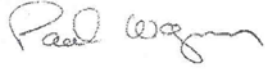


State, Federal and Tribal Fishery Agencies Joint Technical Staff Memo

TO: Mr. Steve Barton, USACE



FROM: Paul Wagner (FPAC Co-Chair) on behalf of FPAC

SUBJECT: Salmon Managers' comments on the COE's March 17, 2010
Libby/Dworshak Flood Control Workshop

DATE: May 4, 2010

We would like to thank you for initiating the Libby/Dworshak Flood Control Workshop process. We appreciate the commitment of staff and time that the US Army Corps of Engineers gave to this workshop. Staff did an excellent job of presenting the material in a clear and concise manner and established a good foundation from which the workshop process can now continue.

As with any workshop process, areas in need of further, or continued, study were identified by the participants. In that spirit we would like to identify those areas where the Salmon Managers would like to encourage the COE to conduct further studies and schedule additional workshops. These include, but are not limited to the following topics:

Dworshak Operations:

The presentation for Dworshak Dam included flow and refill at Dworshak Dam as the primary objectives. We recognize that this is in accordance with the objectives of the current FCRPS Biological Opinion. We also recognize that assuring reservoir refill and allowing water to flow from a reservoir is a balancing act and that the COE undertakes that responsibility with professionalism.

However, in terms of fisheries management the objectives are to provide flow at Lower Granite Dam for the spring fish migration and to mediate summer water temperatures. Regarding these objectives the Salmon Managers continue to have genuine concern regarding the operation of Dworshak Reservoir and spring flow management at Lower Granite Dam. More specifically, how refill occurs relative to the hydrograph at Lower Granite Dam and the passage of juvenile spring fish migrants (Figure 1). We would like to work together with the COE in this ongoing workshop process to explore additional ways to optimize both the fish flow at Lower Granite Dam when spring migrants are at peak passage, along with the Dworshak Reservoir refill objective.

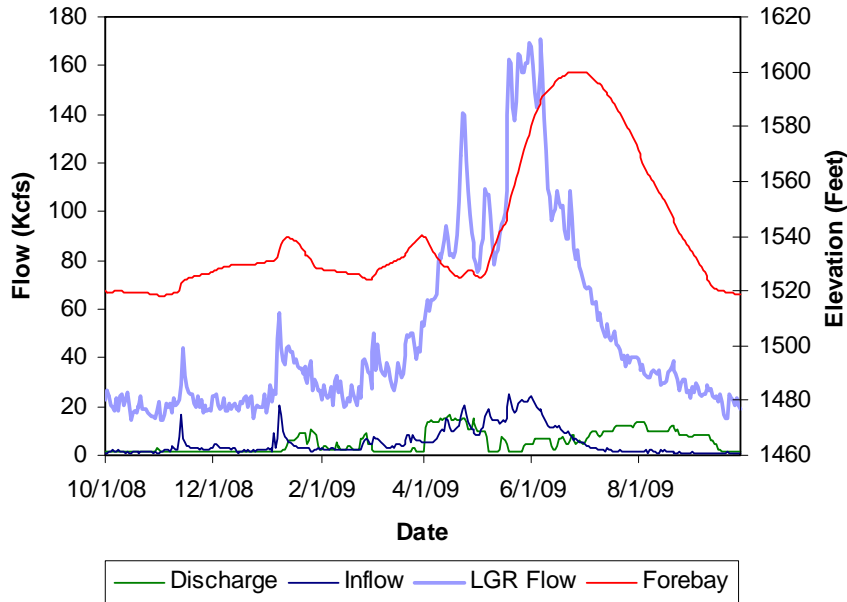


Figure 1. Discharge, inflow and forebay elevation at Dworshak, along with flow at Lower Granite Dam in 2009.

Libby Operation:

In addition to the present study based on the December projections of runoff, the Salmon Managers would like to ask the COE to conduct the Libby analysis using actual runoff volumes from the historic record. The Salmon Managers remain concerned that the present analysis conducted by the COE for establishing 5900 KAF as the cutoff for relaxing the December flood control draft was heavily influenced by the discrepancy between the 1954 December predicted runoff volume of 5952 KAF, and the actual runoff volume of 9143 KAF. The 1954 water year contained the largest increase between the December Apr-Aug forecast and actual Apr-Aug runoff volume at Libby, where the actual runoff volume in 1954 was 9143 KAF or 146% of normal. This runoff volume was the second highest observed runoff in the historic record used for the study. The Salmon Managers would like the COE to explore actual volumes to address the potential that the 5900 KAF cutoff is the consequence of the discrepancy between the predicted and actual volumes; and to determine if the December flood control draft may be relaxed in more years.

Additionally, by including 1954 in the analysis and treating the avoidance of spill as a categorical imperative, the Corps' study severely limited the potential for more balanced reservoir management. Although the Salmon Managers would wish to avoid spill at Libby, setting such avoidance as a hard rule forces additional risk onto refill and reduces

spring flows. We would be interested in investigating the spring and summer flows if this constraint were softened.

The Salmon Managers would appreciate analyzing how the IJC affects both the timing and volume of the water that is released from Libby and how it affects the flow in both the upper and lower Columbia rivers. The COE presented information that because Duncan may no longer back off generation, more water would be trapped in storage behind Libby Dam in some years. The additional studies that the COE may conduct should present additional information for how much Duncan Operation may affect flows at McNary Dam.

The COE presented information regarding their reconsideration of the years that will be used to establish runoff volumes. The Salmon Managers would appreciate reviewing that analysis with the COE and evaluating how the changes proposed by the COE may affect flows at McNary Dam.

The COE also talked about affecting Libby refill to its June 30 elevation by affecting the duration of the VAR Q outflows. While this operation may help the COE better achieve the Biological Opinion refill targets, it is not clear how much this will affect flows at McNary Dam. We suggest that any studies the COE completes relative to this reduction also present the impact to flows at McNary, which will impact the fish migration in both the upper, mid and lower Columbia.