

Southern California Wetlands Recovery Project

WRP Work Plan Project Descriptions

1. Baron Ranch Acquisition

Local Lead: Land Trust for Santa Barbara County

Tier: 1

Project Description: The Land Trust for Santa Barbara County (LTSBC) proposes to acquire the 1,092-acre Baron Ranch on the Gaviota Coast in Santa Barbara County. This acquisition will protect roughly 4 miles of riparian corridor with year-round flows from the Los Padres National Forest (LPNF) to the Pacific Ocean, almost all of the Arroyo Quemado Creek watershed, and create opportunities for watershed and riparian restoration and up to six miles of public trail access, connecting to trails in the LPNF and the Arroyo Hondo Preserve. This project is proposed as an adjunct to the Arroyo Hondo Ranch Enhancement Plan prepared by the LTSBC for the 782-acre Arroyo Hondo Preserve purchased with Wetland Recovery Project support in 2000.

Status: The Baron Ranch Acquisition project is dormant. Santa Barbara County Public Works is pursuing some mitigation work on Arroyo Quemado Creek related to reconfiguration of the landfill, and County Parks is working with the Santa Barbara County Trails Council on planning for a public trail on the property.

Estimated cost: \$6,000,000

Funding:	Wildlife Conservation Board (requested)	\$5,000,000
	Goleta Valley Land Trust (applied)	\$500,000
	Wetlands Recovery Project (requested)	\$500,000

Last updated: 1/20/2010

2. Arroyo Hondo Creek Steelhead Habitat Enhancement Project

Tier: 1

Local Lead: Land Trust for Santa Barbara County

SCC Project Manager: Rachel Couch, rcouch@scc.ca.gov, (805) 845-8853

Project Description: The Land Trust for Santa Barbara County (LTSBC) has implemented a fish passage improvement project in the lower portion of Arroyo Hondo Creek. In-stream enhancements adjacent to and in a culvert under Highway 101 will be installed with the primary purpose of supporting upstream migration of adult steelhead trout into the 2,800-acre Arroyo Hondo watershed. The project consists of two components: creation of a new rock-lined scour pool, supported by a rock weir, upstream of the existing arch culvert and concrete box culvert; and installation of concrete baffles, a maintenance path and walkway within the bed of the existing arch culvert.

Arroyo Hondo is a fairly pristine 2,800-acre coastal watershed with a perennial blue-line stream length of 6 miles. It is located in the Santa Ynez Mountains, approximately 25 miles west of Santa Barbara along the Gaviota Coast. Authors of Steelhead Assessment and Recovery Opportunities in Southern Santa Barbara County identified it as one of the most ecologically important watersheds on the Gaviota Coast.

Status: Due to issues with Caltrans and Union Pacific Railroad, the LTSBC reduced the scope of the originally-intended project. The project did not include removing the concrete box culvert located seaward of the arch culvert, and creating additional lagoon habitat. The scouring pool and concrete baffles were installed in December 2007 and January 2008. LTSBC is now in the second year of maintenance and monitoring. With funds not used for removing the box culvert, LTSBC eradicated invasive species (namely *Vinca major*) and planted natives along the riparian corridor north of the culvert and resting pool. Brush fascines have been installed in order to slow sediment flow into the main Arroyo Hondo from a side canyon approximately 1 mile north of the culvert. Most of this revegetation work was completed in 2009; LTSBC anticipates installing all ordered native plants by June, 2010.

Estimated cost: \$1,481,140

Funding:	Dept. of Fish and Game (Fisheries Restoration Grant)	\$788,558
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Coastal Conservancy	\$756,845
Land Trust of Santa Barbara County	\$12,000
Smart Family Foundation	\$15,000

Cost Notes: A Coastal Conservancy planning grant of \$106,845 was used from 2004 to 2006. Another Coastal Conservancy grant of \$650,000 is earmarked for construction; the project lead estimates using \$425,000 of the \$650,000. The anticipated post-construction cost, including maintenance and monitoring, is \$1,240,558.

Last updated: 1/19/2010

3. Gaviota State Park Watershed Restoration/Enhancement

Tier: 1

Local Lead: California Department of Parks and Recreation

Project Description: Design an environmentally sensitive, all-weather stream crossing. An initial study and proposal were put forth by Santa Barbara County and rejected by the EPA in 2006. Portions of that study and lessons learned from the process can be applied to future planning and design efforts. Develop a plan for the maintenance of the road until a bridge is built. Develop a plan for berm removal and sediment control. Spoils from this removal will be fit for backcountry road fill, so the two tasks should coincide. Develop a plan for site restoration if the campground was relocated out of the floodplain.

Status: State Parks has moved forward with developing a plan for maintenance of the existing entry road and bridge until an all weather crossing is built. State Parks has submitted a Coastal Development Permit application to cover these activities for a 5 year period and expect to have this permit in hand before fall 2010.

Estimated cost: \$665,000

Funding:	Department of Fish and Game (applied)	\$261,000
	Department of Fish and Game	\$84,000
	FEMA	\$65,000
	Wetlands Recovery Project (requested)	\$255,000

Cost Notes: Total implementation estimated to cost \$13 million

Last updated: 2/25/2010

4. Lower Refugio Creek Restoration

Tier: 2

Local Lead: Land Trust for Santa Barbara County

SCC Project Manager: Rachel Couch, rcouch@scc.ca.gov, (805) 845-8853

Project Description: Implement portions of the lower Refugio Creek Riparian Restoration Plan developed with a small grant from the WRP. The project will be undertaken in cooperation with the Cachuma RCD and the three private landowners in the watershed. Lower Refugio Creek supports diverse riparian woodland with sycamore, cottonwood, willow, oak, poplar, bay laurel and California pepper trees and an understory of mixed natives and invasive weeds. The creek also supports one of the largest *Arundo donax* infestations on the Gaviota Coast. The primary land use adjacent to the creek is avocado and citrus orchards, with 1200 feet of fenced pasture on the Freeman Ranch running along the west bank. Listed species expected to be found in the riparian woodland of Refugio Creek include California red-legged frog. Other listed species that may utilize the habitat onsite in the future include southern steelhead, least Bell's vireo and the southwestern willow flycatcher.

The project will improve the wildlife habitat along one and one-half miles of the creek by: (a) removing more than 100 separate patches of *Arundo* and smaller areas of invasive castor bean, ivy, and false tobacco; (b) stabilizing 1,300 linear feet of eroding creek bank primarily with willow fascines and planted berms; and (c) revegetating 17,000 square feet of the riparian corridor with approximately 900 native trees, shrubs and understory plants. The project will also include up to four years of post-installation monitoring, re-treatment and replacement planting to ensure a successful outcome.

Status: Ongoing Project; should be completed by spring 2010. Due to the scope of Arundo infestation, funds have been partially diverted from the bank stabilization efforts to Arundo eradication and revegetation with native species.

Estimated cost: \$562,450

Funding:	Coastal Conservancy	\$385,000
	USFWS Partners for Fish and Wildlife	\$32,450
	USFWS Partners for Fish and Wildlife (second grant)	\$15,000
	Landowner in-kind contribution	\$20,000
	EEMP (Cal Trans) -- (new grant, 2009)	\$110,000

Cost Notes: SCC funds were authorized in two separate Board actions; although the second authorization is referred to as Phase II, it enables completion of the originally-intended work, and is technically not a new project phase.

Last updated: 1/09/2010

5. Maria Ygnacio Fish Passage Project

Tier: 2

Local Lead: None

Project Description: A streambed grade stabilization structure at the Union Pacific Railroad crossing on Maria Ygnacio Creek currently restricts steelhead trout from migrating upstream to spawning habitat. A conceptual design for the barrier modification was developed by a fish passage engineer with NOAA Fisheries. The conceptual design is to cut or remove some of the existing sandstone blocks in the structure, thereby forming a 108-foot long, low flow conduit through which fish can swim upstream to the natural-bottom channel under the freeway next to the railroad. One or two boulder weirs may also be installed below the structure to raise the elevation of the pool and to deflect flow into the middle of the channel. Erosion on the streambank opposite of the hard bank of the adjacent bike path will also be repaired through biotechnical methods, improving habitat for creekside species as well as steelhead. The project would fund professional design services, hydraulic and sedimentation analyses, project management consulting, and permitting.

Maria Ygnacio Creek lies in Southern Santa Barbara County in the middle of an urbanized area adjacent to a bike path and directly above the project is the Union Pacific Railroad and US 101 Freeway crossings. The primary vegetation communities along the project sites are riparian woodland and riparian scrub. Native trees include western sycamore, coast live oak, arroyo willow and black cottonwoods. Species of concern or endangered species known to inhabit this area include the arroyo toad, coast range newt, Belding's savannah sparrow, Nuttall's scrub oak, two-striped garter snake, least Bell's vireo and the Southern Steelhead trout.

Status: The Community Environmental Council is no longer the local lead on this project. Union Pacific Railroad would be interested in pursuing this type of project as long as someone else takes on the liability for their future impacts and/or maintenance. At this point there is no partner able to take on this liability and therefore the project is not moving forward. Santa Barbara County Flood Control District is a potential partner; if they are unable to partner on this project then it should be removed from the Work Plan.

Estimated cost: \$80,000

Funding: Wetlands Recovery Project requested \$80,000

Cost Notes: Cost would be much higher than original estimated cost represented here.

Last updated: 1/21/2010

6. Arroyo Burro Creek Arundo Removal Project

Tier: 2

Local Lead: Santa Barbara City Creeks Division

Project Description: This project proposes to remove approximately 2.5 acres of Arundo donax from the bed, banks and overbanks along a 2,000 foot stretch of Arroyo Burro Creek on private property belonging to the Stonecreek Homeowners Association and remove approximately 1 acre of arundo along a 3,000 foot stretch of

the creek on private properties located just downstream of Hidden Valley Park.

The Agricultural Commissioner's Office will maintain project sites, and survey for regrowth and missed arundo patches for five years subsequent from the beginning of this project or until the declaration of local eradication, whichever comes first. Eradication of arundo from the project areas will be declared upon not finding individual or regrown arundo plants within the project areas for three consecutive years. This project is essentially a continuation downstream of an arundo removal project started in 2002. The 2002 project removed approximately 1 acre of arundo from a 7,000 foot stretch of Arroyo Burro Creek upstream of the Stonecreek site.

Status: The project was originally proposed by the Ag Commissioners Office. In coordination with The Ag Commissioner's Office, the City has assumed management of the arundo removal effort on Arroyo Burro Creek. The City is scheduled to start removal of arundo this year and will also be responsible for maintenance of the removal sites.

Estimated cost: \$99,930

Funding: Wildlife Conservation Board \$51,000
City of Santa Barbara \$48,930

Last updated: 1/22/2010

7. Arroyo Burro Restoration at Las Positas

Tier: Incubator

Local Lead: City of Santa Barbara

Project Description: Develop a riparian restoration plan for approximately 2000 feet of Arroyo Burro Creek in the City of Santa Barbara. The project site is located approximately 0.25 miles above Arroyo Burro Estuary. The proposed project will solicit public input, establish a community restoration working group, develop conceptual design plans, perform a constraints and feasibility analysis, and complete preliminary design plans for a creek restoration project on Arroyo Burro. Potential project components include:

- Eradication of nonnative plants and revegetation with native riparian and upland plant species.
- Removal of all riprap, concrete, and large trash within the creek channel including 200 feet of pipe and wire revetment.
- Removal/redesign of a riprap grade control structure.
- Biotechnical stabilization of approximately 2,000 linear feet of creek bank.
- Construction of a trail with interpretive signage.
- Construction of a wetland/storm water retention basin and biofilter and/or expansion and relocation of the creek channel.

The project site includes two acres of wetland habitat and four acres of upland habitat, and is bordered by Arroyo Burro on the west and Las Positas Road on the east. Urban and agricultural development within the watershed has significantly impacted the creek corridor. The creek habitat in this area is highly degraded due to past land disturbance and urban development within the watershed. The creek is deeply incised (up to 25 feet), the banks are experiencing significant erosion, and the creek corridor is dominated by non-native species such as *Arundo donax*. The creek also has poor water quality due to upstream urban runoff.

Status: The City was scheduled to move forward on the project in 2006, but delayed the project for two reasons: (1) The City is awaiting the outcome of the proposed development project (Veronica Meadows) immediately upstream of the project site, and (2) In 2007, the City diverted some of their focus from Lower Arroyo Burro to steelhead restoration projects on Mission Creek. The Arroyo Burro project is still in the City's capital program with funding dedicated to it. The City plans on moving forward once the outcome of the development project has been decided.

Estimated cost: \$270,000

Funding: City of Santa Barbara \$180,000
Wetlands Recovery Project requested \$90,000

Cost Notes: Also providing a \$10,000 WRP small grant to remove invasive species from a nearby property.

Last updated: 1/22/2010

8. Western Goleta Slough Wetland Restoration Project

Tier: 2

Local Lead: Land Trust for Santa Barbara County

WCB Project Manager: Dave Means

Project Description: This project will enhance and expand wetland habitat value throughout the 34.41 acres owned by CDFG in the Goleta Slough Ecological Reserve by removing non-native plant species; improving hydrologic conditions to sustain wetlands; removing man-made features; enhancing upland habitats adjacent to wetlands and providing for future tide circulation opportunities. The project also includes 5 years maintenance and monitoring to ensure success. This project will take advantage of Army Corps of Engineers Formerly Used Defense Site (FUDS) mitigation funds that require restoration of freshwater wetlands. It will be designed to accommodate restored tidal action as part of a subsequent phase.

Status: In process. The WCB approved \$903,312 in funding for this project May 23, 2006. CEQA and design has been completed (MND). The project was divided into three phases for ease of implementation and permitting. Phase I (on the west side of Los Carneros Rd, with no soil contamination issues or structures to remove) was awarded a Coastal Development Permit in 2009. Construction on Phase I is now complete and onsite native plant installation is nearing completion. Full implementation (Phases II and III) is pending approval of a second Coastal Development Permit. Phase II and III have had soil contamination and unexploded ordnance issues, which slowed the permitting process. The Army Corps FUDS project involves clearing the site and a full Remedial Action Plan that requires soil borings and minor excavations to determine contamination levels. Construction for Phase II and III will likely begin in summer, 2010.

