

**Biological Resources Assessment**  
**12.5-Acre Newport Village Park**  
**City of Newport Beach, Orange County, California**  
**(Laguna Beach 7.5 - Minute USGS Topographic Map Section 93, T-6S, R-10W)**

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## SECTION 1: SUMMARY

At the request of Hall and Foreman, Inc., Michael Brandman Associates (MBA) conducted a study of the natural resources and biological setting for a 12.5-acre parcel in the City of Newport Beach, Orange County, California. This parcel is referred to as the Newport Village Park Project site, hereinafter referred to as Project Site or Site, and it is proposed for the future development of a community park.

The Project Site currently contains five plant communities: coastal sage scrub (CSS), southern riparian scrub, freshwater marsh, non-native grassland (NNG), and ornamental landscape. It contains evidence of previous disturbance caused by grading, drainage feature modification, and the development of the surrounding roads and residential areas.

The Project Site provides suitable habitat for a number of sensitive plant and wildlife species but is not considered a significant wildlife corridor. It also contains two drainage features that fall under the jurisdiction of both United States Army Corps of Engineers (USACE) and California Department of Fish and Game. Sections of the drainage features contain jurisdictional wetland areas.

The Project Site is located within a Non-Reserve Area of the Coastal Subregion of Orange County's Natural Communities Conservation Plan / Habitat Conservation Plan (NCCP/HCP).

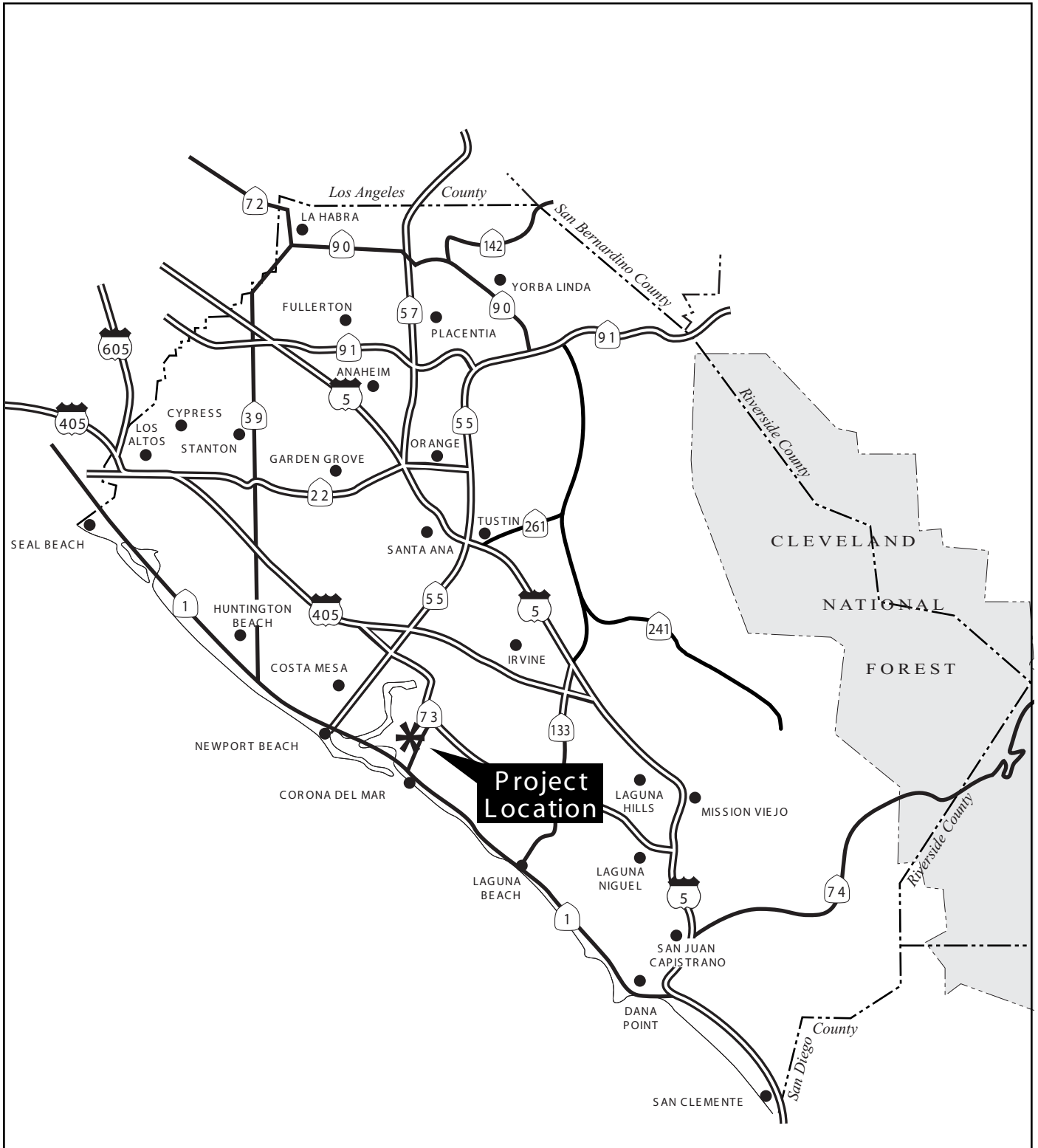
## SECTION 2: INTRODUCTION

The information contained herein is intended to provide the basis for subsequent evaluations of the potential biological resource impacts associated with the project and will enable a meaningful comparison of such impacts among various alternative project elements in terms of significance and magnitude. This study provides a detailed description of existing Project Site conditions.

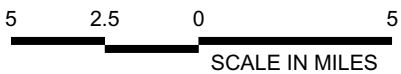
This report was written to comply with all California Environmental Quality Act (CEQA) and Orange County requirements to evaluate biological resources within the Project Site. It was also used to evaluate the Site based on Orange County's NCCP/HCP.

The Project Site is located in the City of Newport Beach, Orange County, California (Exhibit 1). It can be found on the northwestern portion of the Laguna Beach 7.5-minute USGS topographic map, in Section 93, Township 6S, and Range 10W (Exhibit 2). The Project Site ranges in elevation from 100 to 220 feet above sea level. Specifically, the Site resides approximately one-quarter mile southeast of Fashion Island, located northeast of State Highway 1, northwest of Macarthur Boulevard, southeast of Avocado Avenue, and southwest of San Miguel Drive.

