



**San Francisco Bay Conservation and Development Commission  
2020 State Fellowship Opportunity  
Regional Sea Level Rise Adaptation Planning Fellow**

**1. Host location and contact information:**

San Francisco Bay Conservation and Development Commission  
375 Beale Street, Suite 510  
San Francisco, CA 94105

**2. Fellowship Supervisor:**

Dana Brechwald, Adapting to Rising Tides Program Manager

**3. Point of contact for California Sea Grant and prospective fellows and finalists:**

Dana Brechwald  
Adapting to Rising Tides Program Manager  
415-352-3656, [dana.brechwald@bcdc.ca.gov](mailto:dana.brechwald@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.

**The Regional Shoreline Adaptation Plan (RSAP)** for the Bay Area is a long-term planning effort to protect communities, critical developed shoreline areas and natural ecosystems, enhance the resilience of Bay and shoreline systems and increase their adaptive capacities to flooding and rising sea level. The RSAP will be a Bay-wide, stakeholder-driven regional strategy to prioritize the projects and actions that will address the most critical flood risks posed to the region by rising sea level. The RSAP will help protect communities and the built and natural environment located along the Bay shoreline by making smart funding decisions today to limit future post-disaster recovery expenditures and prevent the loss of regionally-critical functions and disproportionate impacts to vulnerable communities. Development of the RSAP

will be collaborative and involve staff from local governments, special districts, and the private and nonprofit sectors, each of which will provide in-kind and/or direct support for the project.

**Regional Sea Level Rise Adaptation Planning Fellow:**

**One fellow will be placed in BCDC's planning division** to help support the agency's Regional Shoreline Adaptation Plan process and the Adapting to Rising Tides Program. 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 regional scale adaptation planning and the 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 adaptation planning processes at a regional scale, capitalizing on completed vulnerability assessments utilizing the ART Assessment Questions to collect data and information that 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 Regional Adaptation Planning 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.



## 2020 California Sea Grant State Fellowship Sediment Management Fellow

### 1. Host location and contact information:

San Francisco Bay Conservation and Development Commission  
375 Beale Street, Suite 510  
San Francisco, CA 94105

### 2. Fellowship Supervisor:

Brenda Goeden, Sediment Program Manager

### 3. Point of Contact: Brenda Goeden

Sediment Program Manager  
375 Beale Street, Suite 510  
San Francisco, CA 94105  
415.352.3623  
[brenda.goeden@bcdC.ca.gov](mailto:brenda.goeden@bcdC.ca.gov)

### 4. Position Description:

**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, and the Suisun Marsh. BCDC was created in 1965 and is the nation's first 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. BCDC 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 McAtter-Petris Act, the San Francisco Bay Plan, the Suisun Marsh Preservation Act, the Suisun Protection Plan, and other special area plans and laws and policies.

The Sediment Management Team is seeking a Fellow to assist in the development of the San Pablo Bay and potentially Suisun Bay chapters of the San Francisco Bay Regional Sediment Management (RSM) Plan. This work entails: reviewing and summarizing known science for the area and identifying existing data gaps; identifying sediment management activities; considering and developing alternative sediment management options; developing recommendations for improving current practices; and working with stakeholders to reach consensus and work towards implementing new strategies. This work incorporates sediment science, climate change resilience planning, natural and nature-based infrastructure; and stakeholder outreach for the two of the San Francisco Bay embayments mentioned above.

RSM plans approach sediment management through the context of the broader sediment system, with considerations of sediment sources, movement, sinks, and exchange with the ocean. Application of this approach to San Francisco Bay and its watersheds will assist

watershed managers, flood control districts, navigation programs, and coastal managers to better understand the impacts that individual permit decisions may have locally and system-wide. In turn, the impacts of sediment processes should be evaluated and considered for projects. Because physical processes can significantly influence biological processes, sediment dynamics are important components of the estuarine system that fuels the environmental and economic vitality of the Bay Area. The San Francisco Bay RSM Plan is a living document and has been contributed to by the sediment management team, including four previous Sea Grant Fellows. Once the plan is established for each embayment implementation can begin for that area with local community involvement and project planning.

In this position, the Fellow, working with program staff, will review relevant research regarding sediment supply, demand, and transport within and beyond the San Francisco Bay Estuary, and conduct site visits and meetings with the local community. The Fellow will also engage regional experts in the field through individual consultations, meetings, and symposia development. The Fellow would also research potential funding sources for prioritized and proposed research to fill identified data gaps.

**GIS Mapping and Geospatial Analysis Product Development.** A portion of the RSM work includes the use of spatial analysis using GIS, creating layers and maps for the work plan. The analysis would include conservation areas, areas where special status species occur, and areas of human impacts. This task would include researching necessary data and information, inputting data into the inhouse GIS system and developing visualization products that will assist managers in understanding relationships between environmental conditions, human activities, and environmental effects.

**Other Fellowship Opportunities.** The Sea Grant Fellowship program at BCDC also offers the opportunity to learn about regional planning and the associated regulatory process. Focus topics at BCDC include sea level rise adaptation and climate change issues, sediment dynamics, resource protection, and wetland restoration. The Fellow will apply their academic training to practical professional experiences, receive training from BCDC staff, and participate in staff activities. The Fellow will also have the opportunity to regularly attend a variety of meetings with federal, state, and local agencies (EPA, U.S. Army Corps of Engineers, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Regional Water Quality Control Board, State Lands Commission, California Department of Fish and Game, and city and county planning departments), make presentations, and prepare reports and documents specific to sediment management issues. Though the primary focus of these fellowship is further development of an RSM plan, the opportunity exists to do regulatory analysis, project management, environmental review, and review sediment quality testing to a limited extent.

BCDC has hosted NOAA Fellows nearly every year (two-year term) for the last fifteen years and has hosted multiple California Sea Grant Fellows since 2010, and is experienced in mentorship programs. In addition, the Commission regularly has a number of interns working in the different units including legal, enforcement, permitting, sediment management, planning, and

clerical. These interns come from a variety of backgrounds and provide opportunities to exchange experience. BCDC staff is diverse, and is composed of regional planners, lawyers, enforcement staff, policy and program analysts, structural engineers, ecologists, oceanographers, and high-level executive staff. BCDC Fellows participate in agency work in a manner equivalent to staff, attending general staff meetings and Commission meetings, and becomes part of the BCDC team.



**1. Host Location and Contact Information:**

California Energy Commission, 1516 Ninth Street, Sacramento, CA 95814  
Shawn Pittard, Deputy Director. [Shawn.Pittard@energy.ca.gov](mailto:Shawn.Pittard@energy.ca.gov). 916-654-5100

**2. Name of fellowship supervisor:**

Scott Flint, Program Manager, Energy Planning, Siting, Transmission and Environmental Protection Division

**3. Point of contact for California Sea Grant, prospective fellows, and finalists:**

Shawn Pittard, Deputy Director, Siting, Transmission and Environmental Protection Division

**4. Position description:**

The California Energy Commission is the state's primary energy policy and planning agency, and plays a critical role in creating the energy system of the future. The Energy Commission is working closely with other California state agencies and with the Bureau of Ocean Energy Management (BOEM) to assess the potential role of offshore wind energy within the state's energy portfolio as well as improve the state's understanding of the impacts that offshore wind (OSW) energy development could have on the coastal and marine environment.

This Sea Grant Fellowship will offer an opportunity to work at the intersection of marine renewable energy development and investigating the potential environmental effects to the coastal and marine environment. The Fellow's primary work will support the state's identification and synthesis of existing marine information and data, including what has been assembled on the California Offshore Wind Energy Gateway. Work will include:

- Supporting the Energy Commission's outreach to academic institutions and researchers to locate and assemble data from the most recent and ongoing scientific work.
- Supporting the Energy Commission's research and development efforts related to offshore wind energy and interactions with the marine environment.
- Reviewing assembled data and identifying the most relevant science-based datasets and information.
- Supporting the Energy Commission's public process, including public workshops and stakeholder meetings, to describe data assembly and review processes.
- Supporting the state's identification of additional data requirements and information gaps.

The Fellow will be housed within the Energy Commission's Siting, Transmission and Environmental Protection Division but will also be available to support activities with other California state agencies, including the Ocean Protection Council (OPC), the California Department of Fish and Wildlife (CDFW), the California State Lands Commission (SLC), and the California Coastal Commission.

The Sea Grant Fellow should have strong research and writing skills and the ability to communicate with state agency staff, researchers, and the public. Experience working with geospatial data and Geographic Information Systems (GIS) is a plus.



