

# Delta Science Program Sea Grant Fellow Opportunity Water Supply Adaptive Management and Communications

#### **Host Location**

980 Ninth Street, Suite 1500, Sacramento, California 95814

#### Fellowship Supervisor and Point of Contact

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## Introduction

California's Sacramento-San Joaquin Delta is the largest estuary on the West Coast and is the hub of the state's major water supply systems. It is inextricably linked to statewide issues that affect its ability to function in a healthy, sustainable way. In November 2009, the California Legislature enacted the Delta Reform Act, one of several bills related to water supply reliability, ecosystem health, and the Delta, and created the Delta Stewardship Council. The mission of the Delta Stewardship Council is to achieve the coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem (including Suisun Marsh).

The Act also established the Delta Science Program (DSP), Lead Scientist, and Delta Independent Science Board (Delta ISB). Under the guidance of the Delta Lead Scientist, a Delta Science Plan (Plan) was completed in December 2013 (http://deltacouncil.ca.gov/sites/default/files/documents/files/Delta-Science-Plan-12-30-2013.pdf). The Plan proposed 31 actions intended to strengthen, organize, and communicate science to provide relevant, credible, and legitimate decision-support for policy and management actions. Chapter 3 of the Plan describes the use of adaptive management as a tool to manage complex natural resources programs and projects and Chapter 4 discusses the necessity of building a science infrastructure. Also see Appendix C of the Delta Plan (http://deltacouncil.ca.gov/sites/default/files/documents/files/AppC\_Adaptive%20Management\_2013.pd f) for further discussions on adaptive management and best available science.

## **Position Description**

The Fellow will work under the direction of the program manager for the Delta Science Program's Water Supply Adaptive Management and Communications Unit and initially, will meet with the program manager, Lead Scientist, and other Science Program staff as appropriate to develop a mentoring plan for the year. This plan will be based on the interests and background of the Sea Grant Fellow and is intended to maximize the Sea Grant Fellow's opportunities.

"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." The Water Supply Adaptive Management and Communications unit has two primary tasks: 1) develop a Water Supply Adaptive Management Framework to address watershed-scale water management actions, and 2) improve science communications to more effectively inform policy and management decisions and build the Delta science community. Based on the Fellow's interests, the Fellow will have the option of working only on the Water Supply Adaptive Management Framework, only on Communication tasks, or a blend of tasks associated with the Water Supply Adaptive Management Framework and Communications tasks.

## 1. Water Supply Adaptive Management Framework

Currently, two staff within this unit are working on developing a framework that will address how adaptive management can be integrated into water management decision-making. This framework will complement the ecosystem restoration framework that is being developed concurrently in another unit. Development of the framework requires research as well as outreach to other federal and State agencies and affected stakeholders.

## Potential Assignments

The Fellow will collaborate with staff to develop the water supply adaptive management framework and will help to propagate the knowledge and information gained through the process to policy and decision makers, managers, and the public. Specific topics would include but are not limited to:

- Water supply challenges facing California and specifically the Sacramento-San Joaquin Delta
- Understanding the water supply and ecosystem protection relationships surrounding the Delta
- Case studies on water supply adaptive management and how they can be applied (adapted) to California and the Delta
- Investigation of water supply "reliability", possibly through surveys
- Studies on social, political and economic challenges and opportunities in applying adaptive management to water supply reliability issues

The fellow may write a section in the framework reflecting his/her work.

## 2. Communications

One of the goals of the Communications Unit is to translate complex scientific information into a form readily understood by the non-scientist. This is done through monthly Brown Bag seminars, quarterly science synthesis symposia in conjunction with UC Davis, and the Bi-annual Bay Delta Science Conference, to mention a few. This unit is also finalizing a communication plan for the Delta Science Program.

## Potential Assignments

- Contribute to the development of the Science Program's Communication Plan
- Develop a science synthesis symposium in association with the U.C. Davis Coastal and Marine Sciences Institute on an issue of importance to the Bay-Delta; lead development of a synthesis paper for publication in an open access scientific journal
- Develop 3-5 Brown Bag seminars centered on a specific theme of importance to management of the Bay-Delta system; synthesize the information for the Council's eNewsletter or other venue
- Synthesize research results from the 2013 Delta Science Fellows solicitation in a format accessible to the non-scientist and present at a Delta Stewardship Council meeting
- Contribute short essays to the Council's online eNewsletter