SYSTEM OPERATIONAL REQUEST: #2005-2

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, Washington Department of Fish and Wildlife, NOAA Fisheries, Nez Perce Tribe, Shoshone-Bannock Tribes, and the Columbia River Inter-Tribal Fish Commission.

TO:	**B. G. Grisoli**	**COE-NWD**
	James D. Barton	**COE-Water Management**
	Cindy Henriksen	**COE-RCC**
	Witt Anderson	**COE-P**
	LTC Charles S. Markham	**COE-Portland District**
	LTC Randy L. Glaeser	**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: March 1, 2005

SPECIFICATIONS: The Salmon Managers listed above are requesting the following fishery operations at the Bonneville Project following the March 2 Spring Creek Hatchery tule fall Chinook release:

1. No operation of unscreened units at Bonneville Powerhouse I or II and follow the turbine operating priority in the Fish Passage Plan;

2. Operate Powerhouse II as first priority. Fully load PH II before operating PH I;

3. Operate turbine units within 1% of peak efficiency;

4. Operate juvenile and adult facilities according to criteria;

5. Beginning on the morning of March 3, operate the corner collector (B2CC) for a period of 5 days, to the morning of March 8. Provide a sixth day, to the morning of March 9, of B2CC operation and tailwater compensation if there are sufficient numbers of hatchery fish still passing the project. Presence of low hundreds of fish per day passage will be interpreted as "sufficient" for the provision of an additional day of protection. This assessment will be based on fish passage index numbers for the sample ending the morning of Tuesday March 8.

6. Concurrent with the operation of the B2CC, operate the Bonneville Project to maintain a minimum 12.5-foot project tailwater elevation. Based on last year's B2CC operation,

which produced TDG readings approaching 108%, a 12.5 foot minimum project tailwater should be sufficient to maintain a maximum level of 105 % TDG (factored for depth compensation) at the chum redds in the Ives Island complex, and on the Oregon shore to the Multnomah area.

7. We request that the Action Agencies use the flexibility in the system to accomplish this while maintaining the target elevation of 1255 feet at Grand Coulee by March 31 to accommodate drum gate maintenance planned by the Bureau of Reclamation.

JUSTIFICATION:

We recognize that we are entering a water runoff season with a lower than normal runoff forecast. With this in mind, this SOR is requesting flow and duration at levels well below what is normally requested by the salmon managers for full protection of the March release group at Spring Creek Hatchery. Because Grand Coulee must achieve a target elevation of 1255 by March 31, we believe that achieving some measure of fish protection by shaping the water that will be released for drum gate maintenance is appropriate and implementable.

Spring Creek Hatchery is scheduled to release 7.37 million tule fall Chinook by mid-day March 2, 2005. This represents one-half of the total production for brood year 2004. The overall importance of this stock to ocean and Columbia River commercial, sport and tribal fisheries has been previously documented in the requests for a total dissolved gas waivers submitted to the Oregon Department of Environmental Quality and Washington Department of Ecology. The Spring Creek Hatchery fall Chinook are an important buffer to ESA listed stocks present in ocean and Columbia River mixed stock fisheries. Because of the accelerated growth of the fish and increasing fish health concerns with the March release group, as well as the April and May groups, postponing the release is not an option. Releasing the fish on March 2 will allow the densities of the remaining fish to be reduced, better maintaining hatchery rearing protocols and ultimately better fish health.

In order to protect the most sensitive developmental stages of juvenile fall Chinook and chum salmon that are incubating downstream from Bonneville Dam in the Ives/Pierce Islands area and along the Oregon shore across from the Ives/Pierce areas, the total dissolved gas supersaturation levels over the redds should not exceed 105%, when factored for depth compensation. At the same time, the fishery agencies and tribes wish to provide adequate spill protection for the Spring Creek Hatchery release. To ensure the protection of incubating juvenile fall Chinook and chum salmon, while providing some protection for the Spring Creek Hatchery release, a minimum tailwater elevation of 12.5 feet should produce a total dissolved gas supersaturation level at, or below, 108%. This would mean that the TDG (with depth compensation) for the highest elevation (11.5 tailwater) chum redd on the Oregon shore below Bonneville Dam would be below 105%. The flow from PH II is preferred because it provides a buffer between the more highly saturated spillway/B2CC flow and the Ives/Pierce Islands area on the Washington shore. A field crew will be on the river measuring the TDG levels at the chum redd sites. If gas levels exceed those predicted and endanger the chum redds, the Corps will be notified to cease the B2CC operation.

If this SOR cannot be implemented as requested, please provide a written response to the Fish Passage Advisory Committee documenting the rationale for the actions taken.