

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400

**2021 SEA GRANT FELLOWSHIP PROPOSAL****CLIMATE CHANGE EMPHASIS****CALIFORNIA COASTAL COMMISSION****Overview**

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

Position Description

The Sea Grant Fellow will be exposed to and work on a broad range of coastal and ocean issues that are part of the Coastal Commission's regulatory and Local Coastal Program planning work throughout the coastal zone. He/she will have a unique opportunity to assist executive, management and policy level staff in the headquarters and district offices of the 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 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 the Commission's climate and sea-level rise planning efforts, policy guidance and other 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 with 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 as outlined in the Coastal Commission's Strategic Plan, including federally funded projects related to sea level rise adaptation planning, public access, environmental justice and protecting public trust lands and resources;
- 5) Assisting with policy work related to advancing wetland protection or restoration efforts or other nature-based solutions in response to coastal hazards; and
- 6) Supporting completion of the Commission's Coastal Armoring Database Project.

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 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 be willing to ask questions. In addition, possessing an entrepreneurial spirit, having strong personal initiative and an ability to work well in a collaborative style with others is 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 focused on climate change issues. This fellowship offers an excellent opportunity for teamwork 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 Jespersen, Federal Programs Manager

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

Susan Hansch
susan.hansch@coastal.ca.gov
(415) 904-5244



Sea Grant Fellowship
California Department of Parks and Recreation
2021 Host Application

1. Host location and contact information

Natural Resources Division, California State Parks
1416 9th St, Room 923, Sacramento, CA 95814
Phone: 916-956-8939 (work mobile phone for Marina Cazorla)
Email: Marina.Cazorla@parks.ca.gov

2. Name of fellowship supervisor

Marina Cazorla, Coastal Program Manager, Natural Resources Division

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

Marina Cazorla, Coastal Program Manager, Natural Resources Division

4. Position Description

The California Department of Parks and Recreation (State Parks) manages 128 park units within the coastal zone, totaling nearly half of the State Park System and almost one quarter of the California coastline. With these coastal park units, State Parks has the responsibility and opportunity to serve as a leader in coastal land management. State Parks' Natural Resources Division (NRD) provides policy direction and technical assistance for natural resource management in the State Park System, and the within NRD, the Coastal Programs team serves to coordinate coastal policy and management at NRD and for the State Park System. NRD also administers major funding programs for natural resources management and habitat restoration throughout the State Parks System, and coordinates with other State and federal agencies on policy issues of statewide significance. With expected impacts from climate change 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 2021 Sea Grant Fellow (Fellow) will have a unique opportunity to inform and implement State Parks policy and programs, including application of innovative natural resource management solutions. The Fellow will work closely with NRD headquarters and its Coastal Programs staff, as well as with District staff. The Fellow will also coordinate with the Ocean Protection Council (OPC) and other state agencies. The fellow will have opportunities to interface directly with senior government officials and leaders in natural resource and coastal management policy. Potential work products include presentations, reports and other deliverables that may be shared within State Parks and with external entities.

Potential Projects and Duties at State Parks

Specific duties will be identified developed collaboratively with the Fellow at the start of their fellowship. Project and programmatic opportunities that the Fellow could pursue include:

Further State Parks' Estuary Initiative

The Estuaries Initiative is developing a comprehensive statewide approach for habitat restoration and preservation of coastal lagoons and estuaries within the State Park System. The Fellow may assist with synthesizing emerging science on coastal lagoons and estuaries, engaging with stakeholders and State Parks resource managers, and developing and implementing a collaborative strategy for prioritizing restoration and management for building estuary resilience in State Parks in the face of climate change.

Implementing State Parks' Sea Level Rise Adaptation Strategy

State Parks has developed a Sea Level Rise Adaptation Strategy, which is already being implemented in a phased approach throughout the Department. The Fellow may assist with implementing action items identified in the Sea Level Rise Adaptation Strategy such as developing support tools to assist project managers, and/or tracking the progress of the State Parks System towards implementation.

Coastal Permitting

In order to conduct habitat restoration and other projects in the coastal zone, State Parks applies for coastal development permits (CDPs) through the California Coastal Commission as well as with local governments. The Fellow may assist and district staff with coastal permitting, while supporting NRD staff review of coastal restoration and adaptation projects.

