

Memorandum

TO: Delta Independent Science Board

FROM: Karla Nemeth, California Natural Resources Agency

DATE: February 25, 2015

SUBJECT: Update on Adaptive Management Revisions to BDCP

This memo provides a status update on the revisions to the adaptive management and monitoring program described in the Bay Delta Conservation Plan (BDCP) in the December 2013 public draft.

Background

The Delta Independent Science Board (DISB) reviewed the public draft BDCP and BDCP EIR/EIS to support the review by the Delta Stewardship Council of these documents. The DISB provided their comments to the Delta Stewardship Council and the California Department of Fish and Wildlife (CDFW) in March 2014. One set of comments focused on the heavy reliance in BDCP on the adaptive management and monitoring program to solve key scientific uncertainties. The DISB criticized the adaptive management and monitoring program in BDCP for its lack of clarity, bureaucratic structure, and its execution by managers rather than by scientists, among other things. The review also criticized a lack of key uncertainties associated with many conservation measures.

After reviewing the DISB comments, ICF began revising the adaptive management and monitoring program (Section 3.6 of BDCP) to address them. The federal permitting agencies, US Fish and Wildlife Service and National Marine Fisheries Service, wanted to facilitate this revision process and ensure that all DISB comments were thoroughly addressed. They enlisted the help of Mark Sogge, the Regional Director of the US Geological Survey (USGS) Pacific Region. Mark and his colleague, Cisco Werner, proposed an approach that would 1) review the revisions made by ICF to date, and 2) suggest further revisions to address any remaining issues. This review was to be done by a small independent panel that would meet with ICF technical staff to verbally discuss their questions and findings. The panel's review was characterized as a "sounding board" to keep the meeting informal and to provide a candid setting for open

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discussion. This approach was also judged the most expeditious way to provide feedback without jeopardizing the BDCP schedule.

On January 29, 2015, Drs. Chris Earle and Marin Greenwood of ICF International (ICF) met with the sounding board panel to discuss recent and potential further revisions to the BDCP adaptive management program. The participants in the panel were:

- Dr. Mark Sogge (USGS Pacific Region), Panel Facilitator
- Dr. Cisco Werner (NOAA NMFS), Panel Co-Facilitator
- Dr. Ronnie Best (Retired USGS)
- Dr. Tom Dunne (University of California, Santa Barbara)
- Dr. Mike Healey (University of British Columbia (retired))
- Dr. Peter Raimondi (University of California, Santa Cruz)
- Dr. Denise Reed (The Water Institute of the Gulf, Louisiana)

ICF presented information summarizing BDCP and its adaptive management program. That was followed by a lively all-day discussion of panel feedback and review of BDCP options. The next day the panel reported on their results and the meeting to a group of principals who represented all of the state and federal agencies involved in BDCP.

In general, the panel provided feedback that was supportive of the revisions that ICF had already made to the adaptive management and monitoring program to address the earlier DISB comments. The panel provided additional feedback to ICF and the BDCP principals that will be used to further refine and revise the plan's adaptive management and monitoring program. Their feedback included the following points, in no particular order:

- Define how actions will be prioritized to create an effective adaptive management program, possibly with a decision-support system.
- Include scientists in the decision-making process of adaptive management.
- Provide enough contingency funding to ensure successful adaptive management.
- Build on the (new) focus areas concept in the plan by providing a coherent framework that integrates the many pieces of BDCP.
- Commit to developing quantitative modeling tools that will provide the framework to make better adaptive management decisions.
- Provide an example of how adaptive management will work in action.

- More clearly state the qualifications of the members of the Adaptive Management Team.
- Expand the range of partnerships available to support adaptive management in BDCP.
- Clarify that adaptive management can be accomplished effectively even without an experimental approach.
- Clarify how research to support adaptive management will be funded and solicited (e.g., request for proposals, review process, reporting and follow-up).

The ICF team will incorporate the additional feedback into the adaptive management and monitoring program of the Recirculated Draft BDCP and final BDCP to the best of their ability.

