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**Subject:** Phase II Bay-Delta Plan Input  
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**Attachments:** [20171109 Reclamation Comments to SWRCB RE Phase II Bay-Delta Plan Input.pdf](#)

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Thank you for the opportunity to provide input regarding Phase II of the Bay-Delta Plan. Reclamation supports the State Water Resources Control Board in looking at flow standards comprehensively and equitably distributing responsibilities for meeting objectives between all water users in a given stream. Reclamation also supports the State Water Resources Control Board protecting Reclamation's releases for existing and new objectives.

Attached are more detailed comments for your consideration. Reclamation looks forward to working with you to evaluate measurement and implementation with operationally feasible mechanisms.

Take care.  
Dave

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# United States Department of the Interior

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BDO-400  
WTR-7.00

NOV 09 2017

Ms. Felicia Marcus, Chair  
State Water Resources Control Board  
1001 I Street  
Sacramento, California 95814

Subject: Phase II Bay-Delta Plan Input

Dear Chair Marcus:

Thank you for the opportunity to engage further in the Phase II Update of the Bay-Delta Plan. The Bureau of Reclamation supports the State Water Resources Control Board (Board) in looking at flow standards comprehensively. Reclamation supports equitable distribution of responsibility for meeting instream flows between all users of water in a given stream or tributary watershed [*National Audubon Society v. Superior Court* (Supreme Court of California, 1983, 33 Cal.3d 419)]. Reclamation supports the Board protecting releases of water that are made by Reclamation to meet objectives assigned to Reclamation.

The Board is charged with balancing beneficial uses of water, including the inherent benefits of the system as it exists today, and this responsibility is unique among regulatory agencies. Incorporating existing Federal and State endangered species act requirements into the Water Quality Control Plan may raise the potential for conflicting regulations, unbalanced beneficial uses of water, and outdated requirements as our investments in science and monitoring improve how we manage for species. We ask that the board provide flexibility in adjusting to changes from the Federal regulatory agencies.

The Central Valley Project (CVP) is operated by assessing the uncertainty of the present condition and appropriately managing the risk among the resources (reservoirs) that Reclamation has available to it from a system-wide perspective. A reach by reach approach for new requirements makes it challenging for Reclamation to continue to manage this overall system-wide risk due to our portfolio of reservoirs.

Reclamation would like to work with the Board on development of additional mechanisms, measurement techniques, and implementation approaches that support a Bay-Delta Plan with an equitable distribution of responsibility between water users as well as realistic operations. We believe that an ongoing dialog would best allow us to find a workable approach.

The following paragraphs address the specific questions asked by the Board.

**1. What specific provisions should be included in the program of implementation to ensure the expeditious implementation of the inflow and cold water habitat objectives?**

We have no specific suggestions for the Board on how to ensure expeditious implementation. The federal government is required to complete National Environmental Policy Act (NEPA) and Endangered Species Act (ESA) analyses on any new changes. Schedules required by the Board would need to allow time for NEPA and ESA analysis before implementation could occur from Federal agencies. Reclamation is available to coordinate appropriate timelines for these processes. In addition, funding requirements would be subject to appropriations.

**a. How long should the State Water Board allow for voluntary tributary or regional plans to be developed and implemented to meet the inflow and cold water habitat objectives and what are the minimum provisions those plans should include to be acceptable?**

Reclamation supports robust Voluntary Settlement Agreements (VSAs) to balance the different demands on water resources and recommends providing sufficient time to work through a robust approach. A deadline by the board could encourage parties to remain at the table and work diligently towards an agreement. Due to the iterative nature of balancing demands on an integrated system, Reclamation recommends that any deadline also offer opportunities to extend the discussion upon demonstration of meaningful progress. All parties, including senior water users and environmental Non-Government Organizations (NGOs), must have a stake in reaching agreement.

