Appendix F

BIOLOGICAL TECHNICAL REPORT





San Ysidro Community Plan Update

Biological Technical Report

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Prepared for: City of San Diego Planning Department

1010 Second Avenue, Suite 1200 San Diego, CA 92101 Prepared by: **HELIX Environmental Planning, Inc.** 7578 El Cajon Boulevard La Mesa, CA 91942

San Ysidro Community Plan Update Biological Technical Report

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1.0 INTRODUCTION

This Biological Resources Report addresses the existing biological resources present in the San Ysidro Community Plan Update (SYCPU) area. The proposed project addressed in this Biological Resources Report consists of two basic components: (1) the SYCPU, and (2) the San Ysidro Historic Village Specific Plan (SYHVSP). The description of each component is described below, and each component is addressed separately throughout the report.

This report provides analyses of impacts to the biological resources in the SYCPU area associated with implementation of the SYCPU and SYHVSP, as well as three options for the extension of Calle Primera to Camino de la Plaza, and it presents the types of mitigation that would be expected to reduce the severity of impacts.

San Ysidro Community Plan Update

The SYCPU is a comprehensive update to the current community plan, which was adopted in 1990 (City of San Diego [City] 1990). The San Ysidro Community Plan covers a total of 1,863 acres in the southern tip of the City adjacent to Otay Mesa-Nestor to the north, Otay Mesa to the east, the Tijuana River Valley to the south and west, and the international border with Mexico to the south (Figure 1). The SYCPU area is located in the U.S. Geological Survey, 7.5-minute Imperial Beach Quadrangle (Figure 2). Figure 3 illustrates the location of the SYCPU area on an aerial photograph.

The SYCPU includes the following eight individual elements intended to guide development: Land Use; Mobility; Urban Design; Economic Prosperity; Public Facilities, Services & Safety; Recreation; Conservation; and Historic Preservation. Each element would be updated to bring the community plan into conformance with the City's General Plan as well as embrace current urban planning and sustainability concepts.

The **Land Use Element** is designed to guide future development within the community. It establishes land use designations for each portion of the community. The majority of the plan area (41 percent) would be designated for residential uses. Commercial uses would comprise 18 percent. Industrial development would comprise 2 percent of the community plan area. A total of 11 percent of the plan area would be designated for institutional uses. Parks and Open Space would cover 5 and 13 percent of the area, respectively. The balance would be occupied by transportation facilities.

The **Mobility Element** is intended to improve mobility throughout the community through the development of a balanced multi-modal transportation network. The element recommends future improvements to specific roadway segments ranging from restriping to new roadway connections. The element also contains a number of policies designed to encourage the use of public transit including promoting pedestrian movement in the vicinity of transit and by enhancing existing bus and trolley stops. Under the SYCPU, Calle Primera would be extended to connect with Camino de la Plaza.

The **Urban Design Element** establishes goals and policies that enhance the urban fabric of San Ysidro while retaining the historic elements that contribute to the overall character of the community.

The **Economic Prosperity Element** envisions a strategic approach that is focused on increasing opportunities for densification of residential and commercial development in selected parts of the community, while protecting the existing strong neighborhoods through enhancement of neighborhood villages.

The **Public Facilities, Services & Safety Element** identifies existing facilities and services, and addresses the capacity and needs for future services including potential sites and desired characteristics for future facilities.

The **Recreation Element** is intended to assure that the recreational needs of the community are met. The Element establishes goals and policies for population-based parks and recreation facilities within the community. In addition, the Element establishes goals and policies related to open space and resource-based parks.

The **Conservation Element** contains policies designed to meet the City's sustainable development goals in areas that have been identified as suitable for development. The Conservation Element also addresses open space and habitat protection.

The **Historic Preservation Element** contains specific recommendations to address the history and cultural resources unique to San Ysidro to encourage protection and appreciation of these resources.

San Ysidro Historic Village Specific Plan

The SYHVSP is a comprehensive planning document that will implement the vision for the SYCPU for this Specific Plan Area. The SYHVSP covers approximately 112 acres, and is bounded by Beyer Boulevard to the north, I-5 to the south, I-805 to the east, and Smythe Avenue to the west.

The overall goal of the Specific Plan is to create an attractive, intensified urban environment with a mix of land uses surrounding the Beyer Trolley Station and along San Ysidro Boulevard, while preserving the low-scale single- and multi-family character of the residential areas.

The Land Use Component of the Specific Plan includes guidelines intended to: (1) preserve the historic character of the area, (2) attract community-oriented development, (3) promote alternate forms of transportation (e.g. walking and biking), and (4) focus increased residential density on major transportation corridors and near transit. The Specific Plan Area includes the following five land use designations, as specified by the SYCPU: Low-Medium Density Residential, Medium Density Residential, Community Commercial (Residential Permitted), Institutional, and Park.



Regional Location Map

SAN YSIDRO COMMUNITY PLAN UPDATE

Figure 1

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Project Vicinity Map (USGS Topography)

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Figure 2

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Project Vicinity Map (Aerial Photograph)

SAN YSIDRO COMMUNITY PLAN UPDATE

Figure 3





The **Mobility Component** of the Specific Plan sets forth a number of polices and guidelines to promote mobility including (1) install new, and widen existing, sidewalks, (2) improve lighting and landscaping along sidewalks, (3) improve street crossings, and (4) incorporate bikeway facilities on select roadways.

The **Urban Design Component** of the Specific Plan identifies policies intended to enhance public spaces, including parks, public plazas, and roadways. The Specific Plan encourages the creation of pocket parks and neighborhood plazas. Enhanced streetscape is encouraged including benches, bicycle parking, and improved landscaping and lighting. Bioswales and pervious pavement are encouraged to reduce stormwater runoff and pollutants. Signage improvements are recommended to increase transit usage, and facilitate movement within the community. Lastly, the inclusion of public art is encouraged.

The **Infrastructure and Public Facilities Component** of the Specific Plan establishes policies and describes improvements necessary for the upgrading and expansion of public facilities, including water, wastewater, solid waste, stormwater, natural gas, police and fire protection, schools, libraries, parks, and other public services. Water conservation measures are identified to help assure a reliable water supply. Stormwater facilities are encouraged to convey runoff through the Specific Plan Area, and reduce water pollution. Adequate staffing and equipment are identified as important to assuring adequate police and fire protection. A new location for the community library in the Specific Plan Area is proposed. Mini and pocket park locations are identified in the Specific Plan area to enhance recreational opportunities within the Specific Plan Area as well as the overall Community Plan Area.

2.0 METHODS

2.1 LITERATURE REVIEW

HELIX Environmental Planning, Inc. (HELIX) conducted reviews of existing biological resources literature for the SYCPU area. Sources for the literature review included, but were not limited to:

- California Natural Diversity Data Base (CNDDB)
- U.S. Fish and Wildlife Service (USFWS) species database
- Multiple Species Conservation Program (MSCP) mapping
- Project-specific data from the San Ysidro Railroad Yard Improvement Project (HELIX 2010)
- U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS) Soil Survey Geographic Database
- USFWS National Wetlands Inventory
- Rare Plants of San Diego County (Reiser 2001)
- San Diego County Bird Atlas (Unitt 2004)

2.2 BOTANICAL RESOURCES

2.2.1 Vegetation Communities

The base vegetation community mapping for this report is primarily from the San Diego Association of Governments (1995) digital file for the MSCP. Where more current or detailed vegetation mapping exists from the San Ysidro Railroad Yard Improvement Project (HELIX 2010), the HELIX data was used. The San Ysidro Railroad Yard Improvement Project study area included a strip of land approximately 58.5 acres in size along the San Diego and Arizona Eastern railroad line in San Ysidro. The study area was located southeast of Interstate 805, north of the international border with Mexico, and east of East Beyer Boulevard.

Vegetation community classifications in this report follow Oberbauer et al. (2008). Assessments of the sensitivity of communities are based on the City's Biology Guidelines (2012). No plant list was prepared for the SYCPU area because a field survey was not conducted for this report, nor would a Community Plan Update typically require that level of detail. Subsequent environmental review would likely be required for future projects which include sensitive biological resources.

2.2.2 <u>Sensitive Plants</u>

Locations of sensitive plant species are from the CNDDB and project-specific mapping (HELIX 2010). Nomenclature for plant species generally follows Hickman (1993) and Jepson Flora Project (2015). Assessments of the sensitivity of species are based on the California Native Plant Society (CNPS 2015) and City (2012).

2.3 SENSITIVE WILDLIFE

The locations of sensitive wildlife species are from the CNDDB, USFWS species database, MSCP mapping, and project-specific mapping (HELIX 2010). Zoological nomenclature for birds is in accordance with the American Ornithologists' Union (2015) and Unitt (2004); for mammals, Baker et al. (2003) and Hall (1981); and for amphibians and reptiles, Crother (2008). Assessments of the sensitivity of species are based on the California Department of Fish and Wildlife (CDFW; 2015) and City (2012).

3.0 EXISTING CONDITIONS

3.1 PLAN AREA DESCRIPTION

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3.1.1 Topography

The SYCPU area has varying elevations from a low of approximately 40 feet above mean sea level (AMSL) in the southwest to a high of approximately 400 feet AMSL in the east (see Figure 2). The majority of the SYCPU area is relatively level; the eastern portion of the area consists of hills that rise up toward Otay Mesa to the east.

3.1.2 Land Use

Current land uses in the SYCPU area include a mixture of residential development of various densities, industrial and commercial uses, institutional facilities, parks and open space, and transportation facilities.

3.1.3 <u>Soils</u>

The USDA NRCS (2015) shows the following soils mapped in the undeveloped portions of the SYCPU area: Olivenhain cobbly loam, Diablo clay, and Tujunga sand. Olivenhain cobbly loam covers the majority of the central and eastern portions of the SYCPU area. There is also one small area of Diablo clay in the eastern portion of the SYCPU area. The western portion of the SYCPU area, associated with riparian vegetation east of Dairy Mart Road supports, Tujunga sand.

The soils in the developed portions of the SYCPU area include Huerhuero-Urban land complex, Huerhuero loam, Diablo clay, Chesterton fine sandy loam, Tujunga sand, and Chino silt loam (saline; USDA NRCS 2015).

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Topographically, the SYHVSP area consists of level terrain at approximately 70 feet AMSL. Soils in the area consist primarily of Huerhuero-Urban land complex. Olivenhain cobbly loam occurs generally north of Beyer Boulevard, and Tujunja sand occurs generally southwest of West San Ysidro Boulevard (USDA NRCS 2015).

3.2 BOTANICAL RESOURCES

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There are 16 vegetation communities/land cover types present in the SYCPU area:

- Freshwater marsh
- Mule fat scrub
- Southern arroyo willow riparian forest
- Riparian scrub
- Tamarisk scrub
- Disturbed wetland
- Unvegetated basin
- Maritime succulent scrub
- Maritime succulent scrub-disturbed
- Diegan coastal sage scrub
- Diegan coastal sage scrub-disturbed
- Saltbush scrub
- Non-native grassland
- Eucalyptus woodland
- Disturbed land
- Developed

The approximate acreages of these vegetation communities/land cover types are presented in Table 1 and shown on Figure 4. Each is described following Table 1.

Table 1 VEGETATION COMMUNITIES/LAND COVER TYPES IN THE SYCPU AREA				
VEGETATION COMMUNITY/ LAND COVER TYPE	ACREAGE*			
Wetland Communities				
Freshwater marsh	1.5			
Mule fat scrub	0.8			
Southern arroyo willow riparian forest	25.4			
Riparian scrub	54.7			
Tamarisk scrub	0.7			
Disturbed wetland	0.1			
Unvegetated basin	0.4			
Subtotal Wetland Communities	83.6			





Existing Vegetation Communities and Land Cover Types

SAN YSIDRO COMMUNITY PLAN UPDATE

Figure 4

Table 1 (cont.) VEGETATION COMMUNITIES/LAND COVER TYPES IN THE SYCPU AREA				
VEGETATION COMMUNITY/ LAND COVER TYPE	ACREAGE*			
Upland Communities				
Diegan coastal sage scrub	5.7			
Diegan coastal sage scrub-disturbed	6.6			
Maritime succulent scrub	77.3			
Maritime succulent scrub-disturbed	14.0			
Saltbush scrub	<0.1			
Non-native grassland	46.1			
Subtotal Upland Communities	149.7			
Other Uplands				
Eucalyptus woodland	0.1			
Disturbed land	45.3			
Developed	1,583.8			
Subtotal Other Uplands	1629.2			
TOTAL	1,863.0			

*Rounded to the nearest 0.1 acre.

3.2.1 <u>Wetland Vegetation Communities</u>

Wetlands, including riparian areas, are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors (Environmental Protection Agency 2013).

3.2.1.1 Freshwater Marsh (1.5 acres)

Freshwater marsh is dominated by perennial, emergent monocots, which can reach heights of 12 to 15 feet. This vegetation type occurs along the coast and in coastal valleys near river mouths and around the margins of lakes and springs. These areas are permanently flooded by fresh water yet lack a significant current. This community consists of species such as cattails (*Typha* spp.) and bulrush (*Scirpus* spp.; Oberbauer et al. 2008). Freshwater marsh has been mapped north of Camino de la Plaza and east of Dairy Mart Road.

3.2.1.2 Mule Fat Scrub (0.8 acre)

Mule fat scrub is riparian scrub community dominated by mule fat (*Baccharis salicifolia*) and maintained by frequent flooding. Often this community is distributed along intermittent streams (Oberbauer et al. 2008). Mule fat scrub has been mapped in two areas along the western edge of the undeveloped land in the eastern portion of the SYCPU area.



3.2.1.3 Southern Arroyo Willow Riparian Forest (25.4 acres)

Southern arroyo willow riparian forest is a winter-deciduous community dominated by broadleaved trees and dominated by arroyo willow (*Salix lasiolepis*). The tree canopy is closed or nearly closed, and the understory is often made up of shrubby arroyo willows (Oberbauer et al. 2008). This community has been mapped southwest of Interstate 5 and east of Dairy Mart Road.

3.2.1.4 Riparian Scrub (54.7 acres)

Southern riparian scrub is dominated by small trees. Characteristic species in this community include species of willow and broom baccharis (*Baccharis sarothroides*; Oberbauer et al. 2008). Southern riparian scrub has been mapped between Interstate 5 and Camino de la Plaza.

3.2.1.5 Tamarisk Scrub (0.7 acre)

Tamarisk scrub typically consists of a monoculture of any of several species of tamarisk (genus *Tamarix*) and usually occurs along intermittent streams. Tamarisk has a deep root system and high transpiration rate, so it can lower the water table to below the root zone of native species, thereby competitively excluding them. It may also rapidly displace native species within a drainage because it is a prolific seeder (Oberbauer et al. 2008). In the SYCPU area, tamarisk scrub has been mapped at the eastern terminus of Beyer Boulevard and southeast of San Ysidro Middle School.

3.2.1.6 Disturbed Wetland (0.1 acre)

Disturbed wetland is an area that is permanently or periodically flooded and supports native wetland plant species but that has been modified by human activity such that non-native wetland species have become established and dominate. Some characteristic species of disturbed wetlands include giant reed (*Arundo donax*), ox tongue (*Picris echioides*), and cocklebur (*Xanthium strumarium* var. *canadense*). Disturbed wetland has been mapped north of Camiones Way, west of Interstate 5.

3.2.1.7 Unvegetated Basin (0.4 acre)

Unvegetated basins are ephemeral, water-holding basins that occur where vehicle use has severely compacted the soil when it was wet (HELIX 2010). The compacted soils allows water to pond readily even in years of low rainfall when other basins would typically be dry. Unvegetated basins are distinguished from vernal pools due to a lack of vernal pool indicator plant species. However, the ponding water makes these basins potential habitat for sensitive animal species such as the federal listed endangered San Diego fairy shrimp (*Branchinecta sandiegonensis*; that was observed in two of the basins) and potentially sensitive plant species and/or other species that are vernal pool indicators. If vernal pool indicator species were to be present, the basins would be classified as vernal pools. Unvegetated basins have been mapped along and east of the railroad tracks east of Interstate 805.

3.2.2 Upland Communities

Upland vegetation communities do not occur in wetland situations (e.g., inundated or containing saturated soils) and, in the SYCPU area, consist of several shrub and grassland communities. These communities occur primarily on the hillsides in the eastern portion of the SYCPU and at two, small locations elsewhere in the SYCPU area: 1) west of Interstate 5 near the international border with Mexico and 2) on an undeveloped piece of land east of Smythe Avenue, south of Avenida de la Madrid.

3.2.2.1 Diegan Coastal Sage Scrub (5.7 acres)

Diegan coastal sage scrub is the southern form of coastal sage scrub comprised of low-growing, aromatic, drought-deciduous, soft-woody shrubs. Diegan coastal sage scrub is typically dominated by facultatively drought-deciduous species such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), and black sage (*Salvia mellifera*; Oberbauer et al. 2008).

This community is typically found on dry sites with steep slopes or clay-rich soils that are slow to release stored water. These sites often include south- and west-facing slopes and occasionally north-facing slopes, where the community can act as a successional phase to chaparral (Oberbauer et al. 2008). In the SYCPU area, Diegan coastal sage scrub has been mapped south of San Ysidro Middle School and east of East Beyer Boulevard.

3.2.2.2 Diegan Coastal Sage Scrub-disturbed (6.6 acres)

Diegan coastal sage scrub-disturbed contains many of the same shrub species as the undisturbed community but is sparser and has a higher proportion of non-native, annual plant species. Diegan coastal sage scrub-disturbed has also been mapped south of San Ysidro Middle School and east of East Beyer Boulevard.

3.2.2.3 Maritime Succulent Scrub (77.3 acres)

Maritime succulent scrub is a low, open scrub community that is dominated by a mixture of stem and leaf succulent, drought-deciduous species that may also occur within sage scrub communities. This vegetation community typically occurs on thin, rocky, or sandy soils on steep slopes of coastal headlands and bluffs. Maritime succulent scrub is restricted to within a few miles of the coast from about Torrey Pines to Baja California, Mexico and on San Clemente and Catalina islands. The dominant species typically found within this community include San Diego barrel cactus (*Ferocactus viridescens*), velvet cactus (*Bergerocactus emoryi*), prickly pear cactus (*Opuntia littoralis*), cliff spurge (*Euphorbia misera*), dudleya (*Dudleya* spp.), California box-thorn (*Lycium californicum*), and California encelia (*Encelia californica*; Beauchamp 1986). Maritime succulent scrub has been mapped on the hills in the eastern portion of the SYCPU area; it has also been mapped on an undeveloped piece of land east of Smythe Avenue, south of Avenida de la Madrid.

3.2.2.4 Maritime Succulent Scrub-disturbed (14.0 acres)

Maritime succulent scrub-disturbed contains many of the same shrub species as the undisturbed community but is sparser and has a higher proportion of non-native, annual plant species. Maritime succulent scrub has been mapped on the hills in the eastern portion of the SYCPU area.

3.2.2.5 Saltbush Scrub (<0.1 acre)

Saltbush scrub consists of usually low, grayish, microphyllous shrubs, up to three feet in height with some succulent species. Stands are typically strongly dominated by shad scale (*Atriplex canescens*). Since shad scale can occur in coastal sage scrub in southern California, and Diegan coastal sage scrub has been mapped nearby (to the north) in the SYCPU area, saltbush scrub in the SYCPU area, which is dominated by shad scale, may be considered a subtype of Diegan coastal sage scrub. Saltbush scrub has been mapped between East Beyer Boulevard and the railroad tracks.