2019

### Sea Grant Host Description

1. Host Location and contact information: North Region Environmental Planning  
Environmental Engineering and Coastal Stewardship  
District 1, 1656 Union Street  
Eureka, CA 95501
2. Fellowship Supervisor: Kevin Church, North Region Chief Environmental Engineer  
(707) 445-5201 [kevin.church@dot.ca.gov](mailto:kevin.church@dot.ca.gov)
3. Point of Contact: Lorna McFarlane, Water Quality Planner  
(707) 441-5609 [lorna.mcfarlane@dot.ca.gov](mailto:lorna.mcfarlane@dot.ca.gov)

### **Agency Background**

The California Department of Transportation (Caltrans) is a part of the cabinet level California State Transportation Agency tasked with managing the state's highway system. Caltrans' mission is to "[p]rovide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."

In response to the National Environmental Policy Act (NEPA), in 1969, and the California Environmental Quality Act (CEQA), in 1973, Caltrans formally initiated an environmental function. Subsequently, in response to the passage of a host of environmentally-related laws and regulations and heightened public support for the environment, environmental compliance has grown to become a substantive and inseparable part of Caltrans' planning, development, construction, operation and maintenance efforts.

Caltrans headquarters' Division of Environmental Analysis (DEA), administers Caltrans' responsibilities under federal and state environmental law. The DEA develops and maintains Caltrans environmental standards, policies, procedures, and practices that are implemented by the Department's 12 District Environmental Branches. The selected Fellow would work with Caltrans North Region Environmental, based in Eureka CA. Staff at headquarters DEA and in the districts work to identify and assess the effects of Caltrans' projects on the state's natural and cultural environments, and identify ways to avoid or mitigate those effects. Efforts include:

- Complying with state and federal environmental laws;
- Encouraging the public to participate in the environmental evaluation process;
- Determining the environmental consequences of our activities;
- Proposing prudent, feasible and cost-effective strategies and alternatives to avoid or minimize adverse impacts of the Department's activities, and;
- Ensuring the mitigation selected is appropriate.
- Provide funding to State and Federal Agencies conservation efforts, implemented as mitigation

<https://dot.ca.gov/programs/environmental-analysis> <https://dot.ca.gov/caltrans-near-me/district-1>

### **Position Description**

The Sea Grant Fellow will function as a full team member in the Environmental Engineering Unit. The Fellow may also split time with the Coastal Stewardship Unit and other Units in the Division of Environmental. Within the Environmental Engineering Unit, and depending on the Fellow's skill and interests, the Fellow may work on the following projects:

- Implementing eelgrass mitigation in Humboldt Bay in coordination with the California Department of Fish and Wildlife (CDFW) and [Sea Grant Extension Specialist Joe Tyburczy](#) (Humboldt State University)
- Assessing the hydroacoustic impacts to aquatic life from construction activities (pile driving, jack hammering etc.)
- Assessing the relationship between land-based construction activities and the collapse of Tidewater Goby burrows
- Assessing the water quality impacts of placing asphalt grindings in roadway construction
- Completing CEQA level Water Quality Assessments for planned projects within Caltrans District 1
- Water Quality permitting (401, 404, 1600, Lake and Streambed Alteration Agreement (LSAA )etc.)
- Identifying and developing mitigation options for Caltrans projects that result in significant impacts
- Identifying and developing innovative new ways to earn alternative compliance units under the Caltrans NPDES (National Pollutant Elimination Discharge System) Permit
- Water Quality monitoring (fresh and marine) for threatened or endangered fish species
- Research and development of proposal on the value and appropriateness of using eDNA in biological surveys
- Overseeing removal of *Spartina denisflora* at Tuluwat Island; restoring ~70 acres of wetlands in Arcata, CA

### Skills Learned

We understand the aim of the fellowship is to provide recent graduates with real world environmental policy and implementation experience. We are committed to ensuring you leave the fellowship with developed and employable skills that will make you a competitive job applicant in the field. We will work closely with the fellow to provide career mentorship and the development of other skills such as:

- Development of Memorandums of Understanding (MOUs) and Interagency agreements
- CEQA, NEPA, and water quality permitting
- Understanding the roles and functions of resource, regulatory and project delivery State agencies
- Exposure to (through direct work with) agencies including CDFW, Coastal Commission, Waterboards, NOAA Fisheries, US Fish and Wildlife
- Understanding of project management

### Desirable Qualifications

Experience with the subject matter for any (or all) of the potential projects listed above but most importantly we seek a motivated, self-starter who is willing to learn. Additionally, we are looking for a fellow with a positive attitude, strong organizational skills, and strong networking/communication abilities.

**\*\*Also, must be willing to live in one of the most beautiful parts of California!!**





**CALIFORNIA COASTAL COMMISSION**

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VOICE (415) 904-5200  
FAX (415) 904-5400  
TDD (415) 597-5885

**2020 SEA GRANT FELLOWSHIP****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, 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 various climate-related special projects including federal grant projects related to sea level rise adaptation planning for critical infrastructure and protecting public trust lands and resources. The Fellow would carry out discreet tasks to complete those special projects.
- 5) Assisting with policy work and development of potential products related to permitting and planning of “living shoreline” 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. As requested by OPC, the Coastal Commission is prepared to cover the required share of the fellowship stipend above the contribution made by the OPC and a percentage by Sea Grant and to supply needed operational, travel, and transit subsidy costs.

### **Host Location**

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

### **Fellowship Supervisors**

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

### **Point of Contact for California Sea Grant, Prospective Fellows, and Finalists**

Susan Hansch, Chief Deputy Director  
[shansch@coastal.ca.gov](mailto:shansch@coastal.ca.gov)  
(415) 904-5244



## The Delta Stewardship Council will host one Sea Grant Fellow in the Planning and Performance Division

### Background

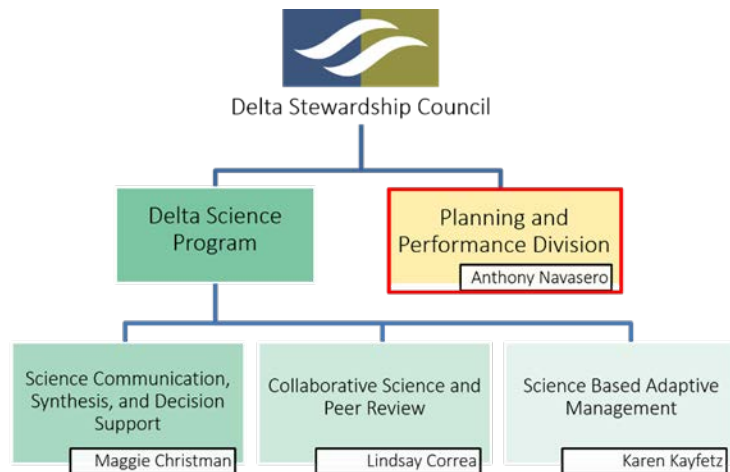
The Sacramento–San Joaquin Delta (Delta), along with the San Francisco Bay, is part of the largest estuary on the West Coast. The Delta provides vital habitat for endangered and endemic species and is the portal through which important fish species, including anadromous Chinook salmon, pass on their way to and from their spawning grounds. The Delta is a major stop on the Pacific Flyway as well as the hub of the State’s water supply system, supplying two-thirds of California’s water supply. Thus, the Delta is inextricably linked to statewide water supply issues that affect its ability to function as a natural ecosystem.



Location Map: Sacramento-San Joaquin Delta

### Delta Stewardship Council

In 2009, seeking an end to decades of conflict over water, the Legislature established the [Delta Stewardship Council](#) (Council) to resolve long-standing issues and achieve the State mandated coequal goals for the Delta. Coequal goals means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. To advance the State’s coequal goals for the Delta, the Council was required to develop the Delta Plan, an enforceable long-term sustainable management plan for the region to ensure coordinated action at the federal, state, and local levels. To better facilitate collaboration and coordination with agencies working in and around the Delta, the Council is located in Sacramento, a hub for many federal (e.g. NOAA, USFWS, USBR, USGS, etc...), State (e.g. CDFW, DWR, SWRCB, etc...), and local agencies as well as consulting firms, academia, and NGOs.





## Planning and Performance Division

As one of the divisions in the Council's organization, the **Planning and Performance Division** provides integration of environmental, engineering, and land use planning expertise to support and coordinate the implementation of the **Delta Plan**, which is enforced through the regulatory authority of the Council. The Planning and Performance Division implements the plan through the Council's roles to coordinate with federal, State, and local agencies to achieve the coequal goals; ensure consistency with the Delta Plan; inform stakeholders how to achieve the coequal goals; comment on projects, plans, and programs with significant impacts to the Delta; and ensure accountability for consistency of projects, plans, and programs with Delta Plan policies.

