



Oregon

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Governor

Department of Fish and Wildlife

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February 4, 2003



Scott Bettin, Bonneville Power Administration
Tony Norris, Bureau of Reclamation
Rudd Turner, Corps of Engineers

Re: Reduction of Chum and Chinook Protection Flows

Dear Mr. Bettin, Norris, and Turner:

The Oregon Department of Fish and Wildlife and U.S. Fish and Wildlife Service are writing you to express our concern regarding the decision by the National Marine Fisheries Service (NMFS) and the Action Agencies to reduce flows for protection of chum redds below Bonneville Dam. The decision, which was to reduce tailwater elevations below Bonneville from 11.5 to 11.2 ft, was based on the concern that continuing to provide flows to maintain the higher tailwater elevation would reduce the probability of meeting April 10 Upper Rule Curves (URC) as required by NMFS' 2000 Biological Opinion, not on any biological data.

The recent impact assessment of chum redds (January 16) from lowered tailwater elevations below Bonneville Dam did not provide any reliable, quantitative information on which to base biological decisions. In fact, no consensus among the Salmon Managers could be reached based on the qualitative assessment made.

The survey did not take into account the ability to identify viable redds this late into the season. Widely fluctuating tailwaters during and after the spawning season moved gravel around in the spawning area. Coupled with algae growth, critical redd locations could not be assured.

The survey and results, presented as long term impacts at public meetings, does not account for the integration of the other key components (variability caused by local stream inflow and the changing tidal/backwater effects) that are important for understanding true long term population impacts. Quantitative modeling assessments of the spawning habitat and impact on chum redds have been made based on Bonneville tailwater, local stream flow, and the tidal/backwater effect. This work has been a cooperative effort involving the Washington Department of Fish and Wildlife, the Oregon Department of Fish and Wildlife, the U.S. Geological Service, and the U.S. Fish and Wildlife Service. These assessments have been made at various combinations of tailwater, local stream flow and tidal/backwater elevations. These conditions change over time and must be constantly monitored closely if managers are trying to control the wetted spawning area to the tenth of a foot in elevation. Because of the extreme variability of conditions in the

Ives Island complex, this goal is hydraulically impossible. Project operators have told the fishery managers they cannot manage to a single tenth of a foot of Bonneville tailwater elevation, but need an operating range of at least one-half foot to operate.

With certainty, lowering the tailwater elevations below 11.5 feet increases the risk of chum mortality, potentially well over 20% at an 11.0 ft tailwater, in an area already managed to a minimum level, with mass spawnings in a much reduced spawning area.

We concur with the high priority for meeting the April 10 URC's to store as much water for spring flow augmentation and meeting all other requirements of the Biological Opinion. The consensus among the fishery managers is that reducing flow and dewatering chum redds would be adverse for chum. We understand that under the terms of the NMFS 2000 Biological Opinion that meeting the April 10 URC for spring migrants is a priority over protection of the natural chum spawning area below Bonneville Dam. Low runoff predictions (forecasted to be 80 maf at The Dalles or about 75% of normal) strongly indicate that the April 10 reservoir elevations will not be met regardless of the present decision to dewater chum redds. An informed decision to dewater chum redds should have acknowledged that adequate protection for chum salmon has not been provided in the last three years since the 2000 Biological Opinion has been in effect. The small savings in water from dropping tailwater from 11.5 to 11.2 ft will make little difference in meeting April 10 URC's given the low runoff projections and high variability of predictions (+/- 30 maf). Also, there is no guarantee that any "fish" water banked now will be available for future fish operations but used for other purposes (i.e. power generation in the event of cold weather or other high power demand).

The fundamental issue at the basis of this management predicament is that trade-offs of protection measures between the different listed stocks are being implemented prior to a thorough consideration of alternatives to mitigate for impacts. This is particularly tragic since very few natural mainstem spawning areas like Ives Island remain in the Columbia Basin. The decision to reduce protection for chum salmon was made without a thorough consideration of alternatives to mitigate for any shortfalls of reaching April 10 URC's, such as releases from Canadian reservoirs. Recent heavy rains have dramatically increased flows in the lower Columbia and it appears that an 11.5 ft tailwater will be maintained for a few more days so there is time to reconsider the decision. The opportunity is much greater for reducing long term risks for any shortfalls in spring flows while little opportunity exists to undo the harm caused now by the deliberate dewatering of chum and chinook redds.

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A more prudent course would be to continue 11.5 ft tailwater protection flows for chum and aggressively begin contingency planning for addressing shortfalls through flexibility in the hydrosystem and equitably assigning risks between fish operations and other river uses such as flood control, irrigation, power, and recreation.

We appreciate the opportunity to provide these comments and look forward to working with you in developing operational plans that will better meet the needs of mainstem spawning chum and chinook below Bonneville Dam. We hope the Action Agencies and NMFS will acquire additional water volumes to assure that the April 10 reservoir elevations are met.

Sincerely,

Signature on Original, Hard Copy to Follow

Raymond R. Boyce
Oregon Department of Fish and Wildlife

Signature on Original, Hard Copy to Follow

David A. Wills
U.S. Fish and Wildlife Service

C: Technical Management Team
Implementation Team
Fish Passage Advisory Committee