

Bernardo Shores Project

Biological Technical Report

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SUMMARY (ABSTRACT)

This biological technical report was prepared to evaluate the approximately 10-acre Bernardo Shores Project (hereafter referred to as “Project” or “proposed Project”). Nearly all of the Project site is developed and contains the Bernardo Shores Recreational Vehicle (RV) Park located in the City of Imperial Beach, San Diego County, California. The property is comprised of two parcels, Assessor Parcel Numbers 626-010-1800 and 625-140-2000. The Project site is zoned CMU-1, with 43 dwelling units (DU) allowed per acre.

The proposed Project is comprised of two Phases. Phase I is a residential community with 193 DUs comprised of 115 3-story townhomes, 75 2-story townhomes, 3 single-family detached homes and related facilities within a total disturbance area of approximately 9.3 acres. Phase II is a potential bike path connection to the Bayshore Bikeway that is dependent upon the issuance of required environmental permits.

Eight vegetation communities or land cover types were mapped on site. Four upland communities or land cover types comprise the majority of the site, including non-native grassland, non-native vegetation, disturbed habitat, and developed land. Four sensitive wetland communities cover 0.36 acre of the site, including southern coastal salt marsh, coastal and valley freshwater marsh, saline meadow, and mudflat (saltpan).

A total of 0.36 acre of waters of the U.S. (WUS; U.S. Army Corps of Engineers [USACE] jurisdictional areas) is present on the Project site. The California Coastal Commission coastal wetlands present are the same as WUS (0.36 acre). Approximately 9 square feet (0.0002 acre) of freshwater marsh wetland waters of the state (California Department of Fish and Wildlife [CDFW] jurisdiction) are present on the Project site. No sensitive plant or animal species has been observed on site and none would be affected by the proposed Project.

The Phase I portion of proposed Project has been carefully designed to avoid all aquatic resources and would not result in direct impacts to any sensitive vegetation community. The proposed Project would only affect part of the developed portion of the site. The existing development comes to the edge of the intertidal salt marsh. Since the proposed Project has been pulled back from the adjacent wetlands to provide a 100-foot buffer, in compliance with California Coastal Commission requirements, it would result in a net creation of sensitive wetland communities and provide public access to the coastal zone.

The Phase II bike path would affect a total of 0.14 acre of wetland WUS and California Coastal Commission wetlands, comprised of 0.01 acre of southern coastal salt marsh, 0.08 acre of saline meadow, and 0.06 acre of mudflat.

As a result of the absence of direct, permanent impacts to sensitive biological resources or sensitive wetlands, no compensatory mitigation is required for Phase I. Compensatory mitigation would be required for the effects of Phase II on wetlands and is expected to be 0.56 acre of wetlands, comprised of 0.14 acre of on-site creation and 0.42 acre of on-site restoration and enhancement.

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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

A biological resources study was conducted for the proposed Bernardo Shores Project (hereafter referred to as “Project” or “proposed Project”) to provide the applicant, City of Imperial Beach (City), resource agencies, and the public with current biological data to satisfy review of the proposed Project under the California Environmental Quality Act (CEQA) and to demonstrate compliance with state, federal, and county regulations. This report describes the Project site’s current biological conditions, vegetation communities, and plant and wildlife species observed or detected during the surveys, and identifies those resources that are sensitive (Figures 1 through 9). It also identifies sensitive species with potential to occur within the Project site. In addition, Project impacts are assessed and mitigation is proposed to offset the proposed Project’s unavoidable significant impacts to sensitive biological resources.

1.2 PROJECT LOCATION AND DESCRIPTION

1.2.1 Project Location

The subject property is the approximately 10-acre, Bernardo Shores RV Park located at 500 Highway 75, City of Imperial Beach, County of San Diego (County), California. The Recreational Vehicle (RV) Park currently contains 124 recreational vehicle spaces. The property is comprised of two parcels, Assessor’s Parcel Numbers (APNs) 626-010-1800 and 625-140-2000 (Figure 3). The primary parcel (APN 625-140-2000) is bordered by State Route (SR-) 75 on the west, Pond 10A of the South San Diego Bay Unit of the San Diego Bay National Wildlife Refuge (NWR) on the north, commercial development on the south, and residential development on the east. A long, narrow pan-handle parcel (APN 626-010-1800) extends northward from the northeastern corner of the larger parcel and along the eastern edge of Pond 10A in the NWR (Figures 1 through 3).

Please note that the San Diego County Tax Assessor (SANDAG REDI 2013) reports the main parcel (APN 625-140-2000) to be 8.83 acres and the pan-handle parcel (APN 626-010-1800) to be 0.72 acre. As a result of more accurate Geographic Information System (GIS) and American Land Title Association (ALTA) surveys, APN 625-140-2000 is actually 9.31 acres and APN 626-010-1800 is 0.76 acre, and those are the areas reported herein.

The site is shown in Sections 19 and 20 of Township 18 South, Range 2 West on the U.S. Geological Survey (USGS) 7.5-minute Imperial Beach quadrangle map (Figure 2). More specifically, the site is located at 32°35’11.83” N latitude and 117°07’10.05” W longitude. The site is relatively flat and slopes gently from south to north with elevations between 6 feet above mean sea level (amsl) at the northern edge, adjacent to Pond 10A and 20 feet amsl in the southeastern corner of the site.

1.2.2 Project Description

Phase I is a residential community with 193 DUs comprised of 115 3-story townhomes, 75 2-story townhomes, and 3 single-family detached homes, as well as related facilities within a total disturbance area of 9.33 acres of the developed portion of the site. Phase I includes a 100-foot buffer zone that includes an outer 50 feet of wetland creation and transition and an inner 50 feet that would contain a public bike path, but no permanent structure. Phase II is within the pan-handle parcel and would provide a bike path connection to the Bayshore Bikeway. Phase II is dependent upon issuance of required permits.

While the Project is currently developed to the edge of Pond 10A and the NWR, the proposed Project has been designed to pull back from the wetlands along the northern edge of the site to allow a 100-foot buffer from existing jurisdictional wetlands and the San Diego Bay.

1.3 SURVEY METHODS

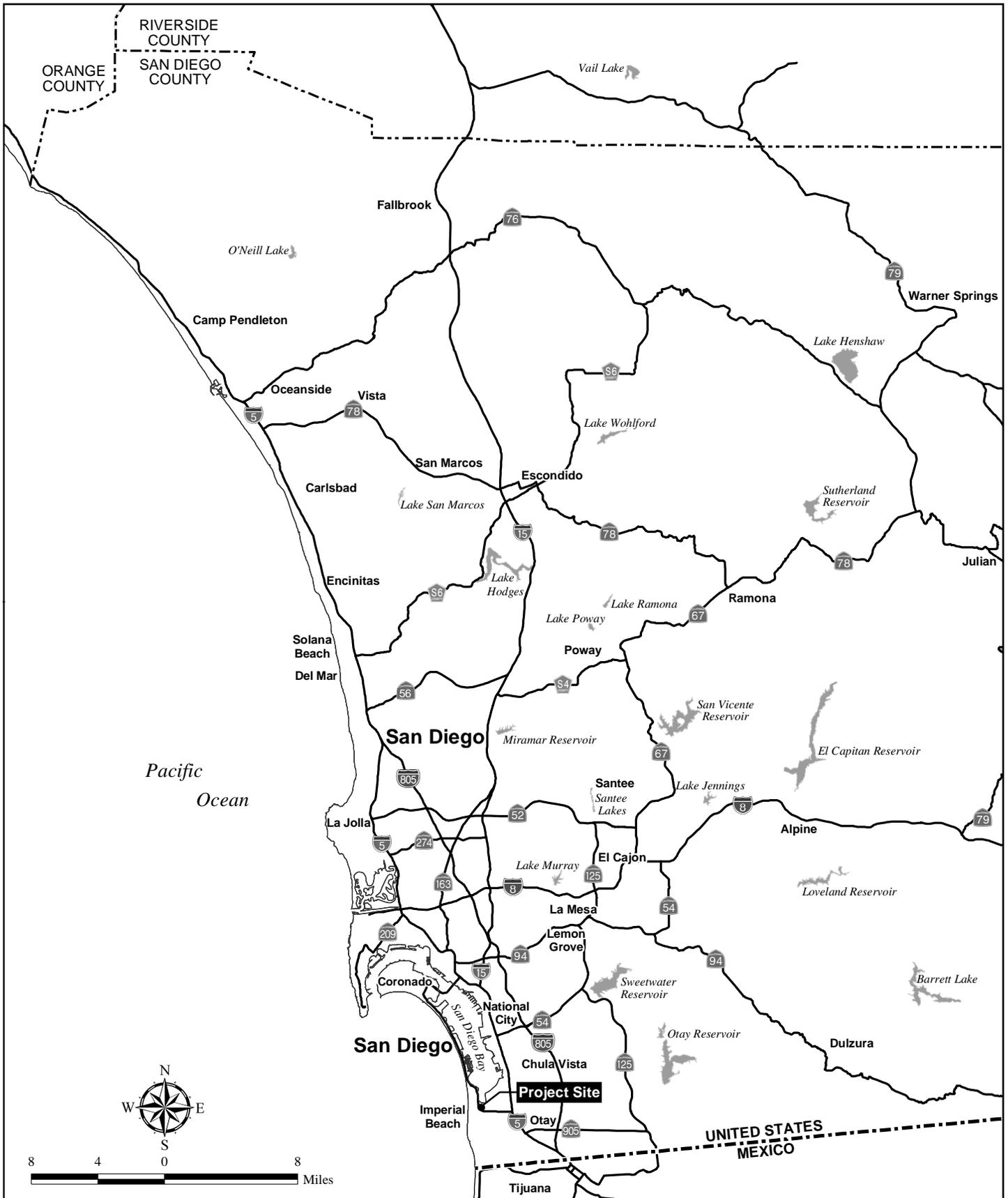
This report identifies vegetation communities and jurisdictional features on site and sensitive species with potential to occur within the Project site but that were not observed or detected during surveys, as well as sensitive species actually observed during focused species surveys. Surveys discussed in this report were conducted by HELIX Environmental Planning, Inc. (HELIX) in 2012 with additional visits made in 2013.

