



San Francisco Bay Conservation and Development Commission
2019 State Fellowship Opportunity
Adapting to Rising Tides Program Fellow

1. Host location and contact information:

San Francisco Bay Conservation and Development Commission
455 Golden Gate Ave, Suite 10600
San Francisco, CA 94102

2. Fellowship Supervisor:

Steve Goldbeck, Chief Deputy Director

3. Point of contact for finalists: Heather Dennis

Research Analyst

415-352-3646, heather.dennis@bcdC.ca.gov

4. Position Description:

General Overview:

San Francisco Bay Conservation and Development Commission: The San Francisco Bay Conservation and Development Commission (BCDC) is a California state planning and regulatory agency with regional authority over the San Francisco Bay, the Bay's shoreline band, and the Suisun Marsh. BCDC was created in 1965 and is the nation's oldest coastal zone agency. Its mission is to protect and enhance San Francisco Bay and to encourage the Bay's responsible and productive use for this and future generations. The Commission leads the Bay Area's ongoing multi-agency regional effort to address the impacts of rising sea level on shoreline communities and assets. Its authority is found in the McAteer-Petris Act, the San Francisco Bay Plan, and other special area plans and laws and policies.

The Planning Division is responsible for conducting major planning studies, specialized research and policy development, and keeping the Commission's policy plans current, including the San Francisco Bay Plan. Planning division staff work collaboratively with other agencies and organizations on issues of regional importance including marsh conservation, sea level rise adaptation, recreation planning and oil spill prevention and response.

Adapting to Rising Tides Program: In 2010, BCDC and NOAA's Office for Coastal Management brought together local, regional, state and federal agencies and organizations, as well as non-profit and private associations for a collaborative planning project along the Alameda County shoreline to identify how current and future flooding will affect communities, infrastructure, ecosystems and economy. Since then, the ART Program has continued to both lead and support multi-sector, cross-jurisdictional projects that build local and regional capacity in the San Francisco Bay Area to plan for and implement adaptation responses. These efforts have enabled the ART Program to test and refine adaptation planning methods to integrate sustainability and transparent decision-making from start to finish, and foster robust collaborations that lead to action on adaptation.

Adapting to Rising Tides Program Fellow:

One fellow will be placed in BCDC's planning division to help support two current projects within the Adapting to Rising Tides Program:

- **Adapting to Rising Tides, Bay Area** is the Bay Area's first 9-county Bay Area regional scale assessment. The project will conduct a climate assessment to evaluate the vulnerabilities and consequences of, and develop adaptation strategies for, the Bay Area transportation network including four key asset categories as defined through the ART

process. The project seeks to illustrate the interconnected nature of regional vulnerabilities and identify the need for a range of adaptation strategies, including physical interventions, governance approaches and funding and financing options.

- **Adapting to Rising Tides, Eastern Contra Costa County** will develop modeling and analyses needed to understand the sea level rise vulnerability in Eastern Contra Costa County, which is uniquely influenced by both the Bay and the Delta. Using the ART adaptation planning process, tools, and data, ART staff will work with local jurisdictions, agencies, and organizations in Contra Costa County, as well as regional, state and federal agencies, to understand the vulnerabilities and consequences communities may face, including: the disproportionate impacts among community members, the disruption of transportation and utility infrastructure, the loss of employment sites, and limitations on access to goods and services. The project will work towards identifying shared and individual actions that will help improve resilience to rising sea levels and other climate change impacts.

The fellow will have the opportunity to participate in a highly collaborative, regional scale planning process while developing and applying geospatial, analytic, and communication skills to aid in the execution of ART process. The fellow will:

- Build GIS expertise and capacity using desktop and web-based tools to analyze exposure to current and future flooding.
- Gain familiarity with vulnerability assessments utilizing the ART Assessment Questions to collect data and information that will inform characterization of vulnerability and consequences for the assets, systems of assets, sectors and services addressed in the projects.
- Develop communication skills participating in large collaborative processes to address the specific challenges of building climate resilience across different communities, assets and services, and jurisdictions and owners • Coordinate and provide staff support for meetings of the various stakeholder groups including regional working group and public meetings.
- Gain experience developing data and functions for web mapping applications used by BCDC staff and the public.

Although the Adapting to Rising Tides projects will be the fellow's primary tasks, additional opportunities will likely include supporting the agency's internal GIS data and web mapping applications, in house training opportunities including robust exposure to regulatory and enforcement processes, and potential assistance in San Francisco Bay Plan amendment processes. BCDC is dedicated to accommodating and developing the fellow's professional goals, ensuring exposure to a wide range of tasks and agency partners, and will tailor the suite of tasks accordingly. BCDC has a long history of hosting fellows and interns and staff is used to welcoming and engaging fellows in meetings, challenging and topical work assignments. Fellows have universally found the experience enriching and rewarding and have continued their career with BCDC or moved to partner organizations, such as the San Francisco Estuary Partnership, San Francisco Planning Department and the Coastal Commission. Our Dredging & Sediment Management Team is currently hosting a NOAA Coastal Management Fellow, our GIS Team is hosting a GIS intern, and our planning team is hosting a master's student in marine science. These three fellows and interns are leading projects that will be instrumental to the agency moving forward.

CALIFORNIA COASTAL COMMISSION

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**2019 SEA GRANT FELLOWSHIP PROPOSAL****CLIMATE CHANGE EMPHASIS****CALIFORNIA COASTAL COMMISSION****Overview**

The California Coastal Commission (Commission) implements the California Coastal Act of 1976 and has regulatory authority over development along the coast in balance with the protection of coastal resources, environmentally sensitive habitats, and public access. This work is carried out through land use planning and permitting. The Commission is an independent, quasi-judicial state agency whose authority is defined as the coastal zone, a 1.5 million-acre area stretching 1,270 miles along the state's mainland coastline from Oregon to Mexico, and around nine offshore islands (333 miles of island shoreline). The Commission also has the responsibility to work with local governments to establish Local Coastal Programs (LCPs) which, when certified by the Commission, become the land use plan basis for coastal permitting at the local level. Furthermore, the Commission has the purview and planning responsibility to assess and address issues of state-wide importance such as sea level rise and coastal erosion and the implications of these on Coastal Act resources. Both sea level rise and coastal erosion will be exacerbated by climate change.

Position Description

The Sea Grant Fellow will be exposed to and work on a broad range of coastal and ocean issues that are part of the Coastal Commission's regulatory and Local Coastal Program planning work throughout the coastal zone. He/she will have a unique opportunity to assist executive, management and policy level staff in the headquarters and district offices of the California Coastal Commission on a variety of coastal and ocean resource protection issues with a special emphasis on climate change and sea level rise adaptation planning. The Fellow will also have the opportunity to interface directly with senior government officials and leaders in resource management policy throughout California. Fellow work products, potentially including presentations and collaborative work on reports with the Coastal Commission and with other state agencies, especially the Resources Agency, the State Lands Commission and the Ocean Protection Council (OPC), will be highly visible. The Sea Grant Fellow may work with the OPC to help coordinate/staff efforts to improve interagency collaboration on California's marine protected areas, climate change and other issues to be determined.

More specifically, a Sea Grant Fellow with the Coastal Commission will support the executive and senior policy and technical staff in its broad state-wide climate change policy work such as implementation of Safeguarding California, participating in multi-agency meetings, serving as a communication conduit between the Commission and other state agencies, drafting Commission recommendations for state-wide planning documents, and assisting the Commission in developing or enhancing projects including those that are done in cooperation with other state partners. The role of the fellow may include support on large-scale team projects and also likely several smaller independent projects which the fellow will contribute to and manage parts of.

Projects/activities that the fellow will be expected to work on would include:

- 1) Assisting in review of climate-related documents such vulnerability assessments, adaptation plans and other technical reports in support of land use plan development for Local Coastal Programs and regulatory work on coastal development permits;
- 2) Supporting outreach and education efforts to local governments, other state agencies, stakeholders and the public about climate and sea-level rise planning information, products and tools. This work could include assisting with updates to the Commission's website and with planning outreach events such as webinars and workshops;
- 3) Assisting Interagency Coordination and Collaboration. As described above, the fellow would support Commission staff efforts done in coordination with other state agencies to implement, track and report on climate adaptation and other sea level rise planning efforts;
- 4) Supporting implementation of climate change related action items of the Commission's 2013-2018 Strategic Plan and the 2018-2019 update of the Strategic Plan; and
- 5) Supporting various climate-related special projects including two distinct sea level rise-related grant projects, one on planning for critical infrastructure and one on protecting public trust lands and resources. The Fellow would carry out discreet tasks to complete those special projects.

Given the wide range of projects and initiatives undertaken by the Commission along the entire California coast, a successful Sea Grant Fellow at the Commission must be willing to take on and deliver products for a range of projects. While there will be an expected emphasis on climate change related projects for most assignments, there will be opportunity for the fellow to dig more deeply into topics of particular interest (such as environmental justice); assignments can be customized to match the unique skills of the selected fellow. The fellow will also be exposed and have the opportunity to work on core elements of the Commission's program such as review of coastal development permit applications and land use planning documents. The selected Sea Grant Fellow must be able to work well under minimal supervision and guidance. Possessing an entrepreneurial spirit, strong personal initiative and an ability to work well in a collaborative style with others would be a great plus.

The Coastal Commission senior management has broad experience and success in hosting fellows and giving them a wide breadth of experience in coastal management issues. The Commission has a team of staff members focusing on climate change issues. This fellowship offers an excellent opportunity for team work and peer collaboration for a Sea Grant Fellow.

Host Location

California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Fellowship Supervisors

Susan Hansch, Chief Deputy Director
Michelle Jesperson, Federal Programs Manager

Point of Contact for Finalists

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California Sea Grant
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California Sea Grant State Fellowship 2019 Host Description

- **Host Location:** California Sea Grant at Scripps Institution of Oceanography, La Jolla, CA
- **Fellowship supervisor:** Katherine Leitzell, California Sea Grant Communications Coordinator
- **Contacts:** Katherine Leitzell kleitzell@ucsd.edu, Caitlin Coomber, ccoomber@ucsd.edu
- **Position:** California Sea Grant Science Communication Fellow

About California Sea Grant

[California Sea Grant](#) is a collaboration of the National Oceanic and Atmospheric Administration (NOAA), the State of California and universities across the state to create knowledge, products and services that benefit the economy, the environment and the citizens of California. [Sea Grant](#) is NOAA's primary university-based program to promote environmental stewardship, long-term economic development and responsible use of coastal, ocean, and Great Lakes resources.

California Sea Grant serves the people and resources of the state's diverse coastal environments, which stretch 1100 miles, encompass several distinct marine zones, and include a wide variety of coastal habitats and living marine resources. The program funds coastal and marine-related research at more than 75 public and private institutions throughout California and the nation. Specifically, we offer these services for coastal and marine science and policy issues:

- Grant and fellowship opportunities for scientists and graduate students
- Complete proposal solicitation, review, and grant administration services
- Extension specialists dedicated to impartial research and outreach for coastal stakeholders and communities
- News and library services
- Connection to a nation-wide network of Sea Grant experts and partners

The mission of the California Sea Grant communications department is to provide science-based information to diverse audiences in support of the goals and objectives of the program, the National Sea Grant network, and NOAA. Current focus areas include sustaining healthy coastal and marine ecosystems, strengthening coastal communities and economies, and supporting a sustainable supply of seafood via environmentally responsible fisheries and aquaculture.

