

# memorandum

DATE: December 5, 2005

REPLY TO: KEC-4  
ATTN OF:

SUBJECT: Supplement Analysis for the Watershed Management Program Final EIS (DOE/EIS-0265/SA-245)

TO: Jan Brady - KEWR-4  
Fish and Wildlife Project Manager

**Project Title:** Idaho Fish Screening Improvement - Challis Creek Diversions

**Project No:** 1994-015-00

**Watershed Management Techniques or Actions Addressed Under This Supplement Analysis**

**(See App.):** 1.15 Fish Passage Enhancement –Fishways, 4.23 Intake and Return Diversion Screens;  
4.25 Consolidate/Replace Irrigation Diversion Dams

**Location:** Private lands; north of Challis in Custer County, Idaho; at five locations (T14N, R19E, Sec.3;  
T14N, R19E, Sec.9; T14N, R19E, Sec.8; T14N, R19E, Sec. 7; and T14N R18E Sec. 4)

**Proposed by:** Bonneville Power Administration (BPA) and Idaho Department of Fish and Game (IDFG)

**Description of the Proposed Action:** This memorandum provides environmental clearance for five proposed diversion improvements in the Challis Creek drainage, identified above. At each SChaC-02, SChaC-03, and SChaC-04 location, the work calls for construction and installation of one instream fish passable diversion to include a tee-plate rock diversion weir that will complement an existing fish screen. The goal is to safely improve upstream and downstream fish passage to rearing and spawning habitat within the Challis Creek watershed. The passage improvements will provide thermal refuge habitat for both anadromous and resident fish and ensure no future losses to fish stocks from inadequate passage at these sites. The work will also halt any future adverse effects to the fishery at the project sites.

Work at SChaC-07/8 is to remove an existing unscreened diversion and consolidate water withdrawal into an existing screened diversion (SChaC-08). A bifurcation structure will be constructed behind the existing screen in the irrigation ditch and a penstock will be installed to deliver water to an existing pump location. A fish ladder will be constructed at the diversion and a fish screen will be constructed on the Highline Canal. The goal is to improve the fishery resource above a measured baseline for fish density in Challis Creek.

Work at SChaC-12 is to install a combination fish screen and water control structure that will preclude all life stages of fish from becoming entrained into an irrigation ditch, and eliminate erosion of the ditch bank in the same area. The proposed fish screen is a modular 18-inch- diameter, 6-feet-long drum screen and the water control structure is a head gate device that would allow flow adjustments to the ditch. The goal is to improve the fishery resource above a measured baseline for fish density in Challis Creek and a secondary goal is to control ditch flows.

**Analysis:** The NEPA compliance checklists for SChaC-02, SChaC-03, and SChaC-04 were prepared by Mr. Patrick Murphy, IDFG Fishery Biologist in Salmon, Idaho on November 22, and November 23, 2005 respectively.

The NEPA compliance checklist for SChAC-07/8 was provided by Mr. Lynn Stratton, IDFG Fish Screen Program Coordinator in Salmon, Idaho on November 30, 2005. The NEPA compliance checklist for SChAC-12 was prepared by Mr. Stratton on September 28, 2005. Information from these checklists meets the standards and guidelines for the Watershed Management Program Environmental Impact Statement (EIS) and Record of Decision (ROD).

The species listed under the Endangered Species Act (ESA) that could be in the project area are the Snake River sockeye salmon (t), Snake River spring Chinook salmon (t), Snake River steelhead (t), bull trout (t), and designated Critical Habitat - steelhead. The IDFG has engaged in a Section 6 Cooperative Agreement (dated January 17, 1995) with the U.S. Fish and Wildlife Service (FWS) that establishes a cooperative program for IDFG to carry out conservation and recovery activities for bull trout (and other threatened and endangered species). This agreement includes the take of species consistent with this agreement, emergency provisions as necessary, recordkeeping for the conservation of listed species, notification to the FWS of any change in circumstances, and other administrative and procedural provisions. These actions comply with the provisions and limitations of this Cooperative Agreement. There are no threatened or endangered plant or animal species that would be affected by the proposed actions identified above.

The IDFG secured an ESA Section 7 programmatic Biological Assessment from NOAA Fisheries, dated July 2003, that addressed activities associated with fish screens. A NOAA Fisheries concurrence letter, dated September 22, 2003, concludes that fish screen activities are not likely to adversely affect listed Snake River salmon and steelhead, designated critical habitat, or Essential Fish Habitat. The concurrence extends into the future without an end date.

Because of the proposed in-water nature at SChAC-02, SChAC-03, and SChAC-04, the IDFG assisted BPA in initiating ESA compliance in accordance with the Habitat Improvement Program (HIP) Biological Opinion for anadromous fish. Accordingly, IDFG submitted a HIP Form 1 for SChAC-02, SChAC-03, and SChAC-04 (dated October 18, October, 20 and October 20, 2005, respectively) that addresses applicable terms and conditions relevant to these proposed water diversion improvements. This includes the following: 1. fish passage is designed in accordance with Anadromous Salmon Passage Facility Guidelines and Criteria including an interactive design process with NOAA Fisheries engineering staff; 2. a prepared Operation and Maintenance Plan will be implemented; 3. a totalizing flow meter device will be installed on the diversion structures; 4. the design of the diversions will enable irrigators to comply with state water right rules and regulations; 5. the general construction conservation measures in section 2.2.1.1. of the HIP BO will be implemented; 6. the Catalogue of Stormwater Best Management Practices for Idaho Cities and Counties will be used; 7. fish will be isolated during construction of the diversion and screen and will continue to have free-flowing water; 8. measures will be taken to avoid discharging machinery fluids into the creek during the construction phase; 9. clean rip-rap rock materials are planned to be deposited instream; 10. sedges, willows, and other herbaceous plants will be planted to accelerate the revegetation process along stream banks; 11. spill prevention and control practices will be employed during construction; and 12. work will occur during season low flows and turbidity will be controlled. We believe the net effect to the aquatic system (listed fish) in the vicinity of the project will be negligible during project construction, when compared with long-term resource benefits.