From Reclamation's perspective, minimum provisions for voluntary plans/settlement agreements include:

- Sustainable Strategy - Voluntary tributary or regional plans should not revert back to Reclamation and the Department of Water Resources (DWR) having primary responsibility for meeting objectives. Such strategy may undercut the commitment of other water users and the NGOs in implementing an agreement.
- Integrated Approach - Reclamation believes VSAs considered by the Board must be analyzed in an integrated fashion where impacts of all VSAs (combined) are considered rather than basin by basin. Reclamation has a variety of resources (reservoirs) that work in tandem to meet the beneficial uses of the CVP. Requirements on one tributary affect Reclamation's operation of other reservoirs on other tributary watersheds. Therefore, integrated analysis is necessary to determine operational feasibility.
- Adaptive Management - There should be an adaptive management component of agreements that allows for flexibility to collaboratively adjust requirements if the science changes or different requirements are imposed beyond the agreements.
- Enforcement - The agreements should define the enforcement. We ask that the Board consider enforcement that holds all parties accountable to the agreements, including other water users and NGOs. We believe that the sustainable strategy with an equitable

distribution of requirements as well as a reliance upon non-flow measures may provide an incentive for all parties to meet agreements.

- ~~Non-Jeopardy - The agreements/plans should result in a non-jeopardy opinion by the United States Fish and Wildlife Service and National Marine Fisheries Service.~~
- Equitable Distribution of Responsibilities, Including Financial - Each water user should contribute both flows and funding. The plans should not require Reclamation to provide the sole funding. Instream flows should be comprised of bypass requirements of water right holders through application of the public trust doctrine.

**b. What measures should the State Water Board take to implement the inflow and cold water habitat objectives if satisfactory voluntary tributary or regional plans are not developed?**

Reclamation supports sustainable implementation that maintains equitable distribution of responsibility between the water users in a stream based on their use of water in that stream. If voluntary agreements are not reached, an implementation plan by the Board, that includes water rights decisions, could be part of the adaptive management process used by the Board to ensure that biological objectives are not discarded and efforts to sustain waters and their related resources are advanced. Reclamation is committed to the voluntary agreement process; however, Reclamation would be willing to work with the Board directly, in coordination with CVP water users, on potential alternatives.

**2. How should the State Water Board ensure that water released to meet objectives is protected through the system and not diverted for other purposes?**

Reclamation supports development of a new term similar to Term 91 to apply to all water users. Protections of releases to meet objectives help to ensure objectives are met, and minimizes the possibility of additional required releases. Releases that are made from storage for requirements in CVP streams are protected from diversion until those requirements are met (currently, through Term 91 for some water rights holders). Expansion of protection to other water rights users could help Reclamation meet all beneficial uses and authorized Project purposes.

Relying on water right holders to monitor and enforce Water Quality Control Plan or VSA implementation through the complaint process may not be effective. A more effective mechanism may be using the water rights process to enforce the Water Quality Control Plan and/or any long-term voluntary settlement agreements/regional plans, conditioning water users water rights on the required objectives with Board enforcement.

**3. What improvements should be made to measure compliance with the existing Delta outflow objectives (that are intended to be retained), and with the proposed new inflow based Delta outflow objectives?**

Reclamation's suggestion is that compliance with Delta outflow objectives be made in a manner that provides for flexibility in meeting objectives and recognizes the variable lag in flow and

tidal impacts within the system. Basing Delta outflow on real-time inflow calculations is impractical at this time due to the lack of methods for determining real-time Delta consumptive use.

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**4. Understanding that the proposed outflow objective is derived from the inflow objective but will require some accounting methodology to accommodate Valley floor and Delta accretions and depletions and floodplain inundation, how should implementation and compliance with the new inflow and inflow-based Delta outflow objectives be coordinated?**

Reclamation is willing to work with the Board to develop operationally feasible mechanisms to measure compliance with Delta outflow objectives. We would prefer to respond to this question through meetings with you rather than detailing responses about monitoring under this request.

