MEMORANDUM

TO: SLDMWA Water Resources Committee Members and Alternates

FROM: Scott Petersen, Water Policy Director

DATE: September 9, 2019

RE: Committee to Consider Recommendation to the Board of Directors to Authorize Execution of Agreement with State Water Contractors and Expenditure of up to $125,000 from the Technical Budget to Jointly Fund CAMT Facilitation

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BACKGROUND

The Collaborative Science and Adaptive Management Program (CSAMP) is an applied science program specifically designed to inform decisions regarding operations of the State Water Project (SWP) and the Central Valley Project (CVP) and species protection in the Delta. The Program was established in 2013 as an outgrowth of litigation and is intended to provide an alternative where parties can work together to address critical uncertainties and promote common understanding. Since the CSAMP is an outgrowth of litigation over the salmon and Delta smelt biological opinions, the process is focused on the south Delta, the export facilities, and some of the science issues that were at the base of that litigation.

CSAMP has a two-tiered organizational structure comprised of a Policy Group made up of agency directors and top-level executives from the entities involved in the litigation, and the Collaborative Adaptive Management Team (CAMT), which includes designated managers and scientists representing state and federal agencies, water contractors and non-governmental organizations to serve as a working group functioning under the direction of the Policy Group. The Delta Science Program and the Interagency Ecological Program Lead Scientist are involved as well. Technical teams are formed as needed.

Currently, the technical investigations that are underway include the application of Delta smelt survey data, fall outflow management for Delta smelt, Old and Middle River Management and Delta smelt entrainment, and south Delta salmonid survival.

CSAMP Technical Studies

Completed

- Effects of Water Project Operations on salmon behavior and survival
- Review of Delta Smelt Survey Data

Ongoing

- Delta Smelt Entrainment Studies
- Fall Outflow Studies
- Delta Salmon Rearing Habitat Study
- Delta Smelt Science Plan Implementation

Planned

- Structured Decision Making for Delta Smelt
- Coordinated Salmon Science Plan for the Delta

The 2019 Workplan (attached) identifies a $1.7 million budget for 2019, with a current funding shortfall of $125,000 for management and facilitation costs. Traditionally, the Authority and the State Water Contractors have jointly funded expenditures at CSAMP/CAMT including facilitation costs.

ISSUE FOR DECISION

Whether to recommend to the Board of Directors approval to authorize execution of an agreement with State Water Contractors and expenditure of up to $125,000 from the Technical Budget to jointly fund CAMT/CSAMP facilitation for the 2019.

RECOMMENDATION

Staff recommends that the Water Resources Committee recommend to the Board to authorize execution of an agreement with the State Water Contractors and expenditure of up to $125,000 from the Technical Budget to jointly fund CAMT/CSAMP facilitation costs.

ANALYSIS

CAMT/CSAMP facilitation is necessary to enable consultants to assist with CAMT/CSAMP agenda development, outreach, and research to support technical meetings. In addition, facilitators assist with the development of background materials and briefings as needed to support CAMT/CSAMP efforts, and develop scopes and solicitations for CAMT studies. Without facilitation, the CAMT/CSAMP processes would not be as efficient or effective in supporting the development, implementation, and utilization of technical studies.

BUDGET IMPLICATIONS

The Board approved $1.01 million in this year's Technical Budget, which includes $105,000 for Coordinated Science (unobligated), $200,000 for Science Studies ($135,000 unobligated) and $505,000 for previous technical project commitments. Should the Committee recommend to the Board, and the Board act upon that recommendation, that will obligate $125,000 of the remaining $240,000 available for this fiscal year for the Technical Studies/Science Budget, resulting in $115,000 of unobligated funds in this fiscal year's budget.