Estimated cost: \$2,435,312

Funding:	Wildlife Conservation Board	\$903,312
	Army Corps of Engineers (mitigation)	\$870,000
	FAA	\$40,000
	USACE/NOAA Estuary Act funding (new, 2010)	\$622,000

Last updated: 1/20/2010

9. Devereux Slough Restoration

Tier: 1

Local Lead: University of California, Coal Oil Point Reserve

Project Description: The project implements the restoration plan included in the Coal Oil Point Reserve Management Plan. The project will remove exotic plant species, revegetate habitat areas and develop a monitoring protocol for seasonally tidal wetlands. The project includes restoration of uplands adjacent to the Devereux Slough. The Coal Oil Point Reserve is a University-owned coastal preserve dedicated to preservation, research and education. The Reserve is located 1.5 miles from the University of California-Santa Barbara and is an important outdoor laboratory for students and researchers. Its 170 acres are a variety of linked coastal habitats including salt-marsh, vernal pool, fresh-water pond, dune swales, estuary, dunes, and coastal scrub. Coal Oil Point is the southern gateway to the undeveloped Gaviota Coast and adjacent to the Ellwood Mesa.

Status: The restoration of the west margin of the Devereux slough began in 2007 with a contribution of \$261,000 from the Wildlife Conservation Board and \$86,270 from UCSB as in-kind matching funds. The WCB grant was frozen for most of 2009, so there will be an extension to December 2010 to finish the project. The project is proceeding as planned.

Estimated cost: \$412,000

Funding:	Wildlife Conservation Board	\$261,000
	University of California Santa Barbara	\$86,270
	Volunteers	\$66,000

Cost Notes: The UC Natural Reserve system provides very little funding to manage and maintain its properties. In 2010, however, UCSB started supporting a steward who will help maintain the restored sites. This project does not have adequate matching funds. Cost estimates for restoration and especially removal of non-native plants are high.

Last updated: 2/09/2010

10. Mission Creek Steelhead Passage Project

Tier: 1

Local Lead: George Johnson, City of Santa Barbara Creeks and Water Quality Division, 805-897-1958, gjohnson@santabarbaraca.gov

SCC Project Manager: Rachel Couch, rcouch@scc.ca.gov, (805) 845-8853

Project Description: The project consists of removing three primary barriers to upstream fish migration in the lower watershed of Mission Creek at the Caltrans channel, Tallant Road, and the 192 Bridge. Because the barriers are linked, removal would provide a total of almost five miles of new habitat for steelhead trout. The project seeks to fulfill the following objectives:

- Facilitate the migration of endangered steelhead trout
- Improve aquatic habitat for fish and amphibians
- Expand wetland habitat and improve water quality
- Increase foraging and nesting habitat for bird species, and increase tree canopy along the Mission Creek riparian corridor
- Improve the hydrology of Mission Creek by allowing for infiltration of surface water to groundwater
- Improve surface water quality through increased channel roughness and infiltration
- Use interpretive signage to provide opportunities for education concerning wetland habitat and water quality issues

Status: A physical model for the CalTrans channel modification was developed and a design alternative was chosen. Project is currently at 30% design. Project proponents presented physical model findings to the Wetland Managers Group in April 2009. Goal is for construction in 2011-2012. Tallant Road is at 90% design phase, awaiting permits and additional funding. Goal is for construction in 2010.

Acres/Stream Miles/Other: Opens up 5 miles of stream for fish passage.

Estimated Total Cost: \$1,394,000

Funding:	Department of Fish and Game (design, permit, envir. rev.)	\$500,000
	City of Santa Barbara \$70k Hwy192, \$50k CT, \$65k Tallant	\$185,000
	Private Foundation (Annenberg?)	\$180,000

Cost Notes: Implementation expected to cost approximately \$7,000,000

Last updated: 11/09/2009

11. Carpinteria Creek Restoration Project

Tier: 1

Local Lead: South Coast Habitat Restoration

SCC Project Manager: Rachel Couch, rcouch@scc.ca.gov, (805) 845-8853

Project Description: Carpinteria Creek is located in coastal Santa Barbara County, about 10 miles southeast of the City of Santa Barbara. It begins in the Santa Ynez Mountains at an elevation of about 4,700 feet and drains a watershed of about 15 square miles, characterized by steep hillsides and canyons. Biologists for the California Department of Fish and Game believe that Carpinteria Creek offers the best opportunity among all South Coast urban streams for restoring significant steelhead runs in the next few years.

This project will remove steelhead passage barriers and enhance riparian habitat along Carpinteria Creek and its main tributary, Gobernador Creek. A total of six barriers will be removed, providing access to three miles of steelhead habitat. These projects were identified in the Carpinteria Creek Watershed Management Plan. The

projects involve replacing two Arizona crossings, three culverts and one debris basin, which block steelhead passage. Each project will also involve enhancing and stabilizing creek bank and riparian habitat. There are willing landowners for each of the projects identified.

Status: The projects are in various stages of the permitting/planning and design/implementation phases. Below is an update to each of the sub-projects:

Bliss - Project planning, design, and permitting is complete. Bridge installed in fall 2008. Revegetation component to be completed winter 2009-2010.

Cate - Project planning, design and permitting is complete for the bridge. Final permits for the biotechnical bank stabilization from the County of Santa Barbara will be issued spring of 2010. Bridge installed in fall 2008. Revegetation component and biotechnical bank stabilization component to be completed by fall 2010.

Raya - Project planning, design and construction is complete.

Widdoes - Project is currently in the planning, design and permitting phase. Implementation funding has been awarded from the Department of Fish and Game and National Oceanic Atmospheric Administration.

Acres/Stream Miles/Other: Opens up approximately 4.17 miles of stream for fish passage

Estimated cost:

Funding:	Bliss	\$892,995
	Cate School	\$538,501
	Raya	\$651,769
	Widdoes	\$855,272
	Debris Basin	\$1,700,000
	TOTAL	\$4,638,537

Last updated: 11/24/2009

12. Prisoners Wetland and Lower Canada del Puerto Restoration

Tier: 1

Local Lead: Channel Islands National Park

Project Description: The proposed project will take place at Prisoners Harbor and Cañada del Puerto, the primary access point for Santa Cruz Island, Channel Islands National Park. The NPS proposes to restore a functional, self-sustaining ecosystem at Prisoners Harbor and a 40-acre associated stream corridor in the lower Cañada del Puerto Creek. The project seeks to: 1) recreate a more natural topography and hydrology by reconnecting the Cañada del Puerto stream with its floodplain and removing non-native eucalyptus trees and other vegetation which have proliferated in the lower drainage; 2) increase biological diversity and productivity by removing fill and restoring the historic wetland; 3) provide an enhanced visitor experience by installing viewing benches and additional interpretive displays; and 4) protect significant cultural and historic resources. The project would restore 3.1 acres of palustrine wetlands and deepwater habitat, remove all of the cattle corrals and relocate the scale house to its pre-1960's location, remove eucalyptus trees, control invasive species, protect archaeological resources, and improve the visitor experience. In addition, a portion of the berm would be removed, thereby reconnecting the creek to its floodplain.

Status: The Park is in the final stage of compliance for this project. The expected publication date for the FINAL EIS is April 1, 2010 with a Record of Decision on or about May 1, 2010. If additional funding becomes available, the Park would implement the project beginning late summer 2010.

Estimated cost: \$775,069

Funding:	NPS Fee Demonstration	\$90,000
	NPS NRPP Disturbed Lands available Oct 1, 2010	\$250,000
	NPS 20% Entrance Fee Funding	\$360,000
	Wetlands Recovery Project (requested)	\$75,069

Last updated: 2/23/2010

13. Matilija Dam Removal Engineering and Design

Tier: 1

Local Lead: Ventura County Watershed Protection District, Peter Sheydayi, 805-654-2016, peter.sheydayi@ventura.org

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: The Matilija Dam Ecosystem Restoration Project involves the removal of the Matilija Dam on Matilija Creek, a tributary of the Ventura River in Ventura County. Removal of the dam would restore fish passage to historic spawning and rearing habitat for southern steelhead in the upper watershed. It would also restore natural sediment transport downstream and improve sand replenishment at beaches along the coast.

The Project is one of the largest dam removal projects in the country, as well as one of the largest ecosystem restoration projects ever undertaken by the Corps of Engineers west of the Mississippi River. Of the estimated total project costs of approximately \$145 million, 65 percent is to be assumed by the Corps of Engineers and the other 35 percent will be the responsibility of the Ventura County Watershed Protection District, the Corps's local partner. When the Project is fully implemented, the Ventura River watershed and its related estuarine and ocean habitats offshore will more closely resemble historic conditions.

Matilija Dam is a 620-foot wide, concrete arch dam located inland of the coastal zone, about 16 miles upstream from the Pacific Ocean and just over half a mile from the confluence of Matilija Creek with the Ventura River. When the dam was built in 1948 by the Ventura County Flood Control District, its height was 198 feet, but the dam has been notched twice (in 1965 and 1978) because of safety concerns and it is now 168 feet high. Although it was constructed with a design reservoir capacity of more than 7,000 acre feet, significant sedimentation has reduced the reservoir's capacity to less than 500 acre feet. Over six million cubic yards of silts, sands, gravels, cobbles and boulders are estimated to reside behind the dam, and the reservoir is projected to fill in completely by 2020 if the dam is not removed.

One of the major features of the Matilija Dam Ecosystem Restoration Project includes moving or re-contouring the 6 million cubic yards of sediments that are now trapped behind the dam: 2 million cubic yards are to be slurried to downstream disposal sites or else placed upstream of the existing reservoir, and the remaining 4 million cubic yards are to be recontoured into sediment storage areas as sources for future natural erosion and transport downstream during storm events. The dam itself will be removed by controlled blasting in 15-foot increments, and a 100-foot wide meandering channel will be constructed through what is now the reservoir area behind the dam. The project also includes constructing a high flow sediment bypass system at a water diversion downstream; building levees along parts of the river channel to protect property from flooding resulting from expected increases in stream channel elevations in the first years after the dam removal; and building a recreation trail along the alignment for the slurry pipeline.

Status: The Feasibility Study and EIR/EIS were completed in 2004, and in July 2005 the Ventura County Watershed Protection District and the Corps of Engineers approved a Project Management Plan, under which they are now completing pre-construction engineering and design phases of the project.

Acres/Stream Miles/Other: The Ventura River watershed encompasses about 226 square miles and is roughly 31 miles long from its headwaters in Los Padres National Forest to its outfall into the Pacific Ocean. The mainstem of the river is about 15.6 miles long.

Estimated total cost:

\$145 million

Funding: The State Coastal Conservancy has contributed more than \$8.6 million in state bond funds to the Matilija program since its inception, including a recent grant of \$4.5 million to the Watershed Protection District to implement several pre-construction elements of the project. Other state agencies have committed an additional \$6.2 million. The combined State funding of \$14,935,810 represents more than 60 percent of the total funding for the project since the beginning of the feasibility study. In addition, the County of Ventura, through its Watershed Protection District, has contributed more than \$3.1 million. Altogether, state and local contributions represent more than 73 percent of the \$24,705,986 in total funds that have been expended on the project to date. Federal participation---the remaining 27 percent of funding for the project---has totaled \$6,612,200.

Cost Notes: To meet its local share of the costs of implementing the project, the VCWPD will need to raise over \$55 million in state, local or private funds for the project.

Last Updated: 11/09/2009

14. Ventura River Parkway

Tier: Incubator

Local Lead: None

SCC Project Manager: Bob Thiel [mailto:](mailto:bthiel@scc.ca.gov), 805-957-9299, bthiel@scc.ca.gov

Project Description: This project will acquire fee title or conservation easements along the lower 15 miles of the Ventura River to create a comprehensive River Parkway that protects habitat, creates wildlife linkages and reconnects the river to its floodplain. The Ventura River Parkway will also provide public access and educational opportunities.

The initial acquisition program will focus on acquiring a contiguous corridor of habitat and recreational open space from Ojai to the Ventura River estuary. The Ojai Valley Land Conservancy has ownership interests (fee title and easement) protecting about three miles of the 15 mile river corridor. Following acquisition, riparian and floodplain restoration projects will be pursued.

Status: In 2007, the Coastal Conservancy awarded a \$100,000 grant to the Trust for Public Land to conduct landowner outreach and develop a conceptual vision plan for a river parkway project along the lower six miles of the Ventura River from Foster Park to the estuary. TPL has since organized a series of stakeholder meetings and contracted with the Studio 606 landscape architecture program at Cal Poly Pomona to prepare a vision plan for that reach of the river. An administrative draft of that vision plan is now under review, and TPL hopes to present it to City officials and the Ventura community in the first or second quarter of 2010.

In addition, Ojai Valley Land Conservancy has recently developed a preliminary conservation plan for the section of the river that runs from the headwaters down to Foster Park. In December 2008, the OVLC acquired fee title ownership to 53.5 acres of undeveloped river bottom and riparian property, known as the Drapeau property, located in and along the river in the Oak View area of the County, using funds from a Coastal Conservancy grant. And within the last three years, the Ventura Hillside Conservancy, another of the project partners in the Ventura River parkway effort, has received donations of three separate, but adjacent parcels in the vicinity of Foster Park, which the VHC will protect and ultimately restore as habitat and open space.

Estimated cost: \$8,000,000

Funding: N/A

Cost Notes: Cost estimates preliminary at this point

Last updated: 1/29/2010

15. Santa Clara River White Rock Lake Acquisition

Tier: 1

Local Lead: City of Santa Clarita, Barbara Blankenship, 661-286-4046

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: Acquisition and restoration of three parcels, totaling 91.12 acres located on or along the Upper Santa Clara River in the Soledad Canyon area northeast of Santa Clarita. The properties, which are all owned by a single willing seller, include an 11-acre RV park; two undeveloped 40 acre parcels with upland areas and riparian forest; 1800 linear feet of stream corridor; and a created wetland area of 5 to 10 acres.

The parcels have been identified as key acquisition priorities in both a Conceptual Area Protection Plan (CAPP) approved by Department of Fish and Game and the Wildlife Conservation Board and a watershed conservation plan prepared by The Nature Conservancy. One of the primary objectives of the project is to help secure a wildlife connection between the two main units of the Angeles National Forest, as well as core habitats and key linkages in a region that is facing severe development pressures from increasing urbanization along the Highway 14 corridor from Santa Clarita through the Antelope Valley.

The site and adjacent areas along the river provide existing and potential habitat for unarmored three-spine stickleback, Santa Ana sucker, arroyo chub, red legged frog, and southwestern willow flycatcher. Vegetation communities in the three parcels include Fremont cottonwood riparian forest, desert buckwheat, and semi desert chaparral, with the potential to restore chaparral, coast live oak woodlands, and high quality riparian scrub and woodlands at lower elevations.

Once the properties are acquired, the City intends to remove the RV infrastructure (buildings, septic tanks,

wells, electrical systems), as well as an earthen flood control berm. The City would then engage in an extensive habitat restoration effort on site and develop both public art and interpretive displays and a trail connection to the Pacific Crest Trail.

