

Corps Planned Operation at Bonneville Dam for Spring Creek Hatchery releases

Background:

The Spring Creek National Fish Hatchery released 7.6 million subyearling fall Chinook salmon into the Columbia River upstream of Bonneville Dam on March 5 & 6, 2008. The Corps, BPA, USFWS, and NOAA Fisheries technical and policy staff held meetings in February to discuss biological information, project operations and potential tests for released fish. A System Operational Request (SOR) was received on February 26, 2008, and was discussed in TMT and IT. Consensus was not reached on the spill portion of the project operation at TMT and IT. The Federal agencies position was that spill would not be provided in 2008 because, based on the best available data, corner collector survival is higher than any other passage routes, there is uncertainty about biological benefit from additional spill for returning Spring Creek adults, and questions concerning the 2008 test protocol. Further discussion identified that there is biological uncertainty in the available data and concerns about overcrowding potentially contributing to mortality.

Federal Agencies developed a proposed operation in conjunction with representatives from the Warm Springs Tribe, the Yakama Indian Nation, the Nez Perce Tribe, and the Umatilla Tribe. This proposal has the endorsement and support of the above mentioned parties. This proposal was then shared with the States of Oregon, Washington, and Idaho and we considered their views and concerns in furthering the proposal.

After fully considering the technical input received and subsequent policy discussions, the Corps has decided to operate Bonneville project in the following manner.

2008 Operations:

Starting on March 5 at 1600 hours, Operate the second powerhouse corner collector (5 kcfs discharge)

Starting on March 6 at 0600 hours

1. Operate the second powerhouse as first priority.
2. Operate fish passage facilities in accordance with the Fish Passage Plan (FPP).
3. Operate second powerhouse turbine units toward the low end of the 1% of best efficiency range until 0600 hours March 10.
4. Operate first powerhouse Minimum Gap Runner (MGR) units on a first on/last off basis when that powerhouse operates, and operate the units within the 1% of best efficiency range. Follow FPP unit operating priorities at both powerhouses.

Starting midnight on March 6 and culminating at 0600 hours on March 10, provide 36 kcfs spill using a modified spill pattern that will provide good fish passage conditions. In addition, 2 kcfs spill will be provided during daytime hours at the end spill bays for adult fish attraction,

according to the FPP. Every other spillbay will be open 2 ft at spillbays 3-17. Adequate flows will be provided to protect incubating chum salmon downstream of Bonneville Dam from the effects of elevated Total Dissolved Gas levels.

Biological Rationale in Support of the Operation:

One relevant biological consideration is the issue of crowding at the bypass, because of the concentrated fish release. This is not a large concern, but in the interest of compromise and optimizing conditions for fish we agreed to spill for this purpose for one year only, as part of a broader multi-year agreement. Based on advice from NOAA Fisheries and our biologists, we believe that a spill of 35 kcfs would help to alleviate the crowding issue.

We remain convinced, based on the available data, that there may be no biological benefit from the additional spill for returning Spring Creek adults. However, we recognize that there is biological uncertainty in the available data, and have heard the differing views of the parties on this. In addition, we have heard from the States and Tribes regarding the importance of these fish for tribal and offshore fisheries.

The Corps believes that these operations will result in acceptable survival for fish passing the project and relieve crowding in gatewells that was implicated in fish mortalities in 2007.

Our priority is to reprogram the Spring Creek Hatchery production so that this release and early spill are unnecessary. We believe there is no need for further testing to inform future operations. Nevertheless, some information may be collected because the fish have already been marked. The sovereigns and the action agencies will work together towards achieving the reprogramming goal. The Corps' Reservoir Control Center issued teletypes to cover 2008 operations.

Future years Operations:

Next year (2009) and beyond, spill would not be provided, but the federal agencies will work with the sovereign parties to stagger fish releases to minimize crowding. In the meantime, we will work to address sources of mortality, including crowding. A mutual commitment is expected from the sovereign parties to join us in supporting and implementing Spring Creek reprogramming as early as 2010, but no later than 2012.