| ULMACEAE | ELM FAMILY | | |
| <i>Ulmus parvifolia</i> Jacq. | Chinese elm, lacebark elm | NNR, DW | I |
| VERBENACEAE | VERVAIN FAMILY | | |
| <i>Lantana</i> sp. | lantana | DEV | I |

Notes: Scientific and common names were primarily derived from the Jepson Online Interchange (University of California 2013). In instances where common names were not provided in this resource, common names were obtained from Rebnan and Simpson (2006). Additional common names were obtained from the USDA maintained database (USDA 2013) or the Sunset Western Garden Book (Brenzel 2001) for ornamental/horticultural plants. Common names denoted with * are from County of San Diego 2010.

HABITATS

ARU = Arundo-dominated riparian
DCSS = Coastal sage scrub
DEV = Urban/developed
DL = Disturbed land
DW = Disturbed wetland
EUC = Eucalyptus woodland
FWM = Freshwater marsh
NNG = Non-native grassland
NNR = Non-native riparian
NNW = Non-native woodland
SWS = Southern willow scrub

ORIGIN

N = Native to locality
I = Introduced species from outside locality
(I) = Introduced species to the ecoregion in which the survey occurred; however, native to other ecoregions within San Diego County.

ATTACHMENT 2
Wildlife Species Observed

**Attachment 2
Wildlife Species Observed**

| Scientific Name | Common Name | Occupied Habitat | On-site Abundance/ Seasonality (Birds Only) | Evidence of Occurrence |
|--|--|------------------|---|---------------------------|
| INVERTEBRATES (Nomenclature for fairy shrimp from Eriksen and Belk 1999; for spiders and insects from Evans 2008; for butterflies from San Diego Natural History Museum 2002) | | | | |
| PAPILIONIDAE | | | | |
| <i>Papilio eurymedon</i> | PARNASSIANS & SWALLOWTAILS pale swallowtail | EUC | C | O |
| <i>Papilio rutulus</i> | western tiger swallowtail | NNR, DEV | C | O |
| PIERIDAE | | | | |
| <i>Pieris rapae</i> | WHITES & SULPHURS cabbage white (I) | EUC | C | O |
| REPTILES (Nomenclature from Crother et al 2008) | | | | |
| PHRYNOSOMATIDAE | | | | |
| <i>Uta stansburiana</i> | SPINY LIZARDS common side-blotched lizard | EUC | C | O |
| BIRDS (Nomenclature from American Ornithologists' Union 2015 and Unitt 2004) | | | | |
| CHARADRIIDAE | | | | |
| <i>Charadrius vociferus vociferus</i> | LAPWINGS & PLOVERS killdeer | FWM | F / Y | O |
| COLUMBIDAE | | | | |
| <i>Zenaidura macroura marginella</i> | PIGEONS & DOVES mourning dove | DCSS | C / Y | V |
| PSITTACIDAE | | | | |
| <i>Amazona</i> sp. | PARROTS Amazon parrot | DEV | F / Y | V |
| TROCHILIDAE | | | | |
| <i>Calypte anna</i> | HUMMINGBIRDS Anna's hummingbird | DEV | C / Y | V, O |
| TYRANNIDAE | | | | |
| <i>Sayornis nigricans semiatra</i> | TYRANT FLYCATCHERS black phoebe | DEV | C / Y | V, O |
| CORVIDAE | | | | |
| <i>Corvus corax clarionensis</i> | CROWS, JAYS, & MAGPIES common raven | DEV | C / Y | V, O |
| HIRUNDINIDAE | | | | |
| <i>Petrochelidon pyrrhonota tachina</i> | SWALLOWS cliff swallow | DW | F / S | O |
| EMBERIZIDAE | | | | |
| <i>Melospiza [=Pipilo] crissalis</i> | EMBERIZIDS California towhee | SWS, DCSS | C / Y | V |