The Division has three primary tasks; 1) reviewing, revising, and implementing the Delta Plan by collaborating with federal, State, and local agencies to follow the Delta Plan's recommendations; 2) measuring progress in achieving the coequal goals of a reliable water supply for California and healthy ecosystem through **Delta Plan Performance Measures**; and 3) review of governmental agency projects or programs that take place within the Delta for potential environmental impacts and consistency with policies in the Delta Plan.

The Planning and Performance Division currently is working on such topics and policies as:

- Reliable Water Supply
- Water Quality
- Risk Reduction to Flooding
- Climate Change
- Sea Level Rise
- Human Right to Water
- Environmental Justice
- Habitat Restoration
- Endangered Species
- Fisheries Management
- Non-native/Invasive Species
- Environmental Review
- CEQA Development
- Delta as an Evolving Place

## Planning and Performance Division Sea Grant Fellow Position

The **Planning and Performance Division's** Sea Grant fellow 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. An opportunity that may be different from past experiences, but one that would be enriching and experience-broadening. 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. Specific projects and work groups will be identified and assigned based on the Sea Grant fellow's expertise and interests and is intended to maximize the fellow's experience, knowledge, and networking opportunities. Working closely with staff across the entire Planning Division, the fellow will have the opportunity to interact with California policy makers and implementers; water operators and managers; and national and international scientific experts. The fellow should gain exposure to how policies, programs, plans, and projects are developed and implemented in the Delta and Suisun Marsh, as well as statewide.



## Potential Assignments

- Participate in developing the Climate Change Vulnerability Assessment and Adaption Strategy for the Delta and Suisun Marsh.
- Assist in implementing priorities that are developed from the 5-Year Review of the Delta Plan.
- Assist in the implementation of the Ecosystem Amendment to the Delta Plan.
- Assist in the development of the CEQA documentation for the Ecosystem Amendment to the Delta Plan.
- Evaluate water supply, water storage, ecosystem restoration, and flood protection projects, plans, and programs and reviewing their environmental documents for their consistency with the regulations of the Delta Plan.
- Assist in early consultation with State and local agencies on their projects, plans, and programs considered covered actions under the Delta Plan to ensure consistency with the regulations of the Delta Plan.
- Gather and develop GIS data for performance measure analysis, Delta Plan regulations, and visualization tools to facilitate stakeholder participation in habitat restoration and flood management planning.
- Research statewide water conservation and groundwater management efforts.
- Review and report on studies, reports, and documents of interest to the Delta Plan's policies and recommendations.
- Support Planning and Performance Division staff in their daily tasks.

## Potential Activities

- Attend agency, division, and working group meetings
- Take training opportunities and skill set development
- Attend seminars and conferences
- Site visits in the Delta
- Enroll in professional development courses
- Partake in social and networking opportunities

**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](mailto:Anthony.Navasero@deltacouncil.ca.gov)



## The Delta Science Program will host three Sea Grant Fellows in 2020

### Background

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

The Delta Stewardship Council is a state agency whose mission is to support a more **reliable statewide water supply** and a

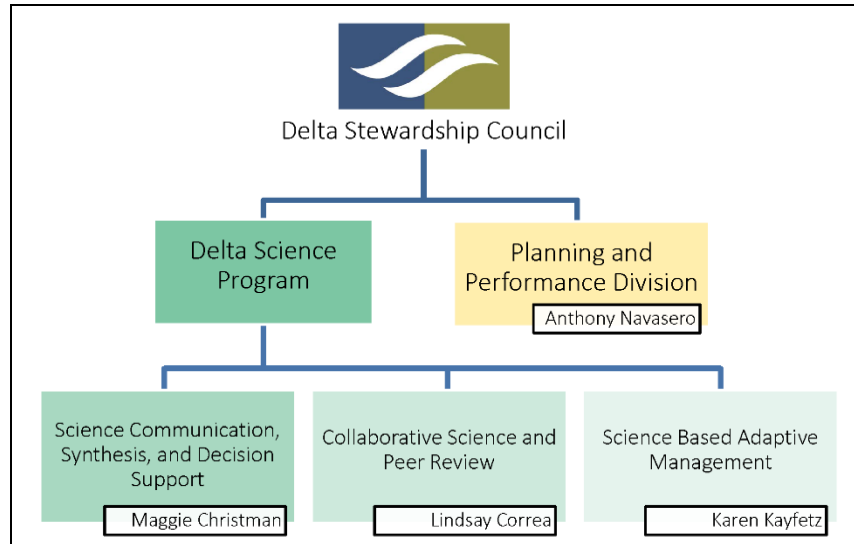
**healthy and resilient ecosystem**, both achieved in a manner that protects and enhances the unique characteristics of the **Delta as an evolving place**. The Delta Science Program (DSP) is a boundary organization with a mission to provide scientific information, independent peer review, and syntheses on issues critical for managing the Bay-Delta system. The DSP also leads efforts to build an open, integrated, and collaborative Delta science community.



The Delta Science Program has hosted fellows for the past seven years and provides a welcoming and collaborative work environment. Past fellows have enjoyed touring the Delta, taking professional development courses, attending seminars and conferences, and assisting partnering agencies with field work. As one of three Science Program fellows, you will work at the dynamic interface of science and policy—**synthesizing, reviewing, coordinating, funding, and communicating** science on several high-priority issues, including:

- Climate change
- Sea level rise
- Water supply reliability
- Habitat restoration
- Endangered species
- Non-native/invasive species
- Fisheries management
- Human dimensions

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 (e.g., National Oceanic and Atmospheric Administration, California Department of Fish and Wildlife, United States (US) Fish and Wildlife Service, US Bureau of Reclamation, US Geological Survey, Department of Water Resources, State Water Resources Control Board), consulting firms, academia, and NGOs, among others. Many fellows have gone on to work with these partners.



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

This unit has three primary areas of emphasis: 1) improve science communications among multiple stakeholders in the Bay-Delta system, including scientists, managers, decision-makers, and the public, 2) facilitate and participate in analysis and synthesis of scientific information to support management and decision-making, and 3) facilitate cooperative decision-making by supporting open science and integrated modeling initiatives. 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 and Point of Contact:** Maggie Christman, Program Manager II  
[Maggie.Christman@deltacouncil.ca.gov](mailto: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](#) was created by a previous fellow.
- Work with the Delta Lead Scientist on monthly reports that summarize recent science efforts around the Delta as well as water supply metrics and ecological indicators.  
[Recent Example](#).
- Summarize science funded by the DSP in a format that is creative and accessible to non-scientists, including policy-makers, managers and program directors (e.g., policy-makers and the public).
- Assist in dissemination of DSP efforts through fact-sheets, social media (e.g., [Science Fridays](#) on Twitter), and other means.
- Plan and facilitate 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, including developing summaries for managers, lay abstracts, and web content to support communication of scientific information to Delta stakeholders.

## **Position 2: Collaborative Science and Peer Review Unit**

The Collaborative Science and Peer Review Unit is working on several exciting and challenging 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 to jointly implement the [Delta Science Plan](#), 2) supporting competitive funding of priority research aligned with the [Science Action Agenda](#), 3) synthesizing scientific information to generate best available science for informing water and environmental decision-making, and 4) facilitating independent scientific peer reviews of programs, plans, and reports. A fellow in this unit will engage in our unit's collaborative interagency initiatives and lead an independent project that utilizes their unique skillset.

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

**Fellowship Supervisor and Point of Contact:** Lindsay Correa, Program Manager II  
[Lindsay.Correa@deltacouncil.ca.gov](mailto:Lindsay.Correa@deltacouncil.ca.gov), 916-445-0092

### **Potential Projects**

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

- Contribute to implementing the Delta Science Plan through participating in multi-agency collaborative efforts to perform horizon scanning for future research agendas, identifying opportunities for sustainable science funding, and developing metrics to track the plan's implementation and performance.
- Advance the integration of human dimensions science to inform Bay-Delta management and policy decisions through implementing social science investigations, developing community research agendas, and building networks of social science investigators.
- Assist with developing guidelines and best practices for policy-science forums.
- Evaluate the effectiveness and utility of Delta Science Program independent peer review efforts, including tracking and summarizing actions resulting from independent scientific peer reviews.
- Assess the collaborative network of the Delta based on ongoing work.
- Contribute to the development of a competitive science funding program.
- Synthesize information on stressor impacts on the Bay-Delta ecosystem.

