

Scope of Work Independent Review Panel Member

2011 OCAP Integrated Annual Review
November 8-9, 2011

Background/Purpose

NOAA's National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS) have each issued Biological Opinions on long-term operations of the Central Valley Project (CVP) and State Water Project (SWP, hereinafter CVP/SWP; OCAP Opinions) that include Reasonable and Prudent Alternatives (RPA) designed to alleviate jeopardy to listed species and adverse modification of critical habitat. NMFS' RPA requires the U.S. Bureau of Reclamation (USBR) and NMFS to host a workshop no later than November 30 of each year to review the prior water year's operations and to determine whether any measures prescribed in the RPA should be altered in light of information learned from the prior year's operations or research (NMFS' OCAP Opinion, section 11.2.1.2 of the 2009 RPA with 2011 amendments, starting on page 9). Under direction from the Secretaries of Commerce and Interior, this review has been expanded to include a review of the implementation of the USFWS OCAP Opinion. The California Department of Water Resources (DWR) also participates in the review because it operates the SWP. The first OCAP annual review was held November 8-9, 2010. The intent of the annual review is to advise NMFS and USFWS as to the efficacy of the prior years' water operations and regulatory actions prescribed by their respective RPAs, with the goal of developing lessons learned, incorporating new science, and making appropriate scientifically justified adjustments to the RPAs or their implementation to support real-time decision making for the next water year.

The purpose of both OCAP Opinions is to present the responsible agency's biological opinion on whether USBR's and DWR's long-term operations of the CVP/SWP are likely to jeopardize the continued existence or adversely modify the designated critical habitat for the ESA listed species under each agency's jurisdiction. Because both OCAP Opinions concluded that the long term operations of the CVP/SWP are likely to jeopardize the continued existence or adversely modify designated critical habitats, the USFWS and NMFS prescribed RPAs to minimize CVP/SWP operations related effects to the level where these effects do not appreciably reduce the likelihood of jeopardizing the continued existence of ESA listed species or adversely modifying critical habitat. The RPA in NMFS' OCAP Opinion (2009 RPA with 2011 amendments) includes both broad and geographic division specific RPA Actions. The RPA Actions reviewed in this process in the USFWS' OCAP Opinion (pp 279-282 & 329-356) are organized by delta smelt life stages. The RPA Actions in both OCAP Opinions provide specific objectives, scientific rationales, and implementing procedures.

Since the OCAP Opinions were issued, NMFS, USFWS, USBR, California Department of Fish and Game (CDFG) and the DWR have been performing scientific research and monitoring in concordance with the implementation of the RPAs.

Technical teams and/or working groups, including the geographic divisions specified in the NMFS' OCAP Opinion, have summarized their data and results following implementation of the RPA Actions within technical reports. The data and summary of findings related to the implementation of the RPAs provide the context for scientific review regarding the effectiveness of the RPA Actions for minimizing the effects of water operations to ESA listed species and critical habitat related to the operations of the CVP/SWP.

At the request of USFWS and NMFS, the Delta Science Program (DSP) is employing the services of an independent science review panel to assist the agencies in reviewing the effectiveness of the implementation of the OCAP RPAs. The role of the Independent Review Panel (IRP) is to provide a technical review to the agencies involved in implementing the OCAP RPAs. Exhibit A, Attachment 1 provides the detailed Charge to the IRP, which defines the IRP members' roles and responsibilities.

General Statement of Work

The IRP will address the work in three stages.

1. The IRP will review and analyze the reports and background materials related to the OCAP Annual Review in the context of the questions presented in the Charge to the IRP.
2. The IRP will meet for a two-day technical meeting in Sacramento, California, to discuss the review materials.
3. The IRP will prepare a report of its findings with respect to the questions posed in the Charge. Each panelist will assist in conceptualizing, writing, and editing the oral and written reviews by responding to the issues and questions identified in the Charge.

Tasks to Be Accomplished by the IRP

Task 1: Read background material and technical team reports identified in the Charge.

Task 2: Review the technical team reports

Task 2a: Participate in and offer professional insights during the two-day meeting to be held in Sacramento, California.

Task 2b: Contribute to the coordinated development of preliminary findings and assessments to be presented at the meeting.

Task 3: Draft initial recommendations

Task 4: Participate in the coordinated development of the IRP review report that responds to the issues and questions identified in the Charge.

Additional Tasks for IRP Chair and Lead Author

One member of the IRP will be selected to chair the panel and one member will be selected to act as lead author.

Task 5: The Chair will coordinate communications within the IRP during the review process, lead the deliberations of the panel during the meeting, and organize the work of the panel.

Task 6: The Lead Author will develop the structure of the panel's report, assemble individual IRP contributions into the panel's report, and format and edit the final report.

Deliverables and Timeline

Task 1: by November 8, 2011

Read and review all background material identified in the Charge.

Task 2a and 2b: November 8-9, 2011

Attend and participate in the IRP meeting in Sacramento, CA.

Task 3: November 9, 2011

Present preliminary findings and recommendations at the meeting.

Task 4: December 9, 2011

The final review report, co-authored by all IRP members, is due no later than 30 days after the meeting.

Guidelines for reports:

The report is expected to directly address the questions identified in the Charge. Format for the report is at the discretion of the IRP; however, it is requested that the report contain a concise executive summary and a table of contents if the report is lengthy.

