

U.S. Fish & Wildlife Service



Strategic Plan for the Coastal Program Pacific Southwest Region

FY 2012-2016

Pacific Southwest Regional Office
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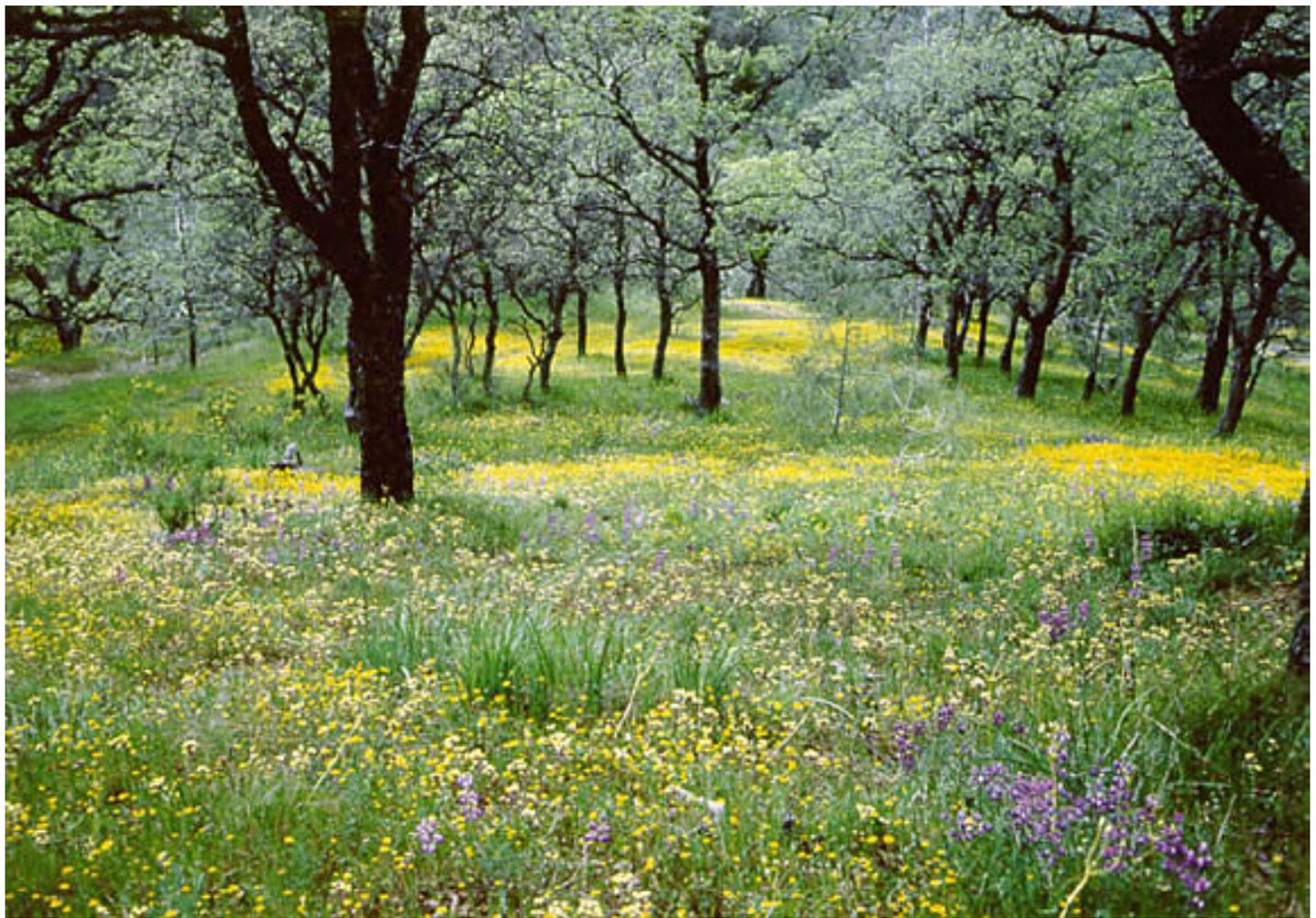
Cover photo, Coastal bluffs and terraces, Santa Barbara County. Photo by Mary Root, USFWS.



Mendocino County vernal pool. USFWS photo.



San Francisco Bay NWR. USFWS photo.



Spring wildflowers. Photo by Henry W. Coe State Park volunteer.

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Executive Summary

The Coastal Program Strategic Plan (Plan) for the Pacific Southwest Region (Region 8) describes the U.S. Fish and Wildlife Service's (Service) approach for conserving and restoring high priority coastal ecosystems and habitats in California. The Service is embracing new approaches to conservation as strategies for addressing resource threats evolve in the face of climate change. This plan describes how the Coastal Program in Region 8 intends to put these new strategies into action through landscape-scale planning and building partnerships to attain specific biological outcomes over the next 5 years. Our approach is to:

- Conserve priority coastal habitats, landscape processes and linkages for Federal Trust Species;
- Work collaboratively with States, Tribes, governmental and non-governmental organizations, industry, academia, and private landowners to conserve coastal habitats;
- Assure that internal and external audiences understand our program's conservation goals and capabilities;
- Recruit and retain highly skilled and motivated restoration scientists; and
- Actively assess and document the delivery and success of our conservation actions and adapt our approach accordingly.

Coastal Program Managers, in conjunction with Partners for Fish and Wildlife Program (PFW) and Schoolyard Habitat Program (SYH) Coordinators, participated in a strategic planning process from 2010-2011 to develop localized strategic plans for their respective office locations. The Regional Office (RO) hosted a facilitator-led Strategic Planning Workshop to assist field staff in developing their local plans and focus areas in February 2011. This plan is the product of a collaborative effort between the RO and the four Local Program offices in Region 8: Humboldt Bay (Arcata Fish and Wildlife Office), San Francisco Bay (Sacramento Fish and Wildlife Office), Central California Coast (Ventura Fish and Wildlife Office), and Southern California (Carlsbad Fish and Wildlife Office). Each office took part in a formal planning process, in coordination with local internal and external stakeholders, to develop individual geographic focus areas, objectives, and strategies to support the National Strategic Goals of the Coastal Program: 1) conserve habitat, 2) broaden and strengthen partnerships, 3) improve information sharing and communication, 4) enhance our workforce, and 5) increase accountability. This strategic plan is the first plan written specifically for the Coastal Program in Region 8 and describes the objectives and key strategic activities that will help us to meet each of the five program goals. It also identifies the targets and performance measures for each goal. To achieve these goals, three overarching strategies will be implemented:



Dune habitats of Coal Oil Point, Santa Barbara County. Photo by Mary Root, USFWS.

Cooperative Conservation

We will seek voluntary cooperative efforts to restore, enhance, and protect high-priority coastal habitats. There are several stressors facing the California coastline, including habitat loss, modification, degradation, and fragmentation. Sources of these threats include development, invasive species, water pollution, and climate change (e.g., sea level rise, increased storminess, increased wave heights and velocities). Locally, we will work with partners to implement community-based adaptation strategies that address invasive species, water quality, and climate change at both the project design and regional planning scales. At the Regional level, the Coastal Program will work with non-governmental organizations, State and Federal agencies, as well as other programs and initiatives within the Department of the Interior to focus on landscape-scale and Pacific coast-wide conservation opportunities to focus on planning for the future health of the Pacific Ocean and its associated ecosystems.

Strategic Habitat Conservation

The Strategic Habitat Conservation (SHC) process will help the Coastal Program to achieve conservation, transparency, and accountability objectives under the five National program goals. By evaluating projects on a watershed or landscape-level, and prioritizing projects within geographic focus areas for conservation delivery, this plan will link project-scale actions to landscape-scale objectives for sustaining populations of Federal Trust Species and habitats. With the initiation of this plan, we will begin implementation of a new local project monitoring protocol to inform future project delivery.

The Regional Coordinator, in conjunction with Local Program Managers, will conduct a California coast-wide survey of bat species within our project sites for the duration of this plan. Bats forage and roost within many of our project sites, but to date, there has not been a comprehensive effort to evaluate the benefits and/or impacts of Coastal Program habitat restoration projects. Bats are an understudied and elusive group of species, and very little data exists on coastal migratory patterns, species composition, and activity levels. Additionally, White-nose Syndrome (WNS) continues to become an increasingly dire situation for bats. To date, millions of bats have perished in the eastern United States due to WNS. Named for the white fungus on the muzzles and wings of affected bats, WNS, originally from Europe, has rapidly spread to multiple sites throughout the eastern United States and into Canada. The fungus associated with WNS has been detected as far west as Oklahoma. If WNS continues to move west as predicted, our study, in conjunction with other bat monitoring efforts, may provide valuable data to help detect the early presence of WNS in California. An extensive network of State and Federal agencies, including the Service, is working to investigate the cause, source and spread of bat deaths associated with WNS, and to develop management strategies to minimize the impacts



Canyon bat (*Parastrellus hesperus*). USFWS photo.



Coastal Program Regional Coordinator Samantha Marcum removes a canyon bat from a mist net. USFWS photo.

of WNS. We have identified a data need, and we can use our research as learning grounds for our pilot landscape SHC effort. We will use information gained from our monitoring efforts and supporting information from our partners to adapt or modify habitat restoration techniques.

Improving Program Effectiveness

The Coastal Program seeks to create the highest quality working environment to facilitate recruitment and retention of the most qualified personnel, and to enhance employee accountability. Staff will need to be equipped with the relevant skills, leadership, technology, and funding to carry out the strategies necessary to protect and restore key coastal habitats in California.

Introduction to the Coastal Program in California

In Region 8, the Coastal Program is part of the Habitat Restoration Division under the Assistant Regional Director for the National Wildlife Refuge System. The Habitat Restoration Division consists of the Division Chief/PFW Regional Coordinator, the Coastal Program Regional Coordinator, the PFW State Coordinators for California, Nevada, and Klamath Basin, the Schoolyard Habitat Regional Coordinator, a Cooperative Agreements Specialist, and a student/trainee position. With the exception of the Chief, all of the aforementioned positions were created after the completion of the previous Strategic Plan in 2007. The Chief oversees all programs and supervises the State and Regional Coordinators within the Habitat Restoration Division. The Regional and State Coordinators oversee their respective programs and provide guidance and support to Local Program Managers. The Schoolyard Habitat Program Coordinator oversees the student/trainee position. The previous Strategic Plan encompassed goals and objectives for the Partners for Fish and Wildlife and Coastal Program in Region 8. In addition to the new RO positions listed above, Region 8 also received a new Coastal Program location for the central California coast in 2010.

The Coastal Program Regional Coordinator participates in Regional and National-level partnerships, supports studies that will result in tools for resource managers to implement on-the-ground conservation actions, and is the natural resources lead for implementation of the National Coastal Wetlands Conservation Grants Program (NCWG). Local Program Managers work with local partners to: identify and prioritize natural resource problems in priority coastal ecosystems, implement on-the-ground solutions to resource issues, design and implement projects, and conduct outreach to promote greater public awareness of the importance of coastal ecosystems.

On average, Region 8 currently receives approximately \$1.6 million annually to implement projects that will conserve coastal habitats and species in California. Each local program office receives an annual base funding amount, and any additional monies are distributed to the field

based on performance measures defined in this Plan. The allocation methodology for Coastal Program funds is transparent and a summary is provided to Local Program Managers, Project Leaders, and Field Supervisors annually. The Coastal Program in Region 8 is structured to serve local coastal communities, leverage partnerships with other agencies to improve our ability to serve our partners and the public, and to find efficiencies and synergies with other ongoing coastal conservation efforts.

This plan outlines the goals, objectives, and key activities planned for the next 5 years for the Regional Coordinator and the Local Program Managers for the Coastal Program in Region 8:

- Regional Coordinator, co-located with the United States Geological Survey (USGS) at the Pacific Coastal and Marine Science Center in Santa Cruz, California
- Humboldt Bay Local Program Manager/Conservation Partnerships Supervisor, and Hydrologist, located in the Arcata Fish and Wildlife Office in Arcata, California
- San Francisco Bay Local Program Manager, co-located with the San Mateo County Resource Conservation District in Half Moon Bay, California (reporting to the Sacramento Fish and Wildlife Office, Sacramento, California)
- North Central California Coast Local Program Manager, co-located with the National Oceanic and Atmospheric Administration (NOAA) at the Southwest Fisheries Science Center in Pacific Grove, California (reporting to the Ventura Fish and Wildlife Office, Ventura, California)
- South Central California Coast Local Program Manager/Assistant Field Supervisor for Conservation Partnerships, and Local SYH Coordinator, located in the Ventura Fish and Wildlife Office, Ventura, California
- Southern California Local Program Manager, Local SYH Coordinator, and Conservation Partnerships Program Division Chief, located in the Carlsbad Fish and Wildlife Office, Carlsbad, California



Tomales Dunes. USFWS photo.

Regional Overview

Priority Habitat Types

The nearly 1,110 miles of diverse California coastline contains habitats for many threatened and endangered species, including marine mammals, and it is also where the State's population is concentrated. Approximately 80 percent of the State's 35 million residents live within 30 miles of the coast, and this number continues to rise. In addition, there are 100 million visitors to the California coast each year and only 400 miles of beaches remaining (Griggs et al. 2005). Southern California and San Francisco Bay's coastal areas are heavily urbanized, making protection of the remaining natural habitats essential for the rare species that reside there. Big Sur, along the central coast, and northern counties, such as Mendocino and Humboldt, contain coastlines that are relatively pristine, where the topography is too rugged for development and much of the land is under permanent protection (Griggs et al. 2005). The California coastal habitat types range from terrestrial areas of beaches, dunes, prairies, and mixed conifer forests to aquatic habitat areas that include tidal marshes, lagoons, brackish/freshwater marshes, sloughs, estuarine habitats and associated coastal stream systems and riparian areas.

