# APPENDIX D Biological Resources Technical Report

# Palomar Community College District South Education Center Project

# **BIOLOGICAL RESOURCES GENERAL SURVEY REPORT**

March 2016

Land Development Review Division, City of San Diego, California Assessor's Parcel Number 6782001900 Escondido, California USGS 7.5-minute Topographic Quadrangle Unsectioned, Township 13 South, Range 2 West

Prepared for:



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## 1.0 Executive Summary

Atkins completed a general biological survey and report for the Palomar Community College District (PCCD) South Education Center Project (project). PCCD proposes to establish the South Education Center on the 27-acre property located at 11111 Rancho Bernardo Road in the city of San Diego, San Diego County, California. The proposed project would convert the existing four-story, 110,000-square foot building into a comprehensive community college education center; construct a looped road; implement drainage improvements; and install walkways, hardscape areas, and landscaping.

This Biological Resources General Survey Report provides an inventory of existing biological conditions on and in the immediate vicinity of the proposed project site, and analyzes potential project-related impacts to sensitive biological resources with respect to local, state, and federal policy.

Atkins biologist Melissa Tu conducted a biological survey on May 14, 2015, following a project re-design that reduced the size of the project area. The survey focused on the revised project area, which is outside the Multi-Habitat Planning Area (MHPA) of the City of San Diego Multiple Species Conservation Program (MSCP). Vegetation communities within the revised project area include 5.47 acres of non-native grassland and 0.36 acre of landscaped areas. Therefore, the proposed project could result in impacts of up to 5.83 acres of previously disturbed areas.

Loss of foraging and nesting habitat for special-status animal species and bird species protected under the Federal Migratory Bird Treaty Act and California Fish and Game Code (CFG Code) may occur as a result of construction activities. However, impacts would be mitigated through breeding season (March 15 through August 30) and nest avoidance. In addition, the loss of foraging habitat is not expected to be significant and would be mitigated by landscaping with native species. No special-status plant species are anticipated to be directly adversely affected by the proposed project.

The standard best management practices (BMPs) will be implemented during project construction, including installation of construction fencing and maintenance of equipment and materials, to ensure that direct impacts to adjacent habitats do not occur and potential indirect impacts are avoided or minimized.



## 2.0 Introduction

At the request of PCCD, Atkins prepared this Biological Resources General Survey Report for the PCCD South Education Center Project (project). PCCD proposes to establish the South Education Center on the 27-acre property located at 11111 Rancho Bernardo Road in the city of San Diego, San Diego County, California (Figure 1). The proposed project would convert the existing four-story, 110,000-square foot building into a comprehensive community college education center as well as provide updated access and security features on the property (Figure 2). This report provides the documentation necessary for project review under the California Environmental Quality Act (CEQA) to allow for the construction, operation, and maintenance of the proposed road and facilities.

## 2.1 Project Location

The area proposed for the project is located in the Rancho Bernardo Community planning area in the northern portions of the city of San Diego, San Diego County, California. Specifically, the project site is located at 11111 Rancho Bernardo Road. The site is depicted on the Escondido, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map within an unsectioned portion of Township 13 South and Range 2 West (Figure 3).

The project site is not located within or directly adjacent to the boundaries of the MHPA of the City of San Diego MSCP. It is, however, situated about 1.50 miles south of the Lake Hodges Segment of the MSCP Subarea Plan area. Additionally, the project site is approximately 0.25 mile east of an area designated as MSCP Preserve Land. The project site is separated from the preserve land by Rancho Bernardo Road.

## 2.2 **Project Description**

The proposed project would establish the PCCD South Education Center by converting the existing fourstory, 110,000-square-foot building into a comprehensive community college education center. The project would also make improvements to the existing parking structure; construct a looped access road; implement drainage improvements; and install walkways, hardscape areas, and landscaping.

The new looped access road would be approximately 1,238 feet long and follows the outer boundary of the existing graded pad from the northern boundary of the existing parking lot to the existing parking structure. The proposed alignment of the loop road would follow the edge of existing non-native grassland.

Construction of the proposed project is anticipated to begin in July 2016 and be completed by January of 2018, lasting approximately 18 months.







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## 3.0 Methodology

### 3.1 Pre-Survey Investigation

Prior to conducting field surveys, a thorough review of available relevant maps, databases, and literature pertaining to biological resources known to occur in the project site was performed. Aerial imagery (Google Earth 2015), topographic maps (USGS 2015), soils maps (U.S. Department of Agriculture [USDA] 2015), vegetation maps (City of San Diego 1997; SanGIS 2015), national wetland inventory (U.S. Fish and Wildlife Service [USFWS] 2015a) and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting. In addition, a query of sensitive species and habitat databases was conducted, including the California Natural Diversity Database (CNDDB; California Department of Fish and Wildlife [CDFW] 2015a), the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2015), San Diego Natural History Museum (SDNHM) Plant Atlas (SDNHM 2015), and the Consortium of California Herbarium (Consortium 2015) applications, as well as a review of regional lists produced by the USFWS (2015b) and CDFW (2015a, 2015b, and 2015c).

The pre-survey investigation also included a verification of whether or not the project site falls in areas designated as final or proposed USFWS Critical Habitat for federally threatened or endangered species (USFWS 2015c), as well as areas designated as MHPA for the MSCP Subarea Plan (SanGIS 2015). Lastly, the pre-survey investigation included a review of MSCP documents (City of San Diego 1997) and the City of San Diego Land Development Code, Land Development Manual and Biology Guidelines, and Environmentally Sensitive Lands regulations, and amendments (City of San Diego 2012).

The complete list of sensitive species and habitats that have been previously recorded in the vicinity of the proposed project was compiled, and all recorded locations of species and other resources were mapped and overlayed onto aerial imagery using Geographic Information Systems (GIS). The list of sensitive species and habitats represents database results for areas within approximately two miles of the project site, as well as selected results from the Escondido, California USGS 7.5 minute topographic quadrangle (Appendix A).

## 3.2 General Biological Surveys

An initial general biological survey of the project site and approximately 100 feet beyond the site, hereinafter referred to as the survey area, was conducted by Atkins in June 2012. The survey was conducted on-foot and included 100 percent visual coverage of the survey area. The survey included a general inventory of existing conditions and focused primarily on mapping vegetation communities or habitat types, assessing suitability for sensitive plant and wildlife species, and identifying potential wetlands and other sensitive resources. Physical parameters assessed included vegetation and soil conditions, presence of indicator plant and wildlife species, slope, aspect and hydrology. A follow-up general biological survey was performed by Atkins in October 2012, which focused on the coastal sage scrub habitat located in the northeastern and eastern portions of the survey area.

The project was re-designed and the project area revised subsequent to the survey in October 2012. On May 14, 2015, Melissa Tu, an Atkins' qualified biologist, conducted a general biological survey of the updated project area including the loop access road. All plant and wildlife species observed in 2012 and 2015 are listed in Appendix B.



Vegetation communities were mapped in the field using aerial imagery and 7.5-minute USGS topographic base maps. The vegetation communities were classified according to Oberbauer *et al.* (2008). The names of plant species discussed in this report generally follow the nomenclature suggested by the CNPS and in Jepson (Baldwin et al. 2012) and Munz (1974). The names of wildlife generally follow the nomenclature suggested by CDFW (CDFG 2008).

Data was collected in the field using a Garmin GPSMAP 60CSx hand-held Global Positioning System unit and recorded on recent aerial imagery at a 1 inch = 200 feet scale. Other materials used in the field included field binoculars, digital camera, and a Kestrel hand-held air temperature and wind speed recording device.



## 4.0 Results

### 4.1 Weather Conditions

The May 14, 2015, survey was conducted between the hours of 8:30 and 10:30 a.m. Weather conditions encountered included mostly cloudy skies and light drizzle with temperatures ranging from 59 to 61 degrees Fahrenheit, and winds ranging from 0 to 4 miles per hour out of the west.

Prior to 2015, the June 21, 2012, survey was conducted between the hours of 7:00 a.m. and 1:00 p.m. Weather conditions encountered included partly cloudy skies, with temperatures ranging from 62 to 68 degrees Fahrenheit, and winds ranging from 1 to 3 miles per hour out of the west. The October 3, 2012, survey was conducted between the hours of 7:30 a.m. and 12:30 p.m. Weather conditions encountered included clear skies, with temperatures ranging from 68 to 70 degrees Fahrenheit, and winds ranging from 0 to 1 mile per hour out of the west.

## 4.2 General Land Uses

General land use in the survey area is limited to existing commercial developments, ornamental plantings, non-native grassland, and native and non-native open space. General land use surrounding the survey area includes disturbed and undisturbed open space and residential developments to the north, and existing commercial developments to the east, south, and west. The project site is also located approximately 0.25 mile east of an area designated as MSCP Preserve Land (SanGIS 2015).

### 4.3 Disturbance

The survey area contains anthropogenic related disturbances. An existing 110,000 square-foot, 4-story building is located at the center of the property. Also, within the project site is a paved parking lot situated northwest of the building and a graded area to the east. The 2015 project area is within a previous graded area. Other disturbances include those resulting from the operation of, and proximity to, adjacent existing commercial and residential developments. Lighting, noise, runoff, and encroachment resulting from building and parking lot operations present direct and indirect disturbances to wildlife and habitat. Further, much of the native habitat in the survey area has been subject to the spread of ornamental landscape, as evident by a relatively high number of non-native and exotic ornamental plant species.

## 4.4 Topography and Soils

The majority of the survey area occurs on a northeast-facing slope with an approximate 2:1 gradient. Elevations range from approximately 740 to 645 feet above mean sea level. Above the slope and in the western portions of the survey area, the topography is relatively flat as a result of parking lot developments for the commercial property. Below the slope and in the north and northwestern portions of the survey area, the topography is defined by a shallow gradient that gently slopes into open space and a drainage feature at the base of the supporting canyon.