The communications team is a small team—two staff members—who handle all communication activities for the program. This includes writing, website content development, multimedia and print design, and working with the California Sea Grant [extension team](#) on various outreach materials to translate complex scientific information into a form readily understood by non-scientists. The communications department



also advises on strategy and messaging, and works closely with others in the program on reporting tasks to the national office.

Position Description

The California Sea Grant Science Communication Fellow will work as an integral part of the communication team. Daily activities may include a variety of communications-related activities including science writing of different types (news, blogs, press releases, fact sheets, feature articles, research summaries, etc.), digital communications, publications tracking and reporting assistance, social media, editing, design, and video work, and development of communications strategies, depending on the interests and skills of the applicant, and the needs of the program.

The California Sea Grant Science Communication Fellow will be expected to harness the network of the State Fellows program to connect with state agencies, better understand information needs, and develop communications materials aimed at agency and policy audiences. The fellow will be expected to lead at least one project aimed at expanding the reach of California Sea Grant's research and extension activities, likely with a focus on agency and policymaker audiences.

Potential projects may include:

- Developing and curating a regular newsletter highlighting California ocean/coastal policy news
- Organizing and facilitating a webinar series aimed at bringing science to agency/policymaker audiences
- Creating videos, story maps or other creative multimedia

The California Sea Grant Science Communication Fellow will have the opportunity to gain hands-on experience in science communication, using a variety of modern communications techniques. As a member of a small team, the fellow will have the opportunity to contribute significantly to the capacity of the program, to build a portfolio of science communication products, and to learn from the broad knowledge of our communications team who have over 15 years of combined experience in the field.

To be successful in this position, applicants should have:

- Excellent verbal and written communication skills including writing for non-academic audiences
- Strong personal initiative and a desire to learn
- An ability to comprehend complex topics, grasp the big picture, and boil them down to their essence
- Experience working as part of a team, giving and receiving constructive feedback
- A demonstrated interest in science communication and digital content production



The Delta Science Program will host three Sea Grant Fellows in 2019

Background

The Sacramento–San Joaquin Delta is part of the largest estuary on the West Coast, supplying two-thirds of California’s water and providing vital habitat for endangered, endemic, and migratory species such as Chinook salmon and the majestic Sandhill crane.

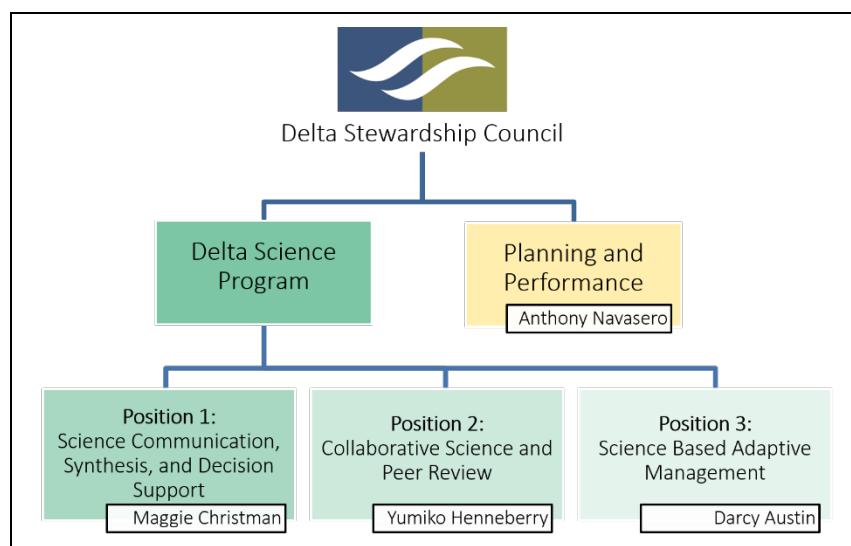
The purpose of the Delta Stewardship Council is to uphold the coequal goals for the Delta—a more **reliable statewide water supply** and a **healthy and protected ecosystem**, both achieved in a manner that protects and enhances the unique characteristics of the **Delta as an evolving place**. The Delta Science Program (DSP) was established to develop scientific information and syntheses on issues critical for managing the Bay-Delta system and to build an open, integrated, and collaborative Delta science community.



As one of three Science Program fellows, you will work at the dynamic interface of science and policy—**analyzing, reviewing, coordinating, and communicating** science on several high-priority issues, including:

- Climate change
- Sea level rise
- Water supply
- Habitat restoration
- Endangered species
- Non-native/invasive species

As the capital of California, Sacramento is a hub for environmental science and policy. Science Program fellows will build an extensive network by working with a range of professionals from government agencies, consulting firms, academia, and NGOs, among others. Past fellows have enjoyed touring the Delta, taking professional development courses, attending seminars and conferences, and assisting other agencies with fieldwork.



Position 1: Science Communication, Synthesis, and Decision Support Unit

This unit has three primary tasks: 1) improve science communications among multiple stakeholders in the Bay-Delta system and the general public, 2) facilitate and participate in analysis and synthesis of scientific information, and 3) facilitate cooperative decision-making with tools such as data sharing platforms and integrated modeling. Based on his or her interests, the Fellow will have the option of working on one of the above tasks or a blend of tasks.

Host Location: 980 Ninth Street, Suite 1500, Sacramento, California

Fellowship Supervisor: Maggie Christman, Program Manager II

Maggie.Christman@deltacouncil.ca.gov, (916) 445-0464

Potential Projects

- Create a website, blog, or report communicating specific aspects of the Delta; for example, [A Beginner's Guide to the Delta](#), a project completed by a past fellow.
- Work with the Lead Scientist on monthly reports that summarize recent science efforts around the Delta. [Recent Example](#).
- Prepare and present reports to the Council summarizing Delta water supply metrics and ecological indicators. [Recent Example](#).
- Summarize science funded by the DSP in a format accessible to non-scientists including policy-makers.
- Assist in dissemination of DSP efforts through social media (e.g., [Science Fridays](#) on Twitter), fact-sheets, and other means.
- Plan and facilitate 3-5 Brown Bag seminars centered on a specific theme of importance to managing the Bay-Delta system.
- Participate in the [State of Bay Delta Science](#) and other synthesis efforts.
- Collaborate on various other decision support efforts led by the unit, including integrated modeling, structured decision making, and data management projects.

Position 2: Collaborative Science and Peer Review Unit

The Collaborative Science and Peer Review Unit is working on several efforts focused on: 1) catalyzing activities that foster connections and collaborations through coordinating Bay-Delta science efforts with a diverse set of stakeholders and agencies, 2) supporting priority research aligned with the [Science Action Agenda](#), which this unit led the coordination of, 3) synthesizing scientific information to generate the best available science for informing water and environmental decision making, and 4) facilitating independent scientific peer reviews of programs, plans, and reports.

Host Location: 980 Ninth Street, Suite 1500, Sacramento, California

Point of Contact: Yumiko Henneberry, Senior Environmental Scientist

Yumiko.Henneberry@deltacouncil.ca.gov, 916-445-7690

Potential Projects

Specific projects will be identified with the fellow based on their expertise and interests.

- Contributing to the implementation of the Delta Science Plan including assessing baseline status of select actions, integrating emerging technology in research, and organizing and coordinating multi-agency meetings
- Investigating how social science can be more effectively integrated with the natural and physical sciences to inform management and policy decisions in the Bay-Delta and/or other managed estuaries
- Developing a strategy for increasing the DSP's roles in advancing the integration of social sciences with the natural and physical sciences
- Developing curriculum related to Delta science, land use, and/or culture that meets California education standards
- Developing a report on approaches to coordinating Policy-Science forums
- Assessing the collaborative network of the Delta based on ongoing work
- Synthesizing information on stressor impacts on the Bay-Delta ecosystem
- Working with interagency groups developing models and decision support tools
- Evaluating independent peer review efforts, i.e. whether the recommendations were followed, how they could be improved, etc., to inform future reviews.

Examples of Previous Fellows' Projects

- Contributed to a multi-agency and stakeholder [salmon gaps analysis report](#)
- Contributed to the development of the Interim Science Action Agenda
- Assisted in organizing a public workshop on Sacramento River temperature modeling
- Conducted an analysis of the potential values striped bass provide to the Delta
- Wrote a collaborative science governance report and appendix to the Delta Science Plan

Position 3: Science-Based Adaptive Management Unit

This unit provides support and leadership on the use of adaptive management, which is a structured, scientific approach to management that aims to produce and actively incorporate new knowledge into management to reduce uncertainties. Current work includes (1) advising on adaptive management frameworks and project- and landscape-level conceptual models, (2) leading the Interagency Adaptive Management Integration Team to develop a habitat restoration adaptive management program in the Delta, and (3) supporting the reviews of the [Delta Independent Science Board](#) (Delta ISB). The Delta ISB, which is comprised of renowned scientists across the nation and across disciplines, provides oversight of programs that support adaptive management in the Delta.

Host Location: 980 Ninth Street, Suite 1500, Sacramento, California

Fellowship Supervisor: Darcy Austin, Program Manager II

Darcy.Austin@deltacouncil.ca.gov, (916) 445-0720

Potential Projects

- Support the reviews of the Delta ISB, which includes helping with literature reviews, analyzing questionnaire data from the science community, and coordinating interagency events (e.g., panel discussions) to advance the discussion on review topics.
 - Current review topics include water supply reliability, non-native species, monitoring, and the science governance of the [Interagency Ecological Program](#).
 - Past fellows contributed to the Delta ISB's [fish and flows review](#) and [water quality review](#).
- Create summary sheets and outreach materials on Delta ISB reviews (see [example](#)).
- Evaluate and synthesize lessons learned from past restoration projects in the context of the approach/design and resulting outcomes.
 - Past fellows helped evaluate Delta levee habitat projects (see [report](#)).
- Support the efforts of the Interagency Adaptive Management Integration Team to develop a habitat restoration program in the Delta.
- Plan and coordinate other interagency meetings, panels, workshops, and field trips.