Representatives and Contact Information

DSP Contract Manager

Sam Harader

Delta Science Program,

980 Ninth St, Suite 1500, Sacramento CA 95814

(916) 445-5466

Sam.Harader@deltacouncil.ca.gov

Location of Work

Location for Tasks 1 and 4 are at Contractor's discretion. Contractor will provide all necessary working space, equipment and logistical support. No travel or per diem will be reimbursed for Tasks 1 and 4.

Tasks 2 and 3 will be carried out in Sacramento, California. The DSP will provide meeting space, computer equipment, and logistical support. Travel and per diem will be reimbursed for Task 2.

Exhibit A, Attachment 1

Charge to the Delta Science Program Independent Review Panel for the OCAP Integrated Annual Review

Orientation and Focus

The intent of the annual review is to inform NMFS and USFWS as to the efficacy of the prior year's water operations and regulatory actions prescribed by their respective RPAs, with the goal of developing lessons learned, incorporating new science, and making appropriate scientifically justified adjustments to the RPAs or their implementation to support 2012 real-time decision making.

This review will focus on the implementation of the OCAP RPAs for operations and fisheries for water year 2011 (October 1, 2010 through September 30, 2011) and will review:

- (1) Whether implementation of the RPA action met the intended purpose of the Action;
- (2) The agencies' response to and implementation of independent review panel recommendations from the prior year's OCAP Annual Review;
- (3) Study designs, methods, and implementation procedures used;
- (4) The effectiveness of the process for coordinating real-time operations with the technical teams;
- (5) Recommendations for adjustments to implementation of the RPA Actions or Suite of Actions for meeting their objectives.

Materials to be Reviewed

- 1) Each independent review panelist will review the following documents (technical team reports) prior to attending the two-day public workshop. These documents will be provided in electronic format.
 - a) Clear Creek Technical Working Group (CCTWG) Annual Review Report
 - b) Interagency Fish Passage Steering Committee (IFPSC) Annual Review Report
 - c) Sacramento River Temperature Task Group (SRTTG) Annual Review Report
 - d) Red Bluff Diversion Dam Technical Team (RBDDTT) Annual Review Report
 - e) American River Group (ARG) Annual Review Report
 - f) Stanislaus Operations Group (SOG) Annual Review Report
 - g) Delta Operations for Salmonids and Sturgeon Group (DOSS) Annual Review Report
 - h) Smelt Working Group (SWG) Annual Review Report

Additional reports for the purpose of historical context:

- Report of the 2010 Independent Review Panel (IRP) on the Reasonable and Prudent Alternative (RPA) Actions Affecting the Operations Criteria and Plan (OCAP) for the State/Federal Water Operations
- Joint Department of Commerce and Department of the Interior Response to the Independent Review Panel's (IRP) 2010 Report of the Reasonable and Prudent Alternative (RPA) Actions Affecting the Operations Criteria and Plan (OCAP) for the State/Federal Water Operations
- NMFS' 2009 RPA with 2011 amendments
- USFWS Biological Opinion on the Long-Term Operational Criteria and Plan (OCAP) for coordination of the Central Valley Project and State Water Project (pages 279-282 and 329-356)
- RPA Summary Matrix of the NMFS and USFWS OCAP Opinion RPAs
- National Academy of Science's March 19, 2010, report
- VAMP peer review report
- State Water Board's Delta Flows Recommendations Report
- NMFS RPA, Appendix 2-B, Task 4: Green Sturgeon Research

Scope of the Review

This review is to address the following questions:

- 1) How well did implementation of the RPA Actions meet the intended purpose of the actions?
- 2) Where the 2010 Independent Review Panel made recommended adjustments to implementation of the RPA Actions,
 - a) Were the adjustments made?
 - b) How well did these adjustments improve the effectiveness of implementing the actions?
- 3) How effective was the process for coordinating real-time operations with the technical teams' analyses and input as presented in the OCAP Opinions? [NMFS' 2009 RPA with 2011 amendments (pages 8-9) and USFWS' OCAP Opinion (page 280)]?
- 4) (a) Were the scientific indicators, study designs, methods, and implementation procedures used appropriate for evaluating the effectiveness of the RPA Actions?

(b) What scientific indicators, study designs, methods, and implementation procedures might be more appropriate for evaluating the effectiveness of the RPA Actions?

- 5) How can the implementation of any of the RPA Actions be adjusted to more effectively meet the objective of the RPA Action (or in some cases a Suite of Actions)?
- 6) How should multi-year data sets on OCAP RPA Action implementation be used to improve future implementation of the RPA Actions?

Products

The IRP will prepare the following products according to the schedule outlined in the Scope of Work:

- Preliminary assessments and impressions
- Final Review Report

Review Panel Membership

- James Anderson, Ph.D., University of Washington
- James Gore, Ph.D., University of Tampa
- Ron Kneib, Ph.D., RTK Consulting & University of Georgia (Emeritus)
- Mark Lorang, Ph.D., University of Montana
- John Van Sickle, Ph.D., U.S. Environmental Protection Agency's Western Ecology Division

Meeting Format

The meeting will be conducted over two days in Sacramento, CA. The first day of the meeting will involve presentations by key individuals from each technical team identified in the NMFS Biological Opinion (Action 11.2.1.1) as well as the USFWS' Smelt Working Group. 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 with the technical team presenters at the meeting. The Lead Scientist or his designee will facilitate discussions. The morning of the following day, the panel will meet in private to deliberate on the charge questions. That afternoon, the public meeting will reconvene at which time the panel will provide a presentation of their initial assessment and impressions.