

## **1. Alamitos Bay SEA**

### ***Location***

#### *General*

The Alamitos Bay Significant Ecological Area (SEA) is located upstream of the Alamitos Bay Marina, off the Los Cerritos Channel of the City of Long Beach. The SEA boundaries encompass the Alamitos Bay salt marsh, which is one of three remaining examples of salt marshes found in the County. The entire SEA area has been identified by the California Audubon as a Globally Important Bird Area (IBA)—part of the Los Cerritos Wetlands and adjacent oil fields section of the Orange Coast Wetlands unit. The entire SEA is located within the United States Geological Survey (USGS) 7.5' California Los Alamitos Quadrangle.

#### *General Boundary and Resources Description*

The SEA boundaries generally follow the Alamitos Bay salt marsh area, which is bordered by an oil field, main artery roads, the Cerritos Channel, and residential development. The SEA is situated to the west of Studebaker Road, north of Westminster Avenue, east of Pacific Coast Highway and south of Loynes Drive and the Cerritos Channel within the City of Long Beach.

The SEA is one of three remaining examples of salt marsh found in the County, and the last remnant of the extensive salt marshes once found in Los Alamitos Bay. The majority of this vegetation type has been lost to urbanization, flood control projects, harbors, and marinas. It is one of the most productive ecological communities and is an important breeding ground for terrestrial and marine organisms, including the majority of commercial fishes. This is due in part to the estuaries and salt marshes interfacing between the terrestrial and marine worlds, and serving as important nutrient cycling centers for marine ecosystems. The Belding's savannah sparrow occurs in Alamitos Bay salt marsh. This species is restricted to salt marsh habitat, and has been placed on the state-endangered species list. The Orange Coast Wetlands IBA is believed to harbor one-eighth of the population of Belding's savannah sparrows, and there is a significant amount in Alamitos Bay. Least terns and other terns that breed in the area often use Alamitos Bay and the Cerritos arm as a foraging area. This type of habitat is an important wintering ground for migratory birds. It is estimated that in the fall and spring seasons, the Orange Coast Wetlands IBA hosts 15,000-20,000 individuals of migrating birds.

### ***Vegetation***

As discussed, the SEA encompasses the last remaining coastal salt marsh in Los Alamitos Bay's formerly extensive system of salt marshes and is one of only three such examples of this habitat remaining in County. Sensitive plant species occurring or potentially occurring within the SEA are discussed in the Sensitive Biological Resources section.

Coastal Salt Marsh: Consists of salt-tolerant plants that are mostly low-growing herbaceous perennials that are found on the borders of marine salt water bodies. The duration and extent of tidal inundation or influence causes a graduation in the prevalence of various species within this community. In the Alamitos Bay wetlands, this includes cordgrass as the dominant species and depending on the conditions, pickleweed, salt grass, alkali heath and spearscale can also be found.

Corresponding MCV communities:

*Sarcocornia pacifica* (*Salicornia depressa*) ([*Salicornia pacifica*, *Salicornia depressa*] pickleweed mats)  
Herbaceous Alliance  
*Bolboschoenus maritimus* (salt marsh bulrush marshes) Herbaceous Alliance  
*Distichlis spicata* (salt grass flats) Herbaceous Alliance  
*Spartina foliosa* (California cordgrass marsh) Herbaceous Alliance

**Intertidal Flats:** Brackish coastal wetlands of low-lying basins of high evaporation and infrequent inputs of freshwater with low-growing salt tolerant plants.

Corresponding MCV Communities:

*Ruppia (cirrhosa, maritima)* (ditch-grass or widgeon-grass mats) Aquatic Herbaceous Alliance

### **Wildlife**

Coastal salt marshes and estuaries are productive habitats, which are used for foraging and breeding grounds, for both resident and migrating wildlife species. Estuaries and coastal salt marshes are the interface between the terrestrial and marine worlds, and are important nutrient recycling centers for marine ecosystems. In the past, this habitat was once extensive in the Los Alamitos Bay area.