Status: The City has been in escrow for the past year to acquire the 51-acre Robins Nest site---the location of the existing RV campground---for \$1.4 million. But the acquisition has been stalled by the inability of the Wildlife Conservation Board (under the mandate of several state budget letters) to fund new projects.

Estimated Total Cost: \$2,125,000

Funding: City of Santa Clarita \$500,000
Wetlands Recovery Project (requested) \$1,625,000

Last updated: 11/9/2009

16. Hedrick Ranch Nature Area Restoration Project

Tier: 2

Local Lead and Contact Information: Friends of the Santa Clara River

SCC Project Manager: Peter Brand, 510-286-4162, brand@scc.ca.gov

Project Description: Implement restoration and enhancement activities on the Hedrick Ranch, a 223-acre riparian preserve along the Santa Clara River. Approximately 94 acres of the site lies in the upper floodplain terrace and the balance of 129 acres lies in the river channel active over the past 10 years. The project will implement the recommendations of the Hedrick Ranch Management and Restoration Plan under the stewardship of the Friends of The Santa Clara River. Key elements of the project include: stabilization of approximately 1,000 linear feet of stream bank; removal of invasive plant species and re-establishment of native riparian vegetation on approximately 16 acres; preparation of additional technical studies, including a hydrogeology study and surveys of reptile and amphibian biota on the property.

Status: On-going project with substantial restoration and enhancement complete.

Acres/Stream Miles/Other: 223 acres

Estimated Total Cost: \$500,000

Funding: Wetlands Recovery Project requested \$500,000

Cost Notes: Final budget not available.

Last updated: 11/9/09

17. Santa Clara River Parkway Acquisitions

Tier: 1

Local Lead: The Nature Conservancy

SCC Project Manager: Peter Brand, 510-286-4162, brand@scc.ca.gov

Project Description: Acquire fee title or conservation easements to approximately 4,000 acres along the lower 25 miles of the Santa Clara River for inclusion in the Santa Clara River Parkway. Approximately 6,000 acres within the meander belt of the river and with upland connections into South Mountain have been mapped out for inclusion in the river parkway. Approximately 2,000 of these acres are already in public ownership. The initial acquisition program will focus on the estuary and lower river and then move upstream. Following acquisition, riparian and floodplain restoration projects will be pursued.

Status: Approximately 2,400 acres have been acquired along 13 miles of the river. McGrath acquisition was completed in April 2010. Three other properties currently are under negotiation.

Acres/Stream Miles/Other: 4,000 acres

Estimated Total Cost: \$14,669,411

Funding:	California Resources Agency (River Parkway)	\$201,000
	CECLP	\$500,000
	USFWS	\$750,000
	Trustee Council	\$4,000,000
	Coastal Conservancy--Prop 13	\$8,206,411
	SCC-Wetlands Recovery Project	\$1,003,000

Cost Notes: Acquisition costs for the entire program are estimated at \$25 million.

Last updated: 11/9/09

18. Santa Clara River Estuary McGrath State Beach

Tier: 2

Local Lead: California State Parks, Channel Coast District

SCC Project Manager: Peter Brand, 510-286-4162, brand@scc.ca.gov

Project Description: Restoration and protection of coastal salt marsh and riparian forest by State Parks within Santa Clara River Estuary Natural Preserve. Exotic plant removal, native re-planting and monitoring. Protection of habitat with fence installation and interpretive signage. While the proposed project includes boardwalk construction, WRP priorities focus on habitat restoration.

Status: Unfunded

Estimated Total Cost: \$204,900

Funding:	Department of Parks and Recreation (in kind)	\$10,500
	Wetlands Recovery Project (requested)	\$193,500

Last updated: 11/9/2009

19. Lower Conejo Creek Acquisition

Tier: 2

Local Lead: N/A

SCC Project Manager: Peter Brand, 510-286-4162, brand@scc.ca.gov

Project Description: Acquire approximately 80 acres along Conejo Creek for restoration of flood plain and riparian habitat. The property is on Conejo Creek at its confluence with Calleguas Creek. The project will also involve acquiring an agricultural and conservation easement for adjacent farm property. Future restoration activities would include widening the flood plain and allowing the creek to meander more freely in this area. Substantial removal of exotics would also be needed. The Habitat Subcommittee of the Calleguas Creek Watershed Steering Committee has approved the acquisition as a priority, and a conceptual restoration plan is being prepared

Status: This is not an active project. Project still has potential in future.

Acres/Stream Miles/Other: 80 acres

Estimated Total Cost: \$1,500,000

Funding:	Coastal Conservancy-In lieu mitigation fees	\$600,000
	Wetlands Recovery Project requested	\$750,000

Cost Notes: Cost estimate is preliminary. The Conservancy has approximately \$1.5 million of in-lieu mitigation fees available for acquisition and restoration of this property and other riparian restoration projects in the Calleguas watershed.

Last updated: 11/9/09

20. Ormond Beach Wetlands Acquisition, Part 2

Tier: 1

Local Lead: Coastal Conservancy

SCC Project Manager: Peter Brand, 510-286-4162, brand@scc.ca.gov

Project Description: Acquire in fee or through conservation easements, the privately owned portions of the Ormond Beach wetlands. In June 2002, the Coastal Conservancy acquired 265 acres formerly owned by Southern California Edison. In June 2006, the Nature Conservancy completed purchase, with state funding, of 275 acres from Metropolitan Water District (MWD). Next priority acquisition is the 340-acre Sod Farm.

Status: First two acquisitions are completed. Negotiations for additional purchase are ongoing.

Estimated Total Cost: \$25,000,000

Funding:	Wildlife Conservation Board	\$12,500,000
	Coastal Conservancy	\$12,500,000

Cost Notes: Cost estimates are current. Future Bond funds are needed for acquisition of inholdings.

Last updated: 11/9/09

21. Ormond Beach Wetlands Restoration Plan

Tier: 1

Local Lead: Coastal Conservancy

SCC Project Manager: Peter Brand, 510-286-4162, brand@scc.ca.gov

Project Description: Prepare restoration plan for the 1100-acre Ormond Beach wetlands area. The restoration plan will evaluate options for: restoring tidal action to portions of the property; restoring historic drainage patterns disrupted by filling and tile drainage systems installed for agricultural use; and recreating a mix of tidal and seasonal wetlands with associated grasslands.

Status: The restoration feasibility study is complete. Next study phase is on-the-ground experiments and studies. Future phases are design, permits and CEQA followed by construction.

Acres/Stream Miles/Other: 1,100 acres

Estimated Total Cost: \$600,000

Funding:	U.S. Environmental Protection Agency	\$75,000
	Coastal Conservancy (HCF)	\$525,000

Cost Notes: Experiments and Studies phase will cost approx. \$200,000.

Last updated: 11/9/09

22. Arundo Removal North San Fernando Valley

Tier: 2

Local Lead: Los Angeles & San Gabriel Rivers Watershed Council, Nancy Steele, 213 229-9950, nancy@lasgrwc.org

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: This project will remove *Arundo donax* (Giant Reed) from private land in five tributary canyons located along north side of San Fernando Valley -- Box Canyon, Devil Canyon, Pacoima Canyon, Little Tujunga Canyon, Big Tujunga Canyon -- that drain to the Los Angeles River. Project will complement Arundo

removal efforts underway on adjacent public land managed by Angeles National Forest, U.S. Army Corps of Engineers, Los Angeles County Dept. Public Works, City of Los Angeles Dept. Water & Power, and the Santa Monica Mountains Conservancy.

The project goal is to control infestations of non-native invasive *Arundo donax*, at several locations near the wild land/urban interface on the north side of San Fernando Valley. The total area affected is approximately 300 acres, with approximately 5 miles of stream corridor. Primary vegetation communities are riparian woodlands dominated by native white alder, sycamore, cottonwood, and willow species.

Status: The Watershed Council is still pursuing funding for this project.

Acres/Stream Miles/Other: 330 acres, 5 stream miles

Estimated Total Cost: \$110,000

Funding: Wetlands Recovery Project (requested) \$86,000

Cost Notes: \$24,000 has been applied from a variety of grants, no funding is secured.

Last Updated: 11/05/2009

23. Sepulveda Basin Plan

Tier: 2

Local Lead: The River Project, Melanie Winter, 818 980-5800, inter@theriverproject.org

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: The River Project (TRP) intends to undertake a cooperative planning effort for the rehabilitation of the Los Angeles River in the Sepulveda Basin, with the ultimate goal of utilizing bioengineered bank stabilization methods for streambank revegetation along nearly a mile of soft-bottom stream. The project will include a detailed reach and site scale engineering and ecological analysis, a feasibility and design process that involves multiple agency involvement, and permitting.

Status: The River Project still hopes to secure funding for this project.

Acres/Stream Miles/Other: 1 stream mile.

Estimated cost: \$485,000

Funding: Wetlands Recovery Project (requested) \$485,000

Last updated: 11/05/2009

24. Zuma Canyon Restoration and Steelhead Enhancement Feasibility Study

Tier: 2

Local Lead: National Park Service, Christy Brigham, (805) 370-2386, christy_brigham@nps.gov

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: Restore a 7 acre agricultural area near the entrance of Zuma Canyon that has been planted in avocados. Based on its location and soils, this area would naturally support a mixture of riparian and coastal sage scrub vegetation. Within the restoration area, the vegetation will be converted from 100% non-native species to a minimum of 60% native vegetative cover within 2 years, with a final goal of less than 5% cover of non-native species at the end of five years. A minimum of 1600 students will visit the site per year and these students will be engaged in ecological restoration activities within the canyon. In addition, the Park Service will expand on the initial baseline habitat assessment by Caltrout, and determine habitat quality and feasibility of steelhead restoration in Zuma Creek, including a habitat assessment, fish passage evaluation, and development of a conceptual restoration plan.

Status: The National Park Service is in the process of completing the initial phase of invasive vegetation removal and other restoration at Zuma Canyon, using a \$113,398 grant of Prop 12 funds from the Coastal Conservancy

under the Santa Monica Bay Restoration Program, as well as \$50,000 in Centennial Challenge grant funds from the Park Service itself. The next phase of restoration is estimated to cost approximately \$120,000, and no monies have been identified as yet to fund that component. The Park Service, however, is seeking \$100,000 from its water resources division to fund the steelhead restoration study for Zuma Creek.

Acres/Stream Miles/Other: 7 acres

Estimated Total Cost: \$402,000

Funding: See the discussion in "Status", above

Last updated: 11/9/2009

25. Solstice Canyon Acquisitions

Tier: 1

Local Lead: National Park Service, Melanie Beck, 805-370-2346, melanie_beck@nps.gov

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: The project seeks to acquire 325 acres in the upper Solstice Canyon watershed of the Santa Monica Mountains to complete continuous parkland ownership between the upper and lower reaches of Solstice Creek. Once acquired, the land would be owned and managed by the National Park Service as federal parkland within the Santa Monica Mountains National Recreation Area (SMMNRA).

Although this section of the upper watershed is relatively pristine, it faces a severe threat of luxury development, and efforts are needed to preserve it and bridge the sections of public ownership at each end of the canyon. The eight properties targeted for acquisition are owned by six different individuals or entities, four of whom have already indicated that they are willing sellers.

Solstice Canyon is a 2,840-acre coastal watershed in the center of the SMMNRA. The 4.9 mile long creek is one of only four perennial streams in the mountains and has been the focus of extensive efforts by a partnership of state, federal and local agencies to improve steelhead habitat and modify or remove fish migration barriers. Those agencies are investing over \$3 million to redesign highway barriers, restore migration routes, and enable the reintroduction of steelhead trout to Solstice Creek---efforts that are the subject of a project already listed on the WRP Work Plan.

Public parkland constitutes 49 percent of the watershed and includes 4.2 miles (or 85 percent) of the mainstem of Solstice Creek. The proposed land acquisition project here would bring 96 percent of Solstice Creek (and 61 percent of the watershed) within public ownership and protection, as well as protect more than 4,200 linear feet of stream corridor.

Status: Prior to 2009, the National Park Service had targeted ten parcels for acquisition. In the fall of 2009, the Park Service acquired two of those parcels, covering 117 acres, at a direct acquisition cost of \$2,570,000. Funding for those parcels came from the federal SAFETEA-LU transportation fund, the office of Third District Los Angeles County Supervisor Zev Yaroslavsky, and the federal Land and Water Conservation Fund. The Park Service intends to proceed with tracking willing-seller status and other acquisition efforts for the remaining properties as funding becomes available.

Estimated Total Cost of remaining parcels: \$6,480,800

Funding: Wetlands Recovery Project (requested) \$6,480,800

Last updated: 11/10/2009

26. Solstice Creek Steelhead Access Implementation

Tier: 2

Local Lead and Contact Information: CalTrans

SCC Project Manager: Kara Kemmler, 805-252-5272, kkemmler@scc.ca.gov

Project Description: Solstice Creek has been identified as a primary candidate for recovery of the southern steelhead trout, a federal endangered species. The seven fish passage barriers located on the stream within the National Recreation Area were removed in fall 2006. The City of Malibu implemented removal of the next

downstream barrier, the existing box culvert at the Corral Canyon Road crossing, and replaced it with a clear span bridge over Solstice Creek. This project was completed in spring 2008. The final fish passage barrier is located at Pacific Coast Highway. This project will be a CalTrans Environmental Enhancement and Mitigation program (EEM) project that would modify the culvert at PCH downstream of the proposed project area.

Status: CalTrans is currently seeking funding

Estimated cost: \$3,425,100

Funding:	Wildlife Conservation Board	\$345,000
	Department of Fish and Game	\$637,815
	Coastal Conservancy	\$145,000
	Coastal Conservancy (NOAA)	\$200,000
	National Park Service	\$1,300,000
	City of Malibu	\$145,000
	City of Malibu, NPS, Heal the Bay (in-kind)	\$56,285
	American Rivers (Conservation Corps)	\$34,000

Last updated: 11/9/09

27. Upper Malibu Creek Feasibility Study (Rindge Dam)

Tier: 1

Local Lead: California Department of Parks and Recreation, Suzanne Goode, 818-880-0364, sgood@parks.ca.gov

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: Conduct an Army Corps of Engineers feasibility study for management of the Upper Malibu Creek watershed. The feasibility study is evaluating options for extensive restoration and enhancement of riparian and aquatic systems above Malibu Lagoon, including the possible removal of Rindge Dam, located about 3 miles upstream from the lagoon. The dam, which is almost completely silted in, acts as a complete barrier to steelhead migration. The study is also focusing on enhancements for endangered steelhead trout and riparian bird habitat. The California Department of Parks and Recreation (DPR) is the local sponsor.