1.3.1 Literature Review

Prior to conducting biological field surveys, a search of the California Natural Diversity Database (CNDDDB) for information regarding sensitive species known to occur within the vicinity of the Project site was performed by HELIX in 2012, as well as a review of U.S. Fish and Wildlife (USFWS) databases. A search of the San Diego Plant Atlas (San Diego Natural History Museum [SDNHM] 2010) also was conducted.

1.3.2 Biological Surveys

General biological surveys of the Project site were conducted by HELIX on August 15 and 17, 2012. Vegetation was mapped on a 1"=100' scale aerial of the site. The entire site was surveyed on foot with the aid of binoculars and all detected plant and animal species were recorded. Animal identifications were made in the field directly by visual observation, or indirectly by detection of calls, burrows, tracks, or scat. All plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs. General biological data, including vegetation mapping and species inventories, have been updated opportunistically based on results of subsequent surveys. In addition to the general biological survey and vegetation mapping, HELIX conducted a jurisdictional delineation that clearly mapped the type and extent of all jurisdictional aquatic resources on the site (HELIX 2012).

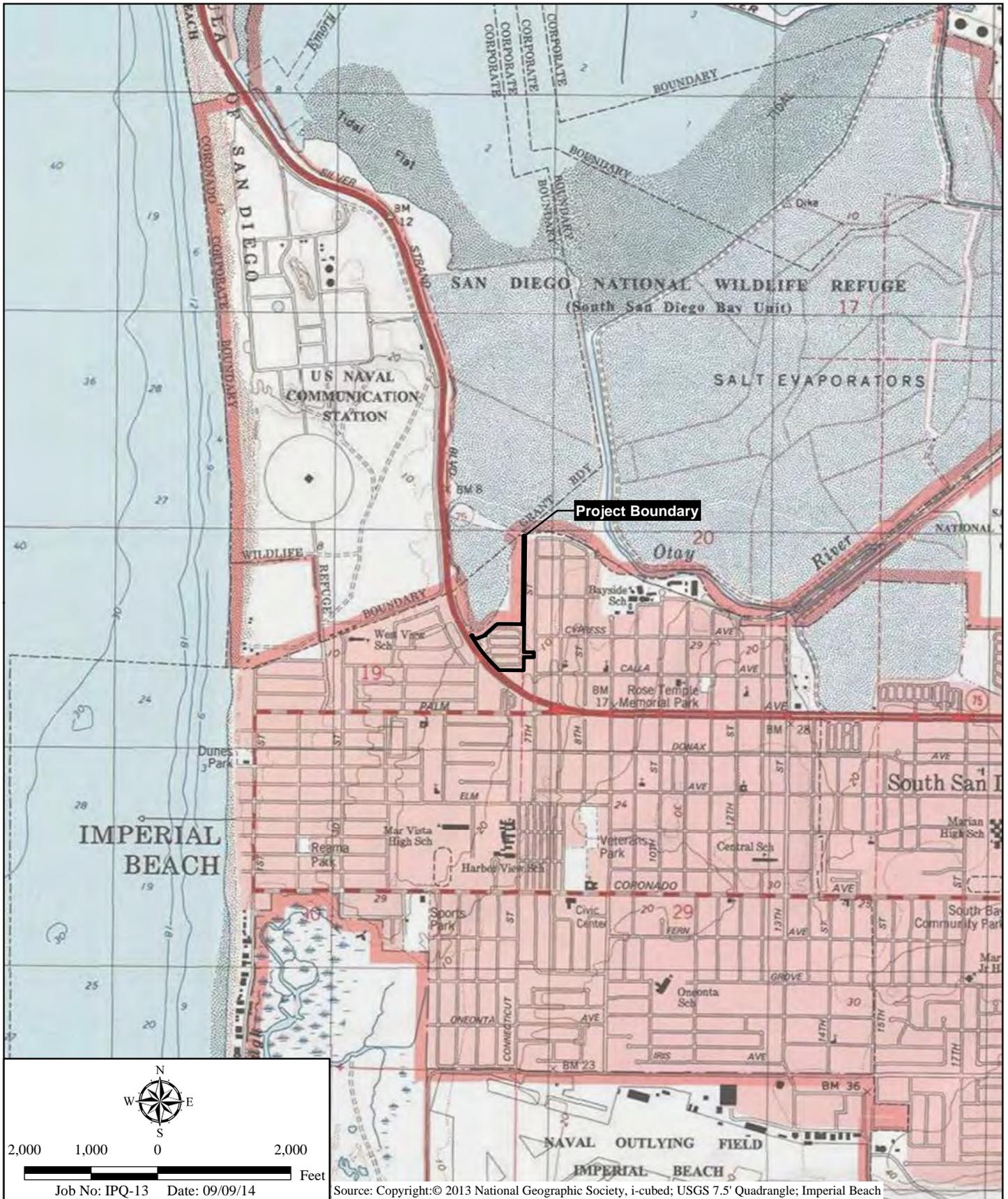


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Regional Location Map

BERNARDO SHORES

Figure 1



Source: Copyright: © 2013 National Geographic Society, i-cubed; USGS 7.5' Quadrangle; Imperial Beach

Project Location Map

BERNARDO SHORES

Figure 2



Aerial Photograph

BERNARDO SHORES

Figure 3



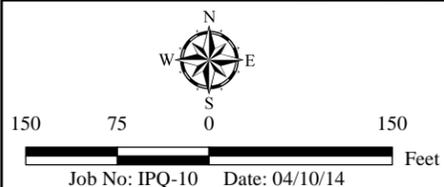
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Soils Map

BERNARDO SHORES

Figure 4

-  Project Boundary
 -  Sampling Plot
 - BSSP** Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*)
 - Vegetation***
 -  Coastal and Valley Freshwater Marsh (FWM) - <math><0.01</math> acre
 -  Southern Coastal Salt Marsh (SCSM) - 0.03 acre
 -  Saline Meadow - 0.21 acre
 -  Salt Pan - 0.12 acre
 -  Non-native Grassland - 0.19 acre
 -  Non-native Vegetation - 0.34 acre
 -  Disturbed Habitat - 0.02 acre
- * All other areas within project boundary are developed.



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Vegetation and Sensitive Resources

BERNARDO SHORES



Waters of the U.S.

