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# 5.4 BIOLOGICAL RESOURCES

The analysis in this section is based in part on the following technical report(s):

- Biological Resources Assessment and Wetland Delineation, Southeast Area Development and Improvement Plan, VCS Environmental, January 2016.

A complete copy of this study is included in Appendix D of this DEIR.

## 5.4.1 Environmental Setting

### 5.4.1.1 APPLICABLE PLANS AND REGULATIONS

#### Federal

##### *Endangered Species Act*

The federal Endangered Species Act (FESA) of 1973, as amended, was promulgated to protect and conserve any species of plant or animal that is endangered or threatened with extinction and the habitats in which these species are found. "Take" of endangered species is prohibited under Section 9 of the FESA. "Take," as defined under the FESA, means to "harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Section 7 of the FESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) on proposed federal actions which may affect any endangered, threatened, or proposed (for listing) species or critical habitat that may support the species. Section 4(a) of the FESA requires that critical habitat be designated by the USFWS "to the maximum extent prudent and determinable, at the time a species is determined to be endangered or threatened." Critical habitat is formally designated by USFWS to provide guidance for planners/managers and biologists regarding where suitable habitat may occur and where preservation for a particular species should be given high priority. Section 10 of the FESA provides the regulatory mechanism that allows the incidental take of a listed species by private interests and non-federal government agencies during lawful activities. Habitat conservation plans (HCPs) for the impacted species must be developed in support of incidental take permits for nonfederal projects to minimize impacts to the species and develop viable mitigation measures to offset the unavoidable impacts.

##### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act of 1918 (MBTA) is the domestic law that affirms and implements the United States' commitment to four international conventions with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the take, kill, possession, transport, and import of migratory birds and their eggs, parts, and nests. It prohibits the

take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations. USFWS administers permits to take migratory birds in accordance with the regulations of the MBTA.

### *Clean Water Act, Section 404*

The United States Army Corps of Engineers (Corps) regulates discharges of dredged or fill material into "waters of the U.S." (including wetlands and non-wetland bodies of water that meet specific criteria).[1] Pursuant to Section 404 of the federal Clean Water Act (CWA), a permit is required for any filling or dredging within waters of the U.S. The permit review process entails an assessment of potential adverse impacts to Corps wetlands and jurisdictional waters, wherein the Corps may require mitigation measures. Where a federally listed species may be affected, a Section 7 consultation with USFWS may be required. If there is potential for cultural resources to be present, Section 106 review may be required. Also, where a Section 404 permit is required, a Section 401 Water Quality Certification would also be required from the Regional Water Quality Control Board (RWQCB).

### *Clean Water Act, Section 401and 402*

Section 401(a)(1) of the CWA specifies that any applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters shall provide the federal permitting agency a certification, issued by the state in which the discharge originates, that any such discharge will comply with the applicable provisions of the CWA. In California, the applicable RWQCB must certify that the project will comply with water quality standards. Permits requiring Section 401 certification include Corps Section 404 permits and National Pollutant Discharge Elimination System (NPDES) permits issued by the Environmental Protection Agency under Section 402 of the CWA. NPDES permits are issued by the applicable RWQCB. The City of Long Beach is within the jurisdiction of the Santa Ana RWQCB (Region 8).

[1] "Waters of the United States," as it applies to the jurisdictional limits of the authority of the Corps of Engineers under the Clean Water Act, includes: all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; water impoundments; tributaries of waters; territorial seas; wetlands adjacent to waters. The terminology used by Section 404 of the Clean Water Act includes "navigable waters" which is defined at Section 502(7) of the Act as "waters of the United States including the territorial seas."

### *Magnuson-Stevens Fishery Conservation and Management Act*

The Magnuson-Stevens Fishery Conservation and Management Act is the primary law governing marine fisheries management in U.S. federal waters (16 U.S.C. §§ 1801–1884). First passed in 1976, the Magnuson-Stevens Act fosters long-term biological and economic sustainability of our nation's marine fisheries out to 200 nautical miles from shore. Regional Fishery Management Councils are charged with developing and recommending fishery management plans, both to restore depleted stocks and manage healthy stocks. The National Marine Fisheries Service aids the Secretary of Commerce, who evaluates, approves, and implements the councils' fishery management plans. The Magnuson-Stevens Act protects identified Essential Fish Habitat (EFH), that is, the habitat necessary for managed fish to complete their life cycle, thus contributing to a fishery that can be harvested sustainably. EFH applies to each life stage of approximately 1,000 managed species. Within EFH, the Habitat Areas of Special Concern are considered high priority areas for conservation, management, or research because they are rare, sensitive, stressed by development, or important to ecosystem function. This designation does not necessarily confer additional protections or restrictions upon an area, but it helps to prioritize and focus conservation efforts.

## State

### *California Fish and Game Code*

The California Fish and Game Code contains several provisions relevant to the Project area. Special status plants and animals are found in the Project area and therefore are regulated by the Fish and Game Code. Section 1600 requires that a project proponent notify the California Department of Fish and Wildlife (CDFW) of any proposed alteration of streambeds, rivers, and lakes. The intent is to protect habitats that are important to fish and wildlife. CDFW may review a project and place conditions on the project as part of a Streambed Alteration Agreement. The conditions are intended to address potentially significant adverse impacts within CDFW's jurisdictional limits. Specific provisions of the Fish and Game Code that are relevant to this Project include:

- California Endangered Species Act (CESA), Sections 2050 et seq.
- Lake and Streambed Alteration Program, Sections 1600 to 1616
- Fully Protected Species, Sections 3511, 4700, 5050, and 5515
- Birds, Birds of Prey and their Eggs, Section 3503
- Migratory Birds, Section 3513
- Nongame Birds, Section 3800(a)
- Native Plant Protection Act (NPPA), Sections 1900 to 1913

### *California Endangered Species Act*

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA and is administered by the CDFG. Its intent is to prohibit take and protect state-listed endangered and threatened species of fish, wildlife, and plants. Unlike its federal counterpart, CESA also applies the take prohibitions to species petitioned for listing (state candidates). Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Under certain conditions, CESA has provisions for take through a 2081 permit or Memorandum of Understanding. In addition, some sensitive mammals and birds are protected by the state as Fully Protected Species. California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFG's California Natural Diversity Data Base (CNDDB) of known and recorded occurrences of sensitive species. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biological resources assessments.

### *Porter-Cologne Water Quality Control Act*

Under the 1969 Porter-Cologne Water Quality Control Act, the RWQCB is authorized to regulate any activity that would result in discharges of waste and fill material to waters of the state (including saline waters), "isolated" waters and/or wetlands (e.g., vernal pools and seeps), and groundwater within the boundaries of the state (California Water Code §§ 13000 et seq.). The RWQCB also adopts and implements water quality control plans (basin plans) that recognize and are designed to maintain the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, maintaining water quality, and addressing the water quality problems of that region. Designated beneficial uses of State Waters that may be protected against quality degradation includes preservation and enhancement of fish, wildlife, designated biological habitats of special significance, and other aquatic resources or preserves.

### *Keene-Nejedly Wetlands Preservation Act*

Pursuant to the Keene-Nejedly Wetlands Preservation Act, the California state legislature recognizes that the remaining wetlands of the state are of increasingly critical economic, aesthetic, and scientific value to the people of California, and that the need exists for an affirmative and sustained public policy and program directed at their preservation, restoration, and enhancement so that wetlands will continue in perpetuity to meet the needs of the people. The Keene-Nejedly Act allows both CDFW and the California Department of Parks and Recreation to acquire interests in real property to protect, preserve, and restore wetlands. Additionally, both departments can enter into operating agreements with cities, counties, and districts for the management and control of wetlands.

*California Coastal Act (California Public Resources Code, Div. 20)*

The Coastal Commission and the City currently have jurisdiction over the portions of the Project area within the certified local coastal program (LCP), as depicted on Figure 5.4-1, *California Coastal Commission Jurisdictional Boundary*. Where development occurs outside of the certified areas but within the Coastal Zone, the Coastal Commission has jurisdiction and could exercise its discretion to override planning decisions made by the City. The Coastal Commission has encouraged the City to determine the extent of wetlands in the Project area and the potential or lack of potential for development of wetland parcels as part of an update to the LCP and Land Use Plan. The City must comply with the entirety of the Coastal Act; the extracted sections below are representative requirements of the California Coastal Act that relate to the Project area.

**Section 30001.5** of the Coastal Act states the basic goals for the state coastal zone:

- Protect, maintain, and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.
- Assure orderly, balanced utilization and conservation of these coastal resources while taking into account the social and economic needs of the people of the state.
- Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutional protected rights of private property owners.
- Assure priority for coastal-dependent development over other development on the coast.
- Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses (including educational uses) and the coastal zone.

As shown in Figure 5.4-1, approximately 1,000 acres of the Project area are in the coastal zone; therefore, the Specific Plan is required to comply with the provisions of the California Coastal Act. The Coastal Act requires that the City adopt an LCP, which is a basic planning tool used by local governments to guide development in the coastal zone. The new Southeast Area Specific Plan, the LCP, and the land use plan for this area would all need to be approved by the Coastal Commission.

The Coastal Act provides policies regarding public access, recreation, marine environment, land resources, development, and industrial development. These policies, which will be applied to the planning process for the Project, are briefly described below.

- **Section 30230, Marine resources: maintenance.** Requires marine resources to be maintained, enhanced, and, where feasible, restored. Special protection is to be given to areas and species of special biological or economic significance.

- **Section 30213, Biological productivity; waste water.** Control of runoff and prevention of ground water depletion is required to maintain the biological productivity and the quality of aquatic resources appropriate for optimum populations of marine organisms and the protection of human health. This section encourages waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

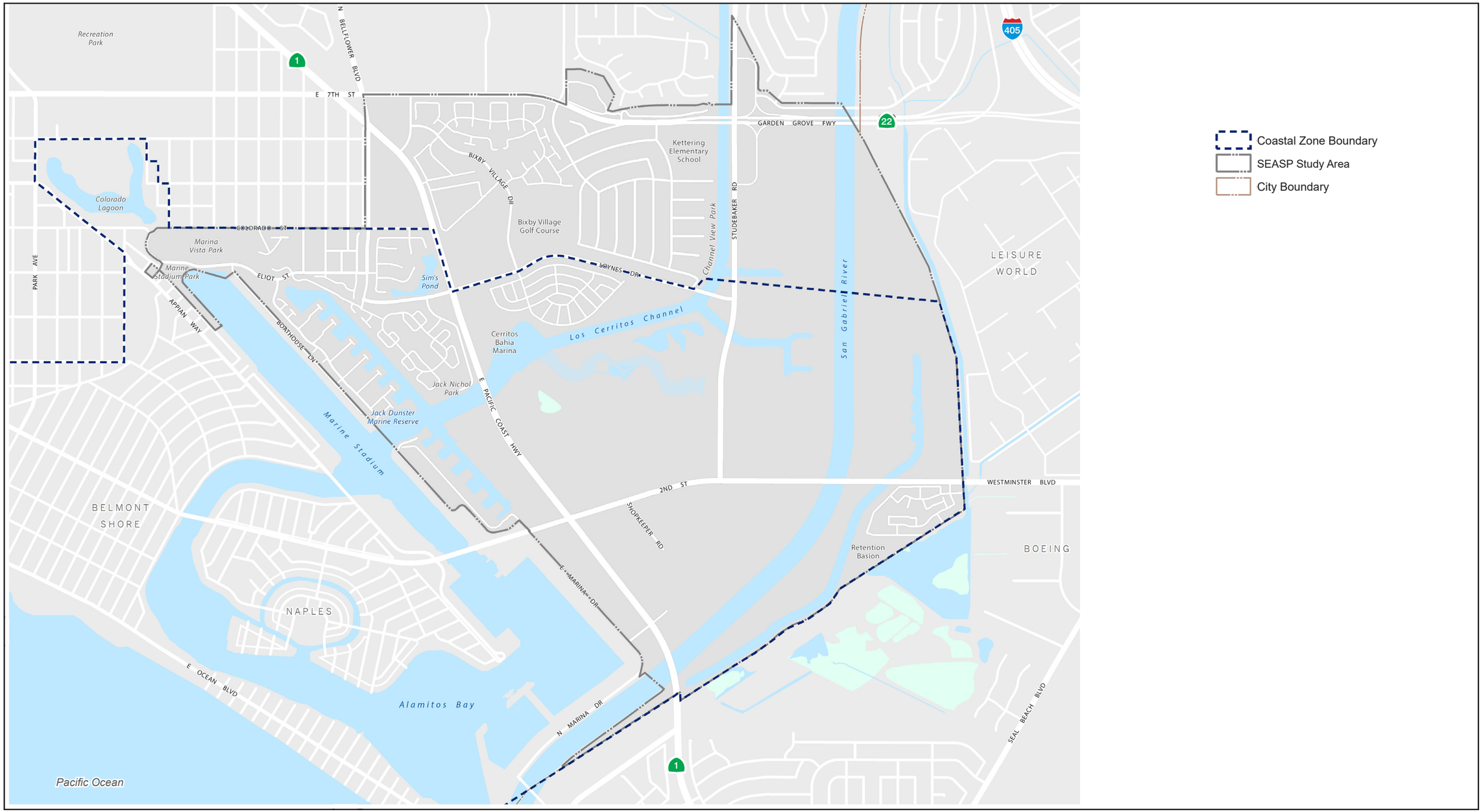
- **Section 30233, Diking, filling or dredging.** The diking, filling, or dredging of open coastal waters, wetlands, etc. is limited to:

  - New or expanded coastal-dependent industrial facilities.
  - Maintaining existing, or restoring previously dredged depth in existing navigational channels, mooring areas, and boat launching ramps.
  - In wetland areas only, entrance channels for new or expanding boating facilities.
  - In a degraded wetland, identified by CDFW pursuant to subdivision (b) of Section 30411, for boating facilities.
  - In open coastal waters, new or expanded boating facilities.
  - Incidental public service purposes, including, but not limited to, burying cables and pipes or inspections of piers and maintenance of existing intake and outfall lines.
  - Mineral extraction.
  - Restoration purposes.
  - Nature study, aquaculture, or similar resource-dependent activities.