Although little documentation regarding the types of animals present has been found, based on the apparent health of the ecosystem, it may be assumed that fishes that are commonly found in the vicinity can also be found in the SEA. These may include species, such as arrow goby, California halibut, cheekspot goby, diamond turbot, queenfish, shadow goby, shiner perch, topsmelt, longjaw mudsucker, Pacific staghorn sculpin, and yellowfin goby.

Without more information, it is not possible to predict whether any reptiles or mammals can be found, but it is likely that amphibians, such as Baja California chorus frogs, are present.

The SEA habitat probably supports a variety of bird species found in the few coastal saltmarshes that remain in coastal Southern California. Belding's savannah sparrow has been observed in the SEA. Shallow water habitat exists and would be expected to attract wading birds and ducks. Foraging habitat that is attractive to raptors appears to be present on the outside perimeter of the marsh.

### **Wildlife Movement**

The SEA provides a variety of saltwater, estuarine, mudflat and freshwater marsh habitats, and is an important stopover for many migratory birds traveling the Pacific Flyway migration route. Its suitability for many fishes and invertebrates allows populations that are capable of supporting further colonization and expansion of range. The area does not fall within any identified terrestrial movement routes for wildlife.

### **Sensitive Biological Resources**

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, and/or rare. This is due to the species' declining or limited population sizes, which usually results from habitat loss. Watch lists of such resources are maintained by the California Department of Fish and Game (CDFG), the United States Fish and Wildlife Service (USFWS), and special groups, such as the California Native Plant Society (CNPS). The following sections indicate the habitats as well as plant and animal species present,

or potentially present within the SEA, which have been accorded special recognition.

#### *Sensitive Plant Communities and Habitats*

The SEA supports several habitat types considered sensitive by resource agencies. These are inventoried by California Department of Fish and Game (CDFG) in the California Natural Diversity Database (CNDDDB) [2011]. The CNDDDB includes state and federally-listed endangered, threatened, and rare vascular plants, as well as several sensitive vertebrate species. The SEA is configured to encompass the regionally significant community of a coastal salt marsh or coastal brackish marsh. This community or closely related designations are considered highest priority communities by the CDFG, indicating that they are declining in acreage throughout their range due to land use changes. The array and composition of these communities have been discussed in the Vegetation section. Changes to the classification system mentioned earlier in some cases divide plant communities into many possible vegetation alliances—not all of which may be considered sensitive. Previously listed communities with at least one sensitive alliance in the new format have been listed.

#### *Sensitive Plant Species*

The following special-status plant taxa have been reported or have the potential to occur within the SEA, based on known habitat requirements and geographic range information:

- Davidson's saltscale (*Atriplex serenana* var.  *davidsonii*) RPR 1B.2
- Southern tarplant (*Centromadia parryi* ssp.  *australis*) RPR 1B.1
- Salt marsh bird's-beak (*Chloropyron maritimum* ssp.  *maritimum*) FE, SE, RPR 1B.2
- Coulter's goldfields (*Lasthenia glabrata* ssp.  *coulteri*) RPR 1B.1
- Coast woolly-heads (*Nemacaulis denudata* var.  *denudata*) FT, RPR 1B.1
- California Orcutt grass (*Orcuttia californica*) FE, SE, RPR 2.1
- Estuary seablite (*Suaeda esteroa*) RPR 1B.2
- San Bernardino aster (*Symphyotrichum defoliatum*) RPR 1B.2

#### *Sensitive Animal Species*

The following special-status animal species are reported or are likely to be present within the SEA based on habitat requirements and known range attributes:

- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) SE
- California least tern (*Sternula antillarum browni*) FE, SE, ABC, CDFG Fully Protected

#### **Ecological Transition Areas (ETAs)**

There are no ETAs designated within this SEA.

#### **Regional Biological Value**

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met is described below.