BERNARDO SHORES

Figure 6



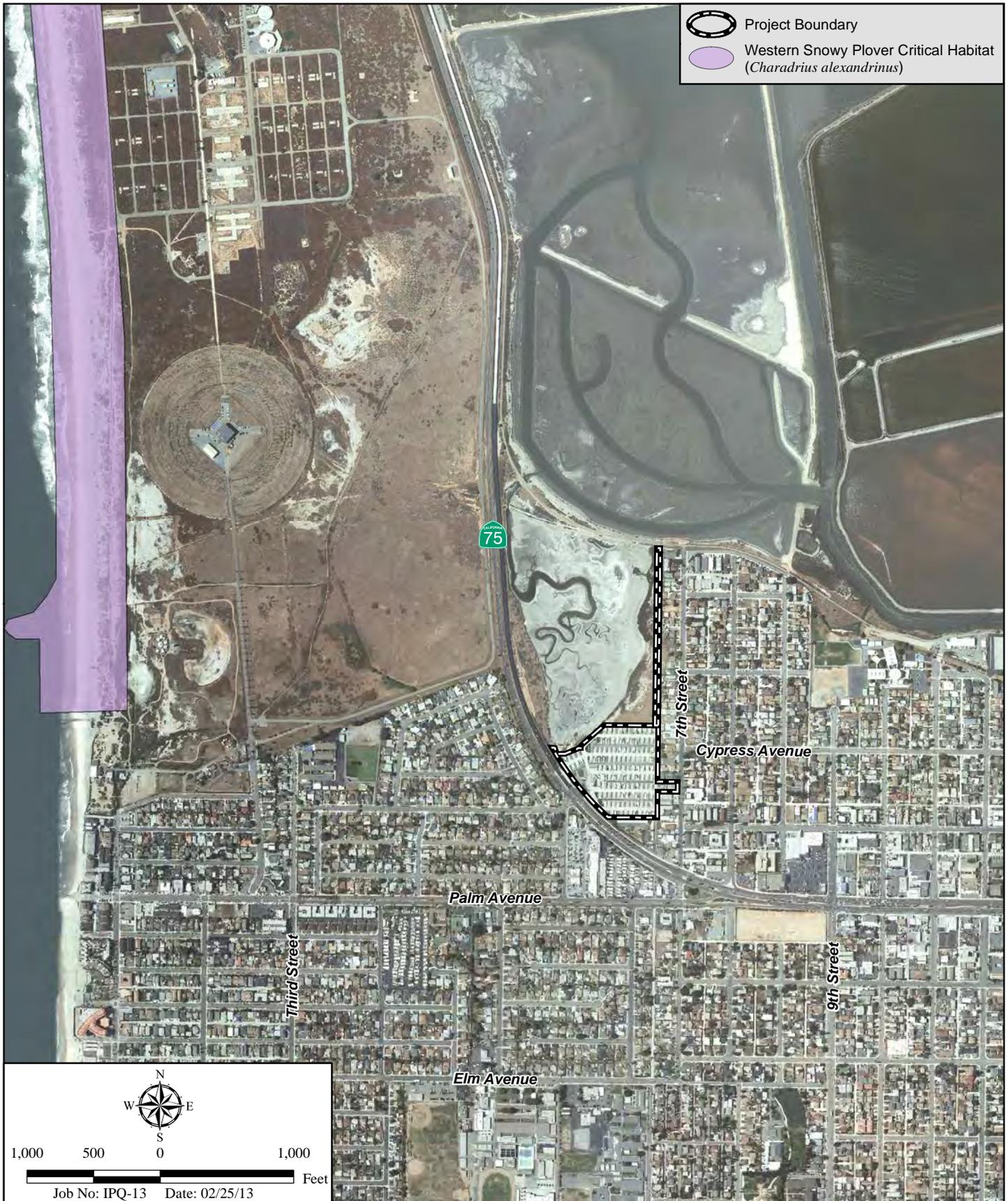
Waters of the State

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Coastal Wetlands

BERNARDO SHORES



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Critical Habitat

BERNARDO SHORES

1.3.3 Focused Species Surveys

Except for a narrow strip along the northern edge of the site and the 0.76-acre narrow strip parcel (APN 626-010-1800; Figures 1 through 3), the site is developed and contains ornamental landscaping. Accordingly, other than those two areas, the site contains no habitat suitable to support any listed plant or animal species.

1.3.4 Jurisdictional Delineation

A jurisdictional delineation was performed by HELIX in 2012. Prior to beginning fieldwork, aerial photographs (1"=100' scale), USGS topographic maps, and soil survey maps were reviewed to determine the location of potential jurisdictional areas that may be affected by the Project. The delineation was conducted to identify and map existing areas under U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344) and wetland and streambed habitats under California Department of Fish and Wildlife (CDFW) jurisdiction pursuant to Section 1600 of the California Fish and Game Code. This information is necessary to evaluate jurisdictional impacts and permit requirements associated with development of the property.

Waters of the U.S.

All areas with depressions, drainage channels, or wetland vegetation were evaluated for the presence of waters of the U.S. (WUS; USACE jurisdiction), including jurisdictional wetlands. The USACE wetlands were delineated pursuant to the Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). Areas were determined to be non-wetland WUS if there was evidence of regular surface flow (e.g., bed and bank) but the vegetation and/or soils criteria were not met.

Waters of the State

The jurisdictional boundaries of waters of the state (CDFW jurisdiction) were determined based on the presence of riparian vegetation or regular surface flow. Streambeds within CDFW jurisdiction were delineated based on the definition of streambed as “*a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation*” (Title 14, Section 1.72). The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream.

Coastal Wetlands

The jurisdictional boundaries of wetland habitats pursuant to Section 30121 of the California Coastal Act were determined based on the presence of hydric soils, hydrophytic vegetation, or surface water or saturated substrate in unvegetated areas adjacent to vegetated wetlands or deepwater habitats (HELIX 2012). Whereas the USACE uses a “three parameter” test (the presence of hydrophytic vegetation, wetland hydrology, and hydric soils) to identify WUS, the

Coastal Commission use a “single parameter” test (any one of the three) to identify areas under their jurisdiction.

1.3.5 Survey Limitations

All noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the lists of species identified are not necessarily comprehensive accounts of all species that occur on the site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed.

1.3.6 Nomenclature

Nomenclature used in this report comes from Holland (1986) and Oberbauer (2008) for vegetation; Hickman, ed. (1993) and Rebman and Simpson (2006) for plants; Glassberg (2001) for butterflies; Collins and Taggart (2006) for reptiles and amphibians; American Ornithologists’ Union (2010) for birds; and Baker et al. (2003) for mammals. Plant species status is taken from the California Native Plant Society (CNPS; 2013). Animal species status is from the CDFW (2011a, b).

1.4 ENVIRONMENTAL SETTING

Prior to the 1900s, San Diego Bay was a fertile, shallow flat-bottomed bay surrounded by extensive mudflats and salt marshes (USFWS 1999). In the southern end of the bay, much of the original salt marsh and intertidal mudflat habitat was diked to create solar evaporation ponds for the purpose of producing salt (USFWS NWR 2009a). While Pond 10A, located in the southwestern corner of San Diego Bay, is now part of the 3,940-acre San Diego Bay NWR, until the South San Diego Bay Unit was established on June 16, 1999, it was owned by the Western Salt Company and used as a solar salt evaporation pond for commercial salt extraction.

On July 13, 2004, the South San Diego Bay Unit was combined with the Sweetwater Marsh Unit and became the San Diego Bay NWR. The NWR protects a rich diversity of endangered, threatened, migratory, and native species and their habitats in the midst of a highly urbanized coastal environment. Nesting, foraging, and resting sites are managed for a diverse assembly of birds. Waterfowl and shorebirds over-winter or stop to feed and rest as they migrate along the Pacific Flyway. Restored wetlands are providing new, high quality habitat for fishes, birds, and coastal salt marsh plants. Quiet nesting areas, buffered from adjacent urbanization, ensure the reproductive success of the federally listed as threatened western snowy plover (*Charadrius alexandrinus nivosus*), federally and state listed endangered California least tern (*Sternula antillarum browni*), and an array of ground nesting seabirds and shorebirds (USFWS NWR 2009a).

Pond 10A is one of the three western salt ponds (10, 10A, and 11) that include approximately 223 acres of open water and 7 acres of associated levees (USFWS NWR 2009a). The NWR is currently implementing their Western Salt Ponds Restoration Project known as *Alternative 1A, Option 1 – Restoration of Intertidal Habitat using Material Imported from the Chula Vista Wildlife Reserve while Retaining Existing Culverts between Ponds 10 and 10A* (USFWS NWR 2009a and b). A new tide gate has been constructed on the west side of Pond 12, to the east of the Otay River

channel and sediment is being redistributed within the ponds to achieve elevations suitable for supporting the desired native coastal wetlands. That project is restoring approximately 36.5 acres within Pond 10A, comprised of 9.5 acres of shallow subtidal habitat, 3.7 acres of intertidal mudflats, 1.2 acres of low salt marsh habitat (cordgrass salt marsh), 2.5 acres of mid salt marsh habitat, and 6.8 acres of high salt marsh habitat (USFWS NWR 2009a).

