

COASTAL CONSERVANCY

Staff Recommendation
May 29, 2014

COMMUNITY WETLAND RESTORATION GRANT PROGRAM

Project No. 12-026-01
Project Manager: Greg Gauthier

RECOMMENDED ACTION: Conservancy approval of the 2014 Community Wetland Restoration Grant Program projects pursuant to its August 2, 2012 authorization.

LOCATION: Santa Barbara, Ventura, Los Angeles, Orange and San Diego counties coastal wetlands and watersheds.

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: [Project Locations Map](#)

Exhibit 2: [2014 CWRGP Projects Summary Table](#)

Exhibit 3: [August 2, 2012 Conservancy Authorization](#)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251-31270 of the Public Resources Code:

“Pursuant to its August 2, 2012 authorization approving the Community Wetland Restoration Grant Program (CWRGP), the State Coastal Conservancy approves the suite of CWRGP 2014 projects, more specifically described in the accompanying staff recommendation. Prior to the disbursement of funds for each project, Earth Island Institute shall submit for each project for review and approval by the Executive Officer of the Conservancy:

- a. A work program, including a project plan, schedule and budget.
- b. All contractors to be employed for the project.
- c. Evidence that all necessary permits and approvals have been obtained.
- d. An agreement to protect the public interest in satisfaction of Public Resources Code section 31116(c), where applicable.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed projects are consistent with the current Project Selection Criteria and Guidelines.
2. The proposed projects are consistent with the purposes and objectives of Chapter 6 of Division 21 of the Public Resources Code, regarding enhancement of coastal resources.
3. The Santa Barbara Zoo, TreePeople, Orange County Coastkeeper, Earth Discovery Institute, and California Invasive Plant Council are nonprofit organizations existing under Section 501(c)(3) of the United States Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”

PROJECT SUMMARY:

Staff recommends that the Conservancy approve the suite of 2014 Community Wetland Restoration Grant Program (CWRGP) projects pursuant to its authorization of funding for the CWRGP on August 2, 2012 (See Exhibit 3).

CWRGP is a program of the Southern California Wetlands Recovery Project (WRP). It is jointly managed by the Conservancy and Earth Island Institute, which provides funding annually for community-based restoration projects in coastal wetlands and watersheds in the Southern California region. The purpose of CWRGP is to further the wetland recovery goals of the WRP Regional Strategy; build local capacity to plan and implement wetland restoration projects; promote community involvement in wetland restoration activities; and foster education about wetland ecosystems. Projects funded through the program must include educational and community involvement elements as strong components of the project.

Each January, CWRGP solicits proposals from nonprofit organizations, university departments, and local agencies eligible to apply to the CWRGP. Proposals are reviewed by a technical advisory committee that includes staff from the Conservancy, Earth Island Institute, the Wildlife Conservation Board, and other WRP partner agencies. Projects are selected by spring with the work beginning in summer or early fall. Projects funded through the CWRGP are designed to be completed in one or two years.

Project selection for the 2014 CWRGP was completed in February, 2014. The 6 projects selected to be funded this year under this funding authorization are as follows:

Santa Barbara County

Andree Clark Bird Refuge Wetland Margin Enhancement Project

The Santa Barbara Zoo’s proposed project will continue to eradicate dense stands of invasive trees and herbaceous invasive plants along the 2.1 acres between the Andree Clark Bird Refuge and the Santa Barbara Zoo. Phase I of the project in 2011/2012 successfully treated approximately one-third of the shoreline along the Zoo. The currently proposed Phase II will

treat the remaining 1.4 acres of the site, which now contain dense stands of *Myoporum* (*Myoporum laetum*) trees with a mix of Garden nasturtium (*Tropaeolum majus*), Veldt grass (*Ehrharta erecta*), English ivy (*Hedera helix*), Victorian box (*Pittosporum undulatum*), and Periwinkle (*Vinca major*). The trees will be removed by the California Conservation Corps fire crew, under the supervision of personnel from Channel Islands Restoration. Trees will be cut with chainsaws and the stumps immediately treated with a 100 percent solution of Aquamaster (Glyphosate) to prevent re-sprouting. The herbaceous invasive plants will be treated and removed by a trained team of at least 300 volunteers. Volunteers will either (or both) remove plants by hand or spray with herbicide depending on the species level of aggressiveness.

The restoration plan will be prepared by Channel Islands Restoration (CIR). Volunteers will plant 1,200 native plant species in the project site after the invasive plants have been removed. They will plant an additional 330 native plants where Giant cane (*Arundo donax*) was removed during Phase I of the project. These plants will be donated to the project by the City of Santa Barbara. Seed and/or cuttings for the plants will be collected on-site by volunteers and by the nursery contractor starting in August 2014 and grown by local nurseries experienced in native plant propagation. . Volunteers under the direction of a CIR supervisor will perform all plantings starting in late winter/early spring of 2014/2015.

During Phase I, 365 people volunteered and the Zoo conservatively estimates that 300 people will volunteer on Phase II. The Zoo provides free admission for all volunteers—an incentive that proved to be popular in Phase I. They will recruit new volunteers from several corporations that support the Zoo, but have not participated in the habitat restoration program before. These include Venoco Inc, Levi Strauss & Co, and Home Depot. They will also recruit volunteers from several “outdoor” retail corporations. These will include Horny Toad, Patagonia and Decker Outdoor Corporation. They will again recruit volunteers from groups that did help during Phase I as well, including REI and Citrix Online, plus the volunteer corps of both the Zoo and CIR.

Total project cost: \$119,900 Amount requested from WRP: \$29,900

Remaining monies provided by Santa Barbara County’s Coastal Resource Enhancement Fund (\$30,900), volunteers (\$43,800), the Santa Barbara Zoo (\$11,600), Santa Barbara Audubon Society (\$500), and the City of Santa Barbara (\$3,200).