Coastal Management and Policy

Depending on the Fellow's background and interest, there are additional coastal management responsibilities within the Coastal Programs group that would allow the Fellow to apply or strengthen their skill set that are technical in nature; require policy analysis; involve strong communications skills; or all of the above. The Fellow could:

- Assist NRD's engineering geologists with issues related to coastal sediment management, including the identification of California shoreline erosion concern areas within the State Park System.
- Track work products of other State and federal agencies and NGOs regarding coastal issues, including State policy guidance documents, coastal adaptation strategies, and science reports. Disseminate applicable information to appropriate audiences, including State Parks HQ and District staff.
- Collaborate with State Parks' Interpretation and Education Division, OPC, and other agencies to develop targeted and effective communication strategies and messaging related to issues impacting coastal units.
- Collaborate with program staff at partner agencies such as the California Natural Resources Agency, California Coastal Conservancy, California Coastal Commission, OPC, and other State and federal agencies.



2020

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
3. Point of Contact: Lorna McFarlane, Water Quality Planner
(707) 441-5609 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
- Assisting with removal of *Spartina densiflora* 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 Sea Grant State Fellowship Program 2021

Host Agency: California State Lands Commission

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

Position Name: Science Team/Coastal Resilience/Tribal & Environmental Justice

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

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

Agency Background:

The [California State Lands Commission](http://www.slc.ca.gov) (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: (1) coastal resilience, climate change preparedness, and other ocean science policy; and (2) 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 $\pm 70\%$ time on projects related to climate change and sea-level rise; offshore renewable energy; coastal erosion, seawalls, and natural coastal infrastructure; and various marine spatial planning/blue economy initiatives. These projects encompass a number of challenging and high-profile activities that include delivering a comprehensive sea-level rise and climate change education and training program for Commission staff; participating on state-level interagency efforts to develop and implement sea-level rise policy, including the State Guidance update and the Safeguarding California update; compiling, reviewing, and developing materials related to coastal armoring and living shorelines; 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 ($\pm 30\%$), under the direction of the Commission's Tribal Liaison and Environmental Justice coordinators, 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 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 leadership, 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.).



The Delta Science Program will host three Sea Grant State Fellows in 2021

Background

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



The [Delta Stewardship Council](#) (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 division of the Council and functions as 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 DSP has hosted fellows for the past eight 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 partner 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
- Integrated modeling
- Human dimensions of natural resource management

As California’s capital, Sacramento is a hub for environmental science and policy. DSP fellows build extensive professional networks by working with a range of State, federal, and local government agencies including the National Oceanic and Atmospheric Administration, the California Department of Fish and Wildlife, the United States (U.S.) Fish and Wildlife Service, the U.S. Bureau of Reclamation, U.S. Geological Survey, the California Department of Water Resources, the California State Water Resources Control Board, as well as consulting firms, academia, NGOs, and 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) enhance science communication among multiple stakeholders in the Bay-Delta system, including scientists, managers, decision-makers, and the public, 2) facilitate and participate in the analysis and synthesis of scientific information to inform management and decision-making, and 3) facilitate cooperative decision-making by supporting open science and integrated modeling initiatives. 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

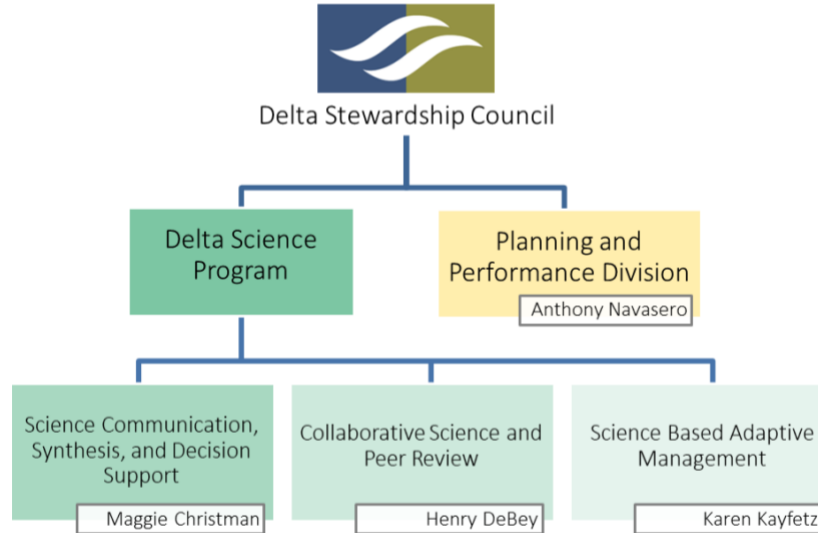
Maggie.Christman@deltacouncil.ca.gov, (916) 445-0464