The diurnal difference in the high mean higher high water (MHHW) and low mean lower low water (MLLW) tides in the Bay is 5.6 feet, with extremes of 9.8 feet (U.S. Department of Navy, Southwest Division 2000). The highest tides, known as king (or spring) tides, occur in January and June. Water levels in the Bay are also affected by storm surge, El Niño-Southern Oscillation events, and long-term eustatic changes. Pond 10A functions as mudflat habitat because the water level in this primary pond is often so low that the muddy bottom of the pond is exposed and utilized for foraging and roosting by a number of shorebirds (USFW 2006). Pond 10A provides foraging and roosting habitat for a variety of shorebirds and other waterbirds, particularly when water levels are low.

Pond 10A and the other western salt ponds (10A and 11) are known to have the lowest salinities of all of the salt ponds in the NWR (USFWS 2006, USFWS NWR 2009a). Pond 10A is also prone to generating strong odors when a combination of warm, shallow water, and increased nutrient concentrations result in algal blooms and low nocturnal dissolved oxygen levels (USFWS NWR 2009a).

Anecdotal evidence indicates that under existing conditions the properties located adjacent to Pond 10A, as well as existing storm drains in the area, can experience tidal inundation during very high tides (USFWS NWR 2009a). As a result, the NWR performed hydraulic modeling to determine if the new hydraulic connections within the salt ponds would exacerbate the potential for tidal flooding in the vicinity of the ponds. That analysis determined that there was no difference in water levels in the western ponds under existing conditions and those following the restoration project. Therefore, the NWR concluded that the restoration projects would have no effect on the level or rate of tidal flooding within the adjacent neighborhood (USFWS NWR 2009a). The project included a proposal to construct a 1.5- to 2-foot-high berm along the eastern edge of Pond 10A to contain tidal waters generated during these very high tides to protect residences there. Additional analyses and modeling indicated that the flood-protection berm was not needed and it has been abandoned (Brian Collins, NWR Manager, pers. com. 2013).

The City of Imperial Beach maintains 2 outlets that affect the water within Pond 10A, including a 24-inch reinforced concrete pipe that empties into Pond 10A just beyond the northwestern corner of the Project site, after crossing under SR-75 from 5th Street. There is also a small storm drain outlet that empties into Pond 10A from 7th Street between Boulevard Avenue and Basswood Avenue (USFWS NWR 2009a).

Land uses in the surrounding area include residential development to the south, east, and west, with NWR to the north, which contains wetlands that support several state and federally listed species. The City of Coronado adjoins the northern boundary of the site. The property is constrained by the wetland communities and NWR along its northern border and in the pan-handle portion of the site.

Soils information was taken from Bowman (1973). Two categories are mapped within study area on the soils maps (Figure 4): Huerhuero-urban complex (2 to 9 percent slopes), and lagoon water (Figure 4). Bowman (1973) provides the following description for Huerhuero-urban complex: this complex occurs on marine terraces, at elevations that range from sea level to 400 feet. The topography of the Project site has been altered through cut and fill operations and leveling for building sites. Before cut and fill operations and leveling, the slope was 2 to 9 percent. The material exposed in the cuts consists of unconsolidated sandy marine sediments. The material in the fills is a mixture of loam and clay loam and sandy marine sediments.

1.4.1 Regional Context

While most of the site is developed and contains no habitat suitable to support sensitive plants or animals, the northern edge is adjacent to Pond 10A that is part of the South Bay Unit of the San Diego NWR. Habitats within the NWR are important foraging and resting areas for listed species and migratory birds along the Pacific Flyway.

The proposed Project area is west of the City of San Diego's Multiple Species Conservation Plan (MSCP) Subarea Multiple Habitat Preservation Area (MHPA), and would have no effect on it.

1.4.2 Vegetation Communities and Land Cover

At the time of HELIX's site surveys on August 15 and 17, 2012, the site was developed with roads and pads for mobile homes and recreational vehicles (Figures 3 and 5). There is a small area between the northern property boundary and the adjacent NWR that contains some wetlands (Figure 5). The pan-handle also contains wetland communities (Figures 3 and 5).

The developed portion of the site is 9.3 acres. It contains only ornamental landscaping, and no native vegetation (Figure 5).

No sensitive or listed plant or animal species were found on the site. The developed portion of the site does not contain suitable habitat to support any listed plant or animal species.

Raptors (birds of prey such as falcons, hawks and owls) and all migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA; 16 USC Section 702 et seq.). If raptors are present on or immediately adjacent to a project site, they are protected under the federal MBTA. There are no trees present that are suitable for nesting raptors on site or near the property borders, and pre-construction surveys for raptors should not be required prior to construction activities.

Eight vegetation communities or land cover types were mapped on site (Table 1). Four upland communities or land cover types comprise the majority of the site, including non-native grassland, non-native vegetation, disturbed habitat, and developed land. Sensitive habitat is defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the CEQA Guidelines. Sensitive vegetation communities on site include southern coastal salt marsh, saline meadow, mudflat (saltpan), and coastal and valley freshwater marsh.

Table 1 EXISTING VEGETATION COMMUNITIES/ LAND COVER TYPES ON SITE	
VEGETATION COMMUNITY*	ACRE(S)**
Wetlands	
Southern coastal salt marsh (52120)	0.05
Coastal and valley freshwater marsh (52400)	<0.01
Saline meadow (--)	0.18
Mudflat (Saltpan) (13300)	0.15
Subtotal	0.38
Uplands	
Non-native Grassland (42200)	0.2
Non-native Vegetation (11000)	0.2
Disturbed Habitat (11300)	0.02
Developed (12000)	9.3
Subtotal	9.68
TOTAL	10.06

* Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

** Upland habitats are rounded to the nearest 0.1 acre, while wetland habitats are rounded to the nearest 0.01; thus, totals reflect rounding.

Southern Coastal Salt Marsh

Southern coastal salt marsh occurs in bays and estuaries along the California coast south of Point Conception. Dominant species include saltgrass (*Distichlis spicata*), spiny rush (*Juncus acutus*), pickleweeds (*Salicornia* spp.), and fleshy jaumea (*Jaumea carnosa*; Oberbauer 2008). Within the property, this community is dominated by pickleweed and covers approximately 0.05 acre, including one small patch near the northwestern border of the site and another at the northern portion of the pan-handle portion (Table 1; Figures 5, 7, and 8).

Coastal and Valley Freshwater Marsh

Coastal and valley freshwater marsh is predominated by perennial, emergent monocots, which reach a height of 12 to 15 feet, often forming completely closed canopies. This vegetation community occurs along the coast and in coastal valleys near river mouths and around margins of lakes and springs. These areas are permanently flooded by fresh water yet lack significant current. Species within the Project area include cattails (*Typha* sp.), American tule (*Schoenoplectus americanus*), rushes (*Juncus* spp.), and umbrella sedge (*Cyperus* sp.). A very small area, approximately 9 square feet, or 0.0003 acre, of freshwater marsh occurs on site. It is located at the end of a 24-inch reinforced concrete pipe that discharges storm water into Pond 10A after crossing under SR-75 from 5th Street, north of the recreational vehicle park and near the westernmost point of the property. That culvert conveys off-site flows (Table 1; Figures 5 and 8).

Saline Meadow

The interaction of the salt water, fill soils, and disturbance associated with urbanization have created wetland areas within the property that defy categorization by the County's most recent habitat-based vegetation classification system (Oberbauer 2008). These areas are predominated by wetland grasses and occur between the bay and the adjacent development. The crosswalk in the Manual of California Vegetation (Sawyer and Keeler-Wolf 2009), a floristic based classification system, suggests alkali meadow for this habitat based on the statewide habitat based vegetation classification system (Holland 1986). That name has been modified here to reflect the saline influence at this location. Common species in this habitat include saltgrass, Italian ryegrass (*Festuca perennis*), and barbgrass (*Hainardia cylindrical*). Approximately 0.18 acre of saline meadow occurs within the property along the northwestern border of the site and in the pan-handle portion (Table 1; Figures 5 and 8).

Mudflat (Saltpan)

Salt pans are expanses of ground covered in salt or other minerals formed from evaporated water (Oberbauer 2008). In Section 404, lexicon salt pans are referred to as mudflats, which are listed by the U.S. Environmental Protection Agency (EPA) as a special aquatic site. Approximately 0.15 acre of mudflat (saltpan) occurs within the property, including one small patch in the northwestern border of the site and another at the northern portion of the pan-handle portion (Table 1; Figures 5 and 8).

