



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

Background

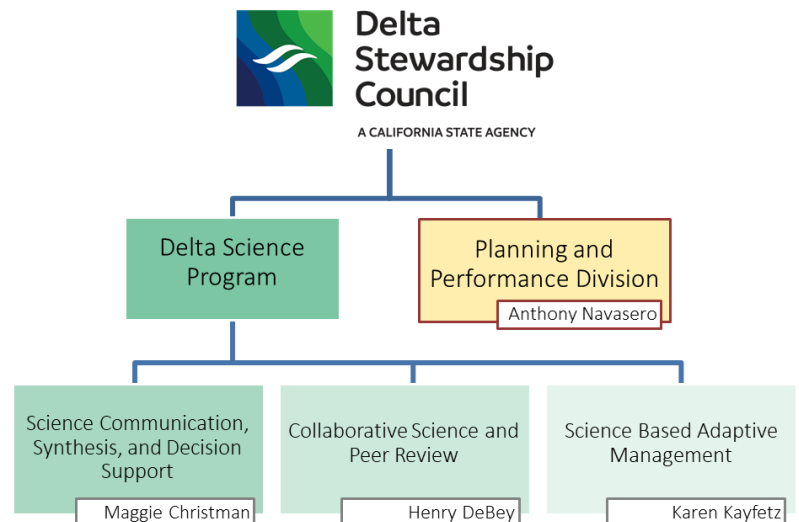
The Sacramento–San Joaquin Delta (Delta), along with the San Francisco Bay, is part of the largest estuary on the West Coast of the Americas. The Delta provides vital habitat for endangered and endemic species and is the portal through which important fish species, including anadromous Chinook salmon, 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 adaptation strategy on a response to climate change and sea level rise
- Risk reduction from flooding in the Delta
- Social science in the Delta
- Environmental justice and the human right to water
- Fisheries management and protection from non-native/invasive species
- A reliable water supply for the majority of the state's population
- Water quality for people and species
- Delta as an evolving place

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. The Sea Grant fellow will meet with the supervisor/mentor and other Division staff to identify specific projects and work groups for assignment considering the Sea Grant fellow's expertise and interests. 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, the Suisun Marsh, and 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.
- Assist with public outreach to community-based organizations and disadvantaged communities to provide and gain information on the Council's projects, such as its climate change initiative.
- Assist on the preparation of the Council's Environmental Justice White Paper.
- Evaluate land use, water supply, water storage, ecosystem restoration, and flood protection projects, plans, and programs for consistency with Delta Plan regulations.
- Assist in early consultation with state and local agencies on their proposed projects, plans, and programs considered covered actions to provide guidance regarding consistency with Delta Plan regulations.
- 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.

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: 715 P Street, Sacramento, CA

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



The Delta Science Program will host three Sea Grant State Fellows in 2022

Background

The Sacramento–San Joaquin Delta along with the San Francisco Bay, is part of the largest estuary on the West Coast of the Americas. 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 nine years and provides a welcoming, collaborative and exciting 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 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 and/or 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. The DSP provides fellows with opportunities to build their professional network as they engage with collaborators from a range of state, federal, and local agencies including the National Oceanic and Atmospheric Administration, the California Department of Fish and Wildlife, the United States (U.S.) Fish and Wildlife Service, U.S. Bureau of Reclamation, U.S. Geological Survey, California Department of Water Resources, and the 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 core functions or a blend of tasks.

Host Location: 715 P Street, Sacramento, California

Fellowship Supervisor & Point of Contact: Maggie Christman, Program Manager II,
Maggie.Christman@deltacouncil.ca.gov, (916) 320-6174

