

## **SYSTEM OPERATIONAL REQUEST: #2003-14**

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

<b>TO:</b>	<b>B. G. Grisoli</b>	<b>COE-NWD</b>
	<b>William Branch</b>	<b>COE-Water Management</b>
	<b>Cindy Henriksen</b>	<b>COE-RCC</b>
	<b>Witt Anderson</b>	<b>COE-P</b>
	<b>Col. Richard Hobernicht</b>	<b>COE-Portland District</b>
	<b>LTC Kertis, Jr.</b>	<b>COE-Walla Walla District</b>
	<b>J. William McDonald</b>	<b>USBR-Boise Regional Director</b>
	<b>Steven Wright</b>	<b>BPA-Administrator</b>
	<b>Greg Delwiche</b>	<b>BPA-PG-5</b>



**FROM:** David Wills, Chairperson, Salmon Managers

**DATE:** September 2<sup>nd</sup>, 2003

**SUBJECT:** Water Temperature Operation for Dworshak and Lower Granite.

### **SPECIFICATIONS:**

If necessary to maintain water temperature criteria, increase outflows at Dworshak to 8.0 Kcfs beginning on September 3, 2003 and continue through September 11, 2003. On September 12<sup>th</sup>, use remaining storage water to ramp outflows down to the minimum Dworshak discharge; enough storage water should remain to provide a similar three-day ramp down as modeled in the 8-25-03 STP. September 3<sup>rd</sup> through 11<sup>th</sup> outflows should be consistent at 8.0 Kcfs throughout each day with little daily load following fluctuations. Temperatures of Dworshak release water should be 44-48 °F. Whenever possible, meet both the 68 °F temperature criteria at Lower Granite and the Dworshak release water of 44-48 °F.

### **JUSTIFICATION:**

Recent tailwater temperatures at Lower Granite dam have begun to exceed the 68 °F water temperature target. This occurred concurrently with the decrease in flow at Dworshak, spill at Dworshak associated with the outage at Lower Granite and the decrease in flow at Lower Granite Dam. Operations at the Dworshak project have included load following which contributes to the temperature fluctuations in the Clearwater while lower outflow from Dworshak contributes to the higher tailwater temperature at Lower Granite Dam.

Flow augmentation volume was shifted from August to September to protect late migrating fall chinook in the Snake River, as advocated by the Nez Perce Tribe-Idaho Plan for Dworshak. Water temperature targets should be maintained to realize the benefit of shifting the flow volume from August to September to facilitate protection of late migrating fall chinook juveniles and to avoid counteracting the benefit of the provision of flow. Maintaining the temperature targets at the Lower Granite tailrace while managing temperature to avoid impact to the Dworshak Hatchery will compliment the benefit of providing the augmentation flow. Maintaining the water temperature target at Lower Granite will benefit both juvenile fall chinook migrants and adult fall chinook and steelhead migrants in the Snake River.