3.2.2.6 Non-native Grassland (46.1 acres)

Non-native grassland occurs as a dense to sparse cover of non-native grasses, sometimes associated with species of showy-flowered, native, annual forbs. This community characteristically occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species in non-native grassland include oats (Avena spp.), red brome (Bromus madritensis ssp. rubens), ripgut grass (Bromus diandrus), ryegrass (Lolium sp.), and mustard (Brassica sp.). Most of the annual, introduced species that comprise the majority of species and biomass within non-native grassland originated from the Mediterranean region, an area with a long history of agriculture and a climate similar to California's. These two factors, in addition to intensive grazing and agricultural practices in conjunction with severe droughts, contributed to the successful invasion and establishment of these species and the replacement of native grasses with an annual-dominated, non-native grassland (Jackson 1985). These grasslands occur throughout San Diego County and serve as valuable raptor foraging habitat. Non-native grassland has been mapped in the eastern portion of the SYCPU area; on the undeveloped piece of land east of Smythe Avenue, south of Avenida de la Madrid; and near the international border with Mexico east of Virginia Avenue.

3.2.3 Other Uplands

Three other land cover types are present within the SYCPU area. All result from some sort of development, encroachment, or other human disturbance.

3.2.3.1 Eucalyptus Woodland (0.1 acre)

Eucalyptus woodland is dominated by eucalyptus (*Eucalyptus* sp.), an introduced genus that has often been planted purposely for wind blocking, ornamental, and hardwood production purposes. Most groves are monotypic with the most common species being either the blue gum (*Eucalyptus gunnii*) or red gum (*E. camaldulensis* ssp. *obtusa*). The understory within well-established groves is usually very sparse due to the closed canopy and allelopathic nature of the

abundant leaf and bark litter. If sufficient moisture is available, this species becomes naturalized and is able to reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, as a wildlife habitat, these woodlands can provide excellent nesting sites for a variety of raptors if the woodlands are not located in highly urbanized environments. During winter migrations, a large variety of warblers may be found feeding on the insects that are attracted to eucalyptus flowers. Eucalyptus woodland has been mapped as a small stand of eucalyptus trees north of Camiones Way, west of Interstate 5.

3.2.3.2 Disturbed Land (45.3 acres)

Disturbed land includes undeveloped areas modified by activities such as grading, scraping, or off-road vehicle use. Areas mapped as disturbed land occur throughout the undeveloped land in the eastern portion of the SYCPU area, as well as north of Camiones Way and east of Virginia Avenue in the southern portion of the SYCPU area.

3.2.3.3 Developed (1,583.8 acres)

Developed land, which covers most of the SYCPU area, includes residential, commercial, institutional, industrial, and transportation land uses. Developed also includes areas of actively maintained landscaping (including public parks).

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The SYHVSP area is completely developed. See Section 3.2.3.3 for a description of this land cover type.

3.3 SENSITIVE BIOLOGICAL RESOURCES

According to City Municipal Code (Chapter 11, Article 3, Division 1) and the City's Biology Guidelines (City 2012), sensitive biological resources refers to upland and/or wetland areas that meet any one of the following criteria:

(a) Lands that have been included in the City's MSCP Preserve (i.e., the Multi-habitat Planning Area [MHPA]);

(b) Wetlands;¹

- 1. All areas persistently or periodically containing naturally occurring wetland vegetation communities;
- 2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities; and/or
- 3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands.



¹ City Wetlands, specifically, are defined by the City Municipal Code (Chapter 11, Article 3, Division 1) as areas that are characterized by any of the following summarized conditions.

- (c) Lands outside the MHPA that contain Tier I, Tier II, Tier IIIA, or Tier IIIB habitats;
- (d) Lands supporting species or subspecies listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;
- (e) Lands containing habitats with MSCP Narrow Endemic species as listed in the Biology Guidelines (City 2012); or
- (f) Lands containing habitats of MSCP Covered Species as listed in the Biology Guidelines (City 2012).

3.3.1 Sensitive Vegetation Communities

Additionally, sensitive vegetation communities are those considered rare within the region or sensitive by CDFW (Holland 1986) and/or the City. These communities, in any form (e.g., including disturbed), are considered sensitive because they have been historically depleted, are naturally uncommon, or support sensitive species.

Upland vegetation communities are divided into five tiers of sensitivity (the first includes the most sensitive, the fifth the least sensitive) based on rarity and ecological importance (City 2012). Tier I includes rare uplands. Tier II includes uncommon uplands. Tiers IIIA and IIIB include common uplands. Tier IV includes other uplands. Wetland communities are not assigned a tier.

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Based on the definitions of "sensitive" above, the SYCPU area supports 13 sensitive vegetation communities: all seven of the wetland communities and all six of the upland communities, as listed in Table 2 and shown on Figure 5.

Table 2 SENSITIVE VEGETATION COMMUNITIES IN THE SYCPU AREA				
VEGETATION COMMUNITY TIER				
Wetland Communities				
Freshwater marsh				
Mule fat scrub				
Southern arroyo willow riparian forest				
Riparian scrub				
Tamarisk scrub				
Disturbed wetland				
Unvegetated basin*				





Sensitive Vegetation Communities

SAN YSIDRO COMMUNITY PLAN UPDATE

Figure 5

Table 2 (cont.) SENSITIVE VEGETATION COMMUNITIES IN THE SYCPU AREA				
VEGETATION COMMUNITY	TIER			
Upland Communities				
Maritime succulent scrub	Tier I			
Maritime succulent scrub-disturbed	Tier I			
Diegan coastal sage scrub	Tier II			
Diegan coastal sage scrub-disturbed	Tier II			
Saltbush scrub	Tier II**			
Non-native grassland	Tier IIIB			

*Where unvegetated basins support San Diego fairy shrimp, they are considered sensitive. Other unvegetated basins may support listed fairy shrimp species or other listed or vernal pool indicator species, so they are conservatively considered sensitive herein, as well. If they were to support vernal pool indicator species, they would be classified as vernal pools.

**In the SYCPU area, saltbush scrub is considered a subtype of Diegan coastal sage scrub, so it has been assigned to Tier II herein. See the description of saltbush scrub in Section 3.2.2.5.

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The SYHVSP is developed; it does not, therefore, support any sensitive vegetation communities.

3.3.2 Sensitive Plant Species

Sensitive plant species are those that are considered federal, State, or CNPS rare, threatened, or endangered; MSCP Covered Species; or MSCP Narrow Endemic (NE) species (Appendix A). More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1):

- (a) A species or subspecies is listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;
- (b) A species is a Narrow Endemic as listed in the Biology Guidelines in the Land Development Manual (City 2012); and/or
- (c) A species is an MSCP Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2012).

A plant species may also be considered sensitive if it is included in the CNPS Inventory of Rare and Endangered Plants (CNPS 2015).

Sensitive plant status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be



more or less abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations.

San Ysidro Community Plan Update

The sensitive plant species addressed in this section are known from the SYCPU area based on information obtained from the literature review (see Section 2.1). Potential additional species and precise locations and numbers of sensitive species would be identified through project-level surveys for proposed future development. Table 3 lists the sensitive plant species observed or with potential to occur in the SYCPU area or listed as Narrow Endemic by the City.

Table 3 SENSITIVE OR MSCP NARROW ENDEMIC PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR				
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE, OBSERVATIONS OR POTENTIAL TO OCCUR IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD	
San Diego thorn-mint (<i>Acanthomintha</i> <i>ilicifolia</i>)	FT SE CNPS 1B.1 NE	Potential . Occurs on clay soils in chaparral, coastal sage scrub, valley and foothill grassland, and vernal pools. CNDDB has a record along Otay Mesa Road within two miles of the site.	Annual herb April to June	
Spineshrub (Adolphia californica)	 CNPS 2B.1 	Observed . Found in clay soils in chaparral, coastal scrub, and valley and foothill grassland at elevations from approximately 145 feet to 2,430 feet AMSL (CNPS 2015). Usually associated with xeric locales (Reiser 2001). Its range in California is coastal San Diego County (CNPS 2015; Reiser 2001). Eighteen individual spineshrub were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Perennial, deciduous shrub December to May	
Shaw's agave (Agave shawii)	 CNPS 2B.1 NE	No Potential . Occurs in coastal bluff scrub and coastal sage scrub right along the coast. Suitable habitat does not occur on site.	Perennial leaf succulent September to May	



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR					
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD		
San Diego bur-sage (<i>Ambrosia</i> <i>chenopodiifolia</i>)	 CNPS 2B.1 	Observed . Found in coastal scrub at elevations from approximately 180 feet to 510 feet AMSL in southern San Diego County (CNPS 2015). Preferred habitat is low-growing, fairly open coastal scrub (Reiser 2001). Reiser (2001) reported "thousands of shrubseast of Beyer Boulevard and south of San Ysidro Junior High School where it is the dominant plant." Where project-specific surveys for the San Ysidro Railroad Yard Improvement Project in the SYCPU area were conducted, which is in the same area Reiser refers to, San Diego bur-sage was found throughout maritime succulent scrub and maritime succulent scrub-disturbed (HELIX 2010).	Perennial shrub April to June		
Singlewhorl burrobush (Ambrosia monogyra)	 CNPS 2B.2 	Potential . Found in sandy chaparral and Sonoran desert scrub at elevations from approximately 30 feet to 1,640 feet AMSL (CNPS 2015) in washes and dry riverbeds (Keil 2014). Its range in California is San Diego and Riverside counties (CNPS 2015). Singlewhorl burrobush was reported to the CNDDB in 1976 along west San Ysidro Boulevard east of Interstate 5 in an area that is now developed.	Perennial shrub August to November		



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR					
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD		
San Diego ambrosia (Ambrosia pumila)	FE CNPS 1B.1 MSCP Covered, NE	Potential . Found in disturbed areas within chaparral, coastal sage scrub, grasslands, and vernal pools. Its range includes coastal San Diego County and western Riverside County south into Baja California, Mexico at elevations from approximately 65 feet to 1,360 feet AMSL (CNPS 2015; Reiser 2001). Reiser (2001) does not report records of this species near the SYCPU area but does note that many reports from the Otay Valley area have proven to be the similar, non-sensitive, weak leaved burweed (<i>Ambrosia confertiflora</i>) and that some of these incorrect records are in the CNDDB. The CNDDB, however, includes a later record from 2009 for San Diego ambrosia in a creekbed in a ravine north of Otay Mesa Road, 0.5-mile northeast of San Ysidro.	Perennial, rhizomatous herb April to October		
Aphanisma (Aphanisma blitoides)	 CNPS 1B.2 NE	No Potential . Occurs in coastal bluff scrub, coastal dunes, and sandy coastal scrub right along the coast. Suitable habitat does not occur on site.	Annual herb February to June		
Coastal dunes milk- vetch (<i>Astragalus tener</i> var. <i>titi</i>)	FE SE CNPS 1B.1 NE	No Potential . Occurs in coastal dunes and sandy places along the coast. Suitable habitat does not occur on site.	Annual herb March to May		



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD
South coast saltscale (<i>Atriplex pacifica</i>)	 CNPS 1B.2 	Observed . Found in coastal bluff scrub, coastal dunes, coastal scrub, and on playas at elevations from sea level to approximately 500 feet AMSL (CNPS 2015). Grows in xeric, often mildly disturbed locales, and the type specimen for this species is from San Diego, presumably within several miles of the ocean (Reiser 2001). Its range in California is Santa Barbara, Los Angeles, Ventura, Orange, Riverside, and San Diego counties, as well as a number of the Channel Islands (CNPS 2015). One known site for this species is on the periphery of the salt marsh near the mouth of the Tijuana River in Imperial Beach (Reiser 2001). Fourteen individual south coast saltscale plants were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Annual herb March to October
Encinitas baccharis (Baccharis vanessae)	FT SE	No Potential . Occurs in post-fire and mature but relatively low-growing chaparral. Also found in southern maritime and	Perennial shrub
	CNPS 1B.1 NE	southern mixed chaparrals. Site outside of the species' geographic range. No chaparral occurs on site.	August to November



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD
Golden-spined cereus (Bergerocactus emoryi)	 CNPS 2B.2 	Potential . Found in sandy soils in closed-cone coniferous forest, chaparral, and coastal scrub at elevations of approximately 10 feet to 1,295 feet AMSL. Maritime succulent scrub is the primary habitat of this cactus (Reiser 2001). Its range in California is Los Angeles and San Diego counties, and Santa Catalina and San Clemente islands (CNPS 2015). Reiser (2001) reports one small colony east of Beyer Way in San Ysidro.	Perennial stem succulent May to June
Snake cholla (Cylindropuntia [Opuntia] californica var. californica)	 CNPS 1B.1 MSCP Covered, NE	Observed . Found in chaparral and coastal scrub on xeric hillsides at elevations of approximately 100 feet to 495 feet AMSL. Its range in California is San Diego County (CNPS 2015; Reiser 2001). Reiser (2001) reports that old biological survey reports note this species in Moody Canyon on Otay Mesa, and that the CNDDB has a record of this species "near San Ysidro." The CNDDB record for this species is from 2011 on both sides of Moody Canyon just east of San Ysidro. Moody Canyon is southeast of San Ysidro Middle School. Fourteen individual snake cholla were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Perennial stem succulent April to May



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD
Otay tarplant (<i>Deinandra</i> <i>conjugens</i>)	FT SE CNPS 1B.1 MSCP Covered, NE	Potential . Found in clay soils in coastal scrub and valley and foothill grassland at elevations of approximately 80 feet to 985 feet AMSL (CNPS 2015). Fractured clay soils in grasslands or lightly vegetated Diegan coastal sage scrub are the preferred habitats of this species (Reiser 2001). Its range in California is southern San Diego County (Reiser 2001). The CNDDB includes a record from 1998 of the species "just east of Beyer School and south of Moody Canyon, west of Otay Mesa, San Ysidro." More specifically, the location details state, "Mapped within Beyer Park" and "in the SE 1/4 of the SE 1/4 of section 36," which may be within the SYCPU area (Figure 2).	Annual herb April to June
Orcutt's bird's-beak (Dicranostegia orcuttiana[Cordylanth us orcuttianus])	 CNPS 2B.1 MSCP Covered	Observed . Found in coastal scrub at elevations of approximately 30 feet to 1,150 feet AMSL (CNPS 2015). Its preferred habitat is seasonally dry drainages and upland adjacent to riparian habitat (Reiser 2001). Its range in California is southern San Diego County (CNPS 2015; Reiser 2001). Reiser (2001) states that, "the major U.S. population is found in the Otay River drainage west of Interstate 805 to Beyer Boulevard where it is locally abundantScattered occurrences are found downstream." Seventy-nine Orcutt's bird's-beak plants were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Annual herb (hemiparasitic) March to September



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD
Short-leaved dudleya (Dudleya brevifolia)	 SE CNPS 1B.1 NE	No Potential . Occurs in open areas and sandstone bluffs in chamise chaparral or Torrey pine forest. Known only from Del Mar and La Jolla.	Perennial herb April to May
Variegated dudleya (<i>Dudleya variegata</i>)	 CNPS 1B.2 MSCP Covered, NE	Potential . Found in clay soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool areas at elevations of approximately 10 feet to 1,900 feet AMSL (CNPS 2015). Usually grows in small areas devoid of shrub cover (Reiser 2001). Its range in California is San Diego County (CNPS 2015). The CNDDB includes a record of this species just south of Otay Mesa Road near Moody Canyon in 1994.	Perennial herb April to June
San Diego button- celery (Eryngium aristulatum var. parishii)	FE SE CNPS 1B.1 NE ³	Potential . Found in mesic coastal scrub, valley and foothill grassland, and vernal pools at elevations of approximately 65 feet to 2,035 feet AMSL. Its range in California includes Los Angeles, Orange, Riverside, and San Diego counties (CNPS 2015). The CNDDB includes a 1990 record for this species on the western edge of Otay Mesa, 0.7-mile east of the San Ysidro Academy.	Annual/perennial herb April to June



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR				
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD	
Cliff spurge (Euphorbia misera)	 CNPS 2B.2 	Observed . Found in rocky coastal bluff scrub, coastal scrub, and Mojavean desert scrub at elevations from approximately 30 feet to 1,640 feet AMSL. Its range in California includes Santa Barbara, Los Angeles, Orange, Riverside, and San Diego counties, as well as San Clemente, Santa Catalina, and Santa Cruz islands (CNPS 2015). The CNDDB includes a 2008 record of the species on the south rim of Otay Mesa above Spring Canyon just east of the SYCPU area and another record from 2011 north and south of the lower end of Moody Canyon on the west end of Otay Mesa, just east of San Ysidro. Twenty-three individuals of this species were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Perennial shrub December to October	



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD
San Diego barrel cactus (<i>Ferocactus</i> <i>viridescens</i>)	 CNPS 2B.1 MSCP Covered	Observed . Found in chaparral, coastal scrub, valley and foothill grassland, and vernal pool areas at elevations of approximately 10 feet to 1,475 feet AMSL in coastal San Diego County (CNPS 2015; Reiser 2001). The optimal habitat for this species appears to be Diegan coastal sage scrub hillsides, often at the crest of slopes and growing among cobbles (Reiser 2001). The CNDDB includes a 1999 report of the species on the south rim of western Otay Mesa from Interstate 805 to Spring Canyon. It also includes a 2010 report of the species on both sides of Moody Canyon east of San Ysidro. Nineteen individuals of this species were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Perennial stem succulent May to June
Beach goldenaster (<i>Heterotheca</i> sessiliflora ssp. sessiliflora)	 CNPS 1B.1 	Potential . Found in coastal chaparral, dunes, and scrub at elevations from sea level to approximately 4,020 feet AMSL. Its range in California is Santa Barbara and San Diego counties (CNPS 2015). The CNDDB includes a 2005 record for this species in the SYCPU area, "west of the Tijuana International Border Crossing and east of Plaza Las Americas Shopping Mall." This location has since been developed.	Perennial herb March to December



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR				
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD	
California box-thorn (<i>Lycium californicum</i>)	 CNPS 4.2 	Observed . Found in coastal bluff scrub and coastal scrub at elevations of approximately 15 feet to 495 feet AMSL (CNPS 2015). It occupies a narrow band of habitat behind the immediate beaches, both in upper areas of coastal salt marsh and on sandstone slopes (Reiser 2001). Its range in California is Santa Barbara, Los Angeles, Orange, San Bernardino, and San Diego counties, as well as a number of the Channel Islands (CNPS 2015). Fifty-four individuals of this species were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Perennial shrub December to August	
Spreading navarretia (Navarretia fossalis)	FT CNPS 1B.1 ³ , NE	Potential . Found in chenopod scrub, shallow freshwater marshes and swamps, playas, and vernal pools at elevations of approximately 100 feet to 2,150 feet AMSL. Vernal pools and vernal swales are the preferred habitats of this species, and it is rarely found in shallow pools (Reiser 2001). Its range in California is Los Angeles, Riverside, San Luis Obispo, and San Diego counties (CNPS 2015). Neither Reiser (2001) nor the CNDDB include records for this species in or near the SYCPU area. This species was not observed during focused surveys for the San Ysidro Railroad Yard Improvement Project (HELIX 2010).	Annual herb April to June	



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD
Slender cottonheads (<i>Nemacaulis denudata</i> var. gracilis)	 CNPS 2B.2 	Potential . Found on coastal and desert dunes and in Sonoran desert scrub at elevations of approximately 160 feet to 1,315 feet AMSL. Its range in California is San Bernardino, Riverside, San Diego, and Imperial counties (CNPS 2015). The CNDDB and Reiser (2001) report a 1903 record of this species somewhere in the vicinity of San Ysidro and the Tijuana River.	Annual herb March to May
California Orcutt grass (<i>Orcuttia californica</i>)	FE SE CNPB 1B.1 ³ , NE	Potential . Found in vernal pools at elevations of approximately 50 feet to 2,165 feet AMSL in Los Angeles, Riverside, Ventura, and San Diego counties in California (CNPS 2015). California Orcutt grass tends to grow in wetter portions of vernal pool basins but does not show much growth until the basins become somewhat dry (Reiser 2001). Reiser (2001) notes a CNDDB record for the species "one mile east of San Ysidro0.5 mile east of the port of entry"	Annual herb April to August
San Diego mesa mint (Pogogyne abramsii)	FE SE CNPS 1B.1	No Potential . Occurs within vernal pools to the north of the site. Site is outside of the species' known range.	Annual herb
	NE		March to July


	Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR				
SPECIES	SENSITIVITY ¹ Federal State CNPS City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	LIFEFORM ² AND BLOOM PERIOD		
Otay mesa mint (<i>Pogogyne</i> <i>nudiuscula</i>)	FE SE CNPS 1B.1 ³ , NE	Potential . Found in vernal pools at elevations of approximately 295 feet to 820 feet AMSL on Otay Mesa in San Diego County in California (CNPS 2015; Reiser 2001). Most colonies occur in open grasslands with mima mound topography (Reiser 2001). Neither Reiser (2001) nor the CNDDB include records for this species in or near the SYCPU area. This species was not observed during focused surveys for the San Ysidro Railroad Yard Improvement Project (HELIX 2010).	Annual herb May to July		
San Diego County viguiera (Viguiera laciniata)	 CNPS 4.2 	Observed . Found in chaparral and coastal scrub in a variety of soil types at elevations of approximately 195 feet to 2,460 feet AMSL (CNPS 2015; Reiser 2001). It is a dominant shrub in southern San Diego County in Diegan coastal sage scrub away from the immediate coast (Reiser 2001). Its range in California includes Orange and San Diego counties (CNPS 2015). Two-hundred four individuals of this species were observed during surveys for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area (HELIX 2010).	Perennial shrub February to August		



Table 3 (cont.) SENSITIVE PLANT SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR

¹See Appendix A for an explanation of sensitivity codes.