- **Section 30240, Environmentally sensitive habitat areas: adjacent developments.** Environmentally sensitive habitat areas are to be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas are to be sited and designed to be compatible with the continuance of such habitat areas.

# Figure 5.4-1 - California Coastal Commission Jurisdictional Boundary






*Base Map Source: City of Long Beach, 2016*

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- **Section 30250, Location; existing developed area.** This section requires that new residential, commercial, or industrial development be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. This section limits the location of new hazardous industrial development away from existing developed areas and requires visitor-serving facilities that cannot feasibly be located in existing developed areas to be located in existing isolated developments or at selected points of attraction for visitors. Article 7 of the Coastal Act also addresses scenic and visual qualities, maintenance and enhancement of public access, and minimization of adverse impacts.

- **Section 30260, Location or expansion.** Coastal-dependent industrial facilities are encouraged to locate or expand within existing sites. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

### *California Rivers and Mountains Conservancy*

In February 2006, a joint powers agreement was adopted by the California Rivers and Mountains Conservancy, State Coastal Conservancy, City of Long Beach, and City of Seal Beach establishing the Los Cerritos Wetlands Authority (LCWA). Although the LCWA is not a regulatory body, it is a major planning and funding entity for the restoration of the "Los Cerritos Wetlands Complex" (LCWC).

Figure 5.4-2, *Los Cerritos Wetlands Complex*, depicts the LCWC boundaries as defined by the LCWA. The Los Cerritos Wetlands Complex span about 500 acres: 341 acres in Long Beach and 159 acres in Seal Beach. The portion of the LCWC in Long Beach includes: the Marketplace Marsh (33 acres owned by the City of Long Beach); Synergy Oil & Gas (152 acres), and LCWA, Phase 1 (72 acres). The remaining approximately 84 acres of the LCWC in Long Beach are privately owned by several owners.

The purpose of the LCWA is to develop a comprehensive program of acquisition, protection, conservation, restoration, maintenance, operation, and environmental enhancement for the Los Cerritos Wetlands, consistent with the goals of flood protection; habitat protection and restoration; and improved water supply, water quality, groundwater recharge, and water conservation.

# 5. Environmental Analysis
## BIOLOGICAL RESOURCES

### Local

#### *Long Beach Local Coastal Program*

As stated above, a large portion of the Project area falls within the state's coastal zone and thus under the requirements of the California Coastal Act, which requires the City to adopt an LCP. The Project are is a stand-alone section of the City's LCP, which was certified by the Coastal Commission in 1980. The LCP specifies appropriate location, type, and scale of new or changed uses of land and water and includes a land use plan and measures to implement the plan (such as zoning ordinances). One of the goals of the Specific Plan is to include the entire Project area in the LCP, which requires certification of the wetland delineations, among other things, by the Coastal Commission.

The 1980 LCP contains a resources management plan (RMP) that applies to five "waterlands" in the Coastal Zone of Long Beach—Alamitos Bay, Marine Stadium, Colorado Lagoon, Los Cerritos Wetlands, and Sims' Pond—and was prepared by staff of the City Planning and Building Department for approval by the City Planning Commission, City Council, and the State Coastal Commission. The resources management plan is an implementation plan, and its overall thrust is to improve and assure public access to coastal and tide-waterland amenities, to improve and maintain water quality, to seek and establish a harmony between public use of waterlands and private use of surrounding urban areas, and to protect and enhance the viability of environmentally sensitive areas.

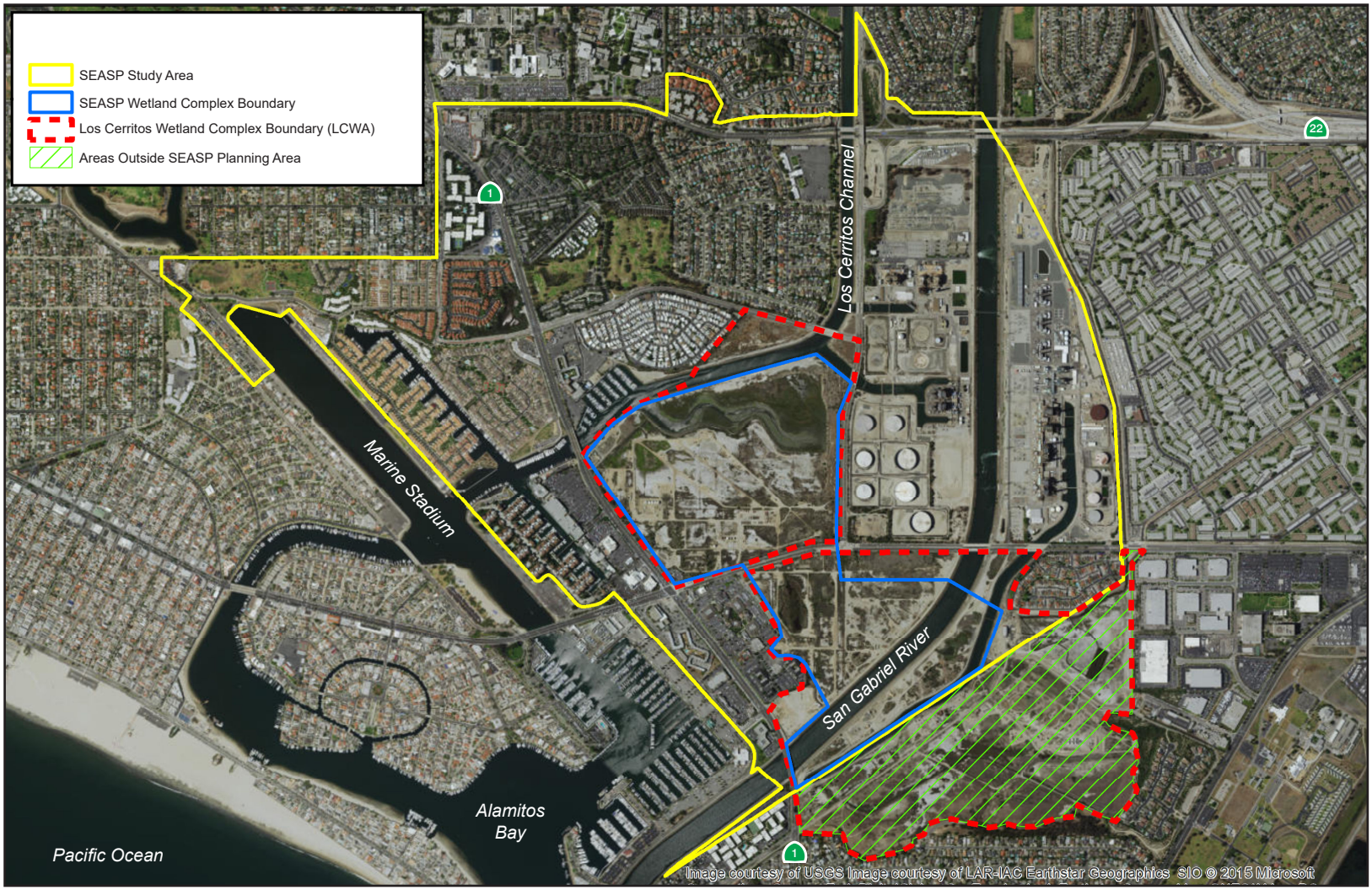
#### *Southeast Area Development Improvement Plan*

The existing SEADIP zoning emphasizes the need to protect and restore wetlands and the importance of buffers between development and sensitive habitats. However, changes in regulatory requirements and further refinement of the restoration opportunities in the planning area require updates to the plan and ordinance to allow for a new generation of development while proactively enhancing the natural resources remaining within the Project area. Key provisions of the SEADIP relative to biological resources include:

- Identifies responsibility for the construction and maintenance of wetlands and buffers.
- Sets the standards for wetland restoration and defines the exceptions to this standard.
- Requires the wetlands to be separated from urban developments by buffers (buffers are treated as a part of the adjacent urban development.

# Figure 5.4-2 - Los Cerritos Wetlands Complex

**5. Environmental Analysis**




0 2,000
Scale (Feet)

*Base Map Source: VCS Environmental, 2015*

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### 5.4.1.2 EXISTING CONDITIONS

#### Methodology

The biological resources assessment was based on a literature review and field surveys. The Project area has been the subject of several specific habitat assessment efforts in the past few years. The following surveys and studies prepared for the properties in the Project area were relied upon to characterize biological resources in the Project area as a whole.

- Tidal Influence, August 2012, "Los Cerritos Wetlands Conceptual Restoration Plan: Habitat Assessment Report," prepared for the Los Cerritos Wetlands Authority and Moffatt & Nichol.
- Moffatt & Nichol, et al., July 2012, "Los Cerritos Wetlands Conceptual Restoration Plan: Opportunities and Constraints Report," prepared for the Los Cerritos Wetlands Authority.
- Everest International, February 2012, "Los Cerritos Wetlands Conceptual Restoration Plan: Watershed Impacts Report," prepared for the Los Cerritos Wetlands Authority and Moffatt & Nichol.
- AECOM Technical Services, Inc., April 2011, "Jurisdictional Delineation Report for Waters of the U.S. and State of California, Marketplace Marsh, Long Beach, California," prepared for Los Cerritos Wetlands Authority.
- Glenn Lukos Associates, October 2007, "Vegetation Mapping of Los Cerritos Wetlands."
- Huffman-Broadway Group, Inc. 2008. "Investigation of the Presence of Wetlands Subject to Regulation under the California Coastal Act: Bryant Long Beach Property, Long Beach," prepared for Rutan & Tucker.
- Endemic Environmental Services, Inc., March 13, 2015, "Los Alamitos Bay Wetland Delineation."
- Glenn Lukos Associates, March 1, 2016, "Jurisdictional Determination of the Alamitos Bay Partnership: Parcel 7 Site, a 9.88-Acre Property Located Within and Adjacent to the Los Cerritos Channel in the City of Long Beach, Los Angeles County, California."

Available literature and databases were reviewed regarding sensitive habitats and special status plant and wildlife species. Special status plant and wildlife species that have the potential to occur within the immediate region of the LCWC were identified. Several agencies, including the USFWS, CDFW, and California Native Plant Society (CNPS) publish lists of particular taxa (species and subspecies)

and the associated level of protection or concern associated with each. The following literature and databases were reviewed:

- The CNDDB, a CDFW species account database that inventories status and locations of rare plants and wildlife in California, was used to identify any sensitive plant communities and special status plants and wildlife that may exist within a five-mile radius of the Project area.
- The USFWS list of endangered and threatened species for Los Angeles County was reviewed to determine if any critical habitat has been designated within the Project area.
- Pertinent maps, scientific literature, websites, regional flora and fauna field guides, and consultation with local experts.