Ventura County

Santa Clara River Student Restoration Project

The Fillmore Unified School District’s proposed project will expand the existing Santa Clara River Field Project, a watershed education program developed as a partnership between Fillmore Unified School District (FUSD), U. S. Fish & Wildlife Service, and the Santa Clara River Trustee Council. In the proposed project FUSD students in grades K-12 will work with University of California Santa Barbara (UCSB) undergraduate students to participate in watershed education and a long-term riparian restoration project at the Santa Clara River. The students and volunteers will remove up to 10.8 acres of *Arundo donax* and Salt cedar

(*Tamarix* spp.) throughout the riparian corridor. Control and removal efforts will be overseen by representatives from UCSB's Cheadle Center for Biodiversity and Ecological Restoration (CCBER) and the Riparian Invasion research lab. Students will cut Arundo and Salt Cedar at the base using loppers and certified FUSD staff members will follow-up using approved herbicide treatment. The resulting biomass will be processed for a variety of purposes to show how "waste" can be turned into useful or profitable products. For example, students could construct flutes out of Arundo or grind Arundo to be used as pathways at schools or at the restoration sites, among other creative projects. Following removal, students and volunteers will initiate restoration by cultivating and out-planting approximately 2,000 native plants, including willows, cottonwoods, mule fat, elderberry, and other ecologically appropriate species to be determined when the project is implemented.

This work will be conducted as a collaborative effort between FUSD students and their parents, UCSB researchers and students, U. S. Fish & Wildlife Service, and volunteers from Ventura Audubon and other community organizations. Approximately 10 classes of 30 students each would participate in the program. This program has been funded by a renewable 6-year grant from the Santa Clara River Trustee Council in partnership with U. S. Fish & Wildlife Service and California Department of Fish and Wildlife. In the first year, a total of six teachers and their classes participated in the program. This school year (2013-2014), the program has been expanded to include 11 teachers and their students. Each teacher participated in a training workshop in the fall and brought their class to the river at least once during October-March in order to teach students about the important habitat and resources provided by the river. The proposed WRP funding would allow students to visit the river for a second trip that focused on the aforementioned restoration work.

This program targets populations that are traditionally underserved by environmental education programs and science education, including low-income and Latino youth. The program is currently coordinated by Laura Todis, Science Teach at FUSD's Sierra Continuation High School. The Continuation High School serves students who have not been successful in traditional high school programs. Sierra students will be involved as not only participants, but will also help run the program for younger students, providing them exposure to careers and leadership in environmental science.

Total Project Cost: \$82,000 Amount requested from WRP: \$30,000

Remaining monies provided by Fillmore Unified School District (\$11,000) and USFWS/Santa Clara River Trust (\$41,000).

Los Angeles County

Topanga Lagoon Filter Strip Restoration Project

The proposed TreePeople project will utilize volunteers to remove invasive plant species and plant native trees, herbaceous plants, and shrubs in a one acre filter strip riparian zone along the Topanga Creek floodplain that drains into Topanga Lagoon in Topanga State Park. At least 450 community volunteers will attend the 13 restoration events TreePeople will hold at the project

site. Volunteers will range from school groups, boy and girl scouts, retirees, and local residents from the surrounding neighborhood. Volunteers will learn how to remove invasive species and plant native species, while also learning why conserving this coastal stream and lagoon is important.

TreePeople uses passive restoration techniques as much as possible, and will closely monitor natural recruitment of native plants in areas cleared of invasive species. Planting goals will be adjusted as needed to accommodate the natural plant growth. The invasive species will be removed including arundo (*Arundo donax*), smilo grass (*Piptatherum miliaceum*), riggut (*Bromus* spp.), Bermuda grass (*Cynodon dactylon*), and euphorbia (*Euphorbia* spp.). The native species that will be planted include willows (*Salix* spp.), sycamore (*Platanus* spp.), mulefat (*Baccharis salicifolia*), giant wild rye (*Elymus condensatus*), Fremont cottonwood (*Populus fremontii*), and elderberry (*Sambucus* spp.). During the hot summer months, newly planted and young volunteer native plants will be watered to ensure establishment and survival in the dry season. TreePeople volunteers will also gather seeds from native species at the project site which will be germinated at TreePeople's nursery. TreePeople records where the seeds were gathered, so they can be planted back at the site where they grow. All of the plants that will be planted at the project site will be from stocks of germinated seeds that were gathered at previous restoration events in nearby project areas.

While TreePoepel is a volunteer-based organization, they will also hire a team of Ecological Interns who will be highly trained and work independently at the site once a week. TreePeople's Wildland Restoration Manager will conduct 3 eight-hour Ecological Intern training sessions over the course of the grant period to train new interns in plant identification, restoration techniques, tool training and safety, and restoration principals. These interns will be capable of more intensive invasive removal and will help monitor new growth at the site and flag any newly sprouted plants to ensure they are not trampled or accidently weeded during restoration events.

Total project cost: \$63,000 Amount requested from WRP: \$10,900

Remaining monies provided by TreePeople (\$4,800) and volunteers (\$47,300).

Orange County

Upper Newport Bay Eelgrass Restoration Project

The proposed Orange County Coastkeeper (Coastkeeper) project will restore up to 1,000 m² (0.25 acres) of eelgrass (*Zostera marina*) in summer 2014 in Upper Newport Bay (UNB) in Newport Beach, California as part of an ongoing larger multi-year community-based project. Coastkeeper expects to have a minimum of 50 volunteers participate directly in restoration activities. Volunteers will come from the local community in Newport Beach, schools that are involved in the Coastkeeper watershed education program, Back Bay Science Center education programs, university students, local divers from various dive shops and clubs, and local business employees that are encouraged to participate in their communities.

The goal of the project is not only to restore eelgrass throughout its historical range in UNB, but

also to develop more effective strategies of restoring and managing this important habitat through the design and testing of innovative and cost-effective transplant methods.