Potential Projects

- Work with the Delta Lead Scientist on monthly reports, infographics, and visual abstracts that summarize recent science efforts around the Delta as well as water supply metrics and ecological indicators. Recent examples include: [Lead Scientist Report](#), [By The Numbers Report](#), [Visual Abstract](#).
- Participate in the [State of Bay-Delta Science](#) and other synthesis efforts, including developing summaries for managers, lay abstracts, infographics, and/or web content to support synthesis and communication of scientific information to Delta stakeholders.
- Create summaries of science funded by the DSP in creative and accessible formats for non-scientists, including policy-makers, managers and program directors.
- Participate in interagency working groups that support integrated modeling, data integration, or data publishing (e.g., Integrated Modeling Steering Committee).

Examples of Previous Fellows' Projects

- Creation of a website ([A Beginner's Guide to the Delta](#)) that serves as a resource for those interested to learn more about this integral place in California.
- Participation in Delta Stewardship Council social media to highlight Delta science (e.g., [Science Fridays](#) on Twitter).
- Organization of Brown Bag seminars to explore a specific theme of importance to managing the Bay-Delta system.
- Leadership and facilitation of interagency working groups (e.g., the Remote Imagery Collaborative).
- Authoring a synthesis study modeling juvenile Chinook salmon migration to inform fisheries management and development of a complementary [Shiny App](#).



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 coordination and collaboration of 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 resources 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 leverages their unique skillset.

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

Fellowship Supervisor and Point of Contact: Henry DeBey, Environmental Program Manager I, Henry.DeBey@deltacouncil.ca.gov, 916-445-0092

Potential Projects

Specific projects will be identified based on the fellow’s expertise and interests, but may include:

- Contributing to the implementation of the Delta Science Plan through participation 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.
- Advancing 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.

- Assisting with developing guidelines and best practices for policy-science forums to identify scientific uncertainties, prioritize management questions, and facilitate exchange among programs and entities to promote science communication among decision-makers, scientists, and stakeholders.
- Enhancing how we work at the interface of science, management, and policy in part by collaborating with other boundary organizations for a best practices document.
- Evaluating the effectiveness and utility of Delta Science Program independent peer review efforts, including tracking and summarizing actions resulting from independent scientific peer reviews.
- Assessing the collaborative network or governance structure of the Delta based on ongoing work.
- Contributing to the update of the Science Action Agenda and development of a competitive science funding program to address needs.
- Synthesizing information on stressor impacts to 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 incorporate new knowledge into management of natural resources. Current work includes (1) leading the Interagency Adaptive Management Integration Team (IAMIT) and the Suisun Adaptive Management Advisory Team (Suisun AMAT) to support adaptive management in the Delta and Suisun Marsh, (2) evaluating and communicating “lessons learned” from past restoration efforts and water management actions, and (3) supporting the reviews of scientific programs conducted by the Delta Independent Science Board (Delta ISB). The Delta ISB, which is comprised of renowned scientists across the nation and across disciplines, supports adaptive management by periodically reviewing scientific research, monitoring, and assessment programs in the Delta.

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

Fellowship Supervisor and Point of Contact: Karen Kayfetz, Environmental Program Manager I
Karen.Kayfetz@deltacouncil.ca.gov, (916) 445-5694

Potential Projects

- Perform evaluation and synthesis related to “lessons learned” from ecosystem restoration and/or water management, drawing on long-term environmental datasets and research. Publish results in agency literature or scientific journals.
- Collaborate on planning an adaptive management forum. Bring in experts from around the Delta and from other systems to discuss "lessons learned" from previous management efforts in a daylong workshop. Co-produce a meeting summary, white paper, or essay for a scientific journal.
- Help to plan and facilitate meetings of the IAMIT and/or the Suisun AMAT, interagency groups who support ecosystem restoration adaptive management in the Delta and Suisun Marsh. Help to support interagency initiatives within these groups.
- 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.