Characterization of the Project area was supplemented by field visits conducted by Lennie Rae Cooke of VCS Environmental, Rick Ware of Marine Resources Management, and Robert Hamilton of Hamilton Biological. Field visits confirmed observations made in reports identified above and covered areas not previously surveyed. Supplemental information is provided in Appendix A of the biological resources assessment (Appendix D of this DEIR).

### Vegetative Communities

As shown below in Table 5.4-1, about 72 percent of the project site is developed with land uses, including residential and commercial uses, parkland, and mineral extraction. The balance of the site consists of undeveloped land (wetlands, upland, and oil operations) and open water. Figure 5.4-3, *Vegetation and Land Cover Types*, shows the locations and acreages of the land covers described in this section. Each of these areas is described in detail below.

Table 5.4-1 Land Cover Types

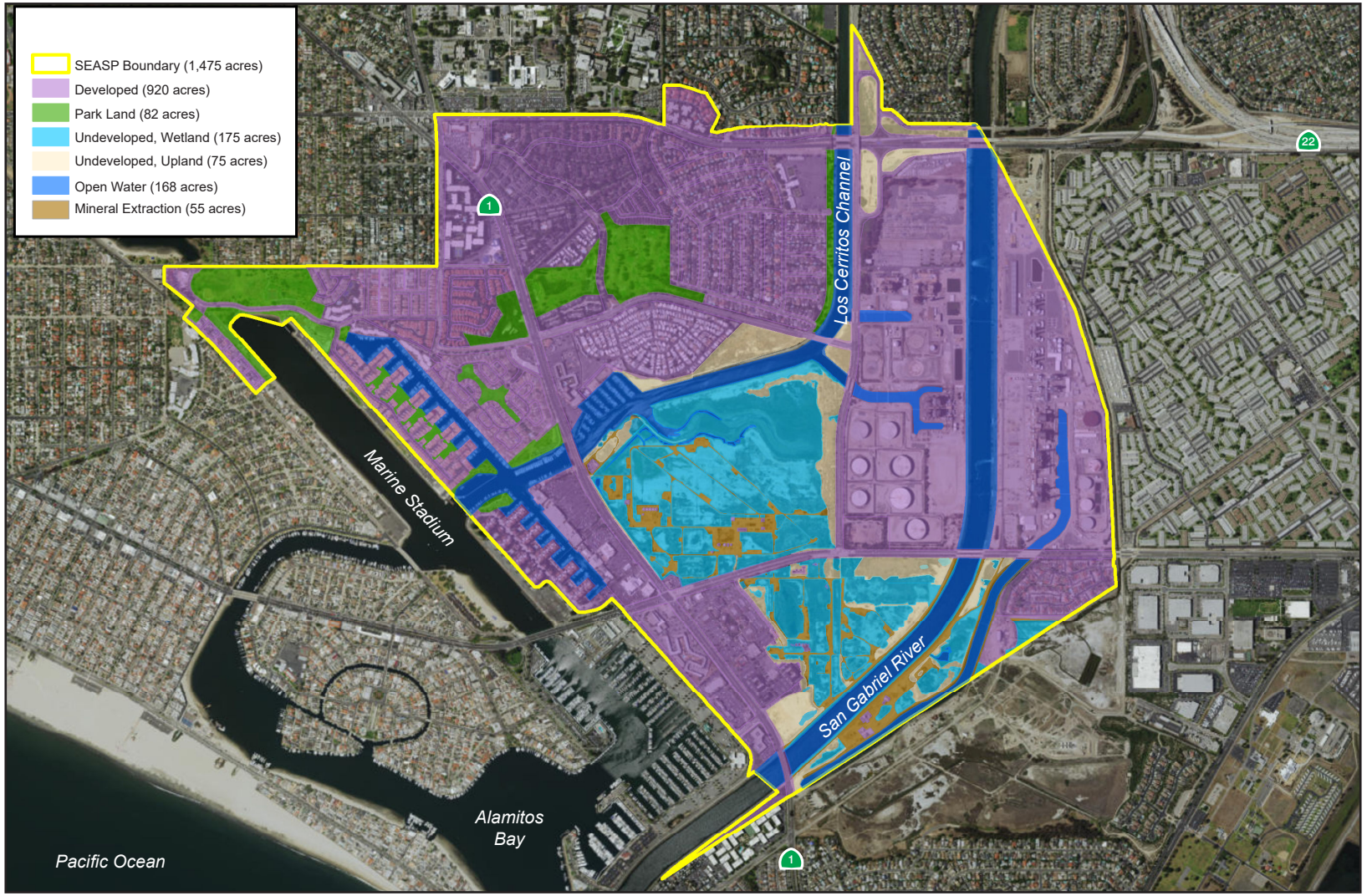
| Community or Land Cover Type | Approx. Acreage | Percent of Total Acreage |
|---|---|---|
| Developed | 920 | 62% |
| Park Land | 82 | 6% |
| Undeveloped, Wetland | 175 | 12% |
| Undeveloped, Upland | 75 | 5% |
| Open Water[1] | 174 | 11% |
| Mineral Extraction | 55 | 4% |
| Total Acreage | 1,481 | 100% |

Source: VCS Environmental 2016

[1] Six acres were added to open water to account for boundary adjustment between the counties of Los Angeles and Orange.

# Figure 5.4-3 - Vegetation and Land Cover Types

**5. Environmental Analysis**




*Base Map Source: VCS Environmental, 2015*

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### *Developed*

The Developed land cover type comprises approximately 62 percent of the Project area. Most of the developed land in the Project area consists of residential neighborhoods, commercial and industrial development, and other areas characterized by man-made roads and structures and exotic landscaping.

Developed areas also include roadways, sidewalks, paved parking areas, ornamental landscaping (predominately nonnative trees and shrubs), and grass lawns. Landscaped and ornamental vegetation is a human-influenced assemblage of plant species and experiences ongoing disturbances by maintenance activities and irrigation.

### *Park Land*

Park Land comprises close to 6 percent of the Project area and is defined as City-managed habitat that supports both native and nonnative species. The acreage in this land cover type includes Sims' Pond Park, Jack Dunster Marine Biological Reserve, Marina Vista Park, Will Rogers Mini Park, Channel View Park, Jack Nichol Park, and Bixby Golf Course (see Figure 3-6, *Proposed Land Use Plan*).

Two of the six City parks within the Project site are biological resources reserves. One, Sims' Pond, is closed to the public; the other, Jack Dunster Marine Biological Reserve, is open to the public and provides recreational and educational uses as well as protection of biological resources. The remaining four parks in the Project area are developed with ornamental landscaping and recreational amenities.

#### *Sims' Pond*

Sims' Pond is a 6.06-acre freshwater marsh at the northwest corner of Loynes and Pacific Coast Highway. Sims' Pond, owned and maintained by the City of Long Beach, was established as a biological reserve as a condition of approval for residential land uses in the area and is not open to the public. Sims' Pond consists of three habitat types.

- **Open Water/Mud Flat:** The open water/mud flat community is characterized by standing water during the rainy season—or when urban runoff creates standing water—and by a varyingly moist/dry surface during the summer and early fall. When open water is present, vegetation is likely limited to duckweed (*Lemna* sp.). During dry periods, the principal weed growing in and around the perimeter was lambsquarters (*Chenopodium album*). Open water is currently limited to small areas near inlets that bring in runoff from surrounding streets and residences.

- **Freshwater Marsh:** Freshwater marsh habitat consists of perennial, emergent monocots that grow in dense stands that may reach heights of six to seven feet or more. This habitat occurs in nontidal areas where soils are saturated/inundated for extended periods.

- **Black Willow Forest and Restored Habitat:** Black Willow Forest and Restored Habitat refers to stands of black willow (*Salix gooddingii*) that grow around the perimeter of the pond, which have an understory consisting of species typical of freshwater marsh habitat, and an area of restored habitat in the northeastern corner of the open space.

A full list of plant and wildlife species observed at Sims' Pond is provided in Tables 4.4-1 and 4.4-2, respectively, of the biological resources assessment (Appendix D of this DEIR).

### *Jack Dunster Marine Biological Reserve*

The Jack Dunster Marine Biological Reserve at the northern shore of the Los Cerritos Channel, adjacent to Marine Stadium, is a natural habitat created for public recreational and educational opportunities. The park's design consists of native landscaping and marine habitats, including unvegetated, soft-bottom sediments; sediments vegetated with eelgrass (*Zostera marina*) and algae; rock rip-rap, pilings, and docks; and open water.

Subtidal marine habitat refers to coastal areas that are perpetually under seawater. In coastal embayments they are found just below the intertidal zone in tidal basins and channels. The soft bottom supports a variety of algal species as well as eelgrass beds. Above the intertidal zone is southern coastal salt marsh habitat, which develops within a six- to ten-foot intertidal elevation range along sheltered inland margins of bays, lagoons, and estuaries. Southern coastal salt marsh habitat is dominated by salt-tolerant aquatic plants forming moderate to dense cover up to three feet tall. Unvegetated intertidal areas, known as salt pannes, often form in highly saline soils of the upper marsh.

A full list of plant and wildlife species observed at the Jack Dunster Marine Biological Reserve is provided in Tables 4.4-5 and 4.4-6, respectively, of the biological resources assessment (Appendix D of this DEIR).

### *Marina Vista Park, Will Rogers Mini Park, Channel View Park, Jack Nichol Park, and Bixby Golf Course*

Marina Vista Park and Will Rogers Mini Park (between Marine Stadium and Colorado Lagoon), Channel View Park (western shore of the Los Cerritos Channel north of Loynes Drive), Jack Nichol Park (northern shore of the Los Cerritos Channel, west of Pacific Coast Highway), and the Bixby Golf Course (north of Loynes) provide limited habitat value. The first four parks are developed areas with similar resources and are characterized by turf grass with scattered trees, nearly all of

them nonnative. Trees observed include coral trees (*Erythrina* spp.), Mexican fan palms (*Washingtonia robusta*), pines (*Pinus* spp.), melaleucas (*Melaleuca* sp.), eucalyptus (*Eucalyptus* spp.), and alder (*Alnus* sp.). Tables 4.4-3 and 4.4-4 of the biological resources assessment (Appendix D) show the full lists of the plant and wildlife species observed at the public parks. The Bixby Golf Course provides limited habitat such as ponds and grasses.

Resident birds at the public parks include such native species as Cooper's hawk (*Accipiter cooperii*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), downy woodpecker (*Picoides pubescens*), black phoebe (*Sayornis nigricans*), western scrub-jay (*Aphelocoma californica*), bushtit (*Psaltriparus minimus*), and house finch (*Haemorhous mexicanus*). See Table 4.4-4 of the biological resources assessment (Appendix D) for a full list of the animal species observed at these parks.

The listed Belding's savannah sparrow (*Passerculus sandwichensis* ssp. *beldingi*) was observed at Jack Nichol Park. The park provides marginal wintering, but not nesting habitat for this species. One other wintering bird species observed only at Jack Nichol Park is the western meadowlark (*Sturnella neglecta*); a flock of 11 meadowlarks was observed.

#### *Wetland Habitat*

Undeveloped, wetland land uses comprise approximately 175 acres or 12 percent of the Project area. This is the area described as the LCWC and the undeveloped adjacent and private lands. The LCWC comprises several properties, three of which together cover the largest portion of the undeveloped wetlands: Marketplace Marsh, the Synergy property, and LCWA Wetlands. Sims' Pond, a freshwater wetland under the protection of the City's Parks, Recreation, and Marine Department, was described under "Park Land." Habitat, plants, and wildlife were evaluated for each of the subareas shown in Figure 5.4-3. Wetland habitats are shown on Figure 5.4-4, *Wetlands* and vegetation communities are shown on Figure 5.4-5, *Vegetation Map*.

### *Marketplace Marsh*

The Marketplace Marsh, about 35 acres, is currently owned by the City of Long Beach. A jurisdictional delineation report prepared by AECOM in 2012 documented 21.8 acres of CDFW jurisdictional and 19.9 acres of Corps jurisdictional wetlands.