**Attachment 2
Wildlife Species Observed**

| Scientific Name | Common Name | Occupied Habitat | On-site Abundance/ Seasonality (Birds Only) | Evidence of Occurrence |
|--|--|------------------|---|---------------------------|
| FRINGILLIDAE <i>Haemorhous [=Carpodacus] mexicanus frontalis</i> | FINCHES house finch | DEV | C / Y | V |
| PASSERIDAE <i>Passer domesticus</i> | OLD WORLD SPARROWS house sparrow (I) | DEV, DH | C / Y | V |
| <p>(I) = Introduced species</p> <p>HABITATS DCSS = Diegan coastal sage scrub DEV = Urban/developed land DL = Disturbed land DW = Disturbed wetland EUC = Eucalyptus woodland FWM = Freshwater marsh NNR = Non-native riparian</p> <p>EVIDENCE OF OCCURRENCE O = Observed V = Vocalization</p> <p>ABUNDANCE (birds only; based on Garrett and Dunn 1981) C = Common to abundant; almost always encountered in proper habitat, usually in moderate to large numbers F = Fairly common; usually encountered in proper habitat, generally not in large numbers U = Uncommon; occurs in small numbers or only locally</p> <p>SEASONALITY (birds only) A = Accidental; species not known to occur under normal conditions; may be an off-course migrant M = Migrant; uses site for brief periods of time, primarily during spring and fall months S = Spring/summer resident; probable breeder on-site or in vicinity T = Transient; uses site regularly but unlikely to breed on-site V = Rare vagrant W = Winter visitor; does not breed locally Y = Year-round resident; probable breeder on-site or in vicinity</p> | | | | |

ATTACHMENT 3

Sensitive Plant Species Observed or with the Potential to Occur

Attachment 3
Sensitive Plant Species
Observed (†) or with Potential to Occur

| Species | State/Federal Status | CNPS CRPR | City of San Diego | Habitat/Blooming Period | Comments |
|---|----------------------|-----------|-------------------|---|--|
| ANGIOSPERMS: DICOTS | | | | | |
| CHENOPODIACEAE GOOSEFOOT FAMILY | | | | | |
| <i>Aphanisma blitoides</i> aphanisma | -/- | 1B.2 | NE, MSCP | Annual herb; coastal bluff scrub, coastal sage scrub; sandy soils; blooms March–June; elevation less than 1,000 feet. | No potential to occur. No sandy soils or coastal bluff habitat. |
| APIACEAE CARROT FAMILY | | | | | |
| <i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery | CE/FE | 1B.1 | NE, MSCP | Biennial/perennial herb; vernal pools, mesic areas of coastal sage scrub and grasslands, blooms April–June; elevation less than 2,000 feet. Known from San Diego and Riverside counties. Additional populations occur in Baja California, Mexico. | No potential to occur. No clay soils or vernal pool habitat. |
| ASTERACEAE SUNFLOWER FAMILY | | | | | |
| <i>Ambrosia monogyra</i> † [= <i>Hymenoclea monogyra</i>] singlewhorl burrobrush | -/- | 2B.2 | - | Perennial shrub; sandy, chaparral, Sonoran desert scrub; blooms August–November; elevation 30–1,650 feet. | Observed. Three patches were found within the project area. Two patches were within disturbed land on the Nazarene Church property. One patch was observed within Diegan coastal sage scrub near the Mission Gorge Pump Station. |