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

Background

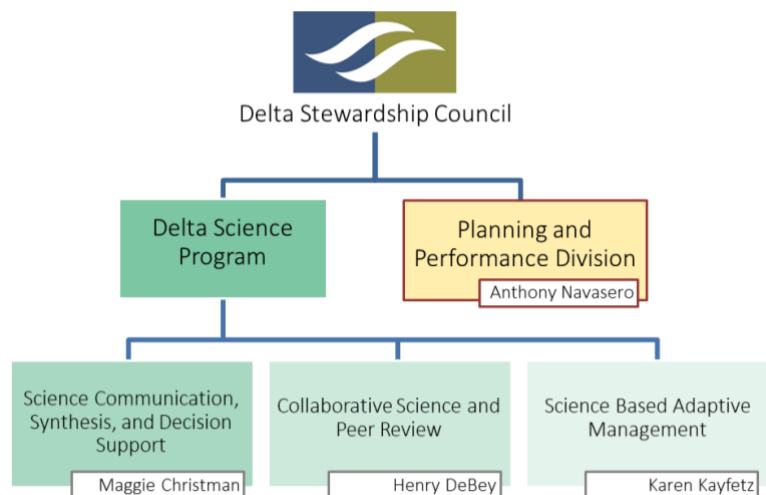
The Sacramento–San Joaquin Delta (Delta), along with the San Francisco Bay, is part of the largest estuary on the West Coast. The Delta provides vital habitat for endangered and endemic species and is the portal through which important fish species, including anadromous Chinook salmon, pass on their 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 mean 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), State (e.g. CDFW, DWR, SWRCB), 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** (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 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 is currently working on such topics and policies as:

- Delta habitat restoration to support endangered species
- Delta vulnerability assessment from climate change and sea level rise
- Review of environmental impacts and project CEQA documentation
- Risk reduction from flooding in the Delta
- Delta as an evolving place
- Fisheries management and protection from non-native/invasive species
- A reliable water supply for the majority of the State's population
- Environmental justice and the human right to water
- Water quality for people and species
- Social science in the Delta

Planning and Performance Division Sea Grant Fellow Position

The 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 a fellow's past experiences, but one that would be enriching and experience-broadening. Initially, the Sea Grant fellow will meet with the supervisor/mentor and other 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 are intended to maximize the fellow's experience, knowledge, and networking opportunities. Working closely with staff across the entire agency, the fellow will have the opportunity to interact with national and international scientific experts; California policy makers and implementers; and water



operators and managers. The fellow will gain exposure to how policies, programs, plans, and projects are developed and implemented in the Delta and Suisun Marsh, as well as statewide.

Below are examples of potential assignments on which the Division's Fellow could engage and collaborate in the upcoming year.

Potential Assignments

- Participate in developing Delta Adapts, the Council's climate change initiative for the Delta and Suisun Marsh, by working with stakeholders to develop adaptation strategies for the Resilience Toolbox.
- Assist with outreach to community-based organizations and disadvantaged communities to provide information and gain input on the Council's climate change initiative and other projects.
- Evaluate land use, water supply, water storage, ecosystem restoration, and flood protection projects, plans, and programs for 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.
- Develop GIS maps and analyze data using tools such as R and Python to support Division activities, such as analysis of performance measures, implementation of Delta Plan regulations, and development of visualization tools to facilitate stakeholder participation in climate change, ecosystem restoration, and flood management planning.

Potential Activities

- Attend agency, division, and working group meetings
- Participate in training opportunities and skill set development
- Attend seminars and conferences
- Visit sites and projects in the Delta
- Enroll in professional development courses
- Participate in social and networking opportunities

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

Fellowship Mentor and Point of Contact:

Anthony Navasero, Senior Engineer, Water Resources

Contact information: (916) 445-5471, Anthony.Navasero@deltacouncil.ca.gov

California Sea Grant Fellowship 2021
Host Office Application and Position Description
NOAA's Channel Islands National Marine Sanctuary

Host Location

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

Fellowship Supervisors

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

Position Description

We are seeking a 2021 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 ten 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 2021 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. Learn more about former CINMS California Sea Grant Fellows [here](#).

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

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 council has been to every fellow that has worked at the sanctuary.

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 October 2019 to support development of the next updated plan. The 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 2021 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 members to revise 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 fellow will also gain experience in conservation planning and project management, including policy development guided by the National Environmental Policy Act.

