

**CALENDAR ITEM
78**

A Statewide

05/24/12

S Statewide

W 25306

J. Trout

**THIRD REPORT UPDATE ON THE BIOLOGICAL, PHYSICAL,
AND BEACH MONITORING FOR THE BOLSA CHICA LOWLANDS
RESTORATION PROJECT NEAR HUNTINGTON BEACH**

**BOLSA CHICA REPORT
FOR 2009 BIOLOGICAL YEAR**

The Bolsa Chica Lowlands Restoration Project (Project) has been open and operating for five years. Opening to the ocean occurred August 24, 2006. Interests in both the Project's success and permit requirements warrant an extensive evaluation of the Project and how it is meeting objectives at this time.

The Commission and its staff have been actively involved with Bolsa Chica starting with the first boundary settlement discussions in 1970 and title settlement in 1973. In 1997 an agreement was reached with the ports of Long Beach and Los Angeles to acquire and restore additional lands Bolsa Chica as mitigation for port improvements in San Pedro Bay.

Commission contractor Merkel & Associates has completed the report on the 2009 year of operation. The dates covered by the report are prescribed by permit conditions of the California Coastal Commission and Army Corps of Engineers. This report is a thorough review of the conditions existing after three years of operation. It reveals no problems with the Project other than siltation of the inlet channel that requires periodic dredging.

The Project at this point continues to be fully effective in achieving the goals established for the Project at its inception. Monitoring of Project performance consisted of three major fields: Biological Monitoring, Physical Monitoring and Beach Monitoring. These were further broken down into tasks, and the findings regarding each, as outlined below.

Water Quality – To date all parameters remain well within acceptable ranges for developing high value fish, invertebrate and vegetative communities and are indicative of a well-flushed marine environment. Water quality monitoring is not required in year three.

CALENDAR ITEM NO. 78 (CONT'D)

Vegetative Habitat – The most notable changes in habitat distribution observed during 2009 (three years post-restoration) were the changes in coastal salt marsh distribution in the Muted Tidal Basins (MTB), the expansion of eelgrass and cordgrass habitat in the Full Tidal Basin (FTB), and the expansion of non-native weeds on the avian nesting sites. Cordgrass and eelgrass transplanted from other sites have expanded to cover 35.5 acres (eelgrass) and cordgrass is expected to fill in between transplant locations. By mid-2009, inundation conditions in the MTBs had moved closer to those envisioned by the original restoration design.

Fish Community – More than 8000 fish were captured, evaluated and released, and represented 37 species. More adult fish were captured this period indicating a rapidly maturing fish community.

Benthic Community – Monitoring of the benthic community is not required in year three.

Avian Community – In 2009, species richness ranged from 64 to 88 species per survey and was highest during February and April. A total of 121 species were observed in 2009, for a grand total of 166 species observed since the start of the monitoring period (twelve surveys from October 2007 to August 2009). Avian abundance was fairly consistent for each survey period with the exception of the June survey, when counts were notably lower. This was due to the seasonal absence of many shorebirds and wintering ducks. Targeted species of concern: Beldings savannah sparrows, western snowy plover and California least tern, occupied most of the area available to them. Beldings sparrow utilized the pickleweed areas where they exist on the site. Snowy plover and least terns, while numerous, have yet to adapt fully to the new areas created for them.

Inlet Flood Shoal – The flood shoal accumulated about 180,000 cubic meters in the second year. This was removed by dredging in the spring of 2009. Excavated sandy material was deposited on the beach down coast from the inlet jetties. Dredging occurred again in spring 2011 and will be covered in the next report for year five.

Tidal Monitoring – Accretion of sand within the flood shoal of the FTB continues to be the most important factor causing tidal lag and muting. Tidal monitoring provides a means of tracking the lag and muting and providing information necessary to determine the need for maintenance dredging to ensure proper physical and ecological system functioning.

