



November 8, 2016

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Subject: Response Panel Comments on California WaterFix Adaptive Management

Dear Review Panel Members:

This letter provides a response to comments on the subject of adaptive management presented in the *Independent Review Panel Report for the 2016 California WaterFix Aquatic Science Peer Review*, (the *Panel Report*, May 12, 2016).

Section 2.6 of the *Panel Report*, pages 53 to 59, addresses adaptive management. The comments were reviewed and we have addressed them, to the extent feasible within the context of the review timeline for the Panel’s December 8-9, 2016 review session. The comments have been addressed within the text of the revised *Framework Plan* (enclosed). Table 1 summarizes how comments in the *Panel Report* have been addressed in the *Framework Plan*. None of the issues raised in these comments have been fully addressed at this time, but it is expected that they can be fully addressed prior to issuance of the biological opinions and incidental take permit for the California WaterFix.

Table 1. Status of Response to Panel Report Comments

Action	Comment / Status
The Review Panel recommends that the BO includes a critical analysis and evaluation of the approach to AM proposed in the PA. (Panel remarks also refer to active vs. passive adaptive management and to scenario planning.)	Framework has been revised to include a new section on structured decision making and to emphasize that this technique is already an integral part of the ESA Section 7 compliance process.
The Review Panel expresses concern that case law has “identified three shortcomings in AM implementation that recur in judicial cases overturning agency decisions: (1) failure to establish objectives or failure to describe monitoring protocols for a plan or project; (2) failure to define decision thresholds in monitoring; and (3) failure to identify specific actions that will be triggered when thresholds are crossed.”	Biological goals and objectives are articulated in Framework Plan Appendix 1 and are subject to further refinement in the BO and 2081(b) permitting processes now underway. These goals are expected to tier to performance measures established in current and pending authorizations (the Biological Opinions and Incidental Take Permit). These performance measures will be actionable metrics for adaptive management (sometimes called “triggers”). Uncertainties will be noted as topics for investigation and resolution.

The Review Panel states that the management program “should include explicit plans for ongoing monitoring of the status of the species and the direct and indirect effects of (1) the design of fish facilities (the footprint of the PA installation), (2) the operations (whether the PA is jeopardizing species or adversely modifying habitat), and (3) restoration and mitigation activities.”

These topics are addressed in the text of the BA, the 2081(b) Application, and the appendices to the *Framework Plan*. However, the plans currently presented are not sufficiently explicit to support implementation. The forthcoming BiOps and Incidental Take Permit are expected to require such plans.

“The Panel recommends that the Agencies articulate an explicit plan in the AABO for evaluating the adequacy of the plans for AM, based on best available knowledge regarding effective AM design and implementation.”

This recommendation pertains to the AABO and is not directly addressed in the Framework Plan. The Framework Plan is expected to be critically reviewed by the Services when preparing the BiOps.

“We recommend that the real-time operational decision making process be linked more explicitly to a formal AM program.”

No such linkage is currently proposed, and this topic is expected to be further reviewed prior to issuance of the BiOps and Incidental Take Permit.

“In the draft BO the Agencies should consider which aspects of the PA demand active AM to reduce the risk of jeopardy or adverse modification, and which aspects should be managed with other structured decision making approaches.”

This recommendation pertains to the BOs and is not directly addressed in the Framework Plan.