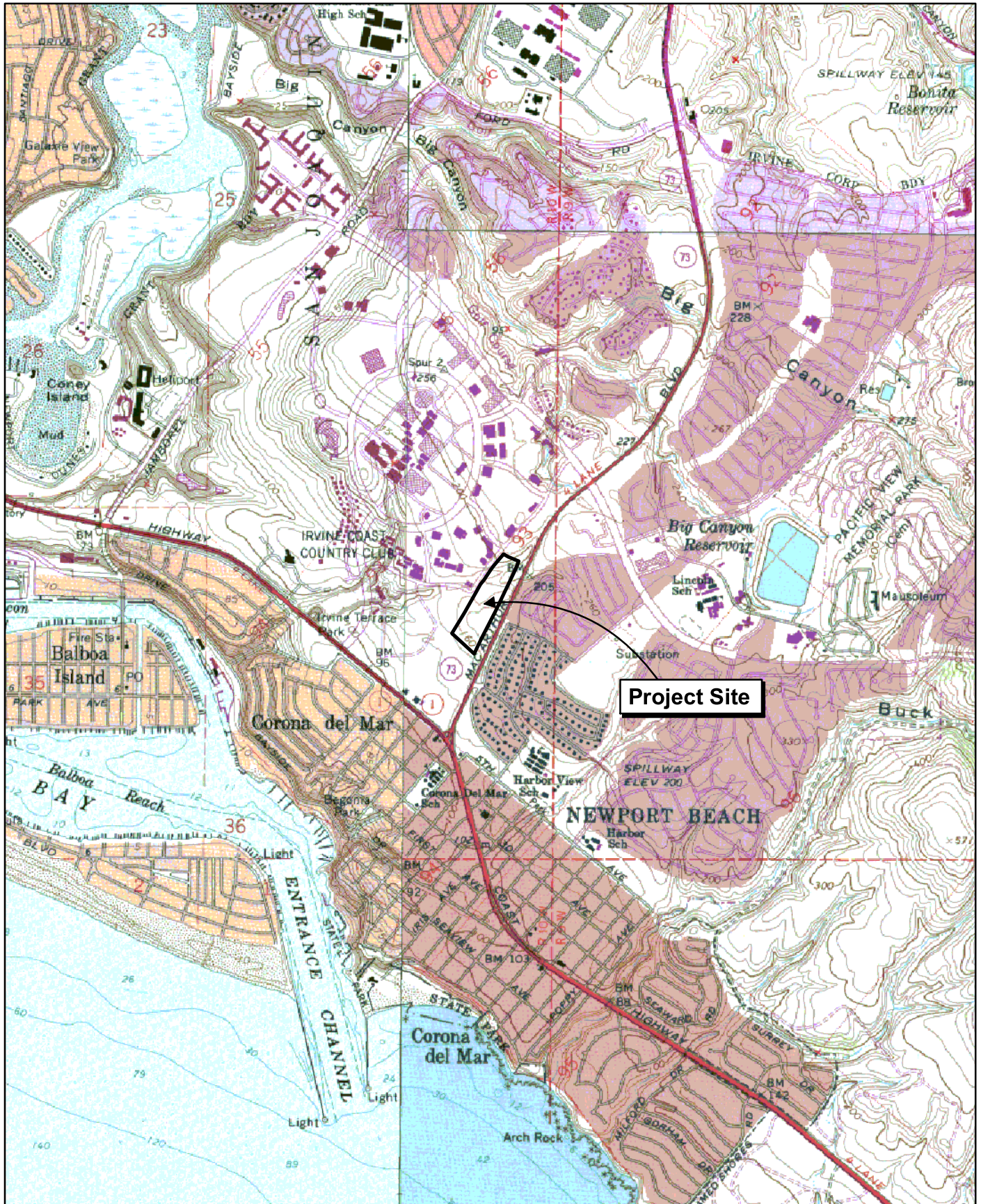
The proposed project consists of site development involving the construction of cement walking paths, picnic tables, and other seating, as well as the restoration of natural plant species and communities such as oak trees, annual grassland, and coastal sage scrub



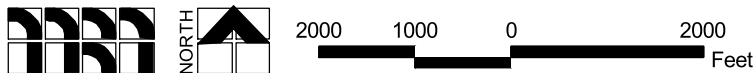
Source: Census Data, 2000 & Michael Brandman Associates, 2001.



# Exhibit 1 Regional Location Map



Source: USGS Laguna Beach 7.5' DRG.



## SECTION 3: METHODS

Analysis of the biological resources associated with the Newport Village Park Project Site began with a thorough review of relevant literature followed by a reconnaissance-level field survey. MBA biologists Scott Crawford and Steve Hongola conducted an initial site survey on foot and by vehicle on June 24, 2004. The primary objective of this survey was to document general Site conditions. On July 23, 2004, MBA also conducted a formal jurisdictional delineation to document the existing conditions associated with all drainage features within the Site.

### 3.1 - LITERATURE REVIEW

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the Project Site, as well as the surrounding area. A compilation of sensitive plant and wildlife species recorded in the vicinity of the site was derived from the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB), a sensitive species and plant community account database. Additional recorded occurrences of plant species found on or near the Site were derived from the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California database. The CNDDDB and CNPS search was based on the Laguna Beach USGS 7.5-minute topographic quadrangle, as well as the Newport Beach and Tustin quadrangles.

Federal register listings, protocols, and species data provided by the U.S. Fish and Wildlife Service (USFWS) and CDFG were reviewed in conjunction with anticipated federal and state listed species potentially occurring within the vicinity.

Reviewed literature also included Orange County's NCCP/HCP and a report for a previous biological assessment conducted on the Project Site by Robert Hamilton. These and other references are listed in Section 7 - References.

### 3.2 - RECONNAISSANCE-LEVEL SURVEYS

MBA's biologists Scott Crawford and Steve Hongola conducted a reconnaissance-level survey of the Project Site on foot on June 24, 2004. Special attention was paid to sensitive habitats or those areas potentially supporting sensitive flora and fauna species. The reconnaissance-level survey focused on three primary objectives:

- Vegetation mapping

- Special status species and plant community assessment
- General habitat assessment

Plant communities were mapped using 7.5-minute USGS topographic base maps and recent aerial photography (ca 2000). Sensitive or unusual biological resources identified during the literature review were ground-truthed during reconnaissance surveys for mapping accuracy. Plant communities within the Project Site were classified at a general level of detail using the widely accepted descriptions provided in Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986 and 1992 update). Survey results for plant and wildlife species are described in Section 4.

### **Plant Species**

Common plant species observed during the field surveys were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified offsite using taxonomical guides. A list of all species observed on the Project Site was compiled from the survey data, shown in Appendix A. Taxonomic nomenclature used in this study follows Hickman (1993). Common plant names, when not available from Hickman (1993), were taken from Munz (1974) or Roberts (1998). In this report, scientific names are provided immediately following common names of plant species (first reference only).

### **Wildlife Species**

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded in field notebooks. Notations were made regarding general habitats for sensitive species potentially occurring on the Project Site based on our preliminary assessment of the cited literature. Field guides were used to assist with identification of species during surveys and included Stebbins (1985) for amphibians and reptiles, National Geographic Society (1987) for birds, and Burt and Grossenheider (1980) for mammals. Common names of wildlife species are standard; however, scientific names are provided immediately following common names (first reference only). Appendix A lists all vertebrate wildlife species observed or detected on the Project Site during the survey.

The general wildlife survey was conducted on foot and by vehicle during daylight hours. The object of this survey was not to extensively search for every species occurring within the Project Site, but to ascertain general conditions and identify habitat areas that could be suitable for various sensitive plant and wildlife species. Sensitive species are generally considered potentially present on the Project Site if suitable habitat is present, the area lies within a species' geographic range, and the species has been recorded to occur within the vicinity of the Project Site. MBA biologists inspected habitats for diagnostic wildlife signs such as nests, burrows, tracks, vocalizations, and noted all direct

observations. The biologists also inspected surface litter, and occasionally turned over stones, fallen bark, and tree branches to look for secretive reptiles and amphibians.

Surveys for raptors (birds of prey) were conducted simultaneously with the field surveys. Efforts included direct and incidental observation of raptor nests, owl pellets, and the identification of soaring or perched raptor species.

### 3.3 - USACE AND CDFG JURISDICTIONAL AREAS

MBA's biologists reviewed USGS topographic maps and aerial photography, prior to conducting the reconnaissance-level survey to identify any potential natural drainage features and water bodies that may be within the jurisdiction of either the USACE and/or CDFG. In general, all surface drainage features indicated as blue-line streams on USGS maps and linear patches of vegetation expected to exhibit evidence of flows are considered potentially subject to state and federal regulatory authority as "waters of the US and/or state." The Project Site was evaluated for jurisdictional drainage features during the reconnaissance-level survey to assess existing drainage features. Following the initial site visit, MBA conducted a subsequent formal wetland delineation within the Project Site following the standard wetland delineation protocol established by USACE (1986). The results of this delineation can be found in MBA's report *Delineation of Jurisdictional Waters and Wetlands* for the Newport Village Park Project Site.

### 3.4 - PROBLEMS AND LIMITATIONS

During the field surveys, weather conditions included a temperature of 69° Fahrenheit and 100% cloud cover with winds of ranging from approximately 0 to 1.0 miles per hour, and the surveys were conducted in the early summer. Overall wildlife species' activity can be considered average for this time of year, as many wildlife species have taken up summer residence in the general area. During the summer, most annual plants species have flowered and are starting to wither and die, making identifications problematic. A lack of rainfall for the year likely decreased the number of species observed within the project site.

Many reptiles, amphibians, and mammals are secretive by nature and some are only nocturnally active, making diurnal observations problematic. Observations of diagnostic signs may provide evidence of occurrence of these species. Otherwise, conclusions regarding potential occurrence are based on consideration of habitat suitability factors.