**5. What approach should the State Water Board use to transition from the current Delta outflow objective in Table 4 of the 2006 Bay-Delta Plan to a new inflow-based Delta outflow objective to ensure that Delta outflows are not reduced while the tributary inflow requirements are being implemented?**

Reclamation suggests that the Board consider an approach such that, as soon as a given tributary has begun implementing new inflow-based Delta outflow objectives, Reclamation and DWR's responsibilities for meeting Table 4 be reduced proportionally to the water released. It may be best for new objectives to start at the beginning of a water year.

Where there are discretionary actions for Reclamation, a transition plan would require Reclamation to comply with NEPA and ESA.

**6. How should the State Water Board account for flows provided for floodplain inundation to benefit native species?**

Reclamation suggests that instream flows should also meet any floodplain inundation needs and as many beneficial uses as possible. Once water has inundated the floodplain, it should go on to meet other beneficial uses.

Flows through the Yolo Bypass and flood control bypasses, which may bypass lower Sacramento River compliance locations, should be included in the calculation for inflow and outflow.

Reclamation believes the Board should allow for habitat restoration to meet floodplain needs as high quality habitat is more likely under focused restoration.

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**7. How should the State Water Board structure adaptive management for the new objectives?**

Consistency with other adaptive management (AM) programs is a good starting point. There are multiple AM programs in the Delta. Reclamation suggests that it may be best for the Board to

consider how to incorporate its efforts into existing and emerging adaptive management programs. In 2015, the Delta Independent Science Board (ISB) reviewed how adaptive management is perceived and used in the Delta and considered how it might be applied more efficiently and effectively. A draft of their findings can be found here:

<http://deltacouncil.ca.gov/sites/default/files/2015/08/Adaptive%20management%20report%20v.8.pdf>

Reclamation is actively engaged in three adaptive management programs currently related to flow and non-flow activities occurring as part of the CVP and State Water Project (SWP), some of which the Board is also engaged in.

EcoRestore: EcoRestore's AM program is the Interagency Adaptive Management Integration Team (IAMIT). IAMIT is an interagency technical coordinating body to strengthen collaborations and discuss strategies for implementing adaptive management for habitat restoration in the Delta and Suisun Marsh. The California Natural Resources Agency requested that the IAMIT develop a white paper, along with the EcoRestore Adaptive Management Steering Committee, to advise on the development of a habitat restoration adaptive management program and to provide specific recommendations on how such a program could be implemented. A draft of the white paper can be found here:

<http://resources.ca.gov/ecorestore/wp-content/uploads/2017/04/2017-3-8-EcoRestore-Adaptive-Management-Program-White-Paper-v3-7-2017.pdf>

Collaborative Science and Adaptive Management Program (CSAMP): CSAMP has produced annual reports of activities, achievements, and future plans of the program's Collaborative Adaptive Management Team operating under the leadership and guidance of the Collaborative Science Policy Group. The purpose of CSAMP is to work with a sense of urgency to collaboratively evaluate current hypotheses and management actions associated with protection and restoration of species of concern, current and future Federal and State regulatory authorizations for the SWP and CVP, and other local and State management actions, to improve performance from both biological and water supply perspectives. Its approaches are to provide a forum for communication, act as a catalyst to address contentious and urgent management relevant science issues, and undertake timely compilation and dissemination of information for decision makers on these issues. Found here:

[http://www.water.ca.gov/environmentalservices/csamp\\_reports.cfm](http://www.water.ca.gov/environmentalservices/csamp_reports.cfm)

The roles of the Interagency Ecological Program and CSAMP in adaptive management are highlighted in the Adaptive Management Framework for the California WaterFix and Current Biological Opinions:

[http://cms.capitoltechsolutions.com/ClientData/CaliforniaWaterFix/uploads/FIX\\_eBlast\\_AdaptiveMgmt\\_92816\\_V2.pdf](http://cms.capitoltechsolutions.com/ClientData/CaliforniaWaterFix/uploads/FIX_eBlast_AdaptiveMgmt_92816_V2.pdf)