Status: In October 2008, the Corps completed its internal draft of the F4 Milestone (Alternative Review Conference) component of the feasibility study. The tentatively recommended plan includes removal of Rindge Dam over several years concurrent with the mechanical removal of the 780,000 cubic yards of impounded sediment. Three upland sediment disposal sites within several miles of the dam are still being evaluated for disposal of a portion of the sediment; Surf Rider Beach has been identified as the disposal site for an estimated 320,000 cubic yards of beach compatible material. The report assumes that concrete from the dam would be hauled to the Calabasas Landfill, located in the upper portion of the watershed.

The next phases of the project are to complete an independent technical review of that report and its recommendations and begin preparation of the public draft of the feasibility study. But that work was halted when the Coastal Conservancy's funding for the project (upon which DPR relies for its local cost share) was frozen between December 2008 and November 2009 because of the state bond freeze. Now that the Conservancy has been authorized to resume funding for a portion of its grant to DPR, the parties are planning to initiate work on the next phases of the feasibility study.

Estimated Total Cost of Feasibility Study: \$3,900,000

Funding:	Dept. of Parks and Recreation (in-kind)	\$350,000
	Dept. of Parks and Recreation	\$568,500
	U.S. Army Corps of Engineers	\$1,950,000
	SCC-Santa Monica Bay Restoration Project	\$652,700
	Coastal Conservancy	\$368,800

Cost Notes: A 50% non-federal match is needed to complete the feasibility study. Costs kept increasing over the life of the project. If the Corps were to manage and help fund implementation of the removal of Rindge Dam (now estimated to cost between \$31 million and \$72 million), the usual split would be a 65% federal and 35% local cost share and would require Congressional authorization and appropriation for the project .

Last updated: 11/09/2009

28. Malibu Lagoon Restoration and Enhancement

Tier: 1

Local Lead: California Department of Parks and Recreation

SCC Project Manager: Kara Kemmler, 805-252-5272, kkemmler@scc.ca.gov

Project Description: Restore and enhance the ecological structure and function of Malibu Lagoon by increasing circulation and enhancing wetland habitat. Lagoon enhancements were initially recommended in the 1999 Malibu Lagoon enhancement plan prepared by UCLA for the SCC. Heal the Bay worked on the Malibu Lagoon Restoration and Enhancement Plan (completed June 2005) with State Parks, the Coastal Conservancy and a diverse group of stakeholders. Phase 1 of the Restoration and Enhancement Plan included relocation and redesign of the existing public parking and staging areas to maximize habitat restoration area in Phase 2 and to improve water quality in the Lagoon through implementation of BMPs. Phase 2 involves restoration of the lagoon, including recontouring western lagoon channels, enhancing circulation in the lagoon, habitat enhancement and providing improved educational and recreational opportunities for the public. The EIR included both phases and was certified by State Parks in April 2006.

The Coastal Conservancy and the RCD of the Santa Monica Mountains worked with State Parks to implement Phase 1 of the Plan, completed in spring 2008. The Coastal Conservancy, RCD of the Santa Monica Mountains and Santa Monica Baykeeper are working with State Parks to implement phase 2 of the Plan. The restored wetland habitat could potentially be enlarged in the future by restoring the adjacent property once it is acquired.

Status: Implementation of the first phase, relocation of the existing parking lot, was completed in April 2008. Final design and permitting for Phase 2 is expected to be complete in spring 2010. Implementation of the second phase, lagoon restoration, will be ready to begin in summer 2011 depending on availability of funds.

Estimated Total Cost: \$9,269,200

Funding:	Wildlife Conservation Board	\$417,200
	State Water Resources Control Board (Prop 50)	\$3,000,000
	State Water Resources Control Board (Prop 13)	\$825,000
	Dept. of Parks and Recreation (in-kind)	\$200,000
	Coastal Conservancy	\$827,000
	LA County (pending)	\$1,000,000
	WCB (pending)	\$2,000,000
	TBD	\$1,000,000

Cost Notes: Coastal Conservancy also paid for restoration planning, \$350,000.

Last updated: 11/9/09

29. Cold Creek Riparian Acquisitions, Part 2

Tier: 2

Local Lead: Mountains Restoration Trust

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: Since 2006, MRT has acquired several parcels identified for acquisition in the Cold Creek Restoration Plan reducing the original 155.83 acres to be acquired to the acquisition of 20 parcels totaling 119.27 acres. The properties to be included as part of the 1319-acre Cold Creek Preserve include wetland, riparian and upland habitat along Cold Creek, a perennial tributary to Malibu Creek. The subject acquisitions will continue the 20-year acquisition strategy of the State Coastal Conservancy-funded Cold Creek Restoration Plan to acquire properties integral to the preservation of Cold Creek, a wild, pure and scenic stream in the Santa Monica Mountains National Recreation Area. Major project tasks for each acquisition will include: preparation of appraisal, completion of negotiations, compilation of funding sources, order of preliminary title report, opening of escrow, review of title issues, and closing of escrow.

The 119.27 acres includes all the parcels identified in the Cold Creek Restoration Plan, Phase II, and the Cold Creek Restoration Plan, Amended. Cold Creek Restoration Plan, Phase I, acquired the 66.78-acre Cold Creek Valley Preserve in 1991 and completed in 1999. Phase II focused on the properties immediately adjacent to Cold

Creek from the Valley Preserve to Cold Canyon Road. The CCRP, Amended, incorporated the acreage on the south side of Phase II properties and northerly of conservation easement properties or to California State Park's Backbone Trail.

The Cold Creek riparian corridor is located within a coastal watershed of the Santa Monica Mountains of Los Angeles County. Its pristine habitat has been designated a Significant Ecological Area and Environmentally Sensitive Habitat Area. Described as a natural sandstone basin, it contains a free, perennial spring-fed stream shaded by a dense riparian canopy, and a diverse mixture of native vegetation types and sensitive natural resources. Phase 2 includes 25 acres of existing wetland habitat along Cold Creek and 3,200 feet of stream corridor. In 2009, 7 acres of wetland were mapped on one of two Cold Creek tributaries and 5 acres of wetland were identified on the other tributary.

Primary vegetation communities include chaparral, coastal sage scrub (mainly covering south-facing aspects), grassland, oak woodland, and sycamore/oak/willow riparian woodland with obligate wetland plant species. Cold Creek runs from east to west, creating a critical wildlife corridor between Topanga State Park and Malibu Creek State Park that provides connectivity and habitat linkages for wildlife movement, dispersal, and re-colonization of core habitat areas following natural disturbances. Cold Creek is one of the few natural streams in the Santa Monica Mountains that has not been invaded by non-native aquatic species. Cold Creek historically supported steelhead before being cut off from Santa Monica Bay by the Rindge Dam and county road culverts.

Status of Acquisition of all Identified Parcels:

	Acquired	To be Acquired	In Escrow
CCRP, Phase 2	24 (131 acres)	6 (22.97 acres)	
CCRP, Amended	15 (213 acres)	14 (96.30 acres)	11 (79 acres)
Total	39 (344 acres)	20(119.27 acres)	11 (79 acres)

Acres/Stream Miles/Other: To protect Cold Creek, the Cold Creek Restoration Plan proposed to acquire 463.06 acres made up primarily of small lots.

- 343.79 acres have been acquired retiring 40 building sites.
- 119.27 acres remain to be acquired that will retire another 20 building sites; of the 119.27 acres to be acquired, 78.90 acres are in escrow

Estimated Total Cost to complete CCRP Phase 2: \$1,650,000

Funding for CCRP Phase 2: Previous grants from Habitat Conservation Fund and Los Angeles County Prop A grants were used to acquire 2 properties.

Estimated Total Cost to complete CCRP Amended: \$3,350,000

Funding for CCRP Amended:

Funds from Los Angeles County Prop A, Mitigation funds waiting ACOE approval, fund raising. \$1,975,000

Cost Notes: 10% has been added to estimated purchase price to cover acquisition costs and future management costs.

Last updated: 2/10/2010

30. Las Flores Creek Restoration

Tier: 2

Local Lead: City of Malibu

Project Description: The goal of this project is to restore ecological function to Las Flores Canyon Creek, resulting in improved channel stability, protection of the emergent wetland downstream and increased potential habitat for steelhead trout and other native species. The Las Flores Canyon watershed is a 2,646-acre coastal watershed of Santa Monica Bay located on the southeastern flank of the Santa Monica Mountains.

The Las Flores Creek Restoration Project is bounded by Pacific Coast Highway (PCH) on the south, Rambla Pacifico on the west, and Las Flores Canyon Road. The total project area is approximately 3.4 acres and 2,400 linear feet of the creek. The project included grading flood plain/terrace and installing rock vanes/deflectors for improved in-stream habitat and channel stability. In-stream habitat features expanded the number of current pools available to steelhead trout and created larger pools. Improved passage, resting pools and escape cover also provided for movement of steelhead to larger upstream spawning pools. The project installed biotechnical bank stabilization (vegetated soil lifts, vegetated rock revetment, etc.) to protect against sediment loading and

landslides, which are deleterious to native aquatic species as well as the downstream emergent wetland. The project also removed and managed invasive exotic plant species including a small cluster of arundo. The project preserved and expanded native tree canopy to improve in-stream and riparian habitat.

Finally, the site was revegetated with native species (coastal scrub, riparian, sycamore woodland) to restore cover, vegetative structure and increase native diversity. Revegetation resulted in increased physical steelhead habitat as well as improved water temperature regulation.

Status: Restoration elements of the project were substantially completed in October 13, 2008. Public access elements including a pedestrian foot bridge, public restrooms and associated revegetation remain to be completed.

Estimated cost: \$4,693,733

Funding:	River Parkways (Resources Agency)	\$925,000
	Wildlife Conservation Board	\$600,000
	DWR - Urban Streams Grant	\$835,000
	City of Malibu	\$2,333,733

Cost Notes: About half of the City's and Resources Agency's funds are allocated to public access elements: public restrooms, pedestrian footbridge, parking, walking trails, picnic tables and benches.

Last updated: 01/20/10

31. Topanga Creek Restoration Program

Tier: 1

Local Lead: California Department of Parks and Recreation

SCC Project Manager: Kara Kemmler, 805-252-5272, kkemmler@scc.ca.gov

Project Description: Implement the recommendations of the 2002 Topanga Creek Watershed and Lagoon Restoration Feasibility Study. This is a multi-phased program that will be implemented over several years and in partnership with multiple agencies, particularly State Parks. The primary goals of the program are to:

1. Restore habitat at identified priority locations in order to increase benefits to the endangered steelhead trout and tidewater goby, as well as other aquatic species of special concern in the watershed.
2. Improve passage opportunities for steelhead trout and extend the reach of creek providing suitable habitat for spawning and rearing.
3. Identify ways to improve sediment transport and delivery in order to enhance conditions in the creek and restore beach nourishment opportunities.
4. Improve water quality in all areas of the watershed where impairments have been identified.
5. Continue monitoring of water quality, sediment loads, streambank condition and target species populations (steelhead trout, tidewater gobies, western pond turtles, CA newts, etc.) in order to identify population trends related to restoration actions.

Two studies were completed in 2008: a feasibility study for removing the Rodeo Grounds road berm that is located approximately 400 meters upstream from Topanga Lagoon; and a hydrogeologic study of lower Topanga Creek to identify groundwater resources and better understand their relationship to fish distribution and habitat in the creek. Final design and permitting for implementation of the Rodeo Grounds berm removal were also completed in March 2008. The Rodeo Grounds Berm Removal project, which will enhance fish passage opportunities, was subsequently funded and began in summer 2008. The berm has been removed and revegetation and monitoring activities are currently ongoing. This project is expected to be completed in Winter 2009/2010.

Status: The next phase of the project will be to implement the PCH bridge replacement and Topanga Lagoon restoration. The landowner, California Department of Parks and Recreation (CDPR) in concert with CalTrans has initiated planning for this phase. CDPR/CalTrans is seeking funding for the planning phase: \$700,000.

Estimated Total Cost: \$4,215,630

Funding:	Dept. of Parks and Recreation	\$454,300
	Dept. of Parks and Recreation (in-kind)	\$52,855
	California Department of Fish and Game	\$250,000
	Wildlife Conservation Board	\$1,847,675

SCC-Santa Monica Bay Restoration Project	\$500,000
Coastal Conservancy	\$300,000
RCD of the Santa Monica Mountains (in-kind)	\$20,800
Mitigation Funds (MRCA)	\$90,000
TBD	\$700,000

Cost Notes: Current need is \$700,000 for planning and environmental review for the PCH bridge replacement and lagoon restoration.

Last updated: 11/9/09

32. Los Angeles River Revitalization - Taylor Yard Acquisition **Tier: 2**

Local Lead: California Depart of Parks and Recreation, Sean Woods, 213 620-6152, sawoods@parks.ca.gov

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: The Taylor Yard property is 42.6 acres, with direct frontage along the river for approximately one mile. It currently does not include wetland habitat, but there is potential for wetland restoration. Once acquired, plans for this site include removal of concrete walls to restore a natural river meander and creation of large-scale wetlands for natural water quality improvements.

The Taylor Yard property lies on the eastern side of the Los Angeles River along a stretch of the river known as Glendale Narrows. It is situated between the newly opened Rió de Los Angeles State Park and the river. It is across the river from the Elysian Valley community, and is directly linked to the Cypress Park and Glassell Park neighborhoods. Within the Los Angeles River Revitalization Master Plan, this property is specifically highlighted within one of the plan's twenty identified Opportunity Areas (Taylor Yard Opportunity Area) because of potential of this site for revitalization, ecological restoration, new recreation opportunities, and water quality improvements.

Status: Project on hold due to state budget status

Acres/Stream Miles/Other: 42.6 acres

Estimated Total Cost: \$50,000,000

Funding: City of Los Angeles (Measure O) \$25,000,000

Cost Notes: The cost estimate may not be accurate, negotiations ongoing, property may require significant remediation prior to restoration

Last updated: 11/05/2009

33. Lower Los Angeles River Acquisitions **Tier: 2**

Local Lead: City of Long Beach, Leslie Hunsaker, 562 570-3131, Leslie.Hunsaker@longbeach.gov

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: Acquire properties adjacent to the lower Los Angeles River suitable for wetland and riparian restoration projects. The City of Long Beach is currently pursuing acquisition of two properties:

Wrigley Heights, North: 15.8 acres. Located east of the river and north of the 405 freeway, the site is adjacent to the Dominguez Gap spreading grounds. Owner appears willing to sell. The City of Long Beach would like to acquire the property. Approximately 9.6 acres would be used for possible recreation, and 6.2 acres for riparian restoration. Estimated cost is \$14,000,000.

Wrigley Heights, South: 24.7 acres. Property is located on the east side of the river between Wardlow Road and the 405 freeway. Site was used for an oil/water separation facility. There is now a horse stable on the property. The City of Long Beach would like to acquire the property for a mixed-use park, including a wetland restoration at the site of the former separation facility. The current owners would be responsible for site clean up. Estimated cost is \$20,000,000.

