STAFF MEMORANDUM

TO: Board Members and Alternates

FROM: Scott Petersen, Water Policy Director
Cynthia Meyer, Special Programs Manager

DATE: January 12, 2023

RE: Update on Science Program

SUMMARY

The San Luis & Delta-Mendota Water Authority's ("Water Authority") current science commitments for Fiscal Year 23 (March 1, 2022 – February 28, 2023) may be considered in three categories. First, the Water Authority re-budgeted $282,652 in the current budget to fund five activities and/or studies previously authorized to be funded. Second, the Water Authority began the year with approximately $2,000 in funds remaining from the State and Federal Contractors Water Agency ("SFCWA") to fund one study initially authorized by SFCWA and transferred to the Water Authority for funding and management, and which has now been completed. Third, the Water Authority has budgeted $392,500 in the current budget for science studies. More detail regarding the various science commitments is provided below. In total, the Water Authority started the current fiscal year with approximately $677,152 available to fund science, of which $284,652 has been obligated.

1. Previous Commitments - $282,652 in FY 23 Budget

Subject	Description of Work / Objective(s)	FY 23 Budget
Joint Funding of Delta Smelt Structured Decision Making Phase 3	This funding would support management and technical analyses required to conduct Phase 3 for the CSAMP Delta Smelt Structure Decision Making (SDM) project. Technical analyses would include modeling and the application of other analytical tools to evaluate the consequences of proposed management actions for Delta Smelt as well as the evaluation of potential consequences to other resource values including water supply and agriculture. Phase 3 was scheduled to occur from September 2020 to September 2021, but has been delayed.	$45,400
Joint Funding for CAMT Technical Support	This funding would match State Water Contractor funding obligated for CAMT studies. The Water	$105,000

	Authority is currently researching two potential uses for this funding – 1. Continuation of Delta Smelt SDM funding for Phase 3, or 2. Execution of a contract for Salmon Structured Decision Making.	
Development of eDNA monitoring tool for detection of Delta Smelt	Goal to develop an accepted eDNA monitoring tool for species detection in tidally mixed aquatic ecosystems in the Delta, and to advance eDNA aquatic monitoring towards a state-of-science that can be applied in the context of scientific, policy, and regulatory decision-making	$63,000
Delta Smelt Incidental Take Limit Research	Funds support the evaluation of differences in salvage between pre- and post-BiOp conditions and the determination of how much variance in salvage can be explained by each of the predictor variables. Support provided to ICF Jones & Stokes, Inc., through a cost share with SWC.	$14,252
CAMT Facilitation and Technical Support	Funds support facilitation and assistance with CAMT and CSAMP meetings. Main contracts with Essex Partnership (Bruce DiGennaro) and Hansen Environmental (Chuck Hansen) held by SWC.	$55,000

2. SFCWA-Funded Studies Being Managed by the Water Authority - $0 Remaining

Subject	Description of Work / Objective(s)	SFCWA Funds Remaining
Measuring Impact of Control of yellow Starthistle in the Northern Sac. Valley and Superior California on Watershed Runoff and Groundwater Levels	Study of the water benefits of yellow Starthistle (YST) control. If there appears to be replicable water supply benefit from YST removal, will prepare plan of recommended YST removal in California that results in increased runoff and/or improved groundwater levels. Study completed in May, 2022.	$0

3. New Science - $392,500 in FY 23 Budget

Subject	Description of Work / Objective(s)	FY 23 Budget
Science Studies/Efforts		$392,500
Joint Funding for CAMT Technical Support	This funding would match State Water Contractor funding obligated for CAMT studies. The Water Authority and State Water Contractors are currently jointly researching two potential uses for this funding – 1. Continuation of Delta Smelt SDM funding for Phase 3b, or 2. Execution of a contract for Salmon Structured Decision Making.	$150,000

	After deliberation within CAMT/CSAMP, the group has chosen to pursue continued development of the Delta Smelt Structured Decision Making Phase 3b, with the salmon recovery strategy being advanced through in-kind contributions this year.	
CAMT Technical Support	Funds support technical engagement by Hansen Environmental (Chuck Hansen) in CAMT and CSAMP meetings. Contract held by SWC.	$30,000
Delta Coordination Group Summer Fall Habitat Action Structured Decision Making Facilitation Support	Funds support facilitation and assistance with Delta Coordination Group Structured Decision Making for Delta Coordination Group recommendations to Reclamation and DWR related to Summer Fall Habitat Actions in the Biological Opinions and State Incidental Take Permit. Project jointly funded with State Water Contractors.	$12,500
SLDMWA Technical, Science and Regulatory Support	Funds will be used for engagement in Science Program, technical or regulatory efforts that arise in FY 2023. Anticipated use includes technical support for the reconsultation on long-term operations of the CVP and SWP, anticipated ESA listing decisions for longfin smelt, yellow-legged frog (and others), and engagement in efforts associated with the Bay-Delta Plan Update. To date, efforts using this funding pool include: 1. Technical Review of Knowledge Base Documents for the Reinitatiation of Consultation for the Long-Term Operations of the Central Valley Project and State Water Project	$200,000

SCIENCE PROGRAM ACTIVITIES:

Staff participates in several science forums including CAMT/CSAMP, Voluntary Agreement Science Committee (VASC), and discussions for the Reinitiation of Consultation on the Long-term operations of the CVP and SWP (ReROC). The CAMT/CSAMP group has been discussing the best approach for a more coordinated monitoring program and integration of the ongoing science projects and initiatives. In turn, the VASC is developing a science plan for scientific studies and monitoring. Both of these groups are contemplating the effectiveness of the various studies and strategy for integrating the results to further our understanding of the environmental challenges. The currents efforts for ReROC focus on providing feedback to Reclamation on the development of the proposed action, modeling approaches, and responding to information requests.