



INFORMATION ITEM

Delta Science Tracker

Summary

Delta Science Program staff will present an overview of the recently developed, Council-funded Delta Science Tracker. For this presentation, staff will be joined by Mario Manzo, Deputy Manager of the U.S. Bureau of Reclamation's Bay-Delta office. The Delta Science Tracker is a comprehensive web-based inventory of scientific research and monitoring activities in the Sacramento-San Joaquin Delta. Given the sheer breadth of scientific efforts in the Delta and the number of interested parties involved, this website provides a "one-stop-shop" for the public to search for science activities, create visualizations summarizing information about science funding and collaborations, and access reports, publications, and other products generated by these activities.

Background

Numerous government agencies, academic institutions, non-governmental organizations, and private research groups conduct a variety of scientific research and monitoring activities throughout the Sacramento-San Joaquin Delta and its watershed. Despite various coordination efforts, easily tracking science activities and their outcomes has been difficult due to the need for a centralized inventory of science efforts and a standardized approach to communicating such activities. This may have limited awareness of how funding was distributed across programs and management areas and hindered opportunities to collaborate and coordinate. Collaboration and transparency are critical to building and maintaining a common body of knowledge and demonstrating the return on investment from science funding in the Delta.

The 2019 Delta Science Plan called for the development of a web-based tracking system of science activities in the Delta (Action 5.3; Delta Stewardship Council 2019). This 'Delta Science Tracker' system was not envisioned to host the data

generated by research or monitoring activities but rather house a database of project-related information to answer such questions as:

- What science activities are being conducted in the Delta?
- Who is involved in implementation of these activities?
- When and where have science activities been conducted?
- What management questions are being answered through this research?
- What funding sources support these activities?
- How is funding being allocated to different activities or topics?
- What are the existing collaborations between agencies and scientists in the Delta?

Providing researchers, decision-makers, and the public a platform on which to share and directly access this information provides a critical link through which collaborations can be built, management decisions can be connected to the best available science, and the public's understanding of the return on science investments can be founded.

In May 2020, the Delta Science Program and ESSA Technologies, Inc. began development of the Delta Science Tracker in partnership with several organizations that fund and/or implement Delta science activities, including the U.S. Bureau of Reclamation, Interagency Ecological Program, California Department of Water Resources, California Department of Fish and Wildlife, State Water Contractors, and United States Geological Survey.

About the Delta Science Tracker

The Delta Science Tracker was designed to be a user-friendly science activity tracking tool that is open to the public and allows anyone to interactively explore information about science research and monitoring activities in the Sacramento-San Joaquin Delta, summarize content through dynamic visualizations, and provide a platform through which information generated by these activities can be shared and accessed. In addition to the goals of promoting collaboration and transparency, the Delta Science Tracker is envisioned to improve communication among the Delta science community, promote opportunities for leveraging and integrating science

efforts, create efficiencies in science funding, and support the implementation of the Science Action Agenda and Delta Science Plan.

System functionalities

At its core, the Delta Science Tracker houses an inventory of science research and monitoring activities as well as a database of organizations who fund or implement those activities and the collaborators involved. Project details include management and science topics addressed by the activities, geographic areas involved, fund sources and amounts, and products generated by the projects. Project proponents can continually add to the database by creating new activity pages or editing existing ones.

Users can explore the rich information contained in this inventory through a large number of search and/or filter options to find activities of interest. In addition, the Delta Science Tracker includes options for users to create several visualizations related to assessing how many activities address various science or management topics, how funding is distributed across activities and topics, and what collaborative networks among individuals and institutions exist in the Delta science enterprise.

User applications

The design and development of this tool were guided by the goal of providing a single location to gather, organize, and summarize critical information about science activities being conducted throughout the Delta in a manner that is valuable to scientists, decision-makers, and the public. Examples of users of this tool include:

- Scientists wishing to connect themselves and their work to other researchers, managers, and decision-makers in the Delta.
- Resource managers who want to track funding and find research projects that can inform their work.
- Decision-makers who want to find the science and human expertise that can inform their policies.
- Funding and implementation agencies who need to track their projects and report out on their programs.

- Anyone who would like to explore, discover, and learn about the science and scientists working in the Delta system.

Fiscal Information

In May 2020, the Council awarded a contract to ESSA Technologies, Ltd. to design and create the Delta Science Tracker tool. The total amount awarded was \$449,803.

List of Attachments

Attachment 1: Delta Science Tracker Information Sheet

Contact

George Isaac

Senior Environmental Scientist

Phone: (916) 902-6581