SYSTEM OPERATIONAL REQUEST: #2012-4

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

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Paul Warm

FROM: Paul Wagner, FPAC Chair

DATE: August 15, 2012

SUBJECT: Truck Transport from McNary Dam

OBJECTIVE: Do not initiate truck transport operations at McNary Dam on August 17, 2012.

SPECIFICATIONS: Delay the Start of truck Transport at McNary Dam until further notice. Due to relatively high existing water temperatures in the holding raceways at McNary Dam coupled with a very warm forecast in the Tri-Cities region, conditions would not be favorable to collect, hold for up to 48 hours, and transport by truck until conditions can be re-evaluated.

JUSTIFICATION: With regard to summer transportation at McNary Dam, the 2012 Fish Operations Plan (FOP) states:

Transportation will be initiated at McNary Dam between July 15–30 per the 2010 Supplemental BiOp (RPA 30, Table 4) and in coordination with NOAA Fisheries and the TMT. Fish will be transported from McNary Dam by barge through August 16, then transported by truck every other day. All fish collected will be transported except those marked for in-river studies. Fish are expected to be transported through September 30. The presence of factors such as excess shad, algae or bryozoans that can clog screens and flumes may result in discontinuing transport operations at McNary Dam before September 30. Detailed criteria for McNary transport are contained in the FPP, Appendix B.

Transportation operations may be adjusted for research purposes, due to conditions at the collection facilities, or as a result of the adaptive management process (to better match juvenile outmigration timing and/or to achieve or maintain performance standards). If new information indicates that modifying (or eliminating) transportation operations at McNary Dam is warranted, adaptive management will be used to make appropriate adjustments through coordination with the FPOM/TMT.

The recommendation to not implement truck transport at McNary Dam on August 17 is based on the following information.

- Average water temperatures in the McNary Forebay have ranged between 68.5-68.9°F from August 8-14, with daily maximum temperatures as high as 69.5°F. Average water temperatures in the McNary tailwater have ranged between 68.6-69.0°F from August 8-14, with daily maximum temperatures as high as 69.2°F (<u>http://www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/201208.lcol.html</u>).
- The August 3-9, 2012 McNary Dam Temperature report issued by the PSMFC Smolt Monitoring Program recorded daily average water temperatures in Raceway #1 between 67.8-69.7°F with daily maximum temperatures between 69.1-71.8°F (see attachment).
- 3. Daily maximum air temperatures in the Tri-Cities area are expected to approach or exceed 100°F over the next five days, making it likely that water temperatures will continue to increase.
- 4. Special sampling protocol has been implemented at the Bonneville and John Day Dam which reduce sampling of juvenile fish to just two days a week at those facilities given the warm water conditions present at those facilities. While no such protocol currently exists for the McNary facility, the fish managers believe it is not prudent to hold fish for an extended period at this facility, especially when the flow in the river is in the 200 kcfs range.
- 5. A new juvenile outfall has been constructed at the McNary project which should improve survival at this project.

There is very little data on the relative benefits of transport during this time period because all previous studies conducted at McNary ceased prior to this date. Environmental conditions at the project form the basis for this decision. However, the improvements made to make the river environment a safer route of passage during this past decade deserve mention. These include:

McNary Dam:

24 hours spill Relocated bypass outfall

John Day Dam:

Top spill weirs Improved spill patterns Improved avian wire array 24 hours spill

The Dalles Dam:

Spillway wall and associated improved spill patterns Improved ice and trash sluiceway chain gate opening patterns Improved avian wire arrays

Bonneville Dam:

Second Powerhouse corner collector (surface bypass) Improved spill patterns (increased minimum openings) Increased spill volume Finished minimum gap runners at the First Powerhouse Heavy-up on Pikeminnow program

The signatories to this SOR believe that due relatively high existing water temperatures at McNary Dam (Forebay, Tailwater, Raceways, etc.) coupled with a very warm forecast in the Tri-Cities region, conditions would not be favorable to collect, hold, and transport by truck until conditions can be re-evaluated. Future evaluations of whether to begin, delay, or discontinue truck transport at McNary dam will consider factors such future water temperatures as well as excessive numbers juvenile of shad that can result in discontinuing transport operations at McNary Dam before September 30.