



INFORMATION ITEM

Lead Scientist's Report

Summary: This month's Lead Scientist's Report is abbreviated due to the Council's tour of the Delta and covers recent and upcoming Delta Science Program activities. The article spotlight will return in June's report.

DELTA SCIENCE PROGRAM ACTIVITIES

Delta Governance Brown Bag Webinar Series

The third Delta Governance Brown Bag webinar took place on May 5, focusing on Adaptive Governance. The panel featured the Independent Science Board's Tanya Heikkila, the Council's Harriet Ross, Hannah Gosnell (Oregon State University), and Newsha Ajami (Lawrence Berkeley National Laboratory). Recordings of all previous webinars are available on the Council's YouTube channel:

<https://www.youtube.com/user/DeltaCouncil?app=desktop>.

California Council on Science and Technology Legislative Briefing

The California Council on Science and Technology held a legislative briefing on "Managing Salinity on the Delta in a Changing Climate" as part of their Disaster Resilience Initiative series on May 16. The briefing featured Karen Kayfetz, the Delta Science Program's adaptive management program manager, as moderator and Jay Lund of the Delta Independent Science Board as a panelist. Other panelists included Brett Milligan (UC Davis) and Nigel Quinn (Lawrence Berkeley National Laboratory). A recording of the briefing will be available on the CCST YouTube page here: <https://bit.ly/39syVD1>.

Release of the latest edition of the Delta Breeze

The Spring 2022 issue of the Delta Science Program's newsletter, the Delta Breeze, was just released on May 23 on the Council's website (<https://bit.ly/39vfyll>)! This third edition provides a bird's eye overview of the "what," "why," "who," and "how" of the Science Action Agenda (SAA). Articles highlight:

- How and why the newly released 2022-2026 SAA emphasizes science integration across a diverse collection of entities working to manage the Delta

- The involved, transparent, nearly 2-year process undertaken by members of the Science Program’s Collaborative Science and Peer Review Unit that brought together members of the Delta science community to identify, refine, and co-produce the most critical science needs for management in the next four years
- Examples of how the SAA has guided funding priorities to address the most pressing information needs for management, including research updates from proposals funded through the 2019 Delta Science Program proposal solicitation
- How progress was measured since the previous 2017-2021 SAA and how outstanding science needs were incorporated into the new 2022-2026 SAA.

US Bureau of Reclamation, Water Temperature Midterm Review

The Delta Science Program is a leading coordinator of independent scientific peer review in the Sacramento-San Joaquin Delta scientific community. An Independent Advisory Panel facilitated by the Delta Science Program will review the temperature models, model framework, and implementation of the Water Temperature Modeling Program (WTMP). The WTMP effort entails the development of data collection and a set of physically-based tools within a modeling platform to assist resource managers of major Central Valley Project (CVP) reservoirs with balancing water resources for downstream uses and temperature needs. The CVP is owned and operated by the Bureau of Reclamation (Reclamation). The CVP has grown into a complex, multi-purpose network of 20 dams and reservoirs that can store nearly 12 million acre-feet of water and has more than 500 miles of major canals and natural channels for water serving urban, agricultural, and industrial demands in the Central Valley and San Francisco Bay area. Temperature management is a key parameter for protecting species with specific cold-water needs and is one of the most complex subjects related to CVP operation. Reclamation continuously adapts and updates modeling capabilities to manage water temperature in the CVP reservoir and river systems as part of CVP reservoir management.

The review will be conducted in two parts; the first part, planned to occur in July 2022, will focus on the WTMP for the Sacramento River northern system (including Shasta and Keswick reservoirs), and a final review in July 2023 will focus on the entire project effort, including the American River and Stanislaus River systems. The panel's findings and recommendations will provide important guidance to improve modeling tools for predicting water temperatures in short time frames for real-time

operations, seasonally for developing temperature management plans, and longer time frames for planning studies.

Delta Science Fellows

The Delta Science Program and California Sea Grant released a request for applications for the 2022 class of Delta Science Fellows on January 25, 2022. Delta Science Fellowship awards provide Masters, Ph.D. students, and postdoctoral researchers up to two years of research funding. This program pairs the next generation of Delta scientists with academic and community mentors to conduct critical science investigations targeting high-priority Delta issues identified in the 2022-2026 Science Action Agenda (SAA). This year there was an increased emphasis on recruiting social science applicants, supported by separate review panels for social science and biophysical science applications. Notices of Intent (NOI) to apply were due on February 28, 2022. Applications from those who submitted an NOI were due April 20, 2022. Six to eight awards will be announced in June, and Fellows will begin work in August/September 2022.

Delta Lead Scientist "Ask-Me-Anything" (AMA) Series

The May 2, 2022, Delta Lead Scientist AMA session focused on efforts to expand social science in the Delta and featured Dr. Jessica Rudnick, California Sea Grant Extension Specialist. The conversation focused on the ongoing work of the Social Science Task Force, the Social Science Community of Practice, and the Delta Residents Survey that will be launched this summer. Visit the @deltacouncil Instagram site to view a recording under the IGTV tab.

BY THE NUMBERS

Delta Science Program staff will summarize current Delta water and environmental management numbers. The summary (Attachment 1) will inform the Council of recent counts, measurements, and monitoring figures driving water and environmental management issues.

LIST OF ATTACHMENTS

Attachment 1: By the Numbers Summary (provided at the Council Meeting)

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