²Lifeform and bloom period are from CNPS (2015).

³Based on a 2006 federal district court ruling that the City's MSCP Subarea Plan does not provide adequate protection for Riverside fairy shrimp, the City surrendered permit coverage for seven vernal pool species on April 20, 2010 (City 2010). The seven species include San Diego fairy shrimp, Riverside fairy shrimp, Otay Mesa mint, San Diego mesa mint (*Pogogyne abramsii*), California Orcutt grass, San Diego button-celery, and spreading navarretia. The USFWS subsequently cancelled the permit as it applied to those seven species on May 14, 2010 (USFWS 2011). Development involving take of any of the seven vernal pool species, therefore, requires authorization from the USFWS through the federal incidental take process until the City completes a new vernal pool Habitat Conservation Plan and enters into another Implementing Agreement for a new federal Incidental Take Permit for those species.



The SYHVSP area is completely developed; therefore, there are no sensitive plant species present or with potential to occur there.

3.3.3 Sensitive Wildlife Species

Sensitive animal species are those that are considered federal or State threatened or endangered; MSCP Covered Species; or MSCP Narrow Endemic species (Appendix A). More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1):

- (a) A species or subspecies is listed as endangered or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;
- (b) A species is a Narrow Endemic as listed in the Biology Guidelines in the Land Development Manual (City 2012); and/or
- (c) A species is a MSCP Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2012).

A species may also be considered sensitive if it is included on the CDFW's Special Animals List (CDFW Natural Diversity Database 2015) as a candidate for federal or State listing, State Species of Special Concern, State Watch List species, State Fully Protected species, or federal Bird of Conservation Concern (Appendix A). Generally, the principal reason an individual taxon (species or subspecies) is considered sensitive is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss. Additionally, avian nesting is protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.

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The sensitive wildlife species addressed in this section are known from the SYCPU area based on information obtained from the literature review (see Section 2.1) or are considered to have potential to occur based on the habitats present in the SYCPU area and the area's geographic location. Potential additional species and precise locations and numbers of sensitive wildlife species would be identified through project-level surveys for proposed future development. Table 4 lists the sensitive wildlife species observed or with potential to occur in the SYCPU area.

Table 4 SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	
Invertebrates			
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	FE ²	Observed. San Diego fairy shrimp is a vernal pool habitat specialist found in small, shallow vernal pools. It can also be found, however, in ditches and road ruts that support suitable conditions (USFWS 1994c <i>in</i> USFWS 1998). The vernal pools often occur in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral. The largest number of vernal pools inhabited by this species occurs in San Diego County. It also has been reported in Orange County; Santa Barbara County; and in Baja California, Mexico (USFWS 1998). San Diego fairy shrimp were detected in two unvegetated basins in the eastern portion of the SYCPU area during focused surveys for sensitive fairy shrimp in 2009/2010 that were conducted for the San Ysidro Railroad Yard Improvement Project (HELIX 2010). The species has also been mapped in the SYCPU area in the USFWS species database. Critical habitat for this species has not been designated by the USFWS within the SYCPU area, however.	

SENSITIVE		Table 4 (cont.) DBSERVED OR WITH POTENTIAL TO OCCUR
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Invertebrates (cont.)		
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE ²	 Potential. Found in moderate to deep (generally ranging from 10 inches to 5-10 feet in depth), longer-lived vernal pools and ephemeral wetlands in southern coastal California and northern Baja California, Mexico. Currently presumed to occupy 60 or fewer pool complexes throughout southern California (USFWS 2011). Critical habitat for this species has not been designated by the USFWS within the SYCPU area. Riverside fairy shrimp have not been reported to the CNDDB in the
		SYCPU area and were not detected in the eastern portion of the SYCPU area during focused surveys for sensitive fairy shrimp in 2009/2010 that were conducted for the San Ysidro Railroad Yard Improvement Project (HELIX 2010). However, unvegetated basins outside of the project's study area may be appropriate for this species.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	
Invertebrates (cont.)		Detential Extent populations of this aposise primarily inhobit	
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE 	Potential. Extant populations of this species primarily inhabit grassland, remnant forbland, juniper woodland, and open scrub and chaparral communities that support its primary larval host plant (dot-seed plantain [<i>Plantago erecta</i>]) and a variety of adult nectar resources. These areas tend to be distributed as patches in a mosaic of vegetation communities. Microhabitat use appears to include patches of exposed soil with abundant sun exposure. The Quino checkerspot has been reported over a wide elevation range from approximately 500 feet AMSL to higher than 5,000 feet AMSL (USFWS 2003). Critical habitat for this species has not been designated by the USFWS within the SYCPU area. There are no CNDDB records for this species in the SYCPU area, and it was not observed during a focused survey of the study area for the San Ysidro Railroad Yard Improvement Project (HELIX 2010). In the SYCPU area, however, all land east of Interstate 805 is within the potential range of the Quino checkerspot in San Diego County based on the recommended survey area map in the USFWS Quino Checkerspot Butterfly Survey Guidelines (USFWS 2014).	

SENSITIV		Table 4 (cont.) DBSERVED OR WITH POTENTIAL TO OCCUR
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Amphibians		
Western spadefoot (Spea hammondii)	 SSC 	Potential. The western spadefoot inhabits floodplains, washes, and low hills. In southern California, its habitats include coastal sage scrub, chaparral, and grassland. Important habitat components include temporary pools (which form during winter and spring rains) for breeding and friable soils for burrowing. This species occurs in California's Central Valley and the San Francisco Bay area south along the coast to northwestern Baja California, Mexico.
		The western spadefoot has not been reported to the CNDDB in the SYCPU area. This species was mapped for the MSCP in the SYCPU area, however. Habitat for the western spadefoot may occur in the undeveloped, eastern and western portions of the SYCPU area.

SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Reptiles Belding's orange-throated whiptail		Observed. This lizard inhabits low-elevation coastal scrub, chamise-
(Aspidoscelis [Cnemidophorus] hyperythrus beldingi)	SSC MSCP Covered	redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. It prefers washes and other sandy areas with patches of brush and rocks (Stebbins 1972) and does not require permanent water (Zeine et al. 1988). It actively forages on the surface and scratches through surface debris taking a variety of small arthropods (Stebbins 1972). During periods of inactivity, individuals seek cover under objects such as rocks, logs, decaying vegetation, and boards, or in rock crevices (Zeiner et al. 1988). The Belding's orange-throated whiptail occurs at elevations from sea level up to approximately 3,410 feet AMSL (Jenning and Hayes 1994 <i>in</i> California Department of Fish and Game 2000) from the Santa Ana River in Orange County, California and near Colton in San Bernardino County, California, west of the Peninsular Ranges and south throughout Baja California, Mexico. In the MSCP area, the species has been documented in Jamul, Santee, Alpine, Otay Mesa, Rancho San Diego, Marine Corps Air Station Miramar, and Escondido (USFWS and CDFW 1996). This species was reported to the CNDDB in 2005 between the international border/Tijuana River levee and the Plaza Las Americas parking lot. In 1981, it was reported south of Otay Mesa Road, 0.5-mil northeast of San Ysidro. Additionally, three individuals were observed in two locations in the eastern portion of the SYCPU area during surveys for the San Ysidro Railroad Yard Improvement Project (HELD

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Reptiles (cont.)		
Red-diamond rattlesnake (<i>Crotalus ruber</i>)	 SSC 	Potential. The red-diamond rattlesnake can be found in chaparral, coastal sage scrub, and along creek banks, particularly among rock outcrops or piles of debris supporting rodents. It ranges from extreme southeastern Los Angeles County (Diamond Bar) into southern San Bernardino County, and south into southern Baja California, Mexico.The red-diamond rattlesnake has not been reported to the CNDDB in the SYCPU area, nor was it mapped there for the MSCP. However, potentially suitable habitat for the species occurs in the undeveloped, eastern portions of the SYCPU area.
Coronado skink (Plestiodon skiltonianus interparietalis)	 SSC 	Potential. This skink can be found in grasslands, coastal sage scrub, open chaparral, pine oak woodland, and coniferous forests. It prefers areas where there is abundant leaf litter or low, herbaceous growth. It occurs in inland southern California south through the north Pacific coast region of northern Baja California Norte, Mexico at elevations from sea level to 8,300 feet AMSL (CaliforniaHerps.com 2015). The Coronado skink has not been reported to the CNDDB in the SYCPU area, nor was it mapped there for the MSCP. However, potentially suitable habitat for the species occurs in the undeveloped, eastern portions of the SYCPU area.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Reptiles (cont.)		
Coast horned lizard (Phrynosoma blainvillii)	 SSC MSCP Covered	 Potential. Coast horned lizards are found in a wide variety of habitats including coastal sage scrub, chaparral, grassland, coniferous forest, oak woodland, riparian, and the margins of the higher elevation desert where it is restricted to juniper-desert chaparral (Grinnell and Grinnell 1907, Van Denburgh 1922, Klauber 1939, Smith 1946, Dixon 1967, Stebbins 1985, Jennings and Hayes 1994, and Brattstrom 1997 <i>in</i> Hollingsworth and Beaman 2005). This species has been reported from elevations ranging from sea level to 8,000 feet AMSL (Brattstrom 1997 <i>in</i> Hollingsworth and Beaman 2005). Within each of these habitats, this species prefers areas with loose, fine soils, an abundance of open areas for basking. It is insectivorous and primarily feeds on native harvester ants (<i>Pogonomyrmex</i> spp.) but will also feed on termites, beetles, flies, wasps, and grasshoppers (Ingles 1929, Reeve 1952, Miller and Stebbins 1964, Dixon 1967, Pianka and Parker 1975, Stebbins 1985, and Jennings and Hayes 1994 <i>in</i> Hollingsworth and Beaman 2005). The coast horned lizard was reported to the CNDDB in 1981 (one to 10 individuals) in open areas in sage scrub south of Otay Mesa Road, 0.5-mile northeast of San Ysidro. Habitat for this species may occur in the

SENSITIVI		Table 4 (cont.) DBSERVED OR WITH POTENTIAL TO OCCUR
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Reptiles (cont.)		·
Two-striped garter snake (<i>Thamnophis hammondii</i>)	 SSC 	Potential. The two-striped garter snake occurs primarily along permanent creeks and streams but also around vernal pools and along intermittent streams. It is occasionally found in chaparral or other habitats relatively far from permanent water. This snake ranges from Monterey County south through the Coastal Ranges into northwestern Baja California, Mexico.
		The two-striped garter snake has not been reported to the CNDDB in the SYCPU area, nor was it mapped there for the MSCP. However, potentially suitable habitat for the species occurs in the undeveloped, eastern and western portions of the SYCPU area.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	
Birds		-	
Cooper's hawk		Potential. The Cooper's hawk nests in deciduous, conifer, and mixed	
(Accipiter cooperii)	WL MSCP Covered	woodlands. In southern California, it generally favors extensive riparian bottomlands (Garrett and Dunn 1981 <i>in</i> Grindrod 2005). Winter habitat requirements are poorly quantified, but Christmas Bird count data suggest that Cooper's hawks use essentially the same habitats during winter and summer (Grindrod 2005). Unitt (2004) shows records of confirmed breeding for Cooper's hawks in/near the SYCPU area.	
		The Cooper's hawk has not been reported to the CNDDB in the SYCPU area, nor was it mapped there for the MSCP. However, it was observed flying overhead during surveys for the San Ysidro Railroad Yard Improvement Project (HELIX 2010). Potentially suitable nesting and foraging habitat for the species occurs in the undeveloped, western portion of the SYCPU area; potentially suitable foraging habitat occurs in the undeveloped, eastern portion of the SYCPU area.	

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR			
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	
Birds (cont.)			
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	 WL MSCP Covered	Potential. This sparrow prefers coastal sage scrub (Unitt 2004) but can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats (Thorngate and Parsons 2005), as well as in open chaparral or coastal sage scrub and grasslands with scattered shrubs (Unitt 2004). Following a chaparral fire, suitable habitat may develop in the early stages of chaparral re-growth (Gallagher 1997), and rufous-crowned sparrows may stay in such open, disturbed habitats for years (Rising 1996, Collins 1999). The <i>canescens</i> subspecies of <i>Aimophila ruficeps</i> is a resident of southwest California on the slopes of the Transverse and Coastal Ranges from Los Angeles County south to Baja California Norte, Mexico. It can also be found on San Martin Island (Thorngate and Parsons 2005). There are no CNDDB records for this species in the SYCPU area; although, it was mapped there for the MSCP. Potentially suitable habitat occurs in the eastern portion of the SYCPU area. Additionally, Unitt (2004) shows probable breeding for the species in/near the SYCPU area.	

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Birds (cont.)		
Grasshopper sparrow (Ammodramus savannarum)	 SSC 	Potential. The grasshopper sparrow is restricted to grasslands and is localized and generally uncommon in San Diego County (Unitt 2004). There are no CNDDB or MSCP records for this sparrow in the SYCPU area. Unitt (2004) also does not report any records of breeding or wintering grasshopper sparrows in the SYCPU area; however, potential grassland habitat for this species does occur in the undeveloped, eastern portion of the SYCPU area.
Bell's sage sparrow (Artemisiospiza belli belli)	BCC WL 	 Potential. The Bell's sage sparrow can be found in chaparral and sage scrub. The habitat must not be too dense or have too much leaf litter. Its distribution throughout San Diego County is patchy, which often shifts to include partially recovered burned areas (Unitt 2004). Unitt (2004) notes that breeding in/near the SYCPU area is probable. The Bell's sage sparrow has not been reported to the CNDDB in the SYCPU area, but it was mapped there for the MSCP. Potentially suitable habitat for the species occurs in the undeveloped, eastern portion of the SYCPU area.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Birds (cont.)		
Burrowing owl (<i>Athene cunicularia</i>)	BCC SSC MSCP Covered	 Potential. In general, burrowing owl habitat is composed of drier, open areas that can include prairies, grasslands, and savannas. The burrowing owl can also be found living in deserts, farmlands, pastures, cemeteries, airports, vacant lots, university campuses, golf courses and other urban areas (Cornell Lab of Ornithology 2014, The Peregrine Fund 2014). Burrowing owls are dependent on the presence of fossorial mammals (primarily prairie dogs and ground squirrels), whose burrows are used for nesting and roosting (Klute et al. 2003). In southern California, the most commonly used rodent burrow is that of the California ground squirrel (<i>Otospermophilus beecheyi</i>; Collins 1979). Burrowing owls in California are year-round residents of the State. During migration and in winter, the burrowing owl is more widespread in lowland areas of the State and reaches more offshore islands (Shuford et al. 2008a). In 2007, the maximum number of burrowing owl pairs in San Diego County was estimated to be at the most 46 (Lincer and Bloom 2007). About 25 of these pairs were in grasslands or sparse coastal sage scrub with grasslands in the East Otay Mesa area; the others were at various locations in San Diego County, including a few in the desert, generally in groups of fewer than three pairs (County of San Diego 2010).

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Birds (cont.)		
Burrowing owl (cont.)		There are no CNDDB records for this species in the SYCPU area; it was not mapped there for the MSCP; and it was not observed during focused surveys for the species in the study area for the San Ysidro Railroad Yard Improvement Project (HELIX 2010; or opportunistically during other surveys of the study area). Nonetheless, potential habitat for the burrowing owl occurs in the SYCPU area, and the species is well documented on Otay Mesa.
Coastal cactus wren (Camphylorhynchus brunneicapillus sandiegensis)	 SSC MSCP Covered	Potential. The key element of San Diego cactus wren habitat is thickets of cholla (<i>Opuntia prolifera</i>) or prickly-pear cacti (<i>O. littoralis</i> , <i>O. oricola</i>) tall enough to support and protect the birds' nests (Shuford et al. 2008b).
		The San Diego Cactus Wren has a very limited range, extending from extreme northwestern Baja California, Mexico (Valle De las Palmas) north through the coastal lowlands of San Diego County and, apparently, into southern Orange County (Rea and Weaver 1990 <i>in</i> Shuford et al. 2008b).
		This species was mapped for the MSCP in the SYCPU area but has not been reported to the CNDDB there. Potentially suitable habitat for this species may occur in the undeveloped, eastern portion of the SYCPU area.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Birds (cont.)		
Birds (cont.) Northern harrier (<i>Circus cyaneus</i>)	 SSC MSCP Covered	 Potential. Northern harrier wintering habitat in California includes fresh and saltwater wetlands, coastal dunes, grasslands, deserts, meadows, and crop lands. Breeding habitat includes freshwater wetlands, coastal brackish wetlands, open wet meadows and grasslands, shrub-steppe communities, desert sinks, areas along rivers and lakes, and agricultural fields (Grinnel and Miller 1944, Martin 1987, and MacWhirter and Bildstein 1996 <i>in</i> Cripe undated). The northern harrier can be found from sea level up to 10,000 feet (Cripe undated). In San Diego County, the northern harrier is found year-round but is more numerous and widespread as a winter visitor than a breeding bird. It is an uncommon to fairly common winter visitor and a rare and local summer resident in the coastal lowlands of San Diego County (Unitt 2004). Unitt does, however, show possible breeding for northern harriers in/near the SYCPU area (Unitt 2004).
		The northern harrier has not been reported to the CNDDB in the SYCPU area, nor was it mapped there for the MSCP. However, potentially suitable habitat for the species occurs in the undeveloped, eastern and western portions of the SYCPU area.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Birds (cont.)		
Southern Willow Flycatcher (<i>Empidonax traillii extimus</i>) California horned lark (<i>Eremophila alpestris actia</i>)	FE SE MSCP Covered WL 	 Not Expected. The southwestern willow flycatcher uses well developed willow riparian forest. the nearest SWWF observation in CNDDB is 10 miles away near the Sweetwater Reservoir. The SWWF is not known or expected to occur in the SYCPU area. Potential. The California horned lark is found on sandy beaches, agricultural fields, grasslands and open areas on coastal slopes and in lowlands from Sonoma County to northern Baja California, Mexico. There are no CNDDB records for this species in the SYCPU area, and it was not mapped there for the MSCP. Potential habitat for this species is present, however, in the undeveloped, eastern portion of the SYCPU area.
Yellow-breasted chat (<i>Icteria virens</i>)	 SSC 	Potential. In California, the yellow-breasted chat is found in dense riparian thickets and brush during its breeding season, and it is mostly absent during the winter (Ricketts and Kus 2000). There are no CNDDB or MSCP records for the species in the SYCPU area. Potential habitat for this species does occur, however, in the undeveloped, western portion of the SYCPU area.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Birds (cont.)		
Loggerhead shrike (<i>Lanius ludovicianus</i>)	BCC SSC 	Potential. In San Diego County, the loggerhead shrike is an uncommon, year-round resident in grassland, open sage scrub and chaparral, and desert scrub. In the southern part of the county, the species' range extends over the Tecate Divide onto the Campo Plateau and almost continuously along the international border with Mexico to the coast (Unitt 2004).
		There are no CNDDB records for this species in the SYCPU area, and it was not mapped there for the MSCP. Potential habitat for this species is present, however, in the undeveloped, eastern portion of the SYCPU area.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Birds (cont.)	. <u>.</u>	·
Coastal California gnatcatcher (Polioptila californica californica)	FT SSC MSCP Covered	 Observed. The coastal California gnatcatcher is closely associated with coastal sage scrub vegetation, and it utilizes this community for foraging and nesting. The birds remain on their territory throughout the year and expand their home range during non-breeding season (Preston et al. 1998, Grishaver et al. 1998 <i>in</i> Mock 2004). The northern and eastern limits of the coastal sage scrub used by the coastal California gnatcatcher are largely bound by mountains; the southern limit is defined by the transition to the Vizcaíno desert about 30 degrees north latitude in Baja California, Mexico (USFWS 2010). In the MSCP area, "the majority of the population is concentrated in a narrow, broken, north-south oriented band of remnant habitat at middle elevations" (USFWS and CDFW 1996). Ninety-four percent of a sample of coastal California gnatcatcher localities in coastal southern California was at or below elevations of 820 feet AMSL (Atwood 1990). In 1981, this species was reported to the CNDDB south of Otay Mesa
		Road, 0.7 mile northeast of San Ysidro. HELIX (2010) reported the gnatcatcher in five locations in the study area for the San Ysidro Railroad Yard Improvement Project in the eastern portion of the SYCPU area. The species has also been mapped in the SYCPU area for the MSCP and in the USFWS species database. Critical habitat for this species has not been designated by the USFWS within the SYCPU area, however.

