

NMFS DRAFT DOCUMENT - - - PREDECISIONAL – DO NOT CITE

**NMFS Note to Science Peer Reviewers, Agency Reviewers and Public Water Agency Reviewers:**

NMFS is issuing the attached draft analyses for independent scientific peer review, and Reclamation, DWR, FWS, DFW and CVP/SWP public water agency review. These are draft products subject to revision. These draft products are components of a biological opinion; they are not the entire Opinion. NMFS has not reached any determination on whether effects will jeopardize listed salmon, steelhead and sturgeon. Consistent with the Section 7 process, NMFS and Reclamation continue to work closely together to complete the consultation. NMFS plans to issue a complete final Biop by July 1<sup>st</sup>. The science review will be helpful in providing independent review of our draft products.

One topic of continued focused work between NMFS and Reclamation is the development of performance objectives to supplement Reclamation's and DWR's proposed operations. NMFS and Reclamation are discussing performance objectives for Shasta cold water pool management and for South Delta entrainment as an approach to further minimize effects and provide a backstop/minimization measure for reducing identified adverse effects. These objectives are also being considered as a tool to provide assurance that adverse effects of water operations to listed salmon, steelhead, sturgeon and Southern Resident Killer Whales will be no greater than those under the previous 2009 NMFS Biological Opinion. These performance measures are not included in the attached draft documents due to the time considerations. We welcome comments on this overall approach, as well as comments on these draft documents.

Per our schedule, comments from state, federal, and PWA's should be directed to >>>>>>>>>>>> and received by >>>>>>>>>>>>date.

Thank you for your interest!

(does someone need to sign this? If so, Barry? Maria?)

**Additional Information:**

1. What will the peer reviewers be looking for? NMFS has developed a separate charge to the peer reviewers which is available at this link: (((insert charge or weblink)))

2. What's specifically in the draft analyses? The drafts contain our analyses of the effects of the action on the listed species within our jurisdiction (winter-run Chinook salmon, spring-run Chinook salmon, steelhead, green sturgeon, and southern resident killer whale (due to Chinook salmon prey base)). We use a suite of analytical tools that range from hydrologic and temperature models to floodplain inundation, migration routing, and life-cycle models.
3. Why are we sharing this draft analyses? It is standard for NMFS to seek external independent peer review of the analysis and approach to analysis for complex consultations. We had similar reviews of draft sections of the 2009 OCAP BiOp and the 2017 CWF BiOp. This provides an opportunity for NMFS to have an independent evaluation of whether we appropriately adhere to the approach that we identify in applying and interpreting the science, tools, and uncertainties.
4. Are we doing this in lieu of sharing a draft biop? No. We typically share these sections with scientific peer reviewers. As is standard practice, we continue to work very closely with the Action Agency, the Bureau of Reclamation and we are sharing additional Biop sections with them, as they are developed.
5. Who are the independent scientists who will be reviewing these documents? We have contracted for an external party to canvas and manage the review process. We are fortunate to have Dr. Dave Hankin (Humboldt State University), Dr. Ken Rose (University of Maryland), and Dr. John Skalski (University of Washington) available as reviewers. All three are familiar with Central Valley fisheries and water management challenges and have been on previous reviews through the Delta Science Program.