Coastal dunes and beaches provide essential habitat for sensitive shorebird species, plants, invertebrates, and marine mammals. Significant species include the Federally threatened western snowy plover (*Charadrius alexandrinus* var. *nivosus*) and Federally endangered Tidestrom's lupine (*Lupinus tidestromii*), beach luvia (*Luvia carnosa*), and Menzie's wallflower (*Erysimum menziesii*). These habitats are also important buffers between uplands and tidal areas, and will become even more critical in the future as sea level rise and increased wave heights and velocities impact the California coastline.

Of the 27 remaining dune fields in coastal California, the largest are the Monterey Bay dunes, covering about 40 square miles, and the 18-square mile Nipomo Dune complex, north and south of the Santa Maria River. Other major dune fields are located at Humboldt Bay and San Diego Bay. California's dunes were formed over thousands of years, yet today, dune erosion is outstripping sand deposition. Dams trap river sediments, depleting the sand supply, and coastal protective structures, such as seawalls, disrupt the natural recycling of sand from sandbar to beach. Coastal development has disturbed dunes at many points along the coast. Off-road vehicles, foot traffic, and horses can damage dune plants, loosening the sands and leaving the dunes vulnerable to wind erosion and blowouts. The resulting dune morphology reduces habitat quality for native plants and wildlife. The Coastal Program is implementing projects to enhance coastal dune ecosystems that support rare endemic plants and roosting/nesting birds. Conservation actions include restoring and protecting dune processes through prevention of new invasive plant infestations, control and eradication of existing invasive species, and designation of protected areas.



Tidestrom's lupine. Photo by Mark W. Skinner, USDA.



Western snowy plover. USFWS photo.

Coastal wetlands, estuaries, and intertidal areas consist of mudflats and salt marshes within various tidal zones some of which transition into large freshwater complexes or sloughs. Estuaries are formed where freshwater streams meet the sea, and contain variably brackish water. California's most sensitive coastal wetlands are estuarine salt marshes with associated tidal channels and mudflats which have been severely modified and degraded since European's established settlements in the region. In some areas of California, large freshwater complexes historically dominated the larger coastal floodplains and dune systems of the region and remnant pockets of these important wetland habitats continue to support many listed species and migratory birds. Coastal California is part of the Pacific Flyway, one of the four principal bird migration routes in North America. Mudflats as well as other coastal wetlands of the region provide foraging and roosting habitat for resident shorebirds and shorebirds traveling along the Pacific Flyway.

Eel grass beds are an important building-block of the food web in intertidal areas along California's coast. Humboldt Bay contains the largest eelgrass beds in California which are important for a variety of fish, invertebrates, and birds such as black brant, which use it as a key staging area. Although relatively few bird species are year-round residents of coastal wetlands, many species temporarily inhabit salt marshes during their annual migrations. Low elevation salt marsh provides nesting habitat for light-footed clapper rail (*Rallus longirostris*) and nursery habitat for important prey resources for California least tern (*Sterna antillarum browni*). Mid-elevation salt marsh provides habitat for Belding's savannah sparrow (*Passerculus sandwichensis beldingi*). Upper salt marsh provides habitat for rare invertebrates, such as salt marsh skipper (*Panoquina errans*). Salt marsh-upland ecotone habitats provide foraging areas and upland refugia during high tide for light-footed clapper rails and migration of salt marsh in the event of sea-level rise.

California's wetlands have significant economic and environmental value, providing benefits such as water-quality maintenance, flood and erosion attenuation, prevention of saltwater intrusion, and wildlife habitat. Most of the areas encompassed by the Coastal Program in California have been designated as sites of Regional or International Importance by the Western Hemisphere Shorebird Reserve Network due to the number and diversity of shorebirds that congregate in these locations each year. The Sacramento-San Joaquin Delta, which feeds the San Francisco Bay, regularly harbors as much as 15 percent of the waterfowl on the Pacific Flyway. Threats to these habitats include invasive species, coastal development, and boating. Conservation actions include projects that address coastal stressors, such as changes in sedimentation or hydrology, or proliferation of invasive species.

Riparian and fluvial systems provide habitat for many Federally-listed species and migratory birds and affect downstream coastal habitats. Salt marshes develop along the shores of protected estuarine bays and river mouths, as well as in more marine-dominated bays and lagoons.



Light-footed Clapper rail. USFWS photo.



California least tern. Public domain photo: www.public-domain-image.com.

These habitats are a mix of tidal and non-tidal zones and consist of deep and shallow water tidal areas, wetlands, streams, rivers, and riparian areas. They support a number of aquatic species including tidewater goby (*Eucyclogobius newberryi*), California red-legged frog (*Rana draytonii*) and anadromous species like the six Evolutionarily Significant Units (ESUs) of steelhead trout (*Oncorhynchus mykiss*), two ESUs of coho salmon (*Oncorhynchus kisutch*), and Chinook salmon (*Oncorhynchus tshawytscha*). Habitat stressors include fragmentation, water diversions, poor water quality, and alteration of native vegetation. Conservation efforts are focused on reconnecting and protecting high quality isolated habitat areas and restoring elements of the natural hydrologic function to fluvial and wetland systems.

Coastal scrub is a low scrubland plant community found in the chaparral and woodlands ecoregion of coastal California and northern Baja California. It is characterized by low-growing aromatic, and drought-deciduous shrubs adapted to the semi-arid Mediterranean climate of the coastal lowlands. Characteristic plants include California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), California buckwheat (*Eriogonum fasciculatum*), coast brittle-bush (*Encelia californica*), golden yarrow (*Eriophyllum confertifolium*), with the larger shrubs toyon (*Heteromeles arbutifolia*), Lemonade berry (*Rhus integrifolia*), and coyote brush (*Baccharis pilularis*), along with other shrubs and herbaceous plants, grasses, and in some places, cacti and succulents.

Northern coastal scrub occurs along the coast from the San Francisco Bay Area north to southern Oregon. It frequently forms a landscape mosaic with coastal prairie. The predominant plants are low evergreen shrubs and herbs. Southern coastal scrub is mostly found along the coast in central and southern California, from the San Francisco Bay Area in the north, through the Oxnard Plain of Ventura County, the Los Angeles Basin, Orange County, parts of Riverside County, coastal San Diego County, and the northwestern corner of Mexico's Baja California state, including the region around Tijuana and Ensenada. A number of rare and endangered species occur in coastal scrub habitats, including the Federally threatened coastal California gnatcatcher (*Polioptila californica californica*), a bird species endemic to coastal sage scrublands. Threats to these habitats and the species associated with them include urbanization, invasive species, and agriculture. Metropolitan areas of Los Angeles, San Diego, and Tijuana are located in the southern coastal scrublands, and most of the scrublands have already been lost to urbanization and agricultural conversion aside from a few relic patches. Conservation efforts are focused on protecting the remaining areas of this rare habitat and restoring degraded areas to their native state when possible. There are also some ongoing butterfly re-establishment efforts in coastal scrub patches in southern California.



Salt marsh harvest mouse.
USFWS photo.

Resource Issues: Threats/Challenges

Altered Coastal Hydrology

General threats to biodiversity include invasive species and development resulting in habitat disturbance, fragmentation, and changes to coastal habitat structure and composition. Specific habitat threats were considered in the development of geographic focus areas. For example, common aquatic habitat threats include flow modification, disconnected habitat, and poor water quality. Hydrologic regimes of entire stream and river systems have been altered by water diversions and dams, which impacts the sedimentation flow into bays, estuaries, and lagoons. Intensive stakeholder competition for fresh water resources results in stream flows that are insufficient to support natural aquatic ecosystems. These alterations disrupt flow dynamics and result in a decrease in aquatic habitat area and a loss of lateral and longitudinal connectivity. Levee construction and channelization of waterways has also resulted in disconnections between main stem stream channels and floodplains. The Coastal Program will target areas to implement conservation strategies that protect instream flows, improve water quality to benefit Federal Trust Species, and reopen high quality aquatic habitat areas that are connected to coastal habitats.

Disconnect of Children and Nature

Many of today's youth are spending increasingly less time outdoors for a variety of reasons ranging from, digital media, organized sports schedules, academic achievement pressures and family work-life schedules. Additionally, many children raised in highly urban environments have few opportunities for natural outdoor exploration. Without experiences and a connection to nature, it will be less likely that future generations will understand and prioritize the conservation of natural resources. A need exists to enhance student education by reinvigorating outdoor learning experiences in all disciplines of study, regardless of both physical and mental ability. To address this long-term challenge, the Coastal Program supports two full-time biologists dedicated to the delivery of the Schoolyard



Before: Culverts impeded fish passage on Lion Creek (before), Ventura County. Photo by Moe Gomez, South Coast Habitat Restoration.



After: Impediment removed on Lion Creek (after), Ventura County. Photo by Brian Hobbs, USFWS.

Habitat (SYH) Program and Connecting People with Nature projects to allow students to observe, to learn, and to experience nature, thus, enhancing their connection to the outdoors, and reducing the adverse effects of indoor-only lifestyles. The SYH Program works directly with schools to provide technical assistance and funding to develop outdoor learning environments and to train teachers on how to incorporate SYH projects into the curriculum. Nature provides children an authentic space for study, provoking thoughts and curiosity that would never surface in the traditional classroom. Teachers are able to enhance standard curriculum that aligns with Federal and State education goals and mandates, while improving students' skills in core subjects such as science, math, reading, and language arts. Without this necessary exposure, future generations will not have the conservation-ethic that is important in ensuring a sustainable future.



Schoolyard Habitat students spend time in an outdoor classroom. Photo by Sarah Swenty, USFWS.

Urbanization and Land Use Conversion

Since the 1850s, California has lost over 90 percent of its original coastal wetlands, primarily because of conversion to agriculture and development. Increasing populations and the associated expansion of development displace or eradicate habitat and wildlife, spread invasive species, create more impermeable surfaces and non-point source polluted runoff, require additional waste and sewage disposal options, power, and water. Coastlines and wetlands and their surrounding uplands habitats are heavily affected because development is often concentrated near shorelines coastal plains, canyons, bluffs, and near dune complexes. These upland areas are also impacted by farming, grazing, burning, and invasive species, resulting in altered stream and groundwater hydrology and increased sedimentation and pollutants into downstream wetlands habitats including bays and estuaries. Conversion of coastal uplands to more intensive agricultural uses also contributes to coastal habitat loss (primarily in coastal prairie, woodlands, and scrub habitats) including conversion of rangelands to more intensive row crop agriculture or orchards (i.e., from rangeland to strawberries or vineyards).

Invasive Species

Invasive species are a growing issue of concern because they continue to increase in association with expanding human populations. Invasive species are one of the greatest threats to biodiversity worldwide, second only to habitat destruction. In California, more than \$80 million goes to fighting invasive plants every year. As more ecosystem components and interactions are altered by invasive plants, restoration of pre-invasion conditions becomes more difficult. Invasive plants can affect native ecosystems by changing fuel properties, which can in turn affect fire behavior and, ultimately, alter natural fire frequency, intensity, extent, type, and seasonality. Restoration may require the installation of native plant communities, managing fuel conditions, fire regimes, and other ecosystem properties in addition to the invaders that caused the changes in the first place. Climate change is predicted to create conditions favorable to range

expansions for new invasive species, in addition to altering habitats and species distributions through sea level rise, increased storminess, coastal erosion and flooding, ocean acidification, rising average temperatures, and changes in stream hydrology. Many Coastal Program projects involve removal of invasive plant species, and subsequent planting of native species, when necessary. The Coastal Program in San Francisco Bay is working with the Bay Area Early Detection Network (www.baedn.org) and other partners to predict new invasive plant arrivals and to remove invasive plants before they become large-scale infestations.

Climate Change

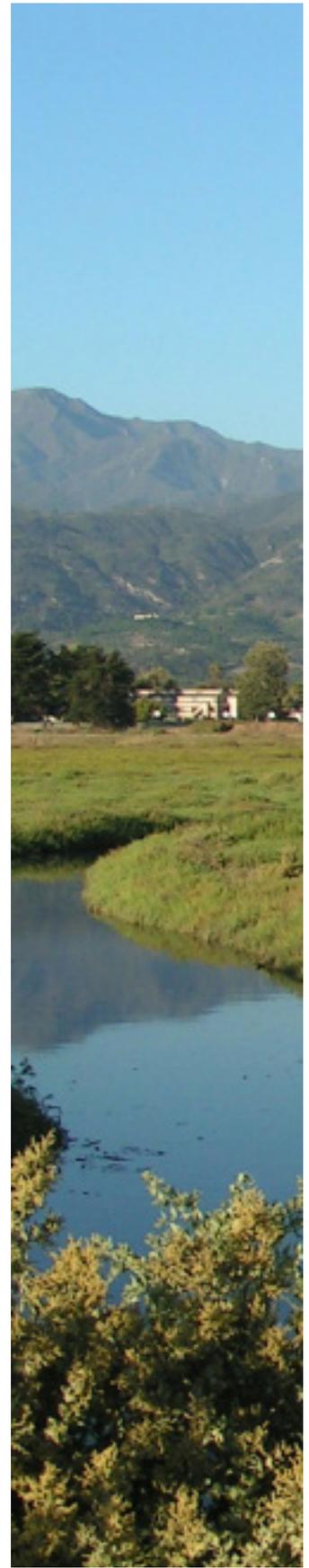
Climate change is likely the greatest conservation challenge of the 21st century. To address and plan for climate change and its impacts, the Service completed a national Strategic Plan for climate change in September of 2010, titled *Rising to the Urgent Challenge-Strategic Plan for Responding to Accelerating Climate Change*. The plan establishes a basic framework within which the agency will work during the next 5 years. The framework is dependent on working with local partnerships and larger landscape level partnerships to help ensure the sustainability of fish, wildlife, plants and habitats in the face of accelerating climate change. The three major strategies of the plan are Adaptation, Mitigation and Engagement, and they are defined as:

- **Adaptation:** Minimizing the impact of climate change on fish and wildlife through the application of cutting-edge science in managing species and habitats.
- **Mitigation:** Reducing levels of greenhouse gases in the Earth's atmosphere. This can be partially achieved through biological carbon sequestration.
- **Engagement:** Joining forces with others to seek solutions to the challenges and threats to fish and wildlife conservation posed by climate change.

