



U.S. Fish & Wildlife Service

The Coastal Program

Success in San Diego Bay



Caring for Our Coastal Habitats

San Elijo Lagoon Restoration Project

San Elijo Lagoon is located on the San Diego County coastline of southern California, within the Fish and Wildlife Service Region 1, Carlsbad Field Office Coastal Program area.

Salt Marsh in Peril

Once a tidally influenced salt marsh and mudflat dominated estuary, San Elijo Lagoon has been chopped into pieces by road, freeway, and rail-road fills. These changes have increased the frequency of sand blockages at the lagoon's mouth. Such blockages lead to stagnation and stressful conditions in the lagoon's aquatic community. Fish kills and loss of biological diversity and productivity, along with increased sedimentation would ultimately cause the lagoon's aquatic ecosystem to die and be replaced by an entirely different habitat: a weed covered upland habitat with little value to wildlife. This would be an "unhealthy" lagoon.

Now visualize a "healthy" San Elijo lagoon: it is regularly flushed by the tide and has shallow sloughs teeming with small fish, crabs, and mollusks. The mudflats that appear between tides are "pastures" for thousands of migrating shorebirds and waterfowl. The salt marsh provides nesting habitat for sensitive species, including the endangered light-footed clapper rail and Belding's savannah sparrow. Fish eating birds, such as the endangered California least tern, other tern species, herons, and egrets forage over the tidal waters, rich with the fish they like to eat.

Returning Health

Thanks to a creative partnership, this vision is becoming a reality. After years

of seeking funds for emergency, one-time sand removal efforts, the Service's Coastal Program and its partners—San Elijo Conservancy, County of San Diego, State Coastal Conservancy, Southern California Wetlands



San Elijo lagoon. Photo by Jack Fancher/USFWS

Clearinghouse—have found a way to keep the lagoon mouth free from sand without using expensive, unpopular measures like dredging a new inlet and building bridges. The creation of an interest-generating endowment guarantees a funding stream that makes continuous, small scale intervention feasible. The "non-structural," relatively inexpensive, solution involves a contract with a small dredging company that will remove sand from the existing inlet on an "as-needed" basis. This will keep the lagoon mouth open to tidal influence, allowing health to return to this fragile coastal system.

A Long-awaited Success

San Elijo Conservancy took the lead in pulling partners together to create an endowment account that will maintain the long-term health of the lagoon and surrounding area. Funds (and awareness) were raised through the efforts of the Conservancy in applying for government grants and obtaining contributions from local citizens. This habitat restoration project will reverse a long trend of coastal wetland degradation and loss in rapidly-developing Southern California.

South San Diego Bay Saltworks Acquisition

Located on the extreme south end of San Diego Bay, the Western Salt Works has been in operation for decades. This 800 acre site was originally a thriving estuarine system that was home to numerous fish and wildlife species. Recently, the Service's Coastal Program, working with the Refuges and Endangered Species programs, acquired the entire 800 acres, with plans to soon turn it into a unit of the San Diego National Wildlife Refuge.

Creative Partnership

The rather complicated story begins with an endangered least tern nesting on a closed military base near the salt works in San Diego Bay. Because of this tern's endangered, protected status, the nesting site was to be perpetually monitored and managed by the US Fish and Wildlife Service (Service). The local port authority wanted the military site for expansion of the port's airport. To compensate for the loss of the least tern's nest, the port authority purchased the 800 acres belonging to Western Salt works. This operating saltworks has a few areas heavily utilized by nesting seabirds. The saltworks will be turned over to the Service with an additional monetary endowment for management, planning the removal of salt making operations, and habitat restoration measures.

The Service's Coastal Program helped lay the foundation for this accomplishment by conducting nesting birds surveys, providing technical assistance, and advocating improved habitat management at the salt works for several years prior to the change in ownership.

Big Payoff for Wildlife

The acquired property will provide immediate fish and wildlife benefits, particularly for nesting seabirds such as the endangered California least tern and threatened western snowy plover. Habitat for seabirds currently nesting on the site will be protected. In addition, cessation of salt production will allow for the restoration of hundreds of acres of tidally influenced wetlands, mudflats and salt marsh. Together, the 800 acres from Western Salt Works, an



Least tern with chick.

Photo by B. W. Mansell

additional 600 acres of State-owned impoundments, and 1,200 acres of San Diego Bay waters will become the South San Diego Bay Unit of the San Diego National Wildlife Refuge, part of a major accomplishment for the Service, its partners, and fish and wildlife resources in Southern California.