### **Examples of Previous Fellows' Projects**

- Multi-agency investigation of salmon behavior and migration in floodplain habitats
- Multi-agency and stakeholder [salmon gaps analysis report](#)
- Contributed to the Interim Science Action Agenda ([past fellows' promotional video](#))
- 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) contributing to scientific synthesis on restoration, climate change, and other management topics, (2) advising on adaptive management frameworks and project- and landscape-level conceptual models, (3) leading the Interagency Adaptive Management Integration Team to support ecosystem restoration adaptive management in the Delta, and (4) 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 and Point of Contact:** Karen Kayfetz, Environmental Program Manager | [Karen.Kayfetz@deltacouncil.ca.gov](mailto:Karen.Kayfetz@deltacouncil.ca.gov), (916) 445-5694

#### **Potential Projects**

- Contribute to developing climate change adaptation strategies for Delta ecosystems.
- Perform evaluation and synthesis related to ecosystem restoration, drawing on long-term environmental datasets and research. Publish results in agency literature or scientific journals.
- Collaborate on planning a symposium on estuarine connectivity. Bring in experts from around the Delta and from other estuarine systems to discuss connectivity in a daylong workshop and produce a white paper or essay for a scientific journal.
- Plan and facilitate meetings of the Interagency Adaptive Management Integration Team, which supports ecosystem restoration adaptive management in the Delta. Help to design and implement a communication strategy for the interagency effort.
- Support the reviews of the Delta ISB, which could include literature reviews, analyzing questionnaire data from the science community, coordinating interagency events (e.g., panel discussions), and creating communication products and outreach materials on Delta ISB reviews.
- Plan and coordinate other interagency meetings, panels, workshops, and field trips.

**Commissioners**  
**Eric Sklar**, President  
Saint Helena

**Jacque Hostler-Carmesin**, Vice President  
McKinleyville

**Russell E. Burns**, Member  
Napa

**Peter S. Silva**, Member  
Jamul

**Samantha Murray**, Member  
Del Mar

STATE OF CALIFORNIA  
Gavin Newsom, Governor

## Fish and Game Commission



*Wildlife Heritage and Conservation*  
*Since 1870*

**Melissa Miller-Henson**  
**Acting Executive Director**  
P.O. Box 944209  
Sacramento, CA 94244-2090  
(916) 653-4899  
fgc@fgc.ca.gov  
www.fgc.ca.gov

## California Sea Grant State Fellowship Program

**Host Location/Contact:** California Fish and Game Commission  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

**Mailing Address:** PO Box 944209  
Sacramento, CA 94244-2090

**Names of Supervisor:** Melissa Miller-Henson, Acting Executive Director

**Point of Contact:** Susan Ashcraft, Acting Deputy Executive Director  
(916) 653-1803  
Susan.Ashcraft@fgc.ca.gov

### 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 have three meetings 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 conducting the day to day management of programs established through regulation, and provides biological data and expertise to inform the Commission's decision-making process.

### **Potential Roles and Projects for 2020 Sea Grant Fellow**

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;
- helping improve the Commission website and develop social media outreach.

While project priorities may change over time to address Commission direction and regulatory need, FGC staff are currently considering the following projects for the 2020 Sea Grant fellow:

- Coastal Fishing Communities Project
- Aquaculture Best Management Practices Plans
- Invasive Species Management Strategies

In addition to these FGC special projects, the Sea Grant fellow may be involved in ongoing collaborative projects to address the management of California's resources in various focal areas including climate change, stakeholder input, tribal concerns, and new and emerging regulatory issues.

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 including direct interaction with Governor-appointed decision makers.



## 2020 Sea Grant Fellowship Position Description

**Host Agency:** Monterey Bay Aquarium

**Location:** 886 Cannery Row, Monterey, CA 93940

**Fellowship Supervisor:** Erin Eastwood | Ocean Policy Campaign Manager, Conservation and Science – [eeastwood@mbayaq.org](mailto:eeastwood@mbayaq.org)

**Point of Contact:** Claudia P. Tibbs | Sustainability and Operations Manager, Conservation and Science – [cptibbs@mbayaq.org](mailto:cptibbs@mbayaq.org)

### 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:

- **Build a constituency 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.
- **Restore and protect California ocean 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 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 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.
- **Combat climate change 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.



## 2020 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.



## 2020 California Sea Grant Host Description

### 1. Host Location and Contact Information:

**West Coast Regional Aquaculture Coordinator, NOAA Fisheries, California**

**Genetics, Physiology, and Aquaculture Program, NOAA Fisheries Southwest Fisheries Science Center**

8901 La Jolla Shores Dr.

La Jolla, CA 92037

### 2./3. Supervisor & Point of Contact for CA Sea Grant, prospective fellows, and finalists:

Diane Windham, NOAA Fisheries West Coast Regional Aquaculture Coordinator – California  
[diane.windham@noaa.gov](mailto:diane.windham@noaa.gov), (530) 574-3055

John Hyde, Genetics, Physiology, and Aquaculture Program Leader, NOAA Fisheries Southwest Fisheries Science Center, [john.hyde@noaa.gov](mailto:john.hyde@noaa.gov), (858) 546-7086

### 4. Position Description:

**Background:** NOAA has a multi-faceted role in aquaculture, ranging from supporting cutting-edge science and research to policy development and regulation. The **NOAA Fisheries Office of Aquaculture** supports sustainable aquaculture that provides safe, sustainable seafood; creates employment and business opportunities in coastal communities; and complements NOAA's comprehensive strategy for maintaining healthy and productive marine populations, ecosystems, and vibrant coastal communities.

NOAA Fisheries plays a central role in developing and implementing policies that enable marine aquaculture development and works to ensure that aquaculture projects comply with existing federal laws and regulations that NOAA enforces under its marine stewardship mission. In the United States, marine aquaculture operates within one of the most comprehensive regulatory environments in the world. Projects that are sited in U.S. waters must meet a suite of federal, state, and local regulations that ensure environmental protection, water quality, food safety, and protection of public health.

Science and adaptive management inform NOAA policy, regulatory, and management decisions regarding aquaculture in marine waters. NOAA's aquaculture efforts are led by NOAA Fisheries and include activities at **NOAA Fisheries science centers and regional offices**, NOAA's National **Sea Grant program**, and NOAA's **National Ocean Service**. The Aquaculture Program integrates and coordinates the agency's aquaculture policies, research, outreach, and international efforts. NOAA is working with its federal, state, and tribal partners on a variety of initiatives stemming from the 2011 National Aquaculture Policy, the National Ocean Policy Implementation Plan, and its mandates under the Endangered Species Act, Magnuson Stevens Fisheries Conservation Act, the National Aquaculture Act, the National Shellfish Initiative and the Aquaculture Technology Transfer Initiative. Several statewide shellfish initiatives are also underway, including in California.

Since 2008, NOAA has been expanding its aquaculture efforts by establishing Regional Coordinators around the country. This allows NOAA to have a regional presence and increases awareness of region-specific issues. The office has Regional Aquaculture Coordinators in the Northeast region, Southeast region, West Coast region (WA/OR/CA), the Pacific Islands region, and soon in Alaska. California primarily grows Pacific oysters, Kumamoto oysters, and manila clams for commercial purposes with lesser amounts of Mediterranean mussels, Atlantic oysters, red abalone, rock scallops,

and seaweed. Research in the Southwest focuses on abalone recovery and commercial aquaculture production of amberjacks (*Seriola* spp.) at the Southwest Fisheries Science Center, and Olympia oyster restoration by various sectors of academia, throughout California and along the entire west coast. There is growing interest in research on shellfish and seaweed bio-remediation/environmental benefits.

**Fellow Responsibilities:** A Sea Grant fellow within NOAA Fisheries' CA office will assist the Regional Aquaculture Coordinator and the SWFSC Genetics, Physiology, and Aquaculture Program Leader in a range of duties addressing policy level issues and science questions in direct coordination with Federal, State and local regulatory agencies, scientific institutions, local stakeholder interests, academia, and the aquaculture industry. In California, a variety of marine aquaculture projects are in various stages of development and permitting - a Sea Grant fellow will have opportunity to be involved with several collaborative/regionally specific projects, internal regional office NOAA activities, Southwest Fisheries Science Center research projects, and national NOAA Aquaculture Program activities and coordination.