Attachment 3
Sensitive Plant Species
Observed (†) or with Potential to Occur

| Species | State/Federal Status | CNPS CRPR | City of San Diego | Habitat/Blooming Period | Comments |
|--|----------------------|-----------|-------------------|---|---|
| <i>Ambrosia pumila</i> San Diego ambrosia | -/FE | 1B.1 | NE, MSCP | Perennial herb (rhizomatous); chaparral, coastal sage scrub, valley and foothill grasslands, creek beds, vernal pools, often in disturbed areas; blooms May–September; elevation less than 1,400 feet. Many occurrences extirpated in San Diego County. | Low potential to occur. Although this species is known from stream terraces through moderately disturbed coastal sage scrub, the habitat east of the Nazarene Church is likely too disturbed for this species. The CNDDDB does not have any records of this species within two miles of the project area. |
| <i>Artemisia palmeri</i> San Diego sagewort | -/— | 4.2 | — | Perennial deciduous shrub; coastal sage scrub, chaparral, riparian, mesic, sandy areas; blooms May–September; elevation less than 3,000 feet. | Low potential to occur. Riparian and alluvial areas east of Nazarene Church and non-lined channel areas. |
| <i>Baccharis vanessae</i> Encinitas baccharis [=Encinitas coyote brush] | CE/FT | 1B.1 | NE, MSCP | Perennial deciduous shrub; chaparral; maritime; sandstone; blooms August–November; elevation less than 2,500 feet. San Diego County endemic. Known from fewer than 20 occurrences. Extirpated from Encinitas area. | No potential to occur. No sandy soils, sandstone or coastal bluff habitat. |
| <i>Bahiopsis</i> [= <i>Viguiera</i>] <i>laciniata</i> San Diego viguiera [=San Diego County viguiera] | -/— | 4.2 | — | Perennial shrub; chaparral, coastal sage scrub; blooms February–June; elevation less than 2,500 feet. | Low potential to occur. Disturbed Diegan coastal sage scrub and alluvial areas east of Nazarene Church. Also has potential to have been introduced as an ornamental shrub. |
| <i>Deinandra</i> [= <i>Hemizonia</i>] <i>conjugens</i> Otay tarplant | CE/FT | 1B.1 | NE, MSCP | Annual; blooms May–June, elevation less than 1,000 feet. | No potential to occur. No appropriate clay soils. Separated from known or historic occurrences. |

Attachment 3
Sensitive Plant Species
Observed (†) or with Potential to Occur

| Species | State/Federal Status | CNPS CRPR | City of San Diego | Habitat/Blooming Period | Comments |
|---|----------------------|-----------|-------------------|--|--|
| <i>Iva hayesiana</i> San Diego marsh-elder | -/- | 2B.2 | - | Perennial herb; marshes and swamps, playas, riparian areas; blooms April–September; elevation below 1,700 feet. | Moderate potential to occur. Disturbed and alluvial areas east of Nazarene Church. |
| <i>Stylocline citroleum</i> oil nest-straw | -/- | 1B.1 | - | Annual herb; chenopod scrub; potentially coastal sage scrub, valley and foothill grasslands; clay soils; blooms March–April; elevation less than 1,300 feet. California endemic. Known from San Diego (presumed extirpated) and Kern counties. | No potential to occur. Most the undeveloped portions of project area are on steep slopes or have sedimentary-based soils, which are generally not suitable for this species. |
| CACTACEAE CACTUS FAMILY | | | | | |
| <i>Cylindropuntia californica</i> var. <i>californica</i> [= <i>Opuntia parryi</i> var. <i>serpentina</i>] snake cholla | -/- | 1B.1 | NE, MSCP | Perennial stem succulent; chaparral, coastal sage scrub; blooms April–May; elevation 100–500 feet. | Low potential to occur. Diegan coastal sage scrub or eucalyptus woodland habitats have been historically disturbed. No historic record in immediate vicinity. |
| <i>Ferocactus viridescens</i> San Diego barrel cactus | -/- | 2B.1 | MSCP | Perennial stem succulent; chaparral, coastal sage scrub, valley and foothill grasslands, vernal pools; blooms May–June; elevation less than 1,500 feet. | Low potential to occur. Diegan coastal sage scrub or eucalyptus woodland habitats have been historically disturbed. |
| CRASSULACEAE STONECROP FAMILY | | | | | |
| <i>Dudleya brevifolia</i> [= <i>D. blochmaniae</i> ssp. <i>brevifolia</i>] short-leaved dudleya [short-leaved live-forever] | CE/- | 1B.1 | NE, MSCP | Perennial herb; southern maritime chaparral, coastal sage scrub on Torrey sandstone; blooms in April; elevation less than 1,000 feet. San Diego County endemic. Known from fewer than five occurrences in the Del Mar and La Jolla areas. | No potential to occur. No sandy soils, sandstone or coastal bluff habitat. |