CAMT 2019 Workplan and Budget

Approved February, 15, 2019

Updated May 23, 2019

CSAMP Priorities and CAMT Workplan Activities	Budget	Committed	Uncommitted
1. Maintain Collaborative Process			
a. Management and Facilitation	$420,000	$295,000	$125,000
b. Sponsored participants	$200,000	$200,000	$0
	$620,000	**$495,000**	**$125,000**
2. Complete Current CAMT Investigations and Communicate Findings			
a. OMR Management - Factors Affecting Delta Smelt Entrainment (Grimaldo)	$82,000	$82,000	$0
b. Fall Outflow - Characterizing the Relationships between Fall Outflow and Survival and Abundance of Delta Smelt (Fleishman)	$60,000	$60,000	$0
c. Delta Smelt Science Plan (Reed)	$15,000	$15,000	$0
d. Delta Salmon Rearing Habitat Study (SFEI)	$173,000	$173,000	$0
	$330,000	**$330,000**	**$0**
3. Support Implementation of Resiliency Strategies for Delta Smelt and Sacramento Salmonids			
a. CSAMP Structured Decision Making for Delta Smelt Recovery	$320,000	$320,000	$0
b. Assist with coordination of the Suisun Marsh Salinity Control Gates, North Delta Food Web and Flow Augmentation actions	Costs included in Item 1 – Collaborative Process		
c. Assist where projects are stuck or otherwise need guidance, including sorting out potential controversy, providing guidance on monitoring, and communicating status and results.	Costs included in Item 1 – Collaborative Process		
	$320,000	**$320,000**	**$0**

4. Support Additional Near-term, No Regrets Salmon Actions a. Use available models to evaluate potential actions. b. Identify projects in addition to the resiliency strategy where CSAMP could provide science support, funding and project management recommendations for early recovery actions that benefit both listed and non-listed species upriver and in the Delta.	$100,000 Costs included in Item 1 – Collaborative Process **$100,000**	$0 **$0**	$100,000 **$100,000**
5. Improve Coordination of Salmonid Research in the Delta and Support Development of an Integrated Central Valley Science Plan for Salmonids a. Develop salmon science plan for the Bay-Delta (ESSA)	$250,000 **$250,000**	$0 **$250,000**	$0 **$0**
6. Initiate Conversation Regarding Oversight, Guidance, and Feedback on Monitoring Schemes Targeting the Delta's Natural Resources a. Help establish monitoring designs and protocols necessary to evaluate the effectiveness of adaptive management actions b. Support efforts to identify indicators of the health and integrity of Delta ecosystems and communities c. Discuss CAMT role, if any, in review of long-term fish surveys and sampling schemes to assess status and trends and assess how to maximize the value of dedicated resources.	Costs included in Item 1 – Collaborative Process		
7. Advance Decision Support Tools a. Continue Winter-run Life Cycle Model Workshops a. Continue engagement in the Delta Science Program SDM process for the Delta.	$80,000 Costs included in Item 1 – Collaborative Process **$80,000**	$80,000 **$80,000**	$0 **$0**
Total	**$1,700,000**	**$1,475,000**	**$225,000**

2019 CAMT Workplan Details

1. Maintain Collaborative Process

Description	Provide management and facilitation for CAMT, Policy Group and subcommittees. Support sponsored participants
Contractors	Bruce DiGennaro (Essex), Kerns and West, Sam Luoma, Rene Henry, and John Ferguson (Anchor QEA)
2019 Budget	$620,000 ($420k for management and facilitation, $200k for sponsored participants)
Funding	Committed: PWA $40,000; USBR $105,000; DWR $320,000; NMFS $30,000; $495,000 Unfunded: $125,000
Comments	Existing facilitation contracts expire on 6/30/19. Funding shortfall is primarily a contracting issue.

2. Complete Current CAMT Investigations and Communicate Findings

2a. OMR Management - Factors Affecting Adult Delta Smelt Entrainment

Description	Studies 1 and 2 have been completed and a draft report has been received for Study 3 (proportional entrainment). Work in 2019 will focus on DSST review of Study 3 and completion of Study 4 (life cycle modeling).
Contractors	Lenny Grimaldo (ICF), Edward Gross, Josh Korman. Pete Smith, Michael MacWilliams, Will Smith
2019 Budget	$82,000
Funding	Committed: PWA $82,000 Unfunded: $0
Comments	Funding for responding to DSST comments, preparing presentation materials for CAMT and Policy Group and publication.