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 2021 California Islands Symposium; 2) helping to carry forward a community science initiative with local recreational diving interests focused on identifying living endangered white abalone in the Northern Channel Islands region to support restoration efforts; 3) handling social media posting to raise public awareness about the sanctuary; 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 2021 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), 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.
- 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.



Sea Grant Host Application 2021

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
- Justine Kimball, Senior Program Manager,
OPC Climate Change Program
justine.kimball@resources.ca.gov
- Tova Handelman, Senior Program Manager,
OPC MPA Program
tova.handelman@resources.ca.gov
- 3. Points of contact for Sea Grant, prospective fellows, and finalists:**
- Justine Kimball, Senior Program Manager,
OPC Climate Change Program
justine.kimball@resources.ca.gov
- Tova Handelman, Senior Program Manager,
OPC MPA Program,
tova.handelman@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.

OPC staff is currently involved in various projects and initiatives focused on: marine protected areas; climate change; sustainable fisheries; marine protected areas; marine pollution; coastal sediment management, and offshore renewable energy. More information about OPC's current priorities can be seen in the recently adopted [Strategic Plan to Protect California's Coast and Ocean](#). 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 work on OPC's other strategic priorities related to Equity, Biodiversity and the Sustainable Blue Economy, including efforts focused on sustainable fisheries, kelp forest resilience, water quality, 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) helps fund scientific research that supports coastal and ocean management and policy priorities and decision-making by evaluating proposals solicited 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 OPC'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.

Sea Grant Fellows 2021 Host Application: California Ocean Science Trust

I. Host Location and Contact Information:

California Ocean Science Trust
Liz Whiteman, Executive Director
400 Capitol Mall #8
Sacramento, CA 95814
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,
(510) 251-8322

Synopsis for a California Ocean Science Trust Sea Grant Fellow

[Ocean Science Trust](#) (OST) is a nonprofit organization established pursuant to the California Ocean Resources Stewardship Act (CORSA) of 2000. OST was created to encourage coordinated multi-agency, multi-institution approaches to ocean resource science and advance science initiatives to meet current and future California ocean resource management needs. OST is staffed by a small 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.

OST also serves as Science Advisor to the Ocean Protection Council and Secretariat to the legislatively mandated OPC Science Advisory Team and Ocean Acidification and Hypoxia Science Task Force. 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.

Our [projects](#) span a breadth of topics, from ocean acidification, sea-level rise, and marine protected areas, all through the lens of a changing climate. We collaborate closely with many State partners, including 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.

OST values an equitable, multicultural workplace. We are an equal opportunity employer with a commitment to engaging the skills, perspectives, and leadership of people of color, LGBTQ people, and other individuals from marginalized backgrounds.

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](#). OST 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 leading scientists, managers, policymakers, and other partners in the NGO and stakeholder communities, as well as participate in meetings and workshops on a range of topics.

Programmatic Opportunities

Potential programmatic opportunities include:

- **Working with the Ocean Protection Council Science Advisory Team (OPC SAT).** OST 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, engage in SAT governance (e.g., conducting membership election and renewal processes, and upholding SAT policies and procedures), and expand their professional network among the academic community. We engage the SAT to develop timely scientific information to advance progress towards OPC strategic goals and alert the State to emerging issues and challenges. Potential opportunities for the Fellow include leading or supporting new topic-based initiatives (e.g., Expert Task Forces and Panels), developing topic-based science summaries and syntheses, supporting dialogue between universities and OPC on research for state-relevant priorities in ocean and climate, and planning for an annual in-person workshops of the OPC SAT where we discuss how the team is addressing state priorities.

- **Advancing State Action on Climate Change and Ocean Acidification.** OST is actively engaged across a range of climate change issues. Below are a few opportunities for the Fellow to engage.
 - **California OA and Hypoxia Science Task Force:** California has in place a 10-year [vision](#) for addressing ocean acidification and a series of pragmatic actions to work towards that vision. OST serves as Secretariat to the [California Ocean Acidification and Hypoxia Science Task Force](#) (Task Force) in response to Assembly Bill 2139 (Williams, 2016). The Fellow may support efforts of the Task Force, including convening an annual workshop, supporting the development of science guidance on priority topics, and managing Task Force communication and outreach efforts.
 - **Climate resilience & adaptation for California fisheries.** OST is facilitating the exploration of tools for responding to climate-driven range shifts and unexpected fisheries closures, providing California managers and decision-makers with concrete, specific information aimed at maximizing the effectiveness for local fishing communities. OST is serving as a coordinator and connector between scientists, fisheries decision-making bodies, and fishing community stakeholders along the California coast to ensure research continues to be aligned with evolving state policy needs.
- **Engaging the California State Legislature on priority topics.** OST seeks to raise the profile of ocean and coastal issues within the legislature to accelerate progress on healthy oceans. OST is poised to fulfill a critical need for relevant, timely, and accessible science expertise within the California Legislature as lawmakers draft legislation, respond to constituents, and set budgets. Working closely with OST staff and leadership, the Fellow may have the opportunity to participate in legislative engagement activities such as briefings on relevant topics (e.g. microplastics, ocean acidification, and climate resilience).