Conservation Delivery Opportunities

'Climate-Smart' Project Prioritization

The Coastal Program works in coastal areas where the majority of the U.S. population is located, and where many of the impacts of climate change will be most immediately obvious, thus, there are opportunities for our program to act upon the early signs of climate change. Sea-level rise, ocean acidification, increased storminess, elevated wave heights and velocity, and greater erosion and flooding will alter habitats and species' assemblages along with human infrastructure and activities. Projects will be designed to achieve population and habitat objectives established at landscape scales for species that the Service considers most vulnerable and sensitive to climate change. Habitat restoration and protection are important adaptation elements of the Service's larger landscape-scale approach to enhancing



*Carpenteria Saltmarsh,
Santa Barbara County.
Photo by Michael Feeney,
Land Trust for Santa
Barbara County.*

ecosystem and population resiliency in the face of climate change. Recent scientific literature identifies several conceptual issues associated with climate change planning that can be integrated into the way we plan for conservation. When possible, we will incorporate climate change into our landscape-level and project-level planning in new ways and we will consider the following factors in our approach:

- **Shifting Restoration Goals:** The goal of restoring habitats to historic conditions may not be applicable in cases where the past is no longer an indication of what future ecosystems will look like. Current scientific literature suggests a goal of increasing ecosystem resilience, broadly defined as restoring ecological functions and processes and protecting genetic and biological diversity.
- **Dealing with Uncertainty:** Some elements of uncertainty about future conditions can be reduced through additional research and modeling. Some of the strategies for addressing this are to: a) increase project monitoring to allow mid-course corrections; b) use ‘active’ adaptive management to incorporate investigation of specific management questions into project design; and c) emphasize ‘robust’ restoration strategies that are likely to have positive impacts under any future climate scenario – such as restoring habitat connectivity; expanding reserve networks; and reducing stressors like pollution and invasive species.
- **Triage:** Because some species and habitats will be much harder hit by climate change than others, it is likely that resource managers will have to decide whether to allocate scarce conservation resources to these or to other more adaptable species. We will continue to work with our partners to gain the knowledge required to implement this approach.
- **Alien Species Response and Definition:** Climate change will allow some alien species to increase ranges and invade new areas and cause some native species to become invasive, resulting in major unforeseen impacts that will necessitate increased monitoring and prevention efforts. We need to be ready to explain changing concepts of what



Mouth of the Eel River. USFWS photo.

is ‘alien’ to the public and be able to articulate a cohesive strategy.

- **Protected Area Selection and Monitoring:** Today’s protected areas may not fulfill their intended habitat functions in the future. Additional attention needs to be paid to monitoring protected area habitat values over time and to articulating a scientifically defensible strategy for choosing future areas that will be relatively resilient to climate change. The complexity of choosing future protected areas is especially relevant to the Coastal Program’s involvement in land protection and restoration through the NCWC Grant program.



Ten Mile River Estuary from Perry-Smith Property, Courtesy Margaret Perry.

Sound Science and Monitoring (Strategic Habitat Conservation)

The focus for SHC is on outcomes for key groups of species by following an adaptive management loop that includes: biological planning, conservation design, conservation delivery, and decision-based monitoring and research. We applied elements of SHC to develop this 5-year strategic plan for the Coastal Program. Application of the SHC process will allow the Coastal Program and our partners to systematically evaluate the impacts of our projects, and help us to identify and adapt our techniques and methodologies for habitat restoration. We will continue to learn from our projects and make the necessary changes to future projects in order to provide the highest quality habitat possible for Federal Trust Species. This plan launches a two-pronged approach to the Program’s first formal Monitoring efforts, and attempt at a comprehensive SHC approach:

Local Project Monitoring

Coastal Program staff will develop a basic implementation monitoring protocol for all projects and site-specific comprehensive monitoring protocols for a subset of projects by March 2013. The purpose of monitoring Coastal Program projects is to:

- Improve Program delivery, customer satisfaction, and accountability;
- Improve project implementation and to assess whether projects were carried out according to the work plan;
- Document and demonstrate success of Coastal Program projects based on defined habitat factors and focal species;
- Evaluate the effectiveness of specific habitat improvement techniques, and enable staff to learn from each project in order to implement changes in future projects;
- Identify long-term information and research needs.

Regional Bat Monitoring Project

The Coastal Program will lead a California coast-wide bat monitoring project that will be designed and implemented by the Regional Coordinator, Local Program Managers, and partners. The purpose of this project is to evaluate the impacts of Coastal Program habitat restoration projects to bats, an elusive and often overlooked group of species and to implement a comprehensive SHC pilot study that will complement other ongoing monitoring efforts in the Region (e.g., NWR Inventory and Monitoring Program, Contaminants Program). Bats play an important role in coastal ecosystems, including the socio-economic component which includes the pollination of agricultural crops and consumption of “pest” insects. Despite their importance, bats remain an understudied and misunderstood group of species. Bats are residents, and sometimes migratory, along the coast of California, but we have not previously examined the effects of Coastal Program restoration projects on this group of species. Within Coastal Program project sites, we will monitor bat species composition and activity levels before and after project construction. We anticipate that the bat monitoring project, in conjunction with local Coastal Program project monitoring, will give us a greater understanding of the benefits that our projects have for native species and/or indicate changes that we should make in future project prioritization and implementation.

Partnerships

The Coastal Program is working with partners and engaging local communities to implement habitat restoration projects that focus on carbon sequestration and sea level rise adaptation strategies to benefit fish and wildlife habitats that may be affected by climate change. Partnerships such as the Humboldt Bay Initiative, the San Luis Obispo Science and Ecosystem Alliance, and the Southern California Wetlands Recovery Project are some of the collaborative partnerships particularly focused on this issue. These programs are implemented with an Ecosystem-based Management (EBM) approach to managing coastal areas. EBM involves collaboration and integration with a wide range of partners to comprehensively manage coastal areas while minimizing conflict, addressing chronic management problems and working together on meeting future challenges. Most of these programs are also part of the West Coast EBM Network: a partnership of six community-based initiatives along the coast of California, Oregon, and Washington. The West Coast EBM network and other ecosystem-based programs are an important component of implementing the West Coast Governors’ Agreement on Ocean Health (WCGA); an agreement signed by Governor’s of Washington, Oregon and California in 2006 to more effectively address issues of regional significance focused on health of oceans and coastal ecosystems. These issues are: clean coastal waters and beaches; healthy ocean and coastal habitats; effective implementation of ecosystem-based management; reduced impacts of offshore development; expanded ocean and coastal scientific information, research and monitoring; increased ocean awareness and literacy among the regions citizens; and sustainable economic development of coastal communities.



*Oak Woodland Eel River.
USFWS photo.*

Leveraging Expertise and “Boots on the Ground” (Shared Positions)

The Coastal Program is partnering with NRCS in Central California to promote opportunities to share technical expertise in delivering collaborative projects with the NRCS Farm Bill programs. The Coastal Program jointly funds a cost-share position for an NRCS Engineer, currently located in the NRCS Salinas Service Center. The Engineer provides technical expertise for Coastal Program projects along the central California coast that would otherwise not be available to our Central Coast program. Through our new partnership, we aim to target 75 percent the position’s time to evaluate, design, and implement priority habitat restoration projects that meet the NRCS and Coastal Program goals. For the Service, priority is given to habitat improvement projects within the northern Central California Coast focus area in Monterey Bay. The new partnership will support the implementation of projects such as stock pond and wetland enhancements, water developments, range plantings, invasive plant removal/control, and grazing management plans that will benefit a suite of native wildlife and plants including sensitive amphibian and vernal pool species and wide-ranging species such as the California condor.

Leveraging Funding

In California, property values and the cost of living are among the highest in the nation. Large-scale habitat restoration projects in estuaries and riparian areas can cost millions of dollars. The remaining undeveloped coastal lands are often under development pressures, thus, costing millions of dollars to acquire for permanent protection. It is essential for the Coastal Program to leverage our monies and expertise with partners, including the State, other Federal agencies, private landowners, and non-profit groups. Our goal is to leverage our Coastal Program dollars at a 10:1 ratio across the Region. The high property values and costs for coastal restoration in California make programs like the Service’s NCWC and North American Wetlands Conservation Act (NAWCA) grants even more important for the Coastal Program to utilize as funding sources for conservation. We actively work with our partners to leverage funding sources and assist them in submitting applications for the NCWC and NAWCA grant programs to protect and restore habitats along the California coast.

Landscape Conservation Cooperatives

The California and North Pacific Landscape Conservation Cooperatives’ (LCCs’) geographic areas encompass the four Coastal Program locations in Region 8. Working with our partners, the Coastal Program has identified data gaps and data needs for specific geographic areas as they relate to impacts from sea level rise. In some cases, as with the Humboldt Bay Initiative, a Strategic Plan (developed in 2009), helps to guide science and management within the region. Coastal Program staff provide information to connect our partners with the opportunities that LCCs may provide. As LCCs become more established, we anticipate that the Coastal Program will be a key to informing LCC funding decisions and acting as a conduit to connect research efforts and conservation delivery in coastal areas of California.



USFWS photo.

Bringing Nature to Children

The California coast is home to some of the nation's largest school districts, many of which are the primary land holders in the area. Many schools are facing decreasing funding and have limited budgets for teacher professional development, field trips, building maintenance and energy costs. These schools serve close to 2 million students in urban, suburban and rural communities. There are many social barriers such as gangs, lack of parks, and poverty that are significant challenges to youth being able to access and enjoy nature. Through the Schoolyard Habitat program we partner with a variety of organizations to create habitat restoration projects at schools that serve as onsite teaching areas where students can access nature. These projects and partnerships also create and build community engagement and increase the health and well-being of involved youth. Additionally, SYH projects not only provide habitat for local and migratory birds and other wildlife, provide vegetation to help filter rainwater and reduce urban runoff, but they can also reduce energy costs to schools via increased shade trees and rain barrels to water school gardens. Some SYH projects focus specifically on providing habitat for threatened or endangered species, such as the western snowy plover, California least tern, least Bell's vireo, arroyo toad (*Anaxyrus californicus*), coastal California gnatcatcher (*Polioptila californica californica*), or Belding's savannah sparrow.

Supporting Job Creation and Local Economies

Coastal Program projects bring jobs to local communities, and assist in supporting local economies. The Washington Office is currently conducting a formal socio-economic analysis to assess and better describe the contributions that the Coastal Program makes to coastal communities. The information attained through the socio-economic analysis will be publicly available by 2013.

Goal One: Conserve Habitat

The RO initiated a strategic planning process in 2010 to protect and conserve the important biological resources of the region, and to update the previous strategic plan's geographic focus areas (FY 2007-2011) for the Program. We plan to maximize our human and fiscal capital to address resource issues of the greatest biological, social, and political importance. We expect to stabilize or reverse resource declines for priority species and habitats.

Geographic Focus Areas

As mentioned above, the RO hosted a facilitator-led Strategic Planning Workshop to assist in the development of local strategic plans and the identification of geographic focus areas. Post-workshop, Local Program Managers worked with internal and external stakeholders, the Coastal Program Regional Coordinator, and each other to complete their local strategic plans and to finalize the focus areas. The Regional focus areas (Page 18) are based upon the local plans and focus areas that were selected by each office, as well as Regional-level partnerships and conservation opportunities.



Students enjoy planting in their school's new wetland. USFWS photo.