DELTA STEWARDSHIP COUNCIL

A California State Agency

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2019 California Sea Grant State Fellowship Opportunity

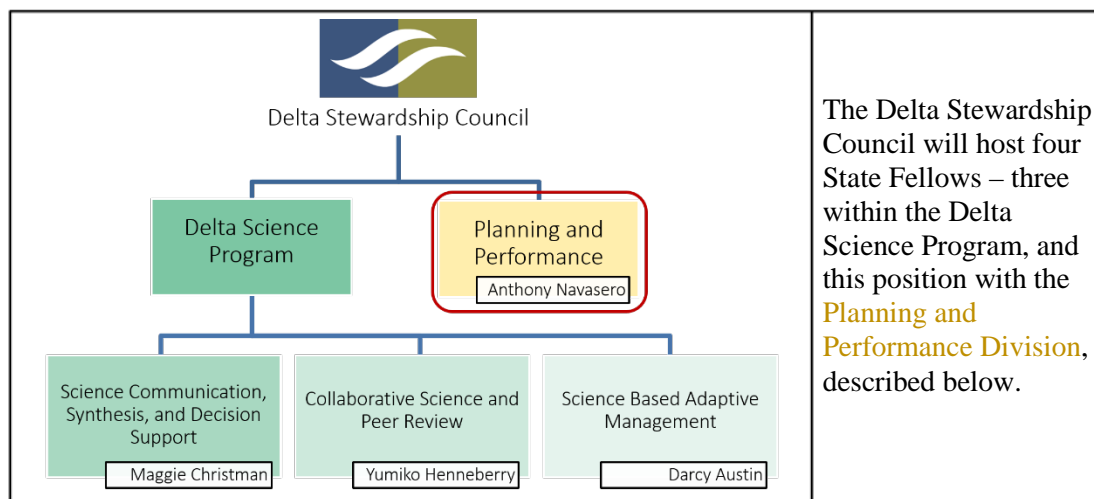
Planning and Performance Division

Background

California's Sacramento-San Joaquin Delta is part of the largest estuary on the West Coast, is the hub of the state's major water supply systems, and provides vital habitat for endangered, endemic, and migratory species. It is inextricably linked to statewide water supply issues that affect its ability to support more natural ecosystem functions.

In November 2009, the California Legislature enacted the Delta Reform Act, and created the [Delta Stewardship Council](#) to achieve the coequal goals (see footnote). The Council's Planning and Performance Division provides integration of environmental, engineering, and land use planning expertise to support and coordinate the implementation of the [Delta Plan](#), a comprehensive, long-term management plan for the Delta based on the best available science. The implementation of the Delta Plan is through cooperation among collaborated agencies and is enforceable through the Council's regulatory authority, which requires State and local actions that significantly affect the coequal goals to be consistent with the Delta Plan.

Position Description



A Sea Grant fellow with the Council's Planning and Performance Division will have the unique opportunity to work at the interface of policy, planning, and science on some of California's most challenging and important natural resource management issues. The Sea Grant fellow will be working and interacting with staff in the Planning and Performance Division's units:

- Delta Plan Development, Implementation, and Policy
- Performance Management

"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

– CA Water Code §85054

- Regulatory Review

Initially, the Sea Grant fellow will meet with the supervisor/mentor and other Planning and Performance Division staff as appropriate to develop a mentoring plan for the year. This plan will be based on the interests and background of the Sea Grant fellow and is intended to maximize the Sea Grant fellow's experience, knowledge, and networking opportunities. Working closely with Planning Division staff, the Sea Grant fellow will have the opportunity to interact with California policy makers, national and international scientific experts, and gain exposure to how policies and plans are developed and implemented in the Delta and Suisun Marsh as well as, at times, statewide.

Currently the Planning and Performance Division is working on several efforts focused on:

- 5-Year review of the Delta Plan;
- Supporting efforts to integrate flood management and habitat restoration into multi-benefit projects;
- Developing a Delta Plan amendment regarding ecosystem restoration;
- Evaluating efforts to enhance recreation and tourism that are compatible with the cultural heritage of the Delta;
- Promoting land use decisions that enhance economic vitality while reducing flood risk and preserving agriculture and open space; and
- Monitoring and collecting data on State programs and projects to measure the State's progress towards achieving the coequal goals and the success of the Delta Plan.

Potential Assignments

Specific projects will be identified and assigned for the Planning and Performance Division's Sea Grant fellow based on their expertise and interests. Potential projects include:

- Implementing Council approved recommendations of the 5-Year review of the Delta Plan
- Environmental review of ecosystem restoration amendments to the Delta Plan
- Evaluating major water supply, water storage, ecosystem restoration, and flood protection projects and programs.
- Researching statewide water conservation and groundwater management efforts.
- Reviewing and reporting on studies, reports, and documents of interest to the Delta Plan's policies and recommendations.
- Tracking progress of Delta Plan objectives (e.g., restoration, conservation, management, etc.) that support the coequal goals.
- Gathering and developing GIS data for visualization tools to facilitate stakeholder participation in habitat restoration and flood management planning.
- Supporting Planning and Performance Division staff in their daily tasks in implementing the Delta Plan.

Host Location: 980 Ninth Street, Suite 1500, Sacramento, California

Fellowship Supervisor/ Mentor and Point of Contact: Anthony Navasero, Senior Engineer, Water Resources—contact information: (916) 445-5471, Anthony.Navasero@deltacouncil.ca.gov

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Russell E. Burns, Member
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Peter S. Silva, Member
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STATE OF CALIFORNIA
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Fish and Game Commission



Wildlife Heritage and Conservation
Since 1870

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California Sea Grant State Fellowship Program

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Names of Supervisor: Valerie Termini, Executive Director

Point of Contact: Susan Ashcraft, Marine Advisor
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Position Description

The California Fish and Game Commission (Commission) was the first wildlife conservation agency in the United States, pre-dating even the U.S. Commission of Fish and Fisheries. The Commission has hundreds of authorities, some general in nature and some very specific through statutes of the Fish and Game Code, Public Resources Code, and Government Code.

In general, the Commission has jurisdiction over nearly every living thing in California except people, agriculture, and domestic animals. Specifically, the Commission is formally vested with authority to regulate the take, possession and conservation of birds, mammals, fish, amphibians and reptiles on all lands of the State and all waters, including ocean waters to three miles out into the Pacific Ocean. The Commission also addresses fish, wildlife and conservation issues on a broad scale, through such subjects as climate change, marine plastics pollution, sustainable fishing communities, predator management, tribal nation engagement, marine aquaculture best management practices, fisheries bycatch, and marine protected areas.

The California State Legislature has deemed that the scope and responsibilities of the Commission have significantly expanded over the years as the size and diversity of California's population has increased, and as the scientific knowledge of the habitat

conservation and ecosystem-based management needs of fish and wildlife has expanded. The Governor-appointed Commissioners are expected to make complex public policy and biological decisions on behalf of the people of California, with a small staff that works to ensure the Commissioners have the necessary information for making those decisions. Examples of the Commission's statutory authorities include:

- formulating general policies for the conduct of the California Department of Fish and Wildlife (Department);
- determining when, where and by what methods hunters and fisherman may take animals and fish;
- listing and delisting of native plants, animals, and fish as threatened or endangered species under the California Endangered Species Act;
- establishing and regulating uses of protected lands and waters such as wildlife areas, ecological reserves and marine protected areas;
- regulating the possession and care of restricted species, such as eagles, owls, bobcats, and bears; and
- addressing non-native species importation, possession and sale;
- leasing state water bottoms and kelp beds for the purposes of aquaculture and commercial kelp harvest.

The Commission conducts its business at six meetings per year, which are strategically located throughout the State to encourage public outreach and participation. In addition, the Commission currently has three committees that each meets three times per year: The Marine Resources Committee, Wildlife Resources Committee, and Tribal Committee. Each committee is chaired or co-chaired by no more than two Commissioners. The goal of these committees is to allow for greater in-depth presentations and discussions on fish and wildlife issues and regulatory proposals under development, and to provide recommendations to the Commission for possible action on these topics. The committee meetings are less formal in nature than Commission meetings and provide for additional stakeholder access to the Commissioners.

There is sometimes confusion about the distinction between the Commission and the Department. In the most basic terms, the Commission establishes policies and regulations while the Department is guided by the Commission's policies, is charged with implementing and enforcing regulations set by the Commission, and provides biological data and expertise to inform the Commission's decision-making process.

The California Sea Grant fellow will have the opportunity to serve as staff on a wide variety of issues before the Commission, including many of those listed above, depending on the fellow's areas of interest, educational goals, initiative, communication and analytical skills, and professional goals. The types of functions the fellow might support include:

- assisting the executive director in developing policies and/or strategic

approaches to items that may be controversial in nature;

- working on committee agendas and topics directly with the Commission's marine advisor and wildlife advisor;
- organizing and/or leading related meetings and workshops;
- enhancing transparency by outreach and communication with stakeholders and partners, and working to maintain broad project or program support;
- drafting and reviewing staff summaries for Commission and committee meetings; and
- helping improve the Commission website and develop social media outreach.

Placement with the Commission will help the fellow better understand how fish and wildlife statutes, regulations and policies are established and implemented in California, and will also provide a front seat to political, administrative, and stakeholder participation processes.



2019 Sea Grant Fellowship Position Description

Host Agency: Monterey Bay Aquarium

Location: 886 Cannery Row, Monterey, CA 93940

Fellowship Supervisor: Erin Eastwood, Ocean Policy Program Specialist

Point of Contact: Claudia P. Tibbs, Conservation & Science Planning & Operations Manager
cptibbs@mbayaq.org; (831) 648-9821

Agency Background:

The Conservation and Science (C&S) Division at the Monterey Bay Aquarium focuses on conserving ocean wildlife and the marine environment. The division is comprised of three program areas: Ocean Conservation Policy, Conservation Research and Seafood Watch. C&S engages in strategies and activities to take action on behalf of ocean conservation while also collaborating with partners to achieve the Aquarium's mission to *inspire conservation of the ocean*. The Aquarium's ocean conservation priorities are to:

- **Cultivate and influence leaders to take action for the ocean**
We believe in the power of collaboration, and a commitment to science-based management, to protect ocean health for future generations. We enlist new ocean champions from government, the private sector and the public to act for the ocean—in the Monterey Bay area, in California, across the United States and around the world.
- **Conserve iconic Pacific Ocean wildlife and ecosystems**
The health of marine life is connected to the health of their ocean homes, which helps to sustain all life on earth. Beyond our work to conserve southern sea otters, Pacific bluefin tuna and white sharks—we're monitoring ocean biodiversity and ecosystem health. Through our policy influence and partnerships, we support and defend ocean protections.
- **Improve the sustainability of global fisheries and aquaculture**
Unsustainable fishing and aquaculture exact a significant toll on ocean health—and on human communities. As a leader in the global sustainable seafood movement, we inform fishing and aquaculture practices, as well as national and international fishery management policies—driving a market shift to ocean-healthy seafood production worldwide.
- **Reduce the sources of ocean plastic pollution**
Plastic pollution is a growing global problem for ocean ecosystems, wildlife and people. Our scientists are investigating the scope and impact of plastic pollution in the marine environment. And we're using science-based information to ignite individual and collective action, championing policies and practices to reduce the flow of plastic from land to sea.
- **Address climate change and its impacts on ocean health**
Carbon emissions profoundly affect ocean health, and our own survival. We advocate for policies to reduce carbon emissions, end our reliance on fossil fuels, promote clean energy and mitigate the unavoidable impacts underway. We conduct scientific research on climate change, and bring science-based information to the public, encouraging them to be a part of the solution.

As an organization, the Aquarium celebrates and embraces diversity. We foster an inclusive, welcoming environment where individual differences are respected, appreciated and recognized as a source of strength to our organization. These qualities enrich our workplace and increase our capacity to fulfill our mission.

