

Delta Science Program Sea Grant Fellow Opportunity Independent Science Board

Host Location

980 Ninth Street, Suite 1500 Sacramento, California 95814

Fellowship Supervisor

Lauren Hastings Delta Adaptive Management Science Advisor lauren.hastings@deltacouncil.ca.gov (916) 445-5026)

Point of Contact for Prospective Fellows and Finalists

Marina Brand Program Manager marina.brand@deltacouncil.ca.gov (916) 445-5031

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). The Delta ISB is comprised of nationally and internationally renowned scientists with backgrounds in ecology, biology, biogeochemistry, geology, and economics and is mandated to provide oversight of the scientific research, monitoring, and assessment programs that support adaptive management of the Delta, including Suisun Marsh, through periodic reviews of each program. It also advises the Delta Stewardship Council when requested (science/policy interface).

Position Description

The Fellow will work under the direction of the Delta ISB to develop innovative ways of assessing Delta Science programs that support agency efforts to understand the implications of actions taken to achieve the coequal goals. As an initial step, the Fellow will meet with the Supervisor, Lead Scientist, Chair and Co-chair of the Delta ISB to develop a mentoring plan for the year. This plan will be based on the needs of the Delta ISB and the interests and background of the Fellow and is intended to maximize the

[&]quot;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."

Fellow's opportunities. Among the opportunities for the Fellow is assisting with the Delta ISB's legislatively mandated reviews. Currently, the Delta ISB is reviewing overarching "themes" rather than individual projects and/or programs. As part of the review process, the Delta ISB is evaluating the structure of and coordination among science programs evaluated as part of the overarching theme. A potential result of a review may be the identification of clusters of programs that should be more effectively coordinated to maximize resources and minimize duplication of efforts. Another outcome could be identifying the extent to which programs provide all of the information needed to guide policy decisions.

The initial efforts of the Delta ISB are to structure reviews around scientific issues inherent in the Act's coequal goals of water supply reliability and ecosystem health. The first thematic review focused on habitat restoration activities and on how adaptive management and climate change are incorporated into these activities. The report, completed in 2013, can be found at:

http://deltacouncil.ca.gov/sites/default/files/documents/files/HABITAT%20RESTORATION%20REVI EW%20FINAL.pdf. The Board recently completed its second review: "Flows and Fishes in the Sacramento-San Joaquin Delta: Strategic Research Needs in Support of Adaptive Management." The report is available here: http://www.deltacouncil.ca.gov/science-board/delta-isb-products. Subsequent reviews will focus on how climate change and adaptive management are being incorporated into programs focused on water supply reliability, water quality, levees, and Delta as an evolving place.

Potential Assignments

- <u>Programs Supporting Adaptive Management of the Delta</u> The Fellow will have the opportunity to interface directly and work in close collaboration with the Board as a whole and with individual members to research governmental and non-governmental agencies and organizations that implement programs related to:
 - o Climate Change/Adaptive Management Water Supply Reliability
 - Climate Change/Adaptive Management Water Quality
 - o Climate Change/Adaptive Management Levees
 - Climate Change/Adaptive Management Delta as an Evolving Place

Opportunities will exist to synthesize information obtained from research and site visits with governmental and non-governmental staff in anticipation of assisting in the preparation of the Delta ISB's report to the Delta Stewardship Council. This may also require participating in meetings and coordinating with program staff from other agencies and organizations.

<u>Delta Science Plan</u> – As required by the Delta Plan, the Delta Science Program prepared a Delta Science Plan in December 2013 (http://deltacouncil.ca.gov/sites/default/files/documents/files/Delta-Science-Plan-12-30-2013.pdf). The Delta Science Plan is a framework for conducting science that organizes and integrates Delta science activities and builds an open collaborative science community (One Delta, One Science). 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. The Fellow may be asked to assist in the implementation of one or more tasks identified in the Science Plan.