Non-native Grassland

Non-native grassland is a dense to sparse cover of annual grasses, often associated with native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Most of the introduced annual species that comprise non-native grassland originated from the Mediterranean region of Europe, an area with a climate similar to that in California and a long history of agriculture. These two factors have contributed to the successful invasion and establishment of these species and the replacement of native grasslands by annual-dominated non-native grassland (Jackson 1985).

This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species include oats (*Avena* sp.), red brome (*Bromus rubens*), ripgut grass (*B. diandrus*), ryegrass (*Lolium* sp.), and mustard (*Brassica* sp.). A total of 0.2 acre of non-native grassland is present in the southern portion of pan-handle (Table 1; Figure 5).

Since the area of non-native grassland is so small (0.20 acre) and comprised of scattered small patches in the southern portion of the pan-handle that are adjacent to houses on the east and Pond 10A on the west, it is not considered to be sensitive.

Non-native Vegetation

Non-native vegetation is typically predominated by a few naturalized ornamental or invasive species. Similar vegetation types include disturbed habitat and developed land. Non-native

vegetation areas are distinct from vegetated disturbed habitat in that the soil substrate has not necessarily been heavily disturbed, and the species assemblage does not include large numbers of annual, ruderal forbs. Developed land can be vegetated, but it is maintained and usually irrigated.

In the project area, places mapped as non-native vegetation are mostly dominated by hottentot-fig (*Carpobrotus edulis*) and baby sun rose (*Aptenia cordifolia*). Non-native vegetation covers approximately 0.16 acre of the property along the northern border of the site and in the pan-handle portion (Table 1; Figure 5).

Disturbed Habitat

Disturbed habitat includes land cleared of vegetation (e.g., dirt roads), land containing a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage that removes any capability of providing viable habitat. Disturbed habitat covers approximately 0.02 acre in the central portion of the pan-handle (Table 1; Figure 5).

Developed Land

Developed land is where permanent structures have been built, the surface is paved or maintained as hardscape, or landscaping is irrigated or maintained. Developed land independently supports no native or naturalized vegetation. Developed land includes the 9.3-acre existing trailer park and 2 incursions into the panhandle by homeowners on 7th Street (Table 1, Figure 5). The developed portion contains trailer pads, roads, and ornamental, maintained landscaping, and has no potential to support sensitive plants or animals (Figure 5).

1.4.3 Flora

Only 0.36 acre of habitat is present on the 10.06-acre Project site. The vast majority of the site (92 percent, 9.3 of 10.06 acres) is developed and does not contain any sensitive plant species.

Within the narrow band of habitat along the northern edge of the Project site and the pan-handle portion, HELIX observed a total of 9 plant species during surveys, of which 4 (44 percent) are non-native species (Table 2).

Table 2 PLANT SPECIES OBSERVED	
SCIENTIFIC NAME	COMMON NAME
<i>Atriplex semibaccata</i> *	Australian saltbush
<i>Bromus diandrus</i> *	ripgut grass
<i>Cressa truxillensis</i>	alkali weed
<i>Chenopodium murale</i>	pigweed
<i>Festuca perennis</i> *	Italian ryegrass
<i>Salsola tragus</i> *	tumbleweed
<i>Aptenia cordifolia</i>	baby sun rose
<i>Salicornia pacifica</i>	Pickleweed
<i>Frankenia salina</i>	alkali heath

* Non-native species

1.4.4 Fauna

The vast majority of the site (92 percent) is developed and does not contain any habitat suitable to support any sensitive animal species.

The NWR in the south end of San Diego Bay provides a variety of habitats that support tens of thousands of migratory birds that annually travel along the Pacific Flyway. Some birds, such as red-necked phalarope (*Phalaropus lobatus*), stop over to forage and rest within salt ponds while migrating along the Pacific Flyway. Other species, such as black brant (*Branta bernicla nigricans*) and eared grebes (*Podiceps nigricollis*) are winter visitors. During the summer months, the area supports a variety of seabirds. South San Diego Bay also supports a number of year-round residents (USFWS NWR 2009a).

Four federally listed as endangered species, including California least tern, light-footed clapper rail (*Rallus longirostris levipes*), California brown pelican (*Pelecanus occidentalis californicus*), and the endangered plant salt marsh bird's-beak (*Cordylanthus maritimus maritimus*) occur within the NWR. Two federally listed threatened species, including western snowy plover and eastern pacific green turtle (*Chelonia mydas*), are also present in the NWR. The California least tern, light-footed clapper rail, and California brown pelican are also listed as endangered by the state of California. The Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), state listed as endangered, also occurs in the NWR. Three Belding's savannah sparrows were observed in the NWR along the eastern edge of Pond 10A during a March 14, 2013, site visit with the USFWS and the NWR staff (Figure5). However, no sensitive or listed animal species have been observed on the Project site.

1.4.5 Sensitive Plant Species

Sensitive species are those considered unusual or limited in that they are: (1) only found in the San Diego region; (2) a local representative of a species or association of species not otherwise found in the region; or (3) severely depleted within their ranges or within the region. No sensitive plant species has been detected on site.

Sensitive plant species with potential to occur on site are included in Appendix A (alphabetically by scientific name). Refer to Appendix C for an explanation of status codes. Sensitive plant species reported by the CNDDDB in the project vicinity include: Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), beach golden aster (*Dudleya blochmaniae* ssp. *blochmaniae*), Blochman's dudleya (*Heterotheca sessiliflora* ssp. *sessiliflora*), coast woolly-heads (*Nemacaulis denudata* var. *denudata*), and estuary seablite (*Suaeda esteroa*; Appendix A). Of those 5 species of sensitive plants with a potential to occur on site, only estuary seablite has a moderate potential in the pan-handle portion of the site. None of the plant species listed in Appendix A has a high potential to occur on site.

1.4.6 Sensitive Wildlife Species

Sensitive animal species with potential to occur on site are included in Appendix B. Sensitive animal species reported by the CNDDDB in the project vicinity include 2 invertebrates (western tidal-flat tiger beetle [*Cicindela gabbii*] and western beach tiger beetle [*Cicindela latesignata latesignata*]), 3 birds (western snowy plover [*Charadrius alexandrinus nivosus*], Belding's savannah sparrow [*Passerculus sandwichensis beldingi*], and light-footed clapper rail [*Rallus longirostris levipes*]), and 1 mammal (Mexican long-tongued bat [*Choeronycteris Mexicana*]; Appendix B).

All of those sensitive animals have a low potential to occur on the Phase I portion of Project site and none would be affected because it will only affect the developed portion of the site. Belding's savannah sparrow was observed near the pan-handle parcel (Figure 5) but would not be directly affected by the proposed Phase II portion of the Project.

1.4.7 Wetlands/Jurisdictional Waters

The WUS in the study area include 0.36 acre of special aquatic sites comprised of southern coastal salt marsh, coastal and valley freshwater marsh, and saline meadow, as well as mudflats (Table 3; Figure 6). The total length of federal jurisdictional habitats is 1,455 linear feet. The length was determined by measuring along the longest axis of each jurisdictional polygon.

HABITAT	AREA (acres)	LENGTH[‡] (feet)
Wetlands		
Southern coastal salt marsh	0.03	305
Coastal and valley freshwater marsh	<0.01	4
Saline meadow	0.21	664
Mudflats (saltpan)	0.12	482
TOTAL	0.36	1,455

[‡]Lengths assigned to habitat measured along the longest axis of each polygon.

Waters of the state (CDFW jurisdictional areas) present on the site are limited to approximately 9 square feet, or less than 0.01 acre (0.0003 acre) of coastal and valley freshwater marsh (Table 4; Figure 7). The total length of this habitat is 4 linear feet.

Table 4 EXISTING WATERS OF THE STATE		
HABITAT	AREA (acres)	LENGTH (feet)
Coastal and valley freshwater marsh	<0.01	4
TOTAL	<0.01	4

Coastal Wetlands

California Coastal Commission coastal wetlands on the property include southern coastal salt marsh, coastal and valley freshwater marsh, saline meadow, and saltpan for a total of 0.36 acre (Table 5; Figure 8). The total length of coastal wetland habitats is 1,455 linear feet.

Table 5 EXISTING CALIFORNIA COASTAL WETLANDS		
HABITAT	AREA (acres)	LENGTH[‡] (feet)
Southern coastal salt marsh	0.03	305
Coastal and valley freshwater marsh	<0.01	4
Saline meadow	0.21	664
Saltpan	0.12	482
TOTAL	0.36	1,455

[‡]Lengths assigned to habitat measured along the longest axis of each polygon.