As depicted in Figure 4, the soils in the survey area are mapped as: Bonsall sandy loam (2 to 9 percent slopes), Cieneba rocky coarse sandy loam (9 to 30 percent slopes eroded), Diablo clay (15 to 30 percent slopes), Diablo-Olivenhain complex (9 to 30 percent slopes), Olivenhain cobbly loam (9 to 30 percent slopes), San Miguel rocky silt loam (9 to 30 percent slopes), and San Miguel-Exchequer rocky silt loams (9 to 70 percent slopes) (USDA 2015). These soils are generally well-drained and typical of marine terraces with gravelly alluvium parent material derived from various sources. The lower profiles of these soils are reported to contain a very cobbly clay and clay loam content. The soils in the eastern portions of the survey area are highly disturbed and compacted as a result of existing developments. The observed soils on the slope and in the canyon bottom have been disturbed by erosion damage associated with the surrounding land use.

### 4.5 Vegetation Communities

As presented in Figure 5, a total of 11 vegetation communities or habitat types were mapped in the survey area during the general biological surveys: developed land, disturbed land, coastal sage scrub, coastal sage scrub-disturbed, disturbed wetland, eucalyptus woodland, mixed chaparral, native grassland, non-native grassland, ornamental plantings, and scrub oak chaparral. The names and classification of vegetation communities are derived from the City of San Diego (City of San Diego 1997, 2009, 2012). Descriptions are supplemented by those provided in Holland (1986), Oberbauer (1996), and Oberbauer and Buegge (2008). A complete list of plant species observed in the survey area is provided in Appendix B (Baldwin et al 2012; Lightner 2011). Table 1 below provides a summary of the existing vegetation communities mapped in the project area and surrounding property boundary (Figure 5).

	Existing Acreage (Rounded)				
Vegetation Community	Property Boundary	Project Area			
Developed	6.18	6.17			
Disturbed / Non-Native Vegetation	0.10	0			
Coastal Sage Scrub*	3.67	0			
Coastal Sage Scrub – Disturbed*	2.25	0			
Disturbed Wetland*	0.08	0			
Eucalyptus Woodland	0.16	0			
Mixed Chaparral*	2.18	0			
Native Grassland*	0.14	0			
Non-native Grassland	6.46	5.47			
Ornamental Plantings	4.31	0.36			
Scrub Oak Chaparral*	1.47	0			
TOTAL	27.00	12.00			

Table 1 Vegetation Communities within the Property Boundary and Project Area

\*= sensitive natural community











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Source: USDA, 2015; ESRI, 2015

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#### Vegetation Communities within the Project Area

#### **Non-Native Grassland**

Non-native grassland is an herbaceous habitat type dominated by one or several non-native species. This designation is applied where non-native broadleaf species account for less than 50 percent of the total vegetative cover. Non-native grasslands typically occur in areas with disturbance and/or a proximity to a nearby seed source resulting in the establishment of extensive and persistently dominant non-native

grasses and less dominant broadleaf species (Figure 6). Characteristic grass species include oats (*Avena* spp.) and bromes (*Bromus* spp.). Common non-native broadleaf forbs include black mustard (*Brassica nigra*), short-pod mustard (*Hirschfeldia incana*), fennel (*Foenicularium vulgare*), star-thistle (*Centaurea* spp.), and other non-native, invasive broadleaf species. This community is prevalent throughout San Diego County.

The non-native grassland within the survey area was dominated with non-native grasses. Dominant species include bromes and other non-native vegetation such as artichoke thistle (*Cynara cardunculus*). This area is in an early coastal sage scrub successional stage. There are small coyote brush (*Baccharis pilularis*) and California buckwheat (*Eriogonum fasciculatum*) shrubs scattered throughout the area and a few small California sagebrush (*Artemisia californica*) (Photo 1).

A narrow linear area, too small to map, along the edge of the non-native grassland next to the developed area, is dominated by black willows (*Salix gooddingii*), salt cedar (*Tamarix* spp.), and toad rush (Photo 2).

A small manmade basin also occurs in the northern portion of the project area near the proposed road. The area is dominated by bare ground and non-native grass and includes some hydrophitic plant species including curly dock (*Rumex crispus*), Western ragweed (*Ambrosia psilostachya*), and a few small mule fat (*Baccharis salisifolia*) bushes.

The non-native grassland within the project area provides low quality habitat for commonly occurring wildlife species.



Photo 1. Non-native grassland looking southwest.



Photo 2. Native willow trees next to the developed area.







**Vegetation Communities** 

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Source: SANDAG, 2015; ESRI, 2015

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#### **Ornamental Plantings**

Non-native ornamental plantings describe areas in which there is evidence of previous removal of natural habitat and planting of non-native ornamental species. Invasive non-native plant species typical in southern California include: ornamental trees such as palm (*Washingtonia* spp., *Phoenix* spp.), and gum; shrubs such as wattle (*Acacia* spp.) and oleander (*Nerium oleander*); and, groundcover such as turf grass and hottentot-fig (*Carpobrotus edulis*), among others. This community is widespread throughout San Diego County.

The ornamental plantings within the project area are associated with the landscaping for the existing commercial building in the project area. The landscaped area adjacent to the commercial building is irrigated and consists primarily of turf grass, pines (*Pinus* spp.), and French lavender (*Lavandula dentata*). The ornamental plantings surrounding the disturbed non-native grassland consists primarily of small open canopy gum trees and non-native grasses.

#### Developed

Developed land generally includes areas that have been permanently altered due to the construction of aboveground structures such as buildings, roads, and golf courses. Developed land is characterized by a high percentage of non-vegetated bare earth or asphalt, concrete, and other permanent surfaces.

Developed land is the second most prevalent community in the survey area. This community type occurs as existing commercial development in the central portion of the survey area, including an asphalt parking lot, buildings, and ornamental landscaping (primarily mature pine trees and ornamental lavender). Areas characterized by developed land provide limited biological function and value.

#### Vegetation Communities within the Property Boundary outside the Survey Area

#### **Disturbed/Non-Native Vegetation**

Disturbed/non-native vegetation includes areas in which there is sparse vegetative cover and where there is evidence of soil surface disturbance and compaction from previous human activity and/or the presence of building foundations and debris. For the purposes of this assessment, areas described as disturbed/non-native vegetation include elements of "disturbed land" bordered by "ornamental plantings." Vegetation in disturbed habitat (if present) will have a high predominance of non-native plant species. This includes exotic species recruited to the area from adjacent ornamental landscaped areas and/or ruderal (weedy) annual species that are indicators of disturbance, such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow-thistle (*Sonchus oleraceus*), among others.

A small patch of disturbed/non-native vegetation is mapped in the northern portion of the property adjacent to Rancho Bernardo Road. This area is comprised of disturbed open patches of non-native herbs and other groundcover between the canopy of adjacent scrub and chaparral. Dominant plant species observed included hottentot-fig (*Carpobrotus edulis*), ripgut (*Bromus diandrus*), and black mustard (*Brassica nigra*). Other notable species included red brome (*Bromus madritensis* ssp. *rubens*), slender wild oats (*Avena barbata*), artichoke thistle, Mexican fan palm (*Washingtonia robusta*), and pine (*Pinus* spp.). The disturbed/non-native vegetation in the area hosts several non-native and/or invasive plant species and provides limited biological function and value.



#### Coastal Sage Scrub and Coastal Sage Scrub – Disturbed

Coastal sage scrub is a native scrub-type community that is widespread throughout the lower elevations of southern California. Vegetation typically consists of low-growing, drought-deciduous, perennial and evergreen shrubs adapted to xeric sites supported by steep and gentle sloping topography with severely drained soils or clays that release stored soil moisture slowly. Coastal sage scrub most often occurs as a dense scrub-type community of scattered shrubs, sub-shrubs, and herbs generally less than 3 feet tall developing considerable cover. Typical stands are dominated by the native shrub, California sagebrush, with a sub-dominance of one or more native shrubs, such as California buckwheat and black sage (Salvia mellifera). The understory typically consists of native and non-native grasses, and annual forbs. Diagnostic species generally include California sagebrush, California buckwheat, black sage, white sage (Salvia apiana), laurel sumac (Malosma laurina), sticky monkey flower (Mimulus auranticus), chaparral yucca (Yucca whipplei), and California aster (Corethrogyne filaginifolia), among others. This community is fireadapted, with many constituent plant species being able to sprout new stems from remnant crowns after a burn. In southern California, this community intergrades with coastal dunes scrub and foredune habitats along the coast, and with grassland, chaparral, and oak woodland habitats at inland locales. Coastal sage scrub is the primary habitat for the federally threatened coastal California gnatcatcher (Polioptila californica californica), among other sensitive species.

Coastal sage scrub and disturbed coastal sage scrub occur in patches around the boundary of the project area. Stands in the eastern, western, and southern portions of the survey area are considered to be relatively low in habitat quality due to very low species richness, predominance of non-native plant species, and proximity to existing developments. The stand in the northeastern portion of the survey area, next to the area where the new access road is proposed, is highly disturbed by ornamental plantings. In terms of composition, these patches are fairly homogenous and support a low diversity of plant species. In general, dominant shrub species observed in the survey area include California sagebrush, coyote brush, and buckwheat. Other shrub species observed in much lower percent cover include sticky monkey flower, black sage, deerweed (Acmispon glaber), and lemonade berry (Rhus integrifolia). The northern stand also contains a relatively high percent cover of non-native grasses and ruderal forbs, including red brome, ripgut, and black mustard. Relative to other coastal sage scrub habitat in the local area (e.g., Lake Hodges Cornerstone MSCP area), the coastal sage scrub in the survey area is highly disturbed and provides limited biological function and value. Furthermore, due to its steepness of slopes, vegetation composition, proximity to existing developments, and overall disturbance, the coastal sage scrub in the survey area is generally unsuitable and does not support the constituent elements required by the coastal California gnatcatcher (USFWS 2010).

