

SYSTEM OPERATIONAL REQUEST: #2004-8

The following State, Federal, and Tribal Salmon Managers have participated in the preparation and support this SOR: U.S. Fish & Wildlife Service, 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.

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|------------|-------------------------------|-------------------------------------|
| TO: | B. G. Grisoli | COE-NWD |
| | William Branch | COE-Water Management |
| | Cindy Henriksen | COE-RCC |
| | Witt Anderson | COE-P |
| | LTC Charles S. Markham | COE-Portland District |
| | LTC Kertis, Jr. | COE-Walla Walla District |
| | J. William McDonald | USBR-Boise Regional Director |
| | Stephen J. Wright | BPA-Administrator |
| | Greg Delwiche | BPA-PG-5 |



FROM: David A. Wills, Chairperson, Salmon Managers

DATE: May 5, 2004

SUBJECT: Lower Granite Dam Operations

SPECIFICATIONS:

Rather than pass fish in the primary bypass system at Lower Granite Dam, operate the Removable Spillway Weir (RSW) with 12 Kcfs training spill to reduce fish collection to that number that can be accommodated in the facility with safe loading into available barges.

This operation should not come at the expense of other fish protection measures being implemented in the hydrosystem.

JUSTIFICATION: Fish migrating from the Snake River have experienced some of the harshest conditions this year compared to recent past years. The Snake River Biological Opinion spill program has been pre-empted because of low flows and regional economic concerns. Thus far this year flow levels in the Snake River have mostly been well below 50 Kcfs. The recent flow increases in the Snake River over the last few days (from 50 to 70 Kcfs) have resulted in the significant movement of fish. Fish passage indices at Lower Granite Dam exceeded 800,000 in the Smolt Monitoring Program sample that ended at 0700 hours on May 5, 2004 (613,583 yearling chinook and 190,477 steelhead). Over 200,000 fish have been collected as of 1100 hours today. There were recent reports of elevated mortality at Lower Granite Dam in the sample collected on May 4 to May 5. At this time it is not known if that mortality was attributable to running the turbine units at the upper end, or above, the 1% efficiency range; or due to some collected debris in an orifice.

There is insufficient barge capacity to transport this number of fish from Lower Granite Dam. Consequently, fish are being bypassed back to the river after being collected and passing through the facility. Lower Granite Dam is equipped with a removable spillway weir that can be used with a minimal amount of training spill (12 Kcfs), which has been proven to be an excellent means of bypassing fish effectively around the hydroelectric project. It would be more prudent to provide these fish with this alternate means of bypass, rather than subjecting these fish to the collection and dewatering in the facility.

Presently, the Lower Granite Project is operating with 5 Units operational, with a project hydraulic capacity of approximately 100 Kcfs. However, according to project personnel the operation of Units 3 and 4 have unresolved issues. These two units are connected to the same transformer and when Unit 4 is brought on line after Unit 3 the project has been experiencing a ground fault. Consequently, assuring the reliability of the project to maintain a hydraulic capacity of 100 Kcfs is questionable.

Therefore, in conclusion, given the present conditions in the Snake River and the potential for imposing undue mortality on the 2004 juvenile migration, it is the recommendation of the Salmon Manager's to return fish to the river via the RSW with training spill at Lower Granite Dam.