


# State, Federal and Tribal Fishery Agencies Joint Technical Staff Memo

*Columbia River Inter-Tribal Fish Commission  
Idaho Department of Fish and Game  
Oregon Department of Fish and Wildlife  
Washington Department of Fish and Wildlife  
U.S. Fish and Wildlife Service*

TO: Tony Norris, BPA  
John Roache, USBOR  
Dan Feil, USCOE

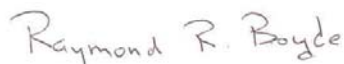
FROM:



Bob Heinith, CRITFC



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Ron Boyce, ODFW



Cindy LeFleur, WDFW



David Wills, USFWS

SUBJECT: Grand Coulee Dam Operations 2009

DATE: August 24, 2009

There have been very low flows in the lower Columbia River this summer, primarily a result of a low runoff volume. Summer flows have been even lower due to the significant refill miss at Libby Reservoir, and the implementation of the Montana study, which decreases the contribution of Libby and Hungry Horse reservoirs to summer flows. The resulting low summer flows have been exacerbated by recent operations at Grand Coulee which resulted in reductions in fish

protection measures specified in the 2009 Fish Operations Plan (FOP) developed by the Action Agencies.

The 2009 operation of Grand Coulee Dam requires an end of August draft to 1278 feet. This draft limit is based on the July final forecast for runoff at Grand Coulee Dam of 79.5 MAF, which is less than the 92 MAF criteria. As of midnight on 8-17-09, GCL was at an elevation of 1283.3 feet and had refilled 0.7 feet between 8-11 and 8-17 (Figure 1). Outflow during this time period at Grand Coulee ranged between 44.2 and 88.9 Kcfs. On August 17<sup>th</sup> Grand Coulee still had 5.3 feet (405 KAF) to draft by the end of the month.

At the same time that water was held in Grand Coulee and refill occurred, the flow at McNary Dam decreased from 22.2 Kcfs to 85.8, averaging 105.8 Kcfs. These very low flows in the lower Columbia River, coupled with the required minimum operating flow criteria at each of the projects, precluded implementing the spill amounts at McNary, The Dalles and Bonneville dams specified in the FOP for several days during this period (Figures 2, 3 and 4).

We believe that the decision to hold water in Grand Coulee Reservoir and refill about 100 KAF during this period significantly contributed to not achieving the juvenile fish protection measures specified in the FOP. Optimal spill amounts were decreased from those specified in the FOP as a result of the low flows, and these flows were lower during the time period when ESA listed subyearling Chinook were migrating through the river. These conditions would have been lessened if Grand Coulee operations had been managed differently.

The Salmon Managers believe coordination on this operational decision would have provided better fish protection, more in accordance with the FOP. We request that in the future that the Salmon Managers be notified as soon as reasonably possible, so that we can provide input in a more timely fashion.

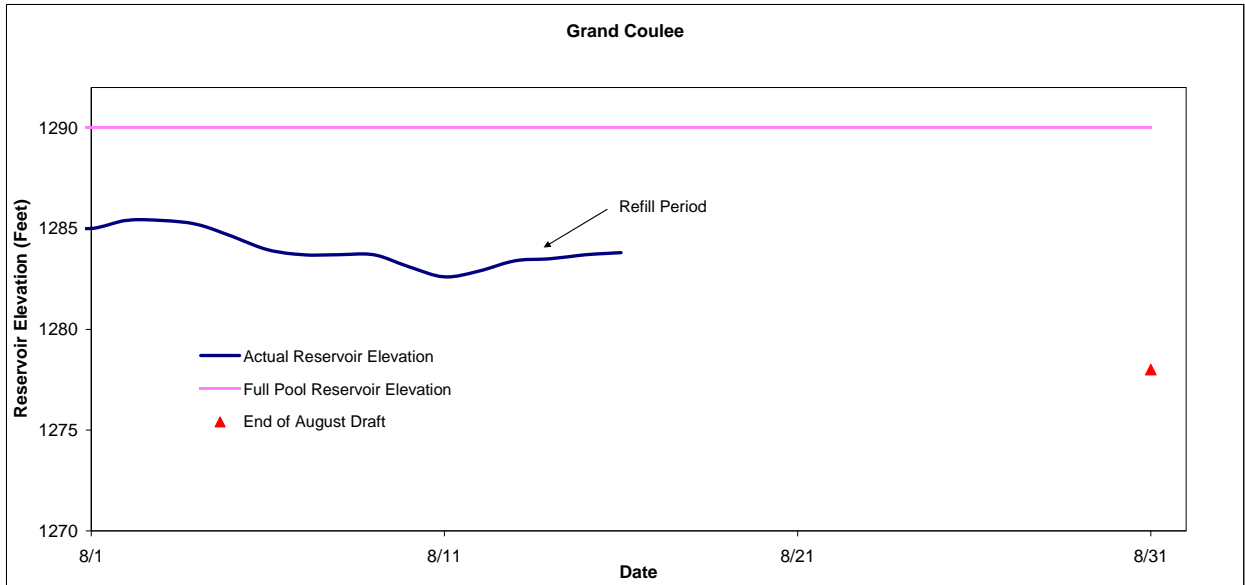


Figure 1. Grand Coulee Dam Reservoir elevation in August of 2009.

