



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

### Background

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

The purpose of the Delta Stewardship Council is to uphold the coequal goals for the Delta—a

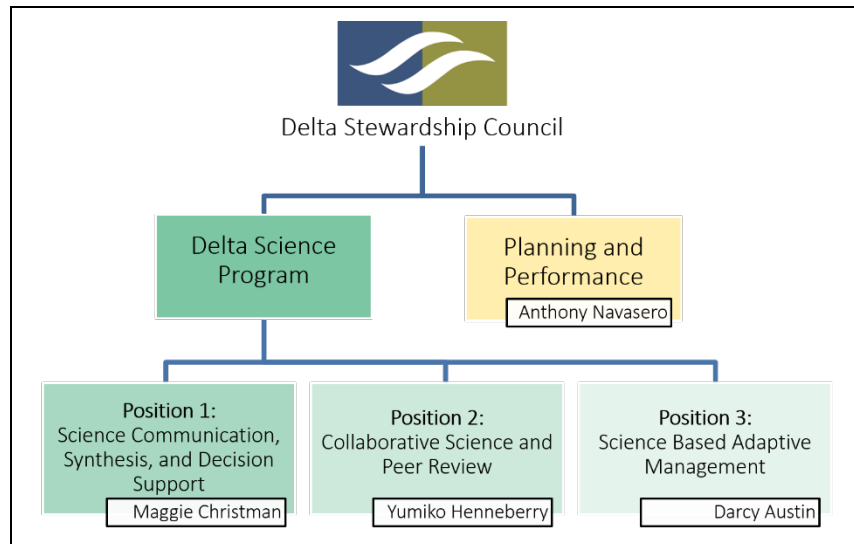
more **reliable statewide water supply** and a **healthy and protected ecosystem**, both achieved in a manner that protects and enhances the unique characteristics of the **Delta as an evolving place**. The Delta Science Program (DSP) was established to develop scientific information and syntheses on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

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

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

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





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

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

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

**Fellowship Supervisor:** Maggie Christman, Program Manager II

[Maggie.Christman@deltacouncil.ca.gov](mailto:Maggie.Christman@deltacouncil.ca.gov), (916) 445-0464

### Potential Projects

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

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

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

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

**Point of Contact:** Yumiko Henneberry, Senior Environmental Scientist

[Yumiko.Henneberry@deltacouncil.ca.gov](mailto:Yumiko.Henneberry@deltacouncil.ca.gov), 916-445-7690

### **Potential Projects**

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

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

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

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

### **Position 3: Science-Based Adaptive Management Unit**

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

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

**Fellowship Supervisor:** Darcy Austin, Program Manager II

[Darcy.Austin@deltacouncil.ca.gov](mailto:Darcy.Austin@deltacouncil.ca.gov), (916) 445-0720

#### **Potential Projects**

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