Over 90 percent of the Waters of the U.S. identified in Marketplace Marsh were southern brackish marsh (12.69 acres) and southern coastal saltmarsh (6.0 acres). Other vegetation consisted of mulefat scrub and southern willow scrub. All wetland communities in the marsh were degraded and disturbed. Habitat types are mapped on Figure 10, *Marketplace Marsh Vegetation*, of the biological resources assessment included as Appendix D of this DEIR. A list of plant and wildlife species

observed in Marketplace March are provided in Tables 4.2-1 and 4.2-2, respectively, of the biological resources assessment (Appendix D of this DEIR).

Marketplace Marsh is adjacent to the LCWA property and is regionally important due to its proximity to ecologically significant areas such as the Seal Beach National Wildlife Refuge and Bolsa Chica Wetlands. Additionally, the Marketplace Marsh presents a local habitat corridor that can be used for cover and food between the surrounding urban uplands. It can also be considered as presenting a high function for bird use, local habitat interspersion, and local wildlife movement. However, these wetlands and wetland basins do not support regional connectivity for large mammals.

### *Synergy Inc. Property*[2]

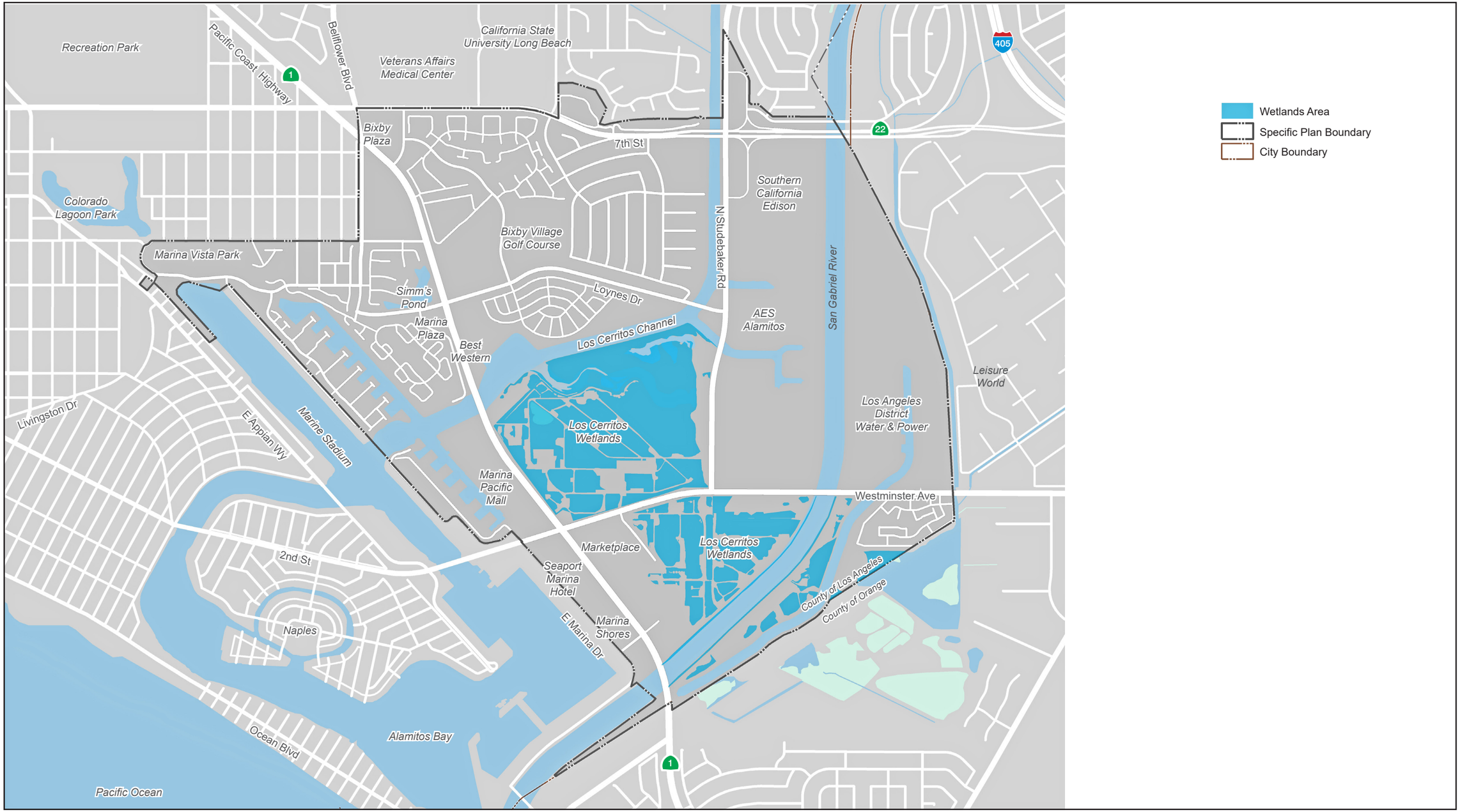
Synergy, Inc., which recently acquired this approximately 152-acre property, is currently pursuing the development of a wetland mitigation bank on the property. The mitigation bank would essentially be an "overlay" on a portion of the property, and oil extraction operations would continue. This project will be led by a newly-formed company: Beach Oil Mineral Partners, LLC. If the mitigation bank is approved, the existing slough and mud flat will be enhanced and protected, and as individual wells are removed from operation, additional wetland would be restored or created in those locations. Approximately 115.5 acres of wetlands were identified on the property.

The mudflat and its central tidal channel is the core of the Los Cerritos Wetlands. Twice daily with the ebb and flood of tides, the mudflat is exposed in varying degrees, but with fairly regular surface and drainage patterns. Generally, the exposed mudflats are clean and sandy, with diverse plant and animal populations. The mudflats generally do not show indicators of pollution.

The wetlands support dominant stands of cordgrass and two species of pickleweed that provide microenvironments for algae, juvenile fish, and crustaceans and nesting of certain birds, such as Belding's savannah sparrow, a federally listed endangered species. At the invertebrate and microscopic levels, the wealth and diversity of species, despite the twice daily foraging by shore birds, is characteristic of a long-standing, healthy mudflat-estuarine ecosystem.

[2] Although Beach Oil Mineral Partners, LLC, will oversee the wetland mitigation bank project discussed in this subsection, the 152-acre site discussed above is referred to as "the Synergy property" in this DEIR for consistency with other documents.

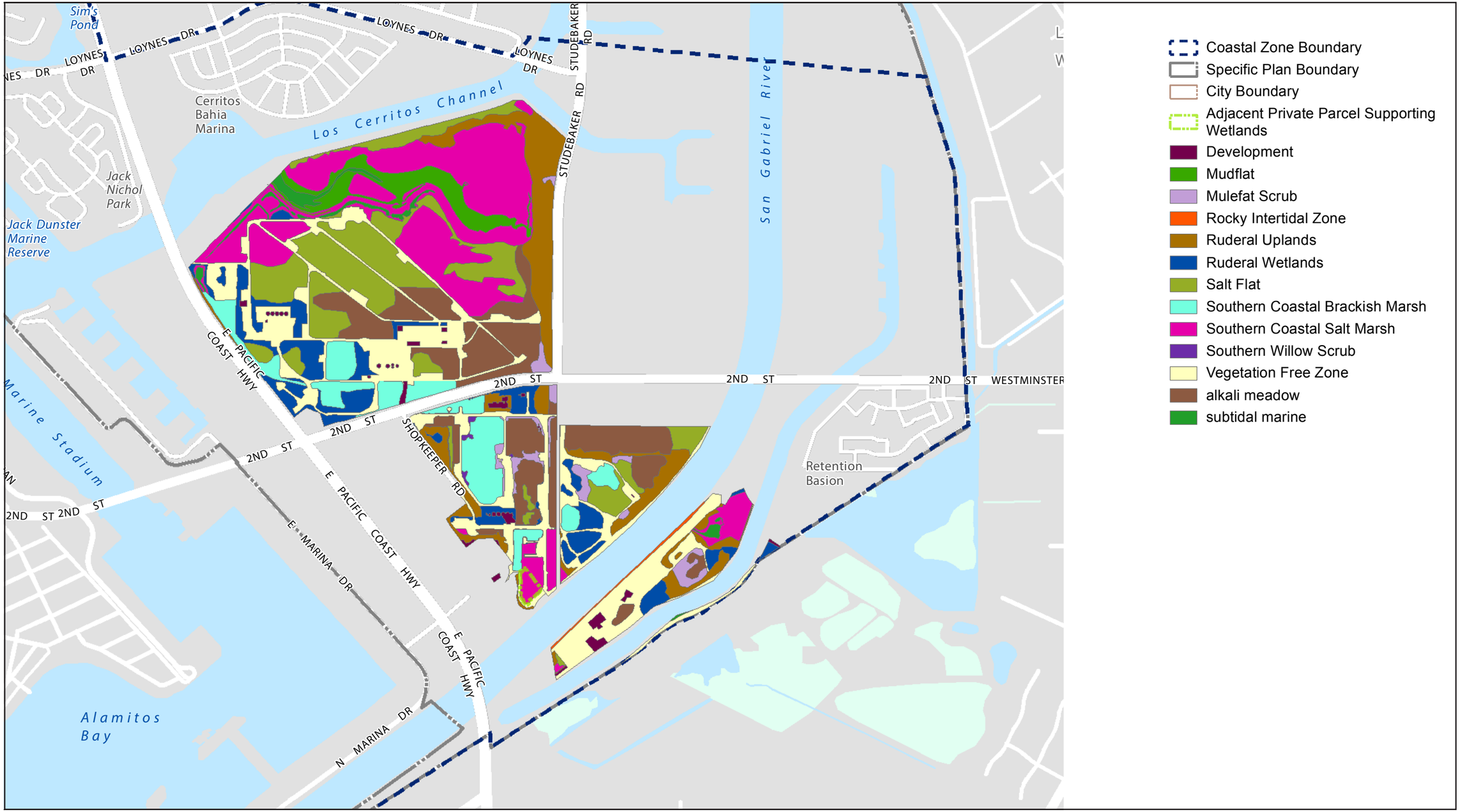
# Figure 5.4-4 - Wetlands
## 5. Environmental Analysis




Base Map Source: ESRI, 2015

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Figure 5.4-5 - Vegetation Map
**5. Environmental Analysis**




*Base Map Source: ESRI, 2016*

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On the Synergy property, Steamshovel Slough has the highest habitat value in the LCWC. This remnant channel is a geomorphological relic that supports intact and biodiverse salt marsh habitat that is the exemplary model of what much of Los Cerritos Wetlands looked like 150 years ago (Tidal Influence 2012). It contains all three of the marsh zones, including dense stands of Pacific cordgrass and several large salt pannes. The slough drains completely at low tides, exposing extensive intertidal mudflat habitat as well as eelgrass beds near the mouth. The portion of the Los Cerritos Channel that is included in this subarea is known to support eelgrass beds that sometimes attracts foraging fishes, sea lions, and other marine mammals. The channel's rubble and fill material are vegetated by salt marsh plants. Habitat types in the Synergy property are mapped on Figure 12, *Synergy Wetlands Vegetation*, of the biological resources assessment included as Appendix D of this DEIR.

This area hosts a sizeable breeding population of Belding's savannah sparrow, is a training ground for least tern fledglings, is a major migratory waterfowl and shorebird bird refuge, and provides excellent conditions for future establishment of endangered salt marsh birds beak and light-footed clapper rail populations. The Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) is listed as endangered by the State of California and is one of the few species of birds that reside year-round in the coastal salt marshes of southern California. Over 75 percent of the coastal wetland habitats within this range have been lost or highly degraded (Zembal and Hoffman 2010), and the remainder suffer from the effects of increasing human populations. Belding's are ecologically associated with dense pickleweed; breeding territories can be very small and they nest within a larger block of habitat, all of which may appear generally suitable. They can be difficult to count accurately since they are secretive and forage throughout a marsh, often well away from nesting sites. A previous survey conducted in 2010 documented that a Belding's nest with two hatchlings was discovered in shoregrass (*Monanthochloe littoralis*) in the narrow far western reach of the Slough. This survey documented 23 territories detected in the main marsh, compared to 26 found in 2006. Tidally deposited trash is problematic but dealt with through regular clean-up. Access to the marsh is easy, and there are signs of human and dog encroachment.

Habitat types in the Synergy property are mapped on Figure 12, *Synergy Wetlands Vegetation*, of the biological resources assessment included as Appendix D of this DEIR. A list of plant and wildlife species observed in the Synergy Property are provided in Tables 4.2-3 and 4.2-4, respectively, of the biological resources assessment (Appendix D of this DEIR).