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA	
· · ·	•	
BCC SSC 	Potential. The yellow warbler can be found in riparian woodland, Mojave riparian forest, mule fat scrub, or southern willow scrub in California during its breeding season. It winters in Central America and South America. There are no CNDDB or MSCP records for the yellow warbler in the SYCPU area. Potential habitat for this species does occur, however, in the undeveloped, western portion of the SYCPU area.	
FE SE MSCP Covered	Observed. The least Bell's vireo is found in mature riparian woodland, Mojave riparian forest, mule fat scrub, or southern willow scrub in California and northern Baja California, Mexico during its breeding season. It winters in southern Baja California, Mexico. The least Bell's vireo was most recently reported to the CNDDB in/near the SYCPU area along the Tijuana River, from approximately 0.6 mile east of the Pacific Ocean east to Dairy Mart Road (west of Interstate 5 and one mile north of the international border with Mexico). The USFWS species database also includes records of the least Bell's vireo in the SYCPU area, and critical habitat for the species has been designated by the USFWS in the western portion of the SYCPU area, generally southwest of Interstate 5, east of Dairy Mart Road, and	
	E WILDLIFE SPECIES C SENSITIVITY ¹ Federal State City BCC SSC FE SE	



Location of Least Bell's Vireo Critical Habitat in the San Ysidro Community Plan Area



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Figure 6

Table 4 (cont.) SENSITIVE WILDLIFE SPECIES OBSERVED OR WITH POTENTIAL TO OCCUR		
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Mammals		·
Western red bat (<i>Lasiurus blossevillii</i>)	 SSC 	Potential. The western red bat is a tree-roosting bat that is closely associated with riparian habitats that provide suitable roosting sites. It may forage in a variety of habitats. In California, most of the breeding records are from the Central Valley; however, western red bats occur throughout low elevations of California, and individuals appear to stay in California year-round (Pierson et al. 2006).
		This species has not been reported to the CNDDB in the SYCPU area, but it was mapped there for the MSCP. The undeveloped, western portion of the SYCPU area may provide potential roosting and foraging habitats for this species.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	 SSC 	Observed. The San Diego black-tailed jackrabbit occurs primarily in open habitats including coastal sage scrub, chaparral, grasslands, croplands and open, disturbed areas if there is at least some shrub cover present.
		Its range is southern Santa Barbara County, south on the coastal slope to the vicinity of San Quintin, Baja California, Mexico. Localities on the eastern edge of its range include Jacumba and San Felipe Valley in San Diego County.
		There are no CNDDB or MSCP records for this jackrabbit in the SYCPU area. It was observed, however, in the eastern portion of the SYCPU area during surveys for the San Ysidro Railroad Yard Improvement Project (HELIX 2010).

SENSITIVE		Table 4 (cont.) DBSERVED OR WITH POTENTIAL TO OCCUR
SPECIES	SENSITIVITY ¹ Federal State City	HABITAT(S)/RANGE AND OBSERVATIONS IN OR NEAR THE SYCPU AREA
Mammals (cont.)	•	•
San Diego desert woodrat (Neotoma lepida intermedia)	 SSC 	Potential. The San Diego desert woodrat can be found in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca. It occurs along the coastal slope of southern California from San Luis Obispo County south into coastal northwestern Baja California, Mexico.
		There are no CNDDB or MSCP records for this woodrat in the SYCPU area. However, potential habitat for this species occurs in the undeveloped, eastern portion of the SYCPU area.

¹See Appendix A for an explanation of sensitivity codes.

²Based on a 2006 federal district court ruling that the City's MSCP Subarea Plan does not provide adequate protection for Riverside fairy shrimp, the City surrendered permit coverage for seven vernal pool species on April 20, 2010 (City 2010). The seven species include San Diego fairy shrimp, Riverside fairy shrimp, Otay Mesa mint, San Diego mesa mint, California Orcutt grass, San Diego button-celery, and spreading navarretia. The USFWS subsequently cancelled the permit as it applied to those seven species on May 14, 2010 (USFWS 2011). Development involving take of any of the seven vernal pool species, therefore, requires authorization from the USFWS through the federal incidental take process until the City completes a new vernal pool Habitat Conservation Plan and enters into another Implementing Agreement for a new federal Incidental Take Permit for those species.

The SYHVSP area is completely developed; therefore, there are no sensitive wildlife species present or with potential to occur there.

3.4 JURISDICTIONAL WATERS/WETLANDS

Agencies with jurisdictional authority over wetlands and other jurisdictional water resources include the U.S. Army Corps of Engineers (USACE), USFWS (if listed species are present), CDFW, Regional Water Quality Control Board (RWQCB), and the City.

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There are seven vegetation communities in the SYCPU area that are likely jurisdictional wetlands (southern arroyo willow riparian forest, riparian scrub, mule fat scrub, freshwater marsh, tamarisk scrub, disturbed wetland, and unvegetated basin). Additionally, the National Wetlands Inventory (USFWS 2015) shows areas mapped as "riverine," which may be jurisdictional non-wetland waters. These riverine resources occur in seven locations in the undeveloped, eastern portion of the SYCPU area and in one location south of State Route 905, west of Smythe Avenue in a developed portion of the SYCPU area. The USGS topo map for this area was also reviewed, and does not show any additional waters not shown in the National Wetlands Inventory. An assessment of wetland and waters resources would need to be made at the project level for all subsequent development proposals. If warranted, a formal jurisdictional delineation would need to be conducted to identify the precise boundaries of these resources to determine the extent of the existing waters/wetlands and to accurately determine if any impacts would occur from any proposed future project.

3.4.1 U.S. Army Corps of Engineers

Wetlands-As stated in the federal regulations for the Clean Water Act, wetlands are defined as:

"...those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil...." (EPA, 40 CFR 230.3 and CE, 33 CFR 328.3)

Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils. According to the USACE, indicators for all three parameters must be present to qualify an area as a wetland.

Waters of the US-In accordance with Section 404 of the Clean Water Act, the USACE regulates the discharge of dredged or fill material into waters of the U.S. 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 as 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)].

The USACE also requires the delineation of non-wetland jurisdictional waters. These waters must have strong hydrology indicators such as the presence of seasonal flows and an ordinary high water mark. An ordinary high water mark is defined as:

... that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (33 CFR Part 328.3).

Areas delineated as non-wetland jurisdictional waters may lack wetland vegetation or hydric soil characteristics. Hydric soil indicators may be missing because topographic position precludes ponding and subsequent development of hydric soils. Absence of wetland vegetation can result from frequent scouring due to rapid water flow. These types of jurisdictional waters are delineated by the lateral and upstream/downstream extent of the ordinary high water mark of the particular drainage or depression.

3.4.2 U.S. Fish and Wildlife Service

Under Sections 7 and 10 of the Endangered Species Act, the USFWS has regulatory authority over federal listed endangered and threatened plant and wildlife species. Specifically, Section 7 requires federal agencies to ensure that their activities are not likely to jeopardize the continued existence of listed species or impact designated critical habitats through consultation with the USFWS. Under Section 7, the USFWS issues a Biological Opinion that serves as the incidental take permit (ITP) associated with a Clean Water Act Section 404 permit authorized by the USACE. Under section 10(a)1(A), the USFWS requires the preparation of a Habitat Conservation Plan (HCP), which accompanies the ITP to ensure that the authorized take is adequately mitigated and minimized. Impacts to any of the seven federal listed vernal pool species must be approved by USFWS (and CDFW; Wildlife Agencies). A draft vernal pool HCP is currently being prepared by the City in coordination with the Wildlife Agencies. If adopted, the City would have "take" authority for the vernal pool species occurring within the HCP areas.

3.4.3 California Department of Fish and Wildlife

Under sections 1600–<u>1607–1616</u> of California 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 and requires a Streambed Alteration Agreement for such activities. CDFW issues a Streambed Alteration Agreement with any necessary mitigation to ensure protection of the State's fish and wildlife resources. CDFW has jurisdiction over riparian habitats 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.

3.4.4 State Regional Water Quality Control Board

The RWQCB is the regional agency responsible for protecting water quality in California. The jurisdiction of this agency includes all waters of the State and all waters of the U.S. as mandated by both the federal Clean Water Act and the California Porter-Cologne Water Quality Control Act. State waters are all waters that meet one of three criteria (hydrology, hydric soils, or wetland vegetation) and generally include but are not limited to, all waters under the jurisdiction of the USACE and CDFW.

3.4.5 <u>City of San Diego</u>

According to City Municipal Code (Chapter 11, Article 3, Division 1), areas that are characterized by any of the following conditions are considered wetlands.

1. All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools;

- 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 catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation as in the case of salt pannes and mudflats;
- 3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands; and/or
- 4. Areas mapped as wetlands on Map No. C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

The entire SYHVSP area is developed. Based on the literature review, there are no potential jurisdictional waters/wetlands present.

3.5 WILDLIFE MOVEMENT CORRIDORS

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Regional wildlife corridors connect otherwise isolated blocks of habitat allowing movement or dispersal of plants and wildlife over a large scale and the consequent mixing of genes between populations. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of its daily routine. Wildlife movement corridors are considered sensitive by the City and resource and conservation agencies.

The remaining undeveloped land in the western portion of the SYCPU area does not connect otherwise isolated blocks of habitat. The riparian habitat in the western portion of the SYCPU area is, itself, surrounded by development and/or active agricultural land on three sides and, therefore, is mostly isolated from other habitat except to the west where it meets with Dairy Mart Pond (west of Dairy Mart Road; Figure 4). This area at one time was the main flow channel for the Tijuana River, which was subjected to sand mining activities, and the river flow has been diverted to the south (beginning at the international border with Mexico) around residential and commercial development that was constructed (Figure 4). While this habitat area is not a regional corridor for wildlife movement, it does provide local access to resources for resident or migratory species. A bridge crossing of this habitat for the extension of Calle Primera to Camino de la Plaza (regardless of the option constructed) would not preclude the local use of the habitat by wildlife.

The remaining undeveloped land in the eastern portion of the SYCPU also does not connect otherwise isolated blocks of habitat, although it includes a strip of MHPA (Figure 7). Rather, this habitat is along the western edge of a large block of habitat to the east associated with Otay Mesa, also providing local access to resources for resident or migratory species (Figure 4).



Location of MHPA, SanGIS Conserved Lands, and Proposed San Ysidro Community Plan Open Space



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Figure 7

The entire SYHVSP area is developed. Therefore, there is no wildlife habitat, and there are no wildlife movement corridors in the SYHVSP area.

4.0 REGULATORY FRAMEWORK

The SYCPU and SYHVSP are both governed by the following local, state, and federal policies and regulations.

4.1 MULTIPLE SPECIES CONSERVATION PROGRAM

The City, USFWS, CDFW and other local jurisdictions joined together in the late 1990s to develop the MSCP, a comprehensive program to preserve a network of habitat and open space in the region and ensure the viability of (generally) upland habitat and species, while still permitting some level of continued development. The City's MSCP Subarea Plan (1997a) was prepared pursuant to the outline developed by USFWS and CDFW to meet the requirements of the State Natural Communities Conservation Planning (NCCP) Act of 1992. Adopted by the City in March 1997, the Subarea Plan forms the basis for the MSCP Implementing Agreement which is the contract between the City, USFWS, and CDFW (City 1997b). The Implementing Agreement ensures implementation of the Subarea Plan and thereby allows the City to issue "take" permits under the federal and State Endangered Species Acts to address impacts at the local level. Under the federal Endangered Species Act, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species. An HCP, such as the City's MSCP Subarea Plan, must accompany an application for a federal ITP. In July 1997, USFWS, CDFW, and City entered into the 50-year MSCP Implementing Agreement, wherein the City received its federal Endangered Species Act Section 10(a) ITP (City 1997b).

Pursuant to its MSCP permit issued pursuant to Section 10(a), the City has incidental "take" authority over 85 rare, threatened, and endangered species including regionally sensitive species that it aims to conserve (i.e., "MSCP Covered Species"). "MSCP Covered" refers to species that are covered by the City's federal ITP and considered to be adequately protected within the City's Preserve, the MHPA. Special "Conditions of Coverage" apply to MSCP Covered Species that would be potentially impacted by projects including modifying project design to avoid impacts to Covered Species in the MHPA where feasible. Additionally, all projects must adhere to MSCP Subarea Plan requirements including those for boundary line adjustments (Section 1.1.1); Compatible Land Uses, General Planning Policies/Design Guidelines, and MHPA Land Use Adjacency Guidelines (Sections 1.4.1-1.4.3) as well as general and specific management policies where applicable). Additional State and federal policy, regulations, and permits may also be required for wetlands and species not covered or fully covered under the MSCP.

Since there is undeveloped land in the SYCPU area, and that land supports sensitive plant and wildlife species both within and outside the MHPA, the City's MSCP Subarea Plan and Implementing Agreement are applicable to development of the SYCPU area. Further discussion of the MSCP related to the SYCPU is provided in the following subsections.



4.1.1 <u>Vernal Pool Lawsuit</u>

Under the federal Endangered Species Act, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species. An ITP can be issued as a Biological Opinion under Section 7 of the federal Endangered Species Act in conjunction with a 404 permit or under Section 10(a) of the Act, which requires that an HCP accompany any applications for a federal ITP. Take authorization for federal listed species covered in the HCP shall generally be effective upon approval of the HCP.

In October of 2006, Judge Brewster issued a Decision and Injunction [Case no. 98-CV- 2234-B(JMA)] in a lawsuit filed by the Southwest Center for Biological Diversity against the USFWS over the issuance of an ITP under Section 10 of the Act to the City based upon the MSCP. The lawsuit was limited to the seven vernal pool species including two crustacean species, San Diego fairy shrimp and Riverside fairy shrimp, and five plant species: Otay mesa mint, California Orcutt grass, San Diego button-celery, San Diego mesa mint, and spreading navarretia.

The Court enjoined the City's ITP for all pending and future development projects where "take" of any of the seven vernal pool species may occur including:

- Pending applications for development of land containing vernal pool habitat.
- Projects where the City has granted permits but development had not yet occurred.
- Future development where the permittee was engaged in the destruction of vernal pool habitat.

As a result of this ruling, numerous private and public development projects which contained vernal pool resources were enjoined. The Court determined that the City and USFWS were not providing adequate coverage under the MSCP for vernal pool species. The following are the main inadequacies identified in the ruling:

- Mitigation was not beneficial and could not be modified for the life of the permit.
- Creation of vernal pools was not always feasible due to site conditions and the difficulty with creating the proper conditions to support vernal pool flora and fauna.
- Measures to determine impact allowance was arbitrary and did not provide the same level of protection for "unnatural" vernal pools.
- Funding was speculative.

All parties entered into mediation in 2007, which continued through 2009, when it ended in an impasse. During the mediation, it was determined that a Vernal Pool HCP should be prepared for the comprehensive protection of vernal pool resources. The City was awarded a federal Endangered Species Act Section 6 grant in 2009 for the preparation of a Vernal Pool HCP. In April 2010, the City entered into a Planning Agreement with the USFWS for the preparation of the Vernal Pool HCP. A draft Vernal Pool HCP is currently being prepared by the City in coordination with the Wildlife Agencies.

In April 2010, the City also relinquished federal coverage of the seven vernal pool species. In 2011, Judge Brewster vacated the 2006 ruling since the relevant portions (i.e., vernal pool



species) of the City's ITP were no longer in effect. This partial relinquishment and cancellation of the ITP only applies to coverage of the seven vernal pool species; the remainder of the City's MSCP ITP was not affected. The City is still responsible for the management of vernal pool resources, including the seven vernal pool species, owned and/or conserved through the City's permitting process. Any existing State coverage of the seven vernal pool species remains in effect.

As of the date of surrender, April 20, 2010, the City has relinquished coverage and does not rely on the City's federal ITP to authorize an incidental take of the two vernal pool wildlife species and five vernal pool plant species. Upon completion of an HCP for vernal pools, the City would enter into an IA in order to obtain species coverage and a federal ITP for the seven vernal pool species under Section 10(a). Incidental take authorization for projects that affect the seven vernal pool species could also be authorized through a federal Endangered Species Act Section 10(a) or through a Section 7 consultation with the USFWS, initiated as part of the 404 permit process by the USACE. A Biological Opinion is issued that serves as the ITP.

4.1.2 Multi-habitat Planning Area

The MHPA is the area within which the permanent MSCP preserve will be assembled and managed for its biological resources. Input from responsible agencies and other interested participants resulted in adoption of the City's MHPA in 1997. The City's MHPA areas are defined by "hard-line" limits, "with limited development permitted based on the development area allowance of the OR-1-2 zone [open space residential zone]" (City 1997a) and MSCP Subarea Plan requirements.

The MHPA consists of public and private lands, much of which has been conserved. Conserved lands shown on the SanGIS database (Figure 7) include lands that have been set aside for mitigation or purchased for conservation. These lands may be owned by the City (i.e. dedicated lands) or other agencies, may have conservation easements, or may have other restrictions (i.e. per the City's Municipal Code Environmentally Sensitive Lands Regulations (ESL), etc.) that protect the overall quality of the resources and prohibit development.