In addition to the above opportunities, we also anticipate a deepening focus on blue carbon, aquaculture, sea level rise and coastal resilience, and renewable energy. 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.



PORT OF SAN DIEGO, SAN DIEGO, CA
PLANNING, ENVIRONMENT, AND GOVERNMENT RELATIONS
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 Director – Aquaculture and Blue Technology
(see address above)
619-686-6491
psylvia@portofsandiego.org

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

Please note: the Port of San Diego will not be able to commit to the proposed financial contribution until our Fiscal Year 2020-2021 Budget is adopted later in Spring 2020.

PORT OF SAN DIEGO, SAN DIEGO, CA

PLANNING, ENVIRONMENT, AND GOVERNMENT RELATIONS

SEA GRANT STATE FELLOW OPPORTUNITY

Position Description:

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

One Sea Grant Fellow with the Port of San Diego will support programs and initiatives through the Port's Planning, Environment, and Government Relations Division. 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, Environment, and Government Relations Division includes seven distinct teams and departments:

1. **Aquaculture and Blue Technology**
2. **Development Services**
3. **Energy**
4. **Environmental Conservation**
5. **Environmental Protection**
6. **Government and Civic Relations**
7. **Planning**

The Port's 2021 Sea Grant Fellow would have the opportunity to assist all of these programs, but would primarily support the Aquaculture and Blue Technology program:

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

Over the course of the fellowship, the Port's Sea Grant Fellow would also have opportunities to support and collaborate with other teams and departments within the Planning, Environment, and Government Relations Division, as well as other departments at the Port. In addition, a Sea Grant Fellow at the Port would be able to learn about the application of the California Environmental Quality Act, the California Coastal Act, and other state or federal coastal and environmental statutes, to environmental, aquaculture, and blue technology projects in San Diego Bay.

There are a number of initiatives currently underway with Planning, Environment, and Government Relations that a Sea Grant Fellow could contribute to. Some of these initiatives and general descriptions of the work needed by a Sea Grant Fellow could include:

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

A successful candidate for this fellowship position must be able to work independently but also function as part of a multi-disciplinary team within the Planning, Environment, and Government Relations Division and other Port departments such as Marketing & Communications, Maritime, and Engineering, as well as counterparts in other agencies and industries. The professional development component of this fellowship has a strong emphasis on communication, interpersonal skills, interaction with policy and regulatory information. While there is limited opportunity in this particular position for direct scientific research, 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.

SFEP

SAN FRANCISCO



ESTUARY
PARTNERSHIP

California Sea Grant State Fellowship 2021 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

Fellowship Supervisors

Caitlin Sweeney, Director
Heidi Nutters, Environmental Planner

Host Background Information

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

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

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

Position Description

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

The Fellow's primary responsibility 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 assisting with the planning and implementation of the 2021 State of the Estuary Conference (a biennial two-day regional conference attended by over 800 people) 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.



1. Host location and contact information

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

2. Fellowship Supervisor(s)

Coastal Restoration Fellowship – Jessica Davenport
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

4. Position description(s)

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

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

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

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

Coastal Restoration Fellow

One of the SCC's fellows will work on coastal habitat restoration along the shoreline of San Francisco Bay. Coastal resource enhancement is the SCC's largest funding program, and the complexity of designing, implementing and monitoring resource enhancement projects continues to grow. The coastal restoration fellow will spend his/her time working on the San Francisco Bay Restoration Authority (SFBRA) and the coastal restoration work of the SCC's Bay Area Program. The SCC provides staff support to the SFBRA.