During the spring of 2012, Coastkeeper, in partnership with Coastal Resources Management, Inc., implemented the first community-based eelgrass restoration project in UNB. With the help of over 40 land-based volunteers and divers, they successfully restored over two acres of eelgrass habitat primarily along the northwest main channel side of the peninsula, where the eelgrass was historically present. In the second phase (the proposed project) in 2014, Coastkeeper and Coastal Resources Management intend to expand the extent of eelgrass beds along the length of the peninsula and on Shellmaker Island. Donor material will be collected from established eelgrass sites in Newport Harbor, approximately 600 meters south of the southernmost transplant site. Three transplant methods (bundling, transplanting eelgrass remotely with frames, and buoy-deployed seeding) in separate plots at each site will be employed in order to test best transplant methodologies.

A pre-restoration site assessment will be performed prior to restoration at both donor and restoration sites to determine baseline conditions. Donor sites (from 2012) were monitored on a quarterly basis to ensure recovery of the beds after take and no negative impacts occurred from previous restoration work. Long-term monitoring is already funded through a NOAA and Conservancy grant through December 2016.

Total project cost: \$111,800 Amount requested from WRP: \$15,000

Remaining monies will be provided by NOAA/SCC grant (\$64,000), Orange County Coastkeeper (\$1,000), and volunteers (\$31,800).

San Diego County

Earth Discovery Institute Explorers: A Force for Blue

The Earth Discovery Institute's (EDI) proposed project will conduct wetland and watershed restoration at a coastal marsh and an upland site in the San Diego Bay National Wildlife Refuge (SDBNWR) with a science service-learning model for elementary school students. This project combines science instruction to fourth and fifth grade students with habitat restoration and environmental stewardship. Staff and volunteers will assist with site preparation and maintenance at the two sites. Students from both coastal (South Bay Union School District) and upland (Cajon Valley Union School District) elementary schools will visit South San Diego Bay (SSDB; coastal site) and Crestridge Ecological Reserve (CER; upland site) where grade-level science curriculum will be integrated with restoration projects. Four hundred and fifty students (15 classes) will participate in the program. In preparation for the field trips, each class will be visited by the EDI Education Coordinator to discuss science and ecosystem issues, and how upper and lower watershed areas are related. Subsequently, students will take two science service-learning field trips, one to the wetlands, and one to the upland site where restoration activities will be incorporated into their hands-on science curriculum.

At the coastal marsh site in SSDB, the U. S. Fish & Wildlife Service (USFWS) and SDBNWR

staff will mechanically and chemically remove non-native plant species as well as drill holes for planting using a hydraulic auger prior to EDI restoration efforts. USFWS staff will also identify the restoration plant palette, mark the area for planting, and provide plant protectors for the new plants. Native plants used for this restoration will include goldenbush (*Isocoma menziesii*), buckwheat (*Eriogonum sciculatum*), bladderpod (*Peritoma arborea*), California sagebrush (*Artemisia californica*), California saltbush (*Atriplex californica*), white sage (*Artemisia ludoviciana*), black sage (*Salvia mellifera*), bush sunflower (*Encelia californica*), deerweed (*Acmispon glaber*), lemonade berry (*Rhus integrifolia*), jojoba (*Simmondsia chinensis*), wishbone bush (*Mirabilis laevis*), and California sea lavender (*Limonium californicum*). Working in small groups of 10 students, each group will plant 3 natives for a total of 150 plants.

At the upland site in CER, Endangered Habitats Conservancy staff and contractors will conduct mechanical and chemical removal of non-native plant species, identify a native plant palette, and delineate the area for planting by EDI staff and students. EDI staff and volunteers will pre-dig and pre-water the planting holes. The planting at CER will restore a 10-acre portion of a 20-acre riparian area. Native plants used for this restoration will include toyon (*Heteromoles arbutifolia*), California fuchsia (*Epilobium canum*), San Diego honeysuckle (*Lonicera subspicata* var. *denudate*), San Diego sagewort (*Artemisia palmeri*), mule fat (*Baccharis salicifolia*), California goldenrod (*Solidago californica*), Mexican elderberry (*Sambucus Mexicana*), and San Diego sedge (*Carex spissa*). Working in small groups of 10 students each group will plant 5 plants for a total of 225 plants.

Total project cost: \$36,500

Amount requested from WRP: \$29,400

Remaining monies will be provided by EDI (\$500), USFWS (\$6,200), and Endangered Habitats Conservancy (\$400).

Early Detection Rapid Eradication of Specific Invasive Non-Native Plants in Wetlands of San Diego County

The California Invasive Plant Council's (Cal-IPC) proposed project will survey, map, and control populations of five non-native plants that have been identified as high priority early detection rapid response targets in the San Diego region. This project would be a key component of a regional early detection and rapid response program (EDRR) that is being implemented by the San Diego Association of Governments (SANDAG). Confirming the limited distribution and mapping all populations of the EDRR target plants is a critical task. Further mapping and surveying around the known populations will help ensure that eradication is achieved.

Species that will be targeted for this project were specifically identified as EDRR priorities in the San Diego Invasive Management Plan. The identified species include eupatory (*Ageratina adenophora*), rattlebox (*Sesbania punicea*), purple loosestrife (*Lythrum salicaria*), yellow flag iris (*Iris pseudacorus*), and Algerian sealavendar (*Limonium ramosissimum*).

To work toward the goal of early detection and rapid eradication, this project will utilize a combination of community volunteers including local community groups, California Native Plant Society members, San Diego County Weeds Management Areas participants, consultants,

and the County Department of Agriculture Pest Control Division. Control work will be carried out by community groups that are established in areas where target plants are known to occur, while County Ag Department staff will carry out treatments, if herbicide applications are required. The community, with coordination and assistance by a consultant, will be educated to help in surveying and reporting target species. Surveying for the EDRR target species will be carried out with local 'friends groups'. 'Friends groups' include the many environmental groups that conduct restoration and recreational events in the areas where these plants occur.

Eradication is not achievable in one year. This project will help bring more species and more sites into the active treatment program that is being funded by SANDAG (a three year treatment commitment that has the potential to extend to 12 years). It will also improve the effectiveness of the SANDAG program by collecting more distribution data and generating more community involvement in the program, particularly the participation of groups and individuals already active in the San Diego Weeds Management Areas (WMA).

