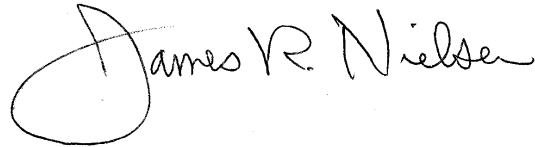


## **SYSTEM OPERATIONAL REQUEST: #98-33**

**TO:** Brigadier General Griffin COE-NPD  
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**FROM:** Jim Nielsen, Chairperson, Fish Passage Advisory Committee

**DATE:** August 25, 1998

**SUBJECT:** Operations at Bonneville Dam September 1-18.

### **SPECIFICATIONS:**

At a minimum, the USFWS requires the operation of Bonneville Powerhouse II Units 11, 17 and 18 from 0600 to 1700 hours daily, September 1 – 18, for the purpose of facilitating tule fall chinook trapping. The recommended operation of the Bonneville project, to maximize both juvenile and adult survival during this time period, is to operate Powerhouse II to full capacity and to avoid operation of Powerhouse I.

### **JUSTIFICATION:**

Beginning in 1986, Bonneville Pool Hatchery (BPH) tule fall chinook have been trapped at Bonneville Dam by United States Fish and Wildlife Service (USFWS) personnel at the trapping facility on the Washington shore fishway to secure supplemental broodstock for Spring Creek National Fish Hatchery (NFH) in years when the run size was projected to be low and the impacts from planned fisheries resulted in pre-season projected hatchery returns that were below the escapement goal. The vast majority of BPH tule fall chinook crossing Bonneville Dam are destined for Spring Creek NFH. BPH tule fall chinook were trapped in 1986-1994. The 1998 forecasted BPH return of 14,200 adults to the Columbia River is very low relative to recent returns and the Columbia River fishery co-managers are now proposing that a BPH broodstock trapping program be reinitiated at Bonneville Dam for 1998. The BPH trapping program would serve to help achieve several conflicting management objectives, including meeting the Spring Creek NFH escapement goal and targeting the treaty Indian fall season fisheries as much as possible on the peak of the upriver bright fall chinook run where chinook to steelhead ratios are most favorable, thereby meeting fall chinook allocation goals for the tribal fisheries with the least possible impact on listed steelhead.

A trapping efficiency rate of 15% of the BPH fall chinook that are projected to pass Bonneville Dam has been the assumption used in the modeling of the various management options that included BPH trapping that were presented in the 1998 fall season BA. To achieve this level of trapping efficiency for BPH tules at Bonneville Dam, it is anticipated that the 1998 BPH trapping operation would have to occur during the approximate time period of September 1 – 18, which is the period of peak BPH tule migration at Bonneville Dam. Typically, about 80% of the BPH tule run passes Bonneville Dam during this time period. Trapping would be conducted for 10 – 12 hours per day, or longer, depending on availability and timing of tule passage. To achieve the 15% level of trapping efficiency, it will also be necessary to request and receive attraction flows through the Bonneville Dam Powerhouse II to stimulate increased fish migration through the Washington shore ladder and trapping facility as has been done in past years.

Concerns regarding the impacts of the proposed flow manipulations on juvenile downstream migrants are reduced since the proposed 1998 BPH trapping operation occurs when the peak juvenile chinook migration and migration of other species and stocks of concern are decreasing. The remaining proportion of juvenile outmigrants of other species and stocks of anadromous salmonids left to pass Bonneville Dam is even less. The potential impact to these few remaining late outmigrating juveniles is outweighed by the potential impacts to adults.

In summary, the benefits to be gained from the proposed 1998 BPH trapping operation, as outlined above, appear to significantly outweigh any negative impacts that might be caused by the trapping operation. Furthermore, the proposed 1998 BPH trapping operation has the strong support of the Columbia River fishery co-managers to help achieve conflicting management objectives for the 1998 fall season.

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- *The following State and Federal Salmon Managers have participated in the preparation of this SOR: Oregon Department of Fish & Wildlife, National Marine Fisheries Service, U.S. Fish & Wildlife Service, Washington Department of Fish and Wildlife.*