### *LCWA Wetlands*

LCWA Wetlands, encompassing three areas adjacent to the San Gabriel River and totaling about 67 acres, comprise several habitat types: mulefat scrub, ruderal wetlands, salt flat, southern coastal brackish marsh, southern coastal salt marsh, and alkali meadow.

Habitat types in the LCWA Wetlands are mapped on Figure 14, LCWA Wetland Vegetation, of the biological resources assessment in Appendix D of this DEIR. A list of plant and wildlife species observed at the LCWA Wetlands are provided in Tables 4.2-5 and 4.2-6, respectively, of the biological resources assessment (Appendix D of this DEIR).

### *Alamitos Bay Partners*

The approximately six-acre Alamitos Bay Partners area is on the south shore of Los Cerritos Channel and abuts the east side of Pacific Coast Highway. Approximately one acre of the project is designated wetlands (Glenn Lukos 2016). Vegetation documented on site includes five-horned smotherweed (*Bassia hyssopifolia*), saltwort (*Batis maritima*), ice plant (*Carpobrotus edulis)*, saltgrass (*Distichlis spicata*), pickleweed (*Saliconia pacifica*), and nonnative grassland (Glenn Lukos 2016).

Vegetation in the wetland areas consists of American glasswort (*Sarcocornia virginica)*, dwarf glasswort (*Sarcocornia bigelovii),* saltwort, and estuary seablite (*Suada esteroa).* Other dominant vegetation on the project site includes seaside heliotrope (*Heliotropium curassavicum),* sea-lavender *(Limonium californicum),* yellow sweetclover *(Melilotus indica),* and various nonnative grasses.

A list of plant species observed at the LCWA Wetlands is provided in Table 4.2-7 of the biological resources assessment (Appendix D of this DEIR).

### *Lyons "Pumpkin Patch"*

The property known as "Pumpkin Patch" is approximately 4.3 acres at the northeast corner of Pacific Coast Highway and the San Gabriel River. The property is currently utilized for seasonal events such as a pumpkin patch in the fall and a Christmas tree lot during the holiday season. It recently has been identified as part of a proposal to relocate oil infrastructure. About 0.41 acre of this parcel is considered wetland.

### *County of Orange*

The County of Orange owns an approximately five-acre parcel on the east City boundary used as a detention basin, about 2.7 acres of which are wetlands.

### *Bryant Parcels*

The Bryant properties—two areas straddling the San Gabriel River and totaling about 17 acres—contain an active oil field and structures associated with oil drilling, such as drilling pads, excavation ditches, and unpaved access roads. A series of low-lying oil spill catchment basins have been constructed to maintain compliance with state and federal water quality requirements. Habitats on the Bryant properties include salt marsh vegetation, a locally abundant patch of mulefat scrub, and alkali flat/playa.

A list of plant and wildlife species observed at the Bryant parcels is provided in Tables 4.2-8 and 4.2-9, respectively, of the biological resources assessment (Appendix D of this DEIR).

*Ruderal Upland Habitat*

Undeveloped Upland habitat covers about 75 acres or 5 percent of the Project area. Ruderal uplands are composed of more than 75 percent nonnative vegetation mixed with less than 2 percent native plant species. Depending on soil quality or land uses, these upland areas are bare or entirely infested by nonnative vegetation. The impacted upland plant communities provide considerably less habitat value than what could be provided by native upland plant communities. Ruderal uplands onsite are in the 7th Street/Studebaker Avenue interchange, along 7th Street between Studebaker Avenue and the east site boundary, and along the margins of the LCWC.

*Open Water*

Open Water comprises 174 acres or approximately 11 percent of the Project area. This habitat covers areas that are perpetually under marine water and do not include wetlands. Open Water habitats include the San Gabriel River, El Cerritos Channel/Steamshovel Slough, Bahia Marina, and the Haynes Cooling Channel. Plant species found in this habitat type are listed in Table 5.4-2.

Table 5.4-2 Plant Species Observed in Open Water Habitats in Project Area

| Scientific Name | Common Name |
|---|---|
| *Arthrocnemum subterminale* | Parish's Glasswort |
| *Atriplex watsonii* | Salt Scale |
| *Batis maritime* | Saltwort |
| *Carex spp.* | Sedges |
| *Colpomenia bullosa* | Brown Bag Algae |
| *Cressa truxillensis* | Alkali Weed |
| *Cuscuta salina* | Saltmarsh Dodder |
| *Distichlis spicata* | Salt Grass |
| *Endocladia muricata* | Sea Moss |
| *Frankenia salina* | Alkali Heath |
| *Gelidium spp.* | Fern Algae |
| *Jaumea carnosa* | Salty Susan |
| *Limonium californicum* | Sea-Lavender |
| *Lycium californicum* | California Boxthorn |
| *Monanthochloe littoralis* | Shore Grass |

Pacific green sea turtles (*Chelonia mydas*), listed as federally threatened, occur in the San Gabriel River, nearshore waters between Long Beach and Huntington Beach, and local embayments. The National Oceanic and Atmospheric Administration Fisheries and California State University at Long Beach (CSULB) have initiated a more detailed sea turtle research study based upon tagging/recapture methods.

The National Marine Fisheries Service (NMFS) regulates EFH under the Magnuson-Stevens Fishery Conservation and Management Act. Alamitos Bay has the potential to support several species of pelagic and groundfish species covered under EFH, although only northern anchovy is likely to be present in the channels. The San Gabriel River is likely considered EFH because of green sea turtles, which are becoming more common there as well as in Alamitos Bay and the Anaheim Bay/Sunset Harbor/Huntington Harbor complex.

Designated Habitats of Particular Concern (HAPC), a subset of EFH, are habitat types identified by NMFS as priorities for habitat conservation, management, and research. HAPCs in the Project area include bay, estuarine, and eelgrass habitats. Due to the presence of endangered green sea turtles, eelgrass, which is a food source for green turtles, is considered a HAPC for this species. Eelgrass has been recorded in the Los Cerritos Channel. Although there is a potential for it to occur in the San Gabriel River and cooling water channels for the AES power plants, it has not been recorded in these areas.

#### *Mineral Extraction*

Mineral Extraction comprises approximately 55 acres or 4 percent of the Project area and does not describe a vegetative community. This land cover type typically refers to the areas dedicated to oil extraction (pumps, access roads, and accessary buildings). These areas are found within the LCWC.

### 5.4.1.3 SPECIAL STATUS SPECIES

#### Sensitive Plants

Sensitive plant communities (sensitive habitats) are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. Sensitive habitats are often threatened with extinction and are therefore considered valuable biological resources. Several species known to occur within the Project area are accorded "special status" by federal agencies, state agencies, and/or non-governmental organizations because of their recognized rarity, potential vulnerability to extinction, and local importance. These species typically have a limited geographic range and/or limited habitat and are referred to collectively as "special status" species.

A number of databases and literature were consulted to determine the special status plant species in the Project area. Twenty special status plant species were documented to occur in the Project area,

four of which are federal and/or state-listed as endangered, threatened, or candidate species—salt marsh bird's-beak, Ventura River milk-vetch, Gambel's watercress, and California Orcutt grass. None of these species were documented during site visits or in previous biological resources reports in the Los Cerritos Wetlands Complex. Sensitive plant species known to occur in the Project area are listed below in Table 5.4-3.

Table 5.4-3 Special Status Plant Species Known to Occur Onsite

| Scientific Name | Common Name | Status |
|---|---|---|
| *Astragalus pycnostachyus var. lanosissimus* | Ventura Marsh Milk-vetch | CNPS list 1B.1 Federal: Endangered State: Endangered |
| *Atriplex coulteri* | Coulter's Saltbush | CNPS list 1B.1 |
| *Atriplex parishii* | Parish's Brittlescale | CNPS list 1B.2 |
| *Atriplex serenana var. davidsonii* | Davidson's Saltscale | CNPS list 1B.1 |
| *Calystegia sepium ssp. binghamiae* | Santa Barbara Morning-Glory | CNPS list 1B.2 |
| *Camissonia lewisii* | Lewis' Evening Primrose | CNPS list 1B.1 |
| *Centromadia parryi ssp. australis* | Southern Tarplant | CNPS list 1B.1 |
| *Chloropyron maritimum ssp. maritimum* | Salt Marsh Birds Beak | CNPS list 1B.2 Federal: Endangered State: Endangered |
| *Juncus acutus ssp. leopoldii* | Southwestern Spiny Rush | CNPS list 4.2 |
| *Lasthenia glabrata ssp. coulteri* | Coulter's Goldfields | CNPS list 4 |
| *Lycium californicum* | California Boxthorn | CNPS list 3 |
| *Nama stenocarpum* | Mud Nama | CNPS list 1B.1 |
| *Nasturtium gambelii* | Gambel's Watercress | CNPS list 1B.1 Federal: Endangered State: Endangered |
| *Nemacaulis denudata var. denudata* | Coast Woolly Heads | CNPS list 4.2 |
| *Orcuttia californica* | California Orcutt Grass | CNPS list 2.2 Federal: Endangered State: Endangered |
| *Sagittaria sanfordii* | Sanford's Arrowhead | CNPS list 2.2 |
| *Sidalcea neomexicana* | Salt Spring Checkerbloom | CNPS list 1B.2 |
| *Suaeda esteroa* | Estuary Seablite | CNPS list 1B.1 |

Table 5.4-3 Special Status Plant Species Known to Occur Onsite

| Scientific Name | Common Name | Status |
|---|---|---|
| *Suaeda taxifolia* | Woolly Seablite | CNPS list 1B.2 |
| *Symphyotrichum defoliatum* | San Bernardino Aster | CNPS list 1B.2 |
| *Zoserta marina* | Eelgrass | NMFS HOPC (food for Pacific green sea turtle) |

Source: VCS Environmental 2016; Tidal Influence (2012); Data compiled from CNNDB, 2012, for Seal Beach and Los Alamitos quadrangle and from LCWA Habitat Assessment.
Status (California Native Plant Society [CNPS] Rare Plant Ranks):
1B.1 Plants Rare, Threatened, or Endangered in California and Elsewhere; Seriously threatened in California
1B.2 Plants Rare, Threatened, or Endangered in California and Elsewhere; Moderately threatened in California
2.2 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
4.2 Plants of Limited Distribution - A Watch List; Moderately threatened in California

### Sensitive Wildlife

Special status wildlife species include federal- and state-listed endangered and/or threatened species and CDFW Species of Special Concern. The CNDDB literature review resulted in a list of 26 sensitive animal species that have records of occurrence near the Project area and have a reasonable potential to occur (see Table 5.4-4). Of the 26 species listed, 11 have the potential to occur in the Project area. Of these, only 3 have been observed in the Project area—the Belding's savannah sparrow, California least tern, and Pacific green sea turtle. Belding's savannah sparrow is the most prevalent in the study area and been observed nesting in salt marsh vegetation found deep in Steamshovel Slough.

