



Coastal
Conservancy
STATE of CALIFORNIA



2020 Coastal Management Fellowship Proposal

California State Coastal Conservancy's Wetlands Recovery Project

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Title

Implementing and Evaluating Efforts to Increase Coastal Wetland Resilience in Southern California

Contact

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Background & Introduction

Of the 330 coastal wetlands that historically existed between Santa Barbara and San Diego counties, in coastal Southern California, there are only 105 of these wetlands remaining today (Regional Strategy 2018). The remaining wetlands are smaller than they used to be, more fragmented, and many are cut-off from their natural sources of water and sediment. The diversity of coastal wetland types has also suffered—lagoons, river mouths, and small creeks have been modified for navigation and flood protection and filled by development. This has left the remaining wetlands in a poor state, more vulnerable to disturbance and stress. While urbanization will continue to impact wetland habitats, the added stress of climate change and sea-level rise further challenges the survival of these delicate ecosystems. Southern California has already lost 62% of its historic coastal wetlands. Without intervention our remaining coastal wetlands will be lost between urban development and rising seas.

The Southern California Wetlands Recovery Project (WRP) was created in 1997 as a regional voice for the valuable coastal wetland resources of Southern California. The WRP consists of 18 state and federal agencies, scientists, and community groups meeting regularly to develop and prioritize wetland conservation efforts throughout Southern California. The WRP consists of all the state and federal government agencies currently funding, managing, or regulating wetland projects between Point Conception and the Mexican border. The primary mechanism for coordination and implementation of the Regional Strategy 2018 is through the WRP Work Plan. The Work Plan contains proposed preservation/ acquisition, restoration, and enhancement projects that will accomplish the goals and objectives identified in the Regional Strategy 2018. Work Plan projects have been vetted by the member agencies that comprise the Wetland Managers Group and ultimately adopted by the WRP Directors Group at an annual meeting.

The [California State Coastal Conservancy](#) (SCC) leads, coordinates, and supports the WRP. Prior to the SCC helping to create the WRP, limited regional coordination or communication amongst these groups existed. The SCC is a state agency established in 1976 to protect and improve natural lands and waterways, help people access and enjoy the outdoors, and sustain local economies along the length of the California's coast and around San Francisco Bay. SCC is primarily a grant-making organization, but we are also thought leaders in climate change adaptation, developing novel projects with our partners and providing critical technical assistance to our grantees.

In 2018, the WRP completed its visionary regional plan, the [Regional Strategy 2018](#) (Strategy). The Strategy provides ecological context and quantitative objectives to guide restoration practitioners and government agencies to design, fund, approve, and implement projects that will help wetlands adapt to sea-level rise. The Strategy also articulates specific implementation strategies to guide the efforts of restoration practitioners that will improve wetland resilience to climate change and other stressors. The

long-term goals of the Strategy bring together, coastal wetlands, watersheds, community-engagement, and science in a comprehensive approach to wetlands persistence.

Now that the Strategy is complete, the WRP needs support to ensure effective implementation of the quantitative objectives, engagement of the community, and tracking of the objectives to determine if the WRP is meeting the goals outlined in the Strategy.

Goals and Objectives

The NOAA fellow would support the WRP in implementing its four overarching goals:

1. Preserve and restore resilient coastal tidal wetlands and associated marine and terrestrial habitats. This goal focuses on recovering functional wetland habitat areas, restoring natural processes of sediment and water flow, and facilitating opportunities for wetland migration in response to sea-level rise.
2. Preserve and restore streams, adjacent habitats, and other non-tidal wetland ecosystems to support healthy watersheds. This goal focuses on recovering non-tidal wetlands by restoring natural water and sediment movement, removing fish passage barriers, and restoring native habitat compositions throughout watersheds.
3. Support education and compatible access related to coastal wetlands and watersheds. This goal focuses on enhancing the quality of life of the 30 million people who live in the WRP region by creating significant coastal access and education opportunities that enhance the public's enjoyment and understanding of wetlands.
4. Advance the science of wetland restoration and management of Southern California. This goal focuses on filling necessary information gaps identified by the scientific analyses completed for the Regional Strategy 2018.