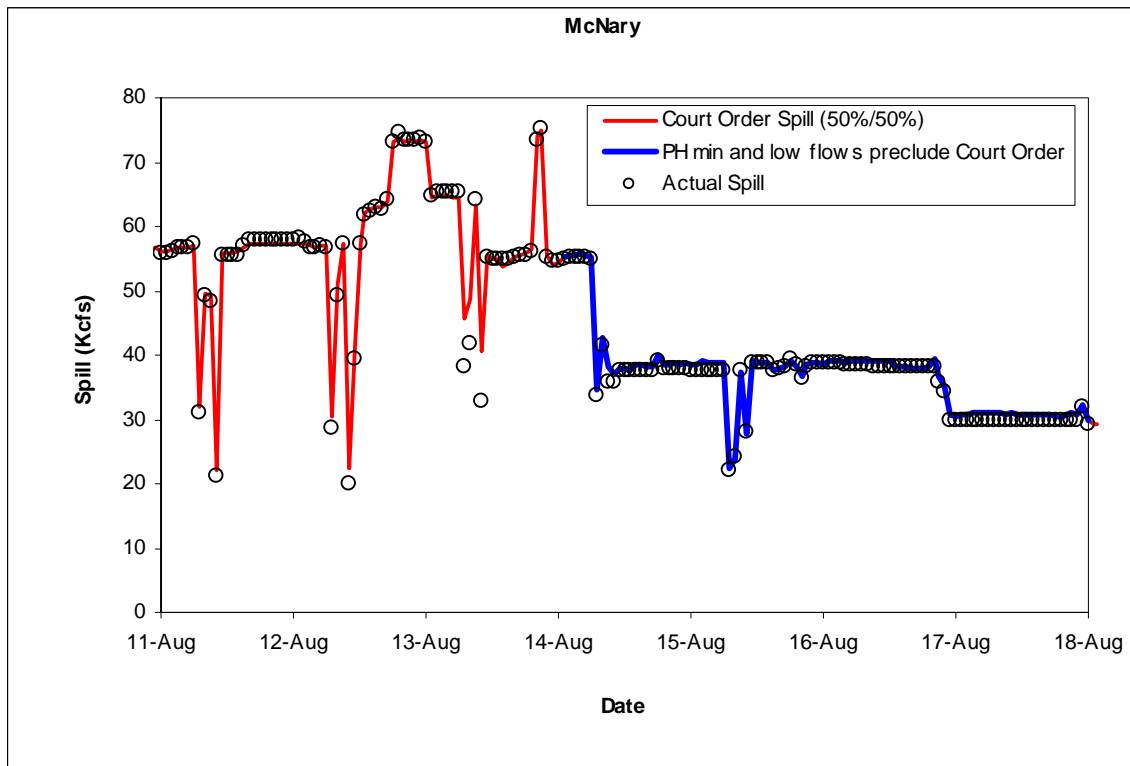


Figure 2. Spill at McNary Dam. Blue line indicates the period affected by low flows.

