

Charge to the Independent Science Reviewer

Collaborative Science and Adaptive Management Program (CSAMP)/Collaborative Adaptive Management Team (CAMT)

Proposal for Investigations on Understanding Population Effects and Factors that Affect Entrainment of Delta Smelt at State Water Project and Central Valley Project

Background/Purpose

The Collaborative Science and Adaptive Management Program (CSAMP) was launched following a decision made on April 9, 2013 by the United States District Court for the Eastern District of California (Court) to extend a court-ordered remand schedule for completing revisions to the salmon (NMFS 2009) and Delta Smelt (FWS 2008) Biological Opinions (BiOps).

Following the issuance of the Court Order, a two-tiered organizational structure was established to implement CSAMP comprised of: (1) a Policy Group made up of agency directors and top-level executives from the entities involved in the litigation, and (2) the Collaborative Adaptive Management Team (CAMT) including 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 CAMT was established to work with a sense of urgency and to develop a robust science and adaptive management program to inform both the implementation of the current BiOps and the development of revised BiOps. It was formed shortly after the April 2013 court order and was charged with preparing a workplan for the Court that identifies topic areas where significant disagreement exists between parties and describes how the topics will be addressed through a collaborative science process. The CAMT prepared a workplan and submitted it to the Court in February, 2014. The Court accepted the workplan and directed CAMT to conduct its work as described in the workplan with periodic reporting.

To assist with implementing the workplan elements, the CAMT formed two scoping teams comprised of scientists from representative organizations to develop a methodology and science process for addressing the disagreements identified in the CAMT process. One scoping team is covering Delta Smelt workplan elements (Table 3-1 Fall Outflow and Table 3-2 Old and Middle River (OMR)/Entrainment) and the other is covering south Delta salmonid workplan elements (Table 3-3 South Delta salmonid survival).

The Delta Smelt Scoping Team (DSST) develops scoping outlines for directed research and calls on teams of experts (Investigator Teams) to develop and submit a research proposal and to conduct the research. The proposed ***Investigations on Understanding Population Effects and Factors that Affect Entrainment of Delta Smelt at State Water Project and Central Valley Project (Delta Smelt Entrainment)*** will 1) use new tools to determine factors affecting entrainment of Delta Smelt under variable hydrodynamic conditions and long-term population consequences of entrainment; 2) determine model sensitivity of multi-stage life cycle models; and 3) determine the best method to calculate proportional losses of adult Delta Smelt.

Material to be Reviewed

Investigations on Understanding Population Effects and Factors that Affect Entrainment of Delta Smelt at State Water Project and Central Valley Project proposal.

Supplemental Documents

1. CAMT Background and Context Information
2. Draft Outline of a Scope of Work for Factors Affecting Adult Delta Smelt Entrainment, CAMT Workplan Element 3-2-1 (to address CAMT Progress Report 2/7/14 Table 3-2, Element 1)
3. Draft Outline of a Scope of Work for Assessing Population Effects of Entrainment, Workplan Element 3-2-2 (to address CAMT Progress Report 2/7/14 Table 3-2, Element 2)
4. Progress Report to the Collaborative Science Policy Group, February 14, 2014. Prepared by the Collaborative Adaptive Management Team (CAMT).
5. Workshop on the Interior Delta Flows and Related Stressors Panel Summary Report. 2014. Panel: Stephen Monismith, Mary Fabrizio, Michael Healey, John Nestler, Kenneth Rose, John Van Sickle. The document is available on:
<http://deltacouncil.ca.gov/sites/default/files/documents/files/Int-Flows-and-Related-Stressors-Report.pdf>

Charge Questions

1. Are goals, objectives, hypotheses and questions clearly articulated and internally consistent?
2. Are key questions, hypotheses and the conceptual model well stated and reasoned? Do they explain the underlying basis for the proposed work?
3. Is the approach well designed and appropriate for meeting the objectives of the project? Does the proposal fully address the questions in the scoping outline?
4. Are the budget and the schedule reasonable and adequate for the work proposed?
5. Are products likely to advance our knowledge of processes influencing entrainment and implications of entrainment?
6. Will the proposal help close gaps and address uncertainties in the science of entrainment identified by the CAMT?
7. Are there additional questions or aspects of the problem that might be addressed during the proposed work? If so give examples.
8. Does the proposal take an integrated approach across all relevant disciplines?
9. Will the analyses described in the proposal help inform the type of management actions referenced in the scoping outline?

10. Is the proposal explicit in what data it will use and how it will address limitations of the data in relation to the questions being asked? Does the proposed investigation appropriately incorporate the existing data, based on identified limitations?

Products

The Independent Science Review Panel will prepare the following products according to the schedule outlined in the Scope of Work:

- Preliminary findings and recommendations to be delivered at the Panel meeting
- Final Review Report

Guidelines for the report: The report is expected to directly address the Charge Questions and provide specific recommendations for the Investigator Team that would lead to an improved research work and draft report.

Meeting Format

The panel meeting will be conducted in Sacramento, CA. During the morning part of the panel meeting, the Investigator Team members will provide presentations of their proposed investigations. Review panel members may be asked to provide a brief biographical sketch as it relates to the review. Review panel members should also be prepared to discuss any questions regarding the review materials. In the afternoon, the panel will meet in private to deliberate on the charge questions. After the closed sessions, the public meeting will reconvene at which time the panel will provide a presentation of their initial findings and recommendations, as well as ask clarifying questions from the Investigator Team.