

## **SYSTEM OPERATIONAL REQUEST: #2000-32**

- *The following State and Federal Salmon Managers have participated in the preparation and support this SOR: Oregon Department of Fish & Wildlife, U.S. Fish & Wildlife Service, and the Washington Department of Fish and Wildlife.*

**TO:** Brigadier General Strock COE-NPD  
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*Marvin S. Yoshinaka*

**FROM:** Marv Yoshinaka, Chairperson, Salmon Managers

**DATE:** October 19, 2000

**SUBJECT:** Flows at Bonneville Dam to protect natural spawning of fall Chinook salmon at the Ives/Pierce Island Complex

### **SPECIFICATIONS:**

- Immediately begin to provide minimum instantaneous flows at Bonneville Dam of 125 kcfs. Gradually ramp flows up to an instantaneous 140 kcfs by November 1
- Reduce hourly and day to nighttime peaking and resulting flow fluctuations.

### **JUSTIFICATION:**

Spawning surveys being conducted by Washington Department of Fish and Wildlife and the US Fish and Wildlife Service have documented fish spawning between Ives and Pierce Islands. The present flow regime is not providing adequate flows for either spawning fall Chinook or staging chum salmon. Historical timing and spawning data indicate that chum salmon will appear shortly after the flow increase to 140 kcfs.

Review of the present reservoirs status and the project operating limits documents indicates that these flows could be provided. It appears that increased flows could be provided by:

- Drafting Chief Joseph pool to minimum operating pool elevation of 930 feet. We estimate that approximately 170 KAF might be available.
- Drafting John Day reservoir to a pool elevation of no less than 260 feet. An estimated 140 KAF might be available, while not impacting water supply to Irrigon and Umatilla hatcheries.  
Potential advance draft of Kootenai Lake to their spring elevation target to 1739 feet approximately 500 KAF.

- Delay refill of USBR upper Snake River projects and pass through flow through Brownlee.
- Draft Grand Coulee
- Draft Albeni Falls

The state and federal fish and wildlife agencies provided the federal parties a memorandum describing the flow needs for spawning fall Chinook and chum salmon. Instead of providing steadily increasing flows as required to maintain and utilize the natural spawning area of the Pierce and Ives Island complex, the daily average flows have been steadily decreasing while major storage reservoirs have been filling. Since the federal operators have been advised of the flow requirements for natural spawning below Bonneville Dam, Grand Coulee Reservoir has filled six feet and flows below Bonneville have steadily declined, decreasing the availability of habitat for spawning. Data indicates that this area, if provided with water, is potentially utilized by lower river fall Chinook and lower river brights during October. Most of the opportunity to provide this spawning area for Chinook has already been lost. There is still potential to provide some natural spawning area for the remainder of October and for Chinook and chum salmon through November.