#### **Disturbed Wetland**

Disturbed wetlands include areas permanently or periodically inundated by water, which have been significantly modified by human activity. Site factors associated with disturbed wetlands include obvious artificial structures such as concrete lining, barricades, rip-rap, piers, or gates. Examples of disturbed wetlands may include lined channels, Arizona crossings, detention basins, culverts, and ditches. Characteristic species of disturbed wetlands include giant reed (*Arundo donax*), salt cedar, gum tree, fan palm (*Washingtonia* spp.), pampass grass (*Cortaderia* spp.), and Bermuda grass (*Cynodon dactylon*). This habitat may also contain willows (*Salix* spp.), cattails (*Typha* sp.), and a variety of other wetland plants. Disturbed wetlands occur throughout San Diego County.



Disturbed wetland occurs within the northern and southern portions of the survey area. This habitat is found in association with an existing concrete-lined ditch and in areas that channel seasonal flows supported by ambient runoff. Dominant plant species observed include toad rush (*Juncus bufonius*), curly dock, and Italian ryegrass (*Festuca multiflorum*). Overall, the disturbed wetland within the survey area provides low quality habitat and limited biological function and value.

#### **Eucalyptus Woodland**

Eucalyptus woodland habitats vary from single-species thickets with little or no shrubby understory, to scattered trees over a well-developed herbaceous and shrubby understory. In most cases, eucalyptus forms a dense stand with a closed canopy. Eucalyptus species produce a large amount of leaf and bark litter, of which, the chemical and physical characteristics limit the ability of other species to grow in the understory, decreasing floristic diversity. Overstory composition is typically limited to one species of the genus, but can be mixed stands composed of several species. Few native overstory species are present within eucalyptus planted areas, except in small cleared pockets. Characteristic vegetation is the gum tree (*Eucalyptus* spp.) with the most common species consisting of blue gum (*Eucalyptus globulus*) and red gum (*Eucalyptus camaldulensis*). In San Diego County, this introduced habitat ranges from coastal to foothill locales that have access to water sources.

Eucalyptus woodland occurs in small patches along the eastern, western, and southern boundaries of the survey area. The woodland stand is relatively dense and comprised of similar-age blue gum trees that have evidently occurred in the area for decades (Google Earth 2015). Understory growth is limited to non-native grasses, namely ripgut. Due to disturbance factors, the eucalyptus woodland within the survey area provides relatively low quality habitat and limited biological function and value.

#### **Mixed Chaparral**

Mixed chaparral is a broad classification for native chaparral-type communities that are widespread throughout the lower and mid elevations of southern California. It c of broad-leaved, sclerophyllous shrubs that grow to about 10 feet in height. Mixed chaparral shrubs are typically associated with northand east-facing slopes and found at higher elevations than coastal sage scrub. For the purposes of this assessment, the City of San Diego classification term "mixed chaparral" is used synonymously with the more specific term, "southern mixed chaparral." Southern mixed chaparral is perhaps the most widespread upland habitat type in the southern California coastal region. Depending on the type of chaparral, dominant species may include mission manzanita (*Xylococcus bicolor*), California scrub oak (*Quercus berberidifolia*), redberry (*Rhamnus crocea*), toyon (*Heteromeles arbutifolia*), horryleaf ceanothus (*Ceanothus crassifolius*), and Ramona lilac (*Ceanothus tomentosus*), among many others.

Mixed chaparral occurs in two distinct patches in the western portion of the survey area. Similar to coastal sage scrub found in the survey area, the mixed chaparral is considered to be relatively low in habitat quality, primarily due to very low species richness and proximity to existing developments. The mixed chaparral that occurs in the survey area is strongly dominated by lemonade berry. Other species observed in much lower densities include scrub oak, laurel sumac, and black sage. The mixed chaparral in the survey area provides limited biological function and value.



#### Native Grassland

Native grassland habitats in San Diego County are dominated by native perennial grasses. Typically, these will include dense tussocks of purple needlegrass (*Stipa pulchra*). Native and introduced annuals occur between the perennials, often exceeding the bunchgrasses in percentage of cover. Native perennial herbs such as checkerblooms (*Sidalcea* spp.), blue-eyed grass (*Sisirynchium bellum*), poppies (*Eschscholzia* spp.), or golden fields (*Lasthenia* spp.) are also apparent in this habitat when it occurs within San Diego County. The percentage cover of native species at any one time may be quite low, but an area is considered native grassland if 20 percent aerial cover of native species is present.

Native grassland occurs in isolated patches in the western portion of the survey area. The dominant native species is purple needlegrass (*Stipa pulchra*), but the area also includes many introduced annual grasses, such as slender wild oat, red brome, and ripgut. Due to the lack of species diversity and general disturbance from surrounding development, native grassland provides limited biological function and value within the survey area.

#### **Non-Native Grassland**

Non-native grassland occurs in the southern portion of the survey area. This habitat occurs as isolated patches within the survey area and is not directly connected to any larger, more expansive grassland blocks. Overall, the grassland within the survey area contains a slight dominance of non-native grasses over broadleaf species. Dominant species include ripgut, soft chess, and wild oat. Sub-dominant species include native and non-native annuals, such as filaree (*Erodium botrys*), dove weed (*Croton setiger*), fiddleneck (*Amsinckia menziesii*), Spanish lotus (*Lotus purshianus*), short-pod mustard, prickly lettuce (*Lactuca serriola*), and yellow star thistle (*Centaurea solstitialis*), among others. The non-native grassland within the survey area provides low quality habitat and limited biological function and value for commonly occurring wildlife species.

#### **Ornamental Plantings**

Approximately 4.31 acres of ornamental plantings are mapped encircling the non-native grassland and developed portions of the project area. This habitat is characterized by several non-native sub-tree and shrub species defining an open canopy, with scattered non-native annual herbaceous species in the understory. A few isolative native shrub species also occur amongst the non-native understory. Overall, the non-native ornamental plantings habitat within the survey area provides limited biological function and value.

#### Developed

Non-native vegetation/ornamental plantings describe areas in which there is evidence of previous removal of natural habitat and planting or recruitment of non-native ornamental plant species, are typical of landscaped areas and are usually in close proximity to existing developments. Non-native plant species typical of this habitat include ornamental trees such as pine, pepper (*Schinus* spp.), palm (*Washingtonia* spp., *Phoenix* spp.), and gum; shrubs such as wattle and oleander (*Nerium oleander*); and groundcover such as turf grass, common ice plant (*Mesembryanthemum crystallinum*), and hottentot-fig, among others. This community is widespread throughout San Diego County.



Ornamental plantings are mapped encircling the disturbed and developed portions of the survey area. This habitat is characterized by several non-native sub-tree and shrub species defining an open canopy, with scattered non-native annual herbaceous species in the understory. A few isolated native shrub species also occur amongst the non-native understory. Overall, the non-native vegetation/ornamental plantings habitat within the survey area provides limited biological function and value.

#### **Scrub Oak Chaparral**

Scrub oak chaparral generally consists of dense, evergreen chaparral with vegetation height measuring up to 20 feet tall. This habitat is dominated by scrub oaks with considerable California mountain mahogany (*Cercocarpus betuloides*). In San Diego County, California scrub oak is often the dominant species (more than 50% cover) and usually occurs in small patches within a variety of other vegetation communities. Scrub oak chaparral typically occurs in somewhat mesic areas at elevations up to 5,000 feet, often on north-facing slopes.

Scrub oak chaparral occurs in the southern portion of the survey area. The area is characteristically dominated by scrub oak and occurs as an isolated stand among surrounding developed and disturbed areas. The scrub oak chaparral within the survey area provides moderate quality habitat, but limited biological function and value for commonly occurring wildlife species.

### 4.6 General Wildlife

The project area was previously disturbed by commercial development and does not provide extensive high quality habitat for wildlife species. Overall, wildlife activity during the general surveys was low. A single reptile, 16 birds, and 5 mammal species were observed or otherwise detected by call or sign in the survey area during the general biological surveys (Appendix B). Common species observed or otherwise detected (e.g., call, feathers, scat, tracks) in or flying over the survey area included common reptiles such as side-blotched lizard (Uta stansburiana); common songbirds such as black phoebe (Sayornis nigricans), northern mockingbird (Mimus polyglottos), house finch (Carpodacus mexicanus), lesser goldfinch (Spinus psaltria), song sparrow (Melospiza melodia), Bullock's oriole (Icterus bullockii), Anna's hummingbird (Calypte anna), American crow (Corvus brachyrhynchos), and mourning dove (Zenaida macroura); and common mammals including desert cottontail (Sylvilagus audubonii), California ground squirrel (Otospermorphilus beecheyi), and domestic dog (Canis familiaris). In addition, an inactive woodrat (Neotoma spp.) nest was observed in the northwestern portion of the survey area (outside of the project area). It is unknown whether or not the woodrat nest was associated with the San Diego desert woodrat (Neotoma lepida intermedia), a sensitive species. With the exception of the unconfirmed San Diego desert woodrat nest, no rare, threatened, or endangered species were observed or otherwise detected in the survey area. Appendix B provides a complete list of wildlife species observed or otherwise detected in the survey area, including the habitat types where each species was observed (CDFG 2008).



## 5.0 Sensitive Biological Resources

Sensitive biological resources generally include the following: (1) vegetation communities or habitat types that are unique, of relatively limited distribution, or of particular values to wildlife; and (2) species and other resources that have been given special recognition by federal or state agencies, and/or are included in the MSCP due to limited, declining, or threatened populations or extent.

Sensitive biological resources determined to occur or have a potential to occur in the survey area are described below in terms of special-status species, sensitive natural communities, jurisdictional waters and wetlands, and wildlife corridors and linkages. Figure 7 presents CDFW CNDDB special-status species observations, including historical observations, and SanGIS special-status species data within one mile of the survey area (CDFW 2015; SanGIS 2015).