Cultural resources work for SChAC-02, SChAC-03, SChAC-04, and SChAC-07/8 was performed by Ms. Laurie Mauser under contract by the IDFG. Her September 2004 report is entitled, "Cultural Resources Assessment for the Idaho Department of Fish and Game – Lower Challis Creek Fish Screen Project". The Idaho State Historic Preservation Office (SHPO) provided their letter of concurrence on December 30, 2004 for these projects and agreed that they can be completed with no effects to historic properties. A "Cultural Resources Survey for Challis Creek Anadromous Fish Screening Archaeological Services for SChAC-11 and SChAC-12" was conducted by Ms. Jeanne A. Pepalis in September 2005. The SHPO's September 24, 2005 letter of concurrence identified that no historic properties were identified at the project site, no historic properties will be affected by the proposed action, no additional

cultural surveys are recommended, and that the actions may proceed. No comments were received from the Shoshone-Bannock Tribe.

Idaho Code requires irrigators to install fish screens, control structures, and fish passage at diversions. These actions are isolated and do not affect a large number of people as the Salmon basin is sparsely populated. Exposure of the project has been by word-of-mouth, resident involvement in similar projects, state code, local political interest, and agency cooperative efforts. Local newspaper articles and Upper Salmon Basin Watershed Project circulars have notified the public of the project intentions. The following partners have been kept informed of the development of this project: landowners, the Salmon River Coalition, Natural Resources Conservation Service, Columbia Basin Fish and Wildlife Authority's Fish Screen Oversight Committee, NOAA Fisheries, FWS, Bureau of Reclamation, Upper Salmon Basin Watershed, and IDFG. Additional conversation has been with the Shoshone-Bannock Tribe, various entities at IDFG, and Idaho Department of Water Resources.

These five water diversion improvements and fish screen actions are exempt from a 404 permit in accordance with CRF33 323.4(a)(3). Likewise, because of the 404 exemption, no IDEQ permit/authorization is required.

**Findings:** The fisheries improvements are generally consistent with: the Northwest Power and Conservation Council's Fish and Wildlife Program; BPA's Watershed Management Program Final EIS (DOE/EIS-0265) and ROD. The project conforms to the IDFG fish screen standards; NOAA Fisheries Salmonid Fish Passage Facility Guidelines and Criteria; the State's Fishery Management Plan, Idaho Bull Trout Recovery Plan; NOAA Fisheries Salmon Recovery Plan; and U.S. Fish and Wildlife Service Bull Trout Recovery Strategy. This Supplement Analysis finds that: 1) implementing the proposed action will not result in any substantial changes to the Watershed Management Program that are relevant to environmental concerns; and, 2) there are no significant new circumstances or information relevant to environmental concerns and bearing on the Watershed Management Program or its impacts. Therefore, no further NEPA documentation is required. The proponent shall comply with the terms, provisions, and conditions of the appropriate permits and authorizations. Support documentation to this environmental clearance may be located in the KEC project file.

/s/ Carl J. Keller

Carl J. Keller  
Fish and Wildlife Biologist

CONCUR:

/s/ Katherine S. Pierce

Katherine S. Pierce  
NEPA Compliance Officer

DATE: December 5, 2005

Attachment  
Environmental Provisions

cc: (w/ attachment)

Mr. Lynn D. Stratton, Screen Program Coordinator, Idaho Department of Fish and Game, P.O. Box 1336, Salmon, ID 83467

Mr. Patrick Murphy, Staff Fishery Biologist, Idaho Department of Fish and Game, P.O. Box 1336, Salmon, ID 83467

## Attachment

**ENVIRONMENTAL PROVISIONS**

Challis Creek Water Diversion and Fish Screen Improvements  
(SChaC-02, SChaC-03, SChaC-04, SChaC-07/8, SChaC-12)  
Challis, Idaho

The following provisions apply:

- The contractor shall construct the five projects under the following ESA provisions, accordingly:
  - a. A Section 6 Cooperative Agreement for bull trout and other listed species with the U.S. Fish and Wildlife Service dated January 17, 1995.
  - b. A Section 7 ESA programmatic Informal Consultation for anadromous fish (fish screens) with NOAA Fisheries dated July 2003.
  - c. A Habitat Improvement Plan Biological Opinion for anadromous fish (water diversion) with NOAA Fisheries dated August 1, 2003.
- An on-site inspector will monitor construction activities to ensure no releases or discharges of sediment into open water.
- Measures shall be taken to avoid unnecessary effects to fish, other aquatic life, and their habitat at the project site during construction.
- Newly disturbed soil and vegetation resources will be replanted according to the IDFG recommended seeds and procedures in accordance with soil type, availability of native seeds, and soil moisture.
- The projects will be consistent and compliant with the: Northwest Power and Conservation Council's Fish and Wildlife Program; BPA's Watershed Management Program Final EIS (DOE/EIS-0265); NOAA Fisheries Anadromous Salmonid Passage Facility Guidelines and Criteria; State's Fishery Management Plan, NOAA Fisheries Salmon Recovery Plan, FWS Bull Trout Recovery Plan, Best Management Practices, and Idaho Code specific to installing fish screens, control structures, and fish passage provisions.
- If there are any changes in construction activities that require relocation or change of work, or for sites that have not been previously identified as work sites, construction shall not proceed until the KEC Environmental Lead for this project can evaluate those changes.

////////\////////