Status: Conservancy staff is working with the City of Long Beach on several potential acquisition sites. The City

is actively pursuing acquisition of the Southern Pacific site and Wrigley Heights, South property. The Edison property has been included in the I-710 widening project planning. The city is no longer pursuing acquisition in the Wrigley Heights, North area.

Acres/Stream Miles/Other: 40.5 acres

Estimated Total Cost: \$20,000,000

Funding: TBD

Cost Notes: Cost estimate is preliminary and includes upland and recreational areas in addition to potential wetland restoration areas. No funding has been identified for these acquisitions.

Last updated: 11/05/09

34. Ballona Wetlands Restoration Planning

Tier: 1

Local Lead: Department of Fish and Game

SCC Project Manager: Mary Small, 510-286-4181, msmall@scc.ca.gov

Project Description: Develop and evaluate restoration alternatives for all of the Ballona lands owned by the State of California, a total of 600 acres. Consistent with the WRP Regional Strategy, planning will include connected wetlands within the landscape context. The restoration plan will develop and analyze a range of alternatives to restore and enhance a mix of wetland habitats that will benefit endangered and threatened species as well as other migratory and resident species. Alternatives will need to be ecologically beneficial, technically feasible and sustainable. The restoration project will provide for wildlife-oriented public access and recreation opportunities. This project will collect baseline data, develop project alternatives, conduct feasibility analysis and complete environmental impact analysis for restoration of the state owned property.

Status: Feasibility analysis of the conceptual restoration alternatives was recently completed. Baseline data collection is underway and environmental analysis of the proposed project alternatives will begin when bond funding is available.

Acres/Stream Miles/Other: 600 acres

Estimated Total Cost: \$3,400,000

Funding: Coastal Conservancy -- Prop 12, Ballona line item \$3,400,000

Cost Notes: The budget includes a total of \$1,000,000 for baseline data collection; \$1,000,000 for the environmental impact analysis and \$1,400,000 for the alternative development, feasibility analysis and public outreach process.

Last updated: 10/22/09

35. DeForest-Dominguez Wetlands Restoration Planning and Design

Tier: 2

Local Lead: City of Long Beach, Leslie Hunsaker, 562 570-3131, Leslie.Hunsaker@longbeach.gov

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: Prepare a preliminary plan, environmental review document, and permits for creation of wetland riparian and upland habitat along approximately 3 miles of the east bank of the Los Angeles River. The plan will be jointly undertaken by the City of Long Beach and the Los Angeles County Department of Public Works (LADPW). The De Forest Park site is approximately 38 acres located on the east side of the Los Angeles River extending about 6,600 feet between the developed DeForest Park to the north and Del Amo Boulevard to the south. The Dominguez Gap east basin extends from Del Amo Blvd. to the 405 freeway. The project has multiple objectives including increasing and enhancing wetland and riparian habitat, improving water quality, and enhancing recreational opportunities.

Restoration of DeForest Basin, in concert with the Dominguez Gap Spreading Ground Basin operated by Los Angeles County Public Works, will establish a two mile contiguous corridor of habitat and recreational open space along the Los Angeles River in Long Beach.

Status: All design work for Dominguez Gap completed 2006 and construction of the project by the County was completed in 2008. The City of Long Beach is overseeing final design of the DeForest project, to be completed in 2010.

Acres/Stream Miles/Other: 2 stream miles

Estimated Total Cost: \$1,050,000

Funding:	Rivers and Mountains Conservancy	\$100,000
	City of Long Beach	\$100,000
	Los Angeles County Department of Public Works	\$250,000
	Coastal Conservancy	\$600,000

Cost Notes: Conceptual planning for DeForest basin was funded by the Coastal Conservancy with money designated for the Los Angeles River in Prop. 204. LADPW funded conceptual planning for the Dominguez Gap basin. Implementation funding will come from a variety of sources.

Last updated: 11/05/2009

36. Machado Lake Habitat Restoration Project Tier: 2

Local Lead: City of Los Angeles, David Attaway, 213 202-2660, David.Attaway@lacity.org

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: Completion of technical studies for the development of final projects to improve habitat and water quality of Machado Lake, which is located in the Ken Malloy Harbor Regional Park (KMHRP) in the communities of Harbor City and Wilmington in the City of Los Angeles. Machado Lake, which is approximately 103 acres in size, represents the only remaining natural wetlands in the Los Angeles Harbor area and serves a particularly important role in sustaining migratory and local bird populations in the Los Angeles area. Environmental review and permitting will also take place in this planning phase.

Status: SCC-funded technical studies underway, set to be completed early 2010.

Acres/Stream Miles/Other: 103 acres

Estimated Total Cost: \$500,000

Funding:	City of Los Angeles (Prop K)	\$200,000
	Coastal Conservancy	\$300,000

Last updated: 11/05/2009

37. Colorado Lagoon Restoration Tier: 2

Local Lead: City of Long Beach, Eric Lopez, 562 570-5690 Eric.Lopez@longbeach.gov

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: Implement the restoration plan for the Colorado Lagoon, a 44-acre saltwater lagoon connected to Alamitos Bay. The principal goals of the plan are to improve the fish and wildlife habitat in and around the lagoon and to improve the quality of the water flowing into and out of the lagoon:

- Redirect, reduce or filter storm and dry weather runoff to minimize contamination of water and sediment in the lagoon;
- Identify sources of pollutants and recommend controls within the watershed;
- Evaluate need to remove contaminated sediments;

- Restore and maintain estuarine habitat; and
- Improve lagoon circulation and the tidal connection with Marine Stadium and Alamitos Bay

The project would be undertaken by the City of Long Beach Parks and Recreation Department with input from the Friends of Colorado Lagoon. The lagoon suffers from poor water quality, frequent algal blooms, and low biological diversity. The lagoon is part of the historic Los Cerritos Wetlands complex. It is a saltwater body that was created by dredging a mudflat and is connected by tide gate to Alamitos Bay through the Marine Stadium. Five storm drains currently discharge into the lagoon. The tide gate is left open during the winter and is closed at times during the summer to retain enough water in the Lagoon for swimming which is allowed in the west arm of the Lagoon. The Lagoon was once a popular clamming site. Marine fish can be found in the lagoon.

Status: Final design/engineering plans are underway and will be completed spring 2010.

Acres/Stream Miles/Other: 44 acres

Estimated Total Cost: \$5,614,868

Funding:	Rivers and Mountains Conservancy	\$150,000
	Coastal Conservancy	\$500,000
	State Water Resources Control Board	\$3,823,868
	Army Corps of Engineers (in kind)	\$906,000
	Ports of Long Beach	\$235,000

Cost Notes: The County is pursuing funds for complimentary improvements to stormwater system.

Last Updated: 11/05/2009

38. Los Cerritos Wetlands Conceptual Restoration Plan Tier: 1

Local Lead and Contact Information: Coastal Conservancy

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: Prepare conceptual restoration plan for the Los Cerritos Wetlands. Project would include an assessment of existing resources, hydrologic analysis, identification of opportunities and constraints, an evaluation of alternatives for expanding tidal circulation and restoring fresh and brackish water wetlands. A recommended conceptual restoration plan will then be prepared. Preparation of the conceptual plan is contingent upon adequate access to property and cooperation of private and public property owners.

Status: A preliminary scope of work has been drafted. No funding has been reserved or identified for the planning, which is on hold until the Los Cerritos acquisitions are complete.

Estimated cost: \$500,000

Funding: Wetlands Recovery Project (requested) \$500,000

Last updated: 11/9/2009

39. Los Cerritos Wetlands Acquisition - Hellman Property Tier: 1

Local Lead and Contact Information: Coastal Conservancy

SCC Project Manager: Bob Thiel, 805-957-9299, bthiel@scc.ca.gov

Project Description: The Los Cerritos Wetlands Authority (LCWA) is negotiating the purchase of the 100-acre Hellman property, south of the San Gabriel River in the City of Seal Beach. Under a settlement agreement between the owners, the Coastal Commission, and a group of environmental organizations, the owners must offer this area for sale to a public entity. This property is adjacent to the City's Gum Grove Park and property owned by the State Lands Commission. The Wildlife Conservation Board (WCB) has indicated a willingness to fund the acquisition. Once acquired, the property would be owned and managed by the LCWA.

Status: The sellers and the Los Cerritos Wetlands Authority have negotiated the principal terms and conditions of the purchase. Acquisition of the property has been delayed, however, because the State's bond freeze has prevented the WCB from funding new projects this year and no alternative source of financing the purchase has been secured.

Acres/Stream Miles/Other: 100 acres

Estimated Total Cost: Confidential

Funding: Wildlife Conservation Board (proposed).

Cost Notes: The LCWA has also sought other potential funding sources in the face of the current freeze on state funding for new projects, including submission of an application to the Orange County transportation mitigation fund.

Last updated: 11/9/2009

40. Santiago Creek Arundo Control and Habitat Restoration

Tier: 1

Local Lead: Santa Ana River Watershed Association, Richard Zembal, 714-378-3213, Rzembal@OCWD.com

Project Description: The purpose of this project is to complete Arundo control and habitat restoration in three areas of Orange County's Santa Ana River Watershed that otherwise will continue to be sources of infestation of Orange County's restoration efforts on Santiago Creek, Carbon Creek, and the lower Santa Ana Canyon. Approximately 140 acres of *Arundo donax* and associated invasive vegetation will be removed and managed in three separate locations proposed for restoration including Santiago Creek, Carbon Creek, and the Santa Ana Canyon between Prado Dam and the Orange County line. These are the last major pieces of infested habitat that have not been treated, or are not scheduled for treatment in, or directly affecting Orange County. Biological monitoring conducted with the control efforts will focus on endangered species leading to an understanding of their status and distribution and fostering recovery. Information will be disseminated on invasive issues and the importance and plight of the riparian communities and their endangered inhabitants.

Status: To date, the Santa Ana Watershed Association has spent \$526,585 on Santiago Creek restoration and \$28,000 annually for the past few years in maintenance. Approximately 140 acres of *Arundo donax* and associated invasive vegetation were removed and are under ongoing management. There has only been preliminary mapping performed in the other two project areas.

Acres/Stream Miles/Other: 140 acres

Estimated cost: \$2,390,766

Funding: Proposition 13 and Santa Ana Trust Fund \$761,476
Wetlands Recovery Project requested \$1,629,290

Cost Notes: Due to its location, this project may not be eligible for WCB funding.

Last updated: 1/28/2010

41. Santa Ana River, Featherly Regional Park Restoration

Tier: 2

Local Lead: Santa Ana Watershed Association, Renee Latu, Executive Director, 909-799-7407 ext. 105, Rlatu@SAWatershed.org

Project Description: The Santa Ana Watershed Association (SAWA), in partnership with the Orange County Conservation Corps, Riparian Repairs, and Featherly Regional Park propose to complete the removal of *Arundo donax* from the park. *Arundo donax* is choking the river, impacting habitat for Least Bell's Vireos, Southwestern Willow Flycatchers, Santa Ana Suckers, and Arroyo Chub.

It will take approximately 6 months to remove the remaining 20 acres of Arundo, which is scattered over a broad area. The Arundo is scattered in clumps, some in rough terrain, and some is on islands in the river. Most patches have native trees and shrubs inside the Arundo clumps. For this reason, only about 4 to 5 acres of

Arundo are accessible to a trackloader.

Arundo will be removed by a combination of chainsaw crews and a trackloader with attached cutting blade. Arundo that can't be cut with the trackloader (due to terrain or inclusion of native plants) will be cut with chainsaws, hauled to a chipper, and chipped into a truck for disposal. The area is expected to restore naturally from the existing seed bank. Native cuttings will be used to revegetate as necessary.

Status: unfunded

Acres/Stream Miles/Other: 20 acres

Estimated Total Cost: \$492,600

Funding: undetermined

Last updated: 1/28/2010

42. Orange Coast River Park

Tier: Incubator

Local Lead: Friends of Harbors, Beaches and Parks, Jean Watt, 949-673-8164, jwatt4@aol.com

SCC Project Manager: Greg Gauthier, 760-832-7365, ggauthier@scc.ca.gov

Project Description: Develop and implement an action strategy for the Orange Coast River Park, a 1000 acre mosaic of wetland, riparian, and upland habitats along the lower three miles of the Santa Ana River. It is envisioned that the Orange Coast River Park would extend up the east side of the Santa Ana River to the eastern boundary of Fairview Park. Included within the proposed boundaries are Fairview Park, and North and South Talbert Preserves, the Huntington Beach Wetlands, the US Army Corps of Engineers restoration marsh at the mouth of the river, Sunset Ridge, and Superior Park in Newport Beach. The privately-owned Banning Ranch would also be included in the park if it is acquired for conservation purposes.

Status: Planning and restoration of each of the park components are in various stages of development; some have already been completed. The Fairview Park Master Plan is complete, partially implemented, and funds continue to be sought to implement the plan. North Talbert Park has been restored and invasive vegetation removal is underway in South Talbert Park. A restoration plan for the Huntington Beach Wetlands is complete and construction is underway.

Additionally, a water quality study to identify potential projects has been completed and a master plan for trails and interpretation has been completed through the National Park Service's Rivers, Trails and Conservation Assistance program. The various landowners have formed an OCRP Partners group and are working to develop a management and operation strategy for the OCRP. Once this step is accomplished the group will be ready to prioritize project and implementation needs and develop a full project action strategy and budget, combining these various components into one coordinated river park.

Acres/Stream Miles/Other: 1,000 acres

Estimated Total Cost: \$51,500,000

Funding: undetermined

Cost Notes: Scope and budget need further definition, total cost estimated to be \$51,500,000.

Last updated: 3/28/2010

43. Serrano Creek Stabilization and Restoration Phase II, Reach 2 & 3

Tier: 1

Local Lead: County of Orange, Marilyn.Thoms@ocpw.ocgov.com 714-955-0610

Project Description: Serrano Creek, a coastal stream corridor, is a tributary to San Diego Creek draining an area of about 2,590 acres at Trabuco Road within the City of Lake Forest. The proposed project will stabilize the creek beds and banks, restore riparian habitat, and reduce sediment loading to Newport Bay. Serrano Creek has undergone substantial erosion in recent years due to changes in the watershed. In general, sediment supply to

the unimproved stream has been reduced and local runoff has increased, both in peak and duration. This project will prepare engineering plans and environmental documents for Serrano Creek between Trabuco Drive and Rancho Parkway, Reaches 2 and 3. The Southern California Wetlands Recovery Project (WRP) was a funding partner to complete restoration work on Reach 1.

