

SYSTEM OPERATIONAL REQUEST: #99-1

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

TO:

Brigadier General Griffin	COE-NPD
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Marv S. Yoshinaka

FROM: Marv Yoshinaka, Chairperson, Salmon Managers

DATE: March 9, 1999

SUBJECT: Spill at Bonneville Dam for the Spring Creek Hatchery Release

SPECIFICATIONS:

The Salmon Managers are requesting the following operation at the Bonneville Project for the ten-day period (March 18-28) following the March Spring Creek Hatchery tule fall chinook release:

1. No operation of unscreened units at Bonneville powerhouse I or II and follow the turbine operating priority in the Fish Passage Plan;
2. Operate Powerhouse I as first priority. Fully load PH I before operating PH II;
3. Spill to the 120% total dissolved gas supersaturation cap (as measured at the Warrendale monitor) 24 hours per day;
4. Operate Bonneville II ice and trash sluiceway only for ice and trash removal;
5. Operate turbine units within 1% of peak efficiency; and,
6. Operate juvenile and adult facilities according to criteria.

These operations are to begin at 2000 hours on March 18 and continue through 2000 hours on March 28, 1999.

JUSTIFICATION:

Spring Creek Hatchery is scheduled to release 4.2 million tule fall chinook on the morning of March 18, 1999. Additional releases of this stock will occur during the spring and summer migration season. The overall importance of this stock has been previously documented and recently reported in the Oregon Department of Environmental Quality request for a total dissolved gas waiver (Attached).

The current performance of the Bonneville Project is significantly below fish passage standards. Therefore, spill is necessary to begin to achieve fish passage standards. Spill at Bonneville is also the safest route available for downstream migrating juvenile salmonids. The 75,000 cubic foot per second (cfs) daytime spill cap was put in place to protect adult salmon. Recent studies of radio tagged adult chinook salmon have shown that spill up to the dissolved gas limit has little potential to increase fallback. In addition, these studies have shown that some of the adult fish that fall back initially migrate well past Bonneville Dam and its hydraulic effects before turning around and falling back past the project. The fish are predestined to fall back and need a safe passage route. Spill is presently the safest route for an adult fish to fall back past Bonneville Dam.