SYSTEM OPERATIONAL REQUEST: #2000-6

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, National Marine Fisheries Service, Idaho Department of Fish & Game and the Columbia River Inter-Tribal Fish Commission.

TO: **Brigadier General Strock** COE-NPD

> William Branch **COE-Water Management**

Cindy Henriksen COE-RCC COE-P **Doug Arndt**

Col. Randall J. Butler **COE-Portland District** Lieut. Col. W.E. Bulen, Jr. **COE-Walla Walla District** J. William McDonald **USBR-Boise Regional Director BPA-Administrator Judith Johansen**

Greg Delwiche BPA-PG-5

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Mary Yoshinaka, Chairperson, Salmon Managers FROM:

DATE: March 21, 2000

SUBJECT: Reservoir operations to improve conditions for the juvenile salmon, spring migration

SPECIFICATIONS:

- Maximize water volume storage in Grand Coulee, Dworshak and Brownlee to enhance water availability for spring migrants while meeting the Bonneville flow constraint. If possible exceed the April 10, Biological Opinion reservoir target elevations.
- Reduce Dworshak outflow to 2 kcfs until flows are requested for the spring migration. Monitor the Peck USGS gage to assure that natural flows are sufficient to maintain 9 kcfs at Peck to facilitate the acclimation pond water supply to the Nez Perce tribe acclimation ponds.
- Reduce outflow from Grand Coulee to maintain flows of 170 kcfs, or minimum tailwater of 15.7 feet (as requested in SOR # 2000-1) at Bonneville and store inflow in excess of the Bonneville flow requirement. Store volume until flows are requested for the spring migration.
- Implement an instantaneous minimum flow of 105 kcfs at Priest Rapids with a gradual 1 kcfs per hour ramping rate. Maintain this operation until flow augmentation for spring migrants is requested. Flows should not be decreased to avoid stranding of juvenile fall chinook emerging below Priest Rapids at Vernita Bar.

JUSTIFICATION:

Flood control and power operations through the spring and summer have resulted in

forecasted flows which indicate that flows at the Lower Granite project will be lower than Biological Opinion flow targets for a large part of the historical spring migration period. Adequate flood control space is available in the Snake and Columbia River basins to allow for additional storage between now and April 10, or the beginning of the spring migration. Maintaining higher reservoir elevations through the end of March and through the middle of April will allow a naturally increasing hydrograph without decreases in flow during the migration. River operations and circumstance experienced to this point will affect the ability to provide adequate spring migration flows, particularly in the Snake River. Maximizing storage, above the Biological Opinion targets elevations for April 10, until spring migration flow augmentation is requested, will provide higher flows in the lower Columbia River. This is intended to mitigate the lower than target flows migrants are expected to experience in the Snake River portion of their migration.

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