Beach Monitoring – One concern for the Project is that the inlet jetties could cause erosion of the down coast sandy beach. Beach profile data were obtained in May and October 2009 and compared to historic data. The beach width remained well above minimum width throughout the period. It appears that erosion here is unlikely to trigger

CALENDAR ITEM NO. 78 (CONT'D)

a need for additional material. However, during the spring dredging work, excavated material was again placed on the beach down coast from the jetties. Nevertheless, particular vigilance is warranted in monitoring the flood shoal accumulation rates following the recent dredging activities to understand if the high sedimentation rates documented during the first two years were transitory or will be repeated.

Ongoing Management – Pursuant to the Commission’s previous approvals staff has overseen continued operation and maintenance of the Project with participation from the multi-agency Steering Committee and the assistance of the on-site manager, the Department of Fish and Game, which manages the Project as part of the Bolsa Chica Ecological Reserve. The monitoring report summarized above contains numerous recommendations that will be implemented as appropriate and as funding allows to adaptively manage the Project to continue functioning to meet established goals.

At present, there is approximately \$6.1 million unencumbered and available for operation and maintenance held in the Kapiloff Land Bank Fund. Depending primarily on the frequency of needed maintenance dredging, this amount is expected to last less than four years. An additional \$2.4 million is being held for restoration of the Future Full Tidal Area. The Steering Committee agency representatives continue to look for additional sources of funding to ensure continued operation of the Project.

EXHIBIT:

A: Site and Location Map

OTHER PERTINENT INFORMATION:

The staff recommends that the Commission find that the acceptance of the Third Annual Monitoring Report on the Biological, Physical and Beach Conditions for the Bolsa Chica Lowlands Restoration Project does not have a potential for resulting in either a direct or a reasonably foreseeable indirect physical change in the environment, and is, therefore, not a project in accordance with the California Environmental Quality Act (CEQA).

Authority: Public Resources Code section 21065 and California Code of Regulations, Title 14, sections 15060, subdivision (c)(3), and 15378.

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

1. Find that the acceptance of the Third Annual Monitoring Report on the Biological, Physical and Beach Conditions for the Bolsa Chica Lowlands Restoration Project is not subject to the requirements of CEQA pursuant to

CALENDAR ITEM NO. 78 (CONT'D)

California Code of Regulations, Title 14, section 15060, subdivision (c)(3), because the subject activity is not a project as defined by Public Resources Code section 21065 and California Code of Regulations, Title 14, section 15378.

2. Accept the Third Annual Monitoring Report on the Biological, Physical and Beach Conditions for the Bolsa Chica Lowlands Restoration Project.