### 3.5 - DEFINITION OF TERMS

**Blue Line Drainage:** A drainage feature indicated by a blue line on USGS 7.5 minute topographic quadrangle maps.

**Focused Survey:** A survey for a specific species that has been designated by the CDFG or USFWS as sensitive and has a written protocol approved by the USFWS.

**Plant Communities:** A classification of a natural or human influenced assemblage of plants that have common characteristics and can be easily identified by key plant species.

**Reconnaissance-Level Survey:** A field investigation of common plant and wildlife species observed within a project site that is often limited to a single point in time during the year. The survey is conducted to obtain a general understanding of the habitats within the property and not to systematically survey the entire property for every plant and wildlife species present.

**Taxonomic Nomenclature:** A system of labeling an individual species with a Latin-based scientific name.

## SECTION 4: ENVIRONMENTAL SETTING

### 4.1 - SOIL AND TOPOGRAPHIC FEATURES

The Project Site contains two different soil series. A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics. The Site is dominated by Calleguas clay loam and Myford sandy loam. (United States Department of Agriculture Soil Survey, Orange County and Western Part of Riverside County 1978).

Topographically, the Project Site resides within rolling hills approximately one mile from the Pacific Ocean. The Site gradually slopes toward the ocean, with a plateau in the southern portion of the site and two small drainage channels in the northern portion. Elevations on Site range from 160 to 200 feet above sea level. The Project Site contains a single watershed in the northern portion of the Site which flows from storm drains on the north and east borders of the Site to a storm drain on the west border. The drainage features within the Site are further discussed in Section 5.2 of this report.

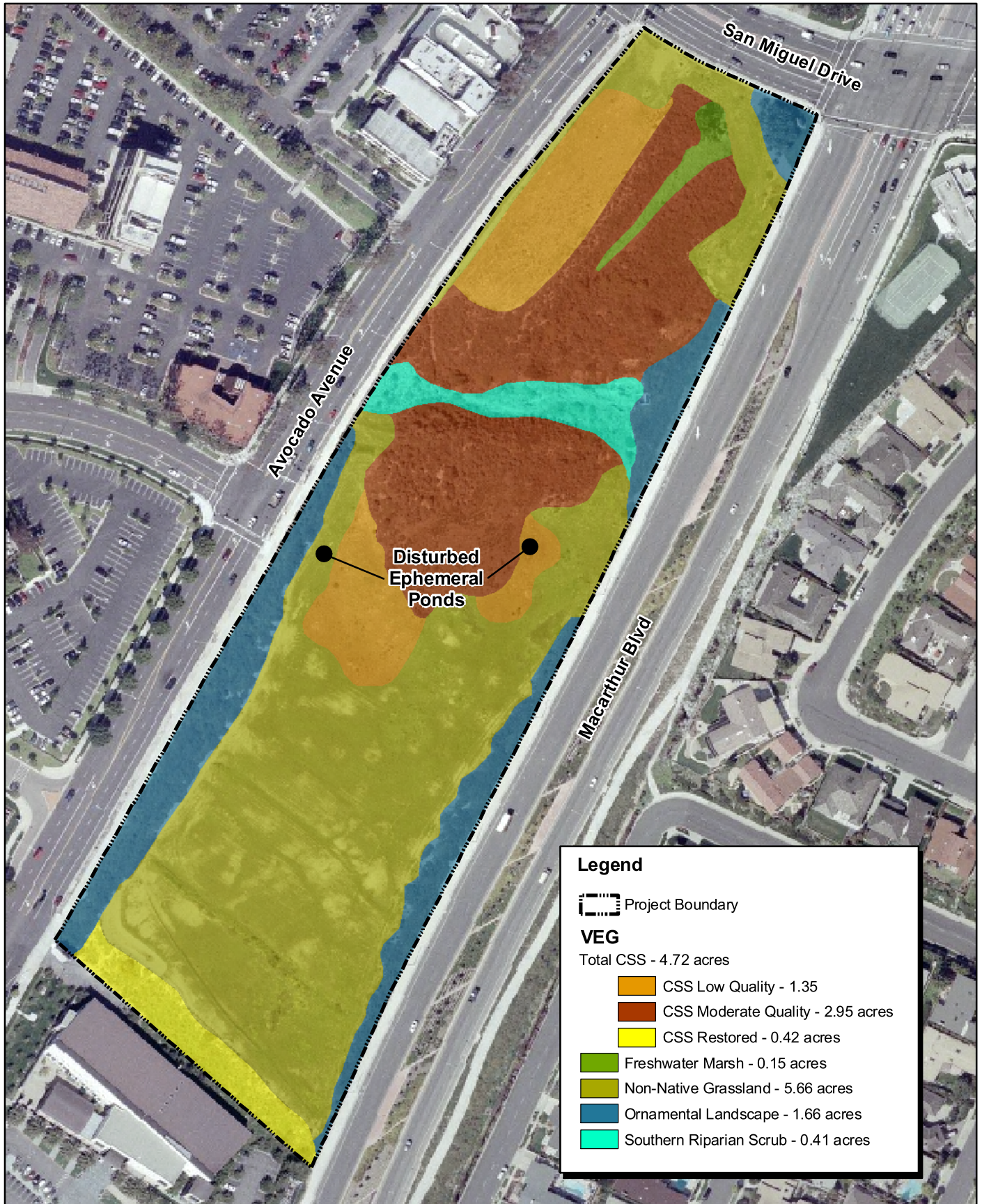
### 4.2 - LEVEL OF DISTURBANCE

The Project Site contains evidence of previous site disturbance caused by grading, drainage feature modification, and the development of the surrounding roads and residential areas. The vegetation is slowly recovering, but overall the Site is considered disturbed and plant species diversity is moderate. Noise from the surrounding urban arterial roadways also contributes a significant amount of disturbance.

### 4.3 - PLANT COMMUNITIES

The Project Site contains five distinct plant communities (Exhibit 3):

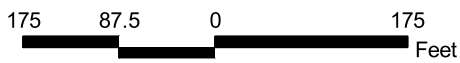
1. Coastal Sage Scrub
2. Southern Riparian Scrub
3. Freshwater Marsh
4. Non-native Grassland
5. Ornamental Landscape



Source:



Michael Brandman Associates  
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## Exhibit 3 Plant Communities Map

NEWPORT VILLAGE PARK, ORANGE COUNTY, CA

Coastal sage scrub (CSS) habitat is found within the northern half of the Project Site, on the upland slopes above the drainage features, as well as on a restored slope on the southern end of the Site. Southern riparian scrub and fresh water marsh communities occur within the northern drainage features. The Project Site is dominated by non-native grassland (NNG) that occurs on the plateau in the southern and central portions of the Site. Ornamental landscape vegetation occurs on the slopes along Macarthur Boulevard and Avocado Avenue. A complete list of all plant and wildlife species observed within the plant communities on Site can be found in Appendix A.

### **Coastal Sage Scrub (4.72 acres)**

Coastal sage scrub is a natural plant community consisting of herbaceous plants and woody shrubs from 1 to 5 feet in height that form a relatively open canopy. It is generally found in more arid environments than similar shrub communities such as chaparral. Typical vegetation consists of low-growing shrubs with patches of bare ground beneath the shrubs (Holland 1986). It has been incorporated into the California sagebrush series described by Sawyer and Keeler-Wolf (1995).

Coastal sage scrub occurs in the northern portion of the Project Site, and on a recently restored slope on the Site's southern border, and makes up approximately 4.72 acres (37 percent) of the site. The CSS communities in the northern portion and southern border of the Site can generally be considered moderate quality habitat based on their vegetation characteristics. They contain moderate species diversity and a density of shrub cover ranging from 80-90 percent, but are isolated and limited in area. Two small areas in the northwest corner and central portions of the site are marginal (low quality) based on a low diversity of species and coverage (less than 50 percent), and higher coverage by ruderal (weedy) species.

The CSS that occurs in the northern and southern portions of the Site is dominated by California sagebrush (*Artemisia californica*) and coyote brush (*Baccharis pilularis*). Other common species observed in the northern portion include coastal prickly pear (*Opuntia littoralis*), bush sunflower (*Encelia californica*), coast goldenbush (*Isocoma menziesii*), laurel sumac (*Malsoma laurina*), and bladderpod (*Isomeris arborea*). The restored CSS in the southern portion of the site contains the same dominant species but has a slightly different overall composition, with common species consisting of black sage (*Salvia mellifera*), island buckwheat (*Eriogonum grande*), and sticky monkeyflower (*Mimulus aurantiacus*). Non-native species observed include pampas grass (*Cortaderia jubata*), black mustard (*Brassica nigra*), and yellow star-thistle (*Centaurea solstitialis*).