In general, a maximum 25 percent encroachment into the MHPA is allowed for development. If 25 percent of the site is outside the MHPA development could be restricted to this area. In addition development is required to be located in the least sensitive area feasible. Should more than 25 percent encroachment be desired, an MHPA boundary line adjustment may be proposed. The City's MSCP Subarea Plan states that adjustments to the MHPA boundary line are permitted without the need to amend the City's Subarea Plan, provided the boundary adjustment results in an area of equivalent or higher biological value. To meet this standard, the area(s) proposed for addition to the MHPA must meet the six functional equivalency criteria set forth in Section 5.4.2 of the Final MSCP Plan (City 1998). All MHPA boundary line adjustments require approval by the Wildlife Agencies and approval from a City discretionary hearing body.

For parcels located outside the MHPA, "there is no limit on the encroachment into sensitive biological resources, with the exception of wetlands, and listed non-covered species' habitat (which are regulated by State and federal agencies) and narrow endemic species." However,



"impacts to sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance" with the City's ESL Ordinance as implemented through compliance with the City's Biology Guidelines (City 2012).

The MSCP includes management priorities to be undertaken by the City as part of its MSCP implementation requirements. Those actions, identified as Priority 1, are required to be implemented by the City as a condition of the MSCP ITP to ensure that MSCP Covered Species are adequately protected. The actions identified as Priority 2 may be undertaken by the City as resources permit. This is addressed further in Sections 4.1.3.1 through 4.1.3.3 of this document.

4.1.3 MHPA Land Use Adjacency Guidelines

To address the integrity of the MHPA and mitigate for indirect impacts to the MHPA, guidelines were developed to manage land uses adjacent to the MHPA. The MHPA Land Use Adjacency Guidelines are intended to be incorporated into the Mitigation Monitoring and Reporting Program and applicable permits during the development review phase of a proposed project. These guidelines address the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/land development.

4.1.3.1 MSCP Subarea Plan- Southern Area:

Otay Mesa is in the southern area of the City's overall MHPA and also includes the Otay River Valley, Tijuana Estuary, and Tijuana River Valley. The Otay Mesa MHPA includes the MHPA in the eastern portion of the SYCPU area. The Tijuana River Valley MHPA includes the MHPA in the western portion of the SYCPU area (Figure 7).

The City's MSCP Subarea Plan Section 1.2.1 describes the Otay Mesa areas of the MHPA and its vision as a network of open and relatively undisturbed canyons containing a full ensemble of native species and providing functional wildlife habitat and movement capability. The City's MHPA Guidelines for Otay Mesa as described in Section 1.2.1 of the City's Subarea Plan (1997a) that may be applicable to the SYCPU area are as follows.

- 1. Maintain and/or provide trail access for Border Patrol use around the rim of canyons, where feasible. Motorized off-road-vehicle use in the MHPA should be prohibited except by Border Patrol, MHPA (Preserve) managers, or emergency vehicles.
- 2. Vernal pool areas should be preserved per adopted regulations. Where development is considered, the vernal pools should be assessed for transplantation of sensitive flora and fauna. Any wetland impacts will be mitigated for losses to meet the State and federal goal of "no net loss of wetland function and value." Mitigation should occur in accordance with requirements to be determined through the 404 and 1602 permitting process for individual projects.

In addition to the general MHPA Guidelines identified above, the City's MSCP identifies the following specific guideline for the Otay Mesa area that may be applicable to the SYCPU area:

- A2. Modify street alignments to retain additional natural areas. Reduce street classifications and roadbed widths where possible to reflect reduced development.²
- A7. Prior to any development impacts in this area, mitigation must include collecting and reseeding vernal pool species into other preserved Otay Mesa pools.

In addition to the general MHPA Guidelines identified above, the City's MSCP also identifies the following specific guidelines for the Tijuana River Valley to the west that may be applicable to the SYCPU area:

- A15. Maintain existing reserve (estuary) and park uses.³
- A16. Maintain a buffer around all wetland areas.
- A19. Retain and enhance, where possible, existing riparian habitat along the Tijuana River.

4.1.3.2 MSCP Subarea Plan: General and Specific Uses, Policies, Guidelines, Directives and Objectives

General – According to Section 1.4.1 of the City's Subarea Plan (1997a), the following land uses are considered conditionally compatible with the biological objectives of the MSCP and, thus, will be allowed within the City's MHPA: passive recreation, utility lines and roads in compliance with policies in Section 1.4.2, limited water facilities and other essential public facilities, limited low-density residential uses, brush management (zone 2), and limited agriculture.

Section 1.4.2 lists general planning policies and design guidelines that should be applied in the review and approval of development projects within or adjacent to the MHPA. The following guidelines may be applicable to the SYCPU area:

Roads and Utilities - Construction and Maintenance Policies:

- 1. All proposed utility lines (e.g., sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights-of-way and disturbed areas, minimizing habitat fragmentation.
- 2. All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts. All such activities must avoid disturbing the habitat of MSCP Covered species, and wetlands. If avoidance is infeasible, mitigation will be required.
- 3. Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in habitat. If

² Not required to be implemented per the City's MSCP Subarea Plan (City 1997a).



temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for, the disturbed area after project completion will be required.

- 4. Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage. Environmental documents and mitigation monitoring and reporting programs covering such development must clearly specify how this will be achieved, and construction plans must contain all the pertinent information and be readily available to crews in the field. Training of construction crews and field workers must be conducted to ensure that all conditions are met. A responsible party must be specified.
- 5. Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads. Local streets should not cross the MHPA except where needed to access isolated development areas.
- 6. Development of roads in canyon bottoms should be avoided whenever feasible. If an alternative location outside the MHPA is not feasible, then the road must be designed to cross the shortest length possible of the MHPA in order to minimize impacts and fragmentation of sensitive species and habitat. If roads cross the MHPA, they should provide for fully-functional wildlife movement capability. Bridges are the preferred method of providing for movement, although culverts in selected locations may be acceptable. Fencing, grading and plant cover should be provided where needed to protect and shield animals, and guide them away from roads to appropriate crossings.
- 7. Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas. Roads must be located in lower quality habitat or disturbed areas to the extent possible.
- 8. For the most part, existing roads and utility lines are considered a compatible use within the MHPA and therefore will be maintained. Exceptions may occur where underutilized or duplicative road systems are determined not to be necessary as identified in the Framework Management Section 1.5.

Fencing, Lighting, and Signage

- 1. Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).
- 2. Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low sodium or similar lighting. Signage will be limited to access and litter control and educational purposes.



Materials Storage

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

Flood Control

- 1. Flood control should generally be limited to existing agreements with resource agencies unless demonstrated to be needed based on a cost benefit analysis and pursuant to a restoration plan. Floodplains within the MHPA, and upstream from the MHPA if feasible, should remain in a natural condition and configuration in order to allow for the ecological, geological, hydrological, and other natural processes to remain or be restored.
- 2. No berming, channelization, or man-made constraints or barriers to creek, tributary, or river flows should be allowed in any floodplain within the MHPA unless reviewed by all appropriate agencies, and adequately mitigated. Review must include impacts to upstream and downstream habitats, flood flow volumes, velocities and configurations, water availability, and changes to the water table level.
- 3. No riprap, concrete, or other unnatural material shall be used to stabilize river, creek, tributary, and channel banks within the MHPA. River, stream, and channel banks shall be natural, and stabilized where necessary with willows and other appropriate native plantings. Rock gabions may be used where necessary to dissipate flows and should incorporate design features to ensure wildlife movement.

Section 1.5.1 sets management goals and objectives that apply throughout the Subarea Plan Area. According to Section 1.5.1, the overarching MSCP goal is to maintain and enhance biological diversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitats, thereby preventing local extirpation and ultimate extinction, and minimizing the need for future listings, while enabling economic growth in the region.

In order to assure that the goal of the MHPA is attained and fulfilled, management objectives for the City of San Diego MHPA are as follows:

- 1. To ensure the long-term viability and sustainability of native ecosystem function and natural processes throughout the MHPA.
- 2. To protect the existing and restored biological resources from intense or disturbing activities within and adjacent to the MHPA while accommodating compatible public recreational uses.
- 3. To enhance and restore, where feasible, the full range of native plant associations in strategic locations and functional wildlife connections to adjoining habitat in order to provide viable wildlife and sensitive species habitat.


- 4. To facilitate monitoring of selected target species, habitats, and linkages in order to ensure long-term persistence of viable populations of priority plant and animal species and to ensure functional habitats and linkages.
- 5. To provide for flexible management of the preserve that can adapt to changing circumstances to achieve the above objectives.

In support of those objectives, Section 1.5.2 of the Subarea Plan provides general management directives that apply throughout the Subarea Plan area. The following directives from section 1.5.2 may be applicable to the SYCPU area:

Public Access, Trails, and Recreation

Priority 1:

- 1. Provide sufficient signage to clearly identify public access to the MHPA. Barriers such as vegetation, rocks/boulders or fencing may be necessary to protect highly sensitive areas. Use appropriate type of barrier based on location, setting and use. For example, use chain link or cattle wire to direct wildlife movement, and natural rocks/boulders or split rail fencing to direct public access away from sensitive areas. Lands acquired through mitigation may preclude public access in order to satisfy mitigation requirements.
- 2. Locate trails, view overlooks, and staging areas in the least sensitive areas of the MHPA. Locate trails along the edges of urban land uses adjacent to the MHPA, or the seam between land uses (e.g., agriculture/habitat), and follow existing dirt roads as much as possible rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types (ecotones) for longer than necessary due to the typically heightened resource sensitivity in those locations.
- 3. In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance, as needed. Undertake measures to counter the effects of trail erosion including the use of stone or wood crossjoints, edge plantings of native grasses, and mulching of the trail.
- 4. Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than four feet in core areas or wildlife corridors. Exceptions are in the San Pasqual Valley where other agreements have been made, in Mission Trails Regional Park, where appropriate, and in other areas where necessary to safely accommodate multiple uses or disabled access. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.
- 5. Limit the extent and location of equestrian trails to the less sensitive areas of the MHPA. Locate staging areas for equestrian uses at a sufficient distance (e.g., 300-500 feet) from areas with riparian and coastal sage scrub habitats to ensure that the biological values are not impaired.



- 6. Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except for law enforcement, preserve management or emergency purposes. Restore disturbed areas to native habitat where possible or critical, or allow to regenerate.
- 7. Limit recreational uses to passive uses such as birdwatching, photography and trail use. Locate developed picnic areas near MHPA edges or specific areas within the MHPA, in order to minimize littering, feeding of wildlife, and attracting or increasing populations of exotic or nuisance wildlife (opossums, raccoons, skunks). Where permitted, restrain pets on leashes.
- 8. Remove homeless and itinerant worker camps in habitat areas as soon as found pursuant to existing enforcement procedures.
- 9. Maintain equestrian trails on a regular basis to remove manure (and other pet feces) from the trails and preserve system in order to control cowbird invasion and predation. Design and maintain trails where possible to drain into a gravel bottom or vegetated (e.g., grass-lined) swale or basin to detain runoff and remove pollutants.

Litter/Trash and Materials Storage

Priority 1:

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

Priority 2:

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

The Subarea Plan also contains several directives for Adjacency Management Issues, such as removal of illegal structures, educating residents about the MHPA, and several directives related to invasive species removal and flood control maintenance. These seem to be ongoing operational issues that would not be affected by a community plan update.



4.1.3.3 Specific Uses, Policies, Guidelines, Directives and Objectives for Otay Mesa

Section 1.5.3 of the City's Subarea Plan (1997a) describes the specific management policies and directives for the Otay Mesa area. The major issues that require consideration for management in the Otay Mesa area include the following, in order of priority, as excerpted from Section 1.5.3 of the Subarea Plan:

- Intense land uses and activities adjacent to and in MSCP Covered species habitat and linkages;
- Off-road-vehicle activity;
- Dumping, litter, and vandalism;
- Enhancement and restoration needs;
- Exotic (non-native), invasive plants and animals;
- Illegal immigration and Border Patrol activities; and
- Utility, facility and road repair, construction, and maintenance activities.

MSCP Subarea Plan: Overall Management Policies and Directives for Otay Mesa

General Policies

General Policies for Otay Mesa contained in Section 1.5.3 of the MSCP Subarea Plan include:

Priority 1:

- 1. No unauthorized motorized vehicles except Border Patrol, MHPA managers, maintenance personnel, or emergency vehicles will be allowed on any trails or off- trail in the MHPA. The Border Patrol should restrict vehicles to the existing access roads as much as feasible, to avoid disturbance of habitat.
- 2. Remove all trash, hazardous materials, and vehicles from the MHPA prior to transfer from private to public ownership and/or management. If hazardous materials remain, these areas should be signed to indicate their locations, and made off-limits to people.
- 3. Inventory vernal pool areas within the Otay Mesa area for sensitive and target species where not previously or recently done, and assess for enhancement/restoration needs or opportunities, general status, and potential threats.

Priority 2:

1. Assess vernal pool areas proposed for development (e.g., approved development projects or proposed regional transportation facilities such as SR-905 and SR-125) for transplantation of sensitive plants and soils containing seedbanks of sensitive flora and fauna. Include in mitigation programs arrangements for proper timing of soil and plant removal, proper storage if necessary, and appropriate timing of enhancement/restoration efforts, including transplantation.

Specific Management Directives for Otay Mesa

Specific Management Directives for Otay Mesa contained in Section 1.5.3 of the MSCP Subarea Plan that may be applicable to the SYCPU area are identified as follows:

Southern Otay Mesa

Priority 1:

1. Continuous coordination with the U.S. Border Patrol will be necessary to ensure continued awareness of the MHPA and cooperation in maintenance. The presence of the Border Patrol in this area should help to make the MHPA safe for visitors. If possible, improve coordination with the U.S. Border Patrol to aid in the identification and prevention of vandalism, off-road vehicle use, dumping, and other disturbances to habitat.

Priority 2:

- 1. Provide educational materials and training on the MSCP and on native wildlife to U.S. Border Patrol agents and other public agency personnel working in the Otay Mesa border area to encourage sensitive behavior towards wildlife and its habitat, and to discourage unnecessary off-road vehicle use in sensitive areas.
- 2. Ensure that the night lighting along the border intrudes as little as possible on lands in the interior of the MHPA.

4.1.3.4 MSCP Subarea Plan: Specific Management Policies and Directives for the Tijuana River Valley

Section 1.5.5 of the City's Subarea Plan (1997a) describes the specific management policies and directives for the Tijuana River Valley. The major issues that require consideration for management in the Tijuana River Valley include the following, in order of priority, as excerpted from Section 1.5.5 of the Subarea Plan and that may apply to the SYCPU area include:

- Intense land uses and activities adjacent to and in MSCP Covered species habitat and linkages;
- Water quality, including sewage, agriculture and urban runoff, and erosion and sedimentation;
- Dumping, litter, and vandalism;
- Exotic (non-native), invasive plants and animals;
- Illegal immigration and Border Patrol activities;
- Enhancement and restoration needs;
- Flood control; and
- Utility, facility and road repair, construction, and maintenance activities.

MSCP Subarea Plan: Overall Management Policies and Directives for the Tijuana River Valley

General Policies

General Policies for the Tijuana River Valley contained in Section 1.5.5 of the MSCP Subarea Plan that may be applicable to the SYCPU area include:

Priority 1:

- 1. Contain active recreational uses planned for the valley in areas determined appropriate for such activities by the County's Regional Park plan. Avoid locating active recreational uses within core habitat or in areas containing MSCP Covered species. Do not use invasive non-native species to landscape recreational or other areas of the Regional Park. Restrict lighting at night of recreational areas within the Tijuana River Valley area, or if this is infeasible due to vandalism, then shield natural habitat areas from lighting.
- 2. Prohibit off-road vehicle activity in the valley and on the mesas in order to avoid further destruction of sensitive habitats and to reduce the effects of noise, dust and sedimentation on sensitive species, wetlands, and adjacent residents.
- 3. Require lessees to properly, and in a timely manner, dispose of all litter located on each leasehold, whether self-generated or not, unless other arrangements with the County or other public landowners have been made.
- 4. Prevent dumping of construction debris, trash and other materials and actively enforce with a joint City/County/other agencies enforcement program. Institute the program in concert with local users of the valley reporting in a "Neighborhood Watch" type program.
- 5. Restrict sand mining on the valley floor to removal in the existing pilot channel if determined necessary for flood control, and in the future for potential water treatment ponding systems in the far eastern portion of the valley if they not interfere with sensitive species habitat.
- 6. Flood control in the Tijuana River Valley is limited to existing agreements with resources agencies that allow clearing or sand removal within existing low-flow or pilot channel(s), and any flood control projects resulting from the 1994 BSI Consultants "Tijuana River Valley Flood Control and Infrastructure Study." Any flood control facility must be consistent with City, State, and Federal Emergency Management Agency regulations and be designed and constructed to maintain riparian and wetland ecosystems within the channel and the valley.
- 7. Organize cleanup crews for the maintenance of equestrian trails with the lead taken by the County Parks and Recreation Department, in conjunction with horse rental stables and local equestrians and clubs.

8. Remove invasive non-native plants pursuant to general management directive.

Specific Management Directives for the Tijuana River Valley

Specific Management Directives for the Tijuana River Valley contained in Section 1.5.5 of the MSCP Subarea Plan that may be applicable to the SYCPU area are identified as follows:

River Corridor

Priority 1:

1. Ensure that adequate amounts of appropriate habitats are maintained for MSCP Covered species (e.g., the northern harrier and mountain plover) dependent on the valley's habitat types including grasslands and agricultural fields.

Priority 2:

- 1. Retain existing berms in the floodplain only where it has been determined that they do not exacerbate flood velocities or levels, or increase flood-related management problems for the estuarine reserve, the MHPA or uses located in the river corridor. Remove all other berms in the floodplain over the long term in order to restore the natural floodplain and ecosystem processes consistent with health and safety considerations for the residents of that area.
- 2. In the future, assess the riparian areas for management needs. Allow the riparian and wetland habitats in the valley to naturally regenerate, except where active restoration has been specified or to remove exotic invasive species. Proposed management changes may offer research opportunities for the future.
- 3. Residences and other structures in the floodplain should be removed over the long term where recommended by the 1994 BSI "Tijuana River Valley Flood Control and Infrastructure Study." Restore the areas to native habitat or place in agricultural lease or recreation, if determined appropriate by the MSCP habitat management technical committee in conjunction with County Parks and Recreation Department.

4.2 CITY OF SAN DIEGO ENVIRONMENTALLY SENSITIVE LANDS REGULATIONS

Environmentally Sensitive Lands (ESL) include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs and 100-year floodplains. Mitigation requirements for sensitive biological resources follow the requirements of the City's Biology Guidelines (2012) as outlined in the City's Municipal Code ESL Regulations (Chapter 14, Article 3, Division 1). Impacts to biological resources within and outside the MHPA must comply with the ESL Regulations, which also serve as standards for the determination of biological impacts and mitigation under the California Environmental Quality Act (CEQA) in the City.

The purpose of the ESL Regulations is to, "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands." The regulations require that development avoid impacts to certain sensitive biological resources as much as possible including but not limited to MHPA lands; wetlands and vernal pools in naturally occurring complexes; federal and State listed, non-MSCP Covered Species; and MSCP Narrow Endemic species. Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect wetland-associated functions and values. While a 100-foot buffer width is generally recommended, this width may be increased or decreased on a case-by-case basis in consultation with the CDFW, USACE, and USFWS (City 2012). Future development proposed in accordance with the SYCPU will be required to comply with all applicable City ESL Regulations.

4.3 CITY OF SAN DIEGO GENERAL PLAN POLICIES

The City's General Plan presents goals and policies for biological resources in the Conservation Element (City 2008). Relevant excerpts from this element are included in Table 5.