Attachment 3
Sensitive Plant Species
Observed (†) or with Potential to Occur

| Species | State/Federal Status | CNPS CRPR | City of San Diego | Habitat/Blooming Period | Comments |
|---|----------------------|-----------|-------------------|---|--|
| <i>Dudleya variegata</i> variegated dudleya | -/- | 1B.2 | NE, MSCP | Perennial herb; openings in chaparral, coastal sage scrub, grasslands, vernal pools; blooms May-June; elevation less than 1,900 feet. | No potential to occur. Most of the Diegan coastal sage scrub in the project area is disturbed by human activities or is located on steep slopes between developed areas. Such habitat is largely unsuitable. |
| ERICACEAE HEATH FAMILY | | | | | |
| <i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly | -/- | 1B.2 | - | Perennial evergreen shrub; chaparral; blooms April-June; elevation 100-2,600 feet. | No potential to occur. No chaparral habitat. This is a large shrub that would likely have been detected if present. |
| EUPHORBIAEAE SPURGE FAMILY | | | | | |
| <i>Euphorbia misera</i> cliff spurge | -/- | 2B.2 | - | Shrub; coastal sage scrub, maritime succulent scrub, coastal bluff scrub; blooms December-August; elevation less than 2,000 feet. | No potential to occur. No sandy soils, sandstone or coastal bluff habitat. |
| FABACEAE LEGUME FAMILY | | | | | |
| <i>Astragalus tener</i> var. <i>titi</i> coastal dunes milkvetch | CE/FE | 1B.1 | NE, MSCP | Annual herb; coastal bluff scrub, coastal dunes, sandy soils, mesic coastal prairie; blooms March-May; elevation less than 200 feet. California endemic. Known from fewer than 10 occurrences in San Diego (presumed extirpated), Los Angeles (presumed extirpated), and Monterey counties. | No potential to occur. No sandy soils or coastal dune habitat. |
| FAGACEAE OAK FAMILY | | | | | |
| <i>Quercus dumosa</i> Nuttall's scrub oak | -/- | 1B.1 | - | Perennial evergreen shrub; closed-cone coniferous forest, coastal chaparral, coastal sage scrub; sandy and clay loam soils; blooms February-March; elevation less than 1,300 feet. | No potential to occur. No chaparral habitat. This is a large shrub that would likely have been detected if present. |

Attachment 3
Sensitive Plant Species
Observed (†) or with Potential to Occur

| Species | State/Federal Status | CNPS CRPR | City of San Diego | Habitat/Blooming Period | Comments |
|---|----------------------|-----------|-------------------|---|---|
| LAMIACEAE MINT FAMILY | | | | | |
| <i>Acanthomintha ilicifolia</i> San Diego thornmint | CE/FT | 1B.1 | NE, MSCP | Annual herb; chaparral, coastal sage scrub, and grasslands; friable or broken clay soils; blooms April–June; elevation less than 3,200 feet. | No potential to occur. No vernal pool habitat occurs within the project area |
| <i>Pogogyne abramsii</i> San Diego mesa mint | CE/FE | 1B.1 | NE, MSCP | Annual herb; vernal pools; blooms April–July; elevation 300–700 feet. San Diego County endemic. | No potential to occur. No vernal pool habitat occurs within the project area. |
| <i>Pogogyne nudiuscula</i> Otay mesa mint | CE/FE | 1B.1 | NE, MSCP | Annual herb; vernal pools; blooms May–July; elevation 300–820 feet. In California, known from approximately 10 occurrences in Otay Mesa in San Diego County. Additional populations occur in Baja California, Mexico. | No potential to occur. No vernal pool habitat occurs within the project area. Separated from known or historic occurrences. |
| POLEMONIACEAE PHLOX FAMILY | | | | | |
| <i>Navarretia fossalis</i> spreading navarretia [=prostrate navarretia] | -/FT | 1B.1 | NE, MSCP | Annual herb; vernal pools, marshes and swamps, chenopod scrub; blooms April–June; elevation 100–4,300 feet. | No potential to occur. No vernal pool habitat occurs within the project area |
| RANUNCULACEAE BUTTERCUP FAMILY | | | | | |
| <i>Myosurus minimus</i> little mousetail | -/- | 3.1 | - | Annual herb; vernal pools, perennial grasslands; blooms March–June; elevation 70–2,100 feet. | No potential to occur. No vernal pool habitat occurs within the project area. |
| RHAMNACEAE BUCKTHORN FAMILY | | | | | |
| <i>Adolphia californica</i> California adolphia | -/- | 2B.1 | - | Perennial deciduous shrub; Diegan coastal sage scrub and chaparral; clay soils; blooms December–May; elevation 100–2,500 feet. | Moderate potential to occur. Diegan coastal sage scrub habitat areas east of Nazarene Church. Known nearby from historic occurrences. |
| <i>Ceanothus verrucosus</i> wart-stemmed ceanothus | -/- | 2B.2 | MSCP | Perennial evergreen shrub; chaparral; blooms December–April; elevation less than 1,300 feet. | No potential to occur. No chaparral occurs within the project area. |