Opportunities to work on California marine aquaculture activities include:

- **Offshore shellfish and finfish projects (including Pacific Ocean AquaFarms finfish proposal and associated NEPA process, Ventura Shellfish Enterprise proposed offshore mussel farm, proposed land-based Norwegian Recirculating System for finfish in Humboldt Co.):** with growing interest in offshore aquaculture in CA and federal waters, work includes utilizing spatial siting analysis, environmental impact analyses required under NEPA, ESA, etc., developing project monitoring and resolving user conflicts. These present challenging interagency coordination opportunities requiring a variety of skills such as diplomacy, in an environment that brings together regulatory marine resource management with robust science. The fellow will assist the Coordinator with meetings of the Southern CA Offshore Aquaculture Working Group. The working group purpose is to facilitate information exchange to inform permitting processes and translate and apply best available science to coastal manager's decision making.
- **Coordination on aquaculture projects with local port districts, CA Dept. of Fish and Wildlife's State Aquaculture Coordinator, and various state/federal regulatory agencies:** the State and Federal coordinators must work closely together on all projects; there is opportunity to work together and benefit from cross-exposure with both agencies to gain understanding of Federal and State policies and regulations.
- **NOAA West Coast Region Aquaculture web page/aquaculture outreach:** the regional and national webpages are continually updating and revising web page design and content; outreach/education opportunities are available.

A Sea Grant fellow's ideal complementary skill set includes:

The Sea Grant fellow may participate in agency meetings, site visits, policy discussions and planning, communication to agencies and constituencies, spatial data sharing, and conference calls. A successful candidate must be able to work independently but function as part of a team, with emphasis on communication, interaction, and policy/regulatory information; in addition, the fellow may provide scientific research support, and should have the ability to conduct science literature/bibliographic, legal, and administration research, and effective time management is vital. Strong writing, computer, organizational, and interpersonal skills are also highly valued. Openness to a broad variety of experiences and projects will enhance the fellowship.



**California Sea Grant Fellowship 2020**  
**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](mailto:michael.murray@noaa.gov), 805-893-6418  
Julie Bursek, Team Lead Education and Outreach; [julie.bursek@noaa.gov](mailto:julie.bursek@noaa.gov), 805-893-6422

**Position Description**

We are seeking a 2020 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 nine 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 the islands of Anacapa, Santa Cruz, Santa Barbara, Santa Rosa, and San Miguel. 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 2020 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. Several former California Sea Grant fellows work at the sanctuary office, and serve as a built-in support network for incoming fellows.

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 began in 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 2020 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 synthesizing public and advisory council input, and 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 community science monitoring projects, including: 1) helping the sanctuary engage with a biosecurity working group that will form as part of the 2020 California Islands Symposium; 2) helping to implement a community science initiative with local commercial and recreational diving industries focused on identifying living endangered white abalone; 3) handling whale identification and marine mammal sightings data collected by sanctuary volunteers using a mobile application system; and 4) helping to conduct an intertidal monitoring student education program, [LiMPETS](#). Throughout the year, additional opportunities will arise within the education and outreach department at CINMS, and the 2020 fellow will be encouraged to pursue a variety of short-duration projects. This will often involve serving as an informal educator speaking and presenting to various audiences (students, stakeholder groups, agency partners), developing web and social media outreach content, and participating in educational field cruises within the sanctuary.

**Additional Opportunities** (approx. 10% time)

- Engage in personal career development planning with the active support and mentorship of 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, to 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 proven ability to work with diverse groups to achieve results; and a strong ability to effectively manage multiple projects and deadlines. This also includes an ability to adapt to interruptions and a fluctuating workload, organize work and prioritize tasks to meet established and variable deadlines, and function effectively under deadline pressure to fulfill assignments on schedule. Also important is an enthusiasm for ocean stewardship and conservation.

## NOAA Office for Coastal Management | 2020 California Sea Grant Fellowship Host

### **Position Description:**

Part of NOAA's National Ocean Service, the Office for Coastal Management's (OCM) mission is to ensure healthy coastal ecosystems, resilient coastal communities, and vibrant and sustainable coastal economies. OCM is organized regionally to address coastal issues at a local level, and provides nationally authoritative data, locally relevant tools, targeted and tailored training, and technical assistance supported by subject-matter expertise. We believe in the power of partnerships, bringing together the collective strengths of agencies and organizations to address the needs of coastal managers and coastal communities.

OCM's West Coast Region covers Alaska, Washington, Oregon, and California, with staff in each of these states except Alaska. The fellow will be working in the West Coast office based in Oakland. While the fellow will focus their work on coastal California, they will have opportunities for interactions with staff nationally, across the West Coast Region, and in other regions.

The West Coast office is currently working closely with numerous partners at the local, state, and federal levels on various initiatives to move the needle on California's coastal resilience goals. The fellow will have countless opportunities to engage with professionals from diverse affiliations. In addition to interactions with the three sister coastal agencies and the three California-based NERRs, the fellow will lead and support projects that actively partner with federal agencies including FEMA, USGS, USEPA, and other arms of NOAA, and state agencies such as Office of Planning and Research, Ocean Protection Council, the Office of Emergency Services and more.

Working with OCM will provide the fellow with the flexibility to pursue achievements on multiple diverse projects. Specifically, the fellow will work on (1) developing and implementing a community prototype project with the six federal agencies of the Federal Partnership for Coastal Resilience in California, and (2) an effort focused on exploring the intersection of nature-based infrastructure and the adaptation of coastal roads.

**Federal Partnership for Coastal Resilience in California:** OCM is working closely with six federal agencies in the Federal Partnership for Coastal Resilience in California (partnership). Participating agencies are the regional offices of NOAA OCM, FEMA, USGS, USEPA, Housing and Urban Development (HUD), and Economic Development Administration (EDA). Together we co-created the partnership with the goal of helping California coastal communities achieve their resilience vision by matching community needs with federal resources. The partnership is still in the early stages of defining approaches for how we will accomplish our goal. We would like to work on a "community prototype" where we assist a specific community(s) in finding federal resources and applying these resources to address their resilience challenges. The fellow will work on developing and implementing this prototype project with the partnership and with state and local agency champions. The fellow will have the opportunity to help shape what the prototype involves, and coordinate the federal agencies for implementation.

**Adaptation of coastal roads:** The fellow will lead efforts for a knowledge exchange and collection of case studies on climate change adaptation solutions involving transportation (ie, local roads), nature-based infrastructure, and reconnection of water pathways. This nascent effort is part of the

NOAA San Francisco Bay and Outer Coast Sentinel Site Cooperative, a cohort comprised of OCM, San Francisco Bay NERR, Greater Farallones National Marine Sanctuary, and BCDC. The Cooperative recognizes the importance, timeliness, and information gaps associated with the challenges of transportation adaptation and the nexus with and opportunities for nature-based solutions. The fellow will be a key member of the team that helps develop and implement the project. The fellow's support may involve establishing a statewide community of practice, organizing an information exchange workshop, developing and sharing case studies from across California, working to tie to federal resources and guidance and identifying state policy conflicts and areas of opportunity.

The fellow may choose to pursue additional projects based on their interests and level of effort required, including, for example, efforts to increase NOAA's focus on social equity and environmental justice. Some tasks will be self-guided, other tasks will be performed in close coordination with OCM staff and as part of the West Coast team. Through their work, the fellow will gain familiarity with the field of coastal management's evolving landscape of professionals, issues, challenges, and approaches.

The fellow will be a part of a small and close-knit, dynamic office. Growth in skills can be expected through practical experience with process design and facilitation, project management, coordination of multiple partners, and participation (as desired) in formal training opportunities OCM will deliver to partners throughout the year in CA, including on the topics of risk communication, green infrastructure, and adaptation planning.

**Additional background:**

OCM administers place-based programs through long-term statutorily established partnerships with coastal state agencies, including the Coastal Zone Management (CZM) Program, National Estuarine Research Reserve (NERR) Program, and Coral Reef Conservation Program. The agencies in California's federally-recognized CZM program are the California Coastal Commission, State Coastal Conservancy, and San Francisco Bay Conservation and Development Commission (BCDC). California's NERRs are the San Francisco Bay, Elkhorn Slough, and Tijuana River NERRs. Through these programs, NOAA and partners collaboratively address local, state, regional, and national management, conservation, science, and education priorities.

OCM's work in California is aimed at supporting the state's existing and emerging challenges in coastal resource management issues including resilience. In particular, planning for and adapting to coastal hazards and climate change-related coastal impacts, including sea level rise and flooding, tsunamis, severe storms, and shoreline change. We focus on educating coastal practitioners and state and local agencies about the value of nature-based solutions as adaptation approaches with multiple benefits. We train coastal professionals on the adaptation planning process, risk communication, and green infrastructure for resilience. We help our audiences apply social science tools and learn to facilitate collaborative meetings. Beyond providing data, we help users understand and make decisions with it. OCM also works closely with other federal partners to align services and product development efforts, and to communicate about and improve state and local access to federal resources (including funding). Based on interest, the fellow may play a role in several of these activities.