CITY OF SAN DIEGO GENERAL PLAN POLICIES RELATING TO BIOLOGICAL RESOURCES				
OLICY	DESCRIPTION			
CE-B.1	 Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities. a. Utilize Environmental Growth Funds and pursue additional funding for the acquisition and management of MHPA and other important community open space lands. b. Support the preservation of rural lands and open spaces throughout the region. c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation Element, Sections C and F; Urban Design Element, Section A). d. Minimize or avoid impacts to canyons and other environmentally sensitive land by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting of sewage discharge away from canyons and other environmentally sensitive lands. e. Encourage the removal of invasive plant species and the planting of 			

	Table 5 (cont.) CITY OF SAN DIEGO GENERAL PLAN POLICIES RELATING TO BIOLOGICAL RESOURCES				
POLICY	DESCRIPTION				
CE-B.1	f. Pursue formal dedication of existing and future open space areas				
(cont.)	throughout the City, especially in core biological resource areas of the City's adopted MSCP Subarea Plan.				
	g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resource conservation.				
CE-B.2	Apply the appropriate zoning and ESL regulations to limit development of floodplains and sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands. a. Manage watersheds and regulate floodplains to reduce disruption of				
	 natural systems, including the flow of sand to the beaches. Where possible and practical, restore water filtration, flood and erosion control, biodiversity and sand replenishment benefits. b. Limit grading and alterations of steep hillsides, cliffs and shoreline to prevent increased erosion and landform impacts. 				
CE-B.4	Limit and control runoff, sedimentation, and erosion both during and after construction activity.				
CE-C.1	Protect, preserve, restore and enhance important coastal wetlands and habitat (tide pools, lagoons and marine canyons) for conservation, research, and limited recreational purposes.				
CE-C.2	Control sedimentation entering coastal lagoons and waters from upstream urbanization using a watershed management approach that is integrated into local community and land use plans (see also Land Use Element, Policy LU-E- 1).				
CE-C.3	Minimize alterations of cliffs and shorelines to limit downstream erosion and to ensure that sand flow naturally replenishes beaches.				
CE-C.4	Manage wetland areas as described in Section H, Wetlands, for natural flood control and preservation of landforms.				
CE-C.6	Implement watershed management practices designed to reduce runoff and improve the quality of runoff discharged into coastal waters.				
	 Continue to participate in the development and implementation of watershed management plans. a. Control water discharge in a manner that does not reduce reasonable use by others, damage important native habitats and historic resources, or create hazardous conditions (e.g., erosion, sedimentation, flooding and subsidence). c. Improve and maintain drinking water quality and urban runoff water quality through implementation of Source Water Protection Guidelines for New Development. d. Improve and maintain urban runoff water quality through 				
	implementation of storm water protection measures (see also Urban Runoff Management, Section E).				

Table 5 (cont.) CITY OF SAN DIEGO GENERAL PLAN POLICIES RELATING TO BIOLOGICAL RESOURCES						
					POLICY	DESCRIPTION
CE-D.4	Continue to develop and implement public education programs.					
	a. Involve the public in addressing runoff problems associated with					
	development and raising awareness of how an individual's activities					
	contribute to runoff pollution.					
	b. Work with local businesses and developers to provide information and					
	incentives for the implementation of Best Management Practices for					
	pollution prevention and control.					
	c. Implement watershed awareness and water quality educational					
	programs for City staff, community planning groups, the general					
	public, and other appropriate groups.					
CE-E.2	Apply water quality protection measures to land development projects early in the processed during project design permitting construction and experience in					
	the process- during project design, permitting, construction, and operations- in order to minimize the quantity of runoff generated on-site, the disruption of					
	natural water flows and the contamination of storm water runoff.					
	a. Increase on-site infiltration, and preserve, restore or incorporate					
	natural drainage systems into site design.					
	b. Direct concentrated drainage flows away from the MHPA and open					
	space areas. If not possible, drainage should be directed into					
	sedimentation basins, grassy swales or mechanical trapping devices					
	prior to draining into the MHPA or open space areas.					
	c. Reduce the amount of impervious surfaces through selection of					
	materials, site planning, and street design where possible.					
	d. Increase the use of vegetation in drainage design.					
	e. Maintain landscape design standards that minimize the use of					
	pesticides and herbicides.					
	f. Avoid development of areas particularly susceptible to erosion and					
	sediment loss (e.g., steep slopes) and, where impacts are unavoidable,					
	enforce regulations that minimize their impacts.					
	g. Apply land use, site development, and zoning regulations that limit impacts on, and protect the natural integrity of topography, drainage					
	systems, and water bodies.					
	h. Enforce maintenance requirements in development permit condition.					
CE-E.3	Require contractors to comply with accepted storm water pollution					
	prevention planning practices for all projects.					
	a. Minimize the amount of graded land surface exposed to erosion and					
	enforce erosion control ordinances.					
	b. Continue routine inspection practices to check for proper erosion					
	control methods and housekeeping practices during construction.					
CE-E.4	Continue to participate in the development and implementation of					
	Watershed Management Plans for water quality and habitat protection.					

Table 5 (cont.)CITY OF SAN DIEGO GENERAL PLAN POLICIESRELATING TO BIOLOGICAL RESOURCES					
POLICY	DESCRIPTION				
CE-E.5	 Assure that City departments continue to use "Best Practice" procedures so that water quality objectives are routinely implemented. a. Incorporate water quality objectives into existing regular safety inspections. b. Follow Best Management Practices and hold training sessions to ensure 				
	that employees are familiar with those practices.c. Educate City employees on sources and impacts of pollutants on urban runoff and actions that can be taken to reduce these sources.d. Ensure that contractors used by the City are aware of and implement urban runoff control programs.				
	e. Serve as an example to the community-at-large.				
CE-E.6	 Continue to encourage "Pollution Control" measures to promote the proper collection and disposal of pollutants at the source, rather than allowing them to enter the storm drain system. a. Promote the provision of used oil recycling and/or hazardous waste recycling facilities and drop-off locations. 				
	 b. Review plans for new development and redevelopment for connections to the storm drain system. c. Follow up on complaints of illegal discharges and accidental spills to storm drains, waterways, and canyons. 				
CE-E.7	Manage floodplains to address their multi-purpose use, including natural drainage, habitat preservation, and open space and passive recreation, while also protecting public health and safety.				
CE-G.1	 Preserve natural habitats pursuant to the MSCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats to ensure their long-term biological viability. a. Educate the public about the impacts invasive plant species have on open space. b. Remove, avoid, or discourage the planting of invasive plant species. c. Pursue funding for removal of established populations of invasive species within open space. 				
CE-G.2	Prioritize, fund, acquire, and manage open spaces that preserve important ecological resources and provide habitat connectivity.				
CE-G.3	Implement the conservation goals/policies of the City's MSCP Subarea Plan, such as providing connectivity between habitats and limiting recreational access and use to appropriate areas.				
CE-G.4	Protect important ecological resources when applying floodplain regulations and development guidelines.				
CE-G.5	Promote aquatic biodiversity and habitat recovery by reducing hydrological alterations, such as grading a stream channel.				
CE-H.1	Use a watershed planning approach to preserve and enhance wetlands.				

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Table 5 (cont.) CITY OF SAN DIEGO GENERAL PLAN POLICIES RELATING TO BIOLOGICAL RESOURCES					
POLICY	DESCRIPTION				
CE-H.2	Facilitate public-private partnerships that improve private, federal, state and				
	local coordination through removal of jurisdictional barriers that limit				
	effective wetland management.				
CE-H.3	Seek state and federal legislation and funding that support efforts to research,				
	classify, and map wetlands including vernal pools and their functions, and				
	improve restoration and mitigation procedures.				
CE-H.4	Support the long-term monitoring of restoration and mitigation efforts to				
	track and evaluate changes in wetland acreage, functions, and values.				
CE-H.5	Support research and demonstration projects that use created wetlands to help				
	cleanse urban and storm water runoff, where not detrimental to natural upland and wetland habitats.				
CE-H.6	Support educational and technical assistance programs, for both planning				
	and development professionals, and the general public, on wetlands				
	protection in the land use planning and development process.				
CE-H.7	Encourage site planning that maximizes the potential biological,				
	historic, hydrological and land use benefits of wetlands.				
CE-H.8	Implement a "no net loss" approach to wetlands conservation in accordance				
	with all city, state, and federal regulations.				
CE-J.1	Develop, nurture, and protect a sustainable urban/community forest.				

4.4 SAN YSIDRO COMMUNITY PLAN POLICIES

The SYCPU presents goals and policies for biological resources in the Conservation Element. Relevant excerpts from this element for the SYCPU are included in Table 6 below.

POLICY DESCRIPTION						
2.2.7	Site structures to preserve and enhance public scenic vistas and open space areas, particularly those areas with views of Tijuana, the Tijuana River Valley, and the Pacific Ocean.					
2.7.2.a	Provide a land use map that illustrates the detailed land use designations, including any land set aside for resource conservation consistent with the City's Multiple Species Conservation Program (MSCP) Subarea Plan.					
2.7.2.d	Achieve sustainable and efficient land use patterns with comprehensive neighborhood and community development through a specific plan that will: cluster development and site structures sensitively by following the natural topography and slope of the existing, undeveloped hillsides. Balance development with preservation of natural resources.					



Table 6 (cont.) SYCPU POLICIES RELATING TO BIOLOGICAL RESOURCES						
POLICY	DESCRIPTION					
4.3.35	Provide a buffer landscaped with native vegetation to protect the Dairy Mart Ponds.					
7.2.3	Protect and enhance Dairy Mart Ponds and the Eastern Open Space area by locating any future passive recreation uses in the least sensitive areas of sensitive habitats.					
7.2.4	Ensure that all new private development, adjacent to wetlands and sensitive resources, is designed to minimize adverse effects to the resources.					
7.4.1	Maintain and preserve the sensitive habitat at the Dairy Mart Ponds by locating any future trails, consistent with the City's Multiple Species Conservation Program, and by providing interpretive signs on the significance of the site at key locations.					
8.1.1	Implement applicable General Plan sustainable development and resource management goals and policies, as discussed in its Conservation Element and the Urban Design Element.					
8.2.1	Implement the Environmentally Sensitive Lands regulations, related to biological resources and steep hillsides, for all new development in the eastern portion of the community. Plan development to minimize grading and relate to the topography and natural features of the San Ysidro Hillsides.					
8.2.2	Implement the MSCP Adjacency Guidelines through the project review process for properties in proximity to the Dairy Mart Ponds and Tijuana River Valley.					
8.2.3	Foster local stewardship and develop positive neighborhood awareness of the open space preserve areas with environmental education programs, through local schools, Homeowner's Associations (HOAs), community groups, and other public forums that address the local ecosystem and habitat preservation.					
8.2.4	Incorporate hands-on learning via neighborhood hikes or other initiatives that present information in a manner that will increase interest in the natural world.					
8.2.5	Incorporate interpretive information on kiosks and in tour guides that identify historic or open space areas, in order to raise awareness and appreciation of the value of the areas in the community.					

5.0 IMPACTS

Impacts associated with implementation of the SYCPU and SYHVSP are analyzed below. In addition, three options for the extension of Calle Primera to Camino de la Plaza over the wetlands associated with the Tijuana River Valley are considered.

The biological impacts are assessed according to guidelines set forth in the City's Biology Guidelines (City 2012), CEQA Significance Thresholds (City 2011), and the City's MSCP Subarea Plan (City 1997a). Mitigation would be required for impacts associated with future development in accordance with the SYCPU and SYHVSP that are considered significant under these guidelines.



While the policies identified in Table 6 above are intended to help guide development to reduce impacts on sensitive biological resources within the SYCPU area, they are not specific enough to guarantee that future development would not significantly impact sensitive biological resources. Project-specific biology studies will be required, as needed, to determine the degree of impact associated with future specific development projects.

5.1 VEGETATION COMMUNITY AND LAND COVER TYPE IMPACTS

San Ysidro Community Plan Update

Areas planned for development under the proposed SYCPU land use plan overlap approximately 102 acres of sensitive biological resources (i.e., wetlands and sensitive upland communities; Figure 8). Table 7 summarizes all the acreages of vegetation communities and land cover types (excluding developed) that could be impacted by build-out of the SYCPU. The total impacts in Table 7 include those from construction of Option 3 (the Preferred Option) for the Calle Primera connection to Camino de la Plaza (Figure 8; see text following Table 7). The impacts shown in Table 7 are divided into impacts occurring inside and outside the MHPA. Areas within the MHPA that are not specifically called out as proposed open space under the SYCPU are considered impacted. The actual impacts will likely be less than this because City regulations set a 25 percent encroachment limit total into the MHPA per parcel, or even less if only a small portion of the parcel is MHPA. Impacts outside of MHPA are also restricted based on environmentally sensitive lands such as steep slopes and biologically sensitive areas. The determination of exact impacts cannot be made at the community plan level, but will be made as each future development project is proposed.

Impacts to wetland communities and (sensitive) upland communities would be significant because they are considered sensitive, as discussed in Section 5.3.1. Impacts to other uplands would be less than significant because they are not considered sensitive.





Impacts to Vegetation Communities and Land Cover Types

SAN YSIDRO COMMUNITY PLAN UPDATE

Figure 8

Table 7						
POTENTIAL IMPACTS TO VEGETATION COMMUNITIES						
AND LAND COVER TYPES WITHIN THE SYCPU AREA						
	EXISTING	IMPACTED ACREAGE*				
VEGETATION	ACREAGE					
COMMUNITY/LAND COVER	IN THE	Inside	Outside	Total		
ТҮРЕ	SYCPU	MHPA	MHPA			
XX 7-4	AREA*	4				
	land Communi		0	0		
Freshwater marsh	1.5	0	0	0		
Mule fat scrub	0.8	0	0.8	0.8		
Southern arroyo willow riparian forest	25.4	0	0	0		
Riparian scrub	54.7	1.8**	0	1.8		
Tamarisk scrub	0.7	0	0.7	0.7		
Disturbed wetland	0.1	0	0.1	0.1		
Unvegetated basin	0.4	0	0.4	0.4		
Subtotal Wetland	83.6	1.8**	2.0	3.8		
Sensitive	e Upland Comn	nunities				
Diegan coastal sage scrub	5.7	0.2	5.7	5.9		
Diegan coastal sage scrub-disturbed	6.6	0	5.5	5.5		
Maritime succulent scrub	77.3	3.1	33.6	36.7		
Maritime succulent scrub-disturbed	14.0	0.3	8.4	8.7		
Saltbush scrub	< 0.1	0	< 0.1	< 0.1		
Non-native grassland	46.1	0.1	41.5	41.6		
Subtotal Upland	149.7	3.7	94.7	98.4		
Other Uplands						
Eucalyptus woodland	0.1	0	0.1	0.1		
Disturbed land	45.3	0.8	39.6	40.4		
Developed	1,583.8	NA	NA	NA		
Subtotal Other Uplands	1629.2	0.8	39.6	40.5		
TOTAL	1,863.0	6.3	136.3	142.7		

*Rounded to the nearest 0.1 acre.

**From construction of Calle Primera (Preferred, Option 3).

Calle Primera

Based on general analysis thus far, construction of the extension of Calle Primera to Camino de la Plaza would be responsible for most if not all of the potential impacts to wetlands associated with implementation of the SYCPU in the MHPA. Vegetation impacts related to the three Calle Primera options are illustrated in Table 8. As in Table 7, impacts to land that is already developed are not included. The impacts are based on the same assumptions for each option, which is construction of 4-lane, 68-foot-wide bridge with a construction zone of 50 feet on either side.

Table 8 ANTICIPATED IMPACTS TO VEGETATION COMMUNITIES FROM THE THREE OPTIONS FOR CALLE PRIMERA						
	EXISTING	IMPA	CTED ACREA	GE*		
VEGETATION COMMUNITY	ACREAGE IN THE SYCPU AREA*	Option 1	Option 2	Option 3 (Preferred)		
Riparian scrub	54.7	1.7	3.3	1.8		
Developed	NA	NA	NA	NA		
TOTAL	54.7	1.7	3.3	1.8		

*Rounded to the nearest 0.1 acre. All impacts to riparian scrub would be in the MHPA.

San Ysidro Historic Village Specific Plan

All impacts from the SYHVSP would occur to developed land, which is an "other upland" that is not considered sensitive. Therefore, the impacts would be less than significant.

5.2 IMPACTS TO COMMON WILDLIFE SPECIES

San Ysidro Community Plan Update

Impacts to common wildlife species would result from the loss of a maximum of up to 143 acres of potential habitat in the SYCPU area (excluding developed; Table 7). As discussed earlier, the actual impacts will likely be less than this because City regulations set a 25 percent encroachment limit total into the MHPA per parcel, or even less if only a small portion of the parcel is MHPA. Wildlife using the habitat would be displaced, and some small mammals, amphibians, and reptiles with low mobility may be inadvertently harmed during grading in these areas. Impacts to common wildlife species are considered less than significant, however, as the species are not considered sensitive (see Section 3.3 for definitions of "sensitive").

The differences between the three Calle Primera options with respect to impacts to common wildlife would be minimal. The impacts from all three options would also be less than significant.

San Ysidro Historic Village Specific Plan

All impacts from the SYHVSP would occur to developed land. While developed land can support some common wildlife species (e.g., house sparrow [*Passer domesticus*]) that are adapted to a human environment, the impacts would be less than significant because these species are not considered sensitive.

5.3 SENSITIVE BIOLOGICAL RESOURCES IMPACTS

San Ysidro Community Plan Update

Impacts to sensitive vegetation communities, plants, and wildlife would occur with implementation of the SYCPU. Impacts to these sensitive biological resources (as defined in Section 3.3) would be significant but could be mitigated at the project level through compliance with ESL Regulations and the City's Biology Guidelines.

Due to the fact that portions of the biological resource assessment are based on secondary source information rather than site-specific field surveys, the impacts would be refined as future development is proposed. This program-level analysis, on the other hand, identifies areas of potential impacts associated with implementation of the overall SYCPU. Site-specific surveys would be conducted for future project-level review to identify, map, and/or verify the presence of sensitive vegetation, plant species, and wildlife species occurring on individual properties and to determine the extent of the impacts.

5.3.1 Sensitive Vegetation Communities

Implementation of the SYCPU would result in the loss of sensitive vegetation communities. These include both wetland communities and upland communities in Tiers I-IIIB, as shown on Figure 9. Tier IV other uplands are not considered sensitive.

Potential impacts to sensitive upland vegetation communities would include the loss of maritime succulent scrub (including disturbed), Diegan coastal sage scrub (including disturbed), saltbush scrub, and non-native grassland. Table 7 provides the acreages of potential impacts to each of these sensitive communities from implementation of the SYCPU. Impacts to wetland communities are addressed in Section 5.4.

None of the three options for the Calle Primera extension to Camino de la Plaza would impact sensitive upland vegetation communities. Impacts to wetland communities associated with the Calle Primera extension are addressed in Section 5.4.

5.3.2 Sensitive Plants

Implementation of the SYCPU has the potential to impact 20 sensitive plant species known to occur, or with potential to occur, in the undeveloped portions of the SYCPU area (Table 3). Precise numbers and locations of sensitive plant species (including any species not listed in Table 3) would be identified through project-level surveys for proposed future development.

No sensitive plant species that occur in riparian scrub habitat were identified in the SYCPU area (where the three Calle Primera options are located) during the literature review. However, it is possible that some could occur. Sensitive plant species, if present, would be located through project-level surveys prior to construction of the Calle Primera extension.

Eleven of the plant species which could be impacted are federal-listed, State-listed, and/or MSCP Covered Species (Table 3). These plant species include: San Diego thorn-mint, San Diego ambrosia, snake cholla, Otay tarplant, Orcutt's bird-beak, variegated dudleya, San Diego button-celery, San Diego barrel cactus, spreading navarretia, California Orcutt grass, and Otay mesa mint. Eight of these species are narrow endemics: San Diego thorn-mint, San Diego ambrosia, snake cholla, Otay tarplant, variegated dudleya, spreading navarretia, California Orcutt grass, and Otay of these species are narrow endemics: San Diego thorn-mint, San Diego ambrosia, snake cholla, Otay tarplant, variegated dudleya, spreading navarretia, California Orcutt grass, and Otay mesa mint. See Table 3 for information on each of these species.