2b. Fall Outflow - Characterizing the Relationships between Fall Outflow and Survival and Abundance of Delta Smelt

Description	Identify environmental variables that are associated strongly with annual changes in survival during autumn and recruitment of Delta Smelt.
Contractors	Erica Fleishman– Principal Investigator, Nobel Hendrix, Robin Waples
2019 Budget	$60,000
Funding	Committed: PWA $60,000 Unfunded: $0
Comments	Funding to complete modeling responding to DSST comments and preparing presentation materials for CAMT and Policy Group.

2c. Delta Smelt Science Plan

Description	Support implementation of the Delta Smelt Science Plan
Contractors	Denise Reed
2019 Budget	$15,000
Funding	Committed: PWA $15,000 — Unfunded: $0
Comments	

2d. Delta Salmon Rearing Habitat Study

Description	Complete Delta Salmon Rearing Habitat Study
Contractors	San Francisco Estuary Institute (SFEI), Anchor QEA, RMA
2019 Budget	$173,000
Funding	Committed: NMFS $ 50,000; DSP $100,000; PWA $ 23,000 — Unfunded: $0
Comments	PWA's funding RMA to provide hydrodynamic modeling and expertise. NMFS funding is for Anchor QEA support. DSP funding is going to the Delta Conservancy for SFEI contract. The Conservancy is providing additional funding for SFEI not shown here.

3. Support Implementation of Resiliency Strategies for Delta Smelt and Sacramento Salmonids

3a. CSAMP Structured Decision Making for Delta Smelt Recovery

Description	Conduct Structured Decision Making (SDM) for Delta Smelt recovery
Contractors	Kerns and West and Compass Resources
2019 Budget	$320,000
Funding	Committed: PWA $ 25,000; USBR $295,000 — Unfunded: $0
Comments	PWA's funding Phase 1 (Project Initiation). USBR funding Phase 2. Work will continue into 2020.

4. Support Additional Near-term, No Regrets Salmon Actions

4a. Use Available Models to Evaluate Potential Near-term Salmon Actions.

Description	Evaluate potential benefits of near-term actions using existing models
Contractors	TBD
2019 Budget	$100,000
Funding	Committed: $0 — Unfunded: $100,000
Comments	Actions to be identified by CAMT

5. Improve Coordination of Salmonid Research in the Delta and Support Development of an Integrated Central Valley Science Plan for Salmonids

5a. Develop Salmon Science Plan for the Bay-Delta

Description	Develop a Salmon Science Plan for the Bay-Delta
Contractors	Kerns and West and ESSA
2019 Budget	$250,000
Funding	Committed: USBR $250,000 — Unfunded: $0
Comments	Work to continue into 2020

6. Initiate Conversation Regarding Oversight, Guidance, and Feedback on Monitoring Schemes Targeting the Delta's Natural Resources

Description	a. Help establish monitoring designs and protocols necessary to evaluate the effectiveness of adaptive management actions. b. Support efforts to identify indicators of the health and integrity of Delta ecosystems and communities. c. Discuss CAMT role, if any, in review of long-term fish surveys and sampling schemes to assess status and trends and assess how to maximize the value of dedicated resources.
Contractors	None – To be done by CAMT
2019 Budget	Costs included in Item 1 – Collaborative Process
Funding	NA
Comments	

7. Advance Decision Support Tools

Description	Continue Winter-run Life Cycle Model Workshops
Contractors	SWFSC
2019 Budget	$80,000
Funding	Committed Unfunded USBR $80,000 $0
Comments	Included in USBR contract with SWFSC for LCM development. Need to verify budget amount.