Attachment 3
Sensitive Plant Species
Observed (†) or with Potential to Occur

| Species | State/Federal Status | CNPS CRPR | City of San Diego | Habitat/Blooming Period | Comments |
|---|------------------------------|-----------|-------------------|--|---|
| ANGIOSPERMS: MONOCOTS | | | | | |
| AGAVACEAE AGAVE FAMILY | | | | | |
| <i>Agave shawii</i> var. <i>shawii</i> Shaw's agave | -/- | 2B.1 | NE, MSCP | Perennial leaf succulent; coastal bluff scrub, coastal sage scrub, maritime succulent scrub; blooms September–May; elevation less than 400 feet. | No potential. No coastal bluff or maritime succulent scrub habitat. Separated from known or historic occurrences. |
| JUNCACEAE RUSH FAMILY | | | | | |
| <i>Juncus acutus</i> ssp. <i>leopardii</i> southwestern spiny rush | -/- | 4.2 | - | Perennial herb (rhizomatous); coastal dunes, meadows and seeps, coastal salt marsh, riparian; blooms May–June; elevation less than 3,000 feet. | Moderate potential to occur. Disturbed and alluvial areas east of Nazarene Church. Possibly along any unlined channels. |
| POACEAE GRASS FAMILY | | | | | |
| <i>Orcuttia californica</i> California Orcutt grass | CE/FE | 1B.1 | NE, MSCP | Annual herb; vernal pools; blooms April–August; elevation 50–2,200 feet. | No potential to occur. No clay soils or vernal pool habitat. |
| THEMIDACEAE BRODIAEA FAMILY | | | | | |
| <i>Bloomeria</i> [= <i>Muilla</i>] <i>clevelandii</i> San Diego goldenstar | -/- | 1B.1 | MSCP | Perennial herb (bulbiferous); chaparral, coastal sage scrub, valley and foothill grassland, vernal pools; clay soils; blooms May; elevation 170–1,500 feet. | Low potential to occur. Diegan coastal sage scrub or eucalyptus woodland habitats have been historically disturbed. |
| <i>Brodiaea orcuttii</i> Orcutt's brodiaea | -/- | 1B.1 | MSCP | Perennial herb (bulbiferous); closed cone coniferous forest, chaparral, meadows and seeps, valley and foothill grassland, vernal pools; mesic, clay soil; blooms May–July; elevation less than 5,600 feet. | No potential to occur. No clay soils or vernal pool habitat. |
| FEDERAL CANDIDATES AND LISTED PLANTS | | | | | |
| FE = Federally listed endangered | STATE LISTED PLANTS | | | | |
| FT = Federally listed threatened | CE = State listed endangered | | | | |
| FC = Federal candidate for listing as endangered or threatened | CR = State listed rare | | | | |
| | CT = State listed threatened | | | | |