5.3.3 <u>Sensitive Wildlife</u>

Implementation of the SYCPU, including the three options for the extension of Calle Primera, has the potential to impact 25 sensitive wildlife species known to occur, or with potential to occur, in the undeveloped portions of the SYCPU area (Table 4). Precise numbers and locations of sensitive wildlife species would be identified through project-level surveys for proposed future development.

5.3.3.1 Federal Listed Endangered Species

The federal endangered San Diego fairy shrimp, Riverside fairy shrimp, Quino checkerspot butterfly, and least Bell's vireo could be impacted with proposed future development implemented as part of the SYCPU land use plan. The only part of the SYCPU land use plan that could affect the least Bell's vireo is the extension of Calle Primera to Camino de La Plaza (all three options).

San Diego fairy shrimp have been found in unvegetated basins in the eastern portion of the SYCPU area and have potential to occur in other such water-holding basins in the area. Riverside fairy shrimp could occur in basins in the eastern portion of the SYCPU area if the basins are deep enough. There has been no critical habitat for either of these species designated by the USFWS in the SYCPU area.

All land east of Interstate 805 in the SYCPU area is within the potential range of the Quino checkerspot butterfly in San Diego County based on the recommended survey area map in the USFWS Quino Checkerspot Butterfly Survey Guidelines (USFWS 2014). There has been no critical habitat for this species designated by the USFWS in the SYCPU area, however.

The least Bell's vireo is known from the riparian habitats in the western portion of the SYCPU area. Critical habitat for the species has been designated by the USFWS in the western portion of the SYCPU area, generally southwest of Interstate 5, east of Dairy Mart Road, and northeast of Camino de la Plaza (Figure 6). The critical habitat designation is a generalization and, as shown on Figure 6, includes land that is developed.

Table 8 shows the impacts to riparian scrub habitat from the three options for the extension of Calle Primera; all options would impact least Bell's vireo critical habitat (Figures 6 and 8). A comparison of the impacts to the vireo habitat is provided below for each of the three Calle Primera options.





Impacts to Sensitive Vegetation Communities

SAN YSIDRO COMMUNITY PLAN UPDATE

Figure 9

Option 1 would have the least impact to least Bell's vireo habitat (1.7 acres), and it would have the shortest span of the habitat. It would also occur farthest away from the primary block of vireo habitat to the north associated with Dairy Mart Pond and the Tijuana River.

Option 2 would have the greatest acreage of impact to the habitat (3.3 acres) and the longest span of the habitat. Compared to Option 1, it would be closer to the primary block of vireo habitat to the north associated with Dairy Mart Pond and the Tijuana River but farther away from it than Option 3.

Option 3, which is the preferred option, would have slightly greater impacts to least Bell's vireo habitat than Option 1 (1.8 acres) and a span of the habitat similar to Option 1. However, it would be closer to the primary block of vireo habitat to the north associated with Dairy Mart Pond and the Tijuana River than either Options 1 or 2.

5.3.3.2 Federal Listed Threatened Species

The coastal California gnatcatcher is a federal threatened species, a State Species of Special Concern, and an MSCP Covered Species that could be impacted with future development in accordance with the SYCPU land use plan. Diegan coastal sage scrub and maritime succulent scrub habitats, which may be suitable for this species, could be impacted (Table 7 and Figure 8). Approximately 3.6 acres of this potentially occupied habitat is in the MHPA and could be impacted under the proposed SYCPU land use plan because it is not called out as proposed open space (Table 7).

5.3.3.3 State Listed Endangered Species

As stated in Section 5.3.3.1, the least Bell's vireo is federal and State endangered, and is an MSCP Covered Species that is known from the riparian habitats in the western portion of the SYCPU area. See Section 5.3.3.1 for the potential impacts to this species from implementation of the SYCPU.

5.3.3.4 State Species of Special Concern

This section addresses State Species of Special Concern that are not also federal or State listed as addressed previously in Sections 5.3.3.1 through 5.3.3.3.

Reptiles

The following five reptile species that are State Species of Special Concern could be impacted by implementation of the SYCPU: Belding's orange-throated whiptail, Coronado skink, coast horned lizard, red-diamond rattlesnake, and two-striped garter snake (Table 4).

The first four species occur in a variety of upland habitats, such as those in the eastern portion of the SYCPU area, and could be impacted directly (e.g., by being crushed by grading equipment) and through the loss of approximately 98 acres of potential upland habitat (Table 7). The last species, two-striped garter snake, occurs primarily along permanent creeks and streams, but also

around vernal pools and along intermittent streams. Therefore, it has potential to occur in undeveloped land in both the eastern and western portions of the SYCPU area, and to be impacted directly and through habitat loss, including from construction associated with the extension of Calle Primera regardless of the option constructed (Table 8).

<u>Birds</u>

The following seven bird species that are State Species of Special Concern could be impacted by implementation of the SYCPU: grasshopper sparrow, burrowing owl, coastal cactus wren, northern harrier, yellow-breasted chat, loggerhead shrike, and yellow warbler (Table 4).

Potential habitat for the grasshopper sparrow, burrowing owl, coastal cactus wren, northern harrier, and loggerhead shrike occurs in the undeveloped eastern portion of the SYCPU area. Potential impacts to these species could occur through direct impacts to active nests and through habitat loss (i.e., approximately 98 acres of potential upland habitat; approximately 42 acres of that is non-native grassland [Table 7]).

Potential habitat for the yellow-breasted chat and yellow warbler occurs in the riparian habitat in the undeveloped, western portion of the SYCPU area where Calle Primera would be extended (regardless of the option constructed). The roadway extension construction could result in impacts to active nests and would cause the loss of potential habitat for these species (Table 8).

There are no CNDDB records for the burrowing owl in the SYCPU area, and it was not mapped there for the MSCP. However, potential habitat for the species is present in the eastern portion of the SYCPU area, and the species is known from nearby Otay Mesa.

In general, burrowing owl habitat is composed of drier, open areas that can include prairies, grasslands, and savannas. The burrowing owl can also be found living in deserts, farmlands, pastures, cemeteries, airports, vacant lots, university campuses, golf courses and other urban areas (Cornell Lab of Ornithology 2014c, The Peregrine Fund 2014). Burrowing owls are dependent on the presence of fossorial mammals whose burrows are used for nesting and roosting (Klute et al. 2003). In southern California, the most commonly used burrow is that of the California ground squirrel (Collins 1979). The California ground squirrel was observed during surveys in the eastern portion of the SYCPU area (HELIX 2010).

Impacts to the burrowing owl could include not only direct impacts to individuals, burrows, and foraging habitat, but also indirect impacts from "eradication of host burrowers; changes in vegetation management; use of pesticides and rodenticides; destruction, conversion or degradation of nesting, foraging, over-wintering or other habitats; destruction of natural burrows and burrow surrogates; and disturbance which may result in the harassment of owls at occupied burrows" (CDFW 2012). Implementation of the SYCPU may result in impacts to approximately 42 acres of non-native grassland and approximately 40 acres of disturbed land in a mosaic with shrub communities in the undeveloped, eastern portion of the SYCPU area. Impacts to non-native grassland would affect the preferred habitat of the burrowing owl. Although the species prefers grasslands, it is also known to use disturbed land.

The loss of foraging habitat would have an adverse effect on raptors in general. The Cooper's hawk, American kestrel, and red-tailed hawk were observed in the undeveloped, eastern portion of the SYCPU area (HELIX 2010), and other raptors such as the burrowing owl and northern harrier have potential to forage there. While grasslands are the primary habitat for raptor foraging, open shrublands or other open habitats in association with grasslands/open shrublands may also be utilized. Therefore, development associated with the SYCPU land use plan could impact approximately 98 acres of potential raptor foraging habitat (Table 7).

<u>Mammals</u>

The following three mammal species that are State Species of Special Concern could be impacted by implementation of the SYCPU: western red bat, San Diego black-tailed jackrabbit, and San Diego desert woodrat (Table 4).

The western red bat has potential to occur in the riparian habitat in the undeveloped, western portion of the SYCPU area where Calle Primera would be extended (regardless of the option constructed) resulting in impacts to potential roosting and foraging habitat for this species (Table 8).

The San Diego black-tailed jackrabbit and San Diego desert woodrat occur in open and shrubby habitats like those that occur in the undeveloped, eastern portion of the SYCPU area. The woodrat could be impacted directly, for example by being crushed by grading equipment if it is present. The jackrabbit would likely be able to escape equipment and avoid impact. Both species would be impacted through the potential loss of approximately 98 acres of potential upland habitat (Table 7).

5.3.3.5 State Fully Protected Species

There are no State Fully Protected (Appendix A) species known to occur, or with potential to occur, in the SYCPU area.

5.3.3.6 Other MSCP Covered Species

The Cooper's hawk and southern California rufous-crowned sparrow are MSCP Covered Species that are also State Watch List Species (Table 4; Appendix A). Potential impacts to these species could occur directly through impacts to active nests and through habitat loss.

The Cooper's hawk was observed flying over the undeveloped, eastern portion of the SYCPU area (HELIX 2010), which supports upland habitats. Therefore, the eastern portion of the SYCPU area may support suitable foraging habitat for this species. Approximately 98 acres of this potential upland foraging habitat could be impacted through implementation of the SYCPU (Table 7). The riparian habitat in the western portion of the SYCPU area supports both potential nesting and foraging habitat, which would be impacted by the extension of Calle Primera regardless of the option constructed (Table 8).

Potential habitat for the southern California rufous-crowned sparrow occurs in the undeveloped, eastern portion of the SYCPU area, and approximately 98 acres of this (upland) habitat could be impacted through implementation of the SYCPU (Table 7).

5.3.3.7 Other Sensitive Species

There are two other sensitive species with potential to occur in the SYCPU area that are sensitive—but not under any of the previously addressed categories of sensitivity. These species are the California horned lark and Bell's sage sparrow, both of which are on the State Watch List (Table 4; Appendix A). The Bell's sage sparrow is also a federal Bird of Conservation Concern (Appendix A). Potential impacts to these species could occur directly through impacts to active nests and through habitat loss. Potential habitats for these species occur in the undeveloped, eastern portion of the SYCPU area. Approximately 98 acres of potential (sensitive upland) habitat for these species could be impacted through implementation of the SYCPU (Table 7).

San Ysidro Historic Village Specific Plan

There are no sensitive biological resources associated with the SYHVSP since it is entirely developed, so none would be impacted.

5.4 JURISDICTIONAL WATERS/WETLANDS

San Ysidro Community Plan Update

5.4.1 <u>City Wetlands</u>

City wetlands in the SYCPU area consist of freshwater marsh, mule fat scrub, southern arroyo willow riparian forest, riparian scrub, tamarisk scrub, disturbed wetland, and unvegetated basins (see Section 5.4.2). There would be no impacts to freshwater marsh or southern arroyo willow riparian forest, and impacts to riparian scrub would only occur from the extension of Calle Primera (regardless of the option constructed; Table 8). While vernal pools are not known from the SYCPU area, there are water-holding basins with potential to support vernal pool indicator species. Project-specific surveys would determine if vernal pools are present. Figures 8 and 9 illustrate the locations of potential impacts to wetlands, and Tables 7 and 8 quantify the potential impacts to wetlands with implementation of the SYCPU.

The City's Biology Guidelines, ESL Regulations, and MSCP Subarea Plan require, in general, that impacts to wetlands be avoided and that a sufficient buffer be maintained around all wetlands to protect wetland functions and values. Buffer distances are typically 100 feet, but in some cases, a lesser buffer may be approved provided it can be demonstrated that the functions and values of the wetland would not be compromised.

5.4.2 Unvegetated Basins

Unvegetated basins occur in the eastern portion of the SYCPU area, some of which are known to support San Diego fairy shrimp. These basins are considered to be City wetlands because they

are characterized as "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 catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation as in the case of salt pannes and mudflats" (City Municipal Code Chapter 11, Article 3, Division 1).

Implementation of the SYCPU has potential to impact up to 0.4 acre of unvegetated basins. Protocol fairy shrimp surveys would be required for all basins to determine the presence or absence of fairy shrimp. USFWS oversight in the form of a Biological Opinion would also likely be required should any potential impacts to fairy shrimp be proposed by a future specific project.

5.4.3 <u>Other Jurisdictional Waters/Wetlands</u>

Implementation of the SYCPU has potential to result in impacts to wetlands regulated by the USACE, CDFW, and RWQCB (some or all of those wetlands listed in Sections 5.4.1 and 5.4.2, including impacts to riparian scrub from the extension of Calle Primera regardless of the option constructed).

There is also potential for jurisdictional non-wetland waters to be impacted in the SYCPU area (e.g., those mapped as "riverine" in the National Wetlands Inventory; see Section 3.4). These impacts would be regulated by the USACE according to Section 404 of the Clean Water Act, RWQCB in accordance with Section 401 of the Clean Water Act, and CDFW under Section 1600 of California Fish and Game Code. All impacts to regulated waters and wetlands would be significant.

San Ysidro Historic Village Specific Plan

Based on the literature review, there are no potential jurisdictional waters/wetlands present in the developed SYHVSP area (Figure 3). Therefore, no impacts are anticipated.

5.5 WILDLIFE MOVEMENT CORRIDORS

San Ysidro Community Plan Update

As explained in Section 3.5, there are no wildlife movement corridors in the SYCPU area, and a bridge crossing of the riparian habitat for the extension of Calle Primera to Camino de la Plaza (regardless of the option constructed) would not preclude local use of the habitat by wildlife. Therefore, wildlife movement impacts from implementation of the SYCPU would be less than significant.

San Ysidro Historic Village Specific Plan

There are no wildlife movement corridors in the developed SYHVSP area. Therefore, no impacts to wildlife movement would occur.

5.6 MULTI-HABITAT PLANNING AREA

San Ysidro Community Plan Update

The MHPA occurs along the eastern and western edges of the SYCPU area (Figure 7). The MHPA in the eastern portion of the SYCPU area consists primarily of sensitive, upland maritime succulent scrub. The MHPA in the western portion of the SYCPU area consists of riparian scrub, southern arroyo willow riparian forest, and freshwater marsh that are sensitive wetland habitats that are also designated as least Bell's vireo critical habitat (Figure 6). As a review of Figure 7 reveals, not all of the MHPA within the SYCPU area would be designated as open space. A portion of the MHPA along the eastern edge of the SYCPU area would be designated for institutional uses. Other, small portions of the MHPA along the eastern edge would be designated for park and industrial uses. All of these uses could impact up to 4.5 acres of the MHPA (3.7 acres of sensitive upland communities and 0.8 acre of Disturbed Land [Table 7]).

MHPA encroachment is also proposed to occur for the extension of Calle Primera to Camino de la Plaza. The preferred alignment for this roadway (Option 3) would encroach into 2.8 acres of the MHPA. Of this, 1.8 acres consist of wetland; the other 1.0 acre is developed land. While MHPA lands are considered by the City to be a sensitive biological resource, limited development is allowed in the MHPA subject to the requirements of the City's MSCP Subarea Plan (i.e. typically up to 25 percent of a property wholly in the MHPA can be developed and some uses are considered compatible to remain or be developed within the MHPA).

5.6.1 MHPA Consistency

The SYCPU would generally be consistent with the currently designated MHPA preserve areas. As mentioned previously, however, land uses in the eastern SYCPU area could impact the MHPA, as would the proposed extension of Calle Primera.

The MHPA boundary can be altered to accommodate projects subject to approval by the City and Wildlife Agencies by meeting the six MHPA boundary line adjustment equivalency criteria (Section 5.4.2 of the MSCP Plan [City 1998]). These criteria include: 1) effects on significantly and sufficiently conserved habitats; 2) effects to MSCP Covered species; 3) effects on habitat linkages and function of preserve areas; 4) effects on preserve configuration and management; 5) effects on ecotones or other conditions affecting species diversity; and 6) effects to species of concern not on the MSCP Covered Species list. An approved MHPA boundary adjustment would be required for projects with MHPA impacts in the eastern SYCPU area.

The MSCP allows roads in the MHPA that are identified in community plan circulation element, collector streets essential for area circulation, and necessary maintenance/emergency access roads. As the extension of Calle Primera is a part of the SYCPU, construction of the roadway would be consistent with the MHPA, although the impacts would still be significant.

5.6.2 MHPA Land Use Adjacency Guidelines

The MHPA has been designed to maximize conservation of sensitive biological resources, including sensitive species. When land is developed adjacent to the MHPA, there is potential for indirect impacts that may degrade habitat or alter animal behavior within the preserve. These indirect effects may include impacts related to drainage, toxics, lighting, noise, human intrusion, and invasive species. These impacts could be short-term resulting from construction activities or long-term resulting from adjacent, occupied residential development. Short-term construction impacts from noise, for example, could result in disruption of nesting and breeding, and adversely affect a population of sensitive species. Long-term impacts from occupied residences could result from trampling and removal of plant cover due to hiking, biking, and other human activities. To address these concerns, the MSCP includes a set of MHPA Land Use Adjacency Guidelines that are to be evaluated and implemented at the project level.

Implementation of the SYCPU would introduce land uses adjacent to MHPA. Future development proposals could result in indirect impacts on adjacent MHPA lands and would be required to address indirect impacts pursuant to the Land Use Adjacency Guidelines.

5.6.3 Specific Management Directives for Otay Mesa and the Tijuana River Valley

For Otay Mesa, the City's MSCP Subarea Plan envisions, "...a network of open and relatively undisturbed canyons containing a full ensemble of native species...." For the Tijuana River Valley, the Subarea Plan envisions, "...a broad natural floodplain containing riparian and wetland habitats...intermixed with compatible activities...." Specific Management Directives are aimed at carrying out these visions, and include measures to protect sensitive vegetation communities and species in the Otay Mesa and Tijuana River Valley areas of the MHPA that occur in the SYCPU area. Development of the SYCPU is expected to occur in accordance with the requirements of the City's MSCP Subarea Plan which includes the MHPA Land Use Adjacency Guidelines; therefore, there are anticipated to be no significant, unmitigated direct or indirect impacts to the MHPA.

San Ysidro Historic Village Specific Plan

The SYHVSP area is not within or adjacent to the MHPA, so the SYHVSP would not directly or indirectly impact the MHPA.

6.0 MITIGATION FRAMEWORK

As indicated earlier, policies established by both the City's General Plan and SYCPU would help encourage future development to minimize impacts on sensitive biological resources. However, more specific mitigation measures are expected to be required to ensure that impacts to sensitive biological resources are either avoided or minimized. Mitigation would be required for remaining impacts that are considered significant under the City's Biology Guidelines (2012) and the City of San Diego's Development Services Department CEQA Significance Determination Thresholds (Appendix I in City 2012). Mitigation measures typically include on-



or off-site enhancement, restoration, or creation of habitat; on- or off-site dedication or acquisition of habitat; payment of monies into the City's Habitat Acquisition Fund; or purchase of credits in an approved mitigation bank. Mitigation measures would be determined and implemented at the specific project level.

As required by CEQA, each future development pursuant to the SYCPU that could directly or indirectly impact sensitive biological resources would be required to conduct biological surveys and prepare a report in accordance with the City's Biological Guidelines. Preparation of this report would include comprehensive field surveys to map vegetation, identify wildlife, and define wetlands. The locations of any sensitive plant species including listed, rare, and/or MSCP Narrow Endemic species, as well as the potential for occurrence of any sensitive species would be determined. As appropriate, focused presence/absence surveys would be conducted in accordance with the City's Biology Guidelines and applicable resource agency survey protocols to determine the potential for impacts to federal and/or State-listed plant or animal species. A preliminary or final jurisdictional wetland delineation would be completed when necessary following the methods outlined in the USACE 1987 Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Delineation Manual for the Arid West Region (USACE 2008).