## 5.1 Special-Status Species

#### Special-status Plant Species

Special-status plant species are those that: are federally listed as threatened or endangered by the USFWS (2015b); are state listed as threatened or endangered or considered sensitive by the CDFW (2015b, 2015c); are CNPS List 1A, 1B, or 2 species recognized in the CNPS's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2015), as consistent with CEQA guidelines; are covered species under the City of San Diego MSCP Subarea Plan; and/or are narrow endemic (plant) species identified in the City of San Diego MSCP Subarea Plan and regulations.

Based on a list compiled through the CNDDB (CDFW 2015a), SanGIS (SanGIS 2015), and other sources (SDNHM 2015; CNPS 2015; Consortium 2015; and Calflora 2015), six special-status plant species historically occurred within one mile of the project area (Table 2), including two state and federally listed species, and three CNPS rare species. Nuttall's scrub oak (*Quercus dumosa*) and San Diego barrel cactus (*Ferocactus viridescens*) were reported within the area prior to the original development in 1996, but these species have not been seen during subsequent surveys. Approximately 20 individual variegated dudleya (*Dudleya ariegate*) plants were documented on the slope in the southernmost portion of the site during 2001. In 2003, the population was confirmed on site, but was reduced to only three individuals (2004 AMEC).

Twelve special-status plant species have been documented between one to two miles from the survey area (Table A-1 in Appendix A). Most of the special-status plant species have not been reported as occupying habitat in the survey area. No special-status plant species are likely to occur in the project area for the reasons described below.

No special-status plant species were observed in the survey area during the general biological surveys conducted on June 21, 2012, October 3, 2012, and May 14, 2015, which included 100 percent visual coverage and a complete botanical inventory of the survey area during the "spring blooming period" for the region. Given the dates of the May and June surveys (during a time of the year when most plant species, including spring-blooming annuals, are readily detectable) and methods employed (100 percent visual coverage and a complete botanical inventory), special-status plant species would have likely been observed had any special-status plant species been present.



Table 2	Special-Status Plant S	pecies Documented within 1	I mile of the Survey	y Area
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Common Name	Scientific Name	Federal <sup>(1)</sup> / State <sup>(2)</sup> / CNPS List <sup>(3)</sup>	MSCP <sup>(4)</sup>	Habitat Associations	Occurrence <sup>5</sup>
California adolphia	Adolphia californica	-/-/2.1	-	San Miguel and Friant soils in Diegan Coastal Sage Scrub and the periphery of chaparral types.	Historically occurred approximately one mile west of the survey area.
Encinitas baccharis	Baccharis vanessae	FT/SE/1B.1	Narrow Endemic	Mature but relatively low growing chaparral dominated by chamise (Adenostoma fasciculatum)	Documented approximately one mile west of the project area. Occurs north and south of the project area in the Lake Hodges Segment (MSCP) and 4S Ranch.
San Diego barrel cactus	Ferocactus viridescens	-/-/2.1	Covered	Cobbled soils on South Coast hillsides and ridges, and sometimes on the periphery of vernal pools.	Occurred in the survey area in 1995. Occurs in the open space northwest of the survey area.
San Diego thorn mint	Acanthomintha ilicifolia	FT/SE/1B.1	Narrow Endemic	Openings in clay soils in chaparral, coastal scrub and grasslands also in vernal pools.	Historically occurred southwest of the survey area.
Variegated dudleya	Dudleya variegata	-/-/1B.2	Narrow Endemic	Openings in sage scrub and chaparral, rocky grasslands, and vernal pools.	Occurred in the southern portion of the survey area in 2003.
Nuttall's scrub oak	Quercus dumosa	-/-/1B.2	-	Chaparral.	Occurred in the survey area in 1995.

(1) Federal Status – FE = Federally Endangered; FT = Federally Threatened; FC = Candidate for federal listing; FD = Delisted

(2) <u>State Status</u> – SE = State Endangered; ST = State Threatened

(3) <u>CNPS</u> – 1A = Plants presumed extinct in California; 1B = Plants rare, threatened, or endangered in California and elsewhere; 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; 3 = Plants in need of more information; 4 = Plants of limited distribution; x.1 = Seriously endangered in California (>80% of occurrences threatened or high degree and immediacy of threat); x.2 = Fairly endangered in California (20-80% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not very endangered in California (<20% of occurrences threatened); x.3 = Not

(4) MSCP covered species are species that will be adequately conserved and "covered" by the City of San Diego MSCP Subarea Plan, based on the City of San Diego MHPA preserve configuration vegetation community conservation targets for all subareas and implementation of habitat management plans. Narrow endemic species include a list of 15 species adopted by the City Council as narrow endemic species, as identified in the City of San Diego Land Development Manual – Biology Guidelines.

<sup>(5)</sup> See Figure 7.

Sources: CDFW 2015a, Calflora 2015, CNPS 2015.

In addition, there are a number of disturbance factors associated with the area that would preclude the presence and persistence of special-status plant species. Perhaps most limiting are the prevalence of nonnative plant species, disturbed soils, and low quality of the vegetation associations present in the survey area. Furthermore, the underlying soils of the survey area are not reported to be specifically associated with any rare endemic plants known to the region (SDNHM 2015; Consortium 2015; USDA 2015). Nonnative grassland and a small disturbed wetland are the only habitats in the survey area that would be directly impacted with implementation of the proposed project. The area was previously disturbed by commercial development, so soil disturbance is evident throughout resulting in the establishment of invasive non-native plant species, such as mustard, and artichoke thistle. Therefore, no special-status plant species are expected to occur in the project area.





FIGURE 7 Existing Biology Data **ATKINS** 100028572

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#### Legend

Project Boundary

#### SANBIOS

- Bell's sage sparrow
- California gnatcatcher
- California myotis
- Desert woodrat
- Southern California rufous crowned sparrow

#### CNDDB

- California adolphia
- Encinitas baccharis
- San Diego barrel cactus
- San Diego desert woodrat
- San Diego thorn-mint
- coast horned lizard
- coastal California gnatcatcher
- coastal cactus wren
- variegated dudleya
- yellow-breasted chat

Source: CNDDB, Apri, 2015; SanBIOS, 2015; ESRI 2015

Palomar College South Education Center BTR

Sensitive vegetation communities in the survey area also have limited potential to support special-status plant species. The mixed and scrub oak chaparral are dense, homogenous, and provide little canopy or understory opportunity for rare endemic plants to become established. The understory of the mixed chaparral consists entirely of non-native herbs, and none of the shrub species observed in the canopy are considered to be sensitive. The native grassland occurs in isolated patches and includes many introduced annual grasses. Similarly, the areas mapped as disturbed/non-native vegetation, including eucalyptus woodland, ornamental plantings, and non-native grassland, are entirely occupied by non-native plants, most notably, freeway ice plant, gum tree, pine tree, and Mexican fan palm. Therefore, no special-status plant species would be expected to occur in the surveyed habitats outside the project area.

#### **Special-status Animal Species**

Special-status animal species are those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS (2015b) or CDFW (2015c) or animals of special concern listed by CDFW (2015c) and/or covered species under the City's MSCP Subarea Plan.

Based on a list compiled through the CNDDB and SANDAG San Diego MSCP data (CDFW 2015a, SANGIS 2015), 13 special-status animal species have been documented within approximately one mile of the survey area (Table 3) and an additional 14 species have been documented between one and two miles from the survey area (Table A-2 in Appendix A).

Special-status bird, mammal, and reptile species reported within one mile of the survey area are listed in Table 3. Species highlighted in bold print in Table 3 have the greatest potential to occur in the native habitat in the survey area. One special-status reptile species the Blainville's horned lizard (*Phrynosoma blainvillii*) has the potential to occur in the survey area. Blainville's horned lizard occurs in coastal sage scrub and chaparral habitat and has been documented northwest of the project area in the MSCP Preserve Land. No special-status amphibian species are likely to occur within two miles of the survey area.

Bird species with the greatest potential to transit through or forage in the survey area include southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Amphispiza belli belli*), Cooper's hawk (*Accipiter cooperii*), and white-tailed kite (*Elanus leucurus*) (Table 3).

In 1995 prior to original site development, southern California rufous-crowned sparrow, Cooper's hawk, white-tailed kite, and coastal California gnatcatcher were recorded in the coastal sage scrub in the survey area (2004 AMEC). However, subsequent grading activities have reduced the potential of the area to support these special-status species and none of these four species were recorded during subsequent surveys in 2001, 2003, 2012, and 2015. Protocol surveys for coastal California gnatcatcher were also performed in 2001, but no gnatcatchers were observed and the species was deemed to be absent from the site (AMEC 2004, Atkins 2012). Southern California rufous-crowned sparrow, Bell's sage sparrow, Cooper's hawk, and white-tailed kite have moderate potential to forage or fly through the coastal sage scrub and chaparral habitat currently occurring in the survey area adjacent to the project area. These birds are not expected to nest in these habitats due to the small patch sizes and proximity to development. However, southern California rufous-crowned sparrow breed in the chaparral and coastal sage scrub habitat in the MSCP Preserve Land northwest of the project area (Figure 7).



