# APPENDIX B Habitat Assessment



July 31, 2015 JN: 145143

#### CITY OF NEWPORT BEACH

100 Civic Center Drive Newport Beach, CA 92660 Contact: John Kappeler, P.E.

SUBJECT: Habitat Assessment for the Little Corona Infiltration Project Located in the City of Newport Beach, Orange County, California

#### **Introduction**

Michael Baker International (Michael Baker), conducted a habitat assessment for the Little Corona Infiltration Project located in the City of Newport Beach, Orange County, California. Michael Baker biologists Travis J. McGill and Ryan S. Winkleman inventoried and evaluated the condition of the habitat within the survey area on April 16, 2015.

The habitat assessment was conducted to characterize existing site conditions and to assess the probability of occurrence of sensitive plant and wildlife species that could pose a constraint to development. Special attention was given to the suitability of the habitat within the survey area to support coastal California gnatcatcher (*Polioptila californica californica*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), and orange-throated whiptail (*Aspidoscelis hyperythra*), the three "Target Species" of the Orange County Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). Biologists also assessed the suitability of the site to support sensitive species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring in the vicinity of the project site.

#### **Project Location**

The project site is generally located southwest of State Route 1 (SR-1) in the City of Newport Beach, Orange County, California. It is found on the Laguna Beach quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 95 of Township 7 south, Ranges 9 and 10 west. Specifically, the project site is located north of the Pacific Ocean, west of Evening Canyon Road, south of SR-1, and east of Hazel Drive (refer to Exhibits 1-4).

#### **Methodology**

A literature review and records search was conducted to determine which sensitive biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field survey of the project site was conducted that provided information on the existing site conditions and its potential to support sensitive biological resources.

#### Literature Review

Prior to conducting the field investigation, a literature review and records search was conducted for sensitive biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CNDDB Rarefind 5, the CDFW's Biogeographic Information and Observation System (BIOS), the California Native Plant Society's (CNPS) Electronic Inventory of Rare, Threatened, and Endangered Plants of California, Calflora Database, compendia of special-status species published by the CDFW, and United States Fish and Wildlife Service (USFWS) species listings, as well as the following resources:

- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species;
- Primary Constituent Elements for coastal California gnatcatcher; and
- Orange County NCCP/HCP.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project site. Additional recorded occurrences of these species found on or near the project site were derived from database queries. The CNDDB GIS database was used, in conjunction with ArcMap software, to locate the nearest occurrence and determine the distance from the project site.

#### Habitat Assessment and Field Investigation

Michael Baker biologists Travis J. McGill and Ryan S. Winkleman inventoried and evaluated the extent and conditions of the plant communities found within the boundaries of the survey area on April 16, 2015. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support sensitive plant and wildlife species. All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded in a standardized field notebook. In addition, site characteristics such as soil condition, topography, presence of indicator species, slope, conditions of the plant communities, hydrology, jurisdictional features, and evidence of human use of the site were noted.



The plant communities were evaluated for their potential to provide suitable habitat for sensitive plant and wildlife species as well as the identification of corridors and linkages that may support the movement of wildlife through the area. Special attention was paid to any sensitive habitats and/or undeveloped, natural areas having a higher potential to support sensitive plant and wildlife species.

#### **Orange County NCCP/HCP**

Orange County's NCCP/HCP was approved in 1996 under the State of California's NCCP program. It encompasses a total area of 208,000 acres, with 37,380 acres within its Reserve System, split into Coastal and Central subregions. The reserves additionally contain special linkages, existing use areas, and other open space areas. The primary goal of the NCCP/HCP is to protect and preserve coastal sage scrub (CSS) in the Reserve System, as well as associated habitats and species. This includes three (3) "Target Species," an additional thirty-six (36) "Identified Species," and four (4) habitat types, as listed on pages ES-17 and ES-18 of the NCCP/HCP. The survey area is located within the Coastal Subregion of the NCCP/HCP, but is located outside of the Reserve System (refer to Exhibit 9).

#### **Existing Site Condition**

The survey area is located at an elevation range of approximately 10 to 20 feet above mean sea level and is relatively flat with no areas of significant topographic relief. According to the USDA NRCS Soil Survey, on-site soils within the project footprint consist of Beaches and Myford sandy loam, 9 to 30 percent slopes, eroded (refer to Exhibit 5). The Beaches soil series consists of poorly drained soils, while the Myford soil series consists of moderately well drained soils.

The survey area occurs in an area that has undergone a partial conversion from natural habitats into residential and recreational land uses, with patches of disturbed natural habitat and restored/revegetated streambed remaining. The survey area is bordered by residential development to the east and the Pacific Ocean to the west. Buck Gully, a perennial stream, begins in the San Joaquin Hills and courses through Newport Beach for approximately 3.5 miles before outletting into the Pacific Ocean at Corona del Mar. Buck Gully is separated from the sandy beach by a concrete weir, which allows water to overflow onto the beach and into the Pacific Ocean. The upstream Buck Gully was restored from September 2011 to April 2012, which included the installation of hydraulic grade control structures as well as non-native vegetation removal and native planting replacement. Buck Gully is in its third year of its habitat mitigation and monitoring program. The lower limits of the restoration area are approximately 140 feet upstream of the survey area.

#### Vegetation

Two (2) vegetation communities were observed within the survey area: freshwater marsh and coastal



sage scrub (refer to Exhibit 6). In addition to the two plant communities, areas characterized as developed and sandy beach were observed in the survey area.

#### Freshwater Marsh

The freshwater marsh plant community extends upstream of a concrete weir into Buck Gully on the southeastern portion of the survey area. Plant species observed within this plant community include cattails (*Typha* sp.), yerba mansa (*Anemopsis californica*), water speedwell (*Veronica anagallis-aquatica*), watercress (*Nasturtium officinale*), yellow sweetclover (*Melilotus indicus*), white sweetclover (*Melilotus albus*), prickly sow thistle (*Sonchus asper ssp. asper*), bristly oxtongue (*Helminthotheca echioides*), celery (*Apium graveolens*), alkali heath (*Frankenia salina*), and alkali bulrush (*Bolboschoenus maritimus*).

#### Coastal Sage Scrub

The coastal sage scrub plant community is located on the eastern boundary of the survey area and includes a combination of naturally occurring vegetation on the coastal bluffs as well as revegetated coastal sage scrub on the banks above Buck Gully. Plant species observed within this plant community include coastal goldenbush (*Isocoma menziesii var. sedoides*), California bush sunflower (*Encelia californica*), fourwing saltbush (*Atriplex canescens*), Hottentot fig (*Carpobrotus edulis*), California buckwheat (*Eriogonum fasciculatum*), woolly seablite (*Suaeda traxifolia*), coyote bush (*Baccharis pilularis*), and castor bean (*Ricinus communis*).

#### Sandy Beach

The sandy beach is found throughout the majority of the survey area. This area is unvegetated and is subject to a high level of human activity associated with beach recreation.

#### Developed

Developed areas within the survey area include the paved beach access road that is found on the eastern boundary of the survey area. The access road separates the naturally occurring vegetation on the coastal bluffs from the revegetated coastal sage scrub on the banks above Buck Gully.