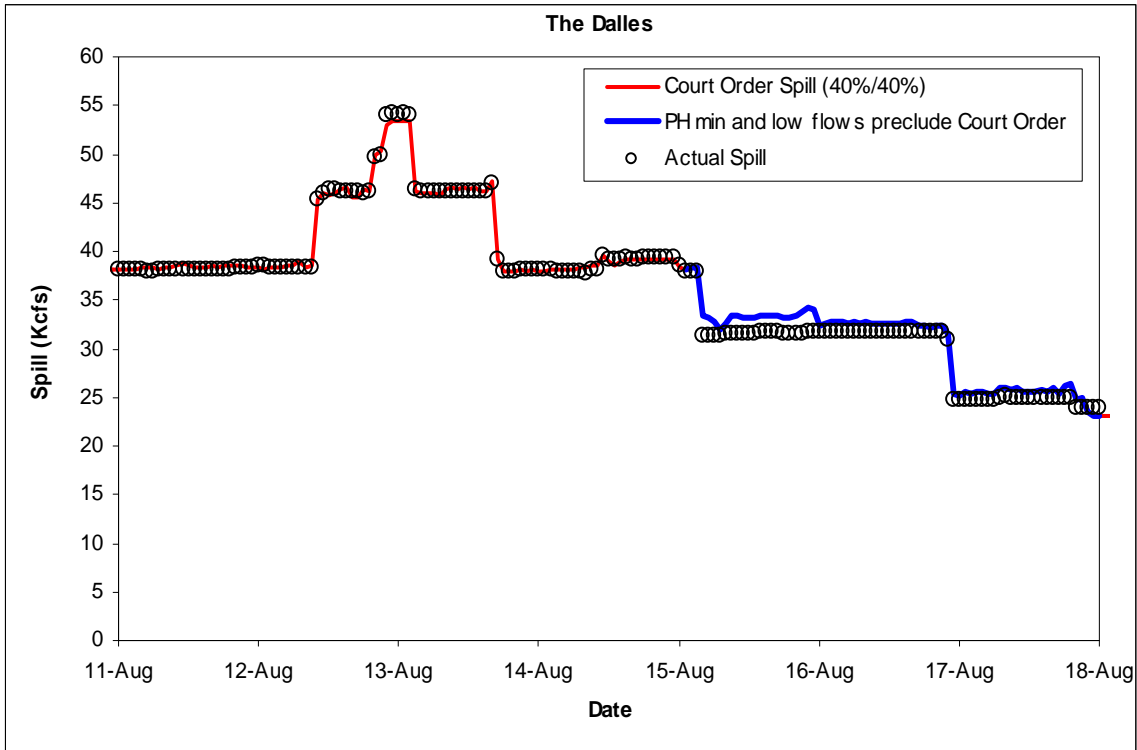


Figure 3. Spill at The Dalles Dam. Blue line indicates the period affected by low flows.

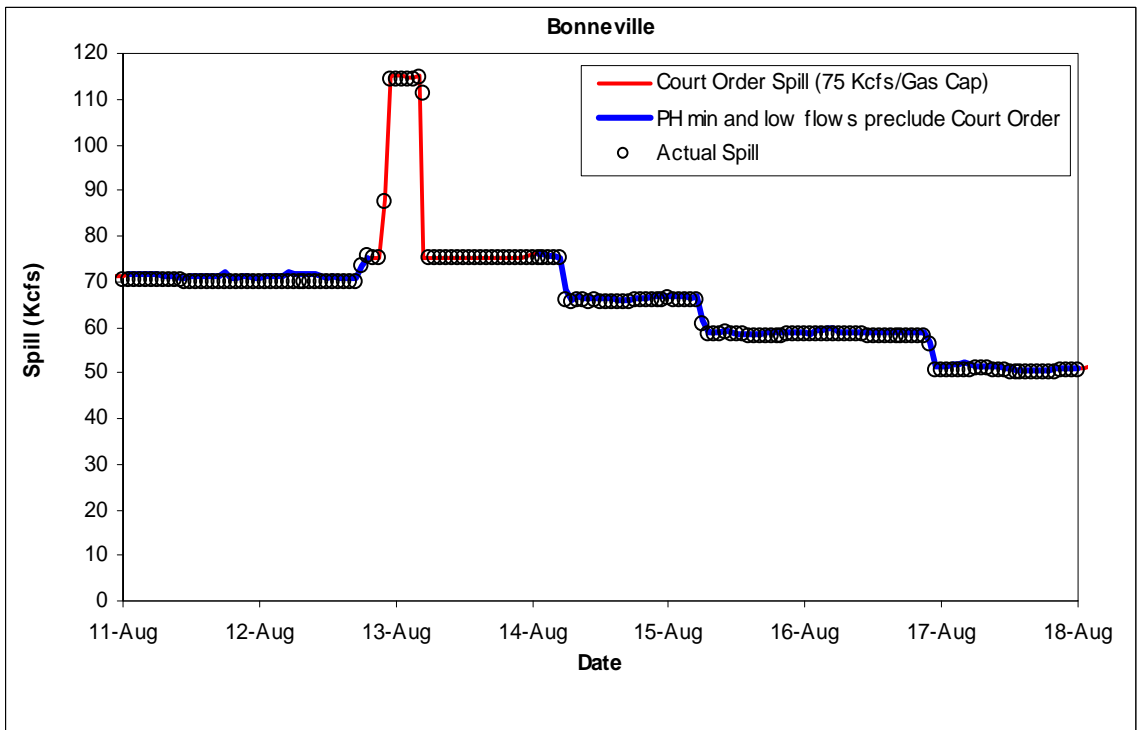


Figure 4. Spill at Bonneville Dam. Blue line indicates the period affected by low flows.