



Photography by Andrew Bramasco.

Land & Sea

Coastal Conservancy in Southern California

By Michelle Armstrong

To-date, more than 300,000 acres of coastal promontories, wetlands, wild and marine life have been preserved along the California coast; roughly defining 469 miles of the 840 spanning the Pacific. Despite these numbers, 90% of all coastal wetlands are forever gone, and only 3.5% of the coast is deemed as protected marine reserves; from LA to San Diego, only 25% (an estimated 15,000 acres) of the historic coastal wetlands presently remain. Nonetheless, significant strides for natural ecological processes have progressed within the last 50 years; a culmination of efforts resulting in the continued survival and comeback of coastal habitat – as nature intended.

While preservation of habitat is key to environmental health and survival, it is the overall restoration that is essential to recover degraded or destroyed ecosystems.

From bogs and swamps, to tidal marshes, prairie potholes, vernal pools and seagrass beds, the coastal wetlands and lowland regions of the coast offer significant biodiversity and wildlife support; not to mention the benefit of local recreation, increased water quality, flood damage reduction and erosion control.

On a mission “to accelerate the pace, the extent, and the effectiveness of coastal restoration,” the Southern California Wetlands Recovery Project, a broad-based partnership chaired by the Resources Agency and supported by the State Coastal Conservancy, holds every intention of a long-term increase in the quantity and quality of the region’s wetlands.

“Southern California’s vitality depends in large part on the

appeal of its natural environment, especially its rivers, streams, wetlands, and nearshore waters (collectively “wetlands”). The state’s five southernmost coastal counties, which constitute only 8.6% of the state’s land area, are home to half the state’s [residents] and account for 42% of its economy,” as stated in a recent SCWRP Regional Strategy Executive Summary. And “while the natural environment continues to act as [a] magnet for people and commerce, the resulting pressures have radically altered and degraded its waters, threatening to undermine public health, economic well being, and the quality of life. [But] despite staggering losses, precious natural areas survive [and] can be recovered.”

In reaffirming the great outdoors and local conservation efforts for California’s renowned coastal tides and wetlands, the following is a profile of such advocacy and restoration. Spanning from the Palos Verdes Peninsula to La Jolla Shores, we offer insight and exploration on the value and necessity of life along Southern California’s Gold Coast – both on land, and sea. ➔



Bolsa Chica Wetlands. Photo by Sarah Sunderman.



La Jolla Coast. Photo by Sarah Sunderman.



Bolsa Chica Wetlands & Ecological Reserve Huntington Beach

Advocating for the restoration and preservation of the Bolsa Chica Wetlands, The Bolsa Chica Conservancy offers 1,350 acres of undeveloped wetlands, lowlands and lower mesa, extending north to an intertidal salt marsh and sand dunes. The coastal sanctuary was recently renewed after a tidal inlet was completed in August 2006, thus allowing the Pacific waters to flow into the wetlands for the first time in over a century; prior to its restoration, the wetlands stood as an oil field since 1940. Through public outreach, participation, education and leadership, the Bolsa Chica extends, once again, a protected, natural refuge for a thriving habitat and coastal ecosystem; not to mention the benefit of oxygen production, natural flood control and reduction in coastal erosion.

“[We] are pleased to report that the restoration has been hugely successful with increases in the number of birds and species of fish,” states Jennifer Robins, president of Amigos de Bolsa Chica. “With the opening of the new estuary have come scores of visitors who walk the trails with cameras and binoculars to enjoy the sights of the many bird species including the endangered Least Tern and Belding’s Savannah Sparrow and the threatened Snowy Plover.”

Resteration Impact

Tidal Basin Fish Population - In 2007, 19 species of fish were identified; that number has grown to 46. Fulfilling its purpose as a fish nursery, the basin is home to such species as halibut, sand bass, top smelt, small sharks and round stingrays – to name a

few. Water samples revealed additional species of invertebrate, including crabs, octopus, shrimp, sea cucumbers, mussels and sea hares.

Vegetation Growth - Despite drought conditions, native plant species are on the rise. In 2007, 0.9 acres of eel grass were planted in the full tidal basin, growing to more than 32 acres at present day; the grass is needed for stabilizing the basin bottom sand and as nursery grounds for many species of fish and shellfish. Cord grass planted along the eastern edge of the basin has shown an 89% increase, providing essential nesting grounds for the endangered California Light Footed Clapper Rails. Additional wetland’s vegetation includes Pickelweed, Battis, Saltbushes, Marsh Fealbane, Beach Primerose and Goldenbush.