## Sea Grant Fellowship 2020 Host Application: California Ocean Science Trust

### **I. Host Location and Contact Information:**

California Ocean Science Trust  
Liz Whiteman, Executive Director  
1601 Alhambra Blvd #100  
Sacramento, CA 95816  
Phone: (510) 251-8320

### **II. Fellowship Supervisor(s)**

Hayley Carter, Senior Science Officer

### **III. Points of Contact for California Sea Grant Prospective Fellows and Finalists**

Hayley Carter, Senior Science Officer – Position Inquiries – [hayley.carter@oceansciencetrust.org](mailto:hayley.carter@oceansciencetrust.org),  
(510) 251-8322

## Synopsis for a California Ocean Science Trust Sea Grant Fellow

[Ocean Science Trust](#) is a nonprofit organization, created by legislation, and staffed by a team of science-to-policy experts based jointly in Sacramento and Oakland. We work statewide and collaborate with scientists and policy leaders across the West Coast and nationally. Our strength lies in nimble response to state priorities, creating scientific partnerships and collaborations to foster innovative yet pragmatic approaches to difficult problems. Leveraging state, federal, and philanthropic funding, we bring resources together and coordinate efforts to maximize impact and amplify return on investments.

We are an interdisciplinary team built around collaboration. We bridge marine science and policy through creativity, innovation, and diverse partnerships. Our [projects](#) span a breadth of topics, from ocean acidification to sea-level rise to marine protected areas, all through the lens of a changing climate. We collaborate closely with State partners, like the California Ocean Protection Council and the California Department of Fish and Wildlife, among others, to ensure State actions on ocean and coastal issues are informed by the best available science. Together, we accelerate progress toward California's bold vision of a resilient coast and ocean.

Ocean Science Trust serves as Science Advisor to the Ocean Protection Council. In this role, we work to build novel science partnerships, to synthesize cutting-edge science into pragmatic roadmaps, to inform strategic science investments and grow science capacity. We serve as the Secretariat to the legislatively mandated OPC Science Advisory Team and Ocean Acidification & Hypoxia Science Task Force.

### Sea Grant Fellow Opportunities

The Fellow will gain diverse educational and career experience. Our Fellows engage in a variety of projects, based on a balance between our organizational needs and the Fellow's background and interests. The Fellow will work closely with the Senior Science Officer, but will collaborate to varying degrees with the full [Ocean Science Trust team](#). Ocean Science Trust staff create a collaborative, team-oriented atmosphere, welcoming the ideas and contributions of all staff to shaping projects and our organization as a whole.

The Fellow will be treated as a full member of our team, and have the opportunity to contribute to, and possibly lead, on a range of projects. Through these activities, the Fellow will have numerous opportunities to interact with high-level scientists, managers, policymakers, and other partners in the NGO and stakeholder communities, as well as participate in meetings and workshops.

### Programmatic Opportunities

The Fellow will have the opportunity to work across programs at Ocean Science Trust, depending on their expertise and interests. Potential opportunities include:

- **Working with the Ocean Protection Council Science Advisory Team (OPC SAT):** Ocean Science Trust serves as the Secretariat of the [OPC SAT](#), a team of 30 interdisciplinary scientists from California and beyond that provide scientific and technical advice to the State, and act as a

conduit to the broader scientific community on behalf of decision-makers. Working with the OPC SAT will provide the Fellow with concrete experience of what it means to work at the science-policy nexus. We host an annual spring in-person workshop of the OPC SAT where we discuss how the team is addressing state priorities, and launch new initiatives, including Expert Taskforces and Expert Panels.

- **Advancing Action on Ocean Acidification and Hypoxia (OAH):** With the adoption of the [State of California Ocean Acidification Action Plan](#) in October 2018, California has in place a 10-year vision for addressing ocean acidification and a series of pragmatic actions to work towards that vision. Ocean Science Trust continues to work with the State to prioritize implementation of actions to understand and reduce impacts from OAH. The Fellow may support several efforts, including:
  - **California OAH Science Task Force:** Convening science integration forums (e.g., webinars, meetings), and supporting product development on behalf of the Task Force to advance implementation of the *State of California Ocean Acidification Action Plan*. See more about the Task Force at [www.westcoastoah.org](http://www.westcoastoah.org)
  - **OA vulnerability:** Convening workshop(s) with scientists and decision-makers to explore vulnerability of species, ecosystems, and human communities to OA in order to pursue the most impactful management interventions.
- **Science needs for California's network MPAs:** Ocean Science Trust is convening two OPC SAT working groups focused on MPAs.
  - **2022 MPA Management Review Scientific Guidance working group:** the working group will provide scientific definitions of selected terms in the Marine Life Protection Act (MLPA) goals and explore appropriate scientific approaches for integrating baseline and long-term monitoring data (as well as other available data sources) into network-wide analyses, in order to better understand how California's MPA network is meeting the goals of the MLPA.
  - **MPAs and Climate Resilience Science Synthesis and Data Needs working group:** the working group will build a road map for exploring the role of the California MPA network through the lens of climate resilience. The working group will focus on addressing the central question: *How would we assess the capacity of the California MPA network to provide ecological and social resilience to climate change, and what further research can deepen our understanding of that function?*
- **Promoting Climate Change Resilience and Adaptive Capacity:** We are strengthening our work to support the State with the science needed to adapt to a changing climate. Two topics, adaptation planning for sea-level rise using a climate "adaptation pathways" approach and climate adaptation financing options, are of great interest to the State. The role for Ocean Science Trust is to better understand and communicate the science underpinning these options,

and whether California's complex regulatory structures would allow for implementation of these options, among other science/policy questions.

In addition to the above opportunities, we also anticipate a deepening focus on aquaculture, microplastics, and renewable energy.

Past Fellows have often assumed leadership roles in programmatic work during their time with Ocean Science Trust. We greatly value professional development, and will mentor the Fellow by drafting and pursuing professional goals, offering assistance in resume building, and ensuring the Fellow is provided networking and leadership opportunities.





## Sea Grant Host Application 2020

### Two 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:** Jenn Eckerle, OPC Deputy Director,  
[jenn.eckerle@resources.ca.gov](mailto:jenn.eckerle@resources.ca.gov)
- 3. Points of contact for Sea Grant, prospective fellows, and finalists:** Jenn Eckerle, OPC Deputy Director,  
[jenn.eckerle@resources.ca.gov](mailto:jenn.eckerle@resources.ca.gov); Justine Kimball, Senior Program Manager, OPC Climate Change Program,  
[justine.kimball@resources.ca.gov](mailto:justine.kimball@resources.ca.gov); Adrian Dahood, Senior Scientist/Policy Advisor, OPC MPA Program,  
[adrian.dahood@resources.ca.gov](mailto:adrian.dahood@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 was established 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 uses partnerships, policy and funding to advance science-based solutions to protect coastal and ocean ecosystems in California. With this diverse complement of tools, OPC has unique flexibility to develop innovative and impactful approaches to conservation. We use each of these tools to identify and implement solutions that improve ocean governance, increase stewardship, and advance scientific understanding necessary to protect marine resources and the communities that rely on them. These efforts yield significant benefits to the state while providing a model to improve protection and conservation across the world.

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 2020 OPC Sea Grant Fellows will have the unique experience of supporting OPC's priorities directed by a new strategic plan, which is anticipated to be finalized and approved by the Council in early 2020.

OPC staff is currently involved in various projects and initiatives focused on: marine protected areas; climate change; sustainable fisheries; marine pollution; coastal sediment management, and 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: research and monitoring; outreach and education; policy and permitting; and enforcement and compliance. This work will also include supporting the state's efforts to prepare for the first decadal adaptive management review of California's MPA network in 2022.

**Both fellows may also have the opportunity to support OPC's work on sustainable fisheries, marine pollution, 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.*** 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. **Fellows will be responsible for helping review and score 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.



**PORT OF SAN DIEGO, SAN DIEGO, CA**  
**PLANNING & 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](mailto:psylvia@portofsandiego.org)

Lily Tsukayama  
Assistant Planner – Planning  
(see address above)  
619-686-8199  
[ltsukayama@portofsandiego.org](mailto:ltsukayama@portofsandiego.org)

## PORT OF SAN DIEGO, SAN DIEGO, CA

### PLANNING & GREEN PORT

### SEA GRANT STATE FELLOW OPPORTUNITY

#### Overview:

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.