1.4.8 Habitat Connectivity and Wildlife Corridors

There are 2 types of wildlife corridors: local and regional. Local corridors provide animals with access to resources such as food, water, and shelter. Animals can use these corridors to travel from riparian to upland habitats and back. Regional corridors allow for animal movement between large core areas of habitat that are regionally important. They include major creeks and rivers, ridges, valleys, and large swaths of undeveloped land.

The project area represents a portion of the interface between dense urban development and managed tidal lands along the southern edge of the San Diego Bay. The Project site does not function as a regional wildlife corridor. The Project site is surrounded by development on three sides and the NWR on the north; therefore, any connectivity the site would provide to wildlife

movement is minimal. The Project site does not contain biological resources that are critical for sensitive species and therefore does not comprise a substantial wildlife movement corridor.

1.5 APPLICABLE REGULATIONS

Biological resources within the Project site are subject to regulatory review by the federal government, state of California, and County. The federal government administers non-marine plant- and wildlife-related issues through the USFWS, while the USACE administers WUS (including wetland and non-wetland) issues. California law relating to wetland, water-related, and wildlife issues is administered by CDFW. The City of Imperial Beach is the lead agency for the CEQA environmental review process in accordance with state law and local ordinances.

Coordination efforts for the proposed Project included pre-application meetings with Community Development and Planning staff on July 31, 2012 and March 28, 2013. A site visit with the USFWS Ecological Services and NWR staff was conducted on March 14, 2013.

Laws and regulations that apply include federal Endangered Species Act (ESA), CWA, CEQA, and California Fish and Game Code. Under CEQA, impacts associated with a proposed project or program are assessed with regard to significance criteria determined by the CEQA lead agency (in this case, the City) and pursuant to CEQA and State CEQA Guidelines.

1.5.1 Federal Government

Administered by the USFWS, the federal ESA provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a ‘take’ under the ESA. Section 9(a) of the ESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” and “harass” are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

The USFWS identifies critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the federal ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat. None of the Project site is located within designated critical habitat (Figure 9) and the Project would therefore not impact critical habitat.

Sections 7 and 10(a) of the federal ESA regulate actions that could jeopardize endangered or threatened species. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major construction activity if it may affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species

issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species' use of the site and impacts to USACE jurisdictional areas. Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP). The term "incidental" applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the taking would be minimized and how steps taken would ensure the species' survival must be submitted for issuance of Section 10(a) permits. A Section 7 or 10(a) permit would not be required for the proposed Project, as no federally listed species or critical habitat occur on site.

All migratory bird species that are native to the United States or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to July 30). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. The site does not contain trees suitable to support raptor nests.

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all WUS. Permitting for projects filling WUS (including wetlands) is overseen by the USACE under Section 404 of the CWA. Projects can be permitted on an individual basis or be covered under one of several approved Nationwide Permits. Individual Permits are assessed individually based on the type of action, amount of fill, etc. and typically require substantial time (often longer than 6 months) to review and approve, while Nationwide Permits are pre-approved if a project meets appropriate conditions.

1.5.2 State of California

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations. The City of Imperial Beach is the lead agency under CEQA and determined that the Project will be processed through CEQA as a Mitigated Negative Declaration.

The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. California ESA Section 2081 authorizes the CDFW to enter into a memorandum of agreement for the take of listed species for scientific, educational, or management purposes.

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in listed plants. The California ESA follows the NPPA and covers both plants and animals designated as endangered

or threatened with extinction. Plants listed as rare under NPPA were also designated rare under the California ESA.

The California Fish and Game Code (Sections 1600 through 1603) requires a CDFW agreement for projects affecting riparian and wetland habitats through issuance of a Streambed Alteration Agreement (SAA).

A federal CWA Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) is required for every federal permit action that may result in a discharge into any WUS. A 404 Permit must have RWQCB certification that the proposed activity will not violate federal and state water quality standards. The RWQCB reviews the request for certification and may recommend either certification or denial of certification to the State Board Executive Director. In addition, the RWQCB also regulates discharges to waters of the state under authority of the Porter-Cologne Water Quality Act and, in certain cases, requires an Application/Report of Waste Discharge (ROWD).

A Coastal Development Permit (CDP) and a Coastal Zone Consistency Determination of concurrence with the City of Imperial Beach's Local Coastal Plan (LCP) and the California Coastal Act is required for projects that could affect California Coastal Commission jurisdictional wetlands.

2.0 PROJECT EFFECTS

Direct impacts are immediate impacts resulting from permanent habitat removal. Direct impacts were quantified by overlaying the limits of all project-related impacts on the biological resources map of the site. Indirect impacts are all actions that are not direct removal of habitat, but affect the surrounding biological resources either as a secondary effect of the direct impacts or as the cause of degradation of a biological resource over time. Projects can have a wide variety of indirect impacts, depending on the nature of the project, such as edge effects, animal behavioral changes, and errant construction. Cumulative impacts are those caused by numerous projects in the region and their additive effect of multiple direct and indirect impacts to biological resources over time.

2.1 SPECIAL STATUS PLANT SPECIES

The potential for sensitive plant species to occur on site is included in Appendix A. An explanation of status codes is provided in Appendix C. As previously stated, no sensitive plant species were observed on site during surveys.

2.2 SPECIAL STATUS ANIMAL SPECIES

No sensitive animal species were observed on site during surveys and none would be affected by the proposed Project. The potential for sensitive animal species to occur on site is included in Appendix B.

2.3 SENSITIVE VEGETATION COMMUNITIES

Phase I, the residential portion of the proposed Project, would not impact any sensitive vegetation community. It would only affect 9.32 acres of the developed portion of the site (Table 6; Figures 9 and 10).

Phase II, the bike path connection to the Bayshore Bikeway, would affect a total of 0.37 acre including 0.14 acre of wetland WUS and California Coastal Commission wetlands comprised of 0.01 acre of southern coastal salt marsh, 0.08 acre of saline meadow, and 0.06 acre of mudflat, and 0.37 acre of upland habitats/land cover types, comprised of 0.09 acre of non-native grassland, 0.11 acre of non-native vegetation, 0.02 acre of developed, and 0.01 acre of disturbed (Tables 6 and 7, Figures 9 and 10).

VEGETATION COMMUNITY*	ACRE(S)**
Southern coastal salt marsh (52120)	0.01
Coastal and valley freshwater marsh (52400)	0
Saline meadow (--)	0.08
Mudflat (Saltpan) (13300)	0.06
Non-native Grassland (42200)	0.09
Non-native Vegetation (11000)	0.11
Disturbed Habitat (11300)	0.01
Developed (12000)	9.32
TOTAL	9.67

* Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

** Habitats are rounded to the nearest 0.01 acre, thus, totals reflect rounding.

2.4 WETLANDS

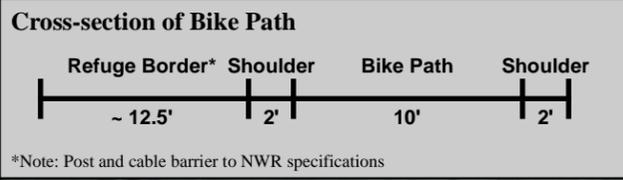
Phase I of the proposed Project would not impact any WUS, waters of the state, or California Coastal Commission wetlands (Figure 10). The proposed Project would remove existing development to create wetlands, provide a 100-foot buffer zone, and pre-mitigate the future impacts of the bike path in the outer 50 feet of the buffer. The purpose of the buffer zone is to reduce the amount of human, domestic animal, and exotic plant intrusion into sensitive wetland, to provide an area that can filter drainage and runoff from developed areas and provide upland resting and refuge areas for wildlife. As a result of wetland creation in the outer 50 feet of the buffer, Phase I of the proposed Project would result in a net gain of wetlands.

Phase II, the bike path connection to the Bayshore Bikeway, would affect 0.14 acre of wetland WUS and California Coastal Commission wetlands comprised of 0.01 acre of southern coastal salt marsh, 0.08 acre of saline meadow, and 0.06 acre of mudflat (Table 7, Figure 11).