Position Description:

The Sea Grant Fellow will contribute to the research, analysis, planning, and coordination needs of the **Ocean Conservation Policy** program to help achieve the Aquarium's ocean plastic pollution and climate change goals.

Potential Assignment

- Perform research and analysis of state, federal and international ocean policy issues relevant to the Aquarium's ocean conservation goals.
- Produce briefing memos, talking points, comment letters, informational folders, and similar material in support of the Aquarium's policy strategies.
- Work with the Ocean Policy team to develop and execute policy strategies at the state, federal and international levels.



2019 Sea Grant Fellowship Position Description

Desirable Qualifications

- Ability to work both independently and with diverse interdisciplinary teams that require clear communication.
- Experience or advanced knowledge in environmental policy, law, management, or another science-related field.
- Excellent research and writing skills.
- Outstanding verbal communication skills.
- Strong time-management and multi-tasking skills.



2019 Sea Grant Fellowship Position Description

Host Agency: Monterey Bay Aquarium

Location: 886 Cannery Row, Monterey, CA 93940

Fellowship Supervisor: Andre Boustany, Nereus Principal Investigator, Fisheries

Point of Contact: Claudia P. Tibbs, Conservation & Science Planning & Operations Manager
cptibbs@mbayaq.org; (831) 648-9821

Agency Background:

The Conservation and Science (C&S) Division at the Monterey Bay Aquarium focuses on conserving ocean wildlife and the marine environment. The division is comprised of three program areas: Ocean Conservation Policy, Conservation Research and Seafood Watch. C&S engages in strategies and activities to take action on behalf of ocean conservation while also collaborating with partners to achieve the Aquarium's mission to *inspire conservation of the ocean*. The Aquarium's ocean conservation priorities are to:

- **Cultivate and influence leaders to take action for the ocean**
We believe in the power of collaboration, and a commitment to science-based management, to protect ocean health for future generations. We enlist new ocean champions from government, the private sector and the public to act for the ocean—in the Monterey Bay area, in California, across the United States and around the world.
- **Conserve iconic Pacific Ocean wildlife and ecosystems**
The health of marine life is connected to the health of their ocean homes, which helps to sustain all life on earth. Beyond our work to conserve southern sea otters, Pacific bluefin tuna and white sharks—we're monitoring ocean biodiversity and ecosystem health. Through our policy influence and partnerships, we support and defend ocean protections.
- **Improve the sustainability of global fisheries and aquaculture**
Unsustainable fishing and aquaculture exact a significant toll on ocean health—and on human communities. As a leader in the global sustainable seafood movement, we inform fishing and aquaculture practices, as well as national and international fishery management policies—driving a market shift to ocean-healthy seafood production worldwide.
- **Reduce the sources of ocean plastic pollution**
Plastic pollution is a growing global problem for ocean ecosystems, wildlife and people. Our scientists are investigating the scope and impact of plastic pollution in the marine environment. And we're using science-based information to ignite individual and collective action, championing policies and practices to reduce the flow of plastic from land to sea.
- **Address climate change and its impacts on ocean health**
Carbon emissions profoundly affect ocean health, and our own survival. We advocate for policies to reduce carbon emissions, end our reliance on fossil fuels, promote clean energy and mitigate the unavoidable impacts underway. We conduct scientific research on climate change, and bring science-based information to the public, encouraging them to be a part of the solution.

As an organization, the Aquarium celebrates and embraces diversity. We foster an inclusive, welcoming environment where individual differences are respected, appreciated and recognized as a source of strength to our organization. These qualities enrich our workplace and increase our capacity to fulfill our mission.

Position Description:

The Sea Grant Fellow will create various analytical tools to support research programs within the **Conservation Research (CR)** department on the themes of ocean plastics in the water column, climate change impacts and historical ecological baselines on kelp.

Potential Assignment

- Conducting research to support ecosystem science research programs.
- Obtaining, processing, organizing, and analyzing empirical data.
- Developing mechanistic and stochastic models using observational and environmental data.
- Writing journal manuscripts and conference presentations from analyses and figures created.
- Assisting with developing innovative ecological indices, metrics, and indicators to address key questions.
- Assisting with research conducted in the Ocean Memory Laboratory on long-term environmental records to generate baselines of ocean ecosystem health.



2019 Sea Grant Fellowship Position Description

- Assisting with research on life history, assessment, climatic forcing, and population structure of fisheries.
- Developing specific tools to support existing CR and Conservation & Science staff projects as assigned.

Desirable Qualifications

- Ability to work both independently and with diverse interdisciplinary teams that require clear communication.
- Experience or advanced knowledge in environmental sciences, fisheries, statistics, computer science, engineering or mathematics.
- Experience in geospatial ecology.
- Experience in processing and interpretation of environmental and biotelemetry data.
- Experience in applying empirical data to models to address applied environmental problems.
- Experience in R, Matlab, Python, AMDB, SAS, ARCGIS, Excel, or other analytical software.
- Familiarity and/or experience in information graphics; familiarity with leveraging large datasets into compelling graphical outputs.

California Sea Grant State Fellowship 2019
Host Office Position Description
NOAA's Channel Islands National Marine Sanctuary

Host Location

NOAA Channel Islands National Marine Sanctuary, University of California Santa Barbara, Ocean Science Education Building 514, Santa Barbara, California 93106

Fellowship Supervisors

Michael Murray, Deputy Superintendent for Programs; michael.murray@noaa.gov, 805-893-6418
Julie Bursek, Team Lead Education and Outreach; julie.bursek@noaa.gov, 805-893-6422

Position Description

We are seeking a 2019 California Sea Grant Fellow to join our hard-working and supportive team. We offer a working environment that is welcoming, innovative, positive, fun, and growth-oriented, and we have enjoyed mentoring fellows for the past eight years. [Channel Islands National Marine Sanctuary](#) (the sanctuary) is a federally-designated marine protected area that is administered by the [Office of National Marine Sanctuaries](#), part of the National Oceanic and Atmospheric Administration (NOAA). It is located approximately 23 miles off the coast of Santa Barbara and encompasses 1,470 square miles of state and federal ocean waters surrounding Anacapa, Santa Cruz, Santa Barbara, Santa Rosa, and San Miguel Islands. A fertile combination of warm and cool currents creates a highly productive marine ecosystem supporting many habitats, a wide diversity of fish and invertebrates, twenty-seven species of whales and dolphins, five species of pinnipeds, and over sixty species of seabirds. The sanctuary's primary objective is to conserve, protect, and enhance the biodiversity, ecological integrity, and cultural legacy of marine resources surrounding the Channel Islands for current and future generations. This is supported in enabling federal legislation – the [National Marine Sanctuaries Act](#).

The 2019 California Sea Grant Fellow will play a key role in advancing several policy, planning and education projects and programs, working closely with the sanctuary's deputy superintendent for programs, and the team lead for education & outreach. The fellow will research, write and conduct outreach on a wide array of marine resource management issues, and will help foster productive relationships with state and federal agencies, academic institutions, and stakeholders. In this position, the fellow will gain the diverse skills and professional experience necessary to succeed in a natural resource management career. Former sanctuary fellows have become permanent or contract NOAA employees, received the Knauss and Presidential Management Fellowships, or taken research and leadership positions in the private and non-profit sectors.

Working in the capacity of a Sanctuary Program Specialist, the fellow will support the following:

Management Plan Revision (approx. 30% time)

A comprehensive management plan guides operation of the sanctuary. The [current management plan](#) was last updated in 2009, and a public process will commence in early 2019 to support development of the next updated plan. The current management plan contains information about the sanctuary's environment and resources, staffing and administration, regulations and boundary, operational and programmatic costs, priority management issues and the actions proposed to address them. The 2019 fellow will be provided a unique opportunity to help shape the future of the sanctuary's planned programs for several years to come. This will involve planning and running public scoping meetings and internal staff meetings focused on identifying focal themes for the management plan, synthesizing public and advisory council input, working closely with staff and advisory council working groups to shape new action plans for programs focused on conservation science, education and outreach, resource protection, maritime heritage, and more. The fellow will work with all of the sanctuary's program coordinators, gaining a broad understanding of how the sanctuary functions, including unique and innovative approaches to marine conservation. This project will also feature meaningful community engagement, allowing the fellow to work closely with a variety of stakeholders as well as governmental agencies. The revised management plan will not be a rehash of past plans, but rather the fellow will work closely with staff to shape something new, creative, and

inspiring. Through this project, the fellow will gain experience in conservation planning and project management, as well as federal policy development guided by the National Environmental Policy Act and Administrative Procedures Act.

Sanctuary Advisory Council (approx. 30% time)

The [sanctuary advisory council](#) is comprised of ten government agency seats and eleven community stakeholder seats in addition to several [working groups](#). The advisory council is vital to successful management of the sanctuary, providing a forum for community engagement and input through open discussion and collaboration. This group will be of critical importance to help guide development of an updated sanctuary management plan. The fellow will work closely with the deputy superintendent for programs to assure effective operation of the council's system. This will involve participating in and supporting council meetings that are held every other month, as well as numerous meetings of the council's working groups. The work will include agenda preparation with the council's Executive Committee, preparing and delivering presentations, corresponding with council members and the public, assisting with member recruitment, and more. For mentorship, networking and job prospecting, it cannot be overstated how important the advisory council has been to every fellow that has worked at the sanctuary.

Education & Outreach (approx. 30% time)

One of the sanctuary's most important tools to support marine conservation is public education and outreach. The fellow will assist the sanctuary's Education & Outreach Team with three citizen science monitoring projects: 1) an educational campaign to enlist divers in the search for federally-listed [endangered white abalone](#) (*Haliotis sorenseni*) in the Northern Channel Islands; 2) implementation of an intertidal monitoring student education program, [LiMPETS](#); and 3) handling whale identification and marine mammal sightings data collected by sanctuary volunteers. For the white abalone project, the fellow will work closely with the team lead for education & outreach and researchers with the National Marine Fisheries Service to coordinate a kick off workshop to develop a citizen science campaign focused on the search for white abalone within the sanctuary and adjacent mainland coast. The target audience may include commercial urchin divers, recreational dive boat operators, and local dive clubs. The fellow will develop outreach tools to assist divers with proper species identification and reporting.

Additional Opportunities (approx. 10% time)

- Engage in personal career development planning with the active support and mentorship of the deputy superintendent and other staff.
- Help to update the sanctuary's [website](#) and post weekly to sanctuary [social media](#) accounts.
- Participate in internal office meetings, including providing progress reports and/or presentations.
- Contribute to superintendent reports and weekly activity reports, including compilation, information gathering, and document editing/formatting.
- Represent the sanctuary at select meetings and conferences, to observe, learn, speak/present, and assist with follow-up actions.
- Occasionally participate in sanctuary research and monitoring activities. This will involve occasional trips aboard sanctuary research vessels, assisting on deck, helping with data acquisition and processing, and summarizing information for presentation/reporting.

