

## **Fall / Winter Update to the 2004 Water Management Plan**

### ***Introduction***

The Fall / Winter Update is part of the annual Water Management Plan (WMP). It is intended to supplement the WMP with information about fall and winter operations that is not available when the WMP is written in October, before any information is available about fall/winter water supply conditions.

### ***Current Conditions***

This water year (October 2003 – September 2004) has started off mixed with some parts of the basin wetter than normal and with some parts dryer than normal.

- Information regarding precipitation and runoff in early October is limited to an El Nino/Southern Oscillation (ENSO) forecast. This year, the October Southern Oscillation Index (SOI) was near zero, indicating a near neutral condition this year.
- The Corps December April – July forecast for the North Fork Clearwater Basin was 2.6 Maf 99% of normal
- The Corps December April-August forecast for Libby is 6.9 Maf 111% of normal.
- The National Weather Services January Early Bird April – July forecast for Lower Granite was 19 MAF 90% of Normal.
- The National Weather Services January Early Bird April – August forecast for The Dalles was 90 MAF 96% of Normal.
- Precipitation conditions through October and November 2003 are mixed. The National Weather Service reported that November precipitation was: 152 percent of normal (1971-2000) at the Columbia River above Grand Coulee, 40 percent of normal at the Snake River above Ice Harbor, and 118 percent at Columbia above the Dalles.
- Snowpack is also mixed for this time of year. As of January 5th, current snowpack in the Columbia River basin ranges from 306 percent to 2 percent of normal for this time of year.

### ***Chum Spawning Flows***

The Action Agencies started the chum spawning operation on November 3. The NMFS 2000 BiOp states that a chum operation will commence “If the best hydrologic data available by early October indicate that precipitation, runoff, and reservoir storage are likely to support the operation from the start of spawning (late October or early November) until the end of emergence...”

Also chum salmon were not observed in the area until November 6th. Based on the current hydrologic conditions and presence of fish, the TMT agreed to begin the chum operation several days later than the November 1 start date specified in NOAA Fisheries’ Biological Opinion.

The alternative operation chosen was to initiate a stable tailwater elevation in the Ives Island area beginning with an initial targeted daytime tailwater elevation was 11.2 –11.5 feet November 3rd. This elevation was increased to 11.3 – 11.6 feet on November 13. The elevation was increased to 11.4 – 11.7 feet on November 24. On December 12 the range was increased to 11.6 - 11.9 ft. On December 16 the range was increased to 11.8 to 12.1 ft.. On December 16 until December 19th the daylight time period was reduced to from 0700 –1400 in order to be able to evacuate water from the lower river On December 31 the operation was changed from a limiting spawning access to a redd projection operation. The minimum tailwater level was set at 11.8 ft. The alternative operation did not meet the detailed specifications of SOR 2003-15 submitted by the fisheries managers, but this stepwise increase in elevation has been consistent with fish observations in the area, and an increase in local precipitation.

The Action Agencies intend to recommend the “no later than” November 1 start date be modified to a planning date for future years. Another recommendation is that the start of the chum operation be contingent upon the presence of chum salmon in the Ives Island Area. These recommendations will be made in the 2004 implementation plan.

### ***Burbot Spawning Flows (Non-BiOp Action)***

A draft SOR (2003-3) received October 21, 2003 from the U. S. Fish and Wildlife Service has requested that starting Dec 1, 2003 and continuing until December 22, 2003 flows from Libby be limited to 15 kcfs and follow established ramp rates. From December 23 until January 30, 2004 outflows from Libby should be between 4 and 10 kcfs. Currently Libby is releasing 20 kcfs. The Action Agencies plan on releasing 20 kcfs until an outflow level of 10 kcfs can be maintained. Outflow from Libby was reduced to 10 kcfs December 19. On January 5 outflow was increased to 12 Kcfs.

## ***Flood Control***

Projects will be operated for flood control in accordance with the Columbia River Treaty Flood Control Operating Plan. The BiOp has requested that an SOI forecast at Libby be used in November and December as guidance for in-season management. The SOI forecast at Libby will be used for flood control operations decisions in 2004. The Corps will use the regression forecasts (Wortman-Morrow) that have been in use since 1983 to determine operational flood control drafts in 2004. Based on the current forecast the Corps is targeting an end of December flood control elevation of 2411 ft. at Libby.

## ***Spring Creek Hatchery Release (Non-BiOp Action)***

The U.S. Fish and Wildlife Service typically releases between 7 and 8 million tule fall chinook fry from the Spring Creek National Fish Hatchery upstream of Bonneville Dam in March. In 2004 the action agencies plan to operate Bonneville Dam with a powerhouse 2 priority, to operate all units with fish screens, and to operate the bypass facility in order to provide project passage for this hatchery release. Discussions are still ongoing at this time as to what combination of spill and/or use of the new Bonneville Corner collection will be.

## ***Vernita Bar spawning operation (Non-BiOp Action)***

The final official fall chinook redd survey was conducted on November 23, 2003. A total of 483 redds were counted, including 37 redds above the 65 kcfs elevation. Therefore, as provided in the Vernita Bar Settlement Agreement, the Critical Elevation was set at 70 kcfs. Flow will be measured at the USGS gauge downstream of Priest Rapids Dam. This protection level will be in effect through emergence in spring 2003.

## ***Snake River Zero Flow (Non-BiOp Action)***

According to the Lower Snake projects operating manuals "From December to February, "zero" minimum project discharge is permitted on a limited basis. Under an agreement between the Corps of Engineers and the fishery agencies, zero riverflow is allowed for water storage during low power demand periods (at night and on weekends) when there are few, if any, actively migrating anadromous fish present in the Snake River...Water stored under zero riverflow conditions may maximize power production from the Columbia River Basin system, but zero riverflow operations are not recommended at Lower Snake projects when fish are actively migrating in the Snake River."