Wildlife species detected in the CSS community include California towhee (*Pipilo crissalis*), house finch (*Carpodacus mexicanus*), bushtit (*Psaltriparus minimus*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), and Audubon cottontail (*Sylvilagus audubonii*). Other wildlife

species expected to occur in this habitat include western fence lizard (*Sceloporus occidentalis*), northern mockingbird (*Mimus polyglottos*), and California ground squirrel (*Spermophilus beecheyi*).

### **Southern Riparian Scrub (0.41 acres)**

Southern riparian scrub generally contains a dense tangle of broad-leaved, winter-deciduous riparian thickets dominated by willow species and commonly containing a herbaceous understory. It is associated with seasonally flooded or saturated stream corridors and forms thickets in riparian zones along alluvial fan stream channels, adjacent sandy or gravelly floodplains, and low stream terraces in southern California. The representative plant species are typically well adapted to a hydrological regime ranging from semi-permanent inundation to occasional soil saturation on or near the surface during at least a portion of the growing season.

Southern riparian scrub is found in the lower drainage that runs east west in the northern portion of the Project Site, occupying approximately 0.41 acres (3 percent) of the Site. Dominant species observed within this community include arroyo willow (*Salix lasiolepis*), black willow (*Salix goodingii*), and mulefat (*Baccharis salicifolia*). A herbaceous understory dominated by narrow-leaved cattail (*Typha angustifolia*) and marsh fleabane (*Pluchea odorata*) occurs in the western portion of the drainage. Other common species observed within the drainage include myoporum (*Myoporum laetum*), coyote bush, salt heliotrope (*Heliotropium curassavicum*), and Australian saltbush (*Atriplex semibaccata*).

Wildlife species commonly observed within the southern riparian scrub habitat include common yellow-throat (*Geothlypis trichas*), lesser goldfinch (*Carduelis psaltria*), and bushtit (*Psaltriparus minimus*). Other wildlife species expected to occur include Pacific tree frog (*Hyla regilla*), song sparrow, yellow-rumped warbler (*Dendroica coronata*), and western scrub jay (*Aphelocoma californica*).

### **Freshwater Marsh (0.15 acres)**

Freshwater marsh is an aquatic habitat that occurs within very slow-moving or standing water. The vegetation is dominated by herbaceous plant species with little to no shrubs or tree canopy cover. This community is typically limited to permanently flooded drainage bottoms and contains obligate wetland vegetation.

Freshwater marsh occurs within the upper drainage that runs north to south in the northern portion of the Site. It is dominated by broad-leaved cattail (*Typha latifolia*) and also contains narrow-leaved cattail, marsh fleabane, watercress, sweet alyssum (*Lobularia maritima*), sedge, and toad rush (*Juncus*

*bufonius*). A large gum tree (*Eucalyptus* sp.) occurs on the north end of the drainage. This community occupies approximately 0.15 acres (1 percent) of the Project Site.

The wildlife species observed within freshwater marsh community were similar to those found in the riparian scrub habitat. Species observed in this plant community include common yellow-throat, Anna's hummingbird, and Audubon cottontail. Additional wildlife species expected to occur include Pacific tree frog and lesser goldfinch.

### **Non-native Grassland (5.66 acres)**

Non-native grassland consists of non-native, annual grasses often associated with native annual forbs. These grasses begin to germinate with the fall rains, grow during the winter and spring, and wither in the early summer. This community is commonly associated with previously disturbed areas (Holland 1986) and is incorporated into the California annual grassland series described by Sawyer and Keeler-Wolf (1995).

Non-native grassland occurs on the broad plateau in the central and southern portions of the Project Site, and is the dominant plant community occupying approximately 5.66 acres (45 percent) of the Site. This community is dominated by species such as yellow star-thistle, fascicled tarweed (*Hemizonia fasciculatum*), red brome (*Bromus madritensis* ssp. *rubens*), red-stemmed filaree (*Erodium cicutarium*), black mustard, slender oats (*Avena barbata*), and cudweed aster (*Lessingia filanginifolia*). It also contains scattered native CSS shrubs such as California sagebrush, coyote bush, coast goldenbush, and deerweed (*Lotus scoparius*). Though the NNG has elements of CSS, coverage by CSS species is less than 5 percent, too low to be considered a distinct vegetation community. Evidence of seasonal ponding, including the presence of facultative wetland species such as mulefat and curly dock, occurs within the interface of the non-native grassland and coastal sage scrub communities.

Wildlife species commonly observed or detected within the non-native grassland community include ash-throated flycatcher (*Myiarchus cinerescens*), house finch, red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), and California ground squirrel. Other species expected to occur within this habitat include western kingbird (*Tyrannus verticillus*), white-crowned sparrow (*Zonotrichia leucophrys*), and Audubon cottontail.

### **Ornamental Landscape (1.66 acres)**

Ornamental landscape is a human-influenced assemblage of plant species associated with urban development. It is found within various urban areas and is usually highly disturbed by maintenance practices and artificial irrigation. Non-native, ornamental trees and shrubs typically dominate this

community, but it can also contain native plant species. Ornamental landscape communities provide cover and nesting habitat for wildlife species that have adapted to urban areas.

Ornamental landscape occupies the two narrow embankments that occur on the eastern and western borders of the Project Site above MacArthur Boulevard and Avocado Avenue. The community is dominated by golden wattle (*Acacia longifolia*). Other common species observed include black mustard, Africa daisy (*Dimorphotheca sinuata*), and sweet alyssum. A stand of ornamental trees dominated by date palm (*Phoenix dactylifera*) and pine (*Pinus* sp.) resides on the northeast corner of the Site. Ornamental landscape occurs over approximately 1.66 acres (13 percent) of the Site.

Wildlife species observed using the ornamental landscape community include house finch, song sparrow, and California towhee. Other species expected to occur within this community include western fence lizard, mourning dove, and Audubon cottontail.

## SECTION 5: IMPORTANT BIOLOGICAL RESOURCES

### 5.1 - SENSITIVE PLANT AND WILDLIFE SPECIES

Based upon a literature review, MBA determined that 6 sensitive plant communities, 25 sensitive plant species, and 24 sensitive wildlife species have been recorded to occur within a reasonable distance (approximately seven miles) of the Project Site. A discussion of each sensitive plant and wildlife species recognized by the CNDDDB, CNPS, and MBA as potentially present on the Project Site is presented in Table 1 and Table 2. These tables identify each sensitive plant and wildlife species, their federal and state status, required habitat, and potential to occur within the Project Site.

No sensitive species were observed within the project site during the reconnaissance-level survey. A sensitive species is considered a potential inhabitant if it's known geographical distribution encompasses part of the site, or if its recorded occurrence was in the vicinity and its general habitat requirements are present. Based on MBA's preliminary review, one sensitive wildlife species and two sensitive plant species were observed on the Project Site during a previous biological survey: coastal California gnatcatcher (*Polioptila californica californica*) (CAGN), Coulter's saltbush (*Atriplex coulteri*), and vernal barley (*Hordeum intercedens*) (Hamilton 1998).

A sensitive plant or wildlife species' potential for occurrence on the Project Site is based upon the following criteria:

**Not Likely to Occur** - There are no present or historical records of the species occurring on or in the immediate vicinity (within 3 miles) of the project site and the diagnostic habitats strongly associated with species do not occur on or in the immediate vicinity of the site.

**Low Potential to Occur** - There is a historical record of the species in the vicinity of the project site and potentially suitable habitat on site, but existing conditions (e.g. density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation) substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.

**Moderate Potential to Occur** - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity (within three miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence within the vicinity.

**High Potential to Occur** - There is both a historical record of the species in the immediate vicinity of the project site and the diagnostic habitats strongly associated with the species occur on or in the immediate vicinity.

**Species Present** - The species was observed on the project site at the time of the field survey or during a survey in the recent past.