In addition to the five geographic focus areas, we have created one thematic focus area that encompasses the habitats and partnership opportunities for Schoolyard Habitats that will be prioritized during the next 5 years:

- Humboldt Bay Watersheds
- San Francisco Bay Outer Coast
- Monterey Bay Dunes and Watersheds
- South Central Coast Watersheds
- Southern California Estuaries
- Schoolyard Habitats

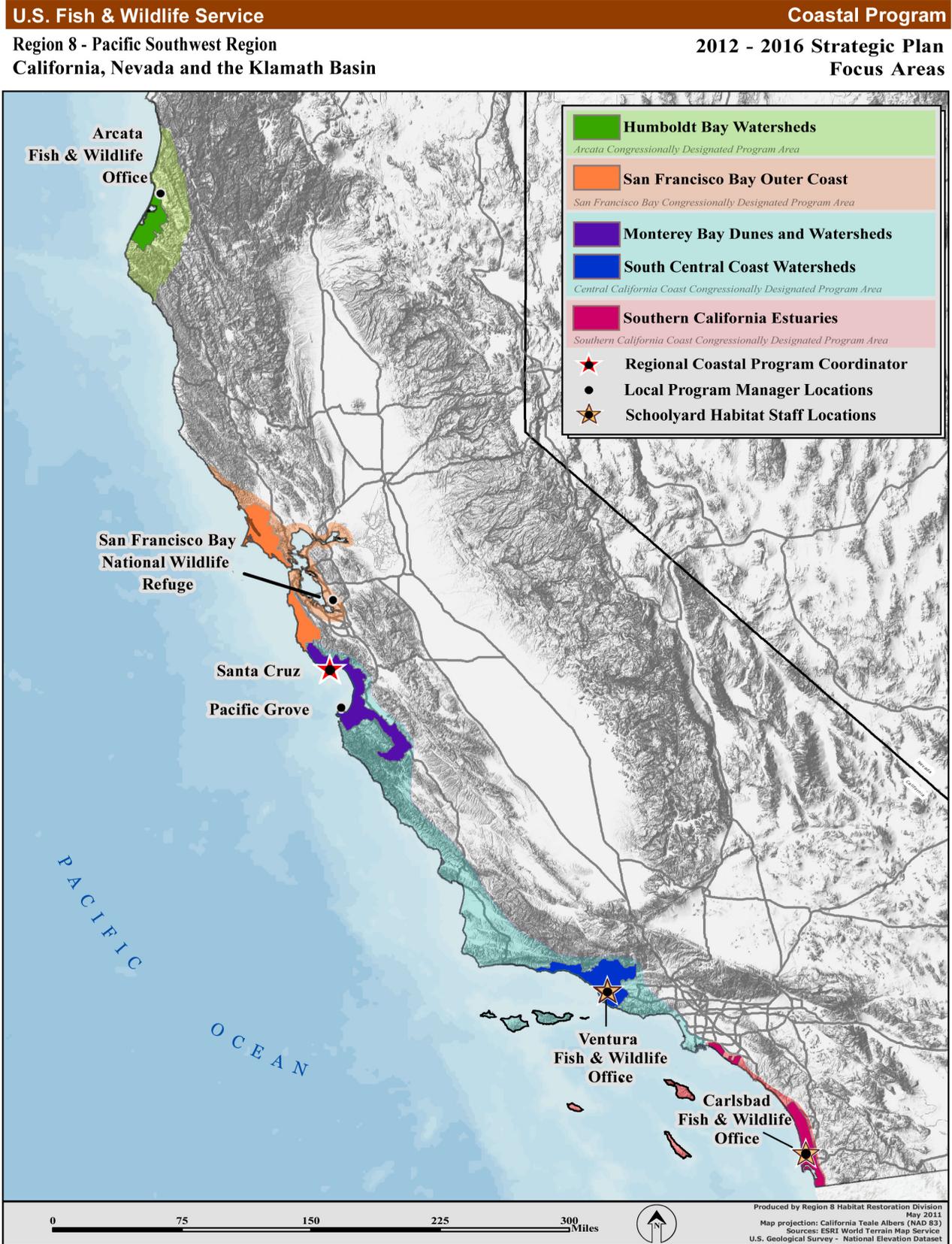
These geographic focus areas were chosen because they consist of networks of terrestrial and aquatic habitats important to significant species assemblages. The focus areas cover broad landscapes and represent areas of opportunity where Program goals can be met and conservation of priority habitats meet the following criteria:

- Specific conservation concerns can be addressed within a 5-year period and achievements will be measurable and significant by the end of the Plan's implementation
- Areas are important to Federal Trust Species (threatened and endangered species, migratory birds, and/or anadromous fish)
- Areas provide habitat connectivity
- Areas present unique partnership opportunities
- Focus in the area will improve local public relations for conservation
- Areas have high restoration potential
- Action within the areas support the implementation of recovery plans



Habitats of Carpenteria Creek Watershed are important to the endangered Southern California steelhead and many other native species, Santa Barbara County. Photo by Mary Root, USFWS.

Figure 1. Region 8 Coastal Program Offices and Focus Areas



Regional Objectives

Objective 1.1: Strategically restore and enhance coastal habitats and ecosystems within focus areas.

Key Strategic Activities

- Conduct priority restoration and enhancement projects within the focus areas (Table 1).
- Reopen high quality aquatic habitat areas that are connected to coastal habitats in the focus areas.
- Eradicate existing invasive plant species and identify potential invasive plant infestations as targets for future conservation actions within the focus areas.
- Reconnect high quality isolated habitat areas and restore elements of the natural hydrologic function to fluvial and wetland systems within the focus areas.
- Incorporate climate change adaptation strategies and models into the design and implementation of restoration projects in lagoons and estuaries within the focus areas.

Table 1. Region 8 Strategic Plan Focus Area Five Year Targets

Local Program	Riparian/ Shoreline Restored/ Enhanced (miles)	Wetland Restored/ Enhanced (acres)	Upland Restored/ Enhanced (acres)	Riparian/ Shoreline Protected (miles)	Wetland Protected (acres)	Upland Protected (acres)	# of Fish Barriers Removed
Humboldt Bay Watersheds	14	966	80	0	30	0	3
San Francisco Bay Outer Coast	140	165	4	0	0	0	3
Monterey Bay Dunes and Watersheds	4.5	510	697	2.4	163	129	3
South Central Coast Watersheds	2	32	100	0	143	120	6
Southern California Estuaries	1.5	533	246	0	0	0	1
TOTALS	162	2206	1127	2.4	336	249	16

**Schoolyard Habitats* – In addition to the projects accounted for in the metrics above, the R8 Coastal program will initiate and complete at least 30 SYH Projects, and facilitate 20 teacher trainings within the life of this plan.

Objective 1.2: Strategically protect priority coastal areas through partnerships for acquisition and conservation easements within the focus areas.

Key Strategic Activities

- Local Program Managers will work with partners to submit at least one proposal annually to NCWC grant or other acquisition funding sources to protect priority coastal habitats.
- By February 2013, the Regional Coordinator and Local Program Managers will develop criteria to prioritize lands for protection along the California coast and to identify new potential partners that can purchase land and hold conservation easements.
- By May 2013, Local Program Managers will create a prioritized list of areas to target for protection along the California coast.
- The Regional Coordinator will work with Local Program Managers and the Wildlife and Sport Fish Restoration program to provide assistance to NCWC grant applicants for project design and proposal development.



Eelgrass beds in Humboldt Bay. Photo by S. Schlosser.

Objective 1.3: Create successful Schoolyard Habitat (SYH) projects that provide refugia and microhabitats for native species and outdoor classrooms for students in the Southern and Central Coast of California.

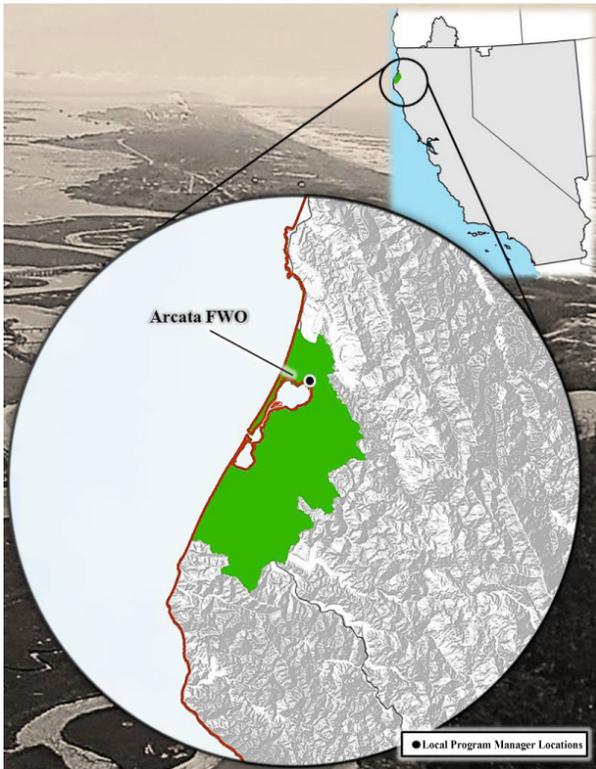
Key Strategic Activity

- Each full-time Local SYH Coordinator will complete 3-4 SYH projects per year that provide or enhance refugia and microhabitats for native species.

Five Year Focus Area Performance Targets: For the objectives and key strategic activities listed above, Coastal Program staff identified geographic focus areas where they will spend a minimum of 50 percent of their time and resources to conduct priority strategic coastal conservation actions over the next 5 years. We also identified specific restoration and protection acres and miles, as well as SYH project and educational targets to help us track our conservation progress within the focus areas. Targets are based upon a combination of staff capacity, current and potential future partnerships, anticipated funding, and opportunities for restoration.



Pelicans on Humboldt Bay. Photo by S. Schlosser.



Humboldt Bay Watersheds Focus Area

Description

Located approximately 350 miles north of San Francisco along the rugged coast of California, the 311-square mile focus area encompasses Humboldt Bay and the estuaries of the Eel and Mad Rivers. Bordered by the cities of Eureka and Arcata, Humboldt Bay is California's second largest natural coastal bay. The area is characterized by a diversity of fish and wildlife species, Native American cultures, rural communities, and an economy dependent upon natural resources. Watersheds in the area are geologically young and experience a high rate of tectonic activity. Rainfall amounts are among the highest in the State with frequent fog and cool temperatures along the coast. Surrounded by the coastal mountains, the landscape includes dunes, coastal prairies, streams and rivers, mixed

Figure 2. Humboldt Bay Watersheds Focus Area

conifer forests, including redwoods, estuaries, and marshes.

Landscapes within the focus area have been significantly altered and impacted by land management activities since the late 1800s. However, the relatively low population density (when compared with the rest of the state) and the rural nature of the area, allows for many opportunities to work with private landowners and agencies to improve diverse habitats. Major land uses in the area include oyster culture, dairy and beef cattle, timber production, organic farming, instream gravel mining, bay dredging, rural subdivision development and tourism. Nearly 40 percent of the eelgrass beds in the State occur in Humboldt Bay and serve as habitat for juvenile Dungeness crab (*Metacarcinus magister*), rockfish (*Sebastes spp.*), salmonids, shorebirds, waterfowl and marine birds. Priority Federal Trust Species in the focus area include migratory songbirds, waterbirds, Federally listed southern Oregon/northern California coho and California coastal chinook salmon, northern California steelhead trout, tidewater goby, and western snowy plover.

Why Was This Area Selected?

New opportunities exist to build partnerships that will expand the benefits of restoration and conservation activities in the focus area: the Salt River Ecosystem Restoration Project, the Arcata Baylands conservation effort, the Salmon Creek Restoration project on the Humboldt Bay National Wildlife Refuge (NWR), the coast-wide *Spartina densiflora* eradication effort, and coastal dunes restoration. The focus area contains portions of estuaries that, if not functional, will limit the ability of species and habitats to persist long-term higher up in the watersheds that drain to the coast.

The Coastal Program is a key partner in the Humboldt Bay Initiative (HBI), a coordinated resource management framework that links the needs of people, habitats and species by increasing scientific understanding of the ecosystem. HBI brings together local stakeholders to envision the desired future state of Humboldt Bay ecosystems and communities, understand current conditions in the ecosystem, and to collaborate towards effectively implementing ecosystem-based approaches. HBI facilitates ongoing coordination and collaboration among local agencies, resource managers and local constituencies and develops, integrates and disseminates key ecosystem information relative to climate change, invasive species, and human activities.

Program Priorities and Anticipated Results

Program priorities are to: 1) eradicate invasive species in coastal dunes, salt marshes and riparian areas along streams; 2) restore complexity and connectivity of streams and small estuaries to their floodplains; 3) improve the function of riverine estuaries by providing complexity and structure to areas devoid of habitat for fish and wildlife; 4) work with diverse partners in a collaborative manner to address the complexities of planning for climate change and sea level rise. Over the next 5 years, the Coastal Program in Humboldt Bay will work with partners using a watershed approach to restore and protect priority wetlands, riparian areas, and associated hydrologic processes in the focus area. At the end of 5 years, we will have improved connectivity and function of coastal dune habitat along Humboldt Bay and the Eel River estuary. We will have improved coastal wetland and intertidal habitats by removing invasive species, enhancing connectivity of brackish and freshwater wetland transition areas, and improving coastal wetlands and riparian corridors in the lower reaches of watersheds surrounding Humboldt Bay, Eel River estuary, and lower Mad River. We will have worked with the HBI Partnership to fill key data gaps essential to running the appropriate sea level rise models for the focus area. We will be a part of a team through the HBI to understand how habitats, species, and people will be impacted by sea level rise and other climate change related factors. We will have worked with our partners to develop an assessment and monitoring strategy for projects and complexes of projects across the focus area landscape.

Partners

Current primary partners in the focus area include the HBI, Humboldt State University, University of California-Sea Grant, Humboldt Bay NWR, California Department of Fish and Wildlife (CDFW), Humboldt County Resource Conservation District (RCD), NRCS, Redwood National and State Parks, City of Arcata, Friends of the Dunes, North Coast Regional Land Trust, Pacific Coast Fish, Wildlife and Wetland Restoration Association, California Coastal Conservancy, and the Wiyot Tribe.