Table 3	Special-Status Animals Documented or Known to Occur within
	1 mile of the Survey Area

Common Name	Scientific Name	Federal Status <sup>(1)</sup>	State Status <sup>(2)</sup>	MSCP <sup>(3)</sup>	Habitat Associations	Occurrence in Survey Area			
Reptiles	•			•	•	•			
Blainville's horned lizard	Phrynosoma blainvillii	-	SSC	Covered	Inhabits coastal sage scrub and chaparral.	Moderate potential to occur in the survey area			
Birds									
American peregrine falcon	Falco peregrinus anatum	FD	SE	Covered	Wetlands, lakes, rivers, or other water or on cliffs, banks, dunes, or mounds.	Not likely to occur.			
Bell's sage sparrow	Amphispiza belli	-	WL	-	Nests in chaparral dominated by fairly dense stands of chamise.	Occurred in the survey area in 1995. Moderate potential to occur in the survey area.			
Burrowing owl	Athene cunicularia	-	SSC	Covered	Open, dry annual, or perennial grasslands, deserts and scrublands characterized by low- growing vegetation.	Not likely to occur.			
Coastal cactus wren	Campylorhynchus brunneicapillus sandiegensis	-	SSC	Covered	Coastal sage scrub with tall <i>Opuntia</i> cactus for nesting and roosting.	Not likely to occur; cactus is not present on site. Historically occurred within a mile prior to housing developments in the area.			
Coastal California gnatcatcher	Polioptila californica	FT	SSC	Covered	Low, coastal sage scrub in arid washes, on mesas, and on slopes.	Low potential to occur in the survey area based small patchy habitat and previous surveys.			
Cooper's hawk	Accipiter cooperii	-	WL	Covered	Open, interrupted, or marginal type woodland. Nest sites mainly found in riparian growths of deciduous trees in canyon bottoms on river flood- plains.	Occurred in the survey area in 1995. Likely to fly over the survey area. Not likely to nest in the survey area.			
Southern California rufous- crowned sparrow	Aimophila ruficeps canescens	-	WL	Covered	Coastal sage scrub and sparse mixed chaparral.	Occurred within the study area in 1995. Moderate potential to occur in the survey area.			
Yellow- breasted chat	Icteria virens	-	SSC	-	Summer resident that inhabits riparian thickets of willow and other brushy tangles near watercourses.	Not likely to occur.			
White-tailed kite	Elanus leucurus	_	SFP	-	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging.	Occurred in the survey area in 1995. Moderate potential to fly over the survey area. Not likely to nest in the survey area.			



Common Name	Scientific Name	Federal Status <sup>(1)</sup>	State Status <sup>(2)</sup>	MSCP <sup>(3)</sup>	Habitat Associations	Occurrence in Survey Area
Mammals						
San Diego black-tailed jackrabbit	Lepus californicus bennettii	-	SSC	-	Coastal sage scrub and chaparral.	Moderate potential to occur in the survey area.
San Diego desert woodrat	Neotoma lepida intermedia	-	SSC	-	Rock outcrops and slopes with moderate to dense canopies.	Likely to occur in the survey area.
Southern mule deer	Odocoileus hemionus	-	-	Covered	Variety of habitats over a broad range.	Likely to forage and transit through the survey area.

## Table 3Special-Status Animals Documented or Known to Occur within1 mile of the Survey Area

(1) Federal Status – FE = Federally Endangered; FT = Federally Threatened; FC = Candidate for federal listing; FD = Delisted

<sup>(2)</sup> <u>State Status</u> – SE = State Endangered; ST = State Threatened

(3) <u>MSCP</u> covered species are species that will be adequately conserved and "covered" by the City of San Diego MSCP Subarea Plan, based on the City of San Diego MHPA preserve configuration vegetation community conservation targets for all subareas and implementation of habitat management plans. Narrow endemic species include a list of 15 species adopted by the City Council as narrow endemic species, as identified in the City of San Diego Land Development Manual – Biology Guidelines.

References: CDFW 2015a, Calflora 2015, CNPS 2015.

Three special-status mammals have the potential to occur in the survey area. Southern mule deer (*Odocoileus hemionus*) is likely to forage in and transit the study area and has potential to occur in the project area. San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) and San Diego desert woodrat has the potential to occur in the survey area. The project area is likely to open and sparsely vegetated to support the jackrabbit or woodrat.

During a general biological survey in 2012, a single woodrat nest was observed in the coastal sage scrub habitat in the northwestern portions of the survey area. It could not be determined as to whether or not the nest belonged to the San Diego desert woodrat, which is not federal or state threatened or endangered, and is not an MSCP covered species. However, this woodrat is designated as a species of special concern by the CDFW. The observed woodrat nest was old, collapsed, and did not appear to be active; however, given the scope of the survey, it could not be positively confirmed or denied that the nest belonged to the San Diego desert woodrat. All of the resources required by this species can be found on or in the immediate vicinity of the survey area. Given the uncertainty, this species is determined to have a high potential to occur in the survey area. With the exception of the San Diego desert woodrat, no other special-status wildlife species were observed or otherwise detected in the survey area during the general biological surveys conducted on March 31, 2012 and May 14, 2015, including any of the other 27 special-status animal species in documented within two miles of the project (CDFW 2015a).

There is a number of disturbance factors associated with the survey area and vicinity that would preclude most special-status animal species from occurring within the habitat. Perhaps most limiting are: (1) the proximity to existing developments and disturbances, including regular lighting, noise, vehicle, and pedestrian activity; and (2) the overall low quality of the habitat present in the survey area with respect to providing nesting, foraging, dispersal, refuge or other elements preferred by special-status animals known to occur in the region.



The adjacent commercial developments and undeveloped areas are regularly used by vehicles and/or pedestrians, which may result in adverse direct and indirect effects to the habitat and special-status animal species attempting to use the habitat. The survey area is subject to adverse direct effects resulting from encroachment into the habitat by pedestrians, of which, was evident in the survey area from existing foot trails, trash, and debris. Pedestrian activity, trash, and debris reduce the quality of the habitat and reduce the likelihood for most special-status animal species to occur. The survey area is also subject to adverse indirect effects from noise and night lighting, the effects of which could also deter special-status animal species from using the area.

Furthermore, the habitat in the survey area and immediate vicinity is constrained in all directions by existing developments and roads, thereby reducing the likelihood for special-status animal species to occur. What little habitat remains has been reduced to small, fragmented, and low quality stands. The existing developments and Rancho Bernardo Road make it difficult for small mammals and reptiles to disperse into the area. These species tend to depend on habitat connectivity without substantial development barriers as they move throughout their range. Also, the small size and low quality of the existing habitat do not offer the space and resources required by most of the special-status animal species known to be associated with the habitat types present in the survey area.

In conclusion, existing development, roads, disturbances, and vegetation composition, limit the number of special-status species that can use the habitat in the survey area. However, a few species, southern mule deer, San Diego jackrabbit, San Diego desert woodrat, and Blainville's horned lizard (refer to Table 3) could occur within or adjacent to the project area. No federally or state listed animal species are likely to occur within or in the immediate vicinity of the project area.

## 5.2 Sensitive Natural Communities

As discussed in Section 4.0, the survey area supports the following sensitive natural communities: 0.14 acre of native grassland, 1.47 acres of scrub oak chaparral, 3.67 acres of coastal sage scrub, 2.25 acres of coastal sage scrub-disturbed, 2.18 acres of mixed chaparral, and 0.07 acre of disturbed wetland (Table 1; Figure 6). The terrestrial communities are considered sensitive by CDFW (CDFG 2010). No sensitive natural communities occur within the project area. Southern cottonwood willow riparian forest, an additional sensitive natural community, occurs approximately 1.5 miles north of the survey area (CDFW 2015a). However, there is no obvious connectivity to the survey area.

## 5.3 Jurisdictional Waters and Wetlands

In the context of this assessment, jurisdictional waters and wetlands generally include those resources regulated by: the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Federal Clean Water Act (CWA), the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act, and the CDFW pursuant to Sections 1600 *et. seq.* of the CFG Code.

A narrow, concrete-lined drainage ditch transects areas in the north and south portions of the survey area. This unnamed drainage feature supports disturbed wetland habitat but does not exhibit an ordinary high water mark (OHWM). Although not confirmed, downstream flows presumably continue to the north beneath Rancho Bernardo Road and discharge to underground municipal stormwater facilities. Due to the lack of an OHWM and connectivity to a jurisdictional waterway, the unnamed drainage feature and



associated wetlands would likely not fall under the regulatory jurisdiction of the USACE, RWQCB, and CDFW.

## 5.4 Wildlife Corridors and Linkages

Development in the region has reduced the total available open space for wildlife populations, and in some instances, created isolated "islands" of habitat. In general, wildlife corridors and linkages are smaller constrained areas of habitat that connect larger areas of habitat that are otherwise separated by rugged terrain, changes in vegetation, or urban development. This allows for interactions between otherwise isolated populations and an exchange of genetic material, which increases the viability and overall health of the population. Wildlife corridors are especially important for species with large habitat ranges or seasonal migrations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of wildlife and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of fragmented archipelago arrangement of habitat over a linear distance. Corridors and linkages consist of land features that accommodate the movement of all sizes of wildlife, including large animals on a regional scale. These areas support adequate vegetation cover and provide visual continuity and long lines of sight, so as to encourage the use of the corridor by all types of wildlife. In San Diego County, important corridors and linkages have been identified on the local and regional scale, particularly in establishing a connection between the northern and southern regional populations of the federally threatened coastal California gnatcatcher.

No known wildlife corridors or linkages occur within the survey area (City of San Diego 1997; SanGIS 2015). The survey area is constrained and surrounded by existing developments and roads, and does not support habitat that would contribute substantially to the assembly and function of any local or regional wildlife corridors or linkages. What little habitat remains on site has been reduced to small, fragmented, and low quality stands, which are disconnected from better quality habitat in the local and regional area. Animal species that require direct or less-constrained habitat connectivity along their travel routes would be challenged to find access to habitat in the survey area and immediate vicinity. Although local habitat for certain migratory and resident birds, habitat in the survey area itself is disturbed and lacks adequate cover or resources and is unlikely to attract or sustain dense populations of local wildlife. Therefore, the survey area does not support habitat that would contribute substantially to the assembly and function of any local or regional of a correst or linkages.