Status: The next step for this project is to prepare the appropriate planning, design and environmental review documentation. Once that has been completed restoration work can begin. The total estimated project cost including construction is \$24 million. Planning phase cost estimate is \$2 million.

Estimated Total Cost: \$2,000,000

Funding: County of Orange \$750,000
Wetlands Recovery Project (requested) \$1,250,000

Cost Notes: Planning work engineering costs include hydrology, hydraulics, geotechnical and structural analysis and permitting. The assumption is that an EIR will not be required.

Last updated: 10/30/2009

44. San Joaquin Marsh Enhancement - Phase II Implementation

Tier: 2

Local Lead: University of California, Irvine

SCC Project Manager: Greg Gauthier, 760-832-7365, ggauthier@scc.ca.gov

Project Description: Enhancement of the approximately 120 acres of perennial marsh. Historically, the perennial marsh contained open water areas and channels. The extent and depth of the open water areas has significantly decreased due to gradual accumulation of sediment and organic matter and subsequent encroachment of cattails. Except for a few remaining open water areas, the marsh has become predominantly a monoculture of cattails. Consequently, the loss of open water habitat has reduced the diversity of wildlife species that the San Joaquin Marsh Reserve supports.

Status: Planning and permitting are complete. A funding package for construction is being prepared from private entities needing mitigation credit and public sources. The Coastal Conservancy funded consultant services to facilitate the revision of design and permits to accommodate the funding partners. The University is preparing conservation MOUs with the regulatory agencies and legal agreements with the funding parties. Construction will be phased based on available funding and may commence in summer 2010.

Acres/Stream Miles/Other: 120 acres

Estimated Total Cost: \$3,700,000

Funding: Mitigation Funds – multiple sources \$3,700,000

Cost Notes: The funding package has not been finalized and may also include some public funds.

Last updated: 1/28/2010

45. Upper Newport Bay Ecological Restoration Implementation

Tier: 1

Local Lead: County of Orange, Marilyn Thoms, 714-955-0610, Marilyn.Thoms@ocpw.ocgov.com

SCC Project Manager: Greg Gauthier, 760-832-7365, ggauthier@scc.ca.gov

Project Description: The Upper Newport Bay Ecosystem Restoration Project addresses the impacts of habitat conversion resulting from sedimentation in the upper bay by dredging 2.1 million cubic yards of sediment and enhancing salt marsh and mudflat habitats around the bay. Total project cost is \$53,300,000 million.

The Ecosystem Restoration Project involves deepening both the Unit I/III and Unit II sediment basins in the upper bay up to -20 feet below mean sea level. The sediment will be disposed of offshore at an approved EPA disposal site. The project also includes an ongoing maintenance dredging program that will be undertaken

approximately every 21 years. These ecosystem enhancements include dredging channels to promote tidal circulation and limit predator access to sensitive areas, expanding mudflat habitat in several locations to compensate for mudflats lost to dredging and creating wetlands and California Least Tern nesting islands.

Upper Newport Bay is the largest open-water estuary in Southern California and one of the last remaining coastal wetlands in Southern California. Implementation of the Upper Newport Bay Ecological Restoration Project will increase the quantity and quality of wetlands habitat which supports numerous federally endangered species, provide critical feeding and resting habitat for migratory waterfowl and shorebirds along the Pacific Flyway, and provide a nursery for anadromous fish and other aquatic species. It further will improve water quality by reducing sediment inflows and algal blooms. The project preserves both Federal and local navigation channels by dredging 2.3 million cubic yards, which if unaddressed will require costly maintenance dredging.

Status: A construction contract was awarded in fall 2005. The ecosystem enhancements funded by the State Coastal Conservancy were completed in 2009. Construction continues with funding from the US Army Corps of Engineers and the American Recovery Act.

Project Milestones and Schedule:

- Final Feasibility Report and EIS/R - September 2000
- Authorization – WRDA 2000
- Chief’s Report - December 2000
- Project Management Plan – November 2001
- OMB Approves Project – December 2004
- Project Cooperation Agreement executed – September 2005
- Construction Contract awarded – September 2005
- Groundbreaking Ceremony – October 2005

Acres/Stream Miles/Other: 1,000 acres

Estimated cost: \$53,300,000

Funding:	Federal Share	\$34,645,000
	Coastal Conservancy -- Prop 12	\$13,000,000
	Other Local Share	\$5,655,000

Cost Notes: Total project costs are approximately \$53.3 million, with 65% of that coming from the Federal government. The State advanced the entire initial local sponsor share of \$13,000,000.

Last updated: 2/2/2010

46. Big Canyon Creek Restoration - Final Engineering

Tier: 2

Local Lead: City of Newport Beach

SCC Project Manager: Greg Gauthier, 760-832-7365, ggauthier@scc.ca.gov

Project Description: The project consists of completing final engineering and design work for the restoration of Big Canyon Creek in Upper Newport Bay. The project includes wetland habitat, water quality improvement, drainage and hydrologic issues, tidal exchange needs, sedimentation, long-term system sustainability, and public access. The restoration plan also addresses drainage problems and water quality contamination from urban runoff.

Status: Final engineering and design work was completed in 2009. Due to challenges with sediment contamination (selenium) and potential impacts to salt marsh birds beak the construction phase of the project will not proceed at this time. The project may be implemented in part to improve public access and habitat. The City of Newport Beach is continuing to work with the Department of Fish and Game to explore ways to implement the project in its entirety.

Total Cost: \$700,000

Funding:	RWQCB (Santa Ana)	\$200,000
	Coastal Conservancy	\$500,000

Cost Notes: The City of Newport Beach contributed funds beyond those listed above to respond to increased sampling and monitoring due to selenium contamination. No cost effective methods for addressing soil contamination exist at present preventing implementation of much of the construction phase.

Last updated: 3/28/2010

47. Laguna Canyon Creek Restoration Project

Tier: 2

Local Lead: City of Laguna Beach

Project Description: The City of Laguna Beach has completed an initial study of the Laguna Creek and a conceptual plan of restoration opportunities. The study Hydrogeomorphic Method (HGM) assessment determined that the creek is now functioning at about 50 percent of its overall habitat, biological, and hydrologic functional capacity. The proposed project will build on the initial study results to prepare the necessary watershed assessment, technical studies, permits, environmental documents and final design plans and specifications for construction of the multi-beneficial restoration work.

The Laguna Creek serves as a major riparian habitat resource and wildlife corridor. Significant open space habitats in close proximity include the Laguna Coast Wilderness Park & Preserve which is located directly to the east across Laguna Canyon Road. The creek consists of a narrow riparian habitat and transitions into coastal sage scrub/chaparral. Riparian woodland canopy species include sycamore, oak, elderberry, and willows. Varied riparian herb vegetation within the creek is well established. Mulefat scrub communities can be found in several locations along the creek. In addition, there is a natural meadow area in the upper portion of the project area near the El Toro and Laguna Canyon road intersection.

Endangered, rare or distributionally restricted species include the Orange County Turkeys rugging, yellow warbler, yellow-breasted chat, many-stemmed dudleya, red-tailed hawk, and water pigmy-stone crop. Examples of Bird and animal species that have been identified in the area include the blue heron, American egret, black phoebes, cliff swallows, brewer's blackbirds, marsh wrens, kestrels, woodpecker, barn owl, mule deer, raccoon, crayfish, goldfish, pacific tree frog, snakes, ducks, frogs, turtles, bobcat, and gray fox.

Status: Stalled due to city staffing and budget. This project was included in the South Orange County Integrated Water Management Plan.

Acres/Stream Miles/Other: 21 acres, 1.2 stream miles

Estimated Total Cost:

\$450,000

Funding: undetermined

Cost Notes: Cost estimate includes watershed assessment, technical studies, permits, environmental documents and final design plans and specifications for construction of the multi-beneficial restoration work. Construction cost estimates undetermined at this point.

Last updated: 3/27/2010

48. Aliso Creek Mainstem Riparian Restoration

Tier: 2

Local Lead: County of Orange, zoila.finch@ocpw.ocgov.com, 714-955-0618

Project Description: The project site is an approximately seven mile reach of lower Aliso Creek and 1,000 feet of the Wood Canyon tributary, located in southern Orange County. Aliso Creek in its entirety stretches approximately 19 ½ miles from the headwaters in the Santa Ana mountains to the Pacific Ocean at Aliso Beach in Laguna Beach. The watershed is approximately 36 square miles and includes portions of unincorporated Orange County and the cities of Aliso Viejo, Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, and Mission Viejo. The project site extends from the creek mouth at the Pacific Ocean to approximately Pacific Park Drive in Aliso Viejo and extends through the City of Laguna Beach, unincorporated Orange County, City of Laguna Niguel, and City of Aliso Viejo. Much of the project area is within the Aliso and Woods Canyons Wilderness Park (AWCWP), which is owned, operated and managed by Orange County, in unincorporated Orange County. The AWCWP is also located within the Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) central and coastal sub-region Nature Reserve of Orange County (NROC). The southern and northernmost portions of the project area are located within developed areas of Laguna Beach and Aliso Viejo

and Laguna Niguel respectively.

The project area is a riparian corridor within an urbanized area with a high population concentration. Aliso Creek has numerous water resource issues, related to both human actions and natural processes, including channel instability, degraded water quality, loss of fish and wildlife habitat, and flood damage. Since 1997, there has been a multi-jurisdictional effort to address problems within the Aliso Creek watershed. The Aliso Creek Watershed Management Feasibility Study, sponsored by the U.S. Army Corps of Engineers, Orange County, and municipalities and water districts within the Aliso Creek watershed boundary, was completed in July 1999. A wide range of technical studies have since been completed. Reestablishment of a healthy and sustainable watershed environment would serve to improve the environmental and economic conditions of the creek, including improving water quality, native habitat, and reducing flood damage.

The proposed project involves ecosystem restoration in a seven-mile reach of Aliso Creek and 1,000 feet of the Wood Canyon tributary. The restoration activities will focus on revitalization of the riparian vegetation community; restoration of natural processes, channel stabilization, and reduction of erosion and flood risk. The restoration activities include the establishment of low drop structures interspersed with pools to improve natural flow and channel stability, removal of existing rip rap and replacement with natural vegetation, terracing and flattening of the channel banks and establishment of riparian vegetation to reduce instability, removal of invasive species and establishment of new riparian habitat, and modification of existing concrete drop structures.

Improvements anticipated from the study include relief from degradation of the creek and restoration of native habitat. Protection for important coastal wetlands downstream will benefit from improved water quality and ecosystem functioning.

Status: The Baseline Conditions report is currently undergoing a technical peer review by an outside LA Corps District. The report analyses the current project conditions and the future without project conditions of the project area. After the peer review is complete a series of public meetings will take place to engage the public and solicit their input on the restoration plan. It is anticipated that a final restoration plan will be completed in December 2011 followed by construction of the project.

Acres/Stream Miles/Other: 7 mile reach of Aliso Creek and 1,000 feet of the Wood Canyon tributary

Estimated Total Cost: Approximately \$45 million

Funding:

1. State Water Resources Control Board, Prop 50 Chapter 8 IRWMP - \$4,600,000 State agreement executed, term of state agreement July 2007 – March 2012
2. California Department of Water Resources, 2004, \$1,000,000, contract pending

Cost Notes: The County spent approximately \$1,500,000 to complete the technical studies needed for this project. These studies include: Hydrology & Hydraulics, Sediment Transport Analysis, Geotechnical, Environmental Resources, Biological, Economics, and Cultural Resources.

Last updated: 01/07/2010

49. San Juan and Trabuco Creek Steelhead Recovery Watershed Management Plan Implementation

Tier: 1

Local Lead: Trout Unlimited, George Sutherland, (949) 361-0274, gsland@cox.net

Project Description: The San Juan and Trabuco Creeks Watershed Steelhead Recovery Plan identifies projects that can be implemented to restore this coastal watershed for the recovery of a native fish species. The top three priority projects identified in the Plan, include alteration of the Metrolink crossing of Trabuco Creek, assessment and restoration of the San Juan Creek Lagoon (hydrologic, sedimentation, and habitat assessment and floating island habitat pilot project), and restoration of a 3,000-foot long reach of Trabuco Creek including alteration of the stream structure and removal of exotic species.

Status: The preferred alternative for design of the Metrolink Fish Passage project will be selected in February 2010 and design work of 30% for the project will be complete in March 2010 with \$773,000 in funding from the Wildlife Conservation Board. Construction costs are estimated at \$4,000,000 but are dependent on the chosen preferred alternative. Other project elements have yet to be initiated.

Acres/Stream Miles/Other: Varies dependent on selected restoration alternatives.

Estimated Total Cost: \$25,000,000

Funding: Undetermined

Cost Notes: The total project cost for all components including concept planning, design, engineering, permitting and construction is roughly estimated at \$25,000,000. These costs could vary greatly depending on restoration alternatives chosen as part of concept and design development.

Last updated: 1/27/2010

50. Trabuco Creek Fish Passage Project

Tier: 2

Local Lead: Trout Unlimited, George Sutherland, (949) 361-0274, gsland@cox.net

Project Description: The project will plan and design a fishway for 800 feet of cement-lined channel on Trabuco Creek under highway I5 and a county road. Removal of the existing fish barrier would open up access to 15 miles of steelhead spawning and rearing habitat. The project will also include riparian habitat enhancement adjacent to the fish barrier to benefit other species.

Status: The plan concept has been completed and 30% of the initial design was completed in 2008. Next phase is final design followed by construction.

Acres/Stream Miles/Other: Removal of one fish passage barrier

Estimated Total Cost: \$375,000 for final design and \$1,500,000 for construction.

Funding: Undetermined

Cost Notes: \$360,000 for 30% design was funded as follows:

Wildlife Conservation Board	\$315,000
California Conservation Corps	\$10,000
California Department of Fish and Game	\$16,000
County of Orange	\$10,000
Trout Unlimited	\$9,000

Last updated: 1/27/2010

51. San Juan Hydrologic Unit - Non Native Species Eradication Plan

Tier: 2

Local Lead: County of Orange, Marilyn Thoms Marilyn.Thoms@ocpw.ocgov.com 714-955-0610

Project Description: The County of Orange is initiating a watershed based Arundo control and native plant restoration program within the San Juan Hydrologic Unit (SJHU). Other invasive non-native plant species will also be controlled including: pampas grass, tamarisk, palms, acacia, eucalyptus, and other species that are invasive and are degrading riparian habitat. The purpose of invasive plant species removal is to reduce fire and flood risk, save water, improve water quality, and enhance habitat in the watersheds of southern Orange County. This program, along with details related to restoration and exotic plant control methods have been developed in coordination with the CA Department of Fish and Game, USGS Biological Resources Division and the US Fish & Wildlife Service. Depending on funding, project sites will be monitored for 10 years or longer after invasive plants are initially removed and annually, as necessary, to ensure that all infestations are ultimately controlled. Mapping the riparian plant communities, developing a GIS database and developing a non-native species eradication plan was completed with a Department of Fish and Game grant in September 2007.