Total project cost: \$26,000

Amount requested from WRP: \$26,000

Site Description:

The Community Wetlands Restoration Program (CWRGP) encompasses the Southern California coastal region from Point Conception in Santa Barbara County to the United States border with Mexico (Exhibit 1). This region includes Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties. Coastal watersheds that drain to the Pacific Ocean are included in the geographic scope of the program. Project locations include coastal wetlands, tidal marshes, rivers, streams, vernal pools as well as buffer zones including dunes, river banks and coastal sage scrub habitats.

Many of the project locations were historical flood plains and extensive wetland ecosystems that have been degraded and fragmented over the past 100 years. Others are discreet pocket wetlands that, while small and sometimes isolated from other habitat, cumulatively comprise a critical natural resource for native flora and fauna in a highly urbanized environment.

Below are site descriptions for the six projects selected for the 2014 CWRGP.

Andree Clark Bird Refuge Wetland Margin Enhancement Project

The proposed project site is on the 2.1 acre margin along the perimeter of the Andree Clark Bird Refuge where it abuts the property of the Santa Barbara Zoo. The project lies entirely within a parcel owned by the City of Santa Barbara.

The 42-acre Andree Clark Bird Refuge contains a freshwater/brackish lake that drains into the ocean at East Beach and is surrounded by marsh, coastal-sage scrub, and non-native vegetation. The Refuge provides habitat to 228 bird species, 43 of which nest there. The Refuge is one of only two locations in Santa Barbara where Double-crested Cormorants and Black-crowned Night-herons breed, and is also home to the Western Pond turtle — a California species of special concern — and the tidewater goby — a federally endangered fish. Five federally listed

bird species have been observed at the Refuge: Brown Pelican (formerly listed), Peregrine Falcon, Least Tern, Willow Flycatcher, and Bank Swallow. Thirteen federal-candidate or rare/declining species have been observed there including the Least Bittern that once bred at the Refuge.

The project site is currently dominated by non-native *Myoporum* (*Myoporum laetum*) trees (dense stands of at least 30-40) mixed with Garden nasturtium (*Tropaeolum majus*), Veldt grass (*Ehrharta erecta*), English ivy (*Hedera helix*), Victorian box (*Pittosporum undulatum*), and Periwinkle (*Vinca major*).

Santa Clara River Student Restoration Project

The proposed project site is located at the junction of Sespe Creek and the Santa Clara River on the Fillmore Unified School District's School Farm property. The project site lies within property owned by the Fillmore Unified School District (Deo Persaud, Assistant Superintendent). The proposed restoration site comprises 10.8 acres of riparian woodland and scrub habitat adjacent to the school farm's fields and orchards. The area contains 35.4% cover of native trees and shrubs including willows (*Salix exigua*, *S. laevigata*, and *S. lasiolepis*), mule fat (*Baccharis salicifolia*), coyote brush (*B. pilularis*), cottonwoods (*Populus fremontii*, *P. trichocarpa*), elderberry (*Sambucus mexicana*), and coastal sagebrush (*Artemisia californica*) along with numerous groundcover taxa.

The main infestation of non-natives consists of *Arundo* (*Arundo donax*) and Salt cedar (*Tamarix* spp.) which cover between 10% and 30% of the habitat. These non-native species threaten the native habitat utilized by various riparian dependant species. Several of these species, including Unarmored Threespine Stickleback, Willow Flycatcher, and Least Bell's Vireo are endangered or threatened species.

Topanga Lagoon Filter Strip Restoration Project

The proposed project consists of a one acre filter strip riparian zone that borders the seasonal floodplain of Topanga Creek in Topanga State Park. The project site is immediately adjacent to the western-edge of the creek's floodplain which has the potential to become a creek bank in the future due its proximity to a braided channel. The site receives water from the north, northeast, and southeast-facing slopes of the nearby hillsides which flow through the site before reaching Topanga Creek which ultimately drains into Topanga Lagoon. Topanga Creek is one of only three creeks in the Santa Monica Bay watersheds that contains the endangered southern steelhead trout.

The project site is currently the most sparsely canopied area near the creek. Of the native vegetation that does grow there, species include willows (*Salix* spp.), mulefat (*Baccharis salicifolia*), white alders (*Alnus rhombifolia*), and giant wild rye (*Elymus condensatus*). The native plant community is choked with invasive species, such as arundo (*Arundo donax*), smilo grass (*Piptatherum miliaceum*), ripgut (*Bromus* spp.), Bermuda grass (*Cynodon dactylon*), and euphorbia (*Euphorbia* spp.).

Upper Newport Bay Eelgrass Restoration Project

The proposed project site is located in Upper Newport Bay (UNB) in Newport Beach, California. Principal jurisdictional agencies include the City of Newport Beach, the County of Orange, and the California Department of Fish and Wildlife. The site lies within the Upper Newport Bay Ecological Reserve (UNBER) which consists of 752 acres of wetland habitat. Approximately ten acres of intertidal and shallow subtidal potential eelgrass (*Zostera marina*) habitat — defined as habitat suitable for eelgrass growth but currently unvegetated, is present in UNB.

The proposed restoration sites are located along the main channel side of DeAnza Peninsula and Shellmaker Island surrounding Orange County Coastkeeper's base of operations at the Back Bay Science Center. These areas are directly east of their first eelgrass restoration project sites also along the DeAnza Peninsula, which were successful in establishing over 200 m² of eelgrass cover. The proposed sites are composed of shallow subtidal mudflats, with bottom sediments consisting of silts to fine mud.

Earth Discovery Institute Explorers: A Force for Blue

The proposed project sites include a coastal wetland within the San Diego Bay National Wildlife Refuge (SDBNWR) and a riparian wetland site within the Crestridge Ecological Reserve (CER). The SDBNWR is an urban refuge located on San Diego Bay in Southern California. The SDBNWR is owned by the U. S. Fish & Wildlife Service and consists of two units: the South San Diego Bay unit and Sweetwater Marsh unit. The proposed wetland restoration site is within the South San Diego Bay unit (SSDB unit). The predominant native habitats within the SSDB include shallow subtidal habitat and intertidal mudflats. In addition, historic salt evaporation ponds afford resting and foraging habitat for a variety of avian species, while the levees around the ponds provide important nesting habitat for seven species of ground nesting seabirds. Intertidal mudflats provide foraging habitat for birds and fish and the most extensive mudflats within SSDB lie within and immediately adjacent to the SSDB unit. The on-going restoration site is a 5-acre parcel at the end of 13th Street in Imperial Beach, San Diego within the SSDB unit.