The Lake Hodges Segment of the MSCP Subarea Plan preserve area is situated approximately 1.5 miles to the northwest of the project site. The preserve area protects a portion of the Hodges Reservoir/San Pasqual Valley core resource area identified in the final MSCP and provides vital regional linkage northwest to the Carlsbad/La Costa region. This area represents a primary connection between the two regions for the coastal California gnatcatcher (City of San Diego 1997). The proposed improvements would not impact habitat within the preserve area, nor would the proposed project affect the preserve area's ability to serve as a wildlife corridor.



## 6.0 Project Impact Analysis

This section provides a project-level biological resources impact analysis for the proposed project in support of environmental review. The issues addressed in this section are derived from the City of San Diego Initial Study Checklist, as presented in the Development Services Department CEQA Significance Determination Thresholds (City of San Diego 2011) and Appendix G of the CEQA Guidelines. Mitigation, monitoring, and reporting requirements to eliminate or reduce project impacts to a less than significant level are provided in Section 7.0.

## 6.1 Issue 1: Special-Status Species

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

#### **Special-Status Plant Species**

As discussed in Section 5.0, no special-status plant species were determined to have moderate to high potential to occur in the survey area (Table 2). Additionally, no special-status plant species were observed in the survey area during the general biological surveys in June and October 2012 and May 2015. The project would result in direct impacts to existing habitat that is highly disturbed and generally unsuitable for special-status plant species. Given the relatively small area proposed to be impacted, marginal quality of the habitat, and the fact that no special-status plant species were observed during surveys in June or October 2012 or May 2015, no special-status plant species would be expected to occur in the proposed permanent impact areas. Therefore, the proposed project is not anticipated to result in any significant impacts to special-status plant species and no mitigation is required.

#### **Special-Status Animal Species**

Also discussed in Section 5.0, a few relatively common local species were determined to have a high potential to occur in the project area (Table 3). A possible San Diego desert woodrat nest observed in the northwestern portion of the survey area had been abandoned for some time and occurred outside of the proposed permanent and temporary impact areas. No other sign of woodrat was observed within the survey area during the June and October 2012 or May 2015 surveys and no sign of woodrat was ever observed in the areas proposed to be directly or indirectly impacted by the project. Therefore, no direct impacts to woodrats, including the CDFW species of special concern San Diego desert woodrat, are anticipated to occur as a result of the proposed project and no mitigation is required.

Furthermore, the project would result in direct impacts to existing habitat that is highly disturbed and generally unsuitable for occurrence of most special-status animal species. Much of the existing habitat in the proposed impact areas occurs in land that has been previously disturbed, developed, and/or planted with ornamental species. The relatively limited amount of habitat that occurs in the proposed impact areas is also not connected to the nearby preservation area; they are separated by about 0.25 mile of development and Rancho Bernardo Road. Adjacent habitats within the survey area are disturbed, surrounded by existing developments, relatively small in size, and would not be expected to support any permanent populations of special-status animal species. Therefore, no special-status animal species would be expected to permanently reside in the proposed permanent impact areas. The special-status



species that are likely to use the project area to forage to transit are likely to also use the larger surrounding habitat. Consequently, the proposed project is not anticipated to result in any significant impacts to special-status animal species and no mitigation is required.

#### **Nesting Birds**

The Federal Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), feral pigeon (*Columba livia*), and resident game birds such as pheasant (*Phasianus colchicus*), grouse (*Dendragapus* sp.), quail (*Callipepla* sp.), and wild turkey (*Meleagris gallopavo*). Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird, including feathers, parts, nests, or eggs.

Section 3503 of the CFG Code makes it illegal to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Section 3503.5 further protects all birds in the orders *Falconiformes* and *Strigiformes* (birds of prey), such as hawks and owls, and their eggs and nests from any form of take.

Although no special-status animal species would be expected to occur, the survey area and immediate vicinity contain trees, shrubs, and man-made structures (e.g., buildings) that provide suitable nesting habitat for common (non-sensitive) birds, including common raptors protected under the MBTA and CFG Code. Construction of the proposed project could result in the removal or trimming of trees and shrubs during the general bird nesting season (March 15 through September 15), and therefore, could result in impacts to nesting birds in violation of the MBTA and CFG Code. Direct impacts could occur as a result of removal of vegetation supporting an active nest. Indirect impacts could occur as a result of construction noise and vibration in the immediate vicinity of an active nest, such that the disturbance results in nest failure. These impacts would be considered significant and in violation of the MBTA and CFG Code.

Mitigation Measure Bio-1 in Section 7.0 would require that the PCCD retain a qualified biologist approved by the City of San Diego to perform pre-construction surveys and implement avoidance measures to prevent construction-related impacts to nesting birds in violation of the MBTA and CFG Code.

## 6.2 Issue 2: Sensitive Natural Communities

Would the project result in a substantial adverse impact on any sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

All sensitive natural communities discussed in Section 5.2 will be avoided with the exception of disturbed wetland, which is considered in Section 6.3 below. The proposed project would result in temporary and permanent impacts to approximately 5.47 acres of non-native grassland (discussed in Section 6.3) and maintenance of 0.36 acre of ornamental planting.

Project construction would occur adjacent to sensitive natural communities and habitats (i.e., coastal sage scrub and chaparral). Adverse indirect impacts to sensitive natural communities and habitats located immediately adjacent to the project site would be considered significant. No indirect impacts resulting from storm water runoff from the construction site are expected. However, construction activities could result in adverse indirect impacts to adjacent sensitive natural communities and habitats pertaining to water quality should fluid leaks from construction vehicles, concrete spoils and other hazardous



construction materials occur at the project site and upstream of other sensitive natural communities and habitats.

Mitigation Measures Bio-2 and Bio-3 in Section 7.0 would require that the PCCD implement BMPs during construction to ensure avoidance of adjacent sensitive natural communities and reduce potential indirect impacts to less than significant.

## 6.3 Issue 3: Wetlands

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

The proposed project is not likely to result indirect impacts to disturbed wetlands. As proposed, there would be about a 150 foot buffer between the disturbed wetland and the nearest project-related construction activity. No direct impacts would occur to the disturbed wetlands, which are depicted in Figure 6. No potential jurisdictional waters and wetlands, including federally protected wetlands as defined by Section 404 of the CWA, were determined to occur within the proposed project impact area.

Mitigation Measures Bio-2 and Bio-3 in Section 7.0 provide protection measures to reduce the significance of potential indirect impact to the disturbed wetland within the survey area, as this could be considered a sensitive natural community by the City of San Diego as described in Section 5.3. Because no other waters or wetlands occur within the survey area, the proposed project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Therefore, no further mitigation would be required.

## 6.4 Issue 4: Wildlife Corridors

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

No known wildlife corridors or linkages occur within the survey area (City of San Diego 1997; SanGIS 2015). Furthermore, the survey area is constrained by existing developments and does not support habitat that would contribute substantially to the assembly and function of any local or regional wildlife corridors or linkages. Construction of the project would not affect the nearby MSCP preserve land. Therefore, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites. Consequently, no mitigation is required.



## 6.5 Issue 5: Habitat Conservation Plans

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

The proposed project does not occur in the boundaries of the MSCP Subarea Plan. The project is not expected to result in any significant impacts to special-status species, including MSCP covered species and narrow endemic species. The project would not result in impacts to any wildlife corridors or linkages, including lands identified in the MSCP Subarea Plan as important habitat linkages or other areas of local or regional wildlife movement importance. The project would also not prevent the City of San Diego from attaining the conservation goals and objectives of the MSCP Subarea Plan area. Therefore, no mitigation is required.

## 6.6 Issue 6: Land Use Adjacency

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

The proposed project would occur in an area that is already predominantly developed and on habitats that are largely disturbed. The project would not introduce any new land uses to the area compared to the pre-project, current land uses. Furthermore, an adverse edge effect likely already exists in the area based on the project site's proximity to developments. The project does not propose any activity or new structure that would exacerbate the existing adverse edge effect. Therefore, the project would not result in any adverse edge effects (direct or indirect) near the MHPA and no mitigation is required.

## 6.7 Issue 7: Local Policies and Ordinances

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

Mitigation Measures Bio-1 through Bio-3 in Section 7.0 would require that avoidance and protection measures, including BMPs, be implemented during construction. Sensitive habitats would be fenced and avoided, thereby reducing direct impacts to less than significant levels. With the implementation of Mitigation Measures Bio-1 through Bio-3, the proposed project would not conflict with any local policies or ordinances protecting biological resources. Therefore, no further mitigation is required.

## 6.8 Issue 8: Invasive Species

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

No natural open space areas with be directly impacted by the proposed project. Indirect impacts to open space will be mitigation through implementation of measures Bio-2 and Bio-3 in Section 7.0. Therefore, the project would not result in the introduction or spread of invasive species into a natural open space and no further mitigation is required.



## 7.0 Mitigation, Monitoring, and Reporting

Development of the proposed project has the potential to directly or indirectly affect biological resources. The following mitigation measures would reduce impacts to biological resources to a less than significant level.

Implementation of Mitigation Measure Bio-1 would reduce impacts to nesting birds and would allow the project to be in accordance with the MBTA and CFG Code.

**Bio-1 Pre-Construction Nesting Bird Surveys.** Vegetation should not be removed from the project site between March 15 and September 15 to avoid impacts to nesting birds. If project construction cannot be avoided during the period of March 15 through September 15, the PCCD shall have a qualified biologist approved by the survey all potential nesting vegetation on and within 300 feet of the project site (where access is available) for nesting birds, prior to commencing project activities (including construction and/or site preparation). Surveys shall be conducted once a day for two days at the appropriate time of day during the breeding season, and surveys shall be performed no more than three days prior to vegetation removal and/or disturbance. If no nesting birds are observed, project activities may begin without further mitigation. If an active bird nest is located, the nest site shall be fenced with an exclusion zone of a minimum of 200 feet (500 feet for raptors) in all directions (as feasible considering site boundaries) and this area shall not be disturbed until after September 15 or until the nest becomes inactive.