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

- 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.
- Track the development of the San Francisco Bay Wetlands Regional Monitoring Program and contribute to ensuring its usefulness to the SCC and SFBRA.
- Help coordinate SFBRA work through meeting organization, meeting notes, preparing technical documents, and presenting information.
- Review project applications and make recommendations for project prioritization.
- Participate in coordination between agencies and among stakeholders.
- Support communications and public outreach (social media, website, etc).

Through the SFBRA and the SCC's Bay Area Program, the fellow will have the opportunity to work with leading scientists, restoration practitioners, resource managers, and community leaders. Tasks may include helping to determine management and science needs, participating in meetings, and conducting site visits. The fellow may also support SFBRA's and SCC's outreach

and technical assistance to support community-based organizations in economically disadvantaged communities in developing projects eligible for our grant funding.

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

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 projects planning and implementing 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.
- Facilitate the Coastal Resilience Network to identify future speakers and host webinars that help share information within the adaptation community of practice.
- Support communication about the science and management issues related to climate change and climate adaptation 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 and collaboratives on behalf of the SCC.

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.



STATE WATER RESOURCES CONTROL BOARD
2021 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, 15th Floor
Sacramento, CA 95814
www.waterboards.ca.gov
2. Fellowship Supervisor:
Laura McLellan, Senior Environmental Scientist
Recycled Water, Desalination, and Constituents of Emerging Concern Unit Chief
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
Recycled Water, Desalination, and Constituents of Emerging Concern Unit Chief
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
(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.

In the Sustainable Water Plans and Policies Section in the Division of Water Quality, the Sea Grant Fellow (Fellow) will use scientific principles to develop and implement impactful statewide water quality plans and policies, including plans and policies relating to seawater desalination, recycled water, and constituents of emerging concern (i.e., new or unregulated potential contaminants such as those found in pharmaceuticals, personal care products, and microplastics). The Fellow will work in multidisciplinary teams on projects including:

- Implementing and developing science-based policy recommendations to amend the seawater desalination provisions of the Water Quality Control Plan for Ocean Waters of California (Ocean Plan), including working on projects such as the proposed Huntington Beach, Doheny, and Cal-Am desalination facilities;
- Developing a comprehensive, flexible statewide Constituents of Emerging Concern strategy to bring the state into a new paradigm of chemical management for addressing emerging contaminants, filling critical data gaps, and taking appropriate actions to protect water quality and the environment;
- Implementing the Water Quality Control Policy for Recycled Water, which promotes the use of recycled water as a sustainable water supply; and
- Developing and managing research grants to fill scientific research gaps to support the increased production and use of recycled water in California.

The Fellow may also work on other projects in the Sustainable Water Plans and Policies Section, including the State Water Board's Stormwater Strategy, and Per- and Polyfluoroalkyl Substances (PFAS) Strategy teams.

Throughout the fellowship, the Fellow will apply their scientific background and experience to develop and implement science-based water quality plans and policies, engage with stakeholders, respond to public comments, author technical reports, and engage in intra- and interagency collaboration (e.g., with regional water boards, Ocean Protection Council, Coastal Commission, State Lands Commission, Fish and Wildlife, Department of Water Resources, Department of Pesticide Regulation, etc.). Our goal is for the Fellow to experience as many facets of the State Water Board as possible while working on projects that will have lasting statewide impact to protect water quality and the environment. The fellowship is an excellent introduction to a career at the Water Boards, and many of our Fellows have gone on to full-time positions within the agency.

We are looking for a Fellow that has:

- Skill and experience working in a highly collaborative team setting.
- Ability to conduct scientific analysis to inform policy development.
- Strong written and verbal communication skills.
- Interest or experience in marine biology, oceanography, chemistry, toxicology, and environmental science.
- Ability to engage with diverse stakeholders who may not agree on scientific, technical, or policy recommendations.
- Self-starting initiative to identify project needs and work collaboratively with minimal supervision.



STATE WATER RESOURCES CONTROL BOARD
2021 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, 15th Floor
1001 I Street
Sacramento, CA 95814
www.waterboards.ca.gov
2. Fellowship Supervisor:
Katherine Walsh, Senior Environmental Scientist Supervisor
Ocean Standards Unit Chief
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. This 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
2021 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, 19th Floor
1001 I Street
Sacramento, CA 95814
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
(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 primarily freshwater and some marine environments. 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.