

SYSTEM OPERATIONAL REQUEST: #2004-5

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 13, 2004

SUBJECT: Flow Priest Rapids Flows, Spill at Bonneville Dam

SPECIFICATIONS:

- Starting April 15, 2004 and continuing until further notice, release water at Grand Coulee Reservoir to begin providing flows of 110 Kcfs at Priest Rapids Dam seven days per week with minimum hourly flow fluctuations.
- Increase spill at Bonneville Dam to at least 75 Kcfs until either water conditions or the end of chum salmon emergence; allow for spill to the total dissolved gas cap.

JUSTIFICATION:

The federal operating agencies would like to increase flows from Grand Coulee Dam in order to facilitate the Bureau of Reclamations drum gate work. This request is in advance of the start date of the present Hanford Reach Protection Program for weekend flow levels, and in advance of when flows would be requested based on steelhead passage numbers. The Salmon Managers have concern regarding increasing flow at Priest Rapids prior to the Hanford Reach Protection Program and need to take the current water supply forecast into consideration.

Decreasing Water Supply Forecasts (WSF) over the winter of 2004 have resulted in concern over the impact on May/June flows if water is released too soon from Grand Coulee and the WSF

further decreases relative to current levels. Providing weekday and weekend flows of 110 Kcfs beginning on April 15th at Priest Rapids will allow Grand Coulee to immediately begin drafting to the 1255 foot level needed for drum gate work while still conserving some water in the event that Water Supply Forecasts continue to decrease. This will conserve water for use in the Middle and Lower Columbia Rivers during the months of May and June, as these months are significant periods of passage for juvenile yearling chinook and steelhead.

It is anticipated that the recommended discharge at Priest Rapids Dam should facilitate a Bonneville Tailwater elevation of at least 15.0 feet, which will allow for spill at Bonneville Dam to be increased to at least 75 Kcfs until either water conditions (flow and tailwater elevations) or the end of chum salmon emergence below Bonneville Dam allow for spill up to the total dissolved gas cap. Increased river flow and spill levels will also benefit currently migrating wild fish from the John Day, Yakima, and Walla Walla Rivers.

Based upon preliminary estimates, the number of spawners in the Hanford Reach was near historical records. The especially high production from these spawners has resulted in high numbers of juveniles currently rearing in the Hanford Reach. To help avoid stranding and entrapping these juveniles, flow fluctuations should be minimized. All agencies and tribes agree that flow fluctuations should be minimized to the greatest extent possible. The CRITFC and the USFWS recommend no more than a plus or minus 10 kcfs fluctuation around the 110 kcfs daily average flow recommendation to help protect millions of emerging Hanford Reach fall chinook fry. The WDFW and the NOAA Fisheries support no more than a plus or minus 30 kcfs fluctuation around the 110 kcfs daily average flow recommendation until April 20th when the weekend provisions of the Hanford Reach Protection Program takes effect.

This requested operation is intended to facilitate the USBR drum gate maintenance, the conservation of water for fish passage and for spring migration flows, chum salmon incubation and for the protection of Hanford Reach juvenile fall chinook. As the future water supply outlook becomes clearer, the Salmon Managers will provide further recommendations as to flows from Priest Rapids Dam.