#### Wildlife

Wildlife activity was moderate during the habitat assessment with twenty-one (21) avian species being detected. Avian species detected during the habitat assessment included western/Clark's grebe (Aechmophorus occidentalis/clarkii), brown pelican (Pelecanus occidentalis), double-crested cormorant (Phalacrocorax auritus), snowy egret (Egretta thula), ring-billed gull (Larus delawarensis), western gull (Larus occidentalis), Heermann's gull (Larus heermanni), rock pigeon (Columba livia), mourning dove (Zenaida macroura), Allen's hummingbird (Selasphorus sasin), American crow (Corvus brachyrhynchos), northern rough-winged swallow (Stelgidopteryx serripennis), bushtit (Psaltriparus minimus), Bewick's wren (Thryomanes bewickii), northern mockingbird (Mimus polyglottos), European starling (Sturnus vulgaris), orange-crowned warbler (Oreothlypis celata), spotted towhee (Pipilo maculatus), song sparrow (Melospiza melodia), house



finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*). No amphibians, fish, mammals, or reptiles were observed within the project footprint. The adjacent Buck Gully immediately to the north of the project site contains freshwater flow and could support fish, amphibians, or mammals. In addition, the site contains a small pond below the Buck Gully concrete weir, which then flows into the Pacific Ocean. While the wetted area between the weir and the ocean could support small numbers of fish, it is also heavily used by gulls, which likely preclude the possibility of any substantial numbers of prey items from establishing.

#### **Nesting Birds**

No active bird nests were observed in the survey area during the April 16, 2015 field survey. Onsite vegetation within the survey area provides few, if any, nesting opportunities. However, the adjacent area, including coastal sage scrub, riparian forest in Buck Gully, and ornamental vegetation in surrounding neighborhoods, provides suitable nesting opportunities for avian species.

#### **Migratory Corridors and Linkages**

The project site is located immediately adjacent to and south of Buck Gully, a perennial creek that begins at Signal Peak in the San Joaquin Hills and drains after approximately 3.5 miles into the Pacific Ocean at the southern end of the survey area. Buck Gully provides a movement corridor and a coastal linkage for wildlife. In addition, a portion of Buck Gully is located within the NCCP/HCP Reserve System beginning at Newport Coast Drive and terminating approximately 0.6 mile upstream of the project site. However, Buck Gully does not flow at a level grade into the Pacific Ocean. Instead, it is separated from the beach by a concrete weir, meaning that any organisms in the water must breach the top of the weir to continue downstream, and that no aquatic-restricted organisms can move upstream past the beach side of the weir. The proposed project will not impact the function of the upstream movement corridor.

#### **Jurisdictional Areas**

There are four key agencies that regulate activities within coastal streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (Corps) Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Water Quality Control Board (Regional Board) regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act. The California Coastal Commission (CCC) regulates activities in or affecting the coastal zone under the Coastal Zone Management Act.

One (1) State and federal jurisdictional drainage feature, Buck Gully, was observed within the boundaries of the survey area. Placement of fill and/or alteration within these jurisdictional areas



is subject to Corps, Regional Board, CDFW, and CCC jurisdiction and approval.

#### **Sensitive Biological Resources**

The CNDDB was queried for reported locations of listed and sensitive plant and wildlife species as well as sensitive natural plant communities in the Laguna Beach and Newport Beach USGS 7.5-minute quadrangles. A search of published records of these species was conducted within these quadrangles using the CNDDB Rarefind 5 online software, BIOS, and the CNPS Electronic Inventory. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities at the time of this survey have the potential to provide suitable habitat(s) for sensitive plant and wildlife species.

The literature search identified forty-three (43) sensitive plant species, seventy-six (76) sensitive wildlife species, and seven (7) sensitive plant communities as having the potential to occur within the Laguna Beach and Newport Beach USGS 7.5-minute quadrangles. These sensitive plant and wildlife species were evaluated for their potential to occur on the project site based on habitat requirements, availability/quality of suitable habitat, and known distributions. Species determined to have the potential to occur on-site are presented in Attachment C, *Potentially Occurring Sensitive Biological Resources*. Attachment C provides details of the analysis and field surveys regarding the potential occurrence of listed and sensitive plant and wildlife species within the project site.

#### Sensitive Plants

Forty-three (43) sensitive plant species have been recorded in the Laguna Beach and Newport Beach quadrangles. The survey area contains small patches of native plant communities that are mostly disturbed by the extensive development in the area. One sensitive plant species, woolly seablite, was observed on-site on the slope in the northwest section of the survey area. Based on habitat requirements for specific species and the availability and quality of habitats needed by each sensitive plant species, it was determined that all other potentially occurring sensitive plant species are presumed absent.

#### Sensitive Wildlife

Seventy-six (76) sensitive wildlife species have been recorded in the Laguna Beach and Newport Beach quadrangles. The survey area contains very small patches of native plant communities that are mostly disturbed by the extensive development in the area. Based on habitat requirements for specific species and the availability and quality of habitats needed by each sensitive wildlife species, it was determined that the project site has a moderate potential to support great egret (*Ardea alba*), great blue heron (*Ardea herodias*), Costa's hummingbird (*Calypte costae*), American peregrine falcon (*Falco peregrinus anatum*), long-billed curlew (*Numenius americanus*), and mimic tryonia (*Tryonia imitator*). Peregrine falcon is an "Identified Species" under the NCCP/HCP, but is authorized for take under the Implementing Agreement and the 10(a) permits distributed to participating landowners by the USFWS. Three (3) sensitive wildlife species were detected during the habitat assessment: snowy egret, brown pelican (off-shore), and Allen's



hummingbird. All other sensitive wildlife species have a low potential to occur or are presumed absent. All three of the NCCP/HCP's "Target Species" (coastal California gnatcatcher, coastal cactus wren, and orange-throated whiptail) are presumed absent within the boundaries of the survey area.

#### Sensitive Plant Communities

The CNDDB lists seven (7) sensitive plant communities as having been recorded in the Laguna Beach and Newport Beach quadrangles: 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, and valley needlegrass grassland. None of these vegetation communities were observed within the survey area during the habitat assessment.

#### **Critical Habitat**

Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. The survey area is not located within any federally designated Critical Habitat (refer to Exhibit 7).

#### **Essential Fish Habitat**

Essential Fish Habitat (EFH) is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." Through Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act, federal agencies or all projects with a federal nexus are required to consult with the National Marine Fisheries Service on activities that may affect EFH for species that are managed under fishery management plans. EFH for this project is being analyzed separately by Tierra Data. The survey area is located within EFH for coastal pelagic species (refer to Exhibit 7).

#### **Environmentally Sensitive Habitat Areas**

The California Coastal Act requires that jurisdictions protect Environmentally Sensitive Habitat Areas (ESHAs). Specifically, PRC Section 30240 states that:

- a) Environmentally sensitive habitat areas shall be protected against any significant disruption
  of habitat values, and only uses dependent on such resources shall be allowed within such
  areas.
- b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.



The Coastal Act generally protects ESHAs where they exist and also protects "against any significant disruption of habitat values." Section 30007.5 of the Coastal Act states that where there is a conflict between policies that it:

...be resolved in a manner, which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

Under Section 30500 of the California Coastal Act, each local government within the California Coastal Zone must prepare or have the Coastal Commission prepare for it a Local Coastal Program. The City of Newport Beach's Local Coastal Program, Coastal Land Use Plan was first approved in October 2005 and was amended by the California Coastal Commission in February 2009. The Coastal Land Use Plan describes criteria for determining ESHAs (generally based on the presence of certain native vegetation communities) and notes those areas within the City's jurisdiction that are most likely to fall under those criteria. The City of Newport Beach Coastal Land Use Plan does not determine absolute ESHAs, but instead the criteria are used to determine which areas are likely to be considered ESHAs for permitting purposes.

Within the survey area, the areas that are likely to be considered ESHAs include terrestrial (non-marine) areas within the Buck Gully Environmental Study Area categorized as coastal brackish marsh, coastal freshwater marsh, and coastal sage scrub (refer to Exhibit 8). In addition, the Newport Beach Marine Conservation Area is determined by the Coastal Land Use Plan to likely qualify as an ESHA. As illustrated in Exhibit 8 and in Table 1 below, project-related construction and access are expected to consist of a combination of temporary and permanent impacts to probable ESHAs.