### **Sensitive Plant Communities**

Based on MBA's literature review the following sensitive plant communities were recorded to occur within the three USGS topographic quadrangles that surround the Project Site:

- Southern Coast Live Oak Riparian Forest
- Southern Coastal Salt Marsh
- Southern Cottonwood Willow Riparian Forest
- Southern Dune Scrub
- Southern Foredunes
- Southern Sycamore Alder Riparian Woodland

Based upon the plant communities observed during the reconnaissance-level survey and the descriptions provided by Holland, none of these sensitive plant communities occur within the Project Site. However, the Site does contain coastal sage scrub and southern riparian scrub, communities that are generally considered to be sensitive by the regulatory agencies because they provide suitable habitat for a variety of sensitive plant and wildlife species.

### **Sensitive Plant Species**

Twenty-three sensitive plant species were determined to have some potential to occur on or in the vicinity of the Project Site. No sensitive plant species were observed during the reconnaissance-level survey. However, Coulter's saltbush and vernal barley were observed on the Project Site during a previous biological survey and are considered present. None of the other sensitive plant species potentially occurring within the Project Site have a high potential to occur. Chaparral sand-verbena, intermediate mariposa lily, many-stemmed dudleya, and mesa horkelia have a moderate potential to occur on the Project Site. A discussion of each sensitive plant species recognized as potentially present by the CNDDDB, CNPS, and MBA is presented in Table 1.

### **Sensitive Wildlife Species**

Twenty-three sensitive wildlife species have some potential to occur on or in the vicinity of the Project Site. No sensitive wildlife species were observed during the reconnaissance-level survey.

However, coastal California gnatcatcher was observed on Site during a previous biological survey and therefore is considered to have a high potential to occur. Seven sensitive wildlife species have a moderate potential to occur within the Project Site including San Diego fairy shrimp, northern red-diamond rattlesnake, orange-throated whiptail, San Diego horned lizard, western spadefoot toad, coastal cactus wren, and southern California rufous-crowned sparrow. A discussion of each sensitive wildlife species recognized by the CNDDDB and MBA as potentially present on the site is presented in Table 2.

Table 1: Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral sand-verbena	—	—	1B	Chaparral, coastal scrub; in sandy areas.	Annual herb	January - August	<b>Moderate.</b> Observed approximately 4.5 miles west of Site. Marginally suitable coastal scrub habitat present.
<i>Aphanisma blitoides</i>	Aphanisma	—	—	1B	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. (1-305M)	Annual herb	March - June	<b>Low.</b> Historic occurrences in Orange County are presumed extirpated. Marginal habitat present.
<i>Atriplex coulteri</i>	Coulter's saltbush	—	—	1B	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Specifically inhabits ocean bluffs, ridgetops, as well alkaline low places. (10-440M)	Perennial herb	March - October	<b>Present.</b> Observed on Site during a previous biological survey. Suitable habitat present.
<i>Atriplex pacifica</i>	South Coast saltscare	—	—	1B	Coastal scrub, coastal bluff scrub, playas, chenopod scrub. Prefers alkaline soils. (1-500M)	Annual herb	March - October	<b>Low.</b> Observed approximately 4 miles southwest of Project Site. No alkaline soils present.
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's saltscare	—	—	1B	Coastal bluff scrub, coastal scrub. Specifically, alkaline soil. (3-250M)	Annual herb	April - October	<b>Low.</b> Observed approximately 3 miles northwest of project site. No alkaline soils present.

Table 1 (Cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate mariposa lily	—	—	1B	Coastal scrub, chaparral, valley and foothill grassland. Found primarily on dry, rocky open slopes and rock outcrops. (120-850M)	Bulbiferous herb	May - July	<b>Moderate.</b> Observed approximately 5 miles east of project site. Marginally suitable coastal scrub habitat present.
<i>Centromadia parryi</i> ssp. <i>australis</i>	Southern tarplant	—	—	1B	Marshes and swamps (margins), valley and foothill grassland, vernal pools, alkaline soils. (0-425M)	Annual herb	May - November	<b>Low.</b> Observed approximately 2 miles northwest of project site. No suitable alkaline soils present.
<i>Cheanactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	—	—	1B	Coastal bluff scrub, coastal dunes. Specifically on sandy sites. (3-100M)	Annual herb	January - August	<b>Low.</b> Observed approximately 1.5 miles south of project site. No coastal bluff scrub present.
<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>	Salt marsh bird's-beak	FE	SE	1B	Coastal salt marsh, coastal dunes. Limited to higher margins of salt marsh habitat. (0-30M)	Annual herb hemiparasitic	May - October	<b>Not likely.</b> Observed approximately 1.5 miles northwest of project site. No suitable salt marsh habitat present.
<i>Dudleya multicaulis</i>	Many-stemmed dudleya	—	—	1B	Chaparral, coastal scrub, valley and foothill grassland. Prefers heavy, often clayey soils and grassy slopes.	Perennial herb	April - June	<b>Moderate.</b> Observed approximately 1.5 miles southwest of project site. Marginally suitable coastal scrub habitat present.

Table 1 (Cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	FT	CT	1B	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Endemic to Orange County, California. Specifically occurs in thin soil on north-facing sandstone cliffs. (10-260M)	Stoloniferous herb	May - July	<b>Not likely.</b> Observed approximately 6.5 miles southwest of the project site. No suitable sandstone cliff habitat present.
<i>Euphorbia misera</i>	Cliff spurge	—	—	2	Coastal bluff scrub, maritime scrub. Resides in southern California, Baja California, and on Guadalupe Island. Prefers rocky sites. (10-500M).	Shrub	December - August	<b>Low.</b> Observed approximately 1.5 miles south of site. No rocky coastal bluff scrub habitat present.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	—	—	1A	Marshes and swamps.	Perennial herb	August - October	<b>Not likely.</b> Presumed extirpated from Orange County. Marsh habitat on site is small, isolated, and highly disturbed, significantly reducing the possibility of occurrence.
<i>Hordeum intercedens</i>	Vernal barley	—	—	3	Coastal dunes, coastal scrub, valley and foothill grassland, vernal pools. (5-1000M)	Annual herb	March - June	<b>Present.</b> Observed on the project site during a previous biological survey. Suitable seasonal pond habitat present.

Table 1 (Cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	Mesa horkelia	—	—	1B	Chaparral, cismontane woodland, coastal scrub. Specifically in sandy or gravelly sites. (70-810M).	Perennial herb	February - September	<b>Moderate.</b> Observed approximately 3.5 miles west of the project site. Marginally suitable coastal scrub habitat present.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's gold fields	—	—	1B	Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Commonly found on alkaline soils in playas, sinks, and grasslands. (1-1400M).	Annual herb	February - June	<b>Low.</b> Observed approximately 1.5 miles southwest of project site. No suitable alkaline soils present.
<i>Nama stenocarpum</i>	Mud nama	—	—	2	Marshes and swamps. Associated with lake shores, river banks, intermittently wet areas. (5-500M).	Annual / perennial herb	January - July	<b>Low.</b> Observed approximately 1.5 miles northwest of project site. Marsh habitat on Site is small, isolated, and highly disturbed, significantly reducing the possibility of occurrence.
<i>Navarretia prostrata</i>	Prostrate navarretia	—	—	1B	Coastal scrub, valley and foothill grassland, vernal pools. Resident of alkaline soils in grassland, or in vernal pools. (15-700M).	Annual herb	April - July	<b>Not Likely.</b> Observed approximately 5 miles northwest of project site. No suitable alkaline soils present.