The fellow will get the most out of this opportunity if they bring these skills, experiences and interests: a natural self-starter approach to work; strong organizational, communication and writing skills; a personable approach and comfort working with a variety of constituencies in public and occasionally contentious settings; a strong ability to effectively manage multiple projects and deadlines; and enthusiasm for ocean stewardship and conservation.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Fisheries Science Center
8901 La Jolla Shores Drive
La Jolla, CA 92037-1508

Host Agency: NOAA/NMFS Southwest Fishery Science Center

Location: (there are three possible locations for the Fellowship)

8901 La Jolla Shores Drive, La Jolla, CA 92037

110 McAllister Way, Santa Cruz, CA 95060

99 Pacific Street, Monterey, CA 93940

Fellow Supervisors: Lead Scientist of project and Division Director

Point of Contact: Toby Garfield, SWFSC Acting Deputy Director

(toby.garfield@noaa.gov, 858-546-7081)

Agency Background:

The NOAA Southwest Fisheries Science Center (SWFSC; <https://swfsc.noaa.gov>) is one of six federal regional science centers that comprise the science expertise for the National Marine Fisheries Service (<http://www.nmfs.noaa.gov/>). The SWFSC provides national and international leadership and innovation in several key areas of Pacific Ocean fisheries and marine mammal science and management in the California Current, throughout the Pacific Ocean and in the Southern Ocean off Antarctica. The SWFSC has three facilities: the headquarters laboratory is in La Jolla, and satellite laboratories in Santa Cruz and Monterey. SWFSC scientists conduct fisheries, marine biological, economic and oceanographic research, observations and monitoring of living marine resources and their environment. Center scientists also conduct research on the impacts of environmental variability and climate change on marine ecosystems and on fishery and conservation socio-economics. The ultimate goals of these efforts are to ensure that the region's marine and anadromous fish, marine mammal, marine turtle, seabird, and invertebrate populations remain at sustainable and healthy levels, as functioning parts of their ecosystem, economic resiliency for fishing communities and enhancing the quality of life for the public.

Position Description:

One Fellow will be selected and assigned to work at one of the laboratories based on the project opportunity (below) negotiated between the Fellow and host. The Sea Grant Fellow will work at the interface between fishery science and regulatory actions. In this time of extreme weather events and changing climate, the SWFSC must interpret new science findings into management scenarios that will ensure resilient coastal communities. There are a number of areas where the Sea Grant Fellow could contribute that include management plans for highly migratory species, developing management strategies to implement Ecosystem-Based Fishery Management (EBFM) within the California Current large marine ecosystem or for the Antarctic fisheries, and critical issues regarding Central Valley salmon. The Fellow will work under the direction of the lead scientist to assist with strategies on informing adaptive management options. Initially, the Fellow will meet with the Division Director and the lead scientist to develop a mentoring plan. The plan will be based on the specific needs of the project and the Fellow's interests. The three will meet regularly during the year-long fellowship. The Fellow will be encouraged to participate in conferences, interagency meetings and collaborative projects and is expected to be a significant contributor to the work.



Southwest Fisheries Science Center 2019 Potential Assignments:

• **Development of NE Pacific Ecosystem Based Fishery Management (ERD)** – (EBFM) scenarios using results from the California Current Integrated Ecosystem Assessment ([CCIEA](#)). A Fellow working on this project would be based at La Jolla and also work with staff in Monterey. The Environmental Research Division (ERD) is the lead division working with the Pacific Fishery Management Council (PFMC) on developing a Fishery Ecosystem Plan to manage all species, including protected species, through a comprehensive ecosystem plan. The CCIEA has developed a robust set of environmental, ecological and human dimension indicators that will form the basis of EBFM recommendations. NMFS employees are working with the various PFMC subcommittees on recommendations for developing and implementing this plan.

• **Water resources management (FED)** –The Fellow will participate in research on economic and social aspects of water use policy in California. In-stream flow and water quality are primary factors affecting habitat quality for protected species of anadromous fish, including endangered Chinook salmon and steelhead in the Central Valley and endangered coho salmon, Chinook salmon, and steelhead trout in California coastal watersheds. The Fellow will be located in Santa Cruz and collaborate with researchers at the SWFSC's Fisheries Ecology Division ([FED](#)) on projects such as quantifying the economic impacts of reallocating water between fish habitat and human uses, designing cost-effective policies for anadromous fish habitat restoration, assessing the benefits and costs of water quality and habitat improvement projects, and developing risk management strategies for allocating water to competing uses over multiple time periods.

• **Communicating water issues (FED & Director's Office)** – Fresh water usage is one of the defining issues that brings together politics, agriculture, municipal planning, coastal modification, commercial and recreational fishing, and aesthetics. The Fellow would work with FED (Santa Cruz) and the Director's Office (La Jolla) on developing communication tools to promote SWFSC's scientific input to this vital discussion.

Dynamic Ocean Management (ERD & partners) – Dynamic Ocean Management to reduce bycatch in federal fisheries. Protecting highly migratory species from fishing gear bycatch relies on a suite of tools from seasonal closures, gear restrictions, and fisher communication. We are developing a real-time tool to reduce bycatch in pelagic fisheries yet current regulations do not have a provision for such an approach. The Fellow would work with Monterey scientists and NGO partners (e.g. Center for Ocean Solutions) to develop a policy framework for implementation of Dynamic Ocean Management in state and federally managed fisheries.

• **Dungeness crab fishery and multiple stressors (ERD)** – Dungeness crab fisheries are being hit with multiple regulatory concerns, e.g. record whale entanglements due to inshore distribution of humpbacks the past two years, and increased domoic acid from harmful algal blooms resulting in the shutdown of the fishery. The fellow would work with scientists at SWFSC and partners to develop policy approaches that would account for multiple stressors yet maximize the ability of the fishery to remain open. The position would be in Monterey.

SWFSC – Southwest Fisheries Science Center – Kristen Koch, Director (kristen.c.koch@noaa.gov)
AERD – Antarctic Ecosystem Research Division – George Watters (george.watters@noaa.gov)
ERD – Environmental Research Division – Toby Garfield (toby.garfield@noaa.gov)
FED – Fisheries Ecology Division – Steve Lindley (steve.lindley@noaa.gov)
FRD – Fisheries Resources Division – Gerard DiNardo (gerard.dinardo@noaa.gov)
MMTD – Marine Mammal & Turtle Division – Lisa Ballance (lisa.ballance@noaa.gov)



CALIFORNIA OCEAN PROTECTION COUNCIL

John Laird, Secretary for Natural Resources, Council Chair
Matt Rodriguez, Secretary for Environmental Protection
Betty Yee, State Controller, State Lands Commission Chair
Robert Hertzberg, State Senator
Mark Stone, State Assemblymember
Michael Brown, Public Member
Jordan Diamond, Public Member

Sea Grant Host Description 2019

2 Fellowships available at the Ocean Protection Council

1. Host location and contact information:

Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

2. Fellowship Supervisor:

Deborah Halberstadt
OPC Executive Director,
(916)-657-0198
deborah.halberstadt@resources.ca.gov

3. Points of contact for finalists:

Jenn Eckerle, OPC Deputy Director, (916) 654-9055, jenn.eckerle@resources.ca.gov;
Jenn Phillips, OPC Climate Change Policy Advisor,
(916) 651-0237,
jennifer.phillips@resources.ca.gov

4. Position description:

Background: The Ocean Protection Council (OPC) is a cabinet-level state agency nested within the California Natural Resources Agency. Created by the California Ocean Protection Act of 2004, OPC's mission is to ensure healthy, resilient, and productive coastal and ocean ecosystems in California. OPC serves as the Governor's advisor on ocean and coastal policy and engages with partners inside and outside government to break down silos and ensure coordinated, science-informed decision-making to conserve California's coast and ocean.

Fellowships at OPC provide an opportunity to work at the interface of science, policy and management to protect California's coastal and marine ecosystems and the communities that rely on them. OPC fellows are fully integrated members of OPC staff and as such, they gain valuable professional experience that will prepare them for success in future endeavors. The 2019 OPC Sea Grant fellows will have a unique experience of working during the Administration transition and supporting OPC's priorities under the direction of a new Governor.

OPC staff is currently involved in various projects and initiatives focused on: marine protected areas; climate change; sustainable fisheries; marine pollution; coastal sediment management, as well as emerging issues such as offshore renewable energy. More information about OPC's current priorities can be seen on our [website](#), under the header "Program Areas." To understand the scope and breadth of the Council's work, please see this recent [meeting agenda](#).

OPC Sea Grant Fellows: Changing ocean conditions have the potential to threaten communities, ecosystems and California's economy. As such, there is an urgent need to catalyze innovative and bold action that builds resilience and safeguards ocean health. To advance our work addressing these critical issues, OPC would host two Sea Grant fellows, one in our [climate change program](#) and the other in our [marine protected areas \(MPA\) program](#).

The climate change fellow would support OPC's state, national and international efforts to understand, prepare for, and adapt to climate change impacts including, but not limited to, ocean acidification and hypoxia, sea-level rise, and harmful algal blooms. This work may include coordination with agency and external partners, scientific analysis, evaluation of data gaps, identifying opportunities for new and/or leveraged OPC investments, and stakeholder outreach.

The MPA fellow would help lead the ongoing effort among state, federal, tribal and non-governmental partners to implement the state's MPA Management Program. This includes supporting the work of the [MPA Statewide Leadership Team](#) to ensure effective collaboration across the four focal areas of the MPA Management Program, which include: research and monitoring, outreach and education, policy and permitting, and enforcement and compliance.

Both fellows may also have the opportunity to support OPC's work on sustainable fisheries, marine pollution, artificial reefs, aquaculture and offshore renewable energy. In addition to supporting the programmatic work in OPC's MPA and climate change programs, the two Sea Grant fellows will be involved in the following:

Broad Efforts of the Council. All OPC staff support the functions of the [seven-member Council](#), including agenda setting, policy recommendations, and project development. Potential tasks associated with managing projects include: frequent communication with project stakeholders, partners, or grantees; presenting staff recommendations to the Council; drafting and amending contracts and grant agreements; managing project-related invoices; organizing, and/or leading related meetings and workshops; participating in site visits; ensuring outcomes of projects are communicated to the public, relevant agencies, and institutions; seeking out additional funding sources or matching funds; encouraging transparency by working with stakeholders; and working to maintain broad project or program support. **Both fellows would support all the functions of the Council.**

Resources Agency Sea Grant Advisory Panel (RASGAP). The Resources Agency Sea Grant Advisory Panel (RASGAP) is in charge of evaluating management-relevant proposals for ocean and coastal research by California's two Sea Grant programs. **One fellow will be responsible for all aspects of RASGAP, including managing panel membership, leading meeting logistics, reviewing and scoring pre- and full proposals, and participating in RASGAP technical review panels.**

Legislative Reporting & Bill Analyses. As a state agency that is part of the Governor's Administration, OPC does not take a position on any legislation. However, OPC tracks relevant bills that may explicitly direct OPC to take action or indirectly impact OPC's priorities to protect coastal and marine resources. **One fellow will be responsible for tracking legislative bills that are relevant to OPC and providing weekly updates to the agency's tracking list. Both fellows may have the opportunity to contribute to bill analyses if an OPC-relevant bill is moving forward in the legislature.**

Communications. Both fellows will support OPC's communications to elevate our work to a wide and diverse set of partners and stakeholders. Communications activities may include, but are not limited to: representing OPC publicly at meetings and workshops; drafting talking points and press releases; and writing content for OPC's website and social media platforms.