Table 1. Proposed Impacts to Environmentally Sensitive Habitat Areas.

Environmentally Sensitive Habitat Areas	Temporary   Permanent   Non-Impact   Acreage		Non-Impacted Acreage	Total Acreage within Study Area
Coastal Brackish Marsh	0.0	0.01	0.0	0.01
Coastal Freshwater Marsh	0.03	0.001	0.01	0.041
Coastal Sage Scrub	0.0004	0.0	0.02	0.0204
Newport Beach Marine Conservation Area	0.01	0.0	0.02	0.03



#### Conclusion

Based on the results of the habitat assessment, the survey area is continuously disturbed by human recreation activities and supports sparse native habitat patches. Even though the majority of the project site consists of sandy beach, which limits the site's viability to provide suitable habitat for sensitive biological resources, the site has the potential to support a small number of sensitive avian species, most of which are not listed, fully protected, or covered by the NCCP/HCP. American peregrine falcon, a fully protected and NCCP/HCP "Identified" species that is somewhat common in coastal areas, has the potential to forage within the survey area but would not nest on-site. Under the Implementing Agreement and the 10(a) permits distributed to participating landowners by the USFWS, peregrine falcon is authorized for take if present.

While Buck Gully provides a linkage from the Pacific Ocean to inland areas, the proposed project is unlikely to substantially alter any wildlife use of Buck Gully as a movement corridor. Vegetation removal will be minimal if at all required for construction. No construction is anticipated that would impact the areas of coastal sage scrub or the woolly seablite that was documented on-site. Adverse impacts to sensitive plants or wildlife are not expected as a result of the construction of this project.

#### Recommendations

Nesting birds are protected pursuant to the Migratory Bird Treaty Act and Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, nesting bird clearance surveys need to be conducted prior to any vegetation removal or any ground disturbing activities that may disrupt nesting birds during the nesting season. The nesting season generally extends from February 1 through August 31, but can vary slightly from year to year based upon seasonal weather conditions.

A pre-construction clearance survey for nesting birds should be conducted within three (3) days prior to any ground disturbing activities to ensure that no nesting birds will be disturbed during construction. As long as development does not cause direct take of a bird or egg(s) or disrupt nesting behaviors, immediate protections would not be required. The biologist conducting the clearance survey should document a negative survey with a report indicating that no impacts to active avian nests will occur.

If an active avian nest is discovered during the pre-construction clearance survey, construction activities might have to be rerouted, a no-work buffer<sup>1</sup> might have to be established around the nest, or construction may be delayed until the nest is inactive. It is recommended that a biological

<sup>&</sup>lt;sup>1</sup> The size of the buffer shall be determined by the biologist in consultation with CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed, non-raptors and 500 feet from the nests of listed species or raptors.



monitor be present to delineate the boundaries of the buffer area if an active nest is observed and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the qualified biologist has determined that young birds have successfully fledged or the nest has otherwise become inactive, a monitoring report shall be prepared and submitted to the City of Newport Beach for review and approval prior to initiating construction activities within the buffer area. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the applicant from CDFW.

Sincerely,

Thomas J. McGill, Ph.D.

Vice President

Natural Resources

Ryan S. Winkleman

**Biologist** 

Natural Resources

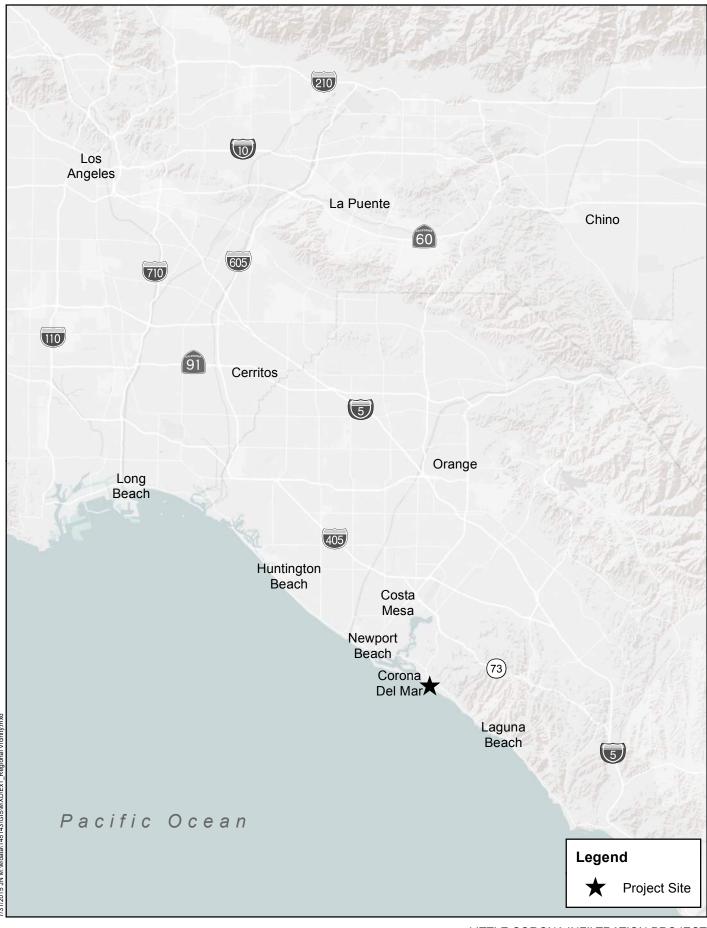
#### Attachments:

- A. Project Exhibits
- B. Site Photographs
- C. Potentially Occurring Sensitive Biological Resources
- D. Flora and Fauna Compendium



