

United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: August 26, 2002

REPLY TO
ATTN OF: KEC-4

SUBJECT: Supplement Analysis for the Watershed Management Program EIS (DOE/EIS-0265/SA-88)

TO: John Baugher, KEWL-4
Fish and Wildlife Project Manager

Proposed Action: John Day Watershed Restoration (2002-2003)

Project No: 1998-018-00

Watershed Management Techniques or Actions Addressed Under This Supplement

Analysis (See App. A of the Watershed Management Program EIS): 4.2 Water Measuring Devices; 4.10 Water Conveyance Pipeline; 4.25 Consolidate / Replace Irrigation Diversion Dams; 6.5 Water Supply: Pipeline.

Location: Canyon City, Grant County, Oregon

Proposed by: Bonneville Power Administration (BPA) and the Confederated Tribes of the Warm Springs Reservation of Oregon.

Description of the Proposed Action: BPA and The Confederated Tribes of Warm Springs Reservation of Oregon (CTWSRO), propose to complete seven types of fish habitat enhancement projects. The projects are located within bull trout and Middle Columbia River steelhead habitat. Projects include culvert removal, culvert replacement, return flow cooling, and the replacement of gravel push-up diversions by installation of permanent flat diversions, infiltration galleries, a steel plate weir, and pumping stations. Project locations are within the John Day River Watershed.

Currently there are many irrigation diversion structures in the upper reach of the mainstem John Day River. These diversions are mainly gravel push-up dams, which are constructed by pushing river gravels to form a small dam across the river. These push-up dams are usually less than three feet high and somewhat porous, yet they may limit upstream and downstream migration of fish during low flow periods. Water temperatures and unsuitable habitat may also block fish movement during summer months in the section of the mainstem John Day River between Prairie City and John Day. On some lands that are flood irrigated, ditches or other systems collect tailwater from fields and return it to the river. If water is returned through open conveyance systems, which are exposed to solar radiation, they can be thermally elevated and may increase river temperatures. These return flows may serve to further degrade water quality impaired stream reaches.

The proposed projects would improve stream conditions by removing and/or replacing culverts that act as fish passage barriers, and by replacing gravel push-up dams. The culvert removal

project is known as Oxbow Site #2. The culvert will be removed and the streambank restored to a natural condition with native vegetation to control erosion. The culvert replacement project is known as Oxbow Site #1. The removed culvert will be replaced with an open bottom pipe-arch culvert that meets state guidelines for fish passage.

The return-flow cooling project is also known as Emmel RFC. This project will replace failing irrigation drains and replace open ditches with buried perforated pipes, lowering the temperature of water returned to the stream. Gravel push-up dams will be replaced with permanent structures, including lay-flat diversions (identified as Rice Ditch Diversion, Lower Island Ditch Diversion, and Ricco Ditch Diversion), an infiltration gallery (identified as Pike Project Phase II and Walker infiltration gallery), a steel plate weir (also located at Oxbow Site #1), and Pumping Stations (Wisenhunt and Vanier Pump Stations).

The pump stations will replace push-up dams through the use of instream sump pumps and a pipeline system to deliver water to the irrigation system. The pumps will have built-in flow meters and fish screens. The infiltration gallery at Pike Project Phase II replaces a push-up dam with a system of perforated pipes placed in sand and gravel along the streambed. Water seeps into the buried pipes and enters an irrigation conveyance system outside of the riparian area. The streambank is stabilized with rock and gravel. The final method for replacement of push-up dams is the use of lay-flat diversions. These permanent structures consist of a concrete pad at riverbed grade, two sidewalls, lay-flat stanchions and a fishway. When the diversion is not in use, the stanchions can be lowered for unrestricted fish passage at all river levels. As flows drop during the irrigation season, boards placed in front of the stanchions raise the water level behind the structure as well as through the fishway.

Analysis: The compliance checklist for this project was completed by Shaun Robertson and Linda Brown, CTWSRO, and meets the standards and guidelines for the Watershed Management Program Environmental Impact Statement (EIS) and Record of Decision (ROD).

The potential impacts of the proposed actions as identified in the EIS are primarily minor, such as loss of sediment retention behind existing gravel push-up dams. Some actions could cause more adverse affects, such as vegetation and soil disturbance, particularly instream, leading to potential impacts to water quality and cultural resources. However, these potential impacts are adequately regulated and mitigated through the permitting process described below. The habitat is currently in a degraded state to the extent that very few aquatic resources (including fish) will be present at the time of construction.

Biological Assessments (BA) were submitted to the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS). The FWS concurred with BPA's determination of "not likely to adversely affect" bull trout, on July 9, 2002. NMFS reviewed the BA and on June 27, 2002, concurred with BPA's finding of "not likely to adversely affect" the Middle Columbia River steelhead on a portion of the proposed actions. BPA requested formal consultation on the remaining actions, including: Emmel Return Flow Cooling; Lower Island Ditch Diversion, Ricco Ditch Diversion, and Rice Ditch Diversion (permanent lay-flat diversions); Pike Project Phase II (infiltration gallery); and Walker Infiltration Gallery (formerly

Walker Pump Station). On July 3, 2002, NMFS responded with a Biological Opinion, concluding formal consultation.

Cultural resources surveys were conducted and the results indicate that no historic properties or cultural resources are present in the vicinity of the proposed project. Accordingly, a report was submitted to the Oregon State Historic Preservation Office (SHPO) on July 8, 2002, with a finding of no adverse affect. In the unlikely event that historic or archaeological materials are encountered during construction, work in the vicinity of the find will be halted and the SHPO and any affected tribes will be notified. A qualified archaeologist will evaluate the significance of the discovery and recommend an appropriate course of action, in consultation with all affected parties.

The instream work requires permits from the Oregon Division of State Lands (DSL) and the U.S. Army Corps of Engineers (COE). CTWSRO submitted permit applications, and the permits are in place.

The CTWSRO has engaged in an extensive public involvement program coordinated by the John Day Basin Council. Contact was made with the public through press releases, informational brochures and materials, field tours, public meetings, agency meetings, and mass mailings. The projects have been discussed as part of the Council's regular monthly meetings, open to the public. Information materials are made available during the meetings, in mailing prior to meetings, in local agency offices, and on the Internet.

Findings: The project is generally consistent with the Northwest Power Planning Council's Fish and Wildlife Program, as well as BPA's Watershed Management Program EIS (DOE/EIS-0265) and ROD. 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.

CONCUR:

/s/ Richard Yarde 8-26-2002
Richard Yarde
Environmental Specialist

/s/ Thomas C. McKinney DATE: 8-27-2002
Thomas C. McKinney
NEPA Compliance Officer

Attachments:
Environmental Checklist

cc: (w/ attachments)
Mr. Shaun Robertson, CTWSRO
Ms. Linda Brown, CTWSRO