Desired skills or attributes include:

- Excellent verbal and written communication skills.
- Ability to lead groups of people, often with divergent views, to advance progress on a particular issue.
- Ability to translate complex scientific information for use by government decision-makers, stakeholders and the general public.
- Ability to work well independently under minimal supervision or guidance.
- Ability to manage multiple projects concurrently.
- An entrepreneurial spirit and strong personal initiative.

SFEP

SAN FRANCISCO



ESTUARY
PARTNERSHIP

California Sea Grant State Fellowship 2019 HOST DESCRIPTION

Host Location and Contact Information

San Francisco Estuary Partnership
375 Beale Street, Suite 700
San Francisco, CA 94105

Contact:
Caitlin Sweeney, Director
415.778.6681
caitlin.sweeney@sfestuary.org

Fellowship Supervisors

Caitlin Sweeney, Director
Karen McDowell, Senior Environmental Planner

Host Background Information

The San Francisco Estuary Partnership (www.sfestuary.org) was established in 1988 as part of the National Estuary Program (NEP) under the Clean Water Act as a U.S. Environmental Protection Agency program. The Partnership is a collaboration of local, state, and federal agencies, NGOs, academia and business leaders working to protect and restore the San Francisco Bay-Delta Estuary. The Partnership's work is guided by the development and implementation of the Estuary Blueprint, a comprehensive, collective vision for the Estuary's future.

The Partnership is staffed by 12 people who manage important multi-benefit projects that improve the health of the Estuary. We build partnerships and leverage federal funding with millions of dollars in state and local funds for regional-scale restoration, water quality improvement, and resilience-building projects.

The Partnership's host entity is the Association of Bay Area Governments, which is staffed by the Metropolitan Transportation Commission under a contract for services. The Partnership is located at the Bay Area Metro Center at 375 Beale Street in San Francisco. The Bay Area Metro Center houses the Metropolitan Transportation Commission, the Association of Bay Area Governments, the Bay Area Air Quality Management District, and the San Francisco Bay Conservation and Development Commission, and is designed to facilitate communication and collaboration among the agencies.

Position Description

The Partnership recently collaborated with more than 70 partners throughout the region to develop long term goals and a five-year action plan. The resulting 2016 Estuary Blueprint is a comprehensive, collective vision for the Estuary's future. The partnership is seeking assistance from a Sea Grant Fellow with several critical actions identified in the 2016 Estuary Blueprint.

The Fellow's primary responsibility initially will be to assist with two major Partnership initiatives called for in the Estuary Blueprint; the 2019 State of the Estuary Report and the 2019 State of the Estuary Conference. The State of the Estuary Report is the most comprehensive report on the health of the San Francisco Estuary. The 2015 report used the best available science and the most recent data contributed by over 30 scientists from the region to assess the status and trends of 33 indicators of ecosystem health. The 2019 version will be an interim report and will focus on reporting out on Estuary-wide indicators as well as lay the groundwork for new indicators. The Fellow will work closely with Partnership staff as well as staff from the Delta Stewardship Council to manage the development of the report, including managing the work of the science lead, the San Francisco Estuary Institute, one of California's premier aquatic and ecosystem science institutes. The Fellow will support coordination an Advisory Committee responsible for guidance on indicators, metrics, etc. The Fellow may also provide science support to the Partnership during the development of the report, including contributing to the development or update of indicators.

The Fellow will also assist with planning and executing the 2019 State of the Estuary Conference, where the report will be released and highlighted in various presentations and posters. The State of the Estuary Conference is held every two years in the fall in Oakland, and is attended by over 800 scientists, managers, students, and policy makers.

In addition to the report and conference, the Fellow will be assigned tasks to support the successful implementation of the Estuary Blueprint in other ways, such as advancing the Partnership's work on developing a Regional Wetlands Monitoring Program, or by assisting with specific Partnership-funded projects focused on restoring habitat, improving water quality, increasing climate resiliency, and championing the Estuary.

Finally, the Fellow would be integrated into the Partnership staff, attending staff meetings, participating in quarterly meetings of the Partnership's Implementation Committee, and attending meetings or workshops with regional partners that pertain to the work of the Partnership.



1. Host location and contact information

State Coastal Conservancy
1515 Clay St., 10th Floor
Oakland, CA 94612-1401

2. Fellowship Supervisor(s)

Coastal Restoration Fellowship - Megan Cooper, Matt Gerhart
Climate Ready Fellowship - Mary Small

3. Point of contact for finalists:

Mary Small
Deputy Executive Officer
510-286-4181, mary.small@scc.ca.gov

4. Position description(s)

General Overview: Established in 1976, the State Coastal Conservancy (SCC) is a non-regulatory agency that works to protect and improve natural lands and waterways, help people get to and enjoy the outdoors, and sustain local economies along the length of California's coast and around San Francisco Bay. The SCC works in partnership with local governments, other public agencies, nonprofit organizations, and private landowners. Much of the SCC's work involves collaborating with scientists and other professionals to deliver on-the-ground coastal resource protection and restoration.

The SCC's broad mandate allows it to undertake planning, projects, and initiatives such as the following:

- Protect and improve the quality and resiliency of coastal wetlands, streams, watersheds, and near-shore ocean waters;
- Help people get to and along the coast and bay shores by building trails and stairways and by acquiring land and easements. The SCC also assists in the creation of low-cost accommodations along the coast, including campgrounds and hostels;
- Help to solve complex land-use problems;
- Protect coastal lands, including agricultural lands and working landscapes;
- Address the potential impacts of climate change on resources within its jurisdiction, and undertake projects that address extreme weather events, sea level rise, storm surge, beach and bluff erosion, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources.

Specific Scope of Work: The SCC is applying to host two fellows to help carry out our work. The SCC is committed to fostering and developing the fellow's professional goals as much as possible, and will tailor the suite of tasks accordingly.

Coastal Restoration Fellow

One of the SCC's fellows will work on coastal habitat restoration throughout the State. Coastal resource enhancement is the SCC's largest funding program, and the complexity of designing, implementing and monitoring resource enhancement projects continues to grow. The coastal restoration fellow will spend his/her time working on programs such as the San Francisco Bay Restoration Authority (SFBRA), the Southern California Wetlands Recovery Project (WRP), and similar programs throughout the State. The SCC provides staff support to both the SFBRA and the WRP.

In the coming year, the fellow will work on the following initiatives:

- Populate and manage the WRP's Marsh Adaptation Planning Tool (MAPT) to help track progress on the WRP's quantitative restoration objectives.
- Help the SCC track the impact of its wetlands restoration projects through a Statewide data portal.
- Review project applications and make recommendations project prioritization.
- Participate in coordination between agencies and among stakeholders.

Through the SFBRA and the WRP, the fellow will have the opportunity to work with leading scientists, restoration practitioners, and resource managers. Tasks may include helping to determine management and science needs, facilitating movement of a very diverse group toward those goals, reviewing and writing technical papers, participating in meetings, conducting site visits, and undertaking GIS work.

Although helping to support the WRP and the SFBRA will be the fellow's primary tasks, s/he could also take on other SCC projects such as climate change adaptation, public access, and urban waterfronts. Tasks may include project development, writing staff recommendations to the SCC Board, project and contract management, presentations to the SCC Board and others, and leadership in communications (e.g., website, social media).

Climate Ready Fellow

SB 1066 (Lieu, 2013) gave the SCC explicit authority to work with its partners on projects to address the effects of climate change on coastal and to work to reduce greenhouse gas emissions. The SCC created its "Climate Ready Program" in 2013 to focus its work to protect important coastal resources and habitats from the current and future impacts of climate change. The SCC will administer Greenhouse Gas Reduction Funds through a Climate Ready grant round in 2019. In addition, Proposition 68 provides funding to the SCC for climate change projects in the San Francisco Bay Area. Through these programs, SCC is collaborating with local partners and other agencies to prepare communities along the coast and within the San Francisco Bay for sea level rise and other impacts of climate change.

Supervised by the SCC's Deputy Director, the Climate Ready fellow will assist the agency in implementing its Climate Ready program. Specifically, the fellow will:

- The 2019 fellow will work on a new grant solicitation, including webinars and outreach. The fellow will help review and score applications and will prepare and present at least one staff recommendations to the SCC board for approval.
- Depending on timing the fellow may prepare grant agreements, review grantee's work plans and budgets, and oversee completion of work tasks;
- Participate and support interagency coordination related to climate adaption work along the coast and around the SF Bay.
- Support communication about the science and management issues related to climate change via the SCC's website, planning and educational forums, conferences, and other means;
- Provide technical, scientific and administrative support to the work of climate change committees or collaboratives that the SCC is involved with, such as the Coastal Resilience Network, the Bay Area Ecosystem Climate Change Consortium, and the state's Climate Action Teams.

Tasks will be varied and may include working with wetland scientists, ecologists and other practitioners to prioritize science and management needs, and to conceptualize projects that will result in lessons learned for the broader community. The fellow may also review technical papers, interact with policy makers and technical practitioners focused on climate change adaptation planning. The fellow will likely support ongoing Climate Ready webinars and other communication and outreach efforts to help share information within the adaptation community of practice.



California Sea Grant State Fellowship Program 2019

Host Agency: California State Lands Commission

Location: 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825

Fellowship Supervisor: Jennifer Mattox, Science Policy Advisor/Tribal Liaison;
Maren Farnum, Environmental Scientist

Point of Contact: Jennifer Mattox, jennifer.mattox@slc.ca.gov; (916) 574-0748
Maren Farnum, maren.farnum@slc.ca.gov; (916) 574-0966

Agency Background:

The [California State Lands Commission](http://www.slc.ca.gov) (CSLC) is an independent and dynamic state agency that works on the cutting edge of integrating science into policy decisions. One of the CSLC's major roles is to act as the landlord for lands within its jurisdiction. When California became a state in 1850, it acquired approximately four million acres of land underlying the State's navigable and tidal waterways. These "sovereign lands" include the beds of California's navigable rivers, lakes, and streams, as well as the State's tide and submerged lands along the State's 1,100+ miles of coastline and offshore islands, from approximately the mean high tide line to three nautical miles offshore. The CSLC holds these lands in trust for the people of California under the Public Trust Doctrine.

Part of the CSLC's trust responsibility includes reviewing and approving or denying lease applications for uses of or activities on sovereign lands (e.g., major energy projects, artificial reefs, piers, etc.). Activities on sovereign lands must be appropriate public trust uses, including commerce, fishing, navigation, environmental preservation, and recreation. The CSLC is the main agency tasked with protecting public access and overseeing public trust uses. Valid public trust uses often conflict with each other; the CSLC works to manage those conflicts and ensure that the Public Trust Doctrine is upheld on sovereign land. In this way, the CSLC, along with its sister state agencies, decides on appropriate uses for California's ocean and proactively plans for future issues and conflicts.