## **Attachment A**

**Project Exhibits** 







Regional Vicinity Map





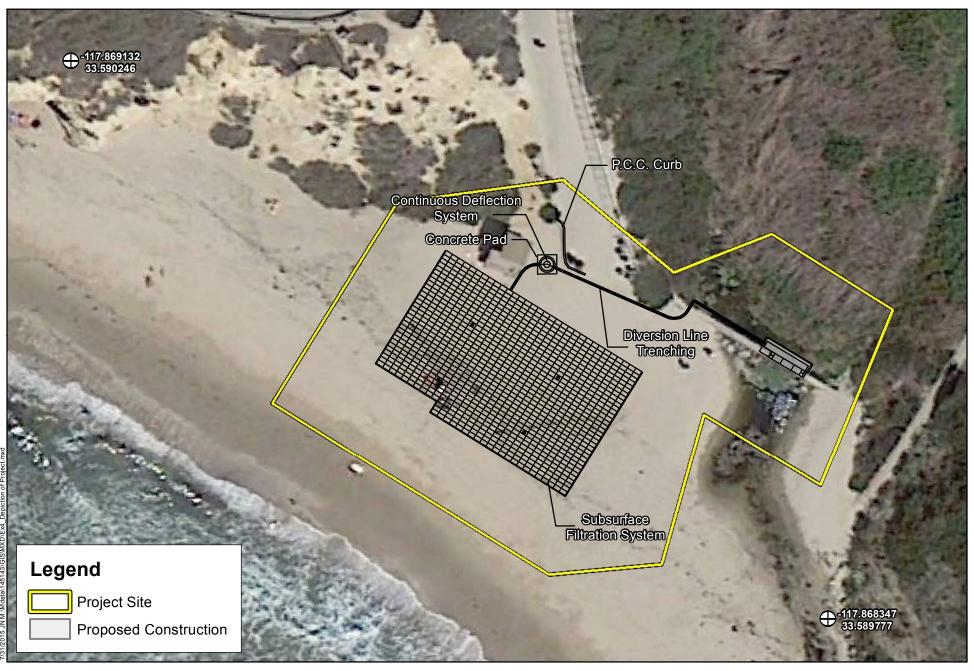


Site Vicinity Map





LITTLE CORONA INFILTRATION PROJECT Project Site





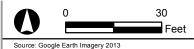
Depiction of Proposed Project





LITTLE CORONA INFILTRATION PROJECT
Soils Map





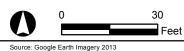
Vegetation Map





Critical and Essential Fish Habitats Map





LITTLE CORONA INFILTRATION PROJECT





Coastal Subregion NCCP/HCP Map

## **Attachment B**

Site Photographs



**Photograph 1:** Looking west from the center of the project site. Bluffs are located to the right (north).



**Photograph 2:** Looking east from the center of the project site. Buck Gully is located on the left (north).





**Photograph 3:** Looking east across the area where the subsurface filtration system would be located.



**Photograph 4:** Looking north at scrub on the bluff face.





**Photograph 5:** Looking north at Buck Gully. The concrete weir is visible between the ponded water and the cattails.



**Photograph 6:** Looking south at the Pacific Ocean.



## **Attachment C**

Potentially Occurring Sensitive Biological Resources

### Potentially Occurring Sensitive Biological Resources

Scientific Name Common Name	Status		tus Habitat		Potential to Occur
Wildlife Species					
Accipiter cooperii Cooper's hawk	Fed: CA:	None WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	No	Low. There is marginal habitat on-site.
Agelaius tricolor tricolored blackbird	Fed: CA:	None CSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [Schoenoplectus sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	No	Presumed absent. There is no suitable habitat on-site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: CA:	None WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated shrublands on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush ( <i>Artemisia californica</i> ), but can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	Low. There is marginal habitat on-site.
Ammodramus savannarum grasshopper sparrow	Fed: CA:	None CSC	Occur in grassland, upland meadow, pasture, hayfield, and old field habitats.  Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	No	Presumed absent. There is no suitable habitat on-site.
Anniella pulchra pulchra silvery legless lizard	Fed: CA:	None CSC	Occurs in moist warm loose soil with plant cover. Moisture is essential. Can be found in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks,. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate sitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs.	No	Presumed absent. There is no suitable habitat on-site.
Antrozous pallidus pallid bat	Fed: CA:	None CSC	A locally common species of low elevations in California. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern Cos. to northern Mendocino Co. A wide variety of habitats is occupied, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name	s	Status	Habitat	Observed On-site	Potential to Occur
Aquila chrysaetos golden eagle	Fed: CA:	None FP/WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	Presumed absent. There is no suitable habitat on-site.
Ardea alba great egret	Fed: CA:	None None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	Moderate. There is suitable habitat within the Buck Gully corridor.
Ardea herodias great blue heron	Fed: CA:	None None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills.	No	Moderate. There is suitable habitat within the Buck Gully corridor.
Asio flammeus short-eared owl	Fed: CA:	None CSC	Formerly a resident locally the length of the state, excluding higher mountains. Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands.	No	Presumed absent. There is no suitable habitat on-site.
Aspidoscelis hyperythra orange-throated whiptail	Fed: CA:	None CSC	Inhabits low-elevations coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	Presumed absent. There is no suitable habitat on-site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: CA:	None None	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Athene cunicularia burrowing owl	Fed: CA:	None CSC	A yearlong resident of open, dry grassland and desert habitats and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Occurs in dry, open areas such as grasslands, prairies, savannas, deserts, farmlands, golf courses and other urban areas. Use burrows excavated by other animal species for cover. Prefer burrows with low, open cover that provide good horizontal visibility.	No	Presumed absent. There is no suitable habitat on-site.
Branchinecta sandiegonensis San Diego fairy shrimp	Fed: CA:	END None	Small, shallow vernal pools, occasionally ditches and road ruts.	No	Presumed absent. There is no suitable habitat on-site.
Bucephala islandica Barrow's goldeneye	Fed: CA:	None CSC	A very uncommon winter resident (October to March) along the central California coast, mainly in San Francisco Bay and vicinity, and in Marin and Sonoma cos. Found locally on estuarine (lagoons and bays) and brackish lacustrine waters.	No	Presumed absent. There is no suitable habitat on-site. This species is extremely rare anywhere in coastal southern California.
Calypte costae Costa's hummingbird	Fed: CA:	None None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	Moderate. This species has previously been documented in the area but was not detected during the survey.