To achieve these goals, the fellow will be working on the following specific **objectives** and tasks:

- 1. Develop and prioritize wetland restoration projects in Southern California.**
 - a. Develop and distribute Request for Proposals document (RFP) for 2021 Work Plan
 - b. Convene two Wetland Managers Group meetings to score and select Work Plan project proposals (travel from Oakland to Costa Mesa, California)
 - c. Coordinate with WRP agencies and project proponents throughout development of the Work Plan
 - d. Provide technical assistance to Work Plan project proponents when needed (travel from Oakland to Southern California for site visits when necessary)
- 2. Evaluate the WRP's regional restoration objectives using an online geospatial tool.**
 - a. Manage WRP data in EcoAtlas for all WRP Work Plan projects
 - b. Develop new protocols for tracking project information efficiently and accurately
 - c. Develop data visualizations using EcoAtlas
 - d. Share data and visualizations of regional wetland objectives through to the WRP's Marsh Adaptation Planning Tool (MAPT)
- 3. Develop and advance a regional wetland monitoring program for Southern California.**
 - a. Attend monthly California Wetland Monitoring Workgroup (CWMW) meetings (Sacramento, California)

- b. Develop a plan (i.e. project description, team, schedule, & budget) for one or more projects from the list of recommendations for a comprehensive regional monitoring program for coastal wetlands in the Regional Strategy 2018
 - c. Write grant proposal to the U.S. Environmental Protection Agency's Wetland Program Development Grants
 - d. If funded, implement proposed project(s)
- 4. Manage a regional, community-based wetland restoration grant program.**
- a. Develop an outreach campaign of the WRP's Community Wetlands Restoration Grant Program (CWRGP)
 - b. Develop two Request for Proposals document for funding from the WRP's CWRGP
 - c. Develop and convene CWRGP two project selection committees & meetings to review and select projects
 - d. Write two staff recommendation reports and present projects to the State Coastal Conservancy Board to authorize disbursement of grants
 - e. Manage all CWRGP projects in terms of contracting, invoicing, and technical support (travel from Oakland to Southern California for site visits when necessary)

Project Description

Over the two-year fellowship, the fellow will be supporting the WRP by helping to convene the Wetland Managers Group and the Director's Group, updating the Work Plan in 2021, and providing technical assistance to the project proponents who are applying for the Work Plan (**Objective 1**). The value of regional coordination through the WRP occurs at its quarterly Wetland Managers Group and annual Directors Group meetings. These meetings provide a platform for multiple agencies to discuss funding, permitting, technical issues, and policies that affect the pace of wetlands restoration. These meetings are also the mechanism for selecting and discussing projects to add to the Work Plan, which is updated on a biannual basis through a Request for Proposals process. The 2019 Work Plan consists of 18 wetland restoration, 3 acquisition, 13 planning, and 2 research projects, all of which address wetland resilience, restoration, or science. The fellow would provide technical assistance by downscaling regional wetland restoration objectives for each project and helping Work Plan project proponents develop proposals that will attract funding and meet the approval of regulatory agencies.

The fellow will help the WRP evaluate progress on achieving its goals and objectives outlined in the Strategy (**Objective 2**). The contribution of WRP Work Plan projects toward regional wetland recovery is quantified using the online geospatial tool called [EcoAtlas](#). The fellow will be responsible for developing methods to track wetland area, diversity, sea-level rise migration potential, and other objectives using EcoAtlas. The fellow will also help SCC create data visualizations using EcoAtlas and share those visualizations through the WRP's Marsh Adaptation Planning Tool, or [MAPT](#). Providing data on wetland recovery through visualizations on MAPT will make this information readily available to the restoration community and WRP agencies.

The Strategy outlined several recommendations for a comprehensive regional monitoring program for coastal wetlands following the state-wide regional monitoring program called the Wetlands and Riparian Area Monitoring Program or [WRAMP](#). The NOAA fellow would help develop one or more projects to help guide the WRP toward the goal of implementing a regional monitoring program (**Objective 3**). While the WRP's project tracking via EcoAtlas is helpful in understanding progress toward the WRP's specific objectives, it does not assess the impact of the WRP on all coastal wetlands throughout the

region. For that, we need a comprehensive monitoring program that assesses the collective actions of the WRP and others on the abundance, diversity and condition of wetlands throughout the region. The WRP has been involved with supporting and developing regional monitoring tools and protocols for almost twenty years and is well positioned to provide the regional coordination needed to implement a multi-agency regional monitoring program and yet this has not happened yet. Once the project(s) is(are) developed in terms of identifying team members and creating a scope and budget, the fellow will write a grant proposal to obtain external funding for project implementation. The grant program will likely be the U.S. Environmental Protection Agency's Wetland Program Development Grants which is typically advertised at the beginning of every other year (next one in 2021). If funded, the fellow would lead project implementation.