The project specific biology reports would determine the potential impacts associated with each proposed development in accordance with the CEQA Significance Thresholds. The reports would also specify mitigation measures required to reduce or avoid significant impact to sensitive biological resources. Mitigation involving enhancement, restoration and/or creation of habitat would be described in a conceptual mitigation plan following the outline provided in the City's Biology Guidelines. The conceptual mitigation plan would include success criteria which must be met, as well as maintenance and monitoring requirements for typically up to five years following completion of the initial planting program.

6.1 SAN YSIDRO COMMUNITY PLAN UPDATE

As discussed in Section 5.1, future development in accordance with the SYCPU could result in significant impacts to the following biological resources:

- Wetland Vegetation Communities,
- Sensitive Upland Vegetation Communities,
- Sensitive Plant Species,
- Sensitive Wildlife Species,
- Jurisdictional Waters/Wetlands, and/or
- MHPA Land.

While implemented mitigation measures would be expected to reduce the severity of impacts, the ability of the measures to reduce the impacts to less-than-significant levels cannot be determined at this time. Detailed analysis of each subsequent development project in the SYCPU area would be required to determine if mitigation is available to reduce impacts to less-than-significant levels.

Wetland Vegetation Communities

The following mitigation is required by the City (2012) for impacts to wetland vegetation communities.

Wetland impacts shall first be avoided. If avoidance is infeasible, then mitigation is required. Wetland impacts shall be mitigated to achieve no net loss of wetland function and value. Mitigation for wetland vegetation community impacts usually entails a combination of habitat acquisition/preservation, restoration, and/or creation. Typical mitigation ratios, as defined in the City's Biology Guidelines, are identified in Tables 9a and 9b.

Table 9a CITY OF SAN DIEGO WETLAND MITIGATION RATIOS (with Biologically Superior Design [*])				
ON-SITE HABITAT TYPESVEGETATION COMMUNITYMITIGATION RATIO				
Mule fat scrub, Riparian scrub, Tamarisk scrub	Riparian	2:1 to 3:1		
Unvegetated basin†	Vernal pool	2:1 to 4:1		
Unvegetated basin†	Unvegetated basin with fairy shrimp	2:1 to 4:1		

^{*}A Biologically Superior Design includes avoidance, minimization, and compensatory measures, which would result in a net gain in overall function and values of the type of wetland resource over the resources being impacted.

[†]Unvegetated basin might qualify as either vernal pool, unvegetated basin with fairy shrimp, or neither, depending on which species are found there.

Table 9b CITY OF SAN DIEGO WETLAND MITIGATION RATIOS (without Biologically Superior Design Outside of the Coastal Zone)				
ON-SITE HABITAT TYPES	VEGETATION COMMUNITY	MITIGATION RATIO		
Mule fat scrub, Riparian scrub, Tamarisk scrub	Riparian	4:1 to 6:1		
Unvegetated basin†	Vernal pool	4:1 to 8:1		
Unvegetated basin [†]	Unvegetated basin with fairy shrimp	4:1 to 8:1		

[†]Unvegetated basin might qualify as either vernal pool, unvegetated basin with fairy shrimp, or neither, depending on which species are found there.

Sensitive Upland Vegetation Communities

The following mitigation is required by the City (2012) for impacts to sensitive upland vegetation communities.

Impacts to sensitive upland vegetation communities shall first be avoided. Where avoidance is not feasible, sensitive upland vegetation communities shall be mitigated through habitat acquisition/preservation, restoration, and/or creation—or a combination thereof. Mitigation for impacts to sensitive upland vegetation would be required in accordance with the ratios in Table 10 per the City's Biology Guidelines. The habitat types that would be impacted by the project and require mitigation are shown in bold in Table 10. The project would also impact Disturbed Land and Eucalyptus Woodland, which are classified as Tier IV, and do not require mitigation. For project impacts that would not exceed five acres (in some cases up to 10 acres), an in-lieu contribution may be made to the City's Habitat Acquisition Fund.

Table 10 MITIGATION RATIOS FOR IMPACTS TO UPLAND VEGETATION COMMUNITIES						
TIER	HABITAT TYPE	MITIGATION RATIOS				
TIER I	Southern Foredunes, Torrey	Location of	Preservatio	n		
(rare uplands)	 Pines Forest, Coastal Bluff Scrub, Maritime Succulent Scrub, Maritime Chaparral Scrub, Oak Chaparral, Native Grassland, Oak Woodlands 			Inside	Outside	
		Location	Inside*	2:1	3:1	
		of Impact	Outside	1:1	2:1	
TIER II	Coastal Sage Scrub (CSS)	Location of Preservation				
(uncommon uplands)	CSS/Chaparral			Inside	Outside	
		Location	Inside*	1:1	2:1	
		of Impact	Outside	1:1	1.5:1	
TIER IIIA	Mixed Chaparral Chamise Chaparral	Location of Preservation			1	
(common uplands)				Inside	Outside	
		Location	Inside*	2:1	3:1	
		of Impact	Outside	1:1	2:1	

Table 10 (cont.) MITIGATION RATIOS FOR IMPACTS TO UPLAND VEGETATION COMMUNITIES						
TIER	HABITAT TYPE	MI	MITIGATION RATIOS			
TIER IIIB	Non-Native Grasslands	Location of	Location of Preservation			
(common uplands)				Inside	Outside	
		Location	Inside*	1:1	1.5:1	
		of Impact	Outside	0.5:1	1:1	

Notes:

For all Tier I impacts, the mitigation could (1) occur within the MHPA portion of Tier I (in Tier) or (2) occur outside of the MHPA within the affected habitat type (in-kind).

For impacts on Tier II, IIIA, and IIIB habitats, the mitigation could (1) occur within the MHPA portion of Tiers I - III (out-of-kind) or (2) occur outside of the MHPA within the affected habitat type (in-kind). Project-specific mitigation will be subject to applicable mitigation ratios at the time of project submittal.

Sensitive Plants

The following types of mitigation may be required for impacts to sensitive plant species known or with potential to occur (see Table 3 for potential species which would be surveyed and note this list is subject to site specific project updates).

A qualified biologist shall survey for sensitive plants in the spring of a year with adequate rainfall prior to initiating construction activities in a given area. If a survey cannot be conducted due to inadequate rainfall, then the project proponent shall consult with the City and Wildlife Agencies (where applicable) to determine if construction may begin based on site-specific vegetation mapping and potential to occur analysis and what mitigation would be required, or whether construction must be postponed until spring rare plant survey data is collected.

Adherence to the MSCP Subarea Plan Appendix A (i.e. Conditions of Coverage) and securing comparable habitat at the required ratio(s) (i.e., a habitat-based approach to mitigation; see Tables 9a, 9b, and 10) shall provide all or a component of mitigation for direct impacts to most sensitive plant species (e.g., MSCP Covered Species).

Impacts to federal or State listed plant species shall first be avoided where feasible, and where not feasible, impacts shall be compensated through salvage and relocation via a transplantation/restoration program and/or off-site acquisition and preservation of habitat containing the plant species at a 2:1 ratio. A qualified biologist shall prepare a City- and Wildlife Agency-approved Restoration Plan that shall indicate where restoration would take place. The restoration plan shall also identify the goals of the restoration, responsible parties, methods of restoration implementation, maintenance and monitoring requirements, final success criteria, contingency measures, and notice of completion requirements. Impacts to moderately sensitive plant species (California Rare Plant Rank 1 or 2 species) shall first be avoided where feasible, and where not feasible, impacts shall be mitigated through reseeding (with locally collected seed stock) or relocation. Where reseeding or salvage and relocation are required, the project proponent shall identify a qualified Habitat Restoration Specialist to be approved by the City. The Habitat Restoration Specialist shall prepare and implement a Restoration Plan to be approved by the City for reseeding or salvaging and relocating sensitive plant species.

Sensitive Wildlife

The following types of mitigation may be required for impacts to sensitive wildlife species.

Fairy Shrimp

Prior to the issuance of construction permits for future projects in the SYCPU area, protocol surveys shall be completed to confirm the presence/absence of San Diego fairy shrimp and Riverside fairy shrimp. If San Diego fairy shrimp and/or Riverside fairy shrimp are identified, authorization for take of the species shall be obtained from the USFWS prior to impacts to the species or its occupied habitat. A draft Vernal Pool HCP is currently being prepared by the City in coordination with the Wildlife Agencies. If adopted, the City would have "take" authority for fairy shrimp occurring within the SYCPU Vernal Pool HCP areas. Mitigation for impacts to fairy shrimp within the Vernal Pool HCP areas would be required to comply with an individual project, USFWS biological opinion/take permit and/or the Vernal Pool HCP (if adopted and applicable for a given specific project).

Quino Checkerspot Butterfly

Prior to the issuance of construction permits for future projects in the SYCPU area, protocol surveys shall be completed to confirm the presence/absence of the Quino checkerspot butterfly. If the butterfly is identified, authorization for take of the species shall be obtained from the USFWS prior to impacts to the species or its occupied habitat. If authorization is obtained, mitigation measures such as the avoidance of occupied habitat and/or the acquisition of occupied habitat shall be developed in consultation with the USFWS and the City.

Coastal California Gnatcatcher

Prior to the issuance of construction permits for future projects in the SYCPU area, protocol surveys shall be completed within MHPA suitable habitat for the coastal California gnatcatcher. If the species is determined to occupy a site, the loss of occupied habitat (potentially Diegan coastal sage scrub and maritime succulent scrub) shall be mitigated for in accordance with the City's Biology Guidelines and MSCP Subarea Plan (see mitigation for sensitive upland vegetation communities and noise components of the City's MHPA Land Use Adjacency Guidelines standard mitigation).

Least Bell's Vireo

Prior to the issuance of construction permits for future projects in the SYCPU area (specifically for the extension of Calle Primera), a protocol survey shall be completed in suitable habitat for the least Bell's vireo. If the species is determined to be present, the loss of occupied habitat shall be mitigated for in accordance with the City's Biology Guidelines and MSCP Subarea Plan (see mitigation for wetland vegetation communities and noise components of the City's MHPA Land Use Adjacency Guidelines standard mitigation).

Burrowing Owl

During discretionary analysis for future specific projects in the SYCPU area habitat assessments would be conducted on undeveloped or disturbed land following guidelines and protocol established in the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Should burrowing owl habitat or sign be encountered on or within 150 meters of a project site, breeding season surveys shall be conducted according to the protocol (CDFW 2012). If occupancy is determined, site-specific avoidance and mitigation measures shall be developed. Measures to avoid and minimize impacts to burrowing owl may include take avoidance (pre-construction) surveys and the use of buffers, screens, or other measures to minimize impacts during project activities.

Coastal Cactus Wren

Prior to issuance of construction permits for future projects in the SYCPU area, any habitat considered suitable for the presence of coastal cactus wren shall be surveyed to determine its presence or absence. If the species is present, mitigation measures shall include area-specific management directives contained in the MSCP for the coastal cactus wren that include the restoration of maritime succulent scrub with propagation of cactus patches within the MHPA, adaptive management of cactus wren habitat, monitoring of populations, and compliance with the MHPA Land Use Adjacency Guidelines to reduce detrimental edge effects. No clearing of occupied habitat may occur from the period of February 15 to August 15. In addition, if unoccupied CACW habitat is impacted, standard mitigation measures for CACW plant salvage and relocation to existing restoration areas would be included for site-specific projects.

Nesting Birds

To reduce potentially significant impacts that would interfere with the avian nesting within the SYCPU area, measures to be incorporated into project-level construction activities should include the following as applicable:

• Site-specific biological resources surveys (e.g., for the coastal California gnatcatcher, burrowing owl, raptors, etc.) shall be conducted in accordance with latest City's Biology Guidelines and Wildlife Agency protocol. Nesting season avoidance and/or pre-grading surveys and mitigation shall also be completed as required to comply with the federal Endangered Species Act, MBTA, California Fish and Game Code, MSCP, and/or ESL Regulations. The MSCP specifies a 300-

foot avoidance area for active Cooper's hawk nests and a 900-foot avoidance area for active northern harrier nests.

- In accordance with the noise component of the City's standard MHPA Land Use Adjacency Guideline mitigation measures, there shall be no clearing, grubbing, grading, or other construction activities during the breeding seasons for cactus wren, least Bell's vireo, and/or coastal California gnatcatcher (cactus wren, February 15-August 15; least Bell's vireo, March 15-September 15; coastal California gnatcatcher, March 1-August 15; burrowing owl February 1–August 31) until it can be demonstrated that construction activities would not result in noise levels exceeding 60dB(A) Leq at the edge of their occupied habitat(s).
- Work near active nests of any species must include suitable noise abatement measures to ensure construction noise levels at the MHPA boundary would not exceed 60 dB(A) Leq.

Other Wildlife Species

Site-specific biology surveys shall be conducted to identify any other sensitive or MSCP Covered species present on each future project in the SYCPU area, including but not limited to the potential species listed in Table 4. Impacts to most sensitive and MSCP Covered species will be mitigated by habitat-based mitigation as established by the City's Biology Guidelines, unless a rare circumstance requires additional species-specific mitigation. In that case, the project-level biological survey report would justify why species-specific mitigation is necessary. For MSCP Covered species, conditions from MSCP Subarea Plan Appendix A will be implemented where applicable, such as measures to discourage Argentine ants on projects occupied by coast horned lizard.

Jurisdictional Waters/Wetlands

Wetlands shall be avoided to the extent feasible. Where avoidance is not feasible, project-specific impacts to jurisdictional wetlands would be assessed for compliance with the City's Biology Guidelines during the City's discretionary process with mitigation requirements applied consistent with Tables 9a and 9b above. Final requirements and locations are, however, subject to change during applicable consultation/permit processes required by the USACE, CDFW, RWQCB, and USFWS (if listed species are present).

Jurisdictional, non-wetland waters shall be avoided to the extent feasible. Where avoidance is not feasible, mitigation will be applied by federal and State regulators via their applicable consulting/permitting process. The types of mitigation required may include on-site protection, enhancement, creation, and/or restoration. Mitigation is typically required at a 1:1 ratio or higher and to be accomplished in close proximity to the impacts or at least in the same watershed. Like with impacts to wetlands, the final mitigation requirements and locations for the mitigation are subject to consultation with the permitting agencies.

MSCP Consistency

Boundary Line Adjustment

The SYCPU does not require a boundary line adjustment, and future specific projects can avoid the need for a boundary line adjustment by complying with the encroachment limitations of the MSCP. Direct impacts to the MHPA above amounts allowed per the City's MSCP Subarea Plan for future specific projects can be offset by adding equivalent land and resources to the MHPA through the MHPA boundary line adjustment process, based on additional project-specific environmental review. This process would include Wildlife Agency concurrence, and disclosure in public documents associated with the discretionary CEQA process. Any MHPA boundary adjustment shall be required to meet the following six functional criteria:

- The adjustment will increase the amount of sufficiently and significantly conserved habitat.
- The adjustment will increase habitat for MSCP Covered Species.
- The adjustment will not affect habitat linkages and functions of the MHPA preserved areas.
- The adjustment will improve the MHPA configuration by removing a disturbed area and adding nesting and foraging habitat to the MHPA lands.
- The adjustment will not result in a loss of ecotones or other factors that affect species diversity. The adjustment will add habitat to the MHPA.
- The adjustment will be beneficial to species that are not on the MSCP Covered Species list.

Indirect Impacts

Indirect impacts to sensitive biological resources in the MHPA would be reduced through compliance with the MSCP Subarea Plan Section 1.4.3 Land Use Adjacency Guidelines which are typically implemented for site-specific projects via inclusion of standard City mitigation measures. The measures would ensure the guidelines listed below are complied with:

- Prior to the issuance of occupancy permits, development areas shall include barriers or be permanently fenced where development is adjacent to the MHPA to deter the intrusion of people and/or pets into the MHPA open space areas. Signage may be installed as an additional deterrent to human intrusion as required by the City.
- The use of structural and nonstructural best management practices (BMPs), including sediment catchment devices, shall be required to reduce the potential indirect impacts associated with construction and development to water quality. Drainage shall be directed away from the MHPA or, if not possible, must not drain



directly into the MHPA. Instead, runoff flow shall be dissipated and filtered via sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA. Drainage shall be shown on the site plan and deemed satisfactory to the City Engineer.

- All outdoor lighting adjacent to the MHPA shall be directed away or shielded to prevent light over-spill.
- No non-invasive plant species shall be introduced into areas adjacent to the MHPA (i.e., landscape plans for projects shall contain no exotic plant/invasive species and shall include an appropriate mix of native species which shall be used adjacent to the MHPA.)
- All manufactured slopes must be included within the development footprint for the project and outside the MHPA.
- All brush management areas shall be shown on the site plan and reviewed and approved by the Environmental Designee of the City. Zone 1 brush management areas must be included within the development footprint and outside the MHPA. Brush management Zone 2 may be permitted within the MHPA (considered impact neutral) but cannot be used as mitigation. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to MSCP Covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area will be the responsibility of a homeowners association or other private party.
- Access to the MHPA, if any, shall be directed to minimize impacts and shall be shown on the site plan and reviewed and approved by the Environmental Designee.
- Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.
- Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

6.2 SAN YSIDRO HISTORIC VILLAGE SPECIFIC PLAN

As discussed in Section 5.0, land within the limits of the SYHVSP does not support sensitive biological resources, nor does the Specific Plan area lie adjacent to the MHPA. Thus, no impacts are anticipated for this area and no mitigation measures would likely be required for future development within the SYHVSP.

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Appendix A

EXPLANATION OF STATUS CODES FOR PLANT AND WILDLIFE SPECIES



Appendix A EXPLANATION OF STATUS CODES FOR PLANT AND WILDLIFE SPECIES

U.S. Fish and Wildlife Service (USFWS)

- FE Federal Listed Endangered
- FT Federal Listed Threatened
- FC Candidate for Federal Endangered Species Act Protection
- BCC Bird of Conservation Concern—Represents USFWS' highest conservation priorities and draw attention to species in need of conservation action.

California Department of Fish and Wildlife (CDFW)

- SE State Listed Endangered
- ST State Listed Threatened
- SR State Listed Rare
- SC Candidate for State Endangered Species Act Protection
- SSC State Species of Special Concern—Declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.
- WL Watch List—Birds that are/were: a) not on the current list of species of special concern but were on previous lists and have not been State listed under the California Endangered Species Act; b) previously State or federally listed and now are on neither list; or c) on the list of "Fully Protected" species.
- FP Fully Protected refers to all vertebrate and invertebrate taxa of concern to the California Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFW.

City of San Diego

- <u>MSCP Covered Species</u> are those included in the Incidental Take Authorization issued to the City by the USFWS and CDFW as part of the City's MSCP Subarea Plan.
- NE <u>MSCP Narrow Endemic</u> A species that is confined to a specific geographic region, soil type, and/or habitat.

Appendix A (cont.) EXPLANATION OF STATUS CODES FOR PLANT AND WILDLIFE SPECIES

California Native Plant Society (CNPS)

California Rare Plant Rank

- 1A = Presumed extirpated in California and either rare or extinct elsewhere.
- 1B = Rare, threatened, or endangered in California and elsewhere.
- 2A= Presumed extirpated in California but more common elsewhere.
- 2B= Rare, threatened, or endangered in California but more common elsewhere.
- 3 = More information is needed.
- 4 = A watch list for species of limited distribution.

Threat Rank

- .1 = Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- .2 = Moderately endangered in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
- .3 = Not very threatened in California (less than 20 percent of occurrences threatened/ low degree and immediacy of threat or no current threats known)