Scientific Name Common Name	St	tatus	Habitat	Observed On-site	Potential to Occur
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	Fed: CA:	None CSC	The coastal population inhabits cactus scrub from southern Ventura County and southwestern San Bernardino County to northwestern Baja California. Key habitat element is thickets of chollas or prickly-pear cacti tall enough to support and protect the birds' nests.	No	Presumed absent. There is no suitable habitat on-site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: CA:	None CSC	Found terrestrially in a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Open habitat on the Pacific slope from southwestern San Bernardino County to northwestern Baja California. Major habitat requirement is the presence of low growing vegetation or rocky outcroppings, as well as sandy soil to dig burrows.	No	Presumed absent. There is no suitable habitat on-site.
Charadrius alexandrinus nivosus western snowy plover	Fed: CA:	THR CSC	Occurs on sandy beaches, salt pond levees and along the shores of large alkali lakes. Requires sandy or gravelly substrate for nesting.	No	Low. There is marginal habitat on-site, but this beach is heavily used by humans and undisturbed nesting and foraging habitat is not present.
Charadrius montanus mountain plover	Fed: CA:	None CSC	Population declining and very local; occasionally fairly common. Winter resident from September through March. Found on short grasslands and plowed fields of the Central Valley from Sutter and Yuba cos. southward. Also fund in foothill valleys west of San Joaquin Valley, Imperial Valley, plowed fields of Los Angeles and western San Bernardino counties, and along the central Colorado river valley.	No	Presumed absent. There is no suitable habitat on-site.
Chelonia mydas green sea turtle	Fed: CA:	THR None	Primarily use three types of habitat: beaches for nesting, open ocean convergence zones, and coastal areas for benthic feeding.	No	Low. There is suitable coastal habitat and this species has been recorded at Newport Beach, but sightings are typically offshore and brief. There is a known population of this species in the San Gabriel River in Long Beach, but this species has no known resident populations in Orange County.
Chondestes grammacus lark sparrow	Fed: CA:	None None	A common to fairly common resident in lowlands and foothills throughout much of California. Breeds only locally in southern deserts, but is somewhat more widespread in winter. Frequents sparse valley foothill hardwood, valley foothill hardwood-conifer, open mixed chaparral and similar brushy habitats, and grasslands with scattered trees or shrubs.	No	Presumed absent. There is no suitable habitat on-site.
Cicindela gabbii western tidal-flat tiger beetle	Fed: CA:	None None	Inhabits estuaries and mudflats along the coast of southern California.	No	Presumed absent. There is no suitable habitat on-site.
Cicindela hirticollis gravida sandy beach tiger beetle	Fed: CA:	None None	Found in moist sand near the ocean in coastal dune habitat.	No	Low. There is suitable habitat on the beach.
Cicindela latesignata latesignata western beach tiger beetle	Fed: CA:	None None	Inhabits estuaries and mudflats along the coast of southern California.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name	St	tatus	Habitat	Observed On-site	Potential to Occur
Cicindela tranquebarica viridissima greenest tiger beetle	Fed: CA:	None None	Usually found along the shores of rivers, lakes, ands estuaries. Found near running water where there is fine sand and can also be found in habitat containing mud flats and alkali areas.	No	Presumed absent. There is no suitable habitat on-site.
Circus cyaneus northern harrier	Fed: CA:	None CSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	Low. There is marginal habitat within the Buck Gully corridor.
Coccyzus americanus occidentalis western yellow-billed cuckoo	Fed: CA:	THR END	In California, the breeding distribution is now thought to be restricted to isolated sites in Sacramento, Amargosa, Kern, Santa Ana, and Colorado River valleys. Obligate riparian species with a primary habitat association of willow-cottonwood riparian forest.	No	Presumed absent. There is no suitable habitat on-site.
Coelus globosus globose dune beetle	Fed: CA:	None None	Inhabits foredunes and sand hammocks immediately bordering the coast.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Coturnicops noveboracensis yellow rail	Fed: CA:	None CSC	Breeds in grass and sedge dominated marshes and wetlands with shallow water depths. Preferred habitat provides a layer of vegetation where they can covertly move beneath.	No	<b>Presumed absent</b> . There is no suitable habitat on-site. The only confirmed record of this species in Orange County is from 1896.
Crotalus ruber red-diamond rattlesnake	Fed: CA:	None CSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	Presumed absent. There is no suitable habitat on-site.
Danaus plexippus monarch butterfly	Fed: CA:	None None	Occurs in open fields and meadows dominated by milkweed. In winter, species can be found on the coast of southern California in eucalyptus groves and at high altitudes in central Mexico.	No	Presumed absent. There is no suitable habitat.
Egretta thula snowy egret	Fed: CA:	None None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	Yes	Present. This species was detected during the habitat assessment.
Elanus leucurus white-tailed kite	Fed: CA:	None FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole.	No	Low. There is marginal habitat within the Buck Gully corridor. No suitable nesting habitat on- site
Empidonax traillii extimus southwestern willow flycatcher	Fed: CA:	END END	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name		Status	Habitat	Observed On-site	Potential to Occur
Emys marmorata western pond turtle	Fed: CA:	None CSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet (1,800 m).	No	Presumed absent. There is no suitable habitat on-site.
Eremophila alpestris actia California horned lark	Fed: CA:	None WL	Prefers riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods or smaller spring fed or boggy areas with willows or alders. Nests in hollow ground often next to grass tuft or clod of earth or manure.	No	Presumed absent. There is no suitable habitat on-site.
Eucyclogobius newberryi tidewater goby	Fed: CA:	END CSC	Inhabit the fresh-saltwater interface (brackish) where salinity is less than 10 to 12 parts per thousand. Typically found at the upper edges of tidal bays near the entrance of freshwater tributaries and in coastal lagoons. These areas provide relatively shallow, and still, but not stagnant, water.	No	Presumed absent. There is no suitable habitat on-site.
Eumops perotis californicus western mastiff bat	Fed: CA:	None CSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least three meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	Presumed absent. There is no suitable habitat on-site.
Euphydryas editha quino quino checkerspot butterfly	Fed: CA:	END None	Can be found in meadows and upland sage scrub/chaparral habitat. The larvae may either feed on dwarf plantain or exserted Indian paintbrush.	No	Presumed absent. There is no suitable habitat on-site.
Falco peregrinus anatum American peregrine falcon	Fed: CA:	Delisted Delisted/ <b>FP</b>	Very uncommon breeding resident, and uncommon as a migrant. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	No	Moderate. There is suitable foraging habitat throughout the project site, but no suitable nesting habitat on-site
Grus canadensis Canadensis lesser sandhill crane	Fed: CA:	None CSC	Use pastures, moist grasslands, alfalfa fields, and shallow wetlands for loafing sites. Roost sites are in a variety of wetlands habitats, where cranes spend the night standing in shallow water. Sites in California have included rainpooled agricultural fields, shallow freshwater lakes and ponds, alkaline lakes, and channels of shallow water.	No	Presumed absent. There is no suitable habitat on-site.
Icteria virens yellow-breasted chat	Fed: CA:	None CSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment.	No	Low. There is suitable habitat in the Buck Gully corridor, adjacent to the project site. No suitable habitat on-site.



Scientific Name		Y4 - 4	W. D. C.	Observed	Principle Comm
Common Name	2	Status	Habitat	On-site	Potential to Occur
Ixobrychus exilis least bittern	Fed: CA:	None CSC	In southern California, common summer resident at Salton Sea and Colorado River, in dense emergent wetlands near sources of freshwater, and in desert riparian (saltcedar scrub). Probably nests only in emergent wetlands.	No	Low. There is suitable habitat in the Buck Gully corridor, adjacent to the project site. No suitable habitat on-site. This species is well documented at the nearby San Joaquin Wildlife Sanctuary.
Lanius ludovicianus loggerhead shrike	Fed: CA:	None CSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats.	No	Presumed absent. There is no suitable habitat on-site.
Lasiurus cinereus hoary bat	Fed: CA:	None None	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees.	No	Presumed absent. There is no suitable habitat on-site.
Laterallus jamaicensis coturniculus California black rail	Fed: CA:	None THR/FP	Occurs in salt marshes, freshwater marshes, and wet meadows. Requires dense cover of upland vegetation to provide protection from predators.	No	Presumed absent. There is no suitable habitat on-site.
Numenius americanus long-billed curlew	Fed: CA:	None WL	Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats.	No	Moderate. There is suitable habitat on-site and this species has previously been documented at the adjacent Corona del Mar State Beach.
Nycticorax nycticorax black-crowned night heron	Fed: CA:	None None	Fairly common, yearlong resident in lowlands and foothills through most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and rarely, on kelp beds in marine subtidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands.	No	Low. There is suitable habitat in the Buck Gully corridor, adjacent to the project site. No suitable habitat on-site.
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: CA:	None CSC	Roosts primarily in crevices of rugged cliffs, high rocky outcrops and slopes. It has been found in a variety of plant associations, including desert shrub and pine-oak forests. The species may also roost in buildings, caves, and under roof tiles.	No	Presumed absent. There is no suitable habitat on-site.
Nyctinomops macrotis big free-tailed bat	Fed: CA:	None CSC	Prefers rugged, rocky terrain and canyons and often roosts in buildings, caves, and occasionally in holes in trees.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Pandion haliaetus osprey	Fed: CA:	None WL	Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. Uses large trees, snags, and dead-topped trees in open forest habitats for cover and nesting. Requires open, clear waters for foraging and uses rivers, lakes, reservoirs, bays, estuaries, and surf zones.	No	Low. This species is well documented at this location but was not observed during the habitat assessment. No suitable foraging or nesting habitat onsite.
Panoquina errans wandering (=saltmarsh) skipper	Fed: CA:	None None	Found in salt marsh, alkali meadow, and upland habitats.	No	Presumed absent. There is no suitable habitat on-site.
Passerculus sandwichensis beldingi Belding's savannah sparrow	Fed: CA:	None END	Found only in southern California salt marshes.	No	Presumed absent. There is no suitable habitat on-site. This subspecies is restricted to salt marshes and is well known from Upper Newport Bay and Bolsa Chica Ecological Reserve, both of which contain abundant pickleweed.