Humboldt Bay Watershed Focus Area Five Year Targets

Riparian/Shoreline Miles Restored:	14
Wetland Acres Restored:	966
Upland Acres Restored:	80
Riparian/Shoreline Miles Protected:	0
Wetland Acres Protected:	30
Upland Acres Protected:	0
Fish Barrier Removal:	3



North Humboldt Bay. Photo by Paula Golightly, USFWS.



South Humboldt Bay. Photo by Pat Davis.

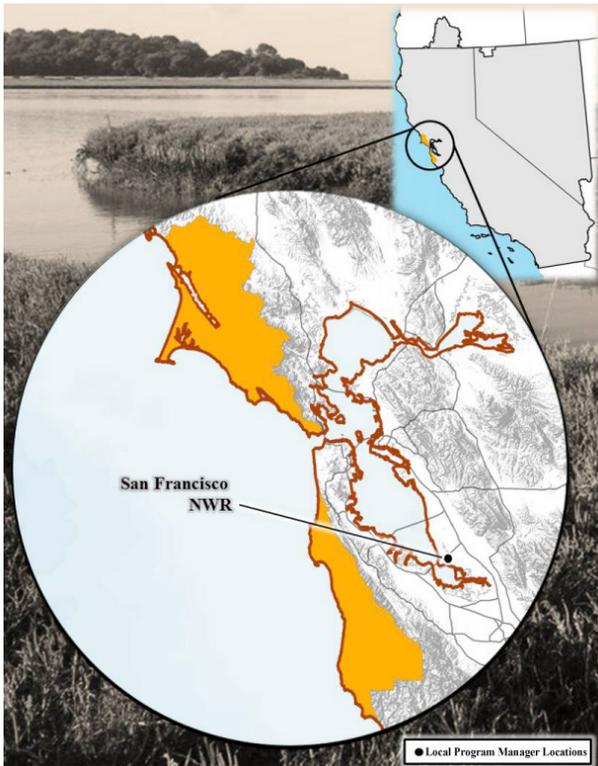


Figure 2. San Francisco Bay Outer Coast Focus Area

San Francisco Bay Outer Coast Focus Area

Description

The San Francisco Bay Outer Coast Focus Area includes the coastline from the Santa Cruz-San Mateo County boundary on the south up to the Sonoma-Mendocino County Boundary north and extends inland to include coastal watersheds draining into this region of the coast. The focal habitats include salt marshes, lagoons, streams, the nearshore, and associated upland habitats that support ecosystem processes. The area possesses the central California coast's distinct maritime climate (cool with little temperature

variation), as opposed to the more continentally influenced climates in the San Francisco Bay Estuary. South of the Golden Gate, in San Mateo County, coastal aquatic habitats include small tidal marshes and lagoons, often brackish and/or seasonally fresh in character, that occur at the mouths of associated coastal stream systems. Systems may be open to tidal influence either seasonally (with closure often due to seasonal sandbar formation at the mouth) or continuously. These systems also support additional freshwater marsh and riparian components. The largest of these systems is at Pescadero, including the Pescadero-Butano Creek Marsh/Lagoon system, associated marshes, and the Pescadero and Butano Watershed. North of the Golden Gate, the Marin coastline includes many sheltered embayments (lagoons or esteros) along larger open bays as well as smaller independent lagoons and creek mouths, with associated coastal watersheds and streams. Stream systems also support freshwater stream habitats, freshwater wetlands, and riparian ecotones. Major coastal features include Bolinas Bay and Lagoon, Drakes Bay, Drakes and Limantour Esteros, Tomales Bay, and Bodega Bay and Harbor. Major tidal marsh areas here include those in Bolinas Lagoon, at Drake's and Limantour Esteros on the Point Reyes peninsula), portions of Tomales Bay near creek mouths. Stream systems include Lagunitas Creek, Walker Creek, and numerous smaller creeks draining the area. Priority Federal Trust Species in the focus area include: the Federally listed California clapper rail (*Rallus longirostris obsoletus*), central coast steelhead trout, central coast coho salmon, Chinook salmon, San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), California red legged frog (*Rana draytonii*), tidewater goby, and Tidestrom's Lupine (*Lupinus tidestromii*).

Why Was This Area Selected?

The focus area was selected because it includes significant restorable aquatic habitats where the Coastal Program can make a positive difference, including numerous tidal marshes, lagoons, brackish/freshwater marshes, and associated coastal stream systems and riparian areas. The focus area includes much of the Central Coast Recovery Unit described in the Service's Draft Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California. Other recovery plans covering the area include those for the California red-legged frog, tidewater goby and the central coast coho salmon. Habitats and watersheds within the focus area have thus been identified as important to the recovery of a variety of species.

Program Priorities and Anticipated Results

Several watershed-scale planning efforts have been completed in the focus area, including the San Gregorio Creek Watershed Management Plan (2010) in San Mateo County, which focuses broadly on watershed health using four sensitive focal species and the Lagunitas Limiting Factors Analysis for Coho Salmon & Steelhead (2008) in Marin County, which focuses on anadromous salmonids. The Coastal Program and partners will use a watershed approach to conserve, protect, enhance, and restore aquatic habitats, and the processes that maintain those habitats in the focus area. For the next 5 years, the Coastal program will focus on holistic, process-based solutions to habitat problems, which arise from watershed scale analyses. This approach will assist us in identifying root causes of landscape and watershed (ecosystem) scale problems in order to strategically and comprehensively prioritize and implement effective conservation actions. The program will use focal species as useful indicators of watershed health. These indicator species will help us to focus our ecosystem limiting factors analyses and also help us to prioritize areas for restoration and enhancement. At the end of 5 years, we will have completed at least one watershed-based analysis and prioritized Coastal Program actions within the watershed. We will be implementing habitat restoration, enhancement, and protection projects based upon the completion of the watershed analyses.

Partners

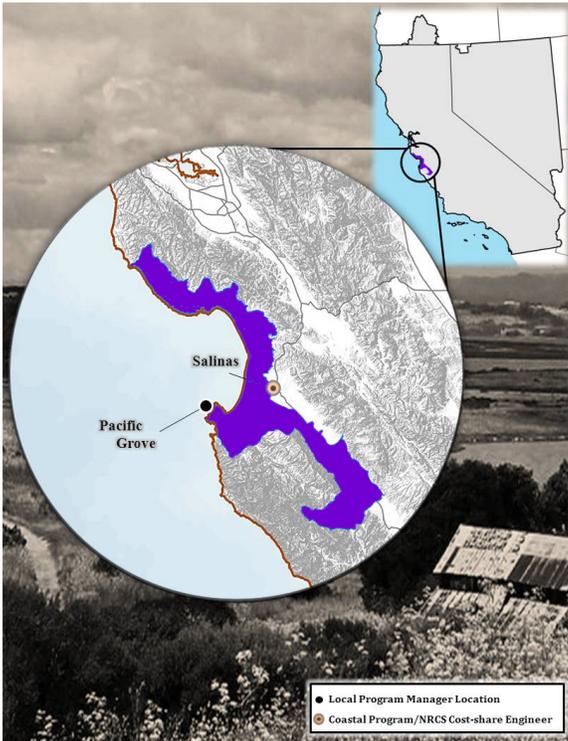
Primary partners in the focus area include the San Mateo RCD, San Mateo Integrated Watershed Restoration Program, NOAA, CDFW, California State Parks, Marin Municipal Water District, Tomales Bay Watershed Council, and the National Park Service.

San Francisco Bay Outer Coast Focus Area Five Year Targets

Riparian/Shoreline Miles Restored:	140
Wetland Acres Restored:	165
Upland Acres Restored:	4
Riparian/Shoreline Miles Protected:	0
Wetland Acres Protected:	0
Upland Acres Protected:	0
Fish Barrier Removal:	3



Photo by John Klochak, USFWS.



Monterey Bay Dunes and Watersheds Focus Area

Description

The Monterey Bay Dunes and Watersheds Focus Area encompasses approximately 3,000 acres (92 miles of dunes/beaches/coastal bluffs, 1,600 acres of wetlands, and 124 miles of rivers and numerous smaller streams) all of which drain into the Monterey Bay National Marine Sanctuary. The focus area includes six ecologically important watersheds and wetlands including Carmel River and lagoon, Salinas River and lagoon, Arroyo Seco River, Elkhorn Slough and estuary, Pajaro River, Watsonville

Figure 4. Monterey Bay Dunes and Watersheds Focus Area

Slough system, San Lorenzo River and Scott Creek. The focus area also includes several small coastal watersheds and their associated lagoons and wetlands including Moro Cojo Slough, Bennett Slough, McClusky Slough, Soquel Creek, and Laguna Creek and lagoon. These smaller watersheds provide essential habitat to many native species and play an important role in linking habitats between the larger coastal watersheds of the focus area. Beaches, dunes, and coastal bluffs in the focus area also provide important habitat to a number of sensitive shorebird species, plants, invertebrates, and marine mammals. Habitats include wetlands (estuaries, lagoons, river inlets, riverine and riparian) and uplands (coastal dunes and coastal scrub). In total, this 521,000-acre focus area provides habitat for 36 Federally listed species and includes three regions designated by the California chapter of the Audubon Society as Important Bird Areas of Global and State priority. The focus area includes pockets of densely populated areas but is still largely agricultural and rural, allowing for opportunities to maintain and enhance linkages within the interconnected marine, coastal, and mountain habitats of the region. Priority species in the focus area are: California red-legged frog, California tiger salamander (*Ambystoma californiense*), Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*), western snowy plover, tidewater goby, Santa Cruz tarplant (*Holocarpus macradenia*), central coast coho, and steelhead salmon.

Why Was This Area Selected?

This focus area was selected because of the immediate need for habitat protection, restoration, and species recovery within the Monterey Bay area. The Coastal Program will focus on the restoration and protection of coastal dunes and watersheds and the recovery sensitive species that



Yadon's Wallflower. Photo by Dave Kodama, SRNWR.



Western snowy plover. Photo by David Pereska.

currently lack support from other local efforts, or that need landscape-level coordination to maximize existing efforts. The Coastal Program will fill a multifaceted niche in this area via locally-based support and leadership for coastal restoration and protection, assistance with grant writing and other funding support for priority projects, assistance with project compliance that may include biological and cultural resource reviews, biological monitoring, surveys and assessments, and the development of new programmatic restoration programs.

Program Priorities and Anticipated Results

Over the next 5 years, the Coastal Program will take a comprehensive approach to coastal dune protection and restoration. We will restore coastal dune and prairie habitat on private and public lands north and south of Salinas NWR. In 2009, the Service partnered with the Big Sur Land Trust in this area to restore 80 acres of dune habitat for western snowy plovers, least terns, and several native plant species. We will expand this project to include additional acreage and to develop new partnerships with adjacent land owners, California State Parks, and Bureau of Land Management. Within the next 5 years, the Coastal Program will restore and reconnect 20 percent (460 acres) of the coastal dune habitat between the Salinas River mouth and the Monterey peninsula, and will benefit a suite of listed species associated with these habitats. Numerous cooperative relationships will also be developed to restore 510 acres of wetland habitat around the Elkhorn and Watsonville slough systems. The Coastal Program will work with the NWR system, Ellicott Slough and Watsonville Slough partners, the CDFW to develop management actions and protect habitat for the recovery of the Federally listed California red-legged frog, Santa Cruz long-toed salamander, and Santa Cruz tarplant. The Coastal Program will strive to build a reputation as a reliable project partner by providing value-added technical assistance, project design, and funding alternatives.

Partners

Current partners in the focus area include Santa Cruz County RCD, Big Sur Land Trust, Land Trust of Santa Cruz County, Trust for Public Land, The Nature Conservancy, Watsonville Wetlands Watch, California Coastal Conservancy, CDFW, and California State Parks. We hope that future partners include Monterey County RCD, NRCS, NOAA, Elkhorn Slough Foundation, Elkhorn Slough National Estuary Research Reserve, Central Coast Wetlands Group, Moss Landing Marine Lab, and Santa Cruz County Parks.



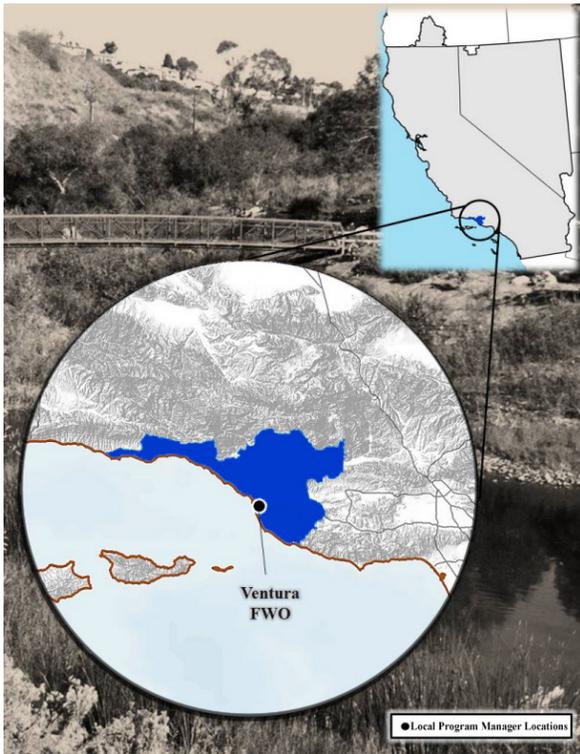
*Guadalupe Nimpomo Dunes.
Photo by Mary Root, USFWS.*

**Monterey Bay Dunes and Watersheds Focus Area
Five Year Targets**

Riparian/Shoreline Miles Restored:	4.5
Wetland Acres Restored:	510
Upland Acres Restored:	697
Riparian/Shoreline Miles Protected:	2.4
Wetland Acres Protected:	163
Upland Acres Protected:	129
Fish Barrier Removal:	3



Central California Coast. Photo by J. Klochak, USFWS.



