

## **SYSTEM OPERATIONAL REQUEST: #99-21**

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

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**TO:**

<b>Brigadier General Strock</b>	<b>COE-NPD</b>
<b>William Branch</b>	<b>COE-Water Management</b>
<b>Cindy Henriksen</b>	<b>COE-RCC</b>
<b>Bolyvong Tanovan</b>	<b>COE-RCC</b>
<b>Doug Arndt</b>	<b>COE-P</b>
<b>Col. R. Slusar</b>	<b>COE-Portland District</b>
<b>Lieut. Col. W.E. Bulen, Jr.</b>	<b>COE-Walla Walla District</b>
<b>J. William McDonald</b>	<b>USBR-Boise Regional Director</b>
<b>Judith Johansen</b>	<b>BPA-Administrator</b>
<b>Greg Delwiche</b>	<b>BPA-PG-5</b>

*Marv S. Yoshinaka*

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

**DATE:** August 10, 1999

**SUBJECT:** Snake River Flows for August 12 through August 22, 1999

### **SPECIFICATIONS:**

#### **Lower Granite Dam**

Dworshak Operations - For the period of August 12 through August 22, maintain Dworshak outflow at a daily average of 15 kcfs and 47 degrees Fahrenheit. The USFWS will continue to monitor the impacts of the lower temperature on hatchery operations. Based on the outcome of this monitoring, modification to temperature may be required. The past week's requested temperature of 47 degrees F. was not met, outflow temperatures have been higher than requested, near 49 degrees F.

Brownlee Operations – At a minimum pass inflow through August 22.

**JUSTIFICATION:** Passage index sampling indicates that sub-yearling passage is continuing in high numbers at the Snake River projects. Passage at Lower Granite Dam continues at levels similar to the past week. Results of research on sub-yearling fall chinook indicate that increased flow and decreased water temperature increases survival and improves passage. In addition, review of historical adult conversion rate data for the Snake River indicates that adult conversion rates have improved after 1992 with higher August flows when compared to the prior period in which Dworshak flows and Snake River flows were higher in September (table attached). NMFS and USFWS have agreed with the biological rationale for this request.