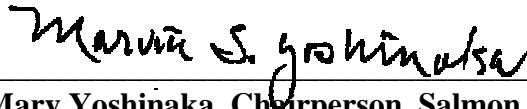


SYSTEM OPERATIONAL REQUEST:#99-17

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

TO: **Brigadier General Griffin** **COE-NPD**
 William Branch **COE-Water Management**
 Cindy Henriksen **COE-RCC**
 Bolyvong Tanovan **COE-RCC**
 Doug Arndt **COE-P**
 Col. R. Slusar **COE-Portland District**
 Lieut. Col. W.E. Bulen, Jr. **COE-Walla Walla District**
 Steve Clark **USBR-Boise Acting Regional Director**
 Judith Johansen **BPA-Administrator**
 Greg Delwiche **BPA-PG-5**



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

DATE: **July 13, 1999**

SUBJECT: **Dworshak flow augmentation and temperature control**

SPECIFICATIONS: Beginning 0001 Thursday July 15, start increasing outflow from Dworshak Dam using 50 degree F water to maintain daily average flows of 55 kcfs at Lower Granite Dam through 2400 Sunday July 25. Maximum daily outflow from Dworshak Dam will be 14 kcfs. Ramp outflows from Dworshak Dam at rate that allows gradual transition of water temperatures in the Clearwater River.

JUSTIFICATION: Based on current subyearling chinook sampling in the Snake River above Lewiston, USFWS projects that most wild subyearling chinook are now in the reservoirs. They project that currently approximately 40% of the 1999 wild fall chinook run has reached Lower Granite Dam and that by July 31 approximately 75% of the run will have arrived at Lower Granite Dam. The hot weather in the Snake River basin since the Fourth of July has resulted in rapidly increasing water temperatures in recent days. In order to keep the wild fall chinook migration underway, it is necessary to maintain adequate flows and keep rising water temperatures under control. Therefore, the Salmon Managers are requesting the USACE to begin increasing outflows of cooler water from Dworshak reservoir to augment the warmer water currently passing out of the Hells Canyon Complex. The goal is to maintain a daily average flow of 55 kcfs and attempt to maintain water temperatures at or below 68 degrees F at Lower Granite Dam between now and August 31.