Status: In progress

Estimated Total Cost: \$2,500,000

Funding: TBD

Last updated: 01/21/2010

52. Restoration of Riparian Habitat in the Carlsbad Hydrologic Unit**Tier: 1****Local Lead:** Doug Gibson, San Elijo Lagoon Conservancy, (760) 436-3944**SCC Project Manager:** Megan Cooper, 619-645-3167, mjohnson@scc.ca.gov

Project Description: This project involves implementation of a comprehensive program to remove non-native plant species, and restore riparian and select upland habitat areas in the Carlsbad Hydrologic Unit. Invasive non-native plants are a concern for several reasons, including the displacement of native vegetation, impacts to threatened and endangered wildlife species, degradation of private property, and increased risk of both fire and flood. The goals of the project are:

- 1) Make significant progress in re-establishing the hydrologic and ecological functions of the riparian and coastal wetland habitats within the CHU through the removal of invasive non-native pest plants over large areas through a comprehensive and efficient program.
- 2) Replace these invasive species through the most effective means available with appropriate native plant species for the habitat.
- 3) Restore beneficial uses to riparian and wetland habitats in the CHU.
- 4) Establish reliable mechanisms to ensure the long-term continuation of efforts to control invasive exotic species in wetland and riparian areas.
- 5) Elucidate steps in the establishment of a Weed Management Area (WMA) for the CHU.

Status: Substantial progress has been made in the implementation of the invasives removal program. The WCB awarded \$1,500,000 for this project in 2006. The WCB grant is underway and will continue until late 2010. To date, 530 acres of invasive plants have been treated and roughly 300 acres remain to be treated. Untreated acres have increased slightly due to the inclusion of Eucalyptus. If using the old maps, there are 107 acres remaining.

Acres/Stream Miles/Other: 880 acres**Estimated Total Cost:** \$5,460,000

Funding:	Wildlife Conservation Board	\$1,500,000
	State Water Resources Control Board	\$3,960,000

Last updated: 2/2/2010**53. Buena Vista Creek Watershed Plan****Tier: 1****Local Lead:** Preserve Calavera**SCC Project Manager:** Deborah Ruddock, 510-286-4168, druddock@scc.ca.gov

Project Description: Preparation of a comprehensive watershed/sub-watershed management plan for Buena Vista Creek, located in the Carlsbad Hydrologic Unit (CHU). Recommended action of Carlsbad Watershed Network Management Plan.

Status: Inactive. Preserve Calavera is looking for funding partners and is refining project scope.**Estimated cost:** \$374,500

Funding:	Audubon Society (in-kind)	\$139,200
	Wetlands Recovery Project (requested)	\$235,300

Last updated: 1/20/2010**54. Buena Vista Lagoon Restoration Plan - Preliminary Engineering and EIR/S** **Tier: 1****Local Lead:** Department of Fish and Game

SCC Project Manager: Deborah Ruddock, 510-286-4168, druddock@scc.ca.gov

Project Description: The Buena Vista Lagoon Restoration Feasibility Study outlined three basic options for lagoon restoration: 1) maintain the lagoon primarily as a freshwater system; 2) restore tidal circulation to the maximum extent possible; or 3) restore tidal circulation to the lagoon's western basin. The Feasibility Study was completed in spring of 2006 and the next phase is to develop preliminary engineering and conducting the environmental impact analysis on the proposed restoration

Status: DFG selected the tidal alternative as the proposed action for the purposes of CEQA based on review of the feasibility study. Preliminary engineering design is underway.

Acres/Stream Miles/Other: Approx. 220 acres

Estimated Total Cost Engineering and Environmental: \$1,700,000

Funding:	Coastal Conservancy	\$658,000
	National Fish and Wildlife Foundation	\$500,000
	SANDAG Commitment	\$540,000

Last updated: 1/20/2010

55. Batiquitos Lagoon Exotics Removal and Revegetation

Tier: 2

Local Lead: Batiquitos Lagoon Foundation

SCC Project Manager: Deborah Ruddock, 510-286-4168, druddock@scc.ca.gov

Project Description: Develop detailed plans for exotics removal and re-vegetation with native plants for approximately 16 acres of wetland and upland habitat adjacent to Batiquitos Lagoon, runoff and erosion control measures to protect the restored and enhanced habitat, and trail improvements as needed. A 1997 Conceptual Planning Study for the lagoon examined conservation and education opportunities and constraints that existed on the shore of the lagoon. The concept study divided the lagoon into 12 planning areas and concluded that invasive non-native plant species were the single greatest threat to habitat quality in and around the lagoon.

This project will prepare the detailed plans, permits, and environmental review to remove exotics and re-vegetate the 5 highest priority areas around the lagoon and to implement runoff and erosion control measures and make trail improvements where needed.

Status: The Batiquitos Lagoon Foundation, the Coastal Conservancy and WRP Local Assistance Program have agreed to not pursue pending completion of key land acquisitions and trail planning in the proposed project area.

Acres/Stream Miles/Other: 16 acres

Estimated Total Cost: \$350,000

Funding:	Coastal Conservancy (requested)	\$300,000
	City of Carlsbad (uncommitted)	\$40,000
	Batiquitos Lagoon Foundation	\$10,000

Cost Notes: Cost estimates are preliminary and based on five year old assumptions.

Last updated: 1/20/2010

56. San Elijo Lagoon Restoration Planning and Engineering

Tier: 1

Local Lead: Doug Gibson, San Elijo Lagoon Conservancy, (760) 436-3944, Doug@sanelijo.org

SCC Project Manager: Megan Cooper, 619-645-3167, mcooper@scc.ca.gov

Project Description: The San Elijo Lagoon Restoration Project will enhance and restore the biological functions and values of the San Elijo Lagoon Ecological Reserve with a balance of habitat types, taking into account

regional historic losses. The project will protect, restore, and maintain, via adaptive management, the San Elijo Lagoon ecosystem and the adjacent uplands. The project has three categories of objectives: 1) physical restoration of lagoon estuarine hydrologic functions; 2) biological restoration of habitat and species within the lagoon; and 3) management and maintenance to ensure long-term viability of the restoration efforts. The current project will complete the studies and analyses needed to identify a preferred design alternative for the Restoration Project, including:

- Coastal Engineering Review and Preliminary Design
- Environmental Review (CEQA/NEPA)
- Regulatory Authorizations and Permitting

San Elijo Lagoon is owned by the California Department of Fish and Game (DFG), the County of San Diego and the San Elijo Lagoon Conservancy. It is designated as a State Ecological Reserve (SER) and is located at the southern boundary of the City of Encinitas adjacent to Solana Beach. It is a critical coastal wetland with significant biological and ecological resources. The lagoon is approximately 1,066 acres and it supports a variety of wildlife including six endangered and thirty two threatened/rare plant and animal species. Birds visit and reside at San Elijo Lagoon in large numbers; more than 319 species have been recorded at the lagoon and adjacent Cardiff State Beach. Over 106 of these species are rare or uncommon migrants. Least terns feed in the lagoon and have nested on several islands created for them in the east basin. Clapper rails inhabit the dense fresh and brackish marsh vegetation. Belding’s savannah sparrows nest in isolated stands of pickleweed. The lagoon is a popular destination for nature enthusiasts and students from around the County because of the wildlife viewing and passive recreation opportunities.

Status: Underway

Acres/Stream Miles/Other: 1,066 acres

Estimated Total Cost: \$1,590,000

Funding:

SANDAG	\$960,000
Coastal Conservancy	\$680,000
Total Project Cost	\$1,590,000

Last updated: 10/22/09

57. San Dieguito Watershed Invasive Species Control and Revegetation **Tier: 1**

Local Lead: San Dieguito River Park Joint Powers Authority, 18372 Sycamore Creek Rd., Escondido, CA 92025
Shawna Anderson, Environmental Planner. Ph: (858) 674-2275 x13

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: This project will restore 874 acres of riparian and marsh habitat in the San Dieguito Watershed in northern San Diego County through the treatment and control of invasive species such as Arundo donax, perennial pepperweed, pampas grass, eucalyptus and tamarisk, with subsequent revegetation using native species. Invasive non-native plant species are displacing native habitat, depleting available water, causing numerous water quality impacts, and creating a flood and fire threat. The river is designated as critical habitat by the Fish and Wildlife Service for three endangered species: least Bell’s vireo, southwestern willow flycatcher and arroyo southwestern toad, and San Dieguito Lagoon has the state’s third largest population of light-footed clapper rail. The San Dieguito River Valley is also recognized as an official ‘cornerstone’ of both the County MHCP and City MSCP Plans. The invasives program is also part of an integrated regional effort that uses common approaches, mapping, permitting and monitoring. This increases long-term benefits and efficiency of projects under the program.

Status: Underway / On-going

Acres/Stream Miles/Other: 847 acres / 10.2 stream miles

Estimated Total Cost: \$4,766,000

Funding:	IRWMP	\$250,000
	California State Parks	\$372,000
	Natural Resources Conservation Service	\$610,200
	U.S. Fish & Wildlife Service	\$105,700
	Wetlands Recovery Project Small Grants	\$47,600
	SANDAG TransNet EMP	\$255,000
	SD County/CDFA	\$5,000
	California River Parkways (pending)	\$835,000
	Wetlands Recovery Project (requested)	\$2,285,500

Cost Notes:	Funding secured to date:	\$1,645,500
	Funding requested/under review:	\$835,000
	Funding gap:	\$2,285,500

Last updated: 03/08/2010

58. Los Peñasquitos – Sediment Management

Tier: 2

Local Lead: Los Peñasquitos Lagoon Foundation

SCC Project Manager: Karen Bane, 510-286-0922, kbane@scc.ca.gov

Project Description: Based upon hydrology and sediment studies completed for the watershed and the lagoon, Los Peñasquitos Creek was identified as the largest potential contributor of sediment to the lagoon. The project will consist of basin construction on a three-acre parcel owned by the City of San Diego property along Los Peñasquitos Creek and some education and outreach concerning the effects of sedimentation on the lagoon. The sediment basin will cover an area of approximately 2.5 acres and is designed to withstand a 100-year storm event (16,800 cubic feet/second) without substantial damage. The basin has a volume capacity of 4,400 yd³ (9,900 tons) and is designed to intercept flows during 2-year to 5-year flood events.

Los Peñasquitos Lagoon is rapidly filling with sediment because urban development in the watershed has upset the geomorphic equilibrium of the three main tributaries (Carroll, Los Peñasquitos and Carmel Creeks) that empty into the Lagoon. Impacts associated with such rapid sedimentation include: reduced tidal mixing within lagoon channels, degradation and (in some cases) net loss of riparian and salt marsh vegetation; increased vulnerability to flooding for surrounding urban and industrial developments; turbidity associated with siltation in lagoon channels. Los Peñasquitos Lagoon (LPL) is recognized as an important coastal resource at local, state, national and international levels. It supports several endangered species (e.g. Least Bell's Vireo, Belding's Savannah Sparrow, Light Footed Clapper Rail, Salt Marsh Daisy), serves as a safe stopover for migratory birds traveling along the Pacific Flyway, and provides refuge for coastal marine species to feed and hide from predators. LPL has special status as the closest lagoon to the only two Areas of Special Biological Significance located within San Diego -- the San Diego Marine Life Refuge and the San Diego-La Jolla Ecological Reserve, as a Critical Coastal Area. It is also being considered for addition to the National Oceanic and Atmospheric Administration (NOAA) National Estuarine Research Reserve system and to the list of Wetland of International Significance under the United Nation's Ramsar Program. LPL is also on the State Water Resource Control Board's 303 (d) list for impairment due to sediment and siltation.

Status: Construction commenced in September 2009. Excavation, grading and implementation of the brow ditches were completed at the end of February 2010. All heavy equipment was removed from the site to clear the project site for landscaping of disturbed areas. Irrigation lines for landscaping were put in place the first week of March 2010 and passed City inspection on March 5, 2010. Weather permitting, container stock and hydroseed will be in place by March 12, 2010. Remaining efforts will focus on maintaining the landscaped areas and erosion control during wet weather until landscaping has passed the 26 month coverage requirement set by the City of San Diego.

Acres/Stream Miles/Other: 2.5 acres (non-wetland)

Estimated Total Cost: \$2,516,000

Funding:	State Water Resources Control Board (Prop 13)	\$815,000
	State Water Resources Control Board	\$1,107,000
	Los Peñasquitos Lagoon Foundation	\$42,000

Coastal Conservancy (Systems Analyses)	\$224,000
Coastal Conservancy (Construction/Outreach)	\$328,000

Last updated: 3/05/2010

59. Hanson Pond Acquisition, El Monte Valley

Tier: 1

Local Lead: Michael Beck, Endangered Habitats Conservancy, (619) 846-3003

SCC Project Manager: Megan Cooper, 619-645-3167, mcooper@scc.ca.gov

Project Description: This project will acquire and restore 143.5 acres of wetland and upland habitat adjacent to the San Diego River in the El Monte Valley, San Diego County. Additionally, the project will be linked hydrologically, physically, and biologically to a major restoration project on Helix Water District owned land to the east and west. This in turn is part of a larger effort to restore over 1,500 acres along the San Diego River corridor in the El Monte Valley.

The Hanson pond project is an integral and critical component of the larger vision for a restored valley and creation of The El Monte Valley Nature Park. Concurrent with this project, the Endangered Habitats Conservancy (EHC) is negotiating the purchase and restoration of over 700 adjacent acres including retiring the rights for the construction of two golf courses. The Hanson pond site will be linked hydrologically, physically, and biologically to the San Diego River and adjacent restoration areas. The site will be the primary location for public access to the El Monte Valley Nature Park. Approximately 30 acres of the pond will be filled and restored to emergent wetland habitat to enhance biodiversity on the site. The emergent wetland will be expanded by roughly 25 acres onto the adjacent Helix property.

Status: Unfunded

Acres/Stream Miles/Other: 143.5 acres

Estimated Total Cost: \$6,500,000

Funding:	San Diego River Conservancy (Prop 40)	\$1,500,000
	County of San Diego	\$1,000,000
	River Parkways (Resources Agency)	\$1,500,000
	Other Sources	\$2,500,000

Last updated: 2/2/2010

60. San Diego River Land Conservation Program, Hanlon Walker

Tier: 1

Local Lead and Contact Information: San Diego River Conservancy

SCC Project Manager: Megan Johnson, 619-645-3167, mjohnson@scc.ca.gov

Project Description: The San Diego River Land Conservation Program proposes the acquisition of approximately 1,500 acres in the San Diego River Watershed, creating a contiguous riparian corridor along 52 miles of the San Diego River that would reach from its headwaters near Julian to its mouth at the Pacific Ocean. This program would ensure and enhance the protection of riparian corridors, the restoration and preservation of wetlands and habitat systems, the improvement of water quality and the provision of access for recreation and education. The Land Conservation Program would implement the San Diego River Conservancy's Five Year Strategic and Infrastructure Plan.