Attachment 3
Sensitive Plant Species
Observed (†) or with Potential to Occur

| Species | State/Federal Status | CNPS CRPR | City of San Diego | Habitat/Blooming Period | Comments |
|---|----------------------|---|-------------------|-------------------------|----------|
| CALIFORNIA NATIVE PLANT SOCIETY RARE PLANT RANKING | | | | | |
| 1A | = | Species presumed extinct. | | | |
| 1B | = | Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing. | | | |
| 2A | = | Plants presumed extirpated in California, but more common elsewhere. | | | |
| 2B | = | Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing. | | | |
| 3 | = | Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed. | | | |
| 4 | = | A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations. | | | |
| .1 | = | Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat). | | | |
| .2 | = | Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat). | | | |
| .3 | = | Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known). | | | |
| CBR | = | Considered but rejected | | | |
| CITY OF SAN DIEGO | | | | | |
| NE | = | Narrow endemic | | | |
| MSCP | = | Multiple Species Conservation Program covered species | | | |

ATTACHMENT 4

Sensitive Wildlife Species with Potential to Occur

**Attachment 4
Sensitive Wildlife Species with Potential to Occur**

| Species | Status | Habitat | Occurrence/Comments |
|---|-------------|--|--|
| INVERTEBRATES (Nomenclature from Eriksen and Belk 1999; San Diego Natural History Museum 2002) | | | |
| BRANCHINECTIDAE FAIRY SHRIMP | | | |
| Vernal pool fairy shrimp <i>Branchinecta lynchi</i> | FT | Vernal pools. | No potential to occur. No vernal pools occur within project area. The CNDDDB does not have any records of this species within 2 miles of the project area. |
| San Diego fairy shrimp <i>Branchinecta sandiegonensis</i> | FE, MSCP, * | Vernal pools. | No potential to occur. No vernal pools occur within project area. The nearest record of this species on the CNDDDB is approximately 1.3 miles to the north, in a, |
| STREPTOCEPHALIDAE FAIRY SHRIMP | | | |
| Riverside fairy shrimp <i>Streptocephalus woottoni</i> | FE, MSCP, * | Vernal pools. | No potential to occur. No vernal pools occur within project area. The CNDDDB does not have any records of this species within 2 miles of the project area. |
| AMPHIBIANS (Nomenclature from Crother et al. 2008) | | | |
| PELOBATIDAE SPADEFOOT TOADS | | | |
| Western spadefoot <i>Spea hammondi</i> | CSC | Vernal pools, floodplains, and alkali flats within areas of open vegetation. | Low potential to occur. Water within Alvarado Creek and tributary drainage too fast-moving to provide suitable breeding habitat. Coastal sage scrub in the project area occurs mostly on slopes, which would not support ponding, or in the Nazarene Church property, which is disturbed by vehicle access and construction. This area was not directly accessed, so potential ponding areas could not be confirmed. Nearest CNDDDB record is on a mesa 1.4 miles northwest of the project area. |

**Attachment 4
Sensitive Wildlife Species with Potential to Occur**

| Species | Status | Habitat | Occurrence/Comments |
|--|---|--|--|
| REPTILES (Nomenclature from Crother et al. 2008) | | | |
| IGUANIDAE Coast horned lizard <i>Phrynosoma blainvillii</i> [= <i>P. coronatum</i> coastal population] | IGUANID LIZARDS CSC, MSCP, * | Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage. | Low potential to occur. Area with highest potential is in coastal sage scrub on Nazarene church property. This area is disturbed by vehicle access, clearing, and construction, so habitat quality is low. Habitat to the north, outside the project area is higher quality, and individuals from that area could disperse into the project area. CNDDDB has a record southwest of the Admiral Baker Golf Course, approximately 0.6 mile to the north. |
| SCINCIDAE Coronado skink <i>Eumeces skiltonianus interparietalis</i> | SKINKS CSC | Grasslands, open woodlands and forest, broken chaparral. Rocky habitats near streams. | Low potential to occur. No suitable native woodland or chaparral habitat within the project area, and grassland is very limited. Denser patches of coastal sage scrub occur on slopes to the north of Nazarene Church property and Mission Gorge Pump Station, but CNDDDB does not have any records within 2 miles of the project area. |
| TEIIDAE Belding's orange-throated whiptail <i>Aspidoscelis hyperythra beldingi</i> | WHIPTAIL LIZARDS CSC, MSCP | Chaparral, coastal sage scrub with coarse sandy soils and scattered brush. | Moderate potential to occur. The coastal sage scrub on the Nazarene Church property and some of the hillsides in the north of the project area appear to contain suitable coastal sage scrub habitat. The CNDDDB does not have any records of this species within 2 miles of the project area. |