The three-person Commission is comprised of the State Controller, Lieutenant Governor, and the Director of Finance. The Fellow will be supervised by the Science Policy Advisor/Tribal Liaison and the Environmental Scientist within the Executive Office of CSLC. The Science Policy Advisor/Tribal Liaison consults with other CSLC staff on many issues where science and policy interface and helps staff navigate complex and politically sensitive issues, including adaptation to climate change and sea-level rise; management of California's marine protected areas; development of offshore renewable energy; and the preservation of cultural and tribal resources. This work includes extensive coordination with other CSLC divisions, including Environmental Planning and Management, Legal, External Affairs, Mineral Resources Management, Marine Environmental Protection, and Land Management.

Position Description:

The Sea Grant Fellow will have the opportunity to work on complex and challenging marine and coastal issues. The Sea Grant Fellow's main work will be related to climate change and sea-level rise; offshore renewable energy; coastal erosion, seawalls, and natural coastal

infrastructure; and the San Diego Ocean Planning Partnership. This will include continuing to refine and deliver ongoing climate change and sea-level rise training program for CSLC staff, integrating the best available science into CSLC decision-making processes, and collaborating with other state, federal, local, and tribal entities. Accordingly, the Fellow will likely have a variety of short-term and long-term projects throughout the fellowship year. The Fellow will also be welcome to participate in conferences, interagency meetings, and collaborative projects with other Fellows as opportunities arise. Previous CSLC Sea Grant Fellows worked on and participated in a number of challenging and high-profile activities, including developing a comprehensive sea-level rise and climate change education and training program for CSLC staff that included development of a GIS viewer; participating on state-level interagency efforts to address sea-level rise policy, including the State Guidance update and the Safeguarding California update; the development of the Commission's new Environmental Justice Policy, evaluating and compiling scientific materials for negotiations on sensitive projects, including coastal sand mining on the Central Coast and shellfish aquaculture in Humboldt Bay; compiling, reviewing, and developing materials for a coastal armoring report; participating on interagency teams exploring offshore renewable energy potential; supporting staff's development of a pilot ocean planning partnership in San Diego; and participating in the development of an environmental justice policy. Many of these projects are ongoing and the Fellow will have an opportunity to continue the work started by current Fellows.

In addition to these long-term projects, the Fellow will interact with CSLC staff from multiple divisions that encompass a wide variety of coastal and marine resource topics. Examples of potential projects include:

- Coastal engineering, erosion, armoring
- Marine and terrestrial renewable energy
- Aquatic invasive species
- Offshore oil development and terminals
- Legacy oil wells and other coastal hazards
- Environmental Justice
- Granted lands/AB691
- Underwater infrastructure impacts
- Cultural and tribal resources
- Marine spatial planning/ocean planning

Specific project and program duties will be developed collaboratively among the Fellow, Science Policy Advisor and Tribal Liaison, and Executive Office, and will be based on the CSLC's needs that arise during the fellowship, as well as the Fellow's interests.

Desirable Qualifications:

- Ability to work both independently and with diverse interdisciplinary teams that require clear communication;
- Ability to develop and apply expertise in natural resources and coastal management issues;
- Ability to translate science into layman's terms;
- Familiarity and/or experience with GIS and web-development;
- Ability to work toward consensus positions with governmental, private, and public interest groups;
- An interest or experience in using social media to educate, engage, and communicate with a wide array of audiences; and
- An interest in CEQA and other natural resource laws, rules, and regulations (e.g., National Environmental Policy Act (NEPA), California Coastal Act, California Ocean Protection Act, Federal and State Endangered Species Acts, etc.).



California Sea Grant State Fellowship Program 2019

Host Agency: California State Lands Commission

Location: 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825

Fellowship Supervisors: Jennifer Mattox, Science Policy Advisor/Tribal Liaison;

Maren Farnum, Environmental Scientist

Points of Contact: Jennifer Mattox, jennifer.mattox@slc.ca.gov; (916) 574-0748;

Maren Farnum, maren.farnum@slc.ca.gov; (916) 574-0966

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The Legislature has enacted more than 300 statutes granting sovereign public trust lands to over 80 local municipalities (referred to as grantees or trustees) to manage in trust for the people of California. The specific uses permitted in each granting statute vary. Some trust grants authorize the construction of ports, harbors, airports, wharves, docks, piers, slips, quays and other structures necessary to facilitate commerce and navigation, while others allow only visitor serving recreational uses or open space. All grants reserve to the people the right to fish in the waters over the lands and the right to convenient access to those waters for that purpose.

While granted public trust lands and assets are managed locally, the Legislature delegated the State's residual and review authority for granted lands to the Commission. The Commission represents the statewide public interest to ensure that trustees operate their grants in conformance with the California Constitution, applicable granting statutes, and the Public Trust Doctrine. Recognizing that evaluating and planning for sea-level rise impacts on granted public trust lands must be prioritized, in 2013, the Legislature enacted Assembly Bill (AB) 691. This bill requires trustees of granted lands with average annual gross public trust revenues exceeding \$250,000 to submit a sea-level rise adaptation strategy assessment to the Commission by July 1, 2019. The assessments are required to inventory vulnerable assets and infrastructure,

estimate the financial costs of sea-level rise, and describe specific sea-level rise adaptation and mitigation strategies.

Position Description:

Under the direction of the Science Policy Advisor/Tribal Liaison and the Environmental Scientist within the Executive Office of CSLC, the Sea Grant Fellow will have the opportunity to work primarily (75%) with our granted lands trustees (major ports, harbor districts, marinas, and local jurisdictions) on developing and reviewing their AB 691 sea-level rise adaptation assessments and evaluating compliance with the legislative criteria. Before this submission deadline, the Fellow will be expected to compile helpful resources to assist grantees with developing their assessments, update the Commission's sea-level rise and AB 691 webpages, create assessment criteria for evaluating submissions, and hold webinars and maintain communication channels with grantees and a hired consultant. After July 1st, 2019, the Fellow will work closely with the Commission's GIS team to publish and maintain a sea-level rise GIS viewer, evaluate submissions, and continue to interface with a hired consultant throughout the AB 691 review process.

The Fellow will also work (25%) on a variety of short and long-term projects throughout the fellowship year, which may include working on the San Diego Ocean Planning Partnership pilot, supporting the Commission's environmental justice team, refining climate change and sea-level rise policy and outreach strategies, integrating the best available science into decision-making processes, and analyzing and compiling scientific materials for a variety of Commission projects. The Fellow may also participate in conferences, interagency meetings, and collaborative projects with other Fellows as opportunities arise.

Desirable Qualifications:

- Ability to work independently and with diverse interdisciplinary teams that require clear communication;
- Someone who is a self-starter and deadline-oriented;
- Experience with GIS and web-development;
- Ability to develop and apply expertise in natural resources and coastal management issues and regulations (e.g. National Environmental Policy Act, California Coastal Act, California Ocean Protection Act, Federal and State Endangered Species Acts, etc.).
- Ability to translate science into layperson's terms;
- Knowledge of/familiarity with resource economics;
- Ability to work toward consensus positions with government, private, and public interest groups;
- Enthusiasm for public policy and lawmaking; ability to work in a complex, fast-paced professional environment;
- An interest or experience in using social media to education, engage, and communicate with a wide array of audiences



Sea Grant Fellowship
California Department of Parks and Recreation
Natural Resources Division

2019 Host Description

1. Host location and contact information

Natural Resources Division, California State Parks
1416 9th St, Room 923
Sacramento, CA 95814
Phone: 916-653-6725

2. Name of fellowship supervisor

Natural Resources Division Coastal Programs Manager: to be announced September 2018
916-653-6725

3. Point of contact for finalists

Catherine Caldwell, Policy & Program Development
Catherine.Caldwell@parks.ca.gov; 916-657-9994

4. Position Description

California State Parks' Natural Resources Division (NRD) provides general policy direction and technical assistance for natural resource management. In addition, NRD administers major funding programs for natural resources management and ecological restoration throughout the State Park System and coordinates with other State and federal agencies on issues of Statewide significance. Currently, California State Parks protects and manages over 100 coastal park units that span a substantial portion of the State's coastline. With expected impacts from Sea Level Rise (SLR) and an increase in extreme events along the California coast, identifying and addressing management priorities for coastal State Park units is becoming increasingly critical for the protection of coastal resources.

The 2019 Sea Grant Fellow will have a unique opportunity to inform State Parks policy and program development and assist in the development of natural resource management solutions, with a focus on coastal parks. The Sea Grant Fellow will work closely with NRD headquarters, and District staff, and will coordinate with the Ocean Protection Council (OPC) as an integral team member on a leading edge of natural resource management in State Parks. The fellow will also have the opportunity to interface directly with senior government officials and leaders in natural resource management policy. Sea Grant Fellow work products include presentations and reports that may be shared throughout the Department and with external entities.



Potential Projects and Duties

Specific project and program duties will be developed collaboratively with the Sea Grant Fellow. Listed below are several project opportunities that address a mix of current policy and technical needs:

Refine strategies and policies to better address projected sea level rise impacts

Evaluate existing State Parks policies and management directives in light of expected climate change and SLR impacts. Work with the Coastal Programs Manager to prepare policy revisions for consideration by State Parks leadership.

Staff the State Parks Sea Level Rise Working Group

The State Parks Sea Level Rise Working Group is an internal body consisting of managers or their designees from a range of State Parks divisions. The Working Group tackles complex coastal issues, including those related to sea level rise and extreme storm events that affect management of coastal State Park units. The Working Group's goal is to develop a Statewide strategy for coastal parks to adapt to sea level rise, as well as the creation of tools to support coastal adaptation decisions. The Sea Grant Fellow will conduct research, gather relevant background information, schedule and organize meetings, give presentations, and track meeting minutes for the Working Group.

Assist Department staff with coastal permitting

Coordinate with District and Coastal Program staff to assist with review and permitting of climate adaptation projects in coastal park units.

Coordinate internal and external communication

- Prepare and deliver presentations to State Parks leadership and Department staff. Presentations may address Parks-focused topics or the findings of regional and Statewide studies related to a particular coastal resource or topic that affects State Park units.
- Engage directly with Department staff to increase awareness and understanding of high priority resources for coastal resource management. Work with coastal State Parks to identify local priorities and opportunities to address the impacts of sea level rise and extreme storm events, and assist in the review of adaptation management alternatives.
- Collaborate with State Parks' Interpretation and Education Division, the OPC, and others to develop communication strategies and messaging related to sea level rise impacts and climate change adaptation strategies.
- Participate in interagency meetings and coordinate with program staff at the California Natural Resources Agency, California Coastal Conservancy, California Coastal Commission, OPC, other State and federal agencies, and NGOs regarding coastal issues. Disseminate applicable information to appropriate audiences, including State Parks HQ and district staff.



Track work products of other State and federal agencies and NGOs regarding coastal issues

Track and monitor progress of other agency work products, including State policy guidance documents, coastal adaptation strategies, and science reports, related to coastal issues. Disseminate applicable information to appropriate audiences, including State Parks HQ and District staff.

Analyze and integrate data to address SLR and other global climate change impacts

In collaboration with the OPC, Coastal Commission and others, recommend data sets and analytical approaches to assist District and field staff with addressing local land management decisions. Provide land managers with assistance incorporating SLR data in project development and grant applications. As appropriate, develop or revise existing guidance documents to ensure accordance with the most up-to-date science and State policy.