The 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 programs:

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

#### Position Descriptions:

The Port's Sea Grant Fellows will have the opportunity to assist all of these programs, with an emphasis on environmental conservation, planning, and aquaculture and blue technology, through the two available fellowship opportunities:

- **Environmental Conservation Fellowship**
- **Coastal Policy and Planning Fellowship**

A successful candidate for both positions must be able to work independently but also function as part of a multi-disciplinary team within Planning & Green Port and other Port departments such as Government & Civic Relations, Marketing & Communications, Maritime, and Engineering, as well as counterparts in other agencies and industry, with emphasis on communication, interpersonal 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. In addition, previous experience with or an interest in project management to assist with various projects, which may involve creating work plans and timelines, taking meeting minutes, drafting presentations and memos, and preparing reports. 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.

### Environmental Conservation Fellowship

The Environmental Conservation Department supports projects and programs that conserve and enhance natural resources by expanding native habitats and ensuring regulatory compliance through sound resource management. Current and ongoing efforts include natural resources surveys, mitigation banking, environmental permitting, natural solutions for resilient shoreline infrastructure, management of environmental and wildlife advisory committees, and support for the Port of San Diego's Environmental Education Program.

A general description of the work needed by the Environmental Conservation Fellow includes:

- **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.
- **Permitting and grants:** assist with a variety of pilot and other projects conducted by Planning & Green Port programs or external stakeholders. This work may include project proposal review, researching relevant grant opportunities and drafting grant proposals, planning, permitting and entitlements (Army Corps of Engineers and Regional Water Quality Control Board), coordination with partners, assisting with project management, drafting comment letters, and site visits to various locations on Port tidelands.
- **Environmental and wildlife advisory committees:** provide logistical support for Environmental Conservation staff for regularly scheduled environmental committee meetings convened by the Port. This may include coordination with stakeholders and drafting meeting minutes, agendas, and memos regarding these committees.

### Coastal Policy and Planning Fellowship

The Planning Department 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, sea level rise and adaptation planning, and environmental review of all Planning & Green Port projects.

A general description of the work needed by a Coastal Policy and Planning Fellow includes:

- **Policy and Planning Research:** research relevant coastal policies from other state and regional agencies or organizations, and assist with policy development to support the Port Master Plan Update and other land or water use planning projects. This may include preparing literature reviews, policy memos, public comment letters, infographics and slide decks, or data analysis.
- **Project Review and Entitlement:** assist the Planning Department to conduct environmental review (CEQA and Coastal Act) for Planning & Green Port projects and activities, such as aquaculture and blue technology pilot projects.
- **Stakeholder and Community Outreach:** assist Planning & Green Port staff to support and participate in stakeholder or community meetings and/or correspond with regional, state, and federal stakeholders on adaptation planning, the Port Master Plan Update, and other long range planning efforts.



**1. Host location and contact information**

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

**2. Fellowship Supervisor(s)**

Coastal Restoration Fellowship - Megan Cooper, Moira McEnespy  
Climate Ready Fellowship - Mary Small

**3. Point of contact for CSG and prospective fellows and finalists:**

Mary Small  
Deputy Executive Officer  
510-286-4181, [mary.small@scc.ca.gov](mailto: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, helps people get to and enjoy the outdoors, and sustains 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 their 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.
- Populate and manage data to help the SCC track the impact of its wetlands restoration projects through a Statewide data portal, EcoAtlas.
- Manage data related to performance measures and dashboards for the SFBRA grant program.
- Help coordinate two multi-agency groups through meeting organization, preparation of technical documents, and presentation of information.
- Review project applications and make recommendations for 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, they 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**

The second fellow will staff the SCC's Climate Ready Program. Through its Climate Ready Program, the SCC works with local partners and other agencies to prepare communities along the coast and within the San Francisco Bay Area for sea level rise and other impacts of climate change. The Climate Ready Program is implementing pilot projects and supporting on the ground planning to protect communities, coastal resources and habitats from the impacts of climate change. The SCC has funded dozens of Climate Ready projects, including a grant round that will be awarded in December 2019, with project work continuing through 2020. Proposition 68 also provides funding to the SCC for climate change projects in the San Francisco Bay Area.



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:

- Manage grants to implement climate adaptation projects. This will include preparing grant agreements, reviewing grantee's work plans and budgets, and overseeing completion of work tasks;
- Coordinate and complete reporting required by the Greenhouse Gas Reduction Funding program for ongoing Climate Ready projects.
- Participate and support interagency coordination related to climate adaptation 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 support ongoing Coastal Resilience Network webinars and other communication and outreach efforts to help share information within the adaptation community of practice.

# SFEP

SAN FRANCISCO



**ESTUARY**  
PARTNERSHIP

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## California Sea Grant State Fellowship 2020 HOST Application

### 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](mailto:caitlin.sweeney@sfestuary.org)

### Fellowship Supervisors

Caitlin Sweeney, Director  
Heidi Nutters, Environmental Planner

## Host Background Information

The San Francisco Estuary Partnership ([www.sfestuary.org](http://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 will be to assist with the development of a Bay Area Wetlands Regional Monitoring Program (WRMP). This grant-funded project responds to a new urgency for faster and more certain tidal marsh restoration in the Bay Area as a result of forecasts of accelerated sea level rise. The WRMP addresses the need to monitor wetland restoration efforts in ways that assess their effectiveness, improve future restoration efforts, support regional coordination of regulatory review and permitting, and adequately account for the large public investment in tidal marsh restoration. The WRMP project includes translating science to management for wetland monitoring. We are looking for someone with a strong science background.

The WRMP core team includes the Partnership, the San Francisco Estuary Institute, San Francisco Bay Joint Venture and the San Francisco Bay National Estuarine Research Reserve. The Fellow would work directly with the Partnership's project manager, Heidi Nutters, and the core project team to support the WRMP steering committee through direct engagement and technical assistance. In addition, there would be an opportunity for the Fellow to engage with Steering Committee members on various specific projects that support the development of the WRMP, depending on interest and skills.

In addition to the WRMP, the Fellow would work to support successful implementation of the Estuary Blueprint in other ways, such as working with partners to track implementation progress and strategizing solutions to implementation challenges, or by assisting with specific Partnership 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.



## California Sea Grant State Fellowship Program 2020

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](mailto:jennifer.mattox@slc.ca.gov); (916) 574-0748;  
Maren Farnum, [maren.farnum@slc.ca.gov](mailto:maren.farnum@slc.ca.gov); (916) 574-0966

### Agency Background:

The [California State Lands Commission](#) (Commission) is an independent and dynamic state agency that works on the cutting edge of integrating science into policy decisions. The three-person Commission is comprised of the State Controller, Lieutenant Governor, and the Director of Finance. One of the Commission's major roles is to act as the landlord for lands within its jurisdiction. This sets the Commission apart from purely regulatory agencies. 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 Commission holds these lands in trust for the people of California under the Public Trust Doctrine.

Part of the Commission'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 Commission is the main agency tasked with protecting public access and overseeing public trust uses. Valid public trust uses sometimes conflict with each other: the Commission works to manage those conflicts and ensure that the Public Trust Doctrine is upheld on sovereign land. In this way, the Commission, along with its sister state agencies, decides on appropriate uses for California's ocean and proactively plans for future issues and conflicts.

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 Commission's Executive Office, 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) and the Commission's consultant team on reviewing AB 691 sea-level rise vulnerability and adaptation assessments, evaluating compliance with the legislative criteria, and developing a comprehensive, statewide synthesis to inform a set of recommended actions.** The main tasks will be to identify priority assets and preferred sea-level rise adaptation approaches, evaluate the economic impacts of sea-level rise, and recommend short-term and long-term actions to support local implementation efforts. The recommended actions should reflect a systematic approach to implementing adaptation measures that will provide long-term asset security, ensuring the public's access and use rights, as well as investments.

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



## California Sea Grant State Fellowship Program 2020

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](mailto:jennifer.mattox@slc.ca.gov); (916) 574-0748  
Maren Farnum, [maren.farnum@slc.ca.gov](mailto:maren.farnum@slc.ca.gov); (916) 574-0966

### Agency Background:

The [California State Lands Commission](#) (Commission) is an independent and dynamic state agency that works on the cutting edge of integrating science into policy decisions. One of the Commission's major roles is to act as the landlord for lands within its jurisdiction. This sets the Commission apart from purely regulatory agencies. 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 Commission holds these lands in trust for the people of California under the Public Trust Doctrine.

Part of the Commission'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 Commission is the main agency tasked with protecting public access and overseeing public trust uses. Valid public trust uses sometimes conflict with each other; the Commission works to manage those conflicts and ensure that the Public Trust Doctrine is upheld on sovereign land. In this way, the Commission, 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 Commission's Executive Office. The Science Policy Advisor/Tribal Liaison consults with other Commission 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 Commission 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 generally be split into two main areas: coastal resilience, climate change preparedness, and other ocean science policy; and tribal engagement and environmental justice.

