Bureau of Reclamation Peer Review Plan

Delta Stewardship Council Review on New Delta Entrainment Lines for Evidence for Effects on Fish from the Long-Term Operation of the Central Valley Project and State Water Project

7/14/2026

Bureau of Reclamation, California-Great Basin Region, Bay Delta Office, 801 I Street, Suite 140, Sacramento, CA 95814

Reclamation Roles:

- Delegated Manager: Spencer Walden, Deputy Area Office Manager (Acting), Bay Delta Office, California-Great Basin Region, Bureau of Reclamation
- Peer Review Lead: Joshua Israel, Chief, Science Division, California- Great Basin Region, Bureau of Reclamation

Subject and Purpose:

The National Academy of Science Committee conducted a review of the monitoring, modeling, and other relevant scientific activity and initiatives that support the long-term operations (LTO) of Central Valley Project (CVP). As part of this study, the Committee assessed the state of the science and provided recommendations on how modeling could be improved, changed, or replaced to more accurately assess the impacts of the CVP operations (NASEM 2025). One topic of focus was Old and Middle River (OMR) Flow management and the Committee recommended a more holistic strategy for OMR modeling and monitoring. The intent of the Delta Stewardship Council (DSP) review is to provide the U.S. Bureau of Reclamation (Reclamation) with recommendations to improve the methods for evaluating fish and aquatic effects of the LTO of the CVP and State Water Project (SWP).

Lines of Evidence including literature reviews, observational datasets, and models are the main structure for describing effects of Reclamation and DWR's LTO of the CVP and SWP on fish and wildlife, water supply, and power generation project purposes. Since the NAS 2025, new lines of evidence have been developed in consideration of the Committee's recommendations to better understand hydrodynamics and population responses associated with entrainment risk. These lines of evidence include new modeling and analyses to consider (1) how actions that restrict water supply provide a material benefit to listed species; (2) Where in the Delta far-field

effects to fish occur under different export operations; and (3) how altered hydrodynamic conditions influence fish in the tidal Delta is a critical uncertainty.

Impact of Dissemination:

The topics included in this peer review are considered influential scientific information requiring peer review as defined by Office of Management and Budget Final Information Quality Bulletin for Peer Review (70 FR 2664-2677) and the Reclamation Manual Policy CMP P14 Peer Review of Scientific Information and Assessments. The nexus of this determination is that these topics have been the subject of: (1) public debate, (2) evidence submitted on prior National Environmental Policy Act (NEPA) and Endangered Species Act (ESA) documents, and (3) statements made in litigation related to the LTO consultation.

Peer Review Scope:

The review will utilize the DSP's established independent scientific peer review and advice processes to review the lines of evidence and provide feedback on modifications to these documents to improve their utility in describing CVP and SWP impacts on listed species and the environment.

Reviewers will address questions based on their expertise and are to provide comments solely on the scientific information being reviewed and the estimated magnitude, certainty, and frequency of impacts, not on agency decision or policy. The scope and Charter will be developed by the DSP through their policies and procedures for Independent Science Review.

Questions include:

- Do the approaches assessing the spatial and temporal extent of export impacts described in the new lines of evidence provide a reasonable and useful representation of where and when near- and far-field export effects on listed fish species are most likely to occur?
    - Are the analyses accurate in terms of model structure, assumptions, covariate inclusion, and based on sufficient data?
- Do the new lines of evidence capture ESA listed fish survival and loss impacts associated with the zone of influence?
    - Are the analyses accurate in terms of model structure, assumptions, covariate inclusion, and based on sufficient data?
- Is the weight of evidence sufficient for informing listed fish population and habitat responses to water export operations?
- Are the references informing literature reviews thorough, relevant, and up to date? Are there more relevant or recent references that should be considered?
- Do the new lines of evidence advance the understanding of the potential proportion of listed fish populations that are impacted by water project export operations?
    - Are the analyses accurate in terms of model structure, assumptions, covariate inclusion, and sufficient data?
- Are the identified consequences of these impacts to the populations (e.g. cohort replacement rate, abundance) adequately considered and based on best available science?

- Compared with currently used LTO scientific basis (past lines of evidence; see supplemental documents 1 and 2), how do these lines of evidence improve understanding of exports on listed fish species and their habitats?
- What are the limitations and uncertainties of the new lines of evidence, and were they appropriately addressed in conclusions?
- Do you have additional insights or suggestions that could help identify the population-level impacts of export operations on listed species?

Timing of Review:

A Review Panel is anticipated to begin convening in August 2026. A final panel report is anticipated October 2026.

Methodology of Review:

The Peer Review will be conducted through the Delta Science Program by individuals selected through the DSP's policies and procedures for Independent Science Reviews. The Peer Review findings/comments will be attributed to the individual reviewer.

Number of Peer Reviewers:

Four reviewers are anticipated to participate in the review.

Reviewer Selection Process:

The peer reviewers will have at least 10 years experience with expertise in water engineering, fisheries science, aquatic ecology, and/or water management. Peer reviewers will have education, professional experience, and peer recognition in their field, and will have contributed to their field. The DSP will select reviewers based on this Peer Review Scope and required expertise identified above. DSP will ensure that peer reviewers do not have a conflict of interest. DSP will ultimately facilitate a conversation amongst individual peer reviewers before the preparation of a single report of peer review comments.

Delivery of Findings:

A final report will be posted to the Delta Stewardship Council Review webpage and Reclamation's Quality of Information webpage.

Response to Peer Review:

The Peer Review Lead will submit a final Report to Reclamation's peer review website (http://www.usbr.gov/main/qoi/peeragenda.html), which will include the committee's report and a summary of the comments provided therein. Reclamation's responses to the comments and reasons the agency believes those actions will satisfy any key concerns or recommendations will be included.

Federal Register Notice:

Federal Register notices will not be provided.

Applicability of the Federal Advisory Committee Act (FACA):

This peer review is not subject to the Federal Advisory Committee Act (FACA).

Agency Contact:

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