980 NINTH STREET, SUITE 1500 SACRAMENTO, CALIFORNIA 95814 DELTACOUNCIL.CA.GOV Twitter: @DeltaCouncil

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

# Background

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

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

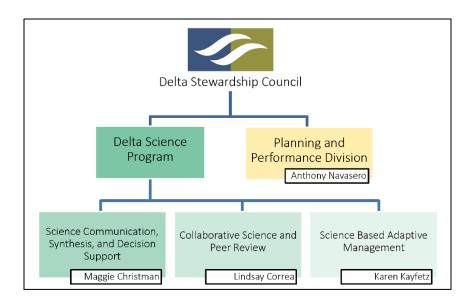


healthy and resilient ecosystem, both achieved in a manner that protects and enhances the unique characteristics of the **Delta as an evolving place**. The Delta Science Program (DSP) is a boundary organization with a mission to provide scientific information, independent peer review, and syntheses on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

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

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

As the capital of California, Sacramento is a hub for environmental science and policy. Science Program fellows will build an extensive network by working with a range of professionals from government agencies (e.g., National Oceanic and Atmospheric Administration, California Department of Fish and Wildlife, United States (US) Fish and Wildlife Service, US Bureau of Reclamation, US Geological Survey, Department of Water Resources, State Water Resources Control Board), consulting firms, academia, and NGOs, among others. Many fellows have gone on to work with these partners.



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

This unit has three primary areas of emphasis: 1) improve science communications among multiple stakeholders in the Bay-Delta system, including scientists, managers, decision-makers, and the public, 2) facilitate and participate in analysis and synthesis of scientific information to support management and decision-making, and 3) facilitate cooperative decision-making by supporting open science and integrated modeling initiatives. Based on his or her interests, the fellow will have the option of working on one of the above tasks or a blend of tasks.

Host Location: 980 Ninth Street, Suite 1500, Sacramento, California
Fellowship Supervisor and Point of Contact: Maggie Christman, Program Manager II
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#### **Potential Projects**

- Create a website, blog, or report communicating specific aspects of the Delta; for example, A Beginner's Guide to the Delta was created by a previous fellow.
- Work with the Delta Lead Scientist on monthly reports that summarize recent science efforts around the Delta as well as water supply metrics and ecological indicators.
   Recent Example.
- Summarize science funded by the DSP in a format that is creative and accessible to nonscientists, including policy-makers, managers and program directors (e.g., policy-makers and the public).
- Assist in dissemination of DSP efforts through fact-sheets, social media (e.g., Science Fridays on Twitter), and other means.
- Plan and facilitate Brown Bag seminars centered on a specific theme of importance to managing the Bay-Delta system.
- Participate in the State of Bay-Delta Science and other synthesis efforts, including developing summaries for managers, lay abstracts, and web content to support communication of scientific information to Delta stakeholders.

## Position 2: Collaborative Science and Peer Review Unit

The Collaborative Science and Peer Review Unit is working on several exciting and challenging efforts focused on: 1) catalyzing activities that foster connections and collaborations through coordinating Bay-Delta science efforts with a diverse set of stakeholders and agencies to jointly implement the Delta Science Plan, 2) supporting competitive funding of priority research aligned with the Science Action Agenda, 3) synthesizing scientific information to generate best available science for informing water and environmental decision-making, and 4) facilitating independent scientific peer reviews of programs, plans, and reports. A fellow in this unit will engage in our unit's collaborative interagency initiatives and lead an independent project that utilizes their unique skillset.

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

Fellowship Supervisor and Point of Contact: Lindsay Correa, Program Manager II

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## **Potential Projects**

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

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

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

- Multi-agency investigation of salmon behavior and migration in floodplain habitats
- Multi-agency and stakeholder salmon gaps analysis report
- Contributed to the Interim Science Action Agenda (past fellows' promotional video)
- Assisted in organizing a public workshop on Sacramento River temperature modeling
- Conducted an analysis of the potential values striped bass provide to the Delta
- Wrote a collaborative science governance report and appendix to the Delta Science Plan

# Position 3: Science-Based Adaptive Management Unit

This unit provides support and leadership on the use of adaptive management, which is a structured, scientific approach to management that aims to produce and actively incorporate new knowledge into management to reduce uncertainties. Current work includes (1) contributing to scientific synthesis on restoration, climate change, and other management topics, (2) advising on adaptive management frameworks and project- and landscape-level conceptual models, (3) leading the Interagency Adaptive Management Integration Team to support ecosystem restoration adaptive management in the Delta, and (4) supporting the reviews of the Delta Independent Science Board (Delta ISB). The Delta ISB, which is comprised of renowned scientists across the nation and across disciplines, provides oversight of programs that support adaptive management in the Delta.

**Host Location:** 980 Ninth Street, Suite 1500, Sacramento, California **Fellowship Supervisor and Point of Contact:** Karen Kayfetz, Environmental Program Manager I

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#### **Potential Projects**

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