Bird Watch - Birds wintering in California’s wetlands have declined from 60 million to 2 million, largely due to destruction of habitat; however, 20% of North American’s migratory birds use the Pacific Flyway annually. Endangered and threatened species such as the Belding’s Savannah Sparrow, the California Least Tern, the Light-Footed Clapper Rails and the Snowy Plover all nest in great numbers in and around the newly restored area of the Bolsa Chica. In addition, large groups of cormorants, Great Blue Herons, White and Brown Pelicans, Black Skimmers, Snowy Egrets, Avocets and other species can be seen loafing on the sand bars in the full tidal basin.

Note: Since initial cleanup began in 2004, 64 oil wells and associated machinery have been removed, including 23 miles of pipe and other hazardous debris.

Upcoming Events

First Saturday Tour

Ecological Reserve
South Lot,
9 a.m. - 10:30 a.m.

Coastal Clean-Up @ the Bolsa Chica

Saturday, September 25
9 a.m. - 12 p.m.

Bolsa Chica Wetlands
Web: bolsachica.org

Amigos De Bolsa Chica
Web: amigosdebolsachica.org

La Jolla Ecological Reserve & Marine Life Refuge San Diego

Described as an ‘ecological haven’ and popular destination for divers and kayakers, La Jolla Ecological Reserve and Marine Life Refuge reside within the San Diego-La Jolla Underwater Park, which spans an estimated 6,000 acres of ocean bottom and tidelands. Designated in 1971 by the City of San Diego, the highly productive and biodiverse ecosystem is classified as an ASBS – or Area of Special Biological Significance; comprised of a natural kelp forest and artificial reef in the waters between La Jolla Shores and La Jolla Cove, coupled with marine diversity, and opportunity for both public use and research. The site also explores two ocean bottom rifts – the La Jolla Canyon, dropping 600 feet, as the Scripps Canyon holds an axial depth of about 1,000 feet. The reserve and refuge are supported in part by the Scripps Institute of Oceanography and Birch Aquarium.

“We have statements from over 250 scientists that marine protected areas result in long lasting and often rapid increases in the abundance, diversity and productivity of fish and marine life. If you allow the ocean to recover and leave it alone, the ecological benefits are phenomenal,” notes Kate Hanley of San Diego Coastkeeper. “La Jolla Shores is a great beach, with [an abundance of] marine resources for San Diego County. [In fact], La Jolla is set to become part of a network of protected areas that will be expanding [in the coming months] due to the implementation of the Marine Life Protection Act – and we will really see the benefits locally of a healthy ocean ecosystem.”

Upcoming Events @ Birch Aquarium at Scripps

SEA Days

3rd Saturdays monthly,
11 a.m. - 3 p.m.

Full Moon Pier Walks
September 22 & 23,
6 p.m. - 8:30 p.m.

California Coastal Clean-Up Day @ La Jolla Shores

September 25, 9 a.m. - 12 p.m.
Web: cleanupday.org

Birch Aquarium
Web: aquarium.ucsd.edu

Scripps Institution of
Oceanography
Web: sio.ucsd.edu

“The Map” at La Jolla Shores

Purposed to raise awareness and stewardship of the reserve, a realistic Lithocrete map – measuring 30 x 75 ft – was created to forward the environmental, biological, ecological, cultural and conservation efforts of the Southern California coast. Located near the Kellogg Park boardwalk, the unique in-ground sculpture contains 55 realistic painted bronze fish and invertebrates embedded in the Lithocrete; in addition, the contours of the ocean floor are also depicted with dive site identification.

Marine Life Protection Act

As the first state law of its kind, the Marine Life Protection Act seeks to expand and enhance marine protected areas along the entire California coast. In safeguarding complete ecosystem communities, the initiative takes a more holistic approach to the science and a more active role for coastal wetlands. For La Jolla, the marine life refuge will be expanding, and is expected to be formally adopted in late 2010. MPA was implemented in 1999. ➡



Palos Verdes Coast. Photo by Lea Reto.

Palos Verdes Peninsula Land Conservancy

Palos Verdes

“Open spaces and natural areas in Southern California are incredibly rare,” states Andrea Vona, PVPLC executive director. “Since its founding in 1988, the Conservancy has protected 1,600 acres of open space as nature preserves on the Palos Verdes Peninsula, protecting threatened wildlife habitat and providing unique opportunities for people to connect with nature. Through education and volunteer workdays, the Conservancy is working with the community to enhance the beauty of the area and enrich the lives of thousands of people.”