Scientific Name Common Name		Status	Habitat	Observed On-site	Potential to Occur
Pelecanus occidentalis californicus California brown pelican	Fed: CA:	Delisted Delisted/ <b>FP</b>	Found in estuarine, marine subtidal, and marine pelagic waters along the California coast.	Yes	Present. This species was observed sitting on rocks off the coast, outside of the limits of disturbance.
Perognathus longimembris pacificus Pacific pocket mouse	Fed: CA:	END CSC	Occurs on loose sandy soils that support sparse coastal sage scrub, grassland, and ruderal habitats.	No	Presumed absent. The only known extant population of this species in Orange County is at the Dana Point Headlands.
Phoebastria albatrus short-tailed albatross	Fed: CA:	END CSC	Nests in islands off Japan and spend most of their lives at sea.	No	<b>Presumed absent</b> . The last record for this species in Orange County was in 1898.
Phrynosoma blainvillii coast horned lizard	Fed: CA:	None CSC	Found in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	Presumed absent. There is no suitable habitat on-site.
<i>Picoides nuttallii</i> Nuttall's woodpecker	Fed: CA:	None None	Common resident of low-elevation riparian deciduous and oak habitats.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Polioptila californica californica coastal California gnatcatcher	Fed: CA:	THR CSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush. This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. It prefers habitat with more low-growing vegetation.	No	Presumed absent. There is no suitable habitat on-site.
Progne subis purple martin	Fed: CA:	None CSC	Summer resident in a variety of wooded, low-elevation habitats throughout the state. Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood.	No	Presumed absent. There is no suitable habitat on-site.
Pyrocephalus rubinus vermilion flycatcher	Fed: CA:	None CSC	Nesters inhabit cottonwood, willow, mesquite, and other vegetation in desert riparian habitat adjacent to irrigated fields, irrigations ditches, pastures and other open, mesic areas in isolated patched throughout central southern California.	No	Presumed absent. There is no suitable habitat on-site.
Rallus obsoletus (= Rallus longirostris levipes) Ridgway's rail (= light-footed clapper rail)	Fed: CA:	END END/FP	Occurs in coastal saline emergent wetlands along Southern California. Prefers emergent wetland dominated by pickleweed and cordgrass. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.	No	Presumed absent. There is no suitable habitat on-site.
Rana draytonii California red-legged frog	Fed: CA:	THR CSC	Inhabits quiet pools of streams, marshes, and occasionally ponds.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name	S	Status	Habitat	Observed On-site	Potential to Occur
<i>Riparia riparia</i> bank swallow	Fed: CA:	None <b>THR</b>	Most commonly found around natural bluffs or eroding streamside banks, human-made sites, such as sand and gravel quarries or road cuts. Live in low areas along rivers, streams, ocean coasts, or reservoirs with lowland vegetation types including riparian forests dominated by willows ( <i>Salix</i> ssp.) and Fremont cottonwood ( <i>Populus fremontii</i> ), irrigated pastures, and desert shrub habitats. Nesting occurs along vertical faces of banks and bluffs from sea level at the coastal sites to over 6,562 feet.	No	Presumed absent. There is no suitable habitat on-site.
Selasphorus sasin Allen's hummingbird	Fed: CA:	None None	Breeders are most common in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats, but also are common in closed-cone pine cypress, urban, and redwood habitats. Occurs in a variety of woodland and scrub habitats as a migrant.	Yes	Present. This species was detected on-site during the habitat assessment.
Setophaga petechia yellow warbler	Fed: CA:	None CSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	Low. There is suitable habitat in the Buck Gully corridor, adjacent to the project site. No suitable habitat on-site.
Sorex ornatus salicornicus southern California saltmarsh shrew	Fed: CA:	None CSC	Occur in coastal salt marshes in Orange, Los Angeles, and Ventura counties.	No	Presumed absent. There is no suitable habitat on-site.
Spea hammondii western spadefoot	Fed: CA:	None CSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	No	Presumed absent. There is no suitable habitat on-site.
Spinus lawrencei Lawrence's goldfinch	Fed: CA:	None None	Open woodlands, chaparral, and weedy fields. Closely associated with oaks.  Nests in open oak or other arid woodland and chaparral near water.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Spizella atrogularis black-chinned sparrow	Fed: CA:	None None	Breeds locally and uncommonly in foothills bordering Central Valley and commonly on arid mountain sloped of southern CA. Occurs mostly on sloping ground in mixed chaparral, chamise-redshank chaparral, sagebrush, and similar brushy habitats.	No	Presumed absent. There is no suitable habitat on-site.
Sternula antillarum browni California least tern	Fed: CA:	END END/FP	Prefers broad, level expanse of open sandy or gravelly beach, dredge spoil and other open shoreline areas, and broad river valley sandbars.	No	Low. There is marginal habitat and this species may fly by. This species is well documented at the nearby Upper Newport Bay, San Joaquin Wildlife Sanctuary, and San Diego Creek.
Taxidea taxus American badger	Fed: CA:	None CSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name	St	tatus	Habitat	Observed On-site	Potential to Occur
Tryonia imitator mimic tryonia (= California brackishwater snail)	Fed: CA:	None None	Found in coastal lagoons and areas where creek mouths join tidal marshes.	No	Moderate. There is suitable habitat in the Buck Gully corridor.
Vireo bellii pusillus least Bell's vireo	Fed: CA:	END END	Primarily occupy riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities.	No	Presumed absent. There is no suitable habitat on-site.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: CA:	None CSC	Nests in fresh emergent wetland with dense vegetation and deep water, often along borders of lakes or ponds. Forages in emergent wetland and most, open areas, especially cropland and muddy shoes of lacustrine habitat.	No	Presumed absent. There is no suitable habitat on-site.
Plant Species					
Abronia maritime red sand-verbena	Fed: CA: CNPS:	None None 4.2	Occurs on coastal dunes. Found at elevations ranging from 0 to 328 feet. Blooming period is from February to November.	No	Presumed absent. There is no suitable habitat on-site.
Abronia villosa var. aurita chaparral sand-verbena	Fed: CA: CNPS:	None None 1B.1	Found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	Presumed absent. There is no suitable habitat on-site and the project is outside of this species' known elevation range.
Aphanisma blitoides aphanisma	Fed: CA: CNPS:	None None 1B.2	Found on bluffs, coastal sage scrub, and coastal dunes in sandy soils. Found at elevations ranging from 3 to 1,001 feet. Blooming period is from March to June.	No	Presumed absent. There is no suitable habitat on-site.
Atriplex coulteri Coulter's saltbush	Fed: CA: CNPS:	None None 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Found at elevations ranging from 33 to 1,444 feet. Blooming period is from March to October.	No	Presumed absent. There is no suitable habitat.
Atriplex pacifica south coast saltscale	Fed: CA: CNPS:	None None 1B.2	Occurs on alkali soils in coastal scrub, coastal bluff, and playas. Found at elevations ranging from 3 to 1,640 feet. Blooming period is from March to October.	No	<b>Presumed absent</b> . There is no suitable habitat.
Atriplex parishii Parish's brittlescale	Fed: CA: CNPS:	None None 1B.1	Occurs in alkali meadows, vernal pools, chenopod scrub, and playas. Often associated with alkali flats with fine soils. Found at elevations ranging from 82 to 6,234 feet. Blooming period is from June to October.	No	<b>Presumed absent</b> . There is no suitable habitat.
Atriplex serenana var. davidsonii Davidson's saltscale	Fed: CA: CNPS:	None None 1B.2	Occurs in coastal bluff scrub and coastal scrub on alkaline soils. Found at elevations ranging from 33 to 656 feet. Blooming period is from April to October.	No	<b>Presumed absent</b> . There is no suitable habitat.
Calochortus catalinae Catalina mariposa-lily	Fed: CA: CNPS:	None None 4.2	Grows in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from February to June.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name	Sta	atus	Habitat	Observed On-site	Potential to Occur
Calochortus weedii var. intermedius intermediate mariposa lily	Fed: CA: CNPS:	None None 1B.2	Found in chaparral, coastal scrub, and valley and foothill grasslands in rocky or calcareous soils. Found at elevations ranging from 344 to 2,805 feet. Blooming period is from May to July.	No	Presumed absent. There is no suitable habitat on-site and the project is outside of this species' known elevation range.
Camissoniopsis lewisii Lewis's evening- primrose	Fed: CA: CNPS:	None None 3	Found in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland in sandy or clay soils. Found at elevations ranging from 0 to 984 feet. Blooming period is from March to June.	No	Presumed absent. There is no suitable habitat on-site.
Centromadia parryi ssp. australis southern tarplant	Fed: CA: CNPS:	None None 1B.1	Occurs in disturbed areas near coastal salt marshes, grasslands, vernal pools, and coastal sage scrub habitat. Found at elevations ranging from 0 to 1,575 feet. Blooming period is from May to November.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Chaenactis glabriuscula var. orcuttiana Orcutt's pincushion	Fed: CA: CNPS:	None None 1B.1	Occurs in sandy areas within coastal bluff scrub and coastal dunes. Found at elevations ranging from 10 to 328 feet. Blooming period is from January to August.	No	Presumed absent. There is no suitable habitat on-site.
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	Fed: CA: CNPS:	END END 1B.2	Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic. Found at elevations ranging from 0 to 99 feet. Blooming period is from May to October.	No	Presumed absent. There is no suitable habitat on-site.
Cistanthe maritima seaside cistanthe	Fed: CA: CNPS:	None None 4.2	Grows within sandy soils of coastal bluff scrub, coastal scrub, valley and foothill grassland. Found at elevations ranging from 16 to 984 feet. Blooming period is from February to August.	No	Presumed absent. There is no suitable habitat on-site.
Comarostaphylis diversifolia ssp. diversifolia summer holly	Fed: CA: CNPS:	None None 1B.2	Found in chaparral and cismontane woodland, often in mixed chaparral and sometimes in burned areas. Found at elevations ranging from 98 to 2,592 feet. Blooming period is from April to June.	No	Presumed absent. There is no suitable habitat on-site.
Deinandra paniculata paniculate tarplant	Fed: CA: CNPS:	None None 4.2	Occurs in coastal scrub, vernal pools, valley and foothill grassland habitats. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Dichondra occidentalis western dichondra	Fed: CA: CNPS:	None None 4.2	Grows within chaparral, cismontane woodland, coastal scrub, valley and foothill grassland habitats. Found at elevations ranging from 164 to 1,640 feet. Blooming period is from January to July.	No	Presumed absent. There is no suitable habitat on-site.
Dudleya multicaulis many-stemmed dudleya	Fed: CA: CNPS:	None None 1B.2	Often occurs on clay soils and around granitic outcrops in chaparral, coastal sage scrub, and grasslands. Found at elevations ranging from 0 to 2,592 feet. Blooming period is from April to July.	No	Presumed absent. There is no suitable habitat on-site. Previously occurred on the bluffs of Corona del Mar but has since been extirpated.
Dudleya stolonifera Laguna Beach dudleya	Fed: CA: CNPS:	THR THR 1B.1	Found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland in rocky soils. Found at elevations ranging from 33 to 853 feet.  Blooming period is from May to July.	No	Presumed absent. There is no suitable habitat on-site.
Eleocharis parvula small spikerush	Fed: CA: CNPS:	None None 4.3	Grows in marshes and swamps. Found at elevations ranging from 3 to 9,908 feet. Blooming period is from April to September.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name	St	atus	Habitat	Observed On-site	Potential to Occur
Eryngium aristulatum var. parishii San Diego button- celery	Fed: CA: CNPS:	END END 1B.1	Occurs in coastal scrub, valley and foothill grassland, and vernal pools in mesic soils. Found at elevations ranging from 66 to 2,034 feet. Blooming period is from April to June.	No	Presumed absent. There is no suitable habitat on-site.
Euphorbia misera cliff spurge	Fed: CA: CNPS:	None None 2B.2	Occurs in rocky areas within coastal bluff scrub, coastal scrub, and Mojavean desert scrub. Found at elevations ranging from 33 to 1,640 feet. Blooming period is from December to October.	No	Presumed absent. There is no suitable habitat on-site.
Helianthus nuttallii ssp. parishii Los Angeles sunflower	Fed: CA: CNPS:	None None 1A	Occurs in marshes, swamps, and on damp river banks. Found at elevations ranging from 16 to 5,495 feet. Blooming period is from August to October.	No	Presumed absent. There is no suitable habitat on-site. This species is presumed extirpated in California.
Hordeum intercedens vernal barley	Fed: CA: CNPS:	None None 3.2	Grows in coastal dunes, coastal scrub, vernal pools, valley and foothill grassland habitats. Grows at elevations ranging from 16 to 3,281 feet. Blooming period is from March to June.	No	Presumed absent. There is no suitable habitat on-site.
Horkelia cuneata var. puberula mesa horkelia	Fed: CA: CNPS:	None None 1B.1	Occurs on sandy or gravelly soils in chaparral, woodlands, and coastal scrub plant communities. Found at elevations ranging from 230 to 2,657 feet. Blooming period is from February to September.	No	Presumed absent. There is no suitable habitat on-site.
Isocoma menziesii var. decumbens decumbent goldenbush	Fed: CA: CNPS:	None None 1B.2	Occurs in coastal sage scrub and grassland habitat. Prefers clay soils to other closely related varieties. Found at elevations ranging from 33 to 443 feet. Blooming period is from April to November.	No	Presumed absent. There is no suitable habitat on-site. A historic record is known from where Corona del Mar drains to the Pacific Ocean, but this species was not observed during the habitat assessment and the on-site vegetation does not match its preferred habitat.
Juncus acutus ssp. leopoldii southwestern spiny rush	Fed: CA: CNPS:	None None 4.2	Habitats include coastal dunes, meadows and seeps, marshes and swamps. Found at elevations ranging from 10 to 2,953 feet. Blooming period is from March to June.	No	Presumed absent. There is no suitable habitat on-site.
Lasthenia glabrata ssp. coulteri Coulter's goldfields	Fed: CA: CNPS:	None None 1B.1	Usually alkaline soils in marshes, playas, vernal pools, and valley and foothill grassland. Found at elevations ranging from 3 to 3,397 feet. Blooming period is from February to June.	No	Presumed absent. There is no suitable habitat on-site.
Lycium californicum California box-thorn	Fed: CA: CNPS:	None None 4.2	Habitats include coastal bluff scrub and coastal scrub. Grows at elevations ranging from 16 to 492 feet. Blooming period is from December to August.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Malacothrix saxatilis var. saxatilis cliff malacothrix	Fed: CA: CNPS:	None None 4.2	Found in coastal scrub and coastal bluff scrub habitats. Found at elevations ranging from 10 to 656 feet. Blooming period is from March to September.	No	Presumed absent. There is no suitable habitat on-site.
Nama stenocarpum mud nama	Fed: CA: CNPS:	None None 2B.2	Grows on the muddy embankments of ponds and lakes. Also reported to utilize river embankments. Found at elevations ranging from 16 to 1,640 feet. Blooming period is from January to July.	No	Presumed absent. There is no suitable habitat on-site.
Nasturtium gambelii Gambel's water cress	Fed: CA: CNPS:	END THR 1B.1	Brackish marsh, freshwater marsh, swamps, and wetlands. Found at elevations ranging from 16 to 1,083 feet. Blooming period is from April to October.	No	Presumed absent. There is no suitable habitat on-site.