Central Valley Project Improvement Act (CVPIA) Adaptive Resource Management (ARM): The purpose of the ARM process is to incorporate science and data into decision support models to recommend Anadromous Fish Program priorities over 5-year time periods. Model development for salmonids and sturgeon has been occurring since 2015 and has focused on providing information to evaluate restoration and other actions using science and monitoring information. Model development, project planning, and activity monitoring is collaborative and includes stakeholder and agency scientists. The Board is welcome to participate. More information is found here:

<https://www.usbr.gov/mp/cvpia/index.html>.

Below are some academic or agency papers on structuring AM programs. Existing available resources should be looked at when given the opportunity to create a new AM.

*Facilitating Adaptive Management in California's Sacramento–San Joaquin Delta*:  
<https://escholarship.org/content/qt8w35m437/qt8w35m437.pdf>

*A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan*: <https://www.nap.edu/resource/13148/bay-delta-report-brief-final.pdf>

### **8. How should the State Water Board ensure that non-flow measures included in voluntary tributary or regional plans are implemented in a timely and effective manner?**

Reclamation suggests that the Board consider allowing non-flow projects to relieve requirements for using flows to meet biological objectives. VSAs should be treated as a package rather than relying entirely upon flows over a degraded environment.

The Board should engage in the management of projects to understand the realistic challenges in implementing actions. In Reclamation's experience, permitting non-flow activities may delay implementation of actions 1-3 years depending on the complexity and scale of a given project. When land ownership and changes in land use are involved, negotiations and agreements may be delayed an additional year or more. Large construction activities typically require over a decade of dedicated work to complete environmental compliance, permitting, land acquisition, design, and contracting.

### **9. What specific drought measures should be included in the Bay-Delta Plan?**

Reclamation agrees with the Board that flows need to address a variety of purposes. Water storage provides reliability for multiple beneficial purposes, including fishery protection, water supply for consumptive use purposes, water quality, and storage to utilize towards protecting these water-dependent beneficial uses over sustained multi-year drought periods.

The Bay-Delta Plan should be durable even in successive drought years, so that agencies do not have to regularly file change petitions due to unsustainable or infeasible operations as

Reclamation manages its stored water. Drought planning should also be written so that parties understand the procedures to be followed under prolonged and unprecedented droughts, when change petitions may be required.

During droughts, operators must strike a balance between maintaining operational flexibility, preparing for future uncertain hydrology, and making sure that all beneficial uses are considered and protected. As DWR states in Chapter 4 of DWR's February 2014 "California's Most Significant Droughts" Report, shown at the site below:

[http://www.water.ca.gov/waterconditions/docs/California\\_Significant\\_Droughts\\_2015\\_small.pdf](http://www.water.ca.gov/waterconditions/docs/California_Significant_Droughts_2015_small.pdf), improved forecasting to recognize droughts early, up to a year in advance, could be helpful.

**10. What should be the threshold for triggering drought measures?**

Reclamation is willing to coordinate with the Board regarding developing triggers for drought measures through a collaborative process with interested stakeholders.

**11. How could the State Water Board incentivize creative voluntary drought measures?**

Reclamation recommends an incentives approach. Reclamation would be willing to work with the Board to develop approaches.

In conclusion, we would like to work with the State Board and staff as you work to further consider objectives and develop the Program of Implementation for the Bay-Delta Plan. Reclamation is available to assist in evaluating operationally feasible mechanisms for implementation.

We look forward to working with you in the future as this effort continues. We hope we can work with you to meet the many beneficial uses of water in the Sacramento and Delta basins and balance the needs of water supply, fish and wildlife, flood protection, power generation, recreation and more. Should you have questions or require further information, please contact Ms. Katrina Harrison, Project Manager, at [kharrison@usbr.gov](mailto:kharrison@usbr.gov) or 916-414-2425.

Sincerely,



David M. Mooney  
Area Manager