The CER is centrally located at the eastern edge of urban development between San Diego County's Multiple Species Conservation Program lands to the north of Interstate 8. It is a 3,000 acre island of habitat almost entirely surrounded by residential development located within the San Diego River watershed. The reserve is owned by the California Department of Fish and Wildlife and managed by The Endangered Habitats Conservancy. CER supports mature riparian woodlands and Engelmann oak woodlands, surrounded by coastal sage scrub, chaparral, and native grasslands. The project site focuses on a 20-acre riparian area through which a seasonal

stream flows.

Early Detection Rapid Eradication of Specific Invasive Non-Native Plants in Wetlands of San Diego County

The proposed project will occur within wetland habitat throughout San Diego County. Different wetland areas within San Diego County have been selected for each of the five invasive plant species that have been identified for possible eradication. For eupatory (*Argentina adenophora*), two populations of less than two acres have been identified at Florida Canyon and Sweetwater Marsh. Rattlebox (*Sesbania punicea*) is found in riparian areas in the Central Valley, forming dense, expansive stands that modify habitat for flora and fauna. It has been found at one site, Tecolote Canyon in San Diego, which feeds into Mission Bay and its initial control work will start there. For purple loosestrife (*Lythrum salicaria*), two populations will be controlled in the Escondido Creek watershed. Yellow flag iris (*Iris pseudacorus*) typically occurs in dense wetland vegetation which can make detection and treatment difficult. For this project, it is known to occur at seven sites on three watersheds within San Diego County and those will be targeted first. Lastly, Algerian sealavender (*Limonium ramosissimum*) is recognized as being highly invasive in high marsh and estuarine vegetation; however it has not been reported in the six estuaries in the San Diego region. This project will survey all estuaries to confirm that it is not a threat.

Project History:

The Southern California Wetlands Recovery Project (WRP) is a partnership of 18 state and federal agencies, working in concert with local governments, environmental organizations and the business community to acquire, restore and enhance coastal wetlands and watersheds.

At the WRP's October 2000 symposium, there was clear consensus that in order to be successful the WRP needed a strong education and community outreach component to its programs. The Small Grants Program, now named the Community Wetland Restoration Grant Program (CWRGP), was conceived as a way to further this objective while also building institutional capacity in the five counties for planning and implementing restoration projects.

In January 2001, at the same time that proposals were solicited to update the WRP Work Plan, applications for the formerly-entitled Small Grant Program (now CWRGP) were posted on the WRP's website and a program announcement was emailed to over 800 people. The WRP nonprofit partner, Environment Now, housed the program for the first 8 years.

Since its inception, CWRGP has completed 112 projects with a total of \$2,500,000 in funding. Several of the organizations initially funded through the CWRGP have gone on to develop and implement larger scale acquisition and restoration projects for inclusion on the WRP Work Plan. The list of such organizations includes the Huntington Beach Wetlands Conservancy, San Elijo Lagoon Conservancy, the City of Santa Barbara, South Coast Habitat Restoration, Mountains Restoration Trust, the City of Costa Mesa, and Orange County Coastkeeper. These and other organizations underscore CWRGP's ability to help develop the skills and capacity in groups,

through small project design and implementation, to take on larger projects for the purpose of Southern California wetlands recovery.

PROJECT FINANCING

Coastal Conservancy Approved August 2, 2012*	\$650,000
Earth Island Institute	\$900,000
Total Project Costs	\$1,550,000

***(Note: Funding for CWRGP projects was authorized by the Conservancy on August 2, 2012 (See Exhibit 3) Project financing information is provided here for reference purposes only.)**

The funding for the six projects recommended for approval in this authorization totals up to \$443,700. Of that amount, up to \$141,200 is anticipated to come from the Conservancy’s August 2, 2012 authorization of funds and the remaining up to \$302,500 is anticipated to come from private and federal funding sources.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed authorization for approval of the 2014 suite of CWRGP projects is undertaken pursuant to Chapter 6 of Division 21, Sections 31251-31270 of the Public Resources Code, regarding coastal resource enhancement projects. Consistent with Section 31251, “(t)he conservancy may award grants to public agencies and nonprofit organizations for the purpose of enhancement of coastal resources that, because of indiscriminate dredging or filling, improper location of improvements, natural or human-induced events, or incompatible land uses, have suffered loss of natural and scenic values.” Five of the projects in the 2014 suite of projects for the CWRGP are led by nonprofit organizations. One of the projects is led by a local school district. One of the proposed projects (Upper Newport Bay Eelgrass Restoration Project)) addresses restoration of habitat which has been degraded due to human impacts. The other five projects have suffered loss of natural habitat values because of natural or human-induced events that have introduced invasive and non-native species into the project sites.

Consistent with Section 31251.2, the Conservancy may award grants to enhance a watershed resource partly outside of the coastal zone. Santa Clara River Student Restoration Project is located within the coastal draining Santa Clara River watershed partly outside the coastal zone. The Topanga Lagoon Filter Strip Restoration Project is located within the coastal draining Santa Monica Bay watershed partly outside the coastal zone. These projects are supported by the local agencies having jurisdiction over the entire project area. The Santa Clara River project has the support of the Fillmore Unified School District. The Topanga Lagoon Filter Strip Restoration Project has the support of the Angeles District State Park.

Section 31252 requires that all areas proposed for resource enhancement by a state agency, local public agency, or nonprofit organization are identified in a certified local coastal plan or program as requiring public action to resolve existing or potential resource protection problems or in other

local plans which the commission determines to be consistent with the policies and objectives of Division 20 (commencing with Public Resources Code section 30000).