Scientific Name Common Name	St	tatus	Habitat	Observed On-site	Potential to Occur
Navarretia prostrata prostrate vernal pool navarretia	Fed: CA: CNPS:	None None 1B.1	Occurs in coastal sage scrub, valley and foothill grassland, and vernal pools, typically in mesic, alkaline sites. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from April to July.	No	Presumed absent. There is no suitable habitat on-site.
Nemacaulis denudata var. denudata coast woolly-heads	Fed: CA: CNPS:	None None 1B.2	Occurs in coastal dunes and sandy soils. Found at elevations ranging from 0 to 328 feet. Blooming period is from April to September.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Orcuttia californica California Orcutt grass	Fed: CA: CNPS:	END END 1B.1	Grows in vernal pools. Found at elevations ranging from 49 to 2,165 feet. Blooming period is from April to August.	No	<b>Presumed absent</b> . There is no suitable habitat on-site.
Pentachaeta aurea ssp. allenii Allen's pentachaeta	Fed: CA: CNPS:	None None 1B.1	Occurs in coastal scrub openings and valley and foothill grasslands. Found at elevations ranging from 225 to 1,560 feet. Blooming period is from March to June.	No	Presumed absent. There is no suitable habitat on-site.
Phacelia ramosissima var. austrolitoralis south coast branching phacelia	Fed: CA: CNPS:	None None 3.2	Found in chaparral, coastal dunes, coastal scrub, and coastal salt marshes and swamps in sandy or sometimes rocky soils. Found at elevations ranging from 16 to 984 feet. Blooming period is from March to August.	No	Presumed absent. There is no suitable habitat on-site.
Quercus dumosa Nuttall's scrub oak	Fed: CA: CNPS:	None None 1B.1	Found in closed-cone coniferous forest, chaparral, and coastal scrub, usually in sandy soils or clay loam near the coast. Found at elevations ranging from 49 to 1,312 feet. Blooming period is from February to August.	No	Presumed absent. There is no suitable habitat on-site.
Suaeda californica California seablite	Fed: CA: CNPS:	END None 1B.1	Found in coastal salt marshes and swamps. Found at elevations ranging from 0 to 49 feet. Blooming period is from July to October.	No	Presumed absent. There is no suitable habitat on-site.
Suaeda esteroa estuary seablite	Fed: CA: CNPS:	None None 1B.2	Occurs in coastal salt marshes and swamps. Found at elevations ranging from 0 to 16 feet. Blooming period is from May to January.	No	Presumed absent. There is no suitable habitat.
Suaeda taxifolia woolly seablite	Fed: CA: CNPS:	None None 4.2	Occurs within coastal bluff scrub, coastal dunes, marshes and swamps. Found at elevations ranging from 0 to 164 feet. Blooming period is from January to December.	Yes	Present. This species was observed on-site.
Symphyotrichum defoliatum San Bernardino aster	Fed: CA: CNPS:	None None 1B.2	Grows in grasslands and disturbed areas in the San Gabriel and San Bernardino Mountains and Peninsular Range. Occurs in vernally wet sites including ditches, streams, and springs in many plant communities. Grows in elevations ranging from 7 to 6,693 feet. Blooming period is from July to November.	No	Presumed absent. This species is extirpated from most of its historical habitat.
Verbesina dissita big-leaved crownbeard	Fed: CA: CNPS:	THR THR 1B.1	Found in chaparral and coastal scrub on steep, rocky, and primarily north-facing slopes within approximately 1.5 miles of the ocean. Typically in gravelly soils. Grows in elevation ranging from 148 to 673 feet. Blooming period is from April to July.	No	Presumed absent. There is no suitable habitat on-site.
Sensitive Habitats					