Table 5.4-4 Special Status Species Known to Occur Onsite

| Scientific Name | Common Name | Status |
|---|---|---|
| **Arthropods** | | |
| *Cicindella trifasciata sigmoides* | Salt Marsh Tiger Beetles | -- |
| *Panoquina errans* | Salt Marsh Wandering Skipper | State: SSC |
| **Fish** | | |
| *Eucyclobobius newberryi* | Tidewater Goby | State: Endangered<br>Federal: Endangered |
| **Reptiles** | | |
| *Chelonia mydas* | Pacific Green Sea Turtle | Federal: Threatened<br>IUCN: Endangered |
| *Emys marmorata* | Western Pond Turtle | State: SSC |
| *Perognathus longimembris pacificus* | Coast Horned Lizard | State: SSC |
| **Birds** | | |
| *Agelaius tricolor* | Tricolored Blackbird | State: SSC |
| *Asio flammeus* | Short-Eared Owl | State: WL |
| *Athene cunicularia* | Burrowing Owl | State: SSC |
| *Charadrius alexandrinus nivosus* | Western Snowy Plover | State: SSC<br>Federal: Threatened |
| *Circus cyaneus* | Northern Harrier | State: SSC |
| *Coccyzus americanus occidentalis* | W. Yellow-Billed Cuckoo | State: SSC<br>Federal: Candidate |
| *Empidonox trailii extimus* | Southwestern Willow Flycatcher | State: Threatened<br>Federal: Endangered |
| *Icteria virens* | Yellow-Breasted Chat | State: SSC |
| *Lanius ludovicianus* | Loggerhead Shrike | State: SSC |
| *Passerculus sandwichensis beldingi* | Belding's Savannah Sparrow | State: Endangered |
| *Polioptila californica californica* | Coastal California Gnatcatcher | State: SSC<br>Federal: Threatened |
| *Rallus longirostris levipes* | Light-footed Clapper Rail | State: Endangered<br>Federal: Endangered |
| *Rynchops niger* | Black Skimmer | State: SSC |
| *Sterna antillarum browni* | California Least Tern | State: Endangered<br>Federal: Endangered |

Table 5.4-4 Special Status Species Known to Occur Onsite

| Scientific Name | Common Name | Status |
|---|---|---|
| *Vireo bellii pusillus* | Least Bell's Vireo | State: Endangered<br>Federal: Endangered |
| Mammals | | |
| *Eumops perotis californicus* | Western Mastiff Bat | State: SSC |
| *Lasiurus xanthinus* | Western Yellow Bat | State: SSC |
| *Microtus californicus stephensi* | South Coast Marsh Vole | State: SSC |
| *Phrynosoma blainvillii* | Pacific Pocket Mouse | Federal: Endangered |
| *Sorex ornatus salicornicus* | Southern California Saltmarsh Shrew | State: SSC |

Source: VCS Environmental 2016; Tidal Influence (2012).
Status:
SSC: State species of special concern
WL: Watch List
IUCN: International Union for the Conservation of Nature, a global environmental organization

#### 5.4.1.4 JURISDICTIONAL WATERS AND WETLANDS

Riparian habitats occur along the banks of rivers and streams. Riparian vegetation communities typically consist of one or more deciduous tree species with an understory of shrubs and herbs. The transition between riparian vegetation and adjacent non-riparian vegetation is often abrupt. Riparian areas in the Project area include the San Gabriel River, El Cerritos Channel/Steamshovel Slough, Bahia Marina, and the Haynes Cooling Channel. Habitats along San Gabriel River, El Cerritos Channel, and the Haynes Cooling Channel are channelized within the Project area. These would be considered Waters of the State and/or US and regulated by CDFW and the Corps.

Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands are also defined and regulated by the California Coastal Commission in the coastal zone. A total of 175 acres of wetlands were documented in the Project area. Table 5.4-5 shows the breakdown by subarea identified in Figure 5.4-2.

Table 5.4-5 Approximate Wetland Acreage Onsite

| Property | Approximate Wetland Acreage |
|---|---|
| Alamitos Bay Partnership | 0.95 |
| Synergy (Beach Oil Mineral Partners, LLC) | 115.47 |
| City of Long Beach | 22.57 |
| LCWA/Bryant | 21.14 |
| LCWA/Bryant/State Lands Commission | 10.72 |
| County of Orange | 2.70 |
| Marina Shores | 0.41 |
| City of Long Beach (San Gabriel River) | 1.45 |
| Total | 175 |

Source: VCS Environmental 2016.

#### 5.4.1.5 WILDLIFE MOVEMENT CORRIDORS

Wildlife corridors link areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Various studies have concluded that, without habitat linkages that allow movement to adjoining open space areas, some wildlife species, especially the larger and more mobile mammals, will not likely persist in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and new genetic variability. Therefore, wildlife corridors effectively act as links between different populations of a species. The smaller a population, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. An increase in a population's genetic variability is generally associated with an increase in a population's health.

Corridors mitigate the effects of habitat fragmentation by:

- Allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity.
- Providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction.
- Serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

# 5. Environmental Analysis
## BIOLOGICAL RESOURCES

Wildlife movement activities usually fall into one of three movement categories:

- Dispersal (e.g., juvenile animals from birth areas, individuals extending ranges).
- Seasonal migration.
- Movements related to home range activities (foraging for food or water; defending territories; searching for mates, breeding areas, or cover).

### Regional Wildlife Movement

The Pacific Flyway is a major north-south flyway for migratory birds in America, extending from Alaska to Argentina and Chile. Migratory birds travel on an annual migration some or all of this distance both in spring and in fall. The Los Cerritos Wetlands are part of this migration, providing food and resting places; some species seek breeding grounds onsite.

Other wildlife movement within the region is limited to the San Gabriel River. The majority of the Project area and its surroundings are developed with residential, commercial, and industrial development. This developed area surrounds the open space and wetland areas of the Project. Additionally, the Project boundaries are surrounded by urbanized development and, with the exception of the trail along the San Gabriel River, these land uses do not provide access to larger open space areas for larger mammals.

The lack of appropriate linkages in the region is likely contributing to increasing conflicts between humans and coyotes in Long Beach. The City has recently addressed issues with aggressive coyotes by developing a strategy for managing coyotes based on balancing respect and protection for wildlife and their habitats without compromising public safety (Coyote Management Plan, undated). The main strategy of the City's Plan consists of a three-pronged approach in which public education is designed around co-existence with coyotes, enforcement of laws and regulations prohibiting the feeding of wildlife, and public safety by implementing appropriate tiered responses to coyote and human interactions. This plan requires active participation on the part of the entire community including residents, homeowners associations, volunteers, and city personnel.

### Project Area Wildlife Movement

The San Gabriel River and wetland areas in the Project area provide travel routes for mammals, birds, fish, and other aquatic species. The San Gabriel River provides linear movement for green sea turtles; fish; and their predators, shore birds (cormorants, egrets) and raptors (osprey, harriers). The banks and trails adjacent to the San Gabriel River provide movement corridors for mammals such as coyote and raccoon. Although the regional bicycle path physically provides a route, it has the potential to place wildlife in conflict with humans.

The wetlands area is currently separated by roadways providing a physical barrier between the two wetland areas within the Project boundary. Birds require the most migration in this area. Between June 2014 and June 2015, the City's Animal Care Services reported the remains of 10 animals on the streets separating wetland areas—4 pelicans, 1 unidentified bird, 2 skunks, and 3 raccoons. Even with the high levels of traffic on Studebaker from 2nd Street to Loynes and 2nd Street from Studebaker to Pacific Coast Highway, these roads do not pose a significant barrier to animal movement between existing wetlands in the Project area.

## 5.4.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

B-1 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

B-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

B-3 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

B-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

B-6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The Initial Study, included as Appendix A, substantiates that impacts associated with thresholds B-5 and B-6 would be less than significant or no impact. However, due to input received from members of the public, this DEIR has been prepared as a "full scope" EIR, where every environmental topic listed in Appendix G of the CEQA Guidelines is evaluated.

## 5.4.3 Environmental Impacts

The following impact analysis addresses thresholds of significance biological resources. The applicable thresholds are identified in brackets after the impact statement.

**Impact 5.4-1: Implementation of the proposed Specific Plan could directly impact sensitive species and natural communities. [Thresholds B-1 and B-2]**

***Impact Analysis:*** Potential direct impacts to sensitive species and natural communities from the implementation of the Specific Plan are analyzed below.

As shown in Tables 5.4-3 and 5.4-4, the Project area contains habitat for 21 special status plant species—4 of which are federal and/or state-listed as endangered, threatened, or candidate species—and 26 special status wildlife—11 of which are federal and/or state-listed as endangered, threatened, or candidate species. Additionally, several other plant and animal species have been observed through field survey of the Project area.

Buildout of the proposed Specific Plan would allow for the development of an additional 5,439 dwelling units and 573,576 square feet of nonresidential building space in the Project area compared to existing conditions. The Specific Plan would establish the necessary plans, development standards, regulations, infrastructure requirements, design guidelines, and implementation programs that subsequent, project-related development activities would follow. No new site specific development is planned at this time, however, the Specific Plan allows new development to be concentrated along the Pacific Coast Highway commercial corridor within the proposed Mixed Use Community Core and Mixed Use Marina land uses. These areas of change are entirely developed and do not include native habitat or other suitable habitat for sensitive species, with the exception of natural water quality features and ornamental trees.

No land use changes or additional development capacity are planned for a majority of the Project area, including the residential neighborhoods north of the Los Cerritos Channel. New industrial uses would be allowed in the proposed Industrial land use in the northeast corner of the Project area consistent with the City's General Industrial land use (LBMC Chapter 21.33) except as outlined in SEASP Section 4.3.7. However, the area proposed Industrial north of Westminster Boulevard is currently developed and infill development at this location would not impact sensitive species or natural communities. A portion of the proposed Industrial land use designation at the northeast corner of Pacific Coast Highway and the San Gabriel River consists of a vacant parcel (described above under Lyons "Pumpkin Patch"). There is approximately 0.41 acre of wetland and future development on this parcel is expected to consist of oil production and office space. Development on this parcel could result in removal of native vegetation that could support sensitive species.

However, the analysis in this DEIR does not consider buildout of a site specific project on this parcel. Separate CEQA processing will be conducted for any development on the Pumpkin Patch site prior to adoption of the proposed Specific Plan.

The Project does not propose development or changes in permitted land uses in Sims' Pond or Jack Dunster Marine Biological Preserve. These areas would be designated Open Space and Recreation under the proposed Specific Plan and are expected to remain in their current uses. Uses in the Open Space and Recreation land use designation shall comply with provisions of LBMC Chapter 21.35, Park District, and any conditions that were included as part of each project's original entitlement approval. Wetlands in these areas may be limited to the public in an effort to preserve the integrity its resource value.

The San Gabriel River, Los Cerritos Channel, and Marine Stadium are designated Channel/Marina/ Waterway in the Specific Plan. Eelgrass, regulated by NMFS, is known to occur in the Jack Dunster Marine Biological Preserve and Los Cerritos Channel and likely to occur in the San Gabriel River. The proposed Specific Plan does not propose development, dredging, or modification within tidelands or rivers that would house eelgrass. Therefore, direct impacts to HAPC (eelgrass) or other EFH would not occur.

### Special Considerations - Los Cerritos Wetlands Complex (LCWC)

The entire portion of the LCWC within the Project boundaries would be designated Coastal Habitat, Wetlands & Recreation, except for two areas: the Lyons Pumpkin Patch, and the Orange County parcel, a 5-acre detention basin, including about 2.7 acres of wetlands. Future development with respect to the Lyons Pumpkin Patch is described above. No development is proposed on the Orange County parcel.

The intent of the Specific Plan is to preserve, restore, and enhance sensitive biological habitat. Buildout would result in a net increase in native vegetation and wetland habitats. This effort is being ensured through a number of project design features. For example, jurisdiction delineations are required for any new development activity in the Coastal Habitat; Wetlands & Recreation land use (see Section 5.8 of SEASP). Uses would be reviewed and designed to avoid direct impacts to wetlands and other sensitive habitats by placing development within existing roads, buildings, or ruderal upland area. The City anticipates that the interpretive center could be housed in the Bixby Ranch Field Office (6422 East 2nd Street) in the ruderal, upland habitat area of the LCWC. Additionally, trails, if allowed, would be developed on upland or unvegetated areas, thus minimizing direct impacts to native vegetation. The Specific Plan also establishes a Wetland Monitoring Fund (SEASP Section 5.9), which will provide revenue in perpetuity for the long-term management of the wetlands, thereby protecting native vegetation and sensitive habitats.

No site specific development project is being proposed in the Coastal Habitat, Wetlands & Recreation area as part of the Specific Plan. However, the Coastal Habitat, Wetlands & Recreation land use designation lies entirely within the coastal zone and provides for coastal restoration, access, and visitor-serving recreation–ancillary office space, boat storage, trails, and an interpretive center. These uses are intended to be complementary to the surrounding habitat and consistent with the Coastal Act. While these uses are intended to be developed in disturbed areas or ruderal uplands consisting of bare land or nonnative vegetation, development of these uses could impact sensitive habitat or result in the loss of native vegetation supporting sensitive species. For example, implementation of the Specific Plan could allow development of dry-stack boat storage on the Alamitos Bay Partnership property—about six acres in the LCWC at the southeast corner of Pacific Coast Highway and the Los Cerritos Channel—which includes about one acre of jurisdictional wetlands and sensitive plant species. Development on this property could result in a significant impact.

### Impact 5.4-2: Implementation of the proposed Specific Plan could indirectly impact sensitive species and natural communities. [Thresholds B-1 and B-2]

Buildout of the Specific Plan would add 8,648 residents and 560 employees to the Project area. Accommodating the increased growth and building square footage could result in indirect impacts on sensitive species and habitats in the proposed Coastal Habitat, Wetlands & Recreation and Open Space and Recreation land uses, which has the greatest concentration of native vegetation and sensitive species. Developments and other human activities near sensitive species and sensitive habitats can have indirect adverse effects because of noise, light, recreational use, human and domestic animal intrusion, and stormwater runoff.