Implementation of Mitigation Measure Bio-2 would prevent direct impacts to habitat located adjacent to the construction site and would also reduce potential indirect impacts pertaining to the spread of silt and general disturbance from the construction zone to a less than significant level.

**Bio-2 Construction Fencing and BMPs.** Prior to vegetation clearing, grading, and/or construction activities, the PCCD will retain a qualified biologist to oversee installation of appropriate fencing to delineate the limits of construction and the approved construction staging areas. Temporary fencing (with silt barriers) will be installed at the limits of project impacts (including construction staging areas and access routes, as feasible) to prevent sensitive habitat impacts outside the project area and to prevent the spread of silt from the construction zone into adjacent habitats. Fencing will be installed in a manner that does not impact habitats to be avoided. The temporary construction fencing will be removed by the PCCD upon project completion.

Also, standard construction BMPs shall be implemented on site, including but not limited to: observation of a reduced 20-mile per hour speed limit in all project areas, limiting construction activities to day-time only (no additional lighting required), placing trash in closed containers, prohibiting firearms on site; prohibiting pets on site, and ensuring construction noise shall not significantly exceed the existing ambient noise level.

Implementation of Mitigation Measure Bio-3 would reduce potential indirect impacts pertaining to the spill of contaminants in the construction zone to a less than significant level.

**Bio-3 Construction Staging and Equipment Maintenance**. The PCCD shall ensure fueling of equipment occurs solely in designated fueling zones or off site. All equipment used in the approved construction limits will be maintained to minimize and control fluid and grease



leaks. Provisions to contain and clean up unintentional leaks/spills of construction materials (e.g., concrete), fuel, oil, fluid and grease shall be in place prior to construction.

Finally, with implementation of Mitigation Measures Bio-1 through Bio-3, the proposed project would have minimal impacts to native vegetation or wildlife within and adjacent to the project area. Therefore, the proposed project is not expected to result in a significant cumulative impact for biological resources with implementation of the mitigation measures outlined in this section.

## 8.0 Certification and Acknowledgements

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed:

Date: March 24, 2016

Melissa Tu, Senior Biologist Atkins



## 9.0 References

- AMEC Earth and Environmental, Inc. 2004. Biological Resources Technical Report, Bernardo Industrial Park North, Lot 11, Project 1096. Prepared for Granum Partners. August.
- Atkins. 2012. PCCD South Education Center Biological Resources General Survey Report.
- Baldwin B.G, D.H. Goldman, D.J Keil, R. Patterson, T.J Rosatti, and D.H. Wilken. 2012. The Jepson Manual: Higher Plants of California. University of California Press. Berkeley, California.
- Calflora. 2015. Calflora Plant Observation Library. Data provided by the participants of Calflora. Accessed June 16, 2015 at <u>http://www.calflora.org/cgi-bin/occform.cgi</u>
- California Department of Fish and Game (CDFG). 2008. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. September. Accessed April 27, 2015 at <u>https://www.dfg.ca.gov/biogeodata/cwhr/pdfs/species\_list.pdf</u>
- California Department of Fish and Game (CDFG). 2010. List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database. September. California Department of Fish and Game, California Natural Diversity Database. Sacramento, California. Accessed April 30, 2015 at <u>http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf</u>
- California Department of Fish and Wildlife (CDFW). 2015a. Biogeographic Data Branch, California Natural Diversity Database (CNDDB), RareFind. May 2015 data.
- California Department of Fish and Wildlife (CDFW). 2015b. Special Vascular Plants, Bryophytes, and Lichens List. California Natural Diversity Database. Sacramento, California. Accessed April 27, 2015 at <u>http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf</u>
- California Department of Fish and Wildlife (CDFW). 2015c. Special Animals. California Department of Fish and Wildlife, California Natural Diversity Database. Sacramento, California. March. Accessed April 27, 2015 at <u>http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf</u>
- California Native Plant Society (CNPS). 2015. California Native Plant Society Electronic Inventory. Accessed June16, 2015 at <u>http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi</u>
- City of San Diego. 1997. Final City of San Diego MSCP Subarea Plan. March 1997. Available at <u>http://www.sandiego.gov/planning/programs/mscp/pdf/subareafullversion.pdf</u>
- City of San Diego. 2009. San Diego Municipal Code. Land Development Code. Biology Guidelines. (Amended) August 2009. Available at <u>http://www.sandiego.gov/planning/community/pdf/cpc/agendas/attachments/ldcbiologyguide</u> <u>draft.pdf</u>
- City of San Diego. 2011. Significance Determination Guidelines under CEQA. January. Available at <u>http://www.sandiego.gov/development-services/news/pdf/sdtceqa.pdf</u>
- City of San Diego. 2012. San Diego Municipal Code. Land Development Code. Regulations, Amendments, and Related Documents (Amended) April 2012. Accessed April 30, 2015 at <u>http://www.sandiego.gov/development-services/industry/landdevcode/#code</u>



Consortium of California Herbaria (Consortium). 2015. Data provided by the participants of the Consortium of California Herbaria. Accessed April 28, 2015 at http://ucjeps.berkeley.edu/consortium/

Google Earth. 2015. Google Earth 5.0. Available at http://earth.google.com/.

- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame Heritage Program. California Department of Fish and Game. Sacramento, California.
- Jepson Flora Project (eds.) 2013. *Jepson eFlora*. Accessed June 18, 2015 at <u>http://ucjeps.berkeley.edu/IJM.html</u>
- Lightner, J. 2011. San Diego County Native Plants. San Diego, California: San Diego Flora.
- Munz, P.A. 1974. A Flora of Southern California. University of California Press. Berkeley, California.
- Oberbauer, T. 1996. Terrestrial Vegetation Communities in San Diego County Based on Holland's descriptions, 6p.
- Oberbauer, T. M., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California" prepared by Robert F. Holland, Ph.D., October 1986). March 2008. Accessed April 30, 2015 at <u>http://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19\_OberbauerTM2008.pdf</u>
- San Diego Natural History Museum (SDNHM). 2015. San Diego County Plant Atlas Project. Available at http://www.sdplantatlas.org/(S(gn2sqn45kw1fmc45trphjz55))/index.aspx
- SanGIS. 2015. SanGIS Interactive Map. Information provided by the participants of San GIS. Accessed in May 2015 at <a href="http://sdgis.sandag.org/">http://sdgis.sandag.org/</a>
- U.S. Department of Agriculture (USDA). 2015. Soil Survey Staff, Natural Resources Conservation Service, Web Soil Survey. Access in May 2015 at <u>http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm</u>
- U.S. Fish and Wildlife Service (USFWS). 2010. Coastal California Gnatcatcher 5-year Review.
- U.S. Fish and Wildlife Service (USFWS). 2015a. National Wetlands Inventory. Accessed May 2015 at http://www.fws.gov/wetlands
- U.S. Fish and Wildlife Service (USFWS). 2015b. Species Reports. Accessed May 2015 at http://ecos.fws.gov/tess\_public
- U.S. Fish and Wildlife Service (USFWS). 2015c. Critical Habitat Portal. Accessed May 2015 at http://criticalhabitat.fws.gov
- U.S. Geological Survey (USGS). 2015. Escondido and Rancho Santa Fe, California 7.5 Minute Series (Topographic) Map. Available at <u>http://store.usgs.gov/b2c\_usgs/usgs/maplocator</u>



# Appendix A

Special-Status Plant and Animal Species List

Common Name/ Scientific Name	Federal Status <sup>(1)</sup>	State Status <sup>(2)</sup>	CNPS List <sup>(3)</sup>	MSCP <sup>(4)</sup>	Habitat Associations
Decumbent goldenbush Isocoma menziesii var. decumbens	-	-	1B.2	-	Coastal scrub. Sandy soils; often in disturbed sites.
felt-leaved monardella <i>Monardella hypoleuca</i> ssp. <i>lanata</i>	-	-	18.1	Covered	Chaparral, cismontane woodland. Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil.
Golden chaetopappa Pentachaeta aurea ssp. Aurea	-	-	4.2	-	Grassland, oak woodland.
Robinson's pepper-grass Lepidium virginicum var. robinsonii	-	-	1B.2	-	Interior South Coast, dry exposed openings in chaparrals and coastal sage scrub.
San Diego button celery Eryngium aristulatum var. parishii	FE	SE	1B.1	Narrow Endemic	Vernal pools.
San Diego goldenstar Bloomeria (=Muilla) clevelandii	-	-	1B.1	Covered	Valley grasslands and vernal pools, associated with mima mound topography. Clay loams.
San Diego marsh-elder Iva haysiana	-	-	2.2	-	South Coast creeks and intermittent streambeds.
San Diego thornmint Acanthomintha ilicifollia	FT	SE	1B.1	Narrow Endemic	Openings in clay soils in chaparral, coastal scrub and grasslands also in vernal pools.
Summer holly Comarostaphylis diversifolia ssp. diversifolia	-	-	1B.2		Southern mixed chaparral on mesic north facing slopes.
thread-leaved brodiaea Brodiaea filifolia	FT	SE	18.1	Covered	Cismontane woodland, coastal scrub, playas, grassland, vernal pools. Usually associated with annual grassland. Clay soils.
Wart-stemmed ceanothus Ceanothus verrucosus	-	-	2.2	Covered	Chaparral, endemic to San Diego County.
Western dichondra Dichondra occidentalis	-	-	4.2		Chaparral, grassland, foothill woodland, coastal sage scrub. Shaded, moist soil.

