

SYSTEM OPERATIONAL REQUEST: #2003-7

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, National Marine Fisheries Service and the Columbia River Inter Tribal Fish Commission.

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FROM: David A. Wills, Chairperson, Salmon Managers

DATE: April 17, 2003

SUBJECT: Priest Rapids Seasonal Flows

SPECIFICATIONS:

- Starting April 21, 2003 begin providing flows at Priest Rapids up to the Spring Biological Opinion Flow Objective of at least 135 Kcfs at Priest Rapids Dam; by April 24, 2003 outflows should be at the 135 Kcfs Flow Objective and be maintained through the end of June.
- Maintain weekend flows at McNary of not less than 80% of the previous five-day average.
- Refill Grand Coulee Reservoir by the July 4th weekend if flow augmentation to meet summer flow objectives is not needed until after July 4th.

JUSTIFICATION:

Given the STP model run (4/08/03) based on an increased water supply volume, projected flows from April 15th to June 30th, 2003 for the Mid Columbia (at Priest Rapids) show flows peaking from mid May through mid June, followed by a sharp decline in flows during the second half of June in order to refill the Grand Coulee project by the end of the month. This projected peak in flow is not consistent with the peak of fish passage through the Mid Columbia based on observations from past years' (see

graph). In addition, there is significant concern regarding the impact that reducing flows in the Mid Columbia during the second half of June will have on flows in the lower Columbia. The second half of June is a significant passage period in the lower Columbia for juvenile fall chinook from the Hanford Reach. The warmer winter this year has resulted in an earlier date of emergence for these fish, and very likely will result in an earlier migration for this population. Historic information shows that on average over 40% of fall chinook have passed McNary Dam by the end of June (see graph below). Consequently, reducing flows in the second half of June to refill Grand Coulee is not recommended.

We believe that it would be more advantageous to both spring migrating chinook and steelhead from the Mid Columbia and summer migrating fall chinook from the Hanford reach migrating through the lower Columbia, as well as Snake River stocks and Mid Columbia stocks in the lower River during the second half of June, to shape the projected flows. The flows should be shaped to maintain at least the 135 Kcfs Spring Biological Opinion Flow Objective from April 24th through the end of June and provide a peak discharge in mid May if additional water is available.

The following illustration displays the flow-shaping plan outlined in this SOR. Maintaining flows of 135 Kcfs through the last one-half of June will provide water to the Lower Columbia River at a time when flows are projected to decrease as a result of reservoir refill. The intent of the flow peak during mid May is to provide additional water for the historical (1985-2002) period of 50% passage for steelhead at Rock Island Dam.



