Independent Scientific Peer Review of the Hydrologic Evaluation of Reeder Reservoir to Increase January and February Flows to Ashland Creek

Date: August 17, 2016

Originating office:

Bureau of Reclamation, Pacific Northwest Regional Office, 1150 N Curtis Rd., Boise, Idaho 83716

Reclamation roles:

Director or delegated manager: Carolyn Chad, Acting Bend Field Office Manager, Pacific Northwest Region, Bureau of Reclamation

Peer review lead: Brian Drake, Project Manager, Bureau of Reclamation

Subject and Purpose: The National Marine Fisheries Service (NMFS) issued a Biological Opinion on Future Operation and Maintenance of the Rogue River Basin Project (BiOp) in 2012. The BiOp outlines a series of actions to minimize the adverse effects of the Project on Southern Oregon Northern California Coho (SONCC) salmon and that species' critical habitat and to promote species recovery. These actions include: 1) minimum instream flows and flow ramping requirements; 2) fish passage improvements; 3) riparian zone restoration; and 4) instream habitat uplift (through additional flow or installation of large wood structures).

Ashland Creek is deficient in habitat during the months of January and February. The City of Ashland owns and operates Reeder Reservoir, an 850 acre-foot impoundment on Ashland Creek behind Hosler Dam. The City utilizes the reservoir to provide drinking water, irrigation water, and supplement streamflows during summer months (starting in June) to offset temperature impacts from the City's wastewater treatment facility located downstream. The City has indicated a willingness to reregulate Reeder Reservoir to provide additional flows in Ashland Creek in January and February to help Reclamation achieve the habitat uplift requirements stipulated in the BiOp, but they have asked for an assessment to evaluate their ability to refill prior to the June timeframe when supplemental flows are necessary. This hydrologic evaluation is intended to use available data to establish the additional amount of water that could be released in January and February and the resulting uncertainty associated with reservoir refill.

Impact of Dissemination: Under Reclamation policy CMP P14 Peer Review of Scientific Information and Assessments in fulfillment of the Final Information Quality Bulletin for Peer Review (70 FR 2664-2677) and implementation of the Information Quality Act (Pub. L. 106-554) the science informing the Hydrologic Evaluation of Reeder Reservoir to Increase January and February Flows to Ashland Creek is determined to be Discretionary Scientific Information.

Peer Review Scope: The subject of this review will consider the science used to develop the available additional flows in Ashland Creek due to changing operations at Reeder Reservoir. In turn it will inform the decision to change operations to increase winter flows in Ashland Creek.

There is limited data available for Reeder Reservoir. Assumptions about reservoir inflows, outflows, and specific reservoir operations were used in order to calculate the ability to release additional flows out of Reeder Reservoir.

Peer reviewers will be asked to provide responses relative to the following questions:

Question 1. Was the methodology utilizing mass balance calculations to calculate available additional flow from Reeder Reservoir consistent with state of the art methodologies river system operations calculations?

Question 2. Have the assumptions and uncertainties associated with the calculation been appropriately characterized in the document?

Manner of Review, Selection of Reviewers: The review of this study will use Reclamation staff that are (a) outside the PN region, (b) have not worked on the study that is being reviewed, (c) have knowledge of hydrologic studies of this nature. The reviewers will review the study document to address the questions listed above.

Number of Peer Reviewers: It is anticipated that 1-3 peer reviewers will be used.

Reviewer Qualification and Selection Process: The peer reviewers will have at least 3 years of experience with expertise in hydrology, reservoir operations, reservoir mass balance studies (or similar disciplines). Peer reviewers will have the education, professional experience, peer recognition in their field, and have contributed to their field of expertise.

Opportunity for Public Review: No, the Independent Scientific Peer Review process will be completed prior to study completion.

Oversight of the Peer Review Team: Oversight of the peer reviewers will be limited to Reclamation. This statement will serve as the scope of work for the reviewer(s).

Timing of Review: August 2016

Delivery of Findings: Independent reviewers will each provide a version of the draft report with track changes to the study author. Once the comments have been addressed and agreed upon by the the study author and the reviewer(s), the reviewer(s) will provide a concurrence statement stating that the report sufficiently addresses the above questions. The statement will be included in the final report.

FACA: This peer review is not subject to the Federal Advisory Committee Act (FACA) because reviewers are government employees.

Response to Peer Review: At the conclusion of receiving peer review comments, Reclamation will publish the final document on the peer review website (http://www.usbr.gov/main/qoi/peeragenda.html) that includes the peer review concurrence statements to be maintained for one-year on that website.

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