Finally, the fellow would manage the WRP's [Community Wetlands Restoration Grants Program](#) (CWRGP; **Objective 4**). The CWRGP provides funding annually for community-based restoration projects in coastal wetlands and streams throughout Southern California. The CWRGP's purpose is to further the WRP's Goal 3 of community engagement and access, build local capacity to plan and implement wetland restoration projects, promote community involvement in wetland restoration activities, and foster education about wetland ecosystems.

In the past, the CWRGP has suffered from a lack of exposure, only receiving a handful of proposals from similar groups of non-profits each year. The fellow will be in charge of developing a new outreach campaign to restoration practitioners throughout Southern California in order to increase the program's visibility and the amount of applications received. The fellow would also write a Request for Proposals document, develop a WRP subcommittee to review project applications, convene subcommittee meetings to select projects, and provide technical assistance to project proponents (see Milestones & Outcomes below).

Milestones and Outcomes

Objectives	Tasks	Completion Date
Objective 1	RFP for 2021 Work Plan	July 2021
	Convene WMG meetings	July 2021
	Technical assistance to project proponents	As-needed
Objective 2	EcoAtlas project forms	October 2022
	Project tracking protocols	July 2022
	Transfer visualizations to MAPT	December 2021
	Attend CWMW meetings	On-going (monthly)
Objective 3	Develop 1-2 monitoring projects	January 2021
	Write EPA grant proposal(s)	April 2021
	Implement projects	On-going
	Develop CWRGP outreach campaign	December 2020
Objective 4	RFP for 2021 CWRGP & 2022 CWRGP	March 2022
	CWRGP 2021 & 2022 selection committee	March 2022
	Two SCC Board recommendations	May 2022
	Manage CWRGP grants	On-going

Fellow Mentoring

Being a state agency, the fellow at SCC will be introduced to a number of projects and colleagues throughout the California coast. SCC is relatively small agency (70 people total) with most staff collaborating and meeting regularly in our Oakland offices. With that, the fellow will be an integral part of our staff and will be interacting with many project managers, lawyers, and our Executive Officer regularly. The fellow will be within the South Coast region of the SCC—a tightly knit group of nine project managers. The fellow will also participate in staff meetings, committees focused on climate change and social justice, and professional development trainings.

SCC will provide meaningful mentorship with her direct supervisor being Evyan Borgnis Sloane, an SCC Project Specialist and the Manager of the WRP. Evyan Sloane is a warm and fun colleague and supervisor who has been working in wetland restoration and science for over a decade, and at SCC for over 5 years, and is seen as an expert in the fields of wetland restoration and coastal adaptation. The fellow will also engage with the South Coast Regional Manager, Megan Cooper, who has worked on wetlands restoration in California for 20 years and who oversees the South Coast workgroup.

SCC has hosted several fellows and interns. We use a fellow mentorship plan (adapted from Washington Department of Ecology) to develop individualized goals for the fellowship and to establish regular method for checking in with fellows and interns on their experience and mentorship needs. Finally, the WRP is a highly collaborative group with participants ranging from public agencies to non-profits to academics and consultants. The fellow will be introduced to a wide variety of sectors and specialists in wetland restoration, conservation, science, and policy (See Project Partners).

Project Partners

The WRP is a collaborative group by design and will provide the fellow with ample opportunities to engage with partners throughout the State. The WRP consists of all the state and federal government agencies currently funding and regulating wetland projects between Point Conception and the Mexican border. The WRP is chaired by the California Resources Agency and supported by the California State Coastal Conservancy. Directors from each of 18 partner agencies form the WRP Directors Group, the governing body of the WRP, and agency staff form the WRP Wetland Managers Group. The Wetland Managers Group meets on a quarterly basis to make vital decisions that guide the WRP's programmatic goals and to select projects to be on the WRP Work Plan. The Science Advisory Panel consists of leading wetland researchers who met regularly for five years to develop the Regional Strategy 2018 (see below). The Wetlands Advisory Group consists of leading wetland restoration practitioners, experts, and land owners who meet regularly to provide input on WRP planning and project-level efforts (see below).