Table A-1Special Status Plant Species Documented within<br/>2 miles of the Survey Area

Common Name/ Scientific Name	Federal Status <sup>(1)</sup>	State Status <sup>(2)</sup>	MSCP <sup>(3)</sup>	Habitat Associations				
REPTILES								
Coronado skink Eumeces skiltonianus interparietalis	-	SSC	-	Found in grassland, chaparral, pinyon-juniper and juniper sage woodland, and pine-oak and pine forests.				
Red-diamond rattlesnake Crotalus ruber	-	SSC	-	Found in chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains.				
Orange-throated whiptail Aspidoscelis hyperythra	-	SSC	Covered	Inhabits low-elevation coastal scrub, chaparral, and valley- foothill hardwood habitats.				
Western pond turtle Actinemys marmorata	-	SSC	Covered	Inhabits permanent or nearly permanent bodies of water in many habitat types below 6,000 feet.				
BIRDS								
California horned lark Eremophila alpestris actia	-	WL	-	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.				
Least Bell's vireo Vireo bellii pusillus	FE	SE	Covered	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.				
Merlin Falco columbarius	-	SSC	-	Wide open space and open woodlands.				
Northern harrier Circus cyaneus	-	SSC	Covered	Nest and forage in grasslands, from salt grass in desert sink to mountain marshes.				
MAMMALS								
American badger <i>Taxidea taxus</i>	-	SSC	Covered	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.				
Big free-tailed bat Nyctinomops macrotis	-	SSC	-	Roosts in high cliffs and outcrops, feeds on insects.				
California myotis Myotis californicus		SSC		Roosts are in rock crevices, trees, and on buildings				
spotted bat Euderma maculatum	-	SSC	-	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.				
Western mastiff bat Eumops perotis californicus	-	SSC	-	Found in many open and semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral.				
Yuma myotis Myotis yumanensis	-	-	-	Optimal habitats are open forests and woodlands with sources of water over which to feed.				

# Table A-2Special Status Animal Species Documented within<br/>2 miles of the Survey Area

<sup>(1)</sup> <u>Federal Status</u> – FE = Federally Endangered; FT = Federally Threatened; FC = Candidate for federal listing; FD = Delisted

(2) <u>State Status</u> – SE = State Endangered; ST = State Threatened; SFP = State Fully Protected; SSC = State Species of Special Concern; WL = State Watch List

(3) <u>MSCP</u> covered species are species that will be adequately conserved and "covered" by the City's MSCP Subarea Plan, based on the City's MHPA preserve configuration vegetation community conservation targets for all subareas and implementation of habitat management plans.



# Appendix B

Plant and Animal Species Observed

Scientific Name	Common Name	2015 Project Area <sup>(1)</sup>	Study Area Surrounding Project Area <sup>(1)</sup>
Apiaceae	Carrot Family		
Foeniculum vulgare	sweet fennel	NNG	
Aizoaceae	Fig-Marigold Family		
Carpobrotus edulis*	hoten tot fig	NNG	
Mesembryanthemum crystallinum*	Common Ice plant	NNG	
Anacardiaceae	Sumac or Cashew Family		
Malosma laurina	laurel sumac	NNG	CSS
Rhus integrifolia	lemonade berry	-	MC
Arecaceae	Palm Family		
Washingtonia robusta*	Mexican fan palm	NNG	
Asteraceae	Sunflower Family		
Ambrosia psilostachya	Western ragweed	DIS-wet	
Artemisia californica	California sage brush	NNG	CSS
Baccharis pilularis	coyote brush	NNG	CSS, MC, MFS
Baccharis salicifolia	mule fat	NNG	MFS
Centaurea solstitialis*	yellow star-thistle	NNG	CSS
Conyza canadensis*	horseweed	NNG	CSS
Cynara cardunculus*	artichoke thistle	NNG	
Deinandra fasciculata	slender tarweed	NNG	
Gnaphalium californicum	California everlasting	NNG	CSS
Gnaphalium canescens	felty everlasting	NNG	CSS
Hazardia squarrosa	saw-toothed goldenbush	-	MC
Heterotheca grandiflora	telegraph weed	NNG	
Isocoma menziesii	goldenbush	NNG	
Helminthotheca echioides*	bristly ox-tongue	NNG	MFS
Sonchus sp.*	sow thistle	NNG	
Boraginaceae	Forget-me-not Family		
Heliotropium curassavicum	salt heliotrope	NNG	
Brassicaceae	Mustard Family		
Brassica nigra*	black mustard	NNG	CSS, MC
Cactaceae	Casctus Family		
Opuntia littoralis	Western prickly pear	NNG	CSS
Cucurbitaceae	Gourd Family		
Marah macrocarpus	wild cucumber		CSS, MC, MFS
Cyperaceae	Sedge Family		
Eleocharis macrostachya	Common spikerush	NNG	
Scirpus californicus	California bullrush		MFS
Chenopodiaceae	Goosefoot Family		
Salsola tragus	Russian thistle	NNG	

#### Table B-1Plant Status Observed



Scientific Name	Common Name	2015 Project Area <sup>(1)</sup>	Study Area Surrounding Project Area <sup>(1)</sup>
Fabaceae	Legume Family		
Acacia retinodes*	ever blooming acacia	NNG	
Acmispon glaber	Common deerweed	NNG	CSS
Melilotus alba*	white sweet clover	NNG	MFS
Fagaceae	Oak Family		
Quercus berberidifolia	scrub oak		MC
Geraniaceae	Geranium Family		
Erodium botys	Filaree, stork's bill	NNG	
Lamiaceae	Mint Family		
Lavandula dentata*	French lavender	NNG	
Salvia mellifera	black sage		CSS, MC
Myrsinaceae	Myrsine Family		
Anagallis arvensis*	pimpernel	NNG	
Myrtaceae	Myrtle Family		
Eucalyptus sp.*	gum tree	ORN	ORN
Pinaceae	Pine Family		
Pinus spp.*	pine	ORN, DEV	ORN, DEV
Poaceae	Grass Family		
Avena fatua*	slender wild oat		CSS
Bromus madritensis ssp. rubens*	red brome	NNG	CSS
Bromus diandrus*	ripgut	NNG	CSS
Cortaderia selloana*	pampas Grass	NNG	
Stipa pulchra	Purple needlegrass		NG
Polemoniaceae	Phlox Family		
Navarretia squarrosa	Skunkweed	NNG	
Polygonaceae	Buckwheat Family		
Eriogonum fasciculatum	California buckwheat	NNG	CSS
Rumex	Curly dock	NNG	
Salicaceae	Willow Family		
Salix gooddingii	black willow	NNG	
Scrophulariaceae	Figwort Family		
Mimulus aurantiacus	sticky monkeyflower		CSS, MC
Solanaceae	Nightshade Family		
Nicotiana glauca*	tree tobacco		MFS
Typhaceae	Cattail Family		
Typha latifolia	broad-leaved cattail		MFS
Tamaricaceae	Tamarisk Family		
Tamarix sp.*	Salt cedar	NNG	

#### Table B-1 Plant Status Observed

<sup>(1)</sup> Habitat codes: DEV = Developed, DIS = Disturbed/non-native vegetation, DIS WET = Disturbed wetland, CSS = Coastal sage scrub,

MC = Mixed chaparral, MFS = Mule fat scrub (or coastal sage scrub-disturbed), NNG = Non-native grassland

\*Non-native species



Scientific Name	Common Name	Project Area <sup>(1)</sup>	Study Area Surrounding Project Area <sup>(1)</sup>
REPTILES	· · · · · · · · · · · · · · · · · · ·		
Iguanidae	Iguanids		
Uta stansburiana	side-blotched lizard		DIS
BIRDS			
Aegithalidae	Bushtits		
Psaltriparus minimus	bushtit		MC
Columbidae	Pigeons and Doves		
Zenaida macroura	mourning dove	NNG	DEV
Corvidae	Jays and Crows		
Corvus brachyrhynchos	American crow	NNG	DIS
Emberizidae	Emberizids		
Pipilo crissalis	California towhee	NNG	MC
Pipilo maculatus	Spotted towhee	CSS	
Icteridae	Blackbirds and Orioles		
Icterus bullockii	Bullock's oriole		DEV
Fringillidae	Finches		
Carpodacus mexicanus	house finch	NNG	DEV, DIS
Carduelis psaltria	lesser goldfinch	NNG	DIS, MC, MFS
Mimidae	Mockingbirds and Thrashers		
Mimus polyglottos	northern mockingbird		DEV, DIS
Sturnidae	Starlings		
Sturnus vulgaris	European starling		DEV
Timaliidae	Babblers		
Chamaea fasciata	wrentit		МС
Trochilidae	Hummingbirds		
Calypte anna	Anna's hummingbird	NNG	CSS, DIS, MC, MFS
Troglodytidae	Wrens		
Thryomanes bewickii	Bewick's wren		MC, MFS
Tyrannidae	Tyrant Flycatchers		
Sayornis nigricans	black phoebe		DIS, MFS
Sayornis saya	Say's phoebe	NNG	
Tyrannus vociferans	Cassin's kingbird	NNG	
MAMMALS			
Canidae	Wolves and Foxes		
Canis familiaris	domestic dog		DIS
Geomyidae	Pocket Gophers		
Thomomys bottae	Botta's pocket gopher	NNG	CSS

#### Table B-2 Animal Status Observed



Scientific Name	Common Name	Project Area <sup>(1)</sup>	Study Area Surrounding Project Area <sup>(1)</sup>
Leporidae	Hares and Rabbits		
Sylvilagus audubonii	desert cottontail	NNG	CSS, DIS, MC
Muridae	Mice and Rats		
Neotoma sp.	woodrat		CSS
Sciuridae	Squirrels		
Otospermophilus beecheyi	California ground squirrel	DEV	CSS, DIS

#### Table B-2Animal Status Observed

<sup>(1)</sup> Habitat codes: DEV = Developed, DIS = Disturbed/non-native vegetation, DIS WET = Disturbed wetland, CSS = Coastal sage scrub, MC = Mixed chaparral, MFS = Mule fat scrub (or coastal sage scrub-disturbed), NNG = Non-native grassland

\*Non-native species