Table 1 (Cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Nemacaulis denudata</i> var. <i>denudata</i>	Coast woolly heads	—	—	1B	Coastal dunes. (0-100M)	Annual herb	April - September	<b>Not likely.</b> Observed approximately 2 miles southwest of project site. No suitable coastal dunes habitat present.
<i>Quercos dumosa</i>	Nuttall's scrub oak	—	—	1B	Closed-cone coniferous forest, chaparral, coastal scrub. Generally found on sandy soils near the coast, sometimes on clay loam. (15-400M)	Evergreen shrub	February - April	<b>Low.</b> Observed approximately 2 miles southwest of project site. Marginally suitable habitat present but this relatively conspicuous perennial shrub oak was not observed on the project site during the reconnaissance level survey.
<i>Senecio aphanactis</i>	rayless ragwort	—	—	2	Cismontane woodland, coastal scrub. Associated with drying alkaline flats. (20-575M)	Annual herb	January - April	<b>Not Likely.</b> Observed approximately 3.5 miles northwest of the project site. No suitable alkaline flats habitat present.
<i>Suaeda estorooa</i>	estuary seablite	—	—	1B	Marshes and swamps. Specifically in coastal salt marshes with clay, silt, and sand substrates. (0-5M).	Perennial herb	May - January	<b>Not likely.</b> Observed approximately 1.5 miles south of project site. No suitable salt marsh habitat present.

Table 1 (Cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Blooming Period	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS				
<i>Verbesina dissita</i>	big-leaved crownbeard	FT	CT	1B	90% in southern maritime chaparral, 10% in coastal sage scrub. Prefers steep, rocky, primarily north-facing slopes within 1.5 miles of the ocean, in gravelly soils. (45-210M)	Perennial herb	April - July.	<b>Not likely.</b> No suitable steep, rocky habitat present. Only known U.S. populations limited to Laguna Beach.
U.S. Fish and Wildlife Service FE Federal Endangered FT Federal Threatened PE Proposed Endangered PT Proposed Threatened FC Federal Candidate FSC Species of Concern* *No longer recognized as a federal designation.		California Department of Fish and Game CE California Endangered CT California Threatened CR California Rare			California Native Plant Society 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 about which we need more information. 4 Plants of limited distribution.			
<p><b>Not Likely to Occur</b> - There are no present or historical records of the species occurring on or in the immediate vicinity (within 3 miles) of the Project Site and the diagnostic habitats strongly associated with the species does not occur on or in the immediate vicinity of the site.</p> <p><b>Low Potential to Occur</b> - There is a historical record of the species in the vicinity of the project site and potentially suitable habitat on site, but existing conditions (e.g. density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation) substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.</p> <p><b>Moderate Potential to Occur</b> - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity (within three miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.</p> <p><b>High Potential to Occur</b> - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the project area (within 3 miles).</p> <p><b>Species Present</b> - The species was observed on the Project Site at the time of the survey or during a previous biological survey.</p>								

Table 2: Special Status Wildlife Species

Species		Status			Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
<b>Invertebrates</b>						
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	—	—	Endemic to San Diego and Orange County mesas. Exclusive to vernal pools.	<b>Moderate.</b> Observed approximately 5 miles northwest of the Project Site. Suitable seasonal pond habitat present.
<i>Cicindela gabbii</i>	Tiger beetle	—	—	—	Estuaries and mudflats along the coast of southern California.	<b>Not likely.</b> No suitable habitat present.
<i>Danaus plexippus</i>	Monarch butterfly	—	—	—	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress) with water and nectar sources nearby.	<b>Not likely.</b> Observed approximately 5 miles southeast of Project Site. No suitable habitat present.
<i>Tryonia imitator</i>	Mimic tryonia	—	—	—	Coastal lagoons, estuaries, and salt marshes from Sonoma County to San Diego County.	<b>Not likely.</b> No suitable salt marsh habitat present.
<b>Fish</b>						
<i>Eucyclogobius newberryi</i>	Tidewater goby	FE	—	—	Brackish water habitats along the California coast from San Diego County to the mouth of the Smith River. Specifically common to shallow lagoons and lower stream reaches, requiring fairly still, but not stagnant water, and high oxygen levels.	<b>Not likely.</b> No suitable brackish water habitat present.
<b>Reptiles and Amphibians</b>						
<i>Aspidoscelis hyperythrus</i>	Orange-throated whiptail	—	—	CDFG: CSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood; prefers sandy washes with patches of brush & rocks. Perennial plants necessary for its major food: termites.	<b>Moderate.</b> Observed approximately 2.5 miles southwest of Project Site. Marginally suitable habitat is limited in area and isolated.
<i>Clemmys marmorata pallida</i>	Southwestern pond turtle	—	—	CDFG: CSC	Permanent or nearly permanent fresh water areas.	<b>Low.</b> Marginal riparian habitat on Site is small, isolated, and disturbed, significantly reducing the possibility of occurrence.

Table 2 (Cont.): Special Status Wildlife Species

Species		Status			Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
<i>Crotalus ruber ruber</i>	Northern red-diamond rattlesnake	—	—	CDFG: CSC	Inhabits chaparral, woodland, grassland, and desert areas. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	<b>Moderate.</b> Observed approximately 4 miles east of the Project Site. Marginally suitable habitat is limited in area and isolated.
<i>Phrynosoma coronatum blainvillei</i>	San Diego horned lizard	—	—	CDFG: CSC	May be found in coastal sage scrub and chaparral in arid and semi-arid climate; prefers friable, rocky, or shallow sandy soils.	<b>Moderate.</b> Observed approximately 5 miles southeast of the Project Site. Marginally suitable habitat is limited in area and isolated.
<i>Scaphiopus hammondi</i>	Western spadefoot	FSC	—	CDFG: CSC	May occur in grassland or in valley-foothill hardwood woodlands; vernal pools essential for breeding.	<b>Moderate.</b> Observed approximately 7 miles southeast of project site. Marginally suitable seasonal pond habitat present.
<b>Birds</b>						
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	—	—	CDFG: CSC	Resident in southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	<b>Moderate.</b> Observed approximately 5 miles southeast of the Project Site. Marginally suitable habitat is limited in area and isolated.
<i>Athene cunicularia</i>	Burrowing owl	FSC	—	CDFG: CSC	May be found in open, dry grasslands, deserts & scrublands with low-growing vegetation; subterranean nester, dependent upon burrowing mammals, especially ground squirrels.	<b>Low.</b> Observed approximately 2.5 miles north of the Project Site. No suitable habitat present.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	Coastal cactus wren	—	—	CDFG: CSC	Southern California Coastal Sage Scrub. Require tall Opuntia cactus for nesting and roosting.	<b>Moderate.</b> Observed approximately 1.5 miles northeast of the Project Site. Marginally suitable habitat is limited in area and isolated.
<i>Charadrius alexandrinus nivosus</i>	Western snowy plover	FT	—		Sandy beaches, salt pond levees and shores of alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	<b>Not Likely.</b> Observed approximately 7 miles northwest of the Project Site. No suitable habitat present.

Table 2 (Cont.): Special Status Wildlife Species

Species		Status			Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
<i>Eremophila alpestris actia</i>	California horned lark	—	—	CDFG: CSC	Short-grass prairies, “bald” hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	<b>Low.</b> Observed approximately 7 miles northeast of project site. Marginally suitable habitat is limited in area and isolated.
<i>Icteria virens</i>	Yellow-breasted Chat	—	—	CDFG: CSC	Riparian thickets of willows along water courses.	<b>Low.</b> Observed approximately 3 miles northeast of project site. Marginal riparian habitat on Site is small, isolated, and disturbed, significantly reducing the possibility of occurrence.
<i>Laterallus jamaicensis coturniculus</i>	California black rail		ST		Mainly inhabits salt marshes bordering larger bays. Specifically occurs in tidal salt marsh heavily grown to pickleweed; also in freshwater and brackish water marshes, all at low elevation.	<b>Not likely.</b> No suitable habitat present.
<i>Passerculus sandwichensis beldingi</i>	Belding’s savannah sparrow	—	SE	—	Inhabits coastal salt marshes, from Santa Barbara south to San Diego County. Nests in Salicornia on or about margins of salt flats.	<b>Not likely.</b> No suitable habitat present.
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT	—	CDFG: CSC	Low, coastal sage scrub in arid washes, on mesas and slopes.	<b>High.</b> Observed during a previous biological survey.
<i>Rallus longirostris levipes</i>	Light-footed clapper rail	FE	SE		Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans.	<b>Not likely.</b> No suitable habitat present.
<i>Sterna antillarum browni</i>	California least tern	FE	SE		Nesting colonies nest along the coast from San Francisco Bay south to northern Baja California. Breeds on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.	<b>Not likely.</b> No suitable habitat present

