

SYSTEM OPERATIONAL REQUEST: #2003-6

The following State, Federal, and Tribal Salmon Managers have participated in the preparation and support this SOR: U.S. Fish & Wildlife Service, National Marine Fisheries Service, Idaho Department of Fish and Game, Oregon Department of Fish and Wildlife, the Washington Department of Fish and Wildlife and the Columbia River Inter Tribal Fish Commission.

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FROM: David A. Wills, Chairperson, Salmon Managers

DATE: April 8, 2003

SUBJECT: Lower Columbia River Spill Program

SPECIFICATIONS:

- Beginning on April 14, 2003, spill daily at Lower Columbia River projects according to the 2000 Biological Opinion up to the 120% spill cap.
- At McNary Dam spill should occur between the hours of 1800 and 0600 and instantaneous volumes should only be limited by the gas cap.
- Spill daily at John Day Dam at 60% of instantaneous flow during nighttime hours at flows up to 300 Kcfs, and up to the 120% gas cap at flows greater than 300 Kcfs. Spill should occur from one hour before sunset to one hour after sunrise.
- Spill at The Dalles Dam shall occur for 24 hours daily at a level equal to 40% of instantaneous flow.
- Spill at Bonneville Dam shall be up to the 120% gas cap during nighttime hours, and 75 Kcfs or up to the gas cap during daytime hours for adult passage evaluation.

JUSTIFICATION:

The passage of juvenile fish into the Lower Columbia River is presently occurring. McNary Dam sampling is occurring on alternate days and has shown the presence of juvenile yearling chinook, subyearling chinook and steelhead.

At John Day Dam passage numbers have increased steadily over the past week. While the second half of April is not normally characterized as a significant passage period for spring migrating juveniles as a whole, it does represent a period of time when significant proportions of specific stocks are migrating. Stocks migrating from the John Day, Umatilla and Yakima River basins dominate the second half of April. To-date PIT tagged wild spring/summer chinook from the Yakima and Walla Walla rivers have been detected at McNary Dam. Historic information for passage timing at John Day Dam indicates that the presence of Umatilla and John Day stocks is expected during the early part of April based on the historic passage (1998-2002) (see Figure). If spill is not initiated early enough during the migration season there is a higher likelihood that these stocks will pass under no spill conditions.

Similar to patterns observed at upstream sites, passage indices have been steadily increasing at Bonneville Dam over the past few days. As of April 3, some 13 million hatchery fish have been released above McNary Dam, with another 22 million expected in the following two weeks. All of this information together supports the initiation of spill. CRITFC advocates its own spill pattern and level in its 2003 River Operations Plan but supports this operation as a good start.

Yearling Chinook Passage Timing at John Day Dam