South Central Coast Watersheds Focus Area

Description

The South Central Coast Watersheds Focus Area encompasses approximately 3,200 acres of dunes/beaches/coastal bluffs, 3,100 acres of wetlands, and many miles of rivers all of which drain into waters of the Santa Barbara Channel and eventually habitats of the Channel Islands National Marine Sanctuary. The focus area includes several ecologically important watersheds and wetlands

Figure 5. South Central Coast Focus Area

including Devereux Slough, Goleta Slough, Carpinteria Salt Marsh, Ventura River and estuary, Santa Clara River and estuary, Ormond Lagoon, and Mugu Lagoon. The focus area also includes several small coastal watersheds and their associated lagoons and wetlands including Arroyo Burro Creek, Mission Creek, Carpinteria Creek, Gobernador Creek and many others. These smaller watersheds provide essential habitat to many native species in the area and play an important role in linking habitats between the larger coastal watersheds of the focus area. Beaches, dunes, and coastal bluffs also provide important habitat to a number of sensitive shorebird species, plants, invertebrates, and marine mammals. In total, the 415,000-acre focus area provides habitat for over 18 Federally listed species and includes four regions designated by California Audubon as Important Bird Areas of Global and State priority. The focus area includes pockets of densely populated areas but is still largely agricultural and rural, allowing for opportunities to maintain and enhance linkages within the interconnected marine, coastal, and mountain habitats of the region. Priority species include: tidewater goby, California red-legged frog, Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), Monarch butterfly (*Danaus plexippus*), southern California steelhead, Belding's Savannah sparrow (*Passerculus sandwichensis beldingi*), and many shorebirds.

Why Was This Area Selected?

This focus area was selected because the Coastal Program can fill an important niche with landscape-level efforts to acquire, restore and protect coastal wetlands, watersheds, and the upland terraces and bluffs. The area was also chosen due to the number of imperiled



Santa Clara River dune habitats and estuary, Ventura County. Photo by Jenny Marek, USFWS.

species and the opportunity to assist in recovery efforts via coastal habitat restoration and protection. We will provide conservation services to our partners by providing technical assistance with grant writing, species expertise on restoration designs, and financial assistance for coastal conservation. Within the last 5 years, the Service awarded five NCWC grants to projects in this focus area and the Coastal Program will work with partners to complete these projects and to foster new partnerships for future projects. Maintaining and enhancing habitat linkages will be a key conservation strategy throughout this focal area, and it will be essential to allow migration and travel corridors for focal species, as well as to facilitate habitat resilience in the face of climate change. In addition, the Coastal Program will continue to develop Schoolyard Habitat projects in local schools within the focus area. The Coastal Program's Schoolyard Habitat projects will fill a niche for citizen-based phenology monitoring and youth education programs. These education projects will teach local communities about climate change impacts and how these impacts relate to the world around them.



Coastal wetlands of Ormond Beach, Ventura County. Photo by Mary Root, USFWS.

Program Priorities and Anticipated Results

By 2016, we will have assisted with the acquisition and restoration of coastal habitats within at least three priority wetland systems in this focus area, including Devereux Slough, Santa Clara River and Ventura River estuaries, Ormond Beach wetlands, and the Carpinteria Saltmarsh. These acquisition and restoration efforts will create additional habitat for a suite of Federally listed species including the tidewater goby, western snowy plover, California least tern, and Ventura marsh milk-vetch. Removal of at least 6 barriers in coastal watersheds will help to reopen over 15 miles of habitat to all life stages of the Federally endangered Southern California Coast steelhead. Restoration of riparian habitats will support the long-term recovery of two Federally listed bird species, the southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*). Maintaining and enhancing linkages will also be a key conservation strategy throughout this focal area, and it will be essential to allow for species' migration and travel corridors as well as to facilitate habitat resilience in the face of climate change. In 5 years, we will have Schoolyard Habitat projects in at least 15 schools which will provide a core forum for phenology-based citizen science efforts. These school projects will connect people with nature in a way that highlights their local habitats and educates people about the benefits that these habitats provide.

Partners

Primary partnerships include ranchers, farmers, Ventura County RCD, Ventura County Agricultural Commissioner's Office, California Coastal Conservancy, California State Parks, California Rangeland Trust, The Nature Conservancy, Land Trust for Santa Barbara County, NRCS, U.S. Forest Service, and universities.

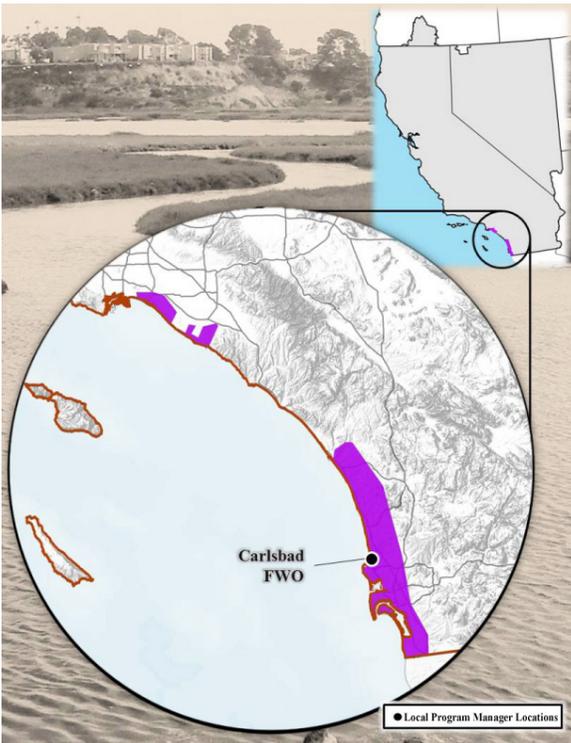
South Central Coast Watersheds Focus Area

Five Year Targets

Riparian/Shoreline Miles Restored:	2
Wetland Acres Restored:	32
Upland Acres Restored:	100
Riparian/Shoreline Miles Protected:	0
Wetland Acres Protected:	143
Upland Acres Protected:	120
Fish Barrier Removal:	6



Coyote Valley. Photo by Mike Thomas, USFWS.



Southern California Estuaries Focus Area

Description

The Southern California Estuaries Focus Area encompasses the western portion of several coastal watersheds in Southern California and occurs within the South Coast Subregion of the Southwestern California Region's Floristic Province identified by Hickman (1993). Though most of the lands in this area are developed, regionally significant habitats for listed species and migratory birds occur within coastal lagoons and estuaries that dot the coastline.

The Coastal Program has an opportunity to assist in restoring and protecting the remaining functional habitat areas for native species. Three distinct areas are included in the overall focus area. Two areas occur within northern Orange County. The northernmost area includes Colorado Lagoon, Los Cerritos Wetlands, Seal Beach NWR, and Bolsa Chica Wetlands. The central area includes Orange Coast River Park and Upper Newport Bay. The southernmost area is located within San Diego County and includes: Buena Vista Lagoon, San Elijo Lagoon, San Dieguito Lagoon, San Diego River, San Diego Bay, and the Tijuana River Valley. Priority Federal Trust Species that occur in focus area include the western snowy plover, light-footed clapper rail, California least tern, Belding's savannah sparrow, salt marsh birds' beak (*Cordylanthus maritimus*), and migratory shorebirds.

Figure 6. Southern California Estuaries Focus Area

Why Was This Area Selected?

This focus area was selected because of regionally significant habitat areas, partners willing to conduct voluntary conservation, opportunities to complement other conservation efforts, and the contributions that the Coastal Program can provide. This focus area contains priority coastal ecosystems and Federal Trust Species that will benefit from Coastal Program technical and financial assistance. Coastal ecosystems that will be targeted for conservation include coastal dunes, mudflats, salt marsh, salt marsh-native upland ecotones, riparian wetlands, and rare uplands. These ecosystems are targeted for conservation because they have undergone a regionally significant decline, and support landscape processes and sensitive species. Mudflats provide foraging and roosting habitat for both resident shorebirds, such as the western snowy plover, and shorebirds traveling along the Pacific flyway. Low elevation salt marsh provides nesting habitat for light-footed clapper rail and nursery habitat for important prey resources



Snowy plover enclosure. USFWS photo.

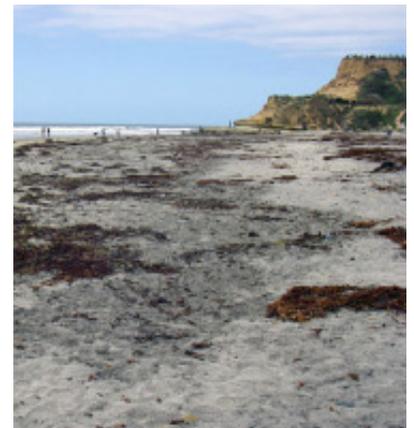
for California least tern. Mid elevation salt marsh provides habitat for Belding’s savannah sparrow. Upper salt marsh provides habitat for salt-marsh bird’s beak and rare invertebrates (i.e., salt marsh skipper). Salt marsh-upland ecotone habitats provide foraging habitat and upland refugia during high tide for light-footed clapper rails, habitat for pollinators of salt marsh bird’s beak, and migration of salt marsh in the event of sea level rise. Riparian habitat provides habitat for listed species and migratory birds and affects downstream coastal habitats through watersheds/flow processes. Rare uplands can provide habitats for listed species (e.g., vernal pools for listed fairy shrimp and plants, nest sites for California least tern and western snowy plover; aeolian soils on south facing slopes for Pacific pocket mouse), and rare habitat types (e.g., Southern Maritime Chaparral and Maritime Succulent Scrub).

Program Priorities and Anticipated Results

Over the next 5 years, the Coastal Program will focus on landscape-scale habitat restoration, project planning and implementation, and management of regionally significant estuarine areas to promote conservation of underrepresented estuarine habitats (i.e., mudflat, salt marsh, upland-wetland ecotone, and dunes). Estuarine conservation projects will be completed in San Elijo Lagoon, San Dieguito Lagoon, and Los Cerritos Wetlands. We will enhance and restore coastal dune ecosystems and identify efficient management practices for sustaining diverse native populations of dune plants at the San Diego River Mouth, San Elijo Lagoon, Silver Strand State Beach, Mission Bay, Carlsbad Bluffs, and Marine Corps Base Camp Pendleton. At the end of 5 years, we will have participated in the restoration of the primary dune systems in the focus area, worked with partners to address issues associated with the indirect impacts of intense development surrounding all of our estuarine habitats, and assisted in the development and implementation of ‘climate smart’ project techniques as they relate to anticipated sea level rise and other climate change impacts.

Partners

Primary partners include Federal and State agencies associated with the Southern California Wetlands Recovery Project, local jurisdictions, and non-profits. Federal and State agencies, such as the California Coastal Conservancy and NOAA, leverage Coastal Program resources by providing technical and financial support for conservation projects. The NWR, California State Parks, CDFW, and local jurisdictions support conservation projects on their lands. Non-profits have demonstrated a capability to implement projects and have established relationships with local landowners to assist with Coastal Program projects.



San Dieguito. USFWS photo.



USFWS photo.

Southern California Estuaries Focus Area Five Year Targets

Riparian/Shoreline Miles Restored:	1.5
Wetland Acres Restored:	533
Upland Acres Restored:	246
Riparian/Shoreline Miles Protected:	0
Wetland Acres Protected:	0
Upland Acres Protected:	0
Fish Barrier Removal:	1



California least tern. Photo by R. Baak, USFWS.



San Elijo, USFWS photo.

Focus on Schoolyard Habitats on the California Coast

Description

Education and outreach are cornerstones of the Coastal Program and are imperative for the long-term success of our projects. The Service has been active in several evolving initiatives, Connecting People with Nature (CPWN) and Youth in the Great Outdoors, both of which involve engaging and educating youth to become active in the outdoors. In 2005, the Director asked every Region to establish a SYH Program under the auspices of the CPWN initiative, because it was already achieving the desired results.

Region 8 hired a SYH Program Regional Coordinator in 2008, and has since expanded the program to include 5 full-time SYH Local Coordinators, including two supported by the Coastal Program in southern California and the central California coast. The mission of the SYH Program is to get students outside to experience nature. To accomplish this mission, the Program helps schools create natural spaces on school grounds where students will observe, draw, write, think and pose questions.

Children spend far less time outdoors exploring than in times past, and this has led to increased mental and physical stresses on today's youth. With over six million students and ten thousand public schools throughout Region 8, the SYH Program has the potential of significantly benefiting both children and wildlife. Schoolyard Habitat projects are typically defined as small-scale habitat improvement projects located on a public or private school-owned property or a city/county park or nature center. These projects can also be located on privately-owned lands dedicated to outdoor learning. The majority of projects are small in size, often less than 1 acre, but some may involve several acres. Two focus areas for the SYH Program include:

Los Angeles County Focus Area

This focus area includes part of the Los Angeles Unified School District (LAUSD), local district 3 south of Santa Monica and local districts 4-8, and has 405 Title I schools. Los Angeles has the largest and most established gang population in the country with an estimated 41,000 members. Two-thirds of Los Angeles' children do not live within walking distance to a park. Los Angeles has the worst air quality of any city in the United States, and it imports over 85 percent of its water. LAUSD is the largest landowner in Los Angeles, and 75-85 percent of that land is impermeable. The mayor of the city has pledged to create a garden in every school. LAUSD has committed \$1 million to building habitat or vegetable gardens on school campuses, and has also created one full-time staff position entitled the 'Sustainable School Yards Ombudsman'.