In partnering with various government organizations and entities, property owners and environmental advocacy groups, the Palos Verdes Peninsula Land Conservancy (PVPLC) actively pursues land acquisition for the restoration and protection of native habitat; not to mention the promotion of public awareness about Palos Verdes Peninsula’s natural environment and wildlife conservation through nature walks, educational programs and outdoor stewardship volunteer opportunities. Over the past 22 years, the Conservancy has garnered 1,600 acres of open space and habitat through in-kind donations from state and private donors, as well as strategic purchases throughout the area; as a result, endangered animal and plant species are once again thriving.

Upcoming Events

Exploring PVP: Guided Nature Walks
Second Saturday of each month from
9 - 11 a.m.

Royal Palms State Beach in San Pedro
Saturday, October 9

Upper Malaga Cove in Palos Verdes Estates
Saturday, November 13

National Public Lands Day - PVPLC Volunteer Day
Saturday, September 25

Palos Verdes Peninsula Land
Conservancy
Web: pvplc.org

PVPLC Project Portfolio

Abalone Cove Ecological Reserve – 64 acres, including Abalone Cove, Portuguese Point, Inspiration Point and Sacred Cove. Hiking trails, sea caves, a blowhole and tide pools.

Agua Amarga Reserve – 59 acres, consisting of Lunada Canyon and Agua Amarga Canyon. Pedestrian trails, coastal sage scrub restoration and restored wetland.

Palos Verdes Nature Preserve – 1,000 acres in nine reserves. The preserve is one of the last remaining locations for coastal sage scrub habitat.

Forrestal Reserve – 155 acres, comprised of geological sites including faults, folds, sedimentary bedding and igneous intrusions. Hiking trails to Fossil Hill.

Vicente Bluffs Reserve – 84 acres, including open lots at Oceanfront Estates and the bluffs below the Point Vicente Interpretive Center. Hiking trails and fishing access.

Note: this is only a sampling of projects and efforts PVPLC is involved.

San Elijo Lagoon Conservancy & Ecological Reserve

Encinitas, North San Diego

As one of the few remaining coastal wetlands in San Diego County, The San Elijo Lagoon and Ecological Reserve embrace nearly 1,000 acres of diverse coastal habitat and watershed. Formed in 1987 for the preservation and enhancement of the reserve’s natural resources and wildlife, the conservancy land trust focuses on inlet maintenance, habitat restoration, invasive plant control and land acquisition; educational and public outreach further the awareness and stewardship of the reserve. More than seven miles of trails wander the lagoon, unveiling over 700 animal and plant species; including six plant communities: coastal strand, salt marsh, brackish/freshwater marsh, riparian scrub, coastal sage scrub and mixed chaparral. Current efforts are actively pursuing the continued restoration of the reserve’s natural habitat.

Conservancy & Reserve Efforts

Active Restoration – Developed in 1998 in response to the gradual deterioration of the Lagoon’s biological resources due to a number of factors (including changes in hydrology, urbanization, increased sedimentation and poor water quality),

the San Elijo Lagoon Action Plan outlines projects to sustain and enhance the biological productivity of the Lagoon and to provide habitat for threatened and endangered species. Prior to the 1880s, the Lagoon was a fully tidal estuary system, connected to the Pacific Ocean by inlet channels and characterized by a low-lying marshy plain. The plan actively:

1. Maintains tidal flushing
2. Implements enhancement, restoration and creation projects – ranging from controlling invasive species to dredging new channels and creating new habitat
3. Acquires habitat to protect wildlife corridors and create buffers between the natural environment of the Lagoon and disturbances resulting from increased urbanization.

Educational Outreach – Facilitating the appreciation and enjoyment of the remarkable natural bounty that a restored native wetland can offer, the Conservancy’s educational outreach provides curriculum for further understanding of the coastal ecosystem, with an emphasis on pursuing its preservation. Local lectures and weekly guided tours are also of note. ❖

San Elijo Coast. Photo by Sarah Sunderman.

Upcoming Events

San Elijo Lagoon Nature Center Guided Tours
Cardiff-by-the-Sea
Saturdays, 10 a.m. - 11:30 a.m.

Rios Avenue Trailhead Guided Tours
Solana Beach
2nd Saturday monthly,
9 a.m. - 11 a.m.

Bird Count
Rios Avenue Trailhead, Solana Beach
2nd Monday monthly,
7:30 a.m. - 12 p.m.

San Elijo Lagoon Conservancy
Web: SanElijo.org