**Attachment 4
Sensitive Wildlife Species with Potential to Occur**

| Species | Status | Habitat | Occurrence/Comments |
|---|-----------|--|--|
| COLUBRIDAE COLUBRID SNAKES | | | |
| Two-striped gartersnake <i>Thamnophis hammondi</i> | CSC, * | Permanent freshwater streams with rocky bottoms. Mesic areas. | No potential to occur. Alvarado Creek appears to flow throughout the year, fed largely by urban runoff. However, most of the creek is channelized within an urban environment, and much of it is concrete-lined, making it largely unsuitable. |
| CROTALIDAE RATTLESNAKES | | | |
| Red diamond rattlesnake <i>Crotalus ruber</i> | CSC | Desert scrub and riparian, coastal sage scrub, open chaparral, grassland, and agricultural fields. | Moderate potential to occur. Coastal sage scrub on the Nazarene Church property appears to be only marginally suitable, due to frequent human disturbance; however surrounding habitat to the north is of higher quality and could provide a source of dispersing individuals. |
| BIRDS (Nomenclature from American Ornithologists' Union 2015 and Unitt 2004) | | | |
| ACCIPITRIDAE HAWKS, KITES, & EAGLES | | | |
| Cooper's hawk (nesting) <i>Accipiter cooperii</i> | WL, MSCP | Mature forest, open woodlands, wood edges, river groves. Parks and residential areas. | Low potential to occur. While potentially suitable trees are present within the project area, mature woodland habitats are absent. The CNDDB does not have any records of this species within 2 miles of the project area. |
| Northern harrier (nesting) <i>Circus cyaneus hudsonius</i> | CSC, MSCP | Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident. | No potential to occur. Suitable lowland habitat does not occur in the project area. The freshwater marsh is very limited and provides unsuitable habitat for this species. |

**Attachment 4
Sensitive Wildlife Species with Potential to Occur**

| Species | Status | Habitat | Occurrence/Comments |
|--|--|--|--|
| <p>White-tailed kite (nesting) <i>Elanus leucurus</i></p> | <p>CFP, *</p> | <p>Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas. Year-round resident.</p> | <p>Low potential to occur. Project area lacks suitable riparian woodland for nesting. Grassland is too limited to provide suitable foraging habitat for this species. The CNDDDB does not have any records of this species within 2 miles of the project area.</p> |
| <p>PICIDAE</p> | <p>WOODPECKERS & SAPSUCKERS</p> | | |
| <p>VIREONIDAE</p> | <p>VIREOS</p> | | |
| <p>Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i></p> | <p>FE, SE, MSCP</p> | <p>Willow riparian woodlands. Summer resident.</p> | <p>Moderate potential to occur within the project area. CNDDDB has records of this species from 2010 on San Diego River 1,200 and 2,400 feet east of project area. Patches of suitable southern willow scrub present within the project area where vegetation maintenance has not occurred.</p> |
| <p>TROGLODYTIDAE</p> | <p>WRENS</p> | | |
| <p>Coastal cactus wren <i>Campylorhynchus brunneicapillus sandiegensis</i></p> | <p>CSC, MSCP, *</p> | <p>Maritime succulent scrub, coastal sage scrub with thickets of prickly pear cactus or coast cholla. Rare localized resident.</p> | <p>No potential to occur within the project area. Although prickly pear and coast cholla occur within the coastal sage scrub in the project area, none of the patches form suitable thickets to support this species. The CNDDDB does not have any records of this species within 2 miles of the project area.</p> |