Ventura County Focus Area

This Focus Area includes 21 school districts in Ventura County. These school districts educate over 140,000 students at 207 schools. SYH projects for this focus area will provide habitat for local and migratory birds, provide vegetation to help filter rainwater before reaching local waterways, and feature local native plant communities including coastal sage scrub and



chaparral. Local SYH coordinators will educate students about the following listed species: southern sea otter (*Enhydra lutris*), California condor (*Gymnogyps californianus*), southwestern willow flycatcher, western snowy plover, least Bell's vireo, tidewater goby, unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), steelhead trout, arroyo toad, California red-legged frog, *Conejo dudleya*, Lyon's pentachaeta (*Pentachaeta lyonii*), and Ventura marsh milk-vetch (*Astragalus pycnostachyus var. lanosissimus*).

Program Priorities and Anticipated Results

Creation and implementation of SYH projects provides the opportunity for every student to observe, learn from, and experience nature, enhancing their connection to the outdoors, and reducing the affects of an indoor only lifestyle. Projects provide children a hands-on approach to learning, which is especially important for non-English speaking students, who may not otherwise understand the concepts taught using traditional teaching methods. Schools use SYH projects to provide authentic learning experiences that align with Federal and State education goals and mandates, and as an integrating context for improving skills in core curriculum subjects such as science, math, reading, and language arts.

Through its SYH Program, the Service can provide on-site, technical assistance to educators, administrators, students, and community members, who wish to create an effective, sustainable outdoor classroom and wildlife habitat on their school grounds. The Program is comprised of two primary components: habitat restoration and teacher training. Teacher training is a presentation or meeting with predetermined goals and learning objectives related to conservation education and habitat restoration. Training may be a workshop for one or multiple schools, a community, or a national meeting.

SYH restoration projects address multiple environmental and educational concepts that benefit youth, the community, and the environment. They are designed to achieve, first and foremost, the mission and goals of the school, in conjunction with the mission and goals of the Service and other cooperators. Teacher-training workshops implemented under the SYH Program are designed to expand the environmental knowledge and skills of teachers and help bring their students and lessons outdoors.

Partners

The primary partners for the SYH Program are local school districts as they provide the land, students and teachers. Many local non-profit groups (e.g., California Native Plant Society, Audubon Society chapters, Los Angeles San Gabriel



Photos by K. Vollherbst, USFWS.



Rivers Watershed Council, San Diego Children and Nature Network, and Multicultural Education for Resource Issues Threatening Oceans (MERITO)), local businesses, Federal and State agencies are involved in projects providing a multitude of services ranging from teacher training professional development workshops to project design and construction.

Five Year Focus Area Targets

Schoolyard Habitat Projects:	30
Teacher Training Workshops:	20



USFWS photo.

Goal Two: Broaden and Strengthen Partnerships

The mission of the Coastal Program is to efficiently achieve voluntary habitat conservation through financial and technical assistance for the benefit of Federal Trust Species. Partnerships are essential and they result in improved projects by pooling all available resources for greater impact, better efficiency, improved communication, innovative solutions through sharing of technical knowledge, and increased public support. The foundation of our Program is our established partnerships and the shared interest in habitat conservation. The following objectives will allow us to broaden and strengthen our partnerships:

Regional Objectives

Objective 2.1: Cultivate existing partnerships and create incentives for future activities.

Ongoing investment in our existing productive partnerships will be a priority for our Program. These partnerships are a key to past and future successes of the Program.

Key Strategic Activities

- Work cooperatively with private landowners, Tribes, States, governmental and non-governmental organizations, and industry to conserve coastal trust resources.
- Expand Regional partnerships with NRCS, NOAA, CDFW, State Parks, NGOs, and USGS.
- Maintain communication with partners by regularly participating in project meetings, field visits, and project design and selection.
- Co-locate Program staff at partner work stations.
- Acknowledge contributions of partners by awards and/or recognition.

Five Year Performance Targets:

We will develop and strengthen Regional and local level partnerships and increase our partner base by at least two new partners each year. We will nominate at least one partner per year for an award to show our appreciation for their valuable conservation efforts and achievements.



Watsonville Slough Partnership receives Coastal America Award. USFWS photo.

Objective 2.2: Seek new diverse partners that reflect the economic, social, biological, and geographical composition of coastal California.

Key Strategic Activities

- The Regional Coordinator will work closely with the NWR Inventory and Monitoring program, Environmental Contaminants Program, Migratory Birds Program (including Joint Ventures), and the Tribal Partnerships Specialist to facilitate cross-program coordination and to identify overlapping priorities where we can combine resources and expertise to meet specific objectives in this Strategic Plan.
- Local Program Managers will attend 1-2 conferences/meetings per year pertaining to their focus area.
- Each Local program will be represented at the Restore America's Estuaries (RAE) Conferences to be held in 2012, 2014, and 2016 in order to facilitate communication and information exchange with national program counterparts, and partners from academia and other partner groups.
- In support of the CPWN initiative, local programs will increase interactions with schools and educational departments in effort to expand delivery of the SYH Program, especially in under-resourced school districts.
- Coastal staff will wear program identifying clothing and provide program brochures at public events to increase Program visibility.
- Develop and utilize a Program Outreach Plan (to include strategies for improved communication with the public and Congress).
- Strengthen existing partnerships with the Yurok and Wyiot Tribes in Humboldt Bay Watershed Focus Area.
- Develop new partnerships with Smith River Rancheria-Tolowa Tribe in the Humboldt Bay Watershed Focus Area.
- Regional Coordinator and Local Program Managers, as appropriate, will participate in California Rangeland Conservation Coalition meetings to foster partnerships with the agricultural community.

Five Year Performance Measures: At the end of 5 years, our project portfolio will demonstrate partnerships in urban and rural communities, will reflect successful conservation with Tribes, and will cover a diversity of coastal habitats (from dunes and estuaries, tidal marsh and mudflats, to watershed scale projects). Local Program Managers will participate in at least one public event each year to increase exposure of the Program and to foster new partnerships. The Regional Coordinator will represent the program for State, coast-wide and National level partnerships and events.



Coastal Program Biologist, Greg Gray, on a site visit with partners. USFWS photo.

Objective 2.3: Work with partners to implement landscape-level community-based adaptation strategies that address invasive species, water quality, and climate change at both the project design level and regional planning scales.

Key Strategic Activities

- Continue participation with the Climate Change Team that consists of multiple Federal and State agencies and universities.
- Continue participation in the West Coast Ecosystem-Based Management Network. The process involves collaboration and integration with a wide range of people, institutions, and expertise to comprehensively manage coastal areas while minimizing conflict, addressing chronic management problems and working together on meeting future challenges.
- Continue participation in the Southern California Wetlands Recovery Project (SCWRP) to strengthen a network of conservation partners in southern and central California.

Five Year Performance Targets: Each Local Program Manager will work with partners to provide technical and financial assistance to at least one project per year that is focused on landscape-level adaptation strategies for habitat restoration.

Objective 2.4: Develop new partnerships and enhance existing partnerships with the academic/scientific community.

Key Strategic Activities

- Support WCGA Climate Change Team projects that will provide information for on the ground conservation.
- Work cooperatively with the North Pacific and California LCCs to identify research needs to better inform our conservation actions.
- Support SCWRP research projects that assist resource managers in prioritizing conservation actions in southern and central California.
- Identify and communicate with scientists regarding our needs for downscaled climate models with results that will help resource managers to plan and adapt to projected climate change impacts.
- Disseminate Coastal Program science needs through partnerships such as the WCGA Climate Change Team, West Coast EBM, and LCCs.

Five Year Performance Targets: The Regional Coordinator will communicate the Coastal Program's science needs to WCGA and the LCCs on a biannual basis. The Regional Coordinator will share informative climate change tools developed through regional partnerships (e.g., WCGA) with Local Program Managers and the LCCs.

Objective 2.5: Leverage time, talent, and funds for project activities. Budget limitations exist within the Program as well as in other partnering programs. Through collaboration, we can help our partners to identify and utilize appropriate sources of funds and leverage funding towards implementation of our conservation projects.

Key Strategic Activities

- Continue to fund joint positions with partners to meet the goals of the Program (e.g., the NRCS cost-shared Engineer located in Salinas, CA.)
- Train field staff to achieve the highest level of expertise in writing grant proposals for the NCWC and NAWCA grant programs.
- Encourage field staff to participate in leadership roles.
- Send regular email updates for funding sources to partners.
- Work with partners to design projects and optimize proposals for, other grant programs including the Tribal Wildlife Grant Program, NRCS Farm Bill programs, CA Wildlife Conservation Board, the Cooperative Endangered Species Conservation Fund (Section 6), and other funding sources.
- Regularly assist partners with identifying and pursuing alternate funding sources (e.g., email novel opportunities, write grant proposals, and provide support letters).
- Assist partners with designing projects and associated permitting processes.

Five Year Performance Targets: We will leverage each Coastal Program project dollar at a 1:10 ratio.

Objective 2.6: Expand partnerships to leverage SYH program resources.

Key Strategic Activities

- Local SYH Coordinators will create, and update as needed, a list of new and diverse partners to target at the local level to support environmental and conservation education programs.
- Local SYH Coordinators will be substantially involved in every SYH project funded through their office.
- The Regional and Local SYH Coordinators will provide external partner presentations on the SYH Program.
- Local SYH Coordinators will provide annual teacher training workshops.
- Local SYH Coordinators will attend local education, environmental, native plant and health care meetings or conferences to identify and develop partnerships to leverage program dollars.
- Local SYH Coordinators will cultivate new and diverse partnerships (e.g., non-profit groups, local businesses, native plant nurseries).

Five Year Performance Targets: Every SYH project dollar will be leveraged at a 2:1 ratio. Local SYH Coordinators will each provide two teacher training workshops per year. Local SYH Coordinators will develop at least two new partnerships per year.



Groups of Bancroft Elementary students joined biologists from the Sacramento Fish and Wildlife Office to learn about habitat and native plants. This biologist teaching his group of students proper planting techniques. Photo by Karleen Vollherbst, USFWS.

Goal Three: Improve Information Sharing and Communication

The fundamental success of any partnership is effective communication. It is essential that important information is shared with our partners, decision-makers, fellow scientists, and the public to accomplish positive results for our trust resources. It is also critical that staff are skilled communicators and can building trust and respect with partners. Communication will continue to be our strongest asset and we will strive to improve it in all ways. The following objectives will allow us to improve information sharing and communication:

Objective 3.1: Improve internal communications within the Coastal Program and the Region 8 habitat restoration team. Program staff need to function as a network, be fully informed, and work collaboratively.

Key Strategic Activities

- Regularly input project information in HabITS so that real-time project information is available to the RO and HQ.
- Participate in the Region 8 Coastal/Partners/SYH annual meeting and quarterly conference calls.
- Participate in Region 8 Coastal Program conference calls.
- Regional Coordinator will participate in the Program’s national monthly conference calls and annual meeting and will relay relevant information to Local Program Managers.
- Participate in Coastal Program national meetings, including the Coastal Program “break-out” meeting at the biennial RAE Conference.
- Regional Coordinator will update the Region 8 Coastal Program Handbook by January 31 of each year to ensure program consistency and to support new staff.
- Coordinate with Partners, SYH, and Tribal partnerships staff to identify areas where the programs can work together.

Five Year Performance Targets: All habitat improvement and protection accomplishments will be reported in HabITS and will be consistent, accurate, and up-to-date. Each Fiscal Year, each field office will have at least one Strategic Planning entry summarizing activities that were completed for Goals 2-5. Each Local Program Manager will attend the biennial RAE Conference and national Coastal Program meetings.



Watsonville Slough site visit. USFWS photo.

Objective 3.1: Improve communication within the Service to comprehensively conserve coastal resources.

In Region 8, the Coastal Program is administered by the National Wildlife Refuges Assistant Regional Director and delivered at the field level by Ecological Services Field Offices. We also work closely with programs housed within the NWR System and the Science Applications Program to help meet mutual goals.

Key Strategic Activities

- The Regional Coordinator and Local Program Managers will keep respective websites and contact information up-to-date.
- Develop a mentoring or job shadowing program within Region 8, with potential for cross-program opportunities.
- Regional Coordinator will have regular coordination with Local Program offices.
- Regional Coordinator will communicate regularly with other programs, including email updates and meet at least annually with NWR Inventory & Monitoring and LCC staff, and the Science Applications Assistant Regional Director.

Five Year Performance Targets: The Regional Coordinator will visit field offices annually and lead bi-monthly Coastal Program conference calls. Local Program Managers will invite at least one staff person from another program to a site visit annually.

Objective 3.3: Improve communications with partners, public, and Congressional staff. All of our partners need to have a clear understanding of our Program and how to reach us.