Under the direction of the Science Policy Advisor/Tribal Liaison and the Environmental Scientist within the Executive Office, the **Sea Grant Fellow will spend  $\pm$ 50% time on projects 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.** These projects encompass a number of challenging and high-profile activities, including continuing to refine and deliver a comprehensive sea-level rise and climate change education and training program for Commission staff including use of an in-house GIS viewer; participating on state-level interagency efforts to address sea-level rise policy, including the State Guidance update and the Safeguarding California update; compiling, reviewing, and developing materials for a coastal armoring report; participating on interagency teams exploring offshore renewable energy potential; evaluating and compiling scientific materials for negotiations on sensitive projects; integrating the best available science into Commission decision-making processes; and collaborating with other state, federal, local, and tribal entities.

The Sea Grant Fellow will spend the remainder of their time, under the direction of the Commission's Tribal Liaison and Environmental Justice coordinator, researching issues and supporting efforts related to Tribal engagement on projects; incorporating traditional knowledge and practices into activities and decisions; exploring and developing proposals for mutually beneficial partnerships with Tribes or other indigenous groups and trusts; participating on interagency groups including the Cultural Resources Climate Change Task Force and Santa Barbara oil and gas decommissioning working group; and participating on the Commission's environmental justice implementation team to ensure integration of Tribal environmental justice and equity issues.

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. Many of these projects are ongoing and the Fellow will have an opportunity to continue the work started by current and former Fellows. The Fellow will interact with Commission staff from multiple divisions that encompass a wide variety of coastal and marine resource topics. 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 Commission'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.).



Sea Grant Fellowship  
California Department of Parks and Recreation

**1. Host location and contact information**

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

**2. Name of fellowship supervisor**

Doug George  
Natural Resources Division, Coastal Program Manager  
[Douglas.George@parks.ca.gov](mailto:Douglas.George@parks.ca.gov); 916-653-1151

**3. Point of contact for California Sea Grant, prospective fellows, and finalists**

Doug George, Coastal Program Manager  
[Douglas.George@parks.ca.gov](mailto:Douglas.George@parks.ca.gov); 916-653-1151

**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 Parks System and coordinates with other State and federal agencies on issues of Statewide significance. Currently, California State Parks protects and manages 129 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 2020 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:

#### ***Implement State Parks Sea Level Rise Strategy***

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 will be completing 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 may assist staff in implementing the action items outlined in the Strategy with Natural Resources identified as project lead.

#### ***Further State Parks Estuary Initiative***

State Parks manages lands that contains nearly 50% of California's estuaries and more than half of coastal park units contain estuaries. Further, over 45% of estuarine habitat in State Parks is vulnerable to sea level rise. The Estuaries Initiative is developing a comprehensive statewide approach for the restoration and preservation of lagoons and estuaries within California State Parks. The Sea Grant Fellow may assist with synthesizing emerging science on estuaries and lagoons, engaging with stakeholders and State Parks resource managers, and collaboratively developing a management plan for estuary resilience in State Parks.

#### ***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 Parks units.
- Engage directly with Department staff to increase awareness and understanding of high priority resources for coastal resource management. Work with coastal State Parks staff 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 issues impacting coastal units.
- 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 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  
2020 Sea Grant Fellow

**HOST APPLICATION**

1. Host Location and Contact Information:  
State Water Resources Control Board, Division of Water Quality  
California Environmental Protection Agency Headquarters Building, 15<sup>th</sup> Floor  
1001 I Street  
Sacramento, CA 95814  
[www.waterboards.ca.gov](http://www.waterboards.ca.gov)
2. Fellowship Supervisor:  
Katherine Walsh, Senior Environmental Scientist Supervisor  
Ocean Standards Unit Chief  
[katherine.walsh@waterboards.ca.gov](mailto:katherine.walsh@waterboards.ca.gov)  
(916) 445-2317
3. Point of Contact for California Sea Grant, Prospective Fellows, and Finalists:  
Katherine Walsh
4. 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 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* (Ocean Plan), the *Water Quality Control Plan for Control of Coastal and Interstate Waters and Enclosed Bays and Estuaries of 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 supervisor of the Ocean Standards Unit, 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 Ocean Standards Unit is dynamic with several priority projects currently under development. The fellow may be involved in developing amendments to the Ocean Plan identified in the 2019 Ocean Plan Review, developing 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 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  
2020 Sea Grant Fellow

**HOST APPLICATION**

1. Host Location and Contact Information:  
State Water Resources Control Board, Division of Water Quality, Sustainable Water Plans and Policies  
California Environmental Protection Agency Headquarters Building  
1001 I Street, 15<sup>th</sup> Floor  
Sacramento, CA 95814  
[www.waterboards.ca.gov](http://www.waterboards.ca.gov)
2. Fellowship Supervisor:  
Laura McLellan, Senior Environmental Scientist (Supervisor)  
Recycled Water, Desalination, and Constituents of Emerging Concern Unit Chief  
[laura.mclellan@waterboards.ca.gov](mailto:laura.mclellan@waterboards.ca.gov)  
(916) 319-8288
3. Point of Contact for California Sea Grant, Prospective Fellows, and Finalists:  
Laura McLellan, Senior Environmental Scientist Supervisor  
Recycled Water, Desalination, and Constituents of Emerging Concern Unit Chief  
[laura.mclellan@waterboards.ca.gov](mailto:laura.mclellan@waterboards.ca.gov)  
(916) 319-8288  
and  
Claire Waggoner, Environmental Program Manager  
Sustainable Water Plans and Policies Section Chief  
[claire.waggoner@waterboards.ca.gov](mailto:claire.waggoner@waterboards.ca.gov)  
(916) 341-5882
4. Position Description:  
The State Water Resources Control Board is a regulatory agency whose mission is to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.

The Sea Grant Fellow will have the opportunity to work on a broad suite of water quality issues, including recycled water, seawater desalination, and contaminants of emerging concern in the Recycled Water, Desalination, and Constituents of Emerging Concern Unit under the Sustainable Water Plans and Policies Section in the Division of Water Quality. The Sea Grant Fellow would work in multidisciplinary teams on projects including: implementing the Water Quality Control Policy for Recycled Water that promotes the safe reliable use of potable and non-potable recycled water as a sustainable water supply; developing and managing recycled water research grants to fill critical research gaps to support the increase and production and use of recycled water in California; implementing and potentially amending the seawater desalination provisions of the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) that promote desalination as a water supply option while protecting of all forms of marine life; and developing and implementing the Constituents of Emerging Concern Initiative to develop a statewide strategy to address emerging contaminants. The Sea Grant Fellow may also work on other projects in the Sustainable Water Plans and Policies Section, including the State Water Board's Stormwater Strategy or per- and polyfluoroalkyl substances (PFAS) team.

Throughout the State Water Board Sustainable Water Plans and Policies fellowship, the Sea Grant Fellow would apply their scientific background and experience to develop and implement scientifically-sound water quality plans and policies, engage with stakeholders, respond to public comments, and develop technical reports. This includes opportunities for the Sea Grant Fellow to develop professional skills and experience in: a variety of technical subject matters, policy-making, stakeholder outreach, and intra- and interagency collaboration (e.g., with regional water boards, Coastal Commission, State Lands Commission, Fish and Wildlife, Department of Water Resources, Department of Pesticide Regulation, etc.). Our goal is to expose the Sea Grant Fellow to as many facets of the State Water Board as possible while also ensuring that over the one-year fellowship, the Sea Grant Fellow works on a project that will have a statewide impact to protect water quality and beneficial uses.



STATE WATER RESOURCES CONTROL BOARD  
2020 Sea Grant Fellow

**HOST APPLICATION**

1. Host Location and Contact Information:  
State Water Resources Control Board, Office of Information Management and Analysis  
California Environmental Protection Agency Headquarters Building, 19<sup>th</sup> Floor  
1001 I Street  
Sacramento, CA 95814  
[www.waterboards.ca.gov](http://www.waterboards.ca.gov)
2. Fellowship Supervisor:  
Ali Dunn, Senior Environmental Scientist Supervisor  
Surface Water Ambient Monitoring Program Unit Chief  
[ali.dunn@waterboards.ca.gov](mailto:ali.dunn@waterboards.ca.gov)  
(916) 319 - 8458
3. Point of Contact for California Sea Grant, Prospective Fellows, and Finalists:  
Ali Dunn
4. Position Description:  
The State Water Resources Control Board is a regulatory agency whose mission is to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource 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, and partner agencies 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 and the Office of Information Management and Analysis, such as rapid trash assessment method development or assistance with healthy watershed assessments. 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.