**Attachment 4
Sensitive Wildlife Species with Potential to Occur**

| Species | Status | Habitat | Occurrence/Comments |
|--|------------------|--|---|
| SYLVIIDAE GNATCATCHERS Coastal California gnatcatcher <i>Poliotila californica californica</i> | FT, CSC, MSCP | Coastal sage scrub, maritime succulent scrub. Resident. | Moderate potential to occur within the project area. Suitable coastal sage scrub occurs within the Nazarene Church property and on slopes east of Junior Academy and north of the Mission Gorge Pump Station. CNDDDB does not have any records in the project area, but has numerous records in Alvarado Canyon and Navajo Canyon just to the east. |
| PARULIDAE WOOD WARBLERS Yellow warbler (nesting) <i>Setophaga [=Dendroica] petechia</i> | CSC | Breeding restricted to riparian woodland. Spring and fall migrant, localized summer resident, rare winter visitor. | Low potential to occur within the project area. The larger patches of southern willow scrub moderately suitable, but relatively small and largely disturbed by human activities and regular vegetation maintenance for flood control purposes. CNDDDB does not have any records of this species within 2 miles of project area. |
| EMBERIZIDAE EMBERIZIDS Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i> | WL, MSCP | Coastal sage scrub, chaparral, grassland. Resident. | Moderate potential to occur. Suitable coastal sage scrub habitat occurs on hills north of the Nazarene Church property and the Mission Gorge Pump Station. The CNDDDB does not have any records of this species within 2 miles of the project area. |

Attachment 4
Sensitive Wildlife Species with Potential to Occur

| Species | Status | Habitat | Occurrence/Comments |
|--|--------|--|--|
| MAMMALS (Nomenclature from Jones et al. 1997 and Hall 1981) | | | |
| VESPERTILIONIDAE Western red bat <i>Lasiurus blossevillii</i> | CSC | Generally associated with riparian habitats, especially willows, cottonwoods, and sycamores. Roosts in the foliage of trees and large shrubs. | Low potential to occur in the project area. Although suitable foraging habitat is abundant along Alvarado Creek and Mexican fan palms could provide potential roosting locations, this species is not commonly found in urban areas in San Diego County. The CNDDDB does not have any records of this species within 2 miles of the project area. |
| MOLOSSIDAE Western mastiff bat <i>Eumops perotis californicus</i> | CSC | Occurs in desert scrub, chaparral, oak woodland, ponderosa pine and mixed conifer forests, and meadows. Strongly tied to areas with cliffs and other significant rock features for roosting. | No potential to roost, but moderate potential to forage within the project area. No suitable cliffs are present for roosting, and this species does not normally roost in bridges or overpasses. Foraging habitat is abundant within Alvarado Creek. The CNDDDB has one record of this species from 1995 within the San Diego River, just southwest of Qualcomm Stadium, approximately 1.4 miles west of the project area. |
| LEPORIDAE San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i> | CSC | Open areas of scrub, grasslands, agricultural fields. | Moderate potential to occur in the project area. Suitable coastal sage scrub habitat occurs on hills north of the Nazarene Church property and the Mission Gorge Pump Station. The CNDDDB does not have any records of this species within 2 miles of the project area. |

**Attachment 4
Sensitive Wildlife Species with Potential to Occur**

(I) = Introduced species

STATUS CODES

Listed/Proposed

FE = Listed as endangered by the federal government

FT = Listed as threatened by the federal government

SE = Listed as endangered by the state of California

Other

CFP = California fully protected species

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

WL = California Department of Fish and Wildlife watch list species

MSCP = City of San Diego MSCP Subarea Plan covered species

* = Taxa listed with an asterisk fall into one or more of the following categories:

- Taxa considered endangered or rare under Section 15380(d) of CEQA guidelines
- Taxa that are biologically rare, very restricted in distribution, or declining throughout their range
- Population(s) in California that may be peripheral to the major portion of a taxon's range but which are threatened with extirpation within California
- Taxa closely associated with a habitat that is declining in California at an alarming rate (e.g., wetlands, riparian, old growth forests, desert aquatic systems, native grasslands)