The Andree Clark Bird Refuge Wetland Margin Enhancement Project, Santa Clara River Student Restoration Project, Topanga Lagoon Filter Strip Restoration Project, Upper Newport Bay Eelgrass Restoration Project, EDI Explorers: A Force for Blue, and Early Detection Rapid Eradication of Specific Invasive Non-native Plants in Wetlands of San Diego County all are identified in respective project proposals as resolving existing or potential resource protection problems. See Consistency with Local Coastal Program Policies section, below.

Consistent with Section 31253, the recommended amount of funding is determined by evaluating the total amount of funding available to the Conservancy for coastal resource enhancement projects, the fiscal resources of each applicant, the urgency of the project relative to other similar projects, and the application of other factors prescribed by the Conservancy for the purpose of determining project eligibility and priority. The Conservancy's funding is appropriate at this time because each of the projects' benefits to coastal habitat is significant and the use of community volunteers in all of these projects provides added cost savings and an important public education component.

**CONSISTENCY WITH CONSERVANCY'S 2013 - 2018
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 5, Objective B** of the Conservancy's 2013 - 2018 Strategic Plan, the proposed suite of 2014 CWRGP projects collectively will enhance approximately 27 acres of coastal habitats including coastal wetlands and intertidal areas, and approximately 0.5 miles of stream corridors.

Consistent with **Goal 9, Objective A**, each of the proposed 2014 CWRGP projects will support programs or events that improve public understanding of coastal resources by involving communities and volunteers in coastal resource restoration.

Consistent with **Goal 9, Objective 9B** the Santa Clara River Student Restoration project and Earth Discovery Institute Explorers project will support the design and installation of interpretive or educational displays related to coastal and watershed resource education.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed suite of 2014 CWRGP projects are consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on November 10, 2011 in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the Consistency with Conservancy's Enabling Legislation section above.

2. **Consistency with purposes of the funding source:** See the Project Financing section above.
3. **Support of the public:** The proposed projects are supported by elected officials, numerous community and nonprofit organizations, and local agencies, including the cities of Santa Barbara, Channel Islands Restoration, Santa Barbara Audubon Society, U. S. Fish & Wildlife Service, Santa Clara River Trustee Council, Endangered Habitats Conservancy, California Department of Fish and Wildlife, California Native Plant Society, and ‘friends groups’ throughout San Dieguito, San Elijo, Tecolote Canyon, San Diego canyons, Batiquitos, Agua Hedionda in San Diego, California. Further support comes from UCLA, UCSB, and Coastal Resources Management, Inc. Proposed projects for the CWRGP also are vetted at local meetings to allow input from the local community and to ensure that projects represent local priorities.
4. **Location:** The 2014 suite of CWRGP projects are located within the coastal zone or coastal draining watersheds. The 2014 suite of CWRGP projects’ locations span the five southernmost California coastal counties constituting the California Bight, from Point Conception in Santa Barbara County to the international border with Mexico. More specific information on each project location is provided in the Project Summary section, above.
5. **Need:** The CWRGP is not sustainable without Conservancy funding and each of the 2014 projects cannot happen without Conservancy funding. The Andree Clark Bird Refuge has additional funding sources, but Conservancy funding will provide staff support and native plants for restoration efforts. The Santa Clara River Student Restoration project has additional funding sources, but Conservancy funding will provide project planning and design costs as well as supplies and transportation. The Topanga Lagoon Filter Strip Restoration Project has additional funding sources; however Conservancy funds will provide additional support for developing restoration and training events, restoration supplies, and transportation. The Upper Newport Bay Eelgrass Restoration Project has additional funding sources, but the Conservancy will provide assistance to develop volunteer workshops and events as well as developing their education and outreach programs. The EDI Explorers project has additional funding, but Conservancy funds will support personnel wages in order to develop in-classroom instruction, volunteer events, and field trainings. Further, Conservancy funds will aid student transportation and restoration supplies costs. The Early Detection Rapid Eradication of Specific Invasive Non-native Plants in Wetlands of San Diego County has no other source of funding identified for the project and cannot proceed without Conservancy funding.
6. **Greater-than-local interest:** The CWRGP is regional by design and serves greater- than-local interest through the cumulative benefits of its multiple small acreage projects. The suite of 2014 projects helps restore native wetland habitat critical for migratory birds and commercially and recreationally important fish species. It also provides educational opportunities for people throughout the region to participate in on-the-ground habitat restoration activities.
7. **Sea level rise vulnerability:** Only two of the proposed projects are vulnerable to sea level rise. The Upper Newport Bay Eelgrass Restoration Project’s site is within an area vulnerable to sea-level rise. To ensure eelgrass survival and resiliency to future conditions, researchers intend to limit transplant areas to depths between 0.0 ft and -3 ft MLLW because any losses associated with sea-level rise would occur at the deeper edges of the beds to depths below

which eelgrass can survive. And, one of the project sites from the EDI Explorers' project is within an area vulnerable to sea-level rise; however this project does not have a plan component to adapt to climate change, focusing its efforts on developing science service-learning for elementary school students instead of designating buffer zones for wetland migration at this time. This project provides funding solely for environmental education. The project site is located within the San Diego Bay National Wildlife Refuge (SDBNWR) Complex. The Refuge's Comprehensive Conservation Plan (CCP), approved in 2006, states that "CCPs are intended to evolve with each Refuge, and the [National Wildlife Refuge System] Improvement Act specifically requires that these plans be formally revised and updated at least every 15 years. . . . Until a formal revision is initiated, the USF&S will periodically review and update the CCP to address needs identified as a result of monitoring or in response to adaptive management procedures."

To that end, the USF&W's Inventory and Monitoring Program provided funding to United States Geological Survey for the completion of downscaled climate change models for the Refuges within the SDBNWR Complex, including the Sweetwater Marsh Unit of the SDBNWR. This information will assist the SDBNWR Complex in preparing for sea level rise.