Table 2 (Cont.): Special Status Wildlife Species

Species		Status			Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State	Other		
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE	SE	—	Low riparian growth in the vicinity of water or in dry river bottoms.	<b>Low.</b> Observed approximately 2 miles northeast of the Project Site. Marginal riparian habitat on Site is small, isolated, and disturbed, significantly reducing the possibility of occurrence.
<b>Mammals</b>						
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE	—	CDFG: CSC	Inhabits the narrow coastal plain from the Mexican border north to El Segundo, Los Angeles County. Seems to prefer fine alluvial sands near the ocean.	<b>Low.</b> Observed approximately 1.5 miles east of the Project Site. Marginal habitat that occurs on Site is small, isolated, and disturbed, significantly reducing the possibility of occurrence.
Federal		State			Other	
FE Federal Endangered		SE State Endangered			CDFG: CSC California Species of Concern	
FT Federal Threatened		ST State Threatened			CDFG: FP Fully Protected Species	
FSC Federal Species of Concern					CDFG: P Protected Species	
PFT Proposed Federal Threatened						
C Candidate for Federal Listing						

## 5.2 - USACE AND CDFG JURISDICTIONAL AREAS

Two surface drainages with clearly defined bed and bank features occur in the northern portion of the Project Site. Based upon MBA's *Delineation of Jurisdictional Waters and Wetlands*, the Site contains 0.50 acres of USACE jurisdictional waters of the U.S. (798 linear feet), 0.23 acres of which are jurisdictional wetlands. In addition, 1.12 acres fall under the jurisdiction of the CDFG.

Based on the overall extent of the drainage features within the proposed project site, it is possible that the development may impact jurisdictional waters. If the proposed project will impact jurisdictional waters, MBA recommends early consultation in order to discuss project design to minimize impacts to drainage features. Additional consultation with USACE, CDFG, and Regional Water Quality Control Board will likely be required for this project with regard to obtaining potentially required permits under Section 404 and 401 of the Clean Water Act and Section 1600 of the California Fish and Game Code.

## 5.3 - REGIONAL CONNECTIVITY/WILDLIFE MOVEMENT CORRIDOR ASSESSMENT

The Project Site is surrounded on all sides by urban arterial roadways as well as residential and commercial developments. The resulting lack of natural habitat in surrounding areas significantly limits the movement of wildlife across the Site. Therefore, it is not considered a significant wildlife movement corridor. Common wildlife species such as coyotes, raccoons, skunks, and opossums can be expected to travel through the Site and neighboring developed areas, but the Site does not provide connectivity between large areas of open space on a local or regional scale.

## SECTION 6: RECOMMENDATIONS

### 6.1 - SENSITIVE PLANT SPECIES

Focused surveys are recommended for sensitive plant species that are federally or state listed as endangered or threatened and have moderate to high potential to occur on the Project Site. Coulter's saltbush and vernal barley were observed on the Project Site during a previous biological survey and are considered present. Chaparral sand-verbena, intermediate mariposa lily, many-stemmed dudleya, and mesa horkelia have a moderate potential to occur on the Project Site. None of these species are federally or state listed as endangered, therefore, none have direct legal protection under the Federal Endangered Species Act (FESA) and/or California Endangered Species Act (CESA). In addition, intermediate mariposa lily is a covered species under Orange County's NCCP/HCP. Therefore, direct and indirect impacts to this species on the project site have been addressed and mitigated through habitat conservation measures instituted by the NCCP/HCP.

Though the Project Site contains marginal habitat for the sensitive plant species mentioned above, the type of habitat potentially being impacted by development is considered low quality and the likelihood of these species occurring within the development area is also considered low. Impacts to these species within the Project Site are not considered significant on a local or regional scale. Therefore, focused surveys for sensitive plant species are not required.

### 6.2 - SENSITIVE WILDLIFE SPECIES

Focused surveys are generally recommended for sensitive wildlife species that are federally or state-listed as endangered or threatened and have a moderate or high potential to occur on the Project Site. Eight sensitive wildlife species were determined to have some potential to occur within the Project Site. Of these, the following species fit the above-mentioned requirements for focused surveys:

- Coastal California gnatcatcher
- San Diego fairy shrimp

Coastal California gnatcatcher is a federally threatened species that has a high potential to occur on the Project Site. Coastal California gnatcatcher is also designated as a covered species under the NCCP/HCP (discussed in Section 6.4). Therefore, the proposed project will need to comply with the following recommended mitigation measures established by the NCCP/HCP:

1. To the maximum extent practicable, no grading of CSS habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15).

2. Prior to the commencement of grading operations or other activities involving disturbance of CSS, a survey will be conducted to locate coastal California gnatcatcher and coastal cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans. A minimum of three surveys will be conducted, at least one week apart, in order to determine the presence or absence of the coastal California gnatcatcher in conformance with the survey protocol issued on August 6, 1997, by the USFWS. These surveys may be conducted at any time during the year; however, surveys conducted between February 15 and August 30 are preferred.
3. Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of CSS habitat to be avoided under the provisions of the NCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel.
4. A monitoring biologist, acceptable to the USFWS and CDFG shall be on-site during any clearing of CSS. The landowner or relevant public agency will advise the USFWS and CDFG at least seven calendar days, and preferably 14 calendar days, prior to the clearing of any habitat occupied by Identified Species to allow the USFWS and CDFG to work with the monitoring biologist in connection with bird flushing and/or capture activities.
5. Following the completion of initial grading or earthmoving activities, all areas of CSS habitat to be avoided by construction equipment and personnel will be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials will be permitted within the marked areas.

San Diego fairy shrimp is a federally endangered species that has a moderate potential to occur on Site, and is designated as a conditionally covered species under the NCCP/HCP. Therefore, the proposed project will need to comply with the specific conditions for conditionally covered species established by the NCCP/HCP. If the proposed project will impact degraded vernal pool habitat it must be consistent with a mitigation plan that includes the following characteristics:

1. It addresses design modifications and other on Site measures that are consistent with the project's purposes, minimizes impacts, and provides appropriate protections for vernal pool habitat
2. It provides for compensatory vernal pool habitat restoration/creation at an appropriate location and includes relocation of potential cyst-bearing soils
3. It provides for monitoring and adaptive management of vernal pools consistent with Chapter 5 of the NCCP/HCP.

***Migratory Bird Treaty Act***

Pursuant to the Migratory Bird Treaty Act (MBTA) and CDFG Code, removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. The nesting season generally extends from early February through August, but can vary slightly from year to year based upon seasonal weather conditions. The Project Site contains several large trees and shrubs suitable for nesting avian species. Therefore, if construction must occur during the avian nesting season, nesting surveys will be required prior to any construction activities to ensure that the project avoids impacts to nesting birds.

***Other Sensitive Wildlife Species***

Six additional sensitive wildlife species have a moderate or high potential to occur on the Project Site but are not federally or state listed as endangered or threatened. These include northern red-diamond rattlesnake, orange-throated whiptail, San Diego horned lizard, western spadefoot toad, coastal cactus wren, and southern California rufous-crowned sparrow. Though the Project Site contains suitable or marginal habitat for these species, they do not have any direct legal protection under the FESA or CESA. They are considered “species of concern” by the CDFG, and focused surveys for these species are not typically required as part of the CEQA process. In addition, all six species are designated as covered species under the NCCP/HCP. Therefore, direct and indirect impacts to these species within areas planned for development have been addressed and mitigated through habitat conservation measures instituted by the NCCP/HCP.

Based on the preliminary project design, areas of suitable habitat for sensitive wildlife species are proposed for restoration and intensive development activities will be limited to areas of low quality habitat on southern portion of the Project Site. Therefore, impacts to the above mentioned wildlife species of concern can be considered less than significant on a local and regional scale.

**6.3 - USACE AND CDFG JURISDICTIONAL AREAS**

Based on the overall extent of the drainage features within the proposed project site, it is possible that the development may impact jurisdictional waters. If the proposed project will impact jurisdictional waters, MBA recommends early consultation in order to discuss project design to minimize impacts to drainage features. Additional consultation with USACE, CDFG, and Regional Water Quality Control Board will likely be required for this project with regard to obtaining potentially required permits under Section 404 and 401 of the Clean Water Act and Section 1600 of the California Fish and Game Code.

