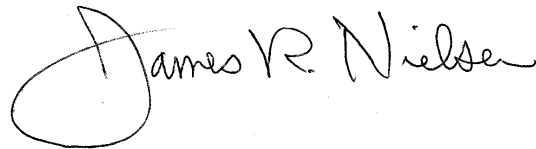


SYSTEM OPERATIONAL REQUEST:#98-6

TO: **Brigadier General Griffin** **COE-NPD**
 William Branch **COE-RCC**
 Cindy Henriksen **COE-RCC**
 Bolyvong Tanovan **COE-RCC**
 Dave Geiger **COE-P**
 John Keys III **USBR-Boise**
 Jack Robertson **Acting BPA-Administrator**
 Greg Delwiche **BPA-PGP-5**
 Mark Maher **BPA-PG-5**



FROM: **Jim Nielsen, Chairperson, Salmon Managers**

DATE: **March 10, 1998**

SUBJECT: **Reservoir Operations and flood control operations Brownlee, Grand Coulee and Canadian Operations**

SPECIFICATIONS:

- Begin refill of Brownlee Reservoir immediately. Reduce Hells Canyon outflow to fill the reservoir while maintaining the required protection for fall chinook redds. Strive to refill Brownlee to elevation 2077 ft by March 31. Maintain full pool at Brownlee and pass inflow until the spring migration begins.
- Shift USBR flood control releases in March from the Upper Snake River to April and May to benefit juvenile fish migrations.
- The USBR, COE and BPA should develop a plan, and submit it to the fishery management agencies as soon as possible, that delivers the full volume of spring and summer flow augmentation as required in the NMFS Biological Opinion.

JUSTIFICATION:

The March final runoff volume forecasts have decreased at all major projects except for Brownlee. This has resulted in increased flood control elevations for most project reservoirs. The federal operators and regulators did not provide SSARR projected flow or reservoir operations prior to the Technical Management Team meeting. However, the revised flood control elevations for Grand Coulee from elevation 1258 to 1270 ft for the end of April flood control elevation will result in extremely low flows in April. The agencies and tribes began requesting conservative reservoir draft operations in January. Several SORs have been submitted requesting flood control shifts, revised refill operations and accelerated drumgate

work at Grand Coulee. The operators and regulators pursued the draft of reservoirs below flood control and upper rule curve operations throughout the fall and winter. Requests to shift outflows from March to April for Canadian projects have been rejected. The result has been the present situation in which April flows will be extremely low because of reservoirs refilling to flood control elevations. It is unlikely that the NMFS Biological Opinion reservoir elevation target for either Grand Coulee or Dworshak will be met by April 20 or June 30. Since the requests from agencies and tribes have been consistently rejected, we are requesting that the operators and regulators provide a detailed plan which specifies how all of the Biological Opinion volumes will be provided for spring and summer flow augmentation.

The flood control elevation at Brownlee for April has been modified to elevation 2066 ft. The available inflow projections indicate that with inflow of 22 kcfs/day to Brownlee and outflow of 9 to 12 kcfs, the project can reach an elevation of 2077 ft by March 31. This will improve the flow for migrating juveniles in April and potentially later in the spring. The intent is to shift all possible March flow to the spring migration period while still protecting fall chinook redds. Flood control releases from the Upper Snake River should be shaped to enhance migration conditions for juvenile migrants.

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**The Salmon Managers are state, federal and tribal entities who have legally recognized mandates and jurisdictions to manage salmon resources in the Columbia River Basin. The following have participated in the preparation of this SOR: Oregon Department of Fish & Wildlife, National Marine Fisheries Service, Columbia River Inter-Tribal Fish Commission, U.S. Fish & Wildlife Service, Idaho Department of Fish and Game, Washington Department of Fish and Wildlife and the Shoshone Bannock Tribes.*

James R. Nielse