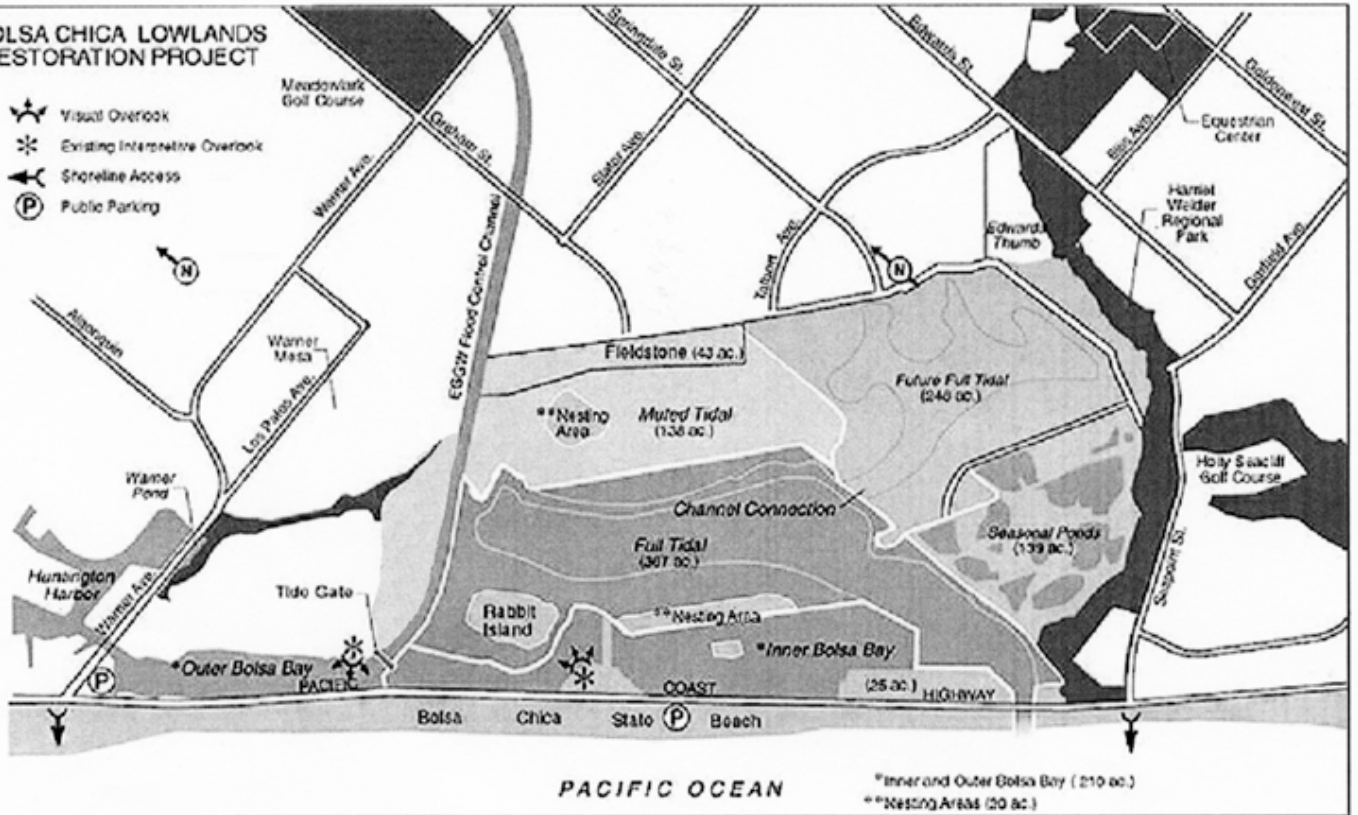
NO SCALE

SITE



BOLSA CHICA LOWLANDS RESTORATION PROJECT

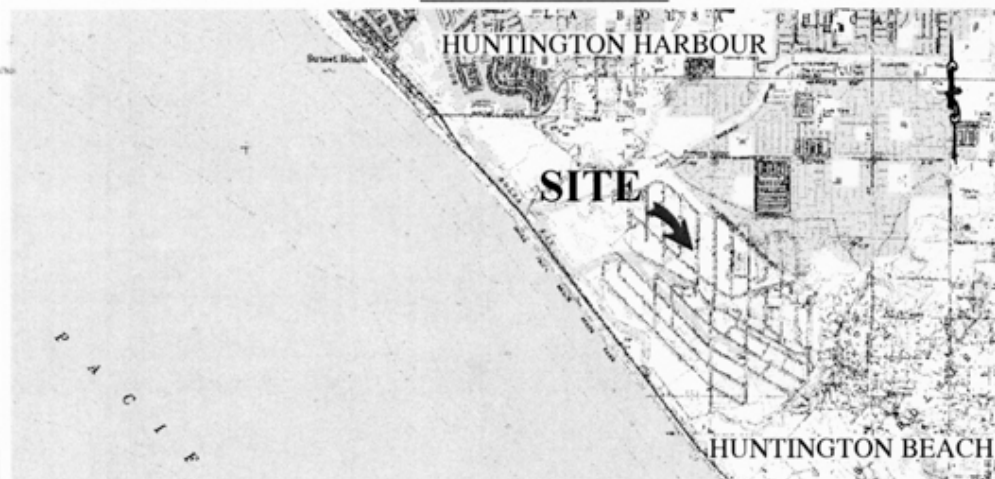
- Visual Overlook
- Existing Interpretive Overlook
- Shoreline Access
- Public Parking



BOLSA CHICA LOWLANDS RESTORATION PROJECT

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

Exhibit A W 25306

BOLSA CHICA ORANGE COUNTY



This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.