State, Federal and Tribal Fishery Agencies Joint Technical Staff

US Fish and Wildlife Service

Columbia River Inter-Tribal Fish Commission

Idaho Department of Fish and Game

Oregon Department of Fish and Wildlife

Washington Department of Fish and Wildlife

December 16, 2003

Robert E. Willis, Chief Environmental Resources Branch Department of the Army Portland District, Corps of Engineers PO Box 2946 Portland, OR 97208-2946

Dear Mr. Willis:

The installation of the new corner collector at Bonneville Power House 2 will require a study to determine its impact on juvenile passage at Bonneville Dam as a whole. The first priority of the study should be to determine the passage efficiency and survival for the corner collector. Next should be a determination of the survival through other routes of passage at Bonneville. The 2004 study should employ methodologies that best mimic run of the river fish. To date this would either require the use of pit tagged fish marked upriver or radio tagged fish released upstream from the project. Due to detection difficulties below Bonneville only radio tagged fish would be practical. With Powerhouse 2 prioritization it will be difficult to determine survival at Powerhouse 1 with any statistical power due to the low fish passage. However, the spillway and Powerhouse 2 should pass enough test fish to generate statistically sound survival estimates. The concern for the study, and the reason for this letter, is to outline the operations that should be tested.

We believe that BiOp operations should be the baseline against which other operations should be assessed. However, recent studies of adult salmon have shown that the daytime spill levels at Bonneville were probably overly conservative in terms of providing protection for adult fish fallback. Therefore, we recommend increasing the daytime spill to a level of 120 kcfs and continue with the gas cap at night. This operation should be considered the modified BiOp operation with the old BiOp operation of 75/gas cap being the baseline to be compared.

We recommend a two-treatment test of the modified BiOp operation of 120 kcfs and gas cap at night versus the 75 kcfs daytime and gas cap at night. We would further recommend that two species be tested both yearling chinook and steelhead for the spring time evaluation. This would be the best test possible and would help generate information over a range of flows and operations to better determine the potential benefits of the corner collector.

However, the System Configuration Team has been discussing the difficulty of funding the current regional program and a two species, two treatment test would represent an increase in the cost from the proposed study design. We recommend that the COE outline budgets for alternative testing schemes. We recommend the following options in order of preference:

- 1) Two treatments with two species and route specific survival for both
- 2) Two treatments with yearling chinook route specific survival and enough steelhead for guidance information and project survival
- 3) One treatment of the modified BiOp operations and two species with route specific survival for both
- 4) One treatment of the modified BiOp operations and yearling chinook with enough steelhead for guidance information and project survival

We argue for the modified BiOp operations since the operation would be moving towards improved project survival (options 3 or 4). The spillway has been shown to be one of the highest survival passage routes at Bonneville. By increasing spill more juveniles will use this passage route. Further, 2004 is planned to be one of the last years of adult telemetry and it would be prudent to utilize this evaluation to further our understanding of the potential adult delay that has been noted in the Bonneville spillway during periods of high spill. We tentatively agree with the COE's assessment that yearling chinook are an adequate surrogate for steelhead survival -- post project passage -- for the reach from Bonneville tailrace to the 205 bridge. However, with the noted reach survival difference between yearling chinook and steelhead we caution against using yearling chinook as surrogates for steelhead for other studies and point out the need to verify the adequacy of this assumption. Therefore, in consideration of budget restraints, and the historic usage of yearling chinook as test animals of choice, we would recommend option 4 -- the one treatment test of modified BiOp operations using radio-tagged yearling chinook as the primary test species with enough steelhead marked to determine percent passage via corner collector and powerhouse 2. This recommendation was initially discussed and agreed to by the technical staff of all fisheries agencies and the tribes within the AFEP process.

Thank you for your consideration and we look forward to working within the NOAA fisheries regional forum to come to resolution on this difficult issue.

Sincerely,

David Wills, USFWS

David a Wills

Ron Boyce, ODFW

Rod Woodin, WDFW

Raymond R. Boyde

Rodney h Woodin

Cc: Rock Peters, COE
Blaine Ebberts, COE

Mike Langeslay, COE

Russ Kiefer, IDFG

Runell B. Kinfor

Tom Lorz, CRITFC