Key Strategic Activities

- Create general Regional and local brochures and factsheets that include Program history and a synopsis of previous accomplishments.
- Create Regional brochure to provide outreach to the agricultural community for potential new partnerships.
- Create a Regional booth that can be used at conferences and public outreach events.
- Regional Coordinator will work with External Affairs staff to post interesting projects on Facebook and Twitter, and in the Service's online journal.
- The Regional Coordinator and Local Program Managers will keep respective websites and contact information up-to-date.
- The Regional Coordinator and Local Program Managers will give presentations about the Coastal Program at partner meetings.
- Create a regional slogan that markets the Program to our partners and the public and highlights how we can contribute to conservation of coastal resources.



Fisheries biologist, Ernest Chen, assists Humboldt Bay Coastal Program planting day on Mill Creek. USFWS photo.

- Develop high quality poster board materials for outreach events that clearly explain our conservation goals and capabilities.
- Develop and implement a Congressional and public outreach plan.
- Support citizen science-based initiatives that monitor species and habitats in the context of climate change and habitat restoration.

Five Year Performance Targets: We will have Regional and local outreach materials to share with partners by 2013; complete Congressional and public outreach plan by 2014; and initiate annual contact with Congressional staff by 2016. The Regional Coordinator and Local Program Managers will revisit websites and associated contact information on a bi-annual basis to ensure that it is up-to-date. All program staff will have their direct contact information included in their email signatures and assure that their contact information is up-to-date in the Service’s internal directory (Lotus Notes) and on all Service websites.

Objective 3.4: Communicate with our partners to inform the conservation and environmental education community about the SYH Program. Educate teachers, students, school staff, community organizations and Service staff about the SYH Program and relevant techniques for on-site habitat restoration.

Key Strategic Activities

- Provide external presentations on the SYH Program.
- Provide site visits and technical advice and expertise to schools.
- Provide teacher training workshops.
- Regional and Local SYH Coordinators will develop and deliver high quality SYH materials to formal and informal educators (e.g., National SYH Program Project Guide, Regional Project Guide Appendix, native plant species and provider lists).
- Provide presentations on native species and habitats to at least 100 students annually.
- Provide 3-4 community service opportunities annually for students and Service staff through the Connecting People with Nature and SYH Programs.
- Provide SYH project updates to field staff, including one presentation annually and monthly updates at general staff meetings.
- Work with External Affairs staff to create an effective SYH outreach plan.

Five Year Performance Targets: Local SYH Coordinators will provide at least three external partner presentations annually. Local SYH Coordinators will provide technical expertise and conduct site visits to 5-7 schools annually. Local SYH Coordinators will provide at least two teacher training workshops annually.

Objective 3.5: Promote the SYH Program by providing updates, news releases, journal articles and updates through the website and Service approved social media outlets.

Key Strategic Activities

- Receive training on effective use of news and social media (e.g., NCTC Working with the News Media course).
- After each SYH event, post interesting stories to appropriate Flickr, Twitter, Facebook accounts.
- Invite congressional representatives, mayors, school district superintendents and Service External Affairs to participate in SYH activities.

Five Year Performance Targets: By the end of this plan, each Local SYH Coordinator will receive at least one training in news and social media communications. For every project implemented, the SYH Coordinator will invite congressional representatives, mayors, school district superintendents and Service External Affairs staff to a SYH event or ceremony.



USFWS biologist connecting students with nature on the Santa Clara River, Newhall, CA. Photo by Mary Root, USFWS.

Goal Four: Enhance Our Workforce

Successful implementation of this Program requires a diverse, highly skilled and motivated workforce. Local Program Managers deliver the habitat conservation projects and they are the front line of communication with our partners. The RO is committed to having highly capable staff that focus on results, act with integrity, and seek creative partnerships and solutions to technical fish and wildlife resource issues. Maintaining and supporting staff is the key to a well-established, highly functional program. The following objectives will allow us to enhance our workforce:

Objective 4.1: Develop and foster high quality conservation scientists.

Create the highest quality work environment to facilitate recruitment and retention of the most qualified personnel, and to enhance employee accountability. Staff will be equipped with the relevant skills, leadership, and technology to carry out the strategies necessary to protect and restore priority coastal habitats in California.

Key Strategic Activities

- Local Program Managers will have access to and complete relevant training courses.
- Train Local Program Managers to achieve the highest level of skill in conservation partnerships, grant writing, and habitat restoration and protection techniques.
- Encourage participation and membership (both individual and programmatic) in professional societies (e.g., Society for Ecological Restoration, RAE).
- Host meetings and conference calls to facilitate information exchange.

Five Year Performance Targets: Local Program Managers will take at least 40 hours of training per year, and seek out at least two other technical training opportunities (e.g., conferences, workshops, and webinars). As a Program, we will present at least one scientific poster or presentation at a professional meeting each year.

Objective 4.2: Maintain institutional knowledge and build leadership in the Program.

It is essential to pass on to new staff members important techniques, styles, and lessons learned to making partnerships work and projects successful. It is also important to expand the knowledge and expertise of our experienced staff and to cultivate new staff with the necessary skills to perform their jobs well. Encouraging and supporting our staff will help the Program, our customers, and our trust resources.



Coastal Program biologist Greg Gray, using an auger to dig holes for volunteer tree planting day at Jolly Giant Creek restoration project site., Arcata. CA. Photo by Dan Gale, USFWS.

Key Strategic Activities

- Nominate one Coastal Program staff person for the Service's "Stepping Up To Leadership" program by 2016.
- Recognize employees performing at a high level, and those who contribute to Regional and National level support of the Program.
- Encourage and foster information exchange and staff details or shadowing between Coastal Program offices.
- Encourage experienced biologists to volunteer in leadership activities, mentor new staff, and lead trainings.
- Develop performance-based allocation methodology for above-base project funding.
- Participate in national meetings of the Coastal Program to exchange knowledge and stay up-to-date on new tools and technical resources critical to being leaders in the field of ecological restoration.
- Maintain and update Regional Program Handbook to facilitate program consistency and training of new staff.
- Use the Sharepoint site for information exchange and as a repository for Program materials, including documents of program policy, history, and scientific literature.

Five Year Performance Targets: The Regional Coordinator and Local Program Managers will participate in the biannual RAE Conference. The Regional Coordinator will work with Local Program Managers to develop a performance-based allocation methodology for above-base funding by April 2012. The Regional Coordinator will update the Regional Program Handbook by January 31 of each year. The Regional Coordinator will update and organize the Sharepoint site monthly. Each year, the RO will recognize one outstanding Local Program Manager/ PFW Field Coordinator as Habitat Restorationist of the Year and one field station restoration program for their team accomplishments.

Objective 4.3: Region 8 will be a national leader of the SYH Program and inspire youth to seek natural resource professions through outreach and mentoring.

Key Strategic Activities

- Develop and provide SYH programs, staff-led field trips, and workshops to at least 300 students annually.
- Participate in conferences and workshops that will further the overall expertise (e.g., teacher training, habitat restoration, project design) of Local SYH Coordinators.
- The Regional and Local SYH Coordinators will participate as instructors or presenters at national SYH events (e.g., NCTC SYH and Outdoor Classroom course, National Schoolyard Action Network).
- Continue information and accomplishment sharing with other SYH Coordinators in Region 8 through regular calls and site

visits.

- Promote SYH Program successes nationally by providing news releases, journal articles, HabITS entries, and Service-approved social media outlets.
- The Regional SYH Coordinator will conduct and participate in national distance learning opportunities.
- Local SYH Coordinators will be encouraged to volunteer in leadership activities.

Five Year Performance Targets: Regional and Local SYH Coordinators will take at least 40 hours of training per year. Each Local SYH Coordinator will complete the NCTC SYH and Outdoor Classroom course and participate in the annual North American Association of Environmental Educators conference.

Goal Five: Increase Accountability

The Regional Coordinators, Local Coastal Program Managers, and SYH Coordinators need to articulate up-to-date accomplishments and to produce consistent reports of program activities. It is the responsibility of the government to ensure to the public, accurate expenditures of funds and appropriate outcomes. Meeting the following objectives will help us to increase our accountability:

Objective 5.1: Ensure all Coastal Program funding and activities are consistent with current policy. The proper use of funds is essential to the integrity of the Program.

Key Strategic Activities

- RO will track funding history and usage in all offices.
- RO will conduct periodic field office reviews to ensure integrity of Coastal Program funds.
- The Regional Coordinator and Local Program Managers will conduct an analysis of Coastal Program fund expenditures to ensure that they are leveraging funds at a 10:1 ratio.
- The Regional Coordinator and Local Program Managers will conduct an annual review of project expenditures to make sure at least 50 percent of Coastal Program funds and staff time were spent in the focus areas.
- The Regional Office allocation methodology will be transparent and provided to all Coastal Program offices.

Five Year Performance Targets: All offices will use 1124 funds within the confines of the Program. The Regional Coordinator will have annual conference calls with each office to discuss current and future projects, and evaluate performance targets. The Regional Coordinator will conduct an annual review of funds leveraged, types and location of projects. Each office's Coastal Program projects and expenditures will be formally reviewed, under the context of National Program guidelines, at least once during the next 5 years.

Objective 5.2: Improve quality and consistency of accomplishment reporting. It is imperative that all levels of activities, projects and technical assistance, are reported consistently by all staff.

Key Strategic Activities

- Local Program Managers will be trained in HabITS.
- Local Program Managers will enter all projects (i.e., Habitat Improvement, Strategic Planning) into HabITS annually.
- RO will conduct annual reviews of all field office HabITS entries and ground truth a subsample of the entries.
- Each year, a Local Program Manager will be appointed represent the Region 8 Coastal Program on the National HabITS Working Group.
- Local Program Managers will include economic benefits information in HabITS project narratives, as appropriate.

Five Year Performance Targets: All accomplishment reporting in HabITS will be consistent, accurate, and up-to-date. Each office will annually enter at least one Strategic Planning entry in HabITS for each of the Goals 2-5, as applicable. A new HabITS Working Group representative will be designated December of each year.

Objective 5.3: Track progress of the 2012 Strategic Plan. It is critical that this strategic plan becomes an effective tool to lead and assist us for success of the Program.

Key Strategic Activities/Five Year Performance Targets: This strategic plan will be reviewed annually to track the progress that we are making. By 2016, all objectives of the strategic plan will be implemented. Program Managers will review their local plans annually and convey any updates to the Regional Coordinator. By the end of each calendar year, the Regional Coordinator will complete an annual summary of accomplishments for this Strategic Plan, with the intent of sharing the report with the Regional Directorate Team.



Giacomini wetlands restoration before (left) and after. USFWS photo.

Objective 5.4: Plan, design, implement, and assess Coastal Program restoration projects to evaluate their effectiveness and to determine if there should be changes to future techniques or project design.

Key Strategic Activities

- Assure that all funded projects with an on-the-ground component, include implementation monitoring.
- Program Managers will design and implement a monitoring program for 1-2 restoration projects.
- Seek peer review for the monitoring plans described above and identify resources needed to implement the plans.
- Conduct a coast-wide acoustic bat monitoring project within Coastal Program project sites to evaluate effects of projects on bat species.
- Ensure that monitoring needs and results are coordinated with other Service programs.
- Develop Regional protocols, study plans, and standardized reporting for water quality monitoring being done by Coastal Program staff to identify key issues that are critical to determining project design alternatives when developing restoration projects in tidally influenced areas.
- Local Program Managers will actively evaluate ways to incorporate results of monitoring efforts into future project design and implementation.

Five Year Performance Targets: The Coastal Program in Region 8 will develop a basic implementation monitoring protocol for all Coastal Program projects, and a more detailed species or issue-specific monitoring protocol for 1-2 projects, by April 2012. The Regional Coordinator will complete the bat monitoring project design by April 2012, and will work with Program Managers to install bat stations during 2012. The Regional Coordinator and Local Program Managers will exchange lessons learned from the previous year's project monitoring at the annual meeting break-out session.

Objective 5.5: Demonstrate that our SYH Program is effective at reaching our target audiences

Schools chosen for funding will have all Essential Criteria in place prior to project implementation. Essential Criteria are:

- School is a reasonable driving distance from field office.
- School has a project team that includes administrative, maintenance or facilities, student and teacher representatives.
- Project size is a minimum of 1000 ft².
- Project is student-driven.
- Teachers have received an outdoor education training (e.g. Project Wet, Project Wild, Project Learning Tree).
- School or landowner will sign a 10-year land agreement.
- Project includes partnerships and community support.
- Project involves restoration using native plants.

Schools with Desirable Criteria in addition to the Essential Criteria will be prioritized for technical assistance and funding. Desirable Criteria are:

- School qualifies as Title 1.
- Project is over 1000 ft² and maximizes available space in the schoolyard.
- At least 100 kids are involved in project implementation and use site annually.
- Service staff is involved in teacher trainings.
- Project dovetails with other USFWS initiatives (e.g. CPWN, LCCs).
- Project benefits threatened and endangered species or species of concern.

Key Strategic Activities

- Develop project tracking and outreach evaluation tools for SYH Projects and Teacher Trainings to track school/ teacher progress over time.
- Make changes to the SYH Program based on project accomplishments and completed evaluations.
- At least one Title 1 school will be served each year.

Five Year Performance Targets: In addition to recording all habitat improvement accomplishments in HabITS, Local SYH Coordinators will provide annual narrative summaries of SYH project accomplishments in the Strategic Planning module of HabITS and will incorporate the information into a Service journal article. Five Title I schools will be served by the end of this Strategic Plan term.

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**U.S. Fish and Wildlife Service
Pacific Southwest Region
National Wildlife Refuge System
Habitat Restoration Division**

Organization Chart