#### Noise

Indirect noise impacts may occur to wildlife during project construction and operation. Construction noise to sensitive wildlife could result from demolition, grading, and building activities. Noise and vibration associated with the use of heavy equipment during project construction has the potential to disrupt wildlife foraging and breeding behavior. As discussed in Section 5.12, *Noise*, construction equipment generates high levels of noise, with maximums ranging from 71 dBA to 101 dBA. The ambient noise levels in the Project area represent typical noise levels for a highly urbanized area with heavily traveled roadways. However, construction noise levels would exceed the existing ambient conditions and could disrupt wildlife if they occur adjacent to or near sensitive areas.

Noise reduction measures required by Mitigation Measures N-1, N-2, and N-3 would reduce temporary construction noise impacts on adjacent properties. However, these measures would not

reduce all construction-related noise impacts near sensitive habitats. No site specific development project is proposed. However, the proposed Specific Plan would allow new development near sensitive biological resources. These areas, such as new development adjacent to the Los Cerritos Channel within the proposed Mixed Use Marina land use, adjacent to the LCWC within the Mixed Use Community Core area, and visitor-serving recreation in the Coastal Habitat, Wetlands & Recreation area, could experience substantial noise increases during construction. This is considered a potentially significant impact for sensitive species during the breeding season.

Following construction, implementation of the Specific Plan would increase ambient noise levels in the Project area through increased population, employment, and associated traffic. Additionally, intensification of development may result in noise from stationary sources such as landscaping, mechanical equipment, and air conditioning systems. The increase in ambient noise levels was evaluated in Section 5.12.3 of this DEIR (Impacts 5.12-3 and 5.12-4). As analyzed, implementation of the proposed Project would not result in a perceptible increase in noise levels along Project area roadways, and stationary-source noise levels would have a substantial increase on the noise environment. As a result, long-term operational noise impacts on biological resources would be less than significant.

### Lighting

Artificial lighting at night has been demonstrated to significantly reduce or curtail the normal activity patterns of nocturnal animals by interfering with foraging, mating, nurturing young, other important social interactions. In addition, lit areas in an otherwise dark environment can expose animals to predators. Night lighting associated with implementation of the proposed Project would result in an increase in lighting associated with the introduction of new buildings, security, sign, and vehicles traveling in the area. As discussed in Section 5.1.3 of this DEIR (Impact 5.1-4), the vast majority of new lighting would occur within a highly urbanized area and on highly trafficked roadways. As such, the overall change in night lighting in the area would not be significant. However, the introduction of new buildings with increased heights in the proposed mixed-use areas or an interpretive center in the proposed Coastal Habitat, Wetlands & Recreation areas could impact sensitive habitat and wildlife in the LCWC and open space areas.

As discussed in Section 5.1.3, the proposed Specific Plan includes a number of design guidelines to control light and glare from new developments. For example, direct lamp glare from unshielded floodlights and lighting aimed into the night sky are prohibited. Exterior lighting should be designed and located in such a way that it does not project off-site or onto adjacent uses. Additionally, the design guidelines that control lighting to protect biological resources are provided in Section 7.2.14 of SEASP as follows:

- Nighttime lighting shall be minimized to levels necessary to provide pedestrian security.
- Buildings shall be designed to minimize light spillage and maximize light shielding to the maximum feasible extent.
- Building lighting shall be shielded and directed downward, up-lighting is prohibited. Use of "event" searchlights or spotlights shall be prohibited.
- Landscape lighting shall be limited to low-intensity and low-wattage lights.
- Red lights shall be limited to only that necessary for security and safety warning purposes, blue or green lights are a better option if the use of colored lights is desired.

Compliance with the above design guidelines would ensure that new buildings and other urban infrastructure would be designed to reduce excessive light and glare onto adjacent sensitive biological resources. Even with these measures, new lighting proposed within and adjacent to sensitive habitat could impact wildlife.

### Human Activities/Urban/Wetland Interface

The proposed Coastal Habitat, Wetlands & Recreation land use designation encourages trails and public viewing areas and allows for the development of visitor-serving recreation or an interpretive center. Additionally, the proposed Project would increase residential uses, increasing population in the Project area. The proposed uses and Specific Plan buildout would attract residents and visitors to the wetland areas. Increased recreational use has damaging effects on wildlife due to trampling, bicycle use, and unregulated movement of domestic animals. The impact of human intrusion into sensitive biological resources could result in a significant impact.

New developments would also introduce new landscaping. Planting of invasive species adjacent to LCWC and other sensitive habitats has the potential to disrupt the habitat value of the native vegetation and wetland habitat. The Specific Plan includes project design features to ensure non-invasive and native plant species. For example, new landscape plantings shall utilize non-invasive species (prohibited species published by the California Invasive Plant Council) and reflect native plants typically associated with wetlands into development around wetlands (SEASP Section 7.2.13A). Additionally, landscaping within 500 feet of natural areas the edge of Shopkeeper Road shall consist of California Native species or varieties that will not invade habitat or hybridize with existing native vegetation to create a more seamless transition between the natural wetlands and development (per CalGreen and Cal-IPC standards) (SEASP Section 7.1.5). Implementation of these provisions of the Specific Plan would ensure that impacts to sensitive habitat is not impacted.

### Stormwater Runoff

As discussed in Section 5.9, *Hydrology and Water Quality*, construction activities related to the buildout of the Specific Plan would potentially result in soil erosion and temporary adverse impacts to surface water quality from construction materials and wastes if left unregulated. Clearing, grading, excavation, and construction activities associated with the proposed Project may impact water quality due to sheet erosion of exposed soils and subsequent deposit of sediment in local drainages. However, future projects in accordance with the proposed Specific Plan are required to comply with the most current General Construction Permit (Order No. 2009-0009-DWQ). This requires treatment of all surface runoff from paved and developed areas, the implementation of applicable best management practices (BMPs) during construction activities, and the installation and proper maintenance of structural BMPs to ensure adequate long-term treatment of water before it enters any stream course or offsite open space areas. Water quality measures will be implemented as part of the NPDES permits, and no significant impacts are anticipated.

Implementation of the Specific Plan would allow for additional residential, commercial, and industrial land uses. These uses could generate pollutants—pesticides, insecticides, herbicides, fertilizers, and vehicle emissions—that, if left untreated, would impact the water quality of receiving waters. As discussed in Section 5.9, future projects in accordance with the Specific Plan would be required to incorporate low-impact development (LID)/site design and source control BMPs to address post-construction stormwater runoff management. Selection of LID and additional treatment control BMPs is based on the pollutants of concern for the specific Project area and the BMP's ability to effectively treat those pollutants in consideration of site conditions and constraints. Further, projects must develop a project-specific LID design plan that describes the menu of BMPs chosen for the project, as well as operation and maintenance requirements for all structural and any treatment control BMPs. Consistency with the City's LID Ordinance would reduce potential water quality impacts to sensitive biological resources to less than significant.

### Avian Species – Bird Strikes

Of the 26 special status wildlife species present in the specific plan area, 15 are birds. The LCWC provides habitat for a number of bird species and is part of the Pacific Flyway. New development or redevelopment activities in areas that are already urbanized would not directly impact any sensitive habitat. However, development that increases building heights near sensitive habitats—Sims' Pond, Jack Dunster Marine Biological Reserve, LCWC, and all areas proposed to be designated Coastal Habitat, Wetlands & Recreation—has the potential to impact sensitive birds due to bird strikes. For example, a mixed-use development with a hotel component could allow up to seven stories in the Mixed Use Community Core or new industrial uses on the vacant Pumpkin Patch, adjacent to the wetlands.

It is well established that buildings can pose a significant hazard to flying birds from collision. Species that frequently fly through small spaces in dense understory habitat appear consistently on top ten lists of fatalities; species well adapted to and common in urban areas, such as sparrows and starlings, are not prominent on lists of fatalities. This may be evidence that resident birds are less likely to die from collisions than migratory birds. About 90 percent of bird strikes with buildings are within the first 40 feet in height (comparable to a 3 story building).

As detailed in Section 7.2.14, *Bird-Safe Treatments*, of the Specific Plan, the proposed Project requires special building treatments and establishes guidelines for all new developments to reduce impacts related to bird strikes. The reflectivity and transparency of glass are the primary hazards to birds. Highly reflective surfaces falsely imitate the sky, clouds, or nearby trees or vegetation. Sheets of transparent glass are invisible to birds and become dangerous barriers to migration routes, shelter, and food. Lights may also disorient and confuse birds by inhibiting their ability to see navigational markers such as the stars and the moon. Therefore, special design requirements have been established relating to lighting, landscaping, and façade treatments. For example, building façade treatments specify glazing materials, and building site design prohibits features that create bird traps. In addition to the building, lighting, and landscaping requirements, height limitations are required within 100 feet of a wetland (see Section 7.1.5 of the Specific Plan, *Special Edge Conditions, Wetlands Edge at Shopkeeper Road*).

### Impact 5.4-3: Buildout of the Specific Plan could impact jurisdictional waters and/or wetlands. [Thresholds B-2 and B-3]

*Impact Analysis:*

#### Direct Impacts

##### *Jurisdictional Waters*

As described under Impact 5.4-1, implementation of the Specific Plan could result in direct impacts to jurisdictional wetlands resulting from private development, trails, or other recreational uses within the LCWC. The Project area contains approximately 175 acres of undeveloped wetlands. The majority of this acreage is protected under the Specific Plan. Wetlands within the Specific Plan area will benefit from the establishment of a wetland monitoring fund by the City. New development is required to contribute to the fund for the long term management of these resources. Since development footprints are not yet defined and the Specific Plan would allow recreational uses in the LCWC, impacts to jurisdictional waters within the proposed Coastal Habitat, Wetlands & Recreation areas are potentially significant.

The intent of the Specific Plan is to preserve, restore, and enhance sensitive biological habitat. Buildout would result in a net increase in native vegetation and wetland habitats. Based on the biological resources assessment, the existing wetland habitats have been impacted to various degrees, resulting in degraded wetland functions and values in most areas. Steamshovel Slough is the area of the highest habitat value, however all the wetlands and buffers are valuable in their current state for potential restoration and enhancement. The Specific Plan effort has resulted in focused consideration of the future of the remaining wetlands in the Project area.

Furthermore, LCWA does not intend to allow development that is inconsistent with wetland preservation on its property. Synergy Oil is in the process of creating a wetland mitigation bank and does not intend to develop on its property. The City of Long Beach, which owns Marketplace Marsh, is also contemplating the establishment of a wetland mitigation bank on this parcel and, if so, would not allow development inconsistent with the banking operation or existing oil extraction operations. These three properties comprise the majority of the undeveloped wetlands in the Project area. Private parcels, such as the Bryant properties, are anticipated to be sold to LCWA and included in the LCWC.

Riparian habitats found within the Project area include the San Gabriel River and, to lesser extent, the El Cerrito Channel and Haynes Cooling Channel. These waterways are channelized within the Project area and are not part of any allowed development. Therefore, there will be no direct impacts to these riparian features.

### Indirect Impacts

Potential indirect impacts to wetlands from adjacent development could include lighting, noise, runoff, and human intrusion. These impacts were addressed above under Impact 5.4-2 for all indirect impacts to sensitive habitats and species. To avoid indirect impacts to wetlands, wetland buffers are required (SEASP Section 5.10) to address the specific type and intensity of these impacts from adjacent development.

Wetland buffers separate wetlands from surrounding land uses that are incompatible with wetland values. Beyond providing protection for wetlands, buffers also serve a valuable function for a variety of wildlife species because they provide habitat for foraging, breeding, and protective cover. Buffers are generally upland areas of native or planted vegetation that protect the character and function of wetlands from indirect impacts and from the adverse impacts of an adjacent land use (e.g. lighting, noise, etc.). The buffers are treated as a part of the adjacent urban developments and are measured horizontally from the edge of the delineated wetland.