## 6.4 - ORANGE COUNTY NATURAL COMMUNITY CONSERVATION PLAN / HABITAT CONSERVATION PLAN

Orange County's NCCP/HCP is a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in Orange County. The purpose of the NCCP/HCP is to maintain biological and ecological diversity within a rapidly urbanizing region. The County approved the NCCP/HCP for the Central and Coastal Subregion portions of Orange County on July 17, 1996. The Project Site is located in the Coastal Subregion of the NCCP/HCP.

Approval and implementation of the NCCP/HCP allows for the conservation of large, diverse areas of natural habitat. The Implementation Agreement (IA) satisfies the State and federal mitigation requirements for designated development and adequately provides for the conservation and protection of the thirty-nine species and their habitats identified in the NCCP/HCP.

Land in the NCCP/HCP Policy Plan Area is classified into the following:

- Reserve System Lands
- Special Linkage Areas
- Existing Use Areas
- Non-Reserve Open Space Areas

The Project Site is a Non-Reserve parcel and is not located within the Reserve System or classified as Special Linkage Area, Existing Use Area, or Non-Reserve Open Space Area.

To comply with the NCCP/HCP, the client will need to adhere to the mitigation measures established by the NCCP/HCP for coastal California gnatcatcher and San Diego fairy shrimp, discussed in Section 6.2.

## SECTION 7: REFERENCES

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**SECTION 8:  
PROJECT RESPONSIBILITY**

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## **Appendix A: Floral and Faunal Compendia**

## Floral Compendium

<b>Aizoaceae</b>	<b>Carpet-Weed Family</b>
<i>Carpobrotus edulis</i>	hottentot-fig
<i>Mesembryanthemum crystallinum</i>	crystalline iceplant
<b>Anacardiaceae</b>	<b>Sumac or Cashew Family</b>
<i>Rhus integrifolia</i>	lemonade berry
<b>Apiaceae</b>	<b>Carrot Family</b>
<i>Apiastrum angustifolium</i>	wild celery
* <i>Foeniculum vulgare</i>	fennel
<b>Asteraceae</b>	<b>Sunflower Family</b>
<i>Ambrosia psilostachya</i>	western ragweed
<i>Artemisia californica</i>	California sagebrush
<i>Baccharis pilularis</i>	coyote brush
<i>Baccharis salicifolia</i>	mulefat
* <i>Centaurea solstitialis</i>	yellow star-thistle
<i>Conyza canadensis</i>	horseweed
<i>Dimorphotheca sinuata</i>	Africa daisy
<i>Encelia californica</i>	California encelia
<i>Gnaphalium beneolens</i>	Fragrant everlasting
<i>Hazardia squarrosa</i>	saw-toothed goldenbush
<i>Hemizonia fasciculata</i>	fascicled tarweed
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Isocoma menziesii</i>	goldenbush
<i>Pluchea odorata</i>	marsh fleabane
* <i>Sonchus oleraceus</i>	common sow thistle
<b>Boraginaceae</b>	<b>Borage Family</b>
<i>Heliotropium sp.</i>	wild heliotrope
<b>Brassicaceae</b>	<b>Mustard Family</b>
* <i>Brassica nigra</i>	black mustard
<i>Hirschfeldia incana</i>	shortpod mustard
<i>Lobularia maritima</i>	sweet alyssum
<i>Rorippa sp.</i>	Water cress
<b>Cactaceae</b>	<b>Cactus Family</b>
<i>Opuntia littoralis</i>	coastal prickly-pear
<b>Capparaceae</b>	<b>Caper Family</b>
<i>Isomeris arborea</i>	bladderpod
<b>Chenopodiaceae</b>	<b>Goosefoot Family</b>
* <i>Salsola tragus</i>	Russian thistle

<b>Euphorbiaceae</b>	<b>Spurge Family</b>
<i>Eremocarpus setigerus</i>	dove weed
<b>Fabaceae</b>	<b>Legume Family</b>
<i>Acacia</i> sp.	acacia
<i>Lotus scoparius</i>	deerweed
<i>Vicia sativa</i>	spring vetch
<b>Geraniaceae</b>	<b>Geranium Family</b>
* <i>Erodium cicutarium</i>	red-stemmed filaree
<b>Hydrophyllaceae</b>	<b>Waterleaf Family</b>
<i>Phacelia cicutaria</i>	caterpillar phacelia
<b>Lamiaceae</b>	<b>Mint Family</b>
<i>Salvia apiana</i>	white sage
<i>Salvia mellifera</i>	black sage
<b>Lemnaceae</b>	<b>Duckweed Family</b>
<i>Lemna</i> sp.	duckweed
<b>Myrtaceae</b>	<b>Myrtle Family</b>
* <i>Eucalyptus camaldulensis</i>	red gum
<b>Plantaginaceae</b>	<b>Plantain Family</b>
<i>Plantago lanceolata</i>	English plantain
<b>Polygonaceae</b>	<b>Buckwheat Family</b>
<i>Eriogonum fasciculatum</i>	California buckwheat
* <i>Rumex crispus</i>	curly dock
<b>Salicaceae</b>	<b>Willow Family</b>
<i>Salix goodingii</i>	black willow
<i>Salix lasiolepis</i>	arroyo willow
<b>Scrophulariaceae</b>	<b>Figwort Family</b>
<i>Mimulus aurantiacus</i>	bush monkey-flower
<b>Solanaceae</b>	<b>Nightshade Family</b>
* <i>Nicotiana glauca</i>	tree tobacco
<i>Solanum</i> sp.	nightshade
<b>Angiosperms (Monocotyledons)</b>	

<b>Areaceae</b>	<b>Palm Family</b>
<i>Phoenix dactylifera</i>	Date palm
<i>Washingtonia</i> sp.	Fan palm
<b>Cyperaceae</b>	<b>Sedge Family</b>
<i>Carex</i> sp.	sedge
<b>Juncaceae</b>	<b>Rush Family</b>
<i>Juncus bufonius</i>	Toad Rush
<b>Poaceae</b>	<b>Grass Family</b>
* <i>Avena barbata</i>	slender wild oat
* <i>Bromus madritensis ssp. rubens</i>	red brome
<i>Cortaderia selloana</i>	selloa pampas grass
<i>Distichlis spicata</i>	saltgrass
<i>Elymus</i> sp.	elymus
<i>Poa annua</i>	annual bluegrass
<i>Polypogon monspeliensis</i>	Rabbitfoot grass
<b>Typhaceae</b>	<b>Cattail Family</b>
<i>Typha angustifolia</i>	narrow-leaved cattail
<i>Typha latifolia</i>	broad-leaved cattail

\* non-native species

## Faunal Compendium

**Birds****Accipitridae***Buteo jamaicensis***Hawks**

red-tailed hawk

**Columbidae***Zenaida macroura***Pigeons and Doves**

mourning dove

**Trochilidae***Calypte anna***Hummingbirds**

Anna's hummingbird

**Tyrannidae***Myiarchus cinerascens**Tyrannus verticalis***Tyrant Flycatchers**

ash-throated flycatcher

western kingbird

**Corvidae***Corvus brachyrhynchos***Jays and Crows**

American crow

**Aegithalidae***Psaltriparus minimus***Bushtits**

bushtit

**Troglodytidae***Thryomanes bewickii***Wrens**

Bewick's wren

**Mimidae***Mimus polyglottos***Thrashers**

northern mockingbird

**Parulidae***Geothlypis trichas***Wood warblers**

common yellowthroat

**Emberizidae***Pipilo crissalis**Melospiza melodia***Emberizids**

California towhee

song sparrow

**Fringillidae***Carpodacus mexicanus**Carduelis psaltria***Finches**

house finch

lesser goldfinch

**Mammals****Geomyidae***Thomomys bottae***Pocket Gophers**

valley pocket gopher

**Sciuridae***Spermophilus beecheyi***Squirrels**

California ground squirrel

**Leporidae***Sylvilagus audubonii***Hares and Rabbits**

Audubon cottontail

## **Appendix B: Site Photographs**

## SITE PHOTOGRAPHS



**Photograph 1**



**Photograph 2: CSS on manufactured slope.**



**Photograph 3**



**Photograph 4: Onsite streambed feature**