Assist with other coastal issues

Work with NRD and District staff on other coastal issues, as assigned.



STATE WATER RESOURCES CONTROL BOARD
2019 Sea Grant State Fellow

HOST DESCRIPTION

Host Location and Contact Information:

State Water Resources Control Board, Division of Water Quality
California Environmental Protection Agency Headquarters Building, 15th Floor
1001 I Street
Sacramento, CA 95814
www.waterboards.ca.gov

Fellowship Supervisor & Point of Contact for Finalists:

Rebecca Fitzgerald, Environmental Program Manager
Water Quality Standards and Assessment Section Chief
rebecca.fitzgerald@waterboards.ca.gov
916-341-5775

Position Description:

The State Water Resources Control Board was created by the Legislature in 1967. Our mission is to preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

The Sea Grant Fellow will primarily work on projects in the Standards Planning Unit 2 (formerly the Ocean Standards Unit), which is one of several units under the Surface Water Quality Standards and Assessment Section. The unit is responsible for developing and updating statewide water quality control plans, policies, and standards involving marine waters. This includes the *Water Quality Control Plan for Ocean Waters of California* (California Ocean Plan), the *Water Quality Control Plan for Control of Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (California Thermal Plan), and the implementation of the *Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling* (Once-Through Cooling Policy). The unit also manages the Beach Safety Program to monitor pathogen contamination at ocean beaches, participates in marine invasive species issues from vessel ballast water discharges, and provides scientific support and inter-agency coordination regarding marine pollution and resource management issues.

Under the general direction of the manager of the Water Quality Standards and Assessment Section, the Sea Grant Fellow will perform complex analyses involved in the development and implementation of state policies and plans for the protection of ocean, estuarine, and inland surface waters. In performing these duties, the fellow shall interact with interested agency staff, stakeholders, and the general public in a courteous and helpful manner. The fellow is responsible for the quantity, quality, and timeliness of work assigned.

The Water Quality Standards and Assessment Section is dynamic with several high priority projects currently under development. The fellow may be involved in prioritizing new planning projects as part of the Ocean Plan triennial review, developing standards and policies for nutrients and blue-green algae in marine and estuarine waters, implementing protections for areas of special biological significance, amending and implementing the Once-Through Cooling Water Policy, and coordinating beach bacteria water quality assessment.

In working on California Ocean Plan amendments and other water quality plans and policies, the fellow's duties may involve all phases of the public planning process, including literature reviews of scientific studies, California Environmental Quality Act (CEQA) scoping, discussion with interested parties to identify possible alternatives for action, preparation of environmental documentation, preparation for public meetings, response to public comments, preparation of recommendations to the Board, and preparation of the administrative record for any changes that the Board adopts. The fellow will also perform other duties as assigned. The working environment is primarily an office environment with limited opportunities for field visits.



STATE WATER RESOURCES CONTROL BOARD
2019 Sea Grant Fellowship Opportunity
Office of Information Management and Analysis
Surface Water Ambient Monitoring Program (SWAMP)

1. Host location and contact information

State Water Resources Control Board, CA-EPA building, Office of Information Management and Analysis (OIMA), 1001 I Street, Sacramento, CA 95814.

2. Fellowship Supervisor & Point of Contact for Finalists:

Ali Dunn, Senior Environmental Scientist
(916) 341-8458

Ali.Dunn@waterboards.ca.gov

3. Position Description

The [State Water Resources Control Board](#) was created by Legislature in 1967. Our mission is to preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

Under the general direction of the of the [Surface Water Ambient Monitoring Program \(SWAMP\)](#) Unit senior, the Sea Grant Fellow (Fellow) will apply data science practices to perform complex analysis, interpretation and visualization of environmental data collected by Water Board Programs, including SWAMP, applicable [California Water Quality Monitoring Council](#) workgroups, and other stakeholders to inform water quality managers and the public. The SWAMP Unit is part of the State Water Board's Office of Information Management and Analysis, home of the [Water Board Data Center](#).

SWAMP's purpose is to inform management decisions and improve the efficiency and effectiveness of Water Board actions (permits, policies, resource management and other activities). Its monitoring programs collect hundreds of chemical, physical and biological samples each year in both freshwater and marine environments. The Fellow will be the SWAMP Unit's main point of contact for marine studies and will be involved in multiple phases of the SWAMP [Coastal Fish Survey](#), the [National Coastal Condition Assessment](#) (NCCA) and other coastal monitoring programs (including monitoring required by Water Board permits and other regulatory actions). Duties will include participating in monitoring study design, field sampling and logistics, meeting organization and notetaking, coordinating with partner programs, data analysis and interpretation, data visualization and communication, adding content to the [My Water Quality Portals](#), and presentation of findings to both technical and lay audiences. The Fellow will also perform other duties, as assigned, to support

the SWAMP Unit, the California Water Quality Monitoring Council, and the Office of Information Management and Analysis, such as rapid trash assessment method development or assistance with satellite imagery analysis to detect potential harmful algal blooms. In performing these duties, the Fellow will interact with interested agency staff, stakeholders and the general public in a courteous and helpful manner. The Fellow is responsible for the quantity, quality, and timeliness of work assigned.

Skills or attributes we seek include:

- Ability to perform complex scientific analysis and communicate findings to technical staff, managers and the general public.
- Strong interest in the mechanics of utilizing science to inform public policy.
- Ability to lead groups of people, often with divergent views on how to move forward on a particular issue.
- Excellent verbal and written communication skills.
- A problem solver with strong personal initiative and the ability to work well under minimal supervision.



**Port of San Diego, San Diego, CA
Planning and Green Port
Sea Grant State Fellow Opportunity**

Host Location and Contact Information:

Port of San Diego
Planning & Green Port
3165 Pacific Highway
San Diego, CA 92101

Supervisor and Point of Contact for Finalists:

Paula Sylvia
Program Manager – Aquaculture and Blue Technology
(see address above)
619-686-6491
psylvia@portofsandiego.org

Lily Tsukayama
Assistant Planner – Planning
(see address above)
619-686-8199
lttsukayama@portofsandiego.org

**Port of San Diego, San Diego, CA
Planning and Green Port
Sea Grant State Fellow Opportunity**

Position Description:

The Port of San Diego was created by the State Legislature to manage San Diego Bay and surrounding waterfront land through a regional governance approach in 1962. The Port of San Diego is the fourth largest of the 11 deep water Ports in California, and is bordered by five member cities: Chula Vista, Coronado, Imperial Beach, National City, and San Diego. The Port oversees two marine cargo terminals, two cruise ship terminals, over 20 public parks, the Harbor Police Department, and the leases of over 200 tenants and over 500 sub tenant businesses around San Diego Bay. The Port is an economic engine, and environmental steward of San Diego Bay and the surrounding tidelands, and a provider of community services and public safety.

Two Sea Grant Fellows with the Port of San Diego will support programs and initiatives through Planning & Green Port. Through integrated planning, sustainable development of Port of San Diego operations, and protection and enhancement of natural resources that celebrate tidelands and waterfront life, Planning & Green Port comprises five distinct teams and departments:

1. **Aquaculture and Blue Technology**
2. **Energy**
3. **Environmental Conservation**
4. **Environmental Protection**
5. **Planning**

The Port's two Sea Grant Fellows will have the opportunity to assist all of these programs, with an emphasis on Aquaculture and Blue Technology, Environmental Conservation, and Planning.

Aquaculture and Blue Technology provides a launching pad for sustainable aquaculture and emerging blue technology businesses in and around San Diego Bay by offering key assets and support services focused on pilot project facilitation, planning and predevelopment tools, state and federal policy and legislative development, permit ready infrastructure, entitlements, market access, and strategic funding. Current and ongoing efforts with this team include: the Blue Economy Incubator, use of marine spatial planning and other tools to inform future aquaculture siting opportunities, and participation in current Blue Economy Incubator pilot projects.

Environmental Conservation supports projects and programs that conserve and enhance natural resources by expanding native habitats and ensuring regulatory compliance through sound resource management, to advance a thriving and sustainable waterfront. Current and ongoing efforts include: mitigation banking, natural solutions for resilient shoreline infrastructure, and managing the Port of San Diego's Environmental Education Program.

Planning creates and supports a well-planned and integrated waterfront through strategic initiatives, policy formation, and agency coordination. Planning advances a holistically planned waterfront that is welcoming, sustainable, prosperous, and improves the quality of life for present and future generations. Current and ongoing long range planning efforts include: the Port of San Diego's Port Master Plan Update, the San Diego Ocean Planning Partnership, and environmental review of all Planning & Green Port projects and activities.

There are a number of initiatives currently underway with Planning & Green Port that Sea Grant Fellows could contribute to. Some of these initiatives and general descriptions of the work needed by Sea Grant Fellows could include:

- **Policy, permitting, and grants:** assist with a variety of pilot and other projects conducted by Planning & Green Port programs (like the Blue Economy Incubator) or external stakeholders. This work may include pilot project proposal review, researching relevant grant opportunities and drafting grant proposals, planning, permitting and entitlements (CEQA, Coastal, Army Corps of Engineers, Regional Water Quality Control Board), coordination with partners, and outreach activities.
- **Aquaculture pilot project support and research:** assist with a variety of current and upcoming pilot projects to support the growth of shellfish and seaweed aquaculture in San Diego Bay. This work may include research and literature review, data analysis and/or review to identify data gaps, and planning for new data collection to assist with identifying suitable locations for various types of aquaculture operations.
- **San Diego Ocean Planning Partnership:** The California State Lands Commission and the Port of San Diego formed the San Diego Ocean Planning Partnership to collaborate on an ocean planning pilot in the ocean space offshore San Diego County. This work may involve local, state, regional, and federal agency coordination, stakeholder engagement, and review of ocean and coastal-related data.
- **Natural Resources:** potential to be involved in or gain exposure to a variety of projects, including but not limited to: natural resources management, wetlands restoration and monitoring, living shorelines, climate change studies, permit compliance, bioremediation, and mitigation banking.
- **Site Visits:** potential to attend site visits to various locations on Port tidelands, including parks, project sites, terminals, or other sites. These visits may involve meetings with Port staff or external stakeholders, environmental monitoring, tours, or public meetings.
- **Other project management and coordination:** assist with various projects (primarily with Aquaculture & Blue Technology, Environmental Conservation, and Planning) to achieve milestones, and provide due diligence for deliverables. This work may involve creating work plans and timelines, coordinating meetings with other Port departments or stakeholders (e.g. local or state agencies, nonprofits, academia), taking meeting minutes, drafting presentations and memos, and preparing reports.

A successful candidate must be able to work independently but also function as part of a multi-disciplinary team within the Port's Planning & Green Port, as well as counterparts in other agencies and industry, with emphasis on communication, inter-personal skills, interaction with policy and regulatory information; there is little emphasis on direct scientific research, however, the ability to conduct detailed literature, legal, and administrative reviews and research will be an important contribution. Strong organizational, listening, and writing skills and a willingness to work on and interact with a broad variety of projects will greatly enhance the fellowship.