Although the Coastal Commission recommends a 100-foot buffer between development and wetlands, the City does not require buffers in areas where existing streets, buildings, parking lots,

access ways, and infrastructure would need to be removed to provide a 100-foot buffer (for example, Pacific Coast Highway adjacent to Synergy wetlands). In addition, with scientific documentation demonstrating that a proposed development may use a reduced, enhanced buffer to accomplish the avoidance and minimization measures related to edge effects, the City may determine that a reduced buffer is appropriate; the City may also require additional mitigation for the reduced buffer. Alternatively, an increased buffer width may be required by the City under the proposed Specific Plan to provide adequate protection of the wetland values. In addition, to the Mitigation Measures required for Impact 5.4-2, wetland buffers required as part of the proposed Specific Plan would ensure indirect impacts to wetlands are less than significant.

**Impact 5.4-4: Implementation of the proposed Specific Plan could affect wildlife movement. [Threshold B-4]**

***Impact Analysis:*** A portion of the San Gabriel River is within the Project area; however, as stated under Impact 5.4-2, the San Gabriel River will not be directly impacted by implementation of the Specific Plan. Recognized wildlife corridors have not been designated within the Project area. However, the LCWC is likely part of a migration path for urban wildlife, providing food and resting sources; some species seek breeding grounds within the Project area. The preservation of wetlands and limited uses allowed within the proposed Coastal Habitat, Wetlands & Recreation land use designation would result in avoidance of impacts to wildlife using this area as a corridor.

The LCWC provides habitat for a number of avian species and is part of the Pacific Flyway. The preservation of wetlands in the Project area substantially reduces impacts to migrating bird species in the Pacific Flyway. As discussed under Impact 5.4-2, Section 7.2.14 of SEASP, Bird-Safe Treatments, would reduce impacts relating to bird strikes to less than significant.

There is a potential for existing ornamental trees to be removed during development or redevelopment in the urbanized areas. Projects undertaken in accordance with the proposed Specific Plan would also be required to comply with the MBTA, which implements the United States' commitment to four treaties with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the take, kill, possession, transport, and import of migratory birds, their eggs, parts, and nests. Compliance with MBTA would ensure that trees and nests will not be removed during the breeding season.

Impact 5.4-5: Implementation of the proposed Specific Plan would not conflict with any local ordinance, habitat conservation plan, natural community conservation plan, or other applicable approved habitat conservation plan. [Thresholds B-5 and B-6]

*Impact Analysis:* The Project area is not in a habitat conservation plan, a natural community conservation plan, or any other approved local, regional, or state habitat conservation plan. Therefore, no impacts with respect to a habitat conservation plan would occur.

Trees in Long Beach are protected under Chapter 14.28 (Trees and Shrubs) of the City's Municipal Code, which regulates the planting, maintenance, and removal of trees in the City. Projects developed under the proposed Project may involve the removal of existing ornamental trees, including street trees. However, projects would be required to comply with provisions of the City's Municipal Code. Therefore, implementation of the proposed Project would not conflict with local policies or ordinances protecting trees, and no impact would occur.

## 5.4.4 Cumulative Impacts

The cumulative study area for biological resources is the southeast Long Beach area consisting or urbanized uses. Development in this area would continue to occur consistent with the adopted General Plan. The primary cumulative impact on biological resources is the fragmentation of ecosystems resulting from incremental losses of native habitats. A cumulative impact would result if connectivity between patches of habitats and wildlife populations were lost.

The proposed Specific Plan intends to protect the valuable habitat and species in the Project area through implementation of a mitigation monitoring fund and wetland buffers. Loss of native vegetation and habitat, on removal of mature trees, or excessive outdoor lighting could contribute to a cumulative impact. However, only a small area of wetland habitat would be impacted which would not result in a significant cumulative impact. The vast majority of wetlands in the LCWC would be preserved. With the mitigation required for the Project area, no significant cumulative impacts to biological resources would occur.

## 5.4.5 Existing Regulations

### Federal

- United States Code, Title 16, Sections 1531 et seq.: Endangered Species Act
- United States Code, Title 16, Sections 703-712: Migratory Bird Treaty Act
- United States Code, Title 33, Sections 1251 et seq.: Clean Water Act

### State

- California Coastal Act
- California Fish and Game Code, Section 2080: Endangered Species Act
- California Fish and Game Code, Section 1600: Lakes and Streambed

## 5.4.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.4-5.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.4-1** Implementation of the proposed Specific Plan could directly impact sensitive species and natural communities.

- **Impact 5.4-2** Implementation of the proposed Specific Plan could indirectly impact sensitive species and natural communities.

- **Impact 5.4-3** Implementation of the Specific Plan could impact jurisdictional waters and/or wetlands in the Coastal Habitat, Wetlands & Recreation land use designation.

- **Impact 5.4-4** Implementation of the Specific Plan may result in the removal of trees and active nests during **the** breeding season.

## 5.4.7 Mitigation Measures

### 5.4.7.1 PROJECT DESIGN FEATURES

PDF-BIO-1 Wetland Delineations (SEASP Section 5.8).

PDF-BIO-2 The City shall establish a Wetland Monitoring Fund and establish fees pursuant to a Property Analysis Record (PAR). Each development or redevelopment shall contribute its fair share based on the size of the development to this fund, which will be created to provide long-term management to the wetlands within SEASP. (SEASP Section 5.9).

PDF-BIO-3 Wetland Buffers (SEASP Section 5.10).

PDF-BIO-4 New landscape plantings shall utilize non-invasive species (prohibited species published by the California Invasive Plant Council) and reflect native plants typically associated with wetlands into development around wetlands (SEASP Section 7.2.13A).

PDR-BIO-5 Wetlands Edge at Shopkeeper Road. Landcaping within 500 feet of natural areas along this edge shall consist of California Native species or varieties that will not invade habitat or hybridize with existing native vegetation to create a more seamless transition between the natural wetlands and development (per CalGreen and Cal-IPC standards) (SEASP Section 7.1.5).

#### 5.4.7.2 MITIGATION MEASURES

##### Impact 5.4-1

BIO-1 Concurrent with submittal of site development plans for development on or adjacent to undeveloped land and all land within the Coastal Habitat, Wetlands & Recreation land use, the project applicant shall submit a biological resources report conducted by a qualified biologist. The biological resources report shall include: analysis of available literature and databases (CNDDB); historical sensitive biological resources; review of current land use and land ownership within the project vicinity; on-site survey and mapping that delineates vegetation communities present within the development area; identification of jurisdictional waters and special status habitat, wildlife, and plant species. Focused surveys for sensitive, threatened, endangered species, will also be prepared, as required. The project applicant shall demonstrate that the proposed development and project design avoids impacts to special status species and habitats, in consultation with CDFW and USFWS. If complete avoidance is not possible, the project applicant shall obtain necessary permits from CDFW and USFWS. Prior to the issuance of grading permits, the project applicant shall submit plans, required permits, and mitigation plans (if needed) to the Long Beach Development Services Department for review and approval.

BIO-2 Concurrent with submittal of site development plans for development on or adjacent to undeveloped land and all land within the Coastal Habitat, Wetlands & Recreation land use, the project applicant shall submit a jurisdictional delineation prepared by a qualified biologist or letters stating that no such jurisdictional features exist. The jurisdictional delineation shall be prepared pursuant to the requirements

of (1) US Army Corps of Engineers (Corps) jurisdiction pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, (2) CDFW jurisdiction pursuant to Section 1602 of the Fish and Game Code, (3) RWQB jurisdiction pursuant to Section 401 of the Clean Water Act and Section 13260 of the Porter-Cologne Act, and (4) wetlands as defined under the California Coastal Act. The project shall be designed to avoid impacts to jurisdictional wetlands. If wetland avoidance is not possible, the applicant shall ensure no net loss of wetlands either by creation of applicant-sponsored wetlands or purchase of mitigation bank credits in consultation with applicable Federal- and State- agencies (Corps, CDFW, RWQB, and/or Coastal Commission). Any mitigation, replacement, and/or restoration of habitat shall occur in the LCWC or in an approved coastal mitigation bank that covers this area. If the applicant can demonstrate that there are no logistically viable opportunities for mitigation within the LCWC, the applicant may propose mitigation elsewhere, which must be approved by the City and the resource agencies The mitigation plan prepared in consultation with the applicable agencies shall include: responsibilities and of persons to supervise and implement the plan, site selection, restoration and creation of habitat; site preparation and planting implementation, schedule, maintenance guidelines, monitoring plan (5 year minimum), and long-term preservation. Prior to the issuance of grading permits covering jurisdictional areas, the project applicant shall provide evidence to the Long Beach Development Services Department that (1) all necessary permits or authorizations have been obtained from the Corps (pursuant to Section 404 of the Clean Water Act), CDFW (pursuant to Section 1602 of the Fish and Game Code, and RWQCB (pursuant to Section 401 of the Clean Water Act), the Coastal Commission, or that no such permits are required; and (2) the detailed mitigation and restoration plan shall be approved by the Development Services Department.

BIO-3 If sensitive biological resources are identified within or adjacent to the proposed development area, the project applicant shall submit evidence to the Long Beach Development Services Department that a qualified biologist has been retained to prepare a construction management plan. The construction limits shall be clearly flagged and/or fenced. No construction access, parking, storage of equipment, or waste dirt or rubble will be permitted within such marked areas. A monitoring biologist shall be onsite during any grading activities. The qualified biologist shall also develop and implement a project specific contractor training program to educate project contractors on the sensitive biological resources within and adjacent to the proposed development project area and oversee measures to avoid and/or minimize impacts to these species.

### Impact 5.4-2

Mitigation Measures N-1, N-2, and N-3 apply.

BIO-4 Prior to the issuance of grading permits for any development, the project applicant shall include noise reduction measures to reduce noise impacts to wildlife. A note shall be provided on development plans indicating that throughout grading, demolition, and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:

- During all excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.
- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors (wildlife) nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (wildlife) during all project construction.
- No construction shall occur within 500 feet of nesting raptors or threatened or endangered species and 100 feet of all other nesting birds protected by the federal Migratory Bird Treaty Act.

BIO-5 Prior to approval of any development adjacent to jurisdictional waters or habitat for special status species and all land within the Coastal Habitat, Wetlands & Recreation land use, the project applicant shall submit a photometric plan demonstrating that the project will be designed and shielded so that the nighttime lighting shall be no greater than 0.10 foot-candles at the edge of the habitat. This would ensure that spill light does not result in exposure of artificial light at levels exceeding the intensity of moonlight (approximately 0.5 foot-candles).

BIO-6 Prior to approval of a trails/access plan within or adjacent to jurisdictional waters, the location, design, and text for urban-open space interface signage shall be developed. The signage shall be located at all pedestrian access points. The signage shall educate users on the responsibilities associated with the open space interface and shall address relevant issues including the role of natural predators in the

wildlands and how to minimize impacts of human and domestic pets on native communities and their inhabitants.

BIO-7 Prior to the issuance of building permits, the project applicant and/or subsequent builder shall prepare an urban-open space interface brochure to be approved by the Long Beach Development Services Department to educate residents on the responsibilities associated with living near sensitive biological habitat. The brochure shall address relevant issues, including the role of natural predators in the wildlands and how to minimize impacts of human and domestic pets on native communities and their inhabitants. The approved brochure, along with attachments, shall be included as part of the rental/lease agreements and as part of the sales literature for future developments.

### Impact 5.4-3

Mitigation Measures BIO-1 and BIO-2 apply.

### Impact 5.4-4

BIO-8 If construction is proposed between January 15 to September 1st, a qualified biologist must conduct a nesting bird survey(s) no more than three days prior to initiation of construction activities to document the presence or absence of nesting birds in or adjacent to the project site. The preconstruction survey(s) will focus on identifying any raptors and/or passerines nests that may be directly or indirectly affected by construction activities. Any nest permanently vacated for the season would not warrant protection pursuant to the Migratory Bird Treaty Act. If active nests are documented, the following measures are required:

- Species-specific measures shall be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. A minimum exclusion buffer of 100 feet shall be maintained during construction, depending on the species and location. The perimeter of the nest setback zone shall be fenced or adequately demarcated with stakes and flagging at 20-foot intervals, and construction personnel and activities are restricted from the area.
- A survey report by a qualified biologist verifying that no active nests are present, or that the young have fledged, shall be submitted to the Long Beach Development Services Department prior to initiation of grading in the nest-setback zone. The qualified biologist shall serve as a biological monitor during

those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur.

- A final report of the findings, prepared by a qualified biologist, shall be submitted to the Long Beach Development Services Department prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

## 5.4.8 Level of Significance After Mitigation

The mitigation measures identified above would reduce potential impacts associated with biological resources to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to biological resources remain.

## 5.4.9 References

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