The federal agencies participating in the WRP include: National Marine Fisheries Services (NOAA), U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Natural Resource Conservation Service, U.S. Army Corps of Engineers. The state agencies include: State Coastal Conservancy, Natural Resources Agency, Coastal Commission, California EPA, Department of Fish and Wildlife, Department of Parks and Recreation, State Lands Commission, State Water Resources Control Board, Wildlife Conservation Board, San Diego Association of Governments, Santa Ana Regional Water Quality Control Board, San Diego Regional Water Quality Control Board, Los Angeles Regional Water Quality Control Board, and Central Coast Regional Water Quality Control Board.

The scientists participating in the WRP include: Dr. Eric Stein (Southern California Coastal Water Research Project), Dr. Richard Ambrose (University of California Los Angeles), Dr. John Callaway (Delta

Science Program & University of San Francisco), Dr. John Largier (University of California Davis), Dr. Josh Collins (San Francisco Estuary Institute), Dr. Christine Whitcraft (California State University Long Beach), Dr. Jason Keller (Chapman University), Dr. Jeff Haltiner (ESA), Dr. Martha Sutula (Southern California Coastal Water Research Project), Dr. Jeff Crooks (Tijuana River National Estuarine Research Reserve), Dr. Shelley Luce (Heal the Bay), Jeremy Lowe (San Francisco Estuary Institute), and Dr. Sarah Giddings (University of California San Diego). While the WRP Science Advisory Panel is no longer meeting on a regular basis as the Regional Strategy 2018 is completed, they do convene for project specific tasks.

The stakeholders participating in the WRP include: San Diego Canyonlands, USFWS Refuges, City of Oceanside, Nature Collective, Los Peñasquitos Lagoon Foundation, Nordby Biological, San Diego Audubon, Laguna Ocean Foundation, Orange Coast River Park, Amigos de Bolsa Chica, Trout Unlimited, Orange County Water District, Everest Consultants, Resource Conservation District of the Santa Monica Mountains, Moffat & Nichol, Santa Monica Bay Restoration Foundation, Ventura Hillside Conservancy, The Nature Conservancy, Mugu Lagoon Navy Base, University of California Santa Barbara, South Coast Habitat Restoration Consultants, Channel Islands Restoration, and City of Santa Barbara.

Cost Share Description

The SCC will contribute both the in-kind and the \$15,000 required non-federal fellowship match. The SCC's operating budget will cover the non-federal cost share and the costs associated with office space, office supplies, computer, phone/internet service, software, and travel. The SCC will provide the fellow with the necessary time to attend required NOAA trainings and conferences.

Strategic Focus Area – Healthy Coastal Ecosystems

Supporting the WRP in implementing the Regional Strategy 2018 (Strategy) addresses nearly all of the goals of the Healthy Coastal Ecosystems focus area. First, the Strategy is based in the latest climate science for the region and the fellow will help transfer the Strategy's results by tracking and helping visualize the objectives and management strategies in order to "strengthen policies and decisions and effectively manage coastal... resources." Second, by managing the Community Wetland Restoration Grant Program (CWRGP) the fellow will "increase and enhance opportunities for the public, students, and teachers to experience, understand, and appreciate coastal resources." Many CWRGP recipients have been community groups and public schools. By managing the CWRGP program, the fellow will help review applications and select community groups to enhance and restore coastal wetlands across Southern California. The fellow will also attempt to reach new community groups that have not received CWRGP grants in the past as a part of the new outreach campaign. Additionally, the fellow will "support coastal and ocean resource managers through cooperative funding, data, information, and tools." For funding, the fellow will help update the Work Plan 2021, find funding streams for Work Plan projects, and help select grant recipients for the CWRGP. For data, information, and tools the fellow will help the WRP track objectives and visualize progress via two online geospatial tools: EcoAtlas and MAPT. Finally, the fellow will "enable conservation and restoration of critical coastal ecosystems and habitat by integrating priorities and interests across agencies and partners organizations using geospatial applications." The Strategy defines the priorities and interests of agencies and stakeholders for resilient wetland restoration and the fellow will use geospatial tools to help the WRP communicate, track, and implement those priorities.