The first priority in the River Conservancy's Land Conservation Program and the most active prospect is the potential acquisition of approximately 140 acres, including over 2 miles of river, in the City of Santee. Fee title to the property is held by the Hanlon/Walker family and is popularly known as the RCP ponds. The Hanlon/Walker properties constitute a critical linkage that is central to the River Conservancy's Strategic Plan. Protection of Hanlon/Walker properties would secure a contiguous riparian corridor from the City of Santee to the El Monte Valley. The properties contain two major sand mining ponds, a portion of a Tank Hill and twelve acres that is the current location of the RCP brick manufacturing company. Sand mining operations on the properties are nearing completion and the owners are willing sellers. The City of Santee has proposed that 90% of the property be placed in the Santee MSCP sub area plan.

Status: on hold due to state bond funding freeze

Acres/Stream Miles/Other: 140 acres, 2 stream miles

Estimated Total Cost: Confidential

Funding: The San Diego River Conservancy has received one million dollars from the US Fish and Wildlife Service for the acquisition of this property. The FWS grant must be spent by 2012.

Last updated: 2/22/2010

61. Rose Creek Watershed Opportunities Assessment Implementation **Tier: 1**

Local Lead: Ann Van Leer, 858 452-2027, ann@landsconserve.com

SCC Project Manager: Chris Kroll, 510 286-4169, ckroll@scc.ca.gov

Project Description: Implement Recommendations of the Rose Creek Watershed Opportunities Assessment including completing a watershed-wide hydrologic study; planning for creation of wetlands at the mouth of Rose Creek; and designing trail linkages.

Status: Hydrologic study will be completed spring 2010

Estimated Total Cost: \$1,165,000

Funding: Coastal Conservancy \$ 237,600

Last updated: 11/05/2009

62. San Diego River Watershed Riparian Restoration Program **Tier: 1**

Local Lead: Michael Nelson, San Diego River Conservancy, (619) 645-3183, mnelson@sdrc.ca.gov

SCC Project Manager: Megan Cooper, 619-645-3167, mcooper@scc.ca.gov

Project Description: The San Diego River Conservancy has initiated a watershed based invasive, non-native plant control program in the San Diego River Watershed. This program will help to implement one of the Conservancy's strategic initiatives contained in its Five Year Strategic and Infrastructure Plan, Program 3, Project 1, Remove Invasive Non-Native Plants and Restore the Land. Initial baseline mapping has been completed, watershed-based permitting is being initiated, and funding for implementation of control and restoration is being developed. Over 329 acres of high priority invasive plant species have been mapped in riparian areas that need to be controlled and replanted. Arundo, tamarisk, palms, and pampas grass are the bulk of the acreage, but non-native trees are also in abundance. All of these species degrade habitat quality and pose a significant fire and flood risk. Initial funding for the program has been committed from the Proposition 40 River Parkways program. Treatment areas not covered by the Prop 40 funds include: Arundo donax (86 acres), tamarisk (3 acres), pampas grass (15 acres), palms (16 acres), mixed exotic trees (11 acres) and other species (17 acres).

Status: The San Diego River Conservancy has created a watershed-wide program for invasive species management and has completed a mitigated negative declaration and received an Army Corps regional permit for the program. Invasive species removal has begun at two sites, the Ward Road property and the Carlton Oaks Golf Course. The Ward Road site, managed by the Department of Fish and Game, is 17 acres and should be completed by 2013. The Carlton Oaks site is 25 acres, contains both public and private land, and should be completed by 2014. This project is an example of a multi-agency partnership and a model for watershed-wide invasive species management. Invasive control is being implemented for approximately \$20,000 per acre.

Acres/Stream Miles/Other: 52 miles of stream

Estimated Total Cost: \$5,000,000

Funding:	River Parkways (Resources Agency)	\$575,000
	Department of Defense	\$175,000
	Regional Water Quality Control Board	\$400,000
	Department of Fish and Game	\$233,000
	Wetlands Recovery Project (requested)	\$3,617,000

Last updated: 2/2/2010

63. Famosa Slough Acquisition

Tier: 1

Local Lead: Jim Peugh, Friends of Famosa Slough, (619) 224-4591

SCC Project Manager: Megan Cooper, 619-645-3167, mcooper@scc.ca.gov

Project Description: The Friends of Famosa Slough propose to acquire 10 real estate parcels totaling approximately 0.9 acres of privately held property adjacent to Famosa Slough. Once this land is acquired, the Friends will stabilize the banks and implement water quality improvements, improve the rough trail through the site, remove invasives, re-vegetate with native plants, and maintain the site until it is self sustaining.

Status: The Friends are currently working with a land broker to seek funding for these acquisitions.

Acres/Stream Miles/Other: 0.9 acre

Estimated Total Cost: \$950,000

Funding: \$70,000 has been identified for this project.

Last updated: 2/2/2010

64. Chollas Creek Watershed Opportunities Assessment

Tier: Incubator

Local Lead: San Diego Groundwork - Chollas Creek

SCC Project Manager: Chris Kroll, (510) 286-4169, ckroll@scc.ca.gov

Project Description: This project will assess opportunities in the Chollas Creek watershed to improve habitat and water quality conditions while also providing for community benefits such as recreation and education. More specifically, the project will: 1) complete an existing conditions report for the watershed; 2) determine feasibility/prioritization of restoration projects from the Chollas Creek Enhancement program; 3) develop detailed restoration plans for target creek sites; 4) develop a trails and community access plan; 5) complete an invasive species strategy; and 6) create a website for the project.

Status: Unfunded

Estimated Total Cost: \$199,897

Funding: Wetlands Recovery Project (requested) \$199,897

Cost Notes: no funding identified

Last Updated: 3/1/2010

65. Sweetwater Marsh Restoration

Tier: 1

Local Lead: Andy Yuen, US Fish and Wildlife Service Refuges, (760) 930-0168

SCC Project Manager: Megan Cooper, 619-645-3167, mcooper@scc.ca.gov

Project Description: The Sweetwater Marsh Restoration and Enhancement Plan proposes to improve the

overall habitat value within the Sweetwater Marsh Unit of the San Diego Bay National Wildlife Refuge. The project site's salt marsh habitat and associated tidal channels provide nesting and/or foraging habitat for four federally listed bird species, including the endangered California least tern, California brown pelican, and light-footed clapper rail, and the threatened western snowy plover, as well as the State endangered Belding's savannah sparrow. A federally listed endangered plant, salt marsh bird's beak, also occurs within the marsh and the threatened California gnatcatcher has been observed in the adjacent upland habitats on Gunpowder Point. Twenty-six species covered by the Multiple Species Conservation Plan (MSCP) have either been observed or have the potential to occur here. Invasive plant species, such as Australian saltbrush, hottentot fig, chrysanthemum, tree tobacco, and fennel, are generally restricted to the transitional zone around the salt marsh, while giant reed and tamarisk occur in a brackish marsh located near Interstate 5. Implementation of the proposed restoration and enhancement projects would assist in the implementation of the recently approved Comprehensive Conservation Plan (CCP) for the San Diego Bay NWR (USFWS 2006).

Status: The USFWS has received funding from a variety of sources to complete portions of the planned restoration. They are not seeking additional funds at this time.

Estimated Total Cost: \$4,135,000

Funding:	NAWCA	\$300,000
	Port of San Diego	\$68,000
	Audubon Society	\$8,953
	Wetlands Recovery Project (requested)	\$3,758,047

Last updated: 2/2/2010

66. South San Diego Bay Coastal Wetland Restoration Project

Tier: 1

Local Lead: USFWS

SCC Project Manager: Megan Cooper, (619) 645-3167, mcooper@scc.ca.gov

Project Description: Prior to the 1900s, San Diego Bay was a fertile, shallow bay surrounded by extensive mudflats and salt marshes. Over the past hundred years, significant portions of the bay have been dredged or filled to accommodate port development and other urban uses. At the southernmost end of the bay, much of the original salt marsh and intertidal mudflat habitat was diked to create solar salt evaporation ponds and salt marsh and freshwater wetland habitats of the Otay River floodplain were converted to agricultural fields. Today, only about 20 percent of San Diego Bay's historic salt marsh habitat and 10 percent of its original intertidal habitat remain intact.

The U.S. Fish and Wildlife Service (Service) has prepared a Comprehensive Conservation Plan (CCP) for the San Diego Bay National Wildlife Refuge (Refuge) that guides refuge operations, habitat management, and visitor services on the Refuge for the next 15 years. The inclusion of habitat restoration proposals within the draft CCP reflects the need to restore sensitive coastal habitats within San Diego Bay, while still maintaining those aspects of the existing habitats on the Refuge that support nesting seabirds and other migratory birds. The primary goal of the recommended restoration is to improve habitat and foraging conditions for a number of listed species, particularly the California least tern, western snowy plover, and light-footed clapper rail.

The first phase of the restoration project will involve the restoration of salt marsh in 215 acres of solar salt ponds on the Refuge, 23 acres of high marsh at Emory Cove, and 19 acres of salt marsh at the Chula Vista Wildlife Reserve. The restoration of the western salt ponds will inform restoration and management decisions for the remaining 800 acres of salt ponds.

Status: The restoration of the western salt ponds began in January 2010 with the replacement of the tide gate at Pond 12. Tide gate construction will be finished by April 2010. The restoration project will continue in September 2010 with the excavation and reconfiguration of Ponds 10 and 11, and the breaching of the salt pond levees to restore tidal circulation in the ponds. The restoration of the Chula Vista Wildlife Reserve and Emory Cove will also begin in September 2010.

Acres/Stream Miles/Other: 233 acres

Estimated Total Cost: \$7,600,000

Funding: USFWS \$125,000

Port of San Diego	\$1,300,000
EPA (to Port of San Diego)	\$1,000,000
National Coastal Wetlands Grant	\$1,000,000
NOAA/ARRA	\$2,975,000
Coastal Conservancy	\$1,200,000

Last updated: 3/1/10

67. Los Laureles Canyon

Tier: Incubator

Local Lead: Tijuana River National Estuarine Research Reserve, Oscar Romo, oromo@parks.ca.gov

SCC Project Manager: Karen Bane, 510-286-0922, kbane@scc.ca.gov

Project Description: Laureles Canyon in the City of Tijuana Mexico drains into Goat Canyon and the Tijuana River National Estuarine Research Reserve (TRNERR) in the United States. The watershed is characterized by steep highly erodible slopes; rapid development; and concrete-lined stream channels. These conditions contribute to high sediment loads in Goat Canyon Creek which are degrading the downstream estuary. In August 2003, to compliment the Goat Canyon Sediment Basin project, the Conservancy authorized \$208,000 for a feasibility study of erosion control and storm water management options in Los Laureles Canyon. Recommendations included a combination of community projects, water and sediment control structures, and preservation of undeveloped portions of the watershed. The Earth Island Institute, UC San Diego, The California State Coastal Conservancy and US Environmental Protection Agency are funding community projects to revegetate neighborhoods, install pervious street pavers, and establish composting and recycling and citizen water quality monitoring. Additional planning is needed to ascertain the type and location of sediment and water control infrastructure and to develop an acquisition program.

Status: The community projects are attracting funds and technical assistance. Since 2008 Earth Island Institute has committed \$74,000 to implement a community based erosion control project in Los Laureles Canyon to revegetate canyons, install pervious pavers, educate community members and establish ongoing maintenance and monitoring of native plant restoration. Irrigation systems have been put in place and the necessary permits have been secured for these small-scale efforts. Additionally, an office has been created in the community and operations are now based out of a trailer on land privately owned by Oscar Romo in order the work more closely and efficiently with the community. Earth Island Institute has hired a Tijuana based independent contractor, Miriam Lopez, to plan and implement this project. Her scope of work includes: building community relations, training local residents, obtaining permits, working with sub contractors, ordering supplies, and working with Oscar Romo, Coastal Training Coordinator at the TRNERR. Earth Island Institute has hired ReCon, a U.S. based restoration firm, to provide plants and give technical assistance to residents in the care and maintenance of the project. In late February permits were obtained to bring thousands of native plants across the border and In March/April 2010 native plants will be planted and established. Oscar Romo has also received a machine to create pervious pavers and is working to develop a long-term business model for the residents of Los Laureles Canyon to create and sell these pavers to the larger Tijuana area. This project is receiving National attention and has been recently featured in a variety of publications including Orion Magazine.

Estimated Total Cost: Not available.

Funding:	Earth Island Institute	\$74,000
	Coastal Conservancy	\$208,000

Last updated: 3/4/2010

69. WRP Community Wetland Restoration Grant Program

Local Lead: Earth Island Institute

Tier: 1

SCC Project Manager: Mary Small, 510-286-4181, msmall@scc.ca.gov

Project Description: Provide grants up to \$30,000 for restoration and enhancement projects consistent with the goals of the Wetlands Recovery Project. The small grants program gives priority to projects with a significant education or community involvement element. The grant selection committee includes a representative from each

of the county task forces. Examples of projects include removal of invasive species and re-vegetation with native species, wetland clean-up projects, and community volunteer and education programs.

Program activities are summarized below:

2001 -- 10 projects funded, \$250,000 total
 2002 -- 10 projects funded, \$280,000 total
 2003 -- 15 projects funded, \$267,908 total
 2004 -- 11 projects funded, \$273,550 total
 2005 -- 9 projects funded, \$188,865 total
 2006 -- 11 projects funded, \$228,557 total
 2007 -- 11 projects funded, \$218,785 total
 2008 -- 12 projects funded, \$289,124 total
 2009 -- 12 projects funded, \$199,675 total

Status:

Program Cycle	Total Projects	Not Started	Ongoing	Complete	Stalled	Withdrawn
2001	10			10		
2002	10			10		
2003	15			15		
2004	11			11		
2005	9			9		
2006	11			9		2
2007	11			9		2
2008	12		5	7		
2009	12	1	9	1		1
TOTALS	101	1	14	81		5

Acres/Stream Miles/Other: regional project scope

Estimated Total Cost: \$325,000 annual

Funding: Earth Island Institute (annual) \$300,000
 SCC-Wetlands Recovery Project (annual) \$25,000

Cost Notes: The annual CWRGP budget includes approximately \$225,000 for grants and \$100,000 for project development, program management, training and technical support, WRP activities and Work Plan support.

Last updated: 4/28/2010