Phase I - Vegetation and Sensitive Resources/Impacts

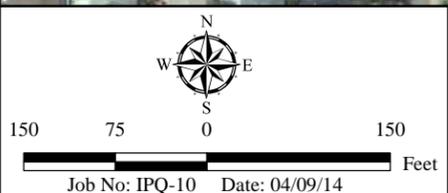
BERNARDO SHORES



*Note: Post and cable barrier to NWR specifications



- Project Boundary
- 2-foot Shoulder
- 10-foot Bike Path
- Refuge Border (Approx. 12.5 feet)
- Coastal and Valley Freshwater Marsh (FWM)
- Southern Coastal Salt Marsh (SCSM)
- Saline Meadow
- Saltpan
- Sampling Plot



Phase II - Vegetation and Sensitive Resources/Impacts

BERNARDO SHORES

Table 7 PHASE II IMPACTS TO WATERS OF THE U.S. AND COASTAL WETLANDS		
HABITAT	AREA* (acres)	LENGTH (feet)
Wetlands		
Southern coastal salt marsh	0.01	53
Saline meadow	0.08	288
Mudflat (saltpan)	0.06	187
TOTAL	0.14	527

* Areas are rounded to 0.01 acre, thus total reflects rounding

2.5 WILDLIFE MOVEMENT AND NURSERY SITES

The site is not part of a regional or local corridor and does not serve as a nursery site.

2.6 INDIRECT IMPACTS

Potential indirect impacts from construction noise may occur as a result of project implementation as described below.

2.6.1 Noise

Construction-related noise from such sources as clearing and grading would be a temporary impact to wildlife. The 100-foot buffer between the development and wetlands would provide some degree of buffering against construction noise.

Breeding birds and mammals may temporarily or permanently leave their territories to avoid disturbances from construction activities, which could lead to reduced reproductive success and increased mortality. Potential short-term noise impacts could result from construction for the proposed Project. Noise effects would be considered significant if construction noise levels exceed a level of 60 dB L_{eq} hourly average or ambient adjacent to nests during the bird breeding season (March 15 to August 15). However, since there is low potential for any nesting bird nearby the proposed Phase I site, avoidance of the nesting season is not required for that portion of the project.

2.6.2 Lighting

Night lighting that extends from a developed area onto adjacent wildlife habitat can discourage nocturnal wildlife in habitat and can provide nocturnal predators with an unnatural advantage over their prey. Outdoor lighting would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat. Therefore, no significant impacts resulting from night lighting are anticipated.

2.6.3 Collisions and Introduced Predators

Anthropogenic threats, such as collisions with man-made structures and predation by domestic pets, combine to kill billions of wildlife annually. Birds are known to collide with buildings that they do not see because of reflective surfaces. Free-ranging domestic cats have been introduced globally and have contributed to multiple wildlife extinctions on islands. Free-ranging or feral cats are likely the single greatest source of anthropogenic mortality for birds and mammals in the United States.

3.0 SPECIAL STATUS SPECIES

3.1 ANALYSIS OF PROJECT EFFECTS

Phase I of the Project only affects a developed site and would not have a substantial adverse effect, either directly or through habitat modifications, on any sensitive habitat or species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the USFWS or CDFW.

Phase I of the project would not have a substantial adverse effect on any sensitive vegetation community identified in local or regional plans, policies, and regulations, or by the USFWS or CDFW.

Phase I of the project would not have a substantial adverse effect on any sensitive animal species.

While Belding's savannah sparrow was not observed within the Phase II bike path connection, it was observed within the adjacent NWR on March 14, 2013 (Figure 5). If Belding's savannah sparrow was present within 300 feet of the bike path and construction commences during its breeding season the project could have an adverse effect on that species.

3.2 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

The Project should avoid indirect impacts from lighting. Outdoor lighting would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat. Therefore, no significant impacts resulting from night lighting are anticipated.

If construction of Phase II intends to commence during the breeding season of Belding's savannah sparrow (March 15 through August 15), a qualified biologist shall survey appropriate habitat areas within and 300 feet adjacent to the proposed bike path footprint for the presence of the sparrow. If breeding Belding's savannah sparrows are present, no construction activities that would result in noise levels exceeding a 60 dB hourly average at the edge of occupied Belding's savannah sparrow habitat within the NWR shall occur during the Belding's savannah sparrow breeding season. An analysis showing that noise generated by construction activities would not exceed 60 dB hourly average at the edge of occupied habitat must be completed by a qualified

acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) at least 2 weeks prior to the commencement of construction activities. Prior to commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under supervision of a qualified biologist.

To reduce the potential of bird strikes, all glass or reflective surfaces adjacent to the NWR will use non-reflective glass and/or coatings to minimize reflectivity. A prohibition on the keeping of outside feline pets or feral cat stations shall be contained in the property deed and thus transferred to all future owners, into perpetuity. Only indoor cats will be allowed. Enforcement of the deed restrictions shall be reflected in the Covenants, Conditions & Restrictions (CC&Rs) of any homeowners association. Measures shall be in place to notify all occupants and potential occupants of this restriction.

4.0 WETLAND HABITATS

Phase I of the project would not have a substantial adverse effect on any aquatic community or wetland.

4.1 ANALYSIS OF PROJECT EFFECTS

Phase I of the project would not have a substantial adverse effect on any aquatic community or wetland.

Phase II, the bike path connection, would affect 0.14 acre of WUS and California Coastal Commission coastal wetlands comprised of 0.01 acre of southern coastal salt marsh, 0.08 acre of saline meadow, and 0.06 acre of mudflat (Table 7).

4.2 MITIGATION MEASURES AND DESIGN CONSIDERATIONS

In the event that the required permits are issued for Phase II, the Project would be required to provide compensatory mitigation for its effects on 0.14 acre of WUS and California Coastal Commission coastal wetland. Neither Phase of the Project would affect any waters of the state. Compensatory mitigation for effects on 0.14 acre of WUS and California Coastal Commission coastal wetland is expected to be required at a 4:1 ratio of which one part, or 0.14 acre, must be creation of new wetland where none currently exists.

5.0 LOCAL POLICIES, ORDINANCES, AND ADOPTED PLANS

5.1 ANALYSIS OF PROJECT EFFECTS

The Project would not conflict with any local policies or ordinances protecting biological resources. The Project would not conflict with the provisions of an adopted HCP Natural Communities Conservation Plan (NCCP) or other approved local, regional, or state HCP.

6.0 SUMMARY OF PROJECT IMPACTS AND MITIGATION

Implementation of the proposed Project would not result in significant impacts to special status plant or animal species, natural communities, or local policies.

Construction of Phase I would not result in impacts on any sensitive species, habitat, or wetlands. As a result of an increased buffer of 100-feet from wetlands, Phase I of the Project would be an enhancement over the current developed condition of the site that is immediately adjacent to jurisdictional wetlands. As a result of the absence of direct, permanent impacts to sensitive biological resources or sensitive wetlands from Phase I (the residential portion) no compensatory mitigation is required.

Phase II, the bike path connection to the Bayshore Bikeway, would affect 0.14 acre of wetland WUS and California Coastal Commission wetlands comprised of 0.01 acre of southern coastal salt marsh, 0.08 acre of saline meadow and 0.06 acre of mudflat. Compensatory mitigation for Phase II effects on wetlands is expected to be required at a 4:1 ratio and include at least 0.14 acre of wetland creation to ensure no net loss of wetlands.

Since the NWR has requested that the Project provide a transition of wetland to upland habitat in the buffer between Pond 10A and Phase I of the Project, wetland creation of 0.56 acre is planned in the 50 feet of the buffer zone closest to Pond 10A.

In summary, Phase I of the Project would have no effect on sensitive plants, animals, or wetland communities, and neither wetland or listed species permits nor mitigation would be required.

Provided that all applicable permits can be obtained, Phase II would affect a small amount of wetland WUS. In the event that Phase II is permitted, compensatory mitigation for wetland effects would be required and provided on site.