Potential Projects

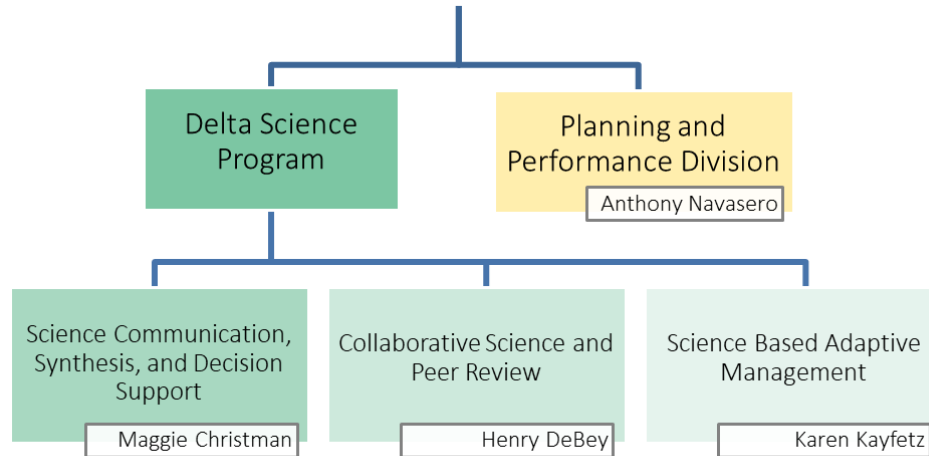
- Work with the Delta Lead Scientist (Dr. Laurel Larsen) on monthly reports to the Council that summarize recent science efforts around the Delta as well as water supply metrics and ecological indicators. Recent examples include: [Lead Scientist Report](#), [By The Numbers Report](#), [Visual Abstract](#).
- Participate in synthesis efforts (e.g., the [State of Bay-Delta Science](#)), including supporting communication of key messages to appropriate audiences using a variety of media and platforms (i.e., lay abstracts, infographics, briefs or fact sheets, web content, and seminars).
- Communicate science facilitated or funded by the DSP in creative and accessible formats for a variety of audiences.
- Support initiatives related to open science, science activity tracking, or integrated modeling, such as the Delta Science Tracker, [Integrated Modeling Steering Committee](#), and development of a virtual modeling collaboratory.

Examples of Previous Fellows' Projects

- Creation of a website ([A Beginner's Guide to the Delta](#)) to serve 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 ([#scifri](#) for the [@DeltaCouncil](#) Twitter account)).
- 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](#).



A CALIFORNIA STATE AGENCY



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 science [funding](#) of priority research aligned with the [Science Action Agenda](#), 3) facilitating [independent scientific peer reviews](#) of programs, plans, and reports, and 4) synthesizing scientific information to generate best available science for informing water and environmental resources decision-making. A fellow in this unit will engage in our unit's collaborative interagency initiatives and lead an independent project that leverages their unique skillset and interests.

Host Location: 715 P Street, Sacramento, CA

Fellowship Supervisor & Point of Contact: Henry DeBey, Environmental Program Manager I, Henry.DeBey@deltacouncil.ca.gov, (916) 996-8658

Potential Projects

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

- Contributing to the development of the **Delta Science Plan** which aims to collaboratively identify and implement approaches and mechanisms for fostering an inclusive, proactive and resilient Delta science community;

- Advancing the integration of **social science** to inform Bay-Delta management and policy decisions through implementing investigations on the social dimensions of the estuary, facilitating collaborative synthesis or meta-analyses of existing datasets, and building a social science community of practice;
- Contributing to the update of the **Science Action Agenda** (SAA) and/or execution of **science funding mechanisms** using the SAA as a framework;
- Supporting Delta Science Program **independent peer review efforts**, including tracking and summarizing actions resulting from independent scientific peer reviews;
- 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, policy and civil society**, by leveraging partnerships with other boundary organizations, fostering diversity, equity and inclusion in science and management governance, communicating science, and contributing content to K through 12 education programs;
- **Synthesizing information** on ecological or social science issues in the Bay-Delta ecosystem.

Examples of Previous Fellows' Projects

- Case study of a non-critically over-drafted groundwater basin, in the context of the Sustainable Groundwater Management Act
- Development and establishment of the Delta Stewardship Council's Delta Diversity Initiative
- 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 collaborative interagency groups to support the application of adaptive management in habitat restoration projects in the Delta and Suisun Marsh, (2) planning a biennial mini-conference called the Adaptive Management Forum, for communicating adaptive management outcomes and coordinating adaptive management governance, (3) evaluating and communicating “lessons learned” from past restoration efforts and water management actions, and (4) 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: 715 P Street, Sacramento, California

Fellowship Supervisor & Point of Contact: Karen Kayfetz, Environmental Program Manager | Karen.Kayfetz@deltacouncil.ca.gov, (916) 870-9036

Potential Projects

- Collaborate on planning the next Adaptive Management Forum. Bring in experts from around the Delta and from other systems to discuss “lessons learned” from previous management efforts in a 2-3 day event. Plan and facilitate interactive workshops to train people in the application of adaptive management to individual projects, or to promote dialogue about adaptive management at the landscape scale. Co-produce a meeting summary, white paper, or essay for a scientific journal.
- 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.
- 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.