


SYSTEM OPERATIONAL REQUEST: #2001-12

The following State and Federal Salmon Managers have participated in the preparation and support this SOR: U.S. Fish & Wildlife Service, National Marine Fisheries Service, Oregon Department of Fish & Wildlife, Idaho Department of Fish and Game, and the Columbia River Inter Tribal Fish Commission.

TO:	Col. Fastabend	COE-NPD
	William Branch	COE-Water Management
	Cindy Henriksen	COE-RCC
	Doug Arndt	COE-P
	Col. Randall J. Butler	COE-Portland District
	Lieut. Col. W.E. Bulen, Jr.	COE-Walla Walla District
	J. William McDonald	USBR-Boise Regional Director
	Steven Wright	Acting BPA-Administrator
	Greg Delwiche	BPA-PG-5



FROM: **Raymond R. Boyce, Chairperson, Salmon Managers**

DATE: **November 27, 2001**

SUBJECT: Tailwater elevation at Bonneville Dam to protect natural spawning of chum and fall chinook salmon at the Ives/Pierce Island Complex and the I-205 seeps.

SPECIFICATIONS: Beginning immediately and continuing until further notice, maintain a tailwater elevation of 11.5 feet at Bonneville Dam. On average it is anticipated that daily average flows will not exceed 125 Kcfs.

JUSTIFICATION: While the specifications and justification contained in SOR #2001-11 are still supported by ODFW and USFWS, the need for the immediate implementation of this SOR is warranted based on the most recent survey and field observations from the Ives/Pierce Island area. Chum salmon have been observed staging and spawning in the island area as well as in the creeks. The chum salmon numbers have increased substantially over the past few days and observations made on November 26th indicate 300 live chum and 300 chum redds in the areas below Willard Creek, above Hamilton Creek and in the break between Ives/Pierce Islands. Based on past years' timing it is anticipated that at least this many new chum will enter the area in the next few weeks.

Presently conditions are relying on increased natural discharge from Hamilton Creek to keep the spawning habitat wetted. However, these west side streams are subjected to wide fluctuations in daily flow dependent on local rain activity. In addition, present conditions are not providing adequate access to preferred spawning substrate and velocity requirements for successful chum salmon reproduction.

Recent modeling studies conducted by the USFWS have indicated that the availability of spawning habitat is most stable when tailwater elevations are higher. Therefore, in order to provide a more stable environment it is requested that Bonneville tailwater elevations be

maintained at a constant level. Based on recent and projected flows (SSARR dated 11/18) it is estimated that this tailwater elevation can be largely maintained at Bonneville Dam for the next few months if reverse load factoring is not implemented.

It is acknowledged that under this operation redds may be established during periods of high Hamilton Creek flow in areas greater than an 11.5 foot tailwater elevation. Changes in tailwater elevations will not be requested this season in order to maintain these redds established by fluctuations in Hamilton Creek discharge.