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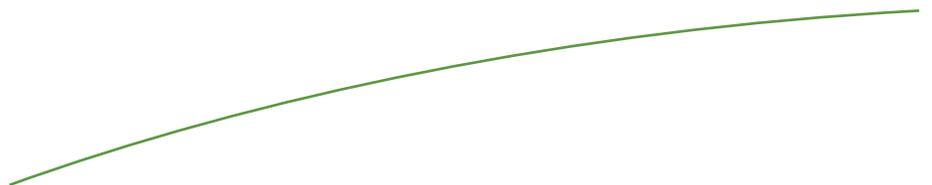
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Appendix A

SENSITIVE PLANT SPECIES OBSERVED OR
WITH POTENTIAL TO OCCUR



Appendix A
SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR
BERNARDO SHORES PROJECT

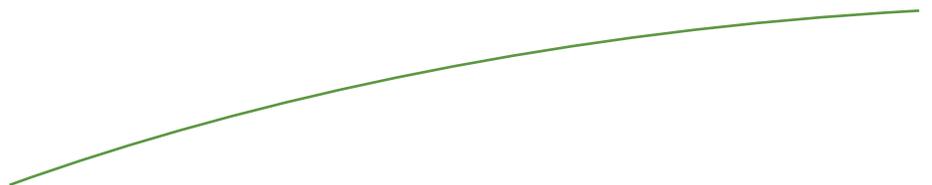
SPECIES	LISTING OR SENSITIVITY	BLOOMING PERIOD	POTENTIAL TO OCCUR
Orcutt's pincushion (<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>)	--/-- CNPS List 1B.1 County List A	January – August	Low. Occurs on beaches and coastal dunes. Beach or coastal dunes are not present on the Project site.
Beach golden aster (<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>)	--/-- CNPS List 1B County List A	April – June	Very low - Occurs in sandy locales in Diegan coastal sage scrub near the coast. There is no coastal sage scrub present in the Project area.
Blochman's dudleya (<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>)	--/-- CNPS List 1B	March - July	Very low - Occurs in sandy openings in Diegan coastal sage scrub near the coast. It is a tiny corm-like sprouting perennial. There is no coastal sage scrub present in the Project area.
Coast woolly-heads (<i>Nemacaulis denudata</i> var. <i>denudata</i>)	--/-- CNPS List 2 County List A	April – September	Very low. Occurs in well developed coastal sand dunes along the beaches. The back dunes, in mildly protected locales, seem to be preferred. No suitable habitat on site; species would likely have been observed if present.
Estuary seablite (<i>Suaeda esteroa</i>)	--/-- CNPS List 4	July - October	Moderate. Occurs in periphery of coastal salt marsh. Soils at such locales are usually mapped as tidal flats. Oftentimes, only a narrow band of terrain on the very periphery of the salt marsh is occupied by the Estuary Suaeda. There is a moderate potential for this species to occur in the pan-handle portion of the site.

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Appendix B

SENSITIVE ANIMAL SPECIES OBSERVED OR
WITH POTENTIAL TO OCCUR



Appendix B
SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR
BERNARDO SHORES PROJECT

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
INVERTEBRATES		
Western tidal-flat tiger beetle (<i>Cicindela gabbii</i>)	--/-- County Group 2	Low. Tiger beetle species are generally found in areas of hard-packed mudflat or salt flat interspersed with pickleweed. Known to be present in and around the Sweetwater Marsh Unit. While there is some potential for this species to be present in Pond 10A, there is no record of its occurrence there. There is no suitable habitat present on the Project site to support this species.
Western beach tiger beetle (<i>Cicindela latesignata latesignata</i>)	--/-- County Group 2	Low. Tiger beetle species are generally found in areas of hard-packed mudflat or salt flat interspersed with pickleweed. Known to be present in and around the Sweetwater Marsh Unit. While there is some potential for this species to be present in Pond 10A, there is no record of its occurrence there. There is no suitable habitat present on the Project site to support this species.
VERTEBRATES		
Birds		
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	FT/-- County Group 1	Low. Occurs in a variety of outer coastal habitats during the winter months, including areas of elevated ground during high tides and resting periods. Nesting locations for this species have been documented in the NWR. This small shorebird nests on open or sparsely vegetated ground, such as beaches, salt pans, and levees above the high tide line. It is unlikely to occur within the Project area, because of the absence of wetlands for foraging and secluded high ground for sheltering. It has a moderate potential to occasionally forage in Pond 10A. The nearest designated Critical Habitat for this species is approximately one-half mile west in a narrow strip along the Silver Strand (Figure 9).

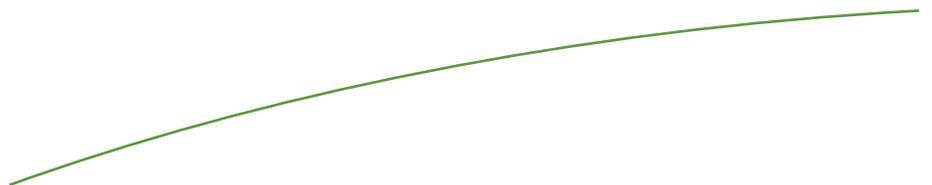
**Appendix B (cont.)
SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR
VALIANO PROJECT**

SPECIES	LISTING OR SENSITIVITY*	POTENTIAL TO OCCUR
VERTEBRATES (cont.)		
Birds (cont.)		
Belding's savannah sparrow (<i>Passerculus sandwichensis beldingi</i>)	FE/SE County Group 1	Very Low. Known to occur throughout the year in dense tidal marshes and adjacent uplands in south San Diego Bay, this species is likely to occupy the marshes and sloughs in the nearby NWR area for foraging and/or nesting, but there is only a very small amount of southern coastal salt marsh around the northern end of the Project site and in the pan handle that could support this species. The California Natural Diversity Database has a location record for this species approximately three-quarter of mile northeast of the project site.
Light-footed clapper rail (<i>Rallus longirostris levipes</i>)	FE/SE County Group 1	Low. Occurs throughout the year in dense tidal marshes in south San Diego Bay, this species is likely to occupy the marshes and sloughs within and adjacent to the assessment area for foraging and/or nesting. There is no suitable habitat within the developed portion of this site to support this species. Use of Pond 10A is unlikely because of its low salinity and the scarcity of intertidal salt marsh and the species it supports. The California Natural Diversity Database has a location record for this species approximately one-half mile north of the Project site.
Mammals		
Mexican long-tongued bat (<i>Choeronycteris mexicana</i>)	--/-- County Group 2	Low. Occurs in desert canyons, arid mountain ranges. Roosts by day in caves, mines or buildings. Feeds on nectar and pollen from agaves and cacti. Only potential is for roosting.



Appendix C

EXPLANATION OF STATUS CODES FOR
PLANT AND ANIMAL SPECIES



Appendix C
EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

FEDERAL, STATE, AND LOCAL CODES

U.S. Fish and Wildlife Service (USFWS)

FE	Federally listed endangered
FT	Federally listed threatened
BCC	Birds of Conservation Concern (discussed in more detail, below)
BGEPA	Bald and Golden Eagle Protection Act (discussed in more detail below)

California Department of Fish and Wildlife (CDFW)

SE	State listed endangered
SR	State listed rare
ST	State listed threatened
SSC	State species of special concern
WL	Watch List

Fully Protected Fully Protected species refer to all vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFW.

County of San Diego

Plant sensitivity:

Group A	Plants rare, threatened, or endangered in California or elsewhere
Group B	Plants rare, threatened, or endangered in California but more common elsewhere
Group C	Plants that may be quite rare, but more information is needed to determine rarity status
Group D	Plants of limited distribution and are uncommon, but not presently rare or endangered

Animal sensitivity:

County Sensitive Animals considered under California Environmental Quality Act (CEQA) review of projects.

Multiple Species Conservation Program (MSCP) Covered

Multiple Species Conservation Program covered species for which the County has take authorization within the MSCP area.

MSCP Narrow Endemic (NE)

Narrow endemic species are native species that have “restricted geographic distributions, soil affinities, and/or habitats.” The MSCP participants’ subarea plans have specific conservation measures to ensure impacts to narrow endemics are avoided to the maximum extent practicable.

Appendix C (cont.)
EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

OTHER CODES AND ABBREVIATIONS

USFWS Bald and Golden Eagle Protection Act (BGEPA)

In 1782, Continental Congress adopted the bald eagle as a national symbol. During the next one and a half centuries, the bald eagle was heavily hunted by sportsmen, taxidermists, fisherman, and farmers. To prevent the species from becoming extinct, Congress passed the Bald Eagle Protection Act in 1940. The Act was extremely comprehensive, prohibiting the take, possession, sale, purchase, barter, or offer to sell, purchase, or barter, export or import of the bald eagle “at any time or in any manner.”

In 1962, Congress amended the Eagle Act to cover golden eagles, a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. The golden eagle, however, is accorded somewhat lighter protection under the Act than the bald eagle. Another 1962 amendment authorizes the Secretary of the Interior to grant permits to Native Americans for traditional religious use of eagles and eagle parts and feathers.

USFWS Birds of Conservation Concern (BCC)

This report from 2002 aims to identify accurately the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS’ highest conservation priorities and draw attention to species in need of conservation action. USFWS hopes that by focusing attention on these highest priority species, the report will promote greater study and protection of the habitats and ecological communities upon which these species depend, thereby ensuring the future of healthy avian populations and communities. The report is available online at <http://migratorybirds.fws.gov/reports/bcc2002.pdf>.

Appendix C (cont.)
EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

OTHER CODES AND ABBREVIATIONS (cont.)

California Native Plant Society (CNPS) Codes

Lists

- 1A = Presumed extinct.
- 1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.
- 2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.
- 3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.
- 4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

List/Threat Code Extensions

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

A “CA Endemic” entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.

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