Additional Criteria

8. **Urgency:** Five of the 2014 suite of CWRGP projects target invasive species for removal. Timely implementation of small invasive removal projects before these species can further spread helps prevent widespread dispersal and habitat destruction. The 6th project, the Upper Newport Bay Eelgrass Restoration Project, seeks completion now while conditions are ideal to increase the ecosystem's ability to withstand predicted future effects of global climate change (e.g., sea-level rise and rising sea surface temperatures).
10. **Leverage:** See the Project Summary section, above for specific details of each of the 2014 CWRGP project's leverage of funding.
12. **Innovation:** All of the 2014 suite of CWRGP projects demonstrate innovation through the inclusion of a wide range and diversity of volunteers often targeting low-income and underserved communities and multi-generational community members.
13. **Readiness:** All of the 2014 suite of CWRGP projects described in the Project Summary section above are ready to implement and to be completed within one to two years.
14. **Realization of prior Conservancy goals:** See Project History section, above.
16. **Cooperation:** The 2014 suite of CWRGP projects by design foster cooperation between the lead organization and the community in helping to enhance coastal resources. Multiple community organizations, nonprofits and local agencies are involved in each of the 2014 suite of CWRGP projects' implementation.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

Andree Clark Bird Refuge Wetland Margin Enhancement Project: The City of Santa Barbara Local Coastal Program was adopted in May 1981, amended in November 2004, and identifies the Andree Clark Bird Refuge as a sanctuary for migratory waterfowl and states that this use shall be preserved, protected, maintained, and, where necessary, enhanced and restored (policies 6.12 and 6.13). This project is consistent with this policy, since it will restore habitat for waterfowl through the removal of non-native species and the planting of native flora.

Santa Clara River Student Restoration Project:

The Ventura County Coastal Area Plan, together with the Coastal Zoning Ordinance, constitutes the County's LCP. This LCP was last amended in September 2008 and states that "biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored". The proposed project will restore riparian habitat in the Santa Clara River watershed through education programs. Further, the proposed project is consistent with the water quality protections found within the Los Angeles Regional Water Quality Control Board's (Region 4) Basin Plan adopted in 1994.

Topanga Lagoon Filter Strip Restoration Project: Lower Topanga Canyon is identified as a Sensitive Environmental Resource Area in the Malibu Local Coastal Program, 1986. The Malibu Local Coastal Program consists of the Land Use Plan and Local Implementation Plan. The Land Use Plan identifies its main objective as "preserv[ing], protect[ing], and enhanc[ing]... coastal resources, including land and marine habitats, and water quality." The project area is also identified as a Sensitive Environmental Resource Area in the draft Santa Monica Mountains Local Coastal Program, which was submitted in February 2014. This project will restore riparian buffer zones important for native plant and endangered fish species.

Upper Newport Bay Eelgrass Restoration Project: The proposed project is consistent with the Newport Beach LCP and will "protect eelgrass meadows for their important ecological function as a nursery and foraging habitat within the Newport Bay ecosystem." Further, the County of Orange and City of Newport Beach's Integrated Regional and Coastal Watershed Management Plan were adopted on August 9th, 2009 and has included eelgrass habitat as an essential part of the plan. Further, the City of Newport Beach's Harbor Area Management Plan was prepared by Coastal Resources Management, adopted on August 18th, 2010, and "acknowledges the need for a balance between harbor maintenance and recreational activities and the preservation of important [eelgrass] habitat. To mitigate the potential impacts to eelgrass of dredging and development, the [plan] requires avoidance where possible and restoration where avoidance is not practical." The Upper Newport Bay Eelgrass Restoration Project is consistent with both of these local coastal plans because it will directly restore eelgrass habitat via planting eelgrass shoots and seeds.

Earth Discovery Institute Explorers: A Force for Blue: Imperial Beach Local Coastal Program was adopted November 21st, 2013 and strives to make Imperial Beach more pedestrian friendly. The City of Chula Vista Bayfront Local Coastal Plan (Chula Vista LCP), adopted in August 9th, 2012 and amended in May 9th, 2013, promotes habitat management and protection and environmental education programs for residents, visitors, and workers. The Chula Vista LCP states that "A continuing major objective of the Chula Vista LCP has been the preservation, protection and enhancement of sensitive wetland and upland wildlife habitat resources in the

Bayfront.” The proposed project is consistent with these two LCPs because it will provide educational signage for pedestrians, develop a strong educational program that expands the classroom and on-site restoration, and enhance/restore riparian and wetland habitat. Further, the South San Diego County Multiple Species Conservation Program (MSCP) was approved in 1997 and adopted in 1998. The proposed project will improve habitat for at least fifteen of the MSCP’s listed species as well as the larger goals of supporting and improving wildlife corridors.

Early Detection Rapid Eradication of Specific Invasive Non-Native Plants in Wetlands of San Diego County: The proposed project sites lie within coastal cities and unincorporated areas of San Diego County. Cities included are La Jolla, Chula Vista, Encinitas, and Imperial Beach.

The La Jolla Local Coastal Program (LCP) identifies the need to “Conserve and enhance the natural amenities of the community such as ... wildlife and natural vegetation...” The proposed project will involve the community to track and eradicate invasive plant species and thus is consistent with the LCP.

The Chula Vista LCP states that “A continuing major objective of the Chula Vista LCP has been the preservation, protection and enhancement of sensitive wetland and upland wildlife habitat resources in the Bayfront.” The identification and removal of invasive plant species through this project supports the wetland preservation and protection goal of this LCP.

The City of Encinitas LCP designates San Elijo Lagoon as an environmentally sensitive habitat and states that “The City will encourage the preservation and the function of San Elijo Lagoon . . . as viable wetlands, ecosystems and habitat for resident and migratory wildlife. . . .” The proposed project is consistent with the LCP because it will help ensure the preservation and function of San Elijo Lagoon by preventing the introduction of invasive plant species from within the watershed.

The City of Imperial Beach LCP Conservation and Open Space (CO) Element identifies the conservation and protection of the beach, estuary and related ecosystems as a major goal and recognizes natural resources as a key foundation of the city. CO policy 9 states the “The City shall support actions to ensure water quality and watershed protection including ... to the extent feasible, preserve, and where possible, create or restore areas that provide water quality benefits, such as riparian corridors and wetlands. The proposed project will help restore and preserve wetland and riparian habitat through the removal of invasive species before they can spread and degrade habitat throughout the watershed.

