Draft Charge for the NMFS ROC LTO Biological Opinion Peer Review

Background

Reclamation is consulting with the U.S Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) pursuant to Section 7(a)(2) of the Endangered Species Act (ESA) on the coordinated operation of the Central Valley Project and State Water Project (CVP/SWP). As a part of these consultations, Reclamation has written a Biological Assessment (BA) that summarizes the effects of the action on ESA-listed species and their designated critical habitats, and NMFS will complete its assessment of effect and jeopardy determination in a biological opinion, expected to be completed by June 17, 2019, as directed by the October 19, 2018, White House memorandum *Promoting the Reliable Supply and Delivery of Water in the West*.

The purpose of this independent scientific peer review is to obtain the views of experts not involved in the ROC on LTO ESA consultation on the incorporation and application of best available scientific information and determination of effects on aquatic species of the proposed CVP/SWP operations.

Panel charge

The panel will review NMFS' analytical approach, status of the species and critical habitats, environmental baseline, and effects analysis sections of the draft BiOp. The Panel will receive relevant background information and supplemental materials to consider in their review. Agencies will be available for a conference call during the review period to provide answers to questions or address clarification needs during the review. Reviewers are expected to convene at least one conference call to discuss major findings and identify and attempt to rectify any conflicting recommendations. The review is expected to culminate with individual reports from each reviewer, according to the format provided by the hiring contractor.

Specific questions for review of the draft NMFS biological opinion:

Overarching objective: Identify to what extent the analyses in the draft biological opinion are scientifically sound and defensible, with consideration of the following questions:

1. How well does the analytical approach explain how the exposure, response, and risk from project operations will be assessed for:
   - individuals, populations, and diversity groups of the listed species?
   - physical and biological features of designated critical habitats?

2. How effectively is the analytical approach applied in the effects analysis on the listed species and designated critical habitats?

3. To what extent does the approach for assessing effects provide a scientifically defensible approach for evaluating adverse effects to listed species and their designated critical habitats throughout the action area?

4. How well does the draft biological opinion use best available scientific and commercial information in the effects analysis and findings?

5. Does the draft biological opinion adequately address data gaps and uncertainties? Specifically:

A. Are assumptions and uncertainties in the effects analysis clearly stated and reasonable based on current scientific thinking?

B. How extensively are gaps in aquatic species life history information considered and appropriately addressed?

6. How adequately does the draft biological opinion address the key operational effects of the proposed action? Specifically:

A. Do the analyses provide sound information and analyses to adequately characterize the effects of operations on spawning, incubating, rearing, and outmigrating salmonids and sturgeon?

B. How thoroughly do the data, analyses, and findings presented in the biological opinion capture the risks to individuals and populations, and critical habitat, from the proposed action? Are there significant risks that have been overlooked or other scientific information that should be considered?

C. Have the appropriate analytical tools (i.e., models) been used for the analysis and what, if any, additional currently available tools should have been considered? Were available models appropriately applied and interpreted in the analysis?

D. Are assumptions plainly stated and scientifically sound, and are analytical uncertainties and limitations of methods clearly stated?

Potential Draft Materials for Independent Science Panel Review

Advance Review Materials (Available April 20, 2019)

ROC ON LTO BA

2009 NMFS OCAP BiOp (or select sections)

LOBO or Previous OCAP Consultation Peer Review Reports

CWF BiOp Analytical Approach

October 19, 2018, White House Memo

Biological Opinion Section Review Materials (Available May 20, 2019)

Analytical Approach

Status of the Species and Critical Habitats

Environmental Baseline

Effects of the Action to the Species

Effects of the Action to Critical Habitat

Integration and Synthesis