#### **CRITERIA ANALYSIS OF THE ALAMITOS BAY SEA**

<b>Criterion</b>	<b>Status</b>	<b>Justification</b>
------------------	---------------	----------------------

	Criterion	Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Met	Los Alamitos Bay is one of only three remaining salt marshes found in the County, and a remnant of extensive salt marshes once found in its area. (The others are the Ballona Wetlands off of Santa Monica Bay and the Malibu Lagoon.) It is the type habitat of Belding's savannah sparrow, which is an endangered species, that is still found in the much reduced habitat of the salt marshes of Southern California.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	Salt marsh is reduced and fragmented from its former coverage in Southern California, so it is important to preserve any of these important estuarine areas.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	Los Alamitos Bay is one of only three remaining salt marshes found in the County, which is a remnant of extensive salt marshes once found in the area.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The Belding's savannah sparrow lives its entire life in salt marshes and breeds, rests, and feeds in this area. Salt marshes are important nursery grounds for many marine animals, and diminished fisheries for many are attributed to the loss of salt marshes. Salt marshes are important habitat for migrating marine birds, which utilize the abundant forage produced by the marsh in the form of mud animals and insects.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	As one of only three salt marshes in the County, this area is scientifically interesting for the study of island bio-geography in that salt marshes are now islands, whereas they were once almost continuous in the seismically active coastline of Southern California. The three marshes differ from one another in dominant vegetation.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities	Met	Los Alamitos Bay is one of only three remaining salt marshes found in the County, which is a remnant of extensive salt marshes once found in its area. The majority of this habitat type has been lost to urbanization, flood control projects, harbors, and marinas. Salt marshes are a very productive

	Criterion	Status	Justification
	in the County.		vegetative community and an important breeding and nursery area for marine, marsh, and terrestrial animals—an ecotone where multiple habitats meet and combine resident biota. Many commercially valuable fishes start life in salt marshes.

In conclusion, the area described in this report is an SEA because it contains: A) the habitat of core populations of endangered and threatened plant and animal species; B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; and D) concentrated breeding, feeding, resting, or migrating grounds that are limited in availability in the County; E) biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community; and F) areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.

### 1. Alamitos Bay SEA Sources

Baldwin, Bruce G., Douglas H. Goldman, David J. Keil, Robert Patterson, and Thomas J. Rosatti (editors, 2012) *The Jepson Manual: Vascular Plants of California, Thoroughly Revised and Expanded*. Second Edition. Jepson Herbarium, Berkeley, CA. 1600 pp., illus.

California Department of Fish and Game, Natural Diversity Database. January 2011. *Special Animals (898 taxa)*. 60 pp.

California Department of Fish and Game, Natural Diversity Database. April 2011. *Special Vascular Plants, Bryophytes, and Lichens List*. Quarterly publication. 71 pp.

California Department of Fish and Game, Natural Diversity Database. January 2011. *State and Federally Listed Endangered and Threatened Animals of California*. 13 pp.

County of Los Angeles, Department of Regional Planning. 2006. *The Alamitos Bay SEA Description*, Los Angeles County, California.

Fish and Wildlife Services. 2000. *Federal Register*. "Endangered and Threatened Wildlife and Plants; Proposed Determination of Critical Habitat for the Coastal California Gnatcatcher; Proposed Rule". Fish and Wildlife Services; 32 pp.

Holland RF. *Preliminary descriptions of the terrestrial natural communities of California*. 1986 and 1992 Update. California Department of Fish and Game unpublished report.

LSA Associates, Inc. October 2009. *Draft Environmental Impact Report: Alamitos Bay Marina Rehabilitation Project*, Prepared for the City of Long Beach.

Sawyer, Keeler-Wolf and Evens. 2009. *A Manual of California Vegetation, Second Edition* Sacramento: California Native Plant Society Press.

U.S. Fish and Wildlife Service. 1997. *Vernal Pools of Southern California Draft Recovery Plan*. U.S. Fish

and Wildlife Service, Portland, Oregon. 113+pp.

Zedler, P.H. 1987. *The Ecology of Southern California Vernal Pools: A Community Profile*. U.S. Fish and Wildlife Service Biological. Report 85(7.11). 136 pp.