For unincorporated areas of San Diego County that are part of the proposed project, the County General Plan (General Plan), adopted by the San Diego County Board of Supervisors in August 2011, serves as the LCP. The Guiding Principles of the General Plan “[p]romote environmental stewardship that protects the range of natural resources and habitats that uniquely define the County’s character and ecological importance.” The Land Use Element policy 6.1 requires “the protection of intact or sensitive natural resources in support of the long-term sustainability of the natural environment. Further, the Conservation and Open Space Element (COS) provides measures for the preservation, conservation, development, and use of natural resources. Goal COS-3 specifically identifies the “Protection and Enhancement of Wetlands” as a major goal.

Removal of invasive species at early stages of infestation as part of the proposed project supports the protection and enhancement of wetlands. Inclusion of volunteers further supports the General Plan by promoting environmental stewardship of the County's natural resources.

The proposed project would be a key component of a regional early detection and rapid response program (EDRR) that is being implemented by the San Diego Association of Governments (SANDAG). Developing this type of EDRR program was one of the key recommendations in the San Diego Management Plan ("*Management Priorities for Invasive Non-native Plants: A Strategy for Regional Implementation, San Diego County, California*"). The proposed project is consistent with this management plan as it targets five invasive plant species that were specifically identified as EDRR priorities in the San Diego Invasive Management Plan.

COMPLIANCE WITH CEQA:

The CWRGP 2014 suite of projects under this authorization all are categorically exempt from the California Environmental Quality Act (CEQA), under 14 California Code of Regulations (CCR) Section 15304 minor alterations to land, water and/or vegetation, and/or under 14 CCR Section 15333, habitat restoration or enhancement projects not exceeding five acres in size. Upon approval, staff will file a Notice of Exemption for each project. A specific discussion of the applicability of these two categorical exemptions (referred to just by section number) to each project is provided below.

Andree Clark Bird Refuge Wetland Margin Enhancement Project: The proposed project will remove invasive trees and herbaceous invasive plants and install native plants over a 1.4 acre marsh and coastal scrub habitat. The project is categorically exempt from CEQA under section 15333, because it is a habitat enhancement project less than 5 acres in size. Consistent with section 15333, the project will not have an adverse impact on endangered, rare or threatened species or their habitat; no hazardous materials are in or around the site; and the project will not result in any significant cumulative impacts.

Santa Clara River Student Restoration Project: The proposed project will build upon the existing Santa Clara River Field Project, a watershed education program, and plans to remove invasive vegetation and plant native species from the riparian areas surrounding the confluence of the Santa Clara River and the Sespe Creek. The project is categorically exempt from CEQA under section 15304 minor alterations of the land, water and/or vegetation because the project's activities will consist of removing invasive species and planting native species by hand. Consistent with section 15333, the project is a small habitat enhancement project of less than five acres which will be carried out principally with hand labor and no mechanized equipment and the project will not have an adverse impact on endangered, rare or threatened species or their habitat; no hazardous materials are in or around the site; and the project will not result in any significant cumulative impacts.

Topanga Lagoon Filter Strip Restoration Project: The project will remove invasive species from the filter strip riparian zone along the Topanga Creek floodplain with volunteers using manual weeding techniques. The project is categorically exempt pursuant to section 15304,

minor alterations of the land, water and/or vegetation and section 15333 as a small habitat restoration project that does not exceed five acres in size and assures the enhancement and restoration of habitat for plants and wildlife. The project involves re-vegetation of less than five acres of disturbed areas with native plant species, and the restoration or enhancement of habitat that will be carried out principally with hand labor and not mechanized equipment. Consistent with section 15333, the project will not have an adverse impact on endangered, rare or threatened species or their habitat; no hazardous materials are in or around the site; and the project will not result in any significant cumulative impacts.

Upper Newport Bay Eelgrass Restoration Project: The Upper Newport Bay Eelgrass Restoration Project will restore up to 0.25 acres of eelgrass in Upper Newport Bay as part of an ongoing larger multi-year community-based project. The project is categorically exempt pursuant to section 15304 as minor alterations of the land, water and/or vegetation on existing officially designated wildlife management areas or fish production facilities which result in improvement of habitat for fish and wildlife resources or greater fish production. The project is further categorically exempt under section 15333 as a small habitat restoration project that does not exceed five acres and assures the maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife. Consistent with section 15333, the project will not have an adverse impact on endangered, rare or threatened species or their habitat; no hazardous materials are in or around the site; and the project will not result in any significant cumulative impacts.

Earth Discovery Institute Explorers: A Force for Blue: The proposed project will conduct wetland and watershed restoration at a coastal marsh and an upland site with a science service-learning model for elementary school students. The project is categorically exempt under section 15304 minor alterations of the land, water and/or vegetation. It is also exempt under section 15333, as a habitat enhancement project on an area of less than 5 acres in size. Consistent with section 15333, the project involves re-vegetation of disturbed areas with native plant species, and stream or river bank re-vegetation, the primary purposes of which are to improve habitat for amphibians or native fish and to reduce or eliminate erosion and sedimentation. Also, consistent with section 15333, the project will not have an adverse impact on endangered, rare or threatened species or their habitat; no hazardous materials are in or around the site; and the project will not result in any significant cumulative impacts.

Early Detection Rapid Eradication of Specific Invasive Non-Native Plants in Wetlands of San Diego County: The proposed project will survey, map, and control populations of invasive non-native plants throughout the San Diego region. The project is categorically exempt from CEQA pursuant to section 15304, minor alterations of the land, water and/or vegetation. The project is also categorically exempt pursuant to section 15333 as it is a small habitat restoration project that does not exceed five acres in size and assures the enhancement and restoration of habitat for plants and wildlife. Consistent with section 15333, the project will not have an adverse impact on endangered, rare or threatened species or their habitat; no hazardous materials are in or around the site; and the project will not result in any significant cumulative impacts.