Scientific Name Common Name	Status	Habitat	Observed On-site	Potential to Occur
Southern Coast Live Oak Riparian Forest	CDFW Sensitive Habitat	Open to locally dense evergreen riparian woodlands dominated by coast live oak ( <i>Quercus agrifolia</i> ). This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. Bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. Canyons and valleys of coastal southern California.	No	Absent.
Southern Coastal Salt Marsh	CDFW Sensitive Habitat	Found in flat, protected waters usually within the protection of a barrier island, estuary, or along low-energy coastlines.	No	Absent.
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood ( <i>Populus</i> sp.) and willow ( <i>Salix</i> sp.) trees and shrubs. Considered to be an early successional stage as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	No	Absent.
Southern Dune Scrub	CDFW Sensitive Habitat	Dynamic habitats that are affected by wave action, tides, wind, and trampling. They develop where there is a substantial amount of blown, dry sand. Plants consist of mostly prostrate herbs with creeping stems and long fleshy taproots.	No	Absent.
Southern Foredunes	CDFW Sensitive Habitat	Important to Snowy plover and California least tern as nesting habitat. In addition to the sensitive species of birds, this habitat is home to rare species of beetles. Dominatnt plant species include sea rocket, saltgrass, ambrosia, and sand verbena.	No	Absent.
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Occurs below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows are also often present. Poison oak, mugwort, elderberry and wild raspberry may be present in understory.	No	Absent.
Valley Needlegrass Grassland	CDFW Sensitive Habitat	A mid-height (to 2 feet) grassland characterized by perennial tussock-forming grasses (primarily purple needlegrass [Nassella pulchra]). Native introduced annuals occur between perennials, often actually exceeding the bunchgrasses in cover. Usually found on fine-textured (often clay) soils, moist or even waterlogged during the winter, but very dry in the summer.	No	Absent.

## U.S. Fish and Wildlife Service (USFWS) - Federal

END- Federal Endangered THR- Federal Threatened

## California Department of Fish and Wildlife (CDFW) - California

END- California Endangered THR- California Threatened FP- Fully Protected

CSC- California Species of Concern

WL- Watch List

## California Native Plant Society (CNPS) California Rare Plant Rank

- 1A Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
- 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
- 2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3 Plants About Which More Information is Needed – A Review List
- 4 Plants of Limited Distribution A Watch List

#### Threat Ranks

- 0.1- Seriously Threatened in California
- 0.2- Moderately Threatened in California
- 0.3- Not Very Threatened in California



## **Attachment D**

Flora and Fauna Compendium

**Table D-1: Plant Species** 

PLANT SPECIES		
Scientific Name	Common Name	
Anemopsis californica	yerba mansa	
Apium graveolens*	celery	
Atriplex sp.	saltbush	
Baccharis pilularis	coyote brush	
Bolboschoenus maritimus	alkali bulrush	
Carpobrotus edulis*	Hottentot fig	
Encelia californica	bush sunflower	
Eriogonum fasciculatum	California buckwheat	
Frankenia salina	alkali heath	
Helminthotheca echioides*	bristly ox-tongue	
Isocoma menziesii var. sedoides	coastal goldenbush	
Melilotus albus*	white sweetclover	
Melilotus indicus*	yellow sweetclover	
Nasturtium officinale	watercress	
Ricinus communis*	castor bean	
Sonchus asper ssp. asper*	prickly sow thistle	
Suaeda taxifolia	woolly seablite	
<i>Typha</i> sp.	cattail	
Veronica anagallis-aquatica*	water speedwell	

<sup>\*</sup> non-native species



**Table D-2: Wildlife Species** 

WILDLIFE SPECIES				
Scientific Name	Common Name			
Aechmophorus occidentalis/clarkii	western/Clark's grebe			
Columba livia*	rock pigeon			
Corvus brachyrhynchos	American crow			
Egretta thula	snowy egret			
Haemorhous mexicanus	house finch			
Larus delawarensis	ring-billed gull			
Larus heermanni	Heermann's gull			
Larus occidentalis	western gull			
Melospiza melodia	song sparrow			
Mimus polyglottos	northern mockingbird			
Oreothlypis celata	orange-crowned warbler			
Pelecanus occidentalis californicus	California brown pelican			
Phalacrocorax auritus	double-crested cormorant			
Pipilo maculatus	spotted towhee			
Psaltriparus minimus	bushtit			
Selasphorus sasin	Allen's hummingbird			
Spinus psaltria	lesser goldfinch			
Stelgidopteryx serripennis	northern rough-winged swallow			
Sturnus vulgaris*	European starling			
Thryomanes bewickii	Bewick's wren			
Zenaida macroura	mourning dove			

<sup>\*</sup> non-native species

