

United States Government

Department of Energy

Bonneville Power Administration

memorandum

DATE: September 5, 2006

REPLY TO
ATTN OF: KEC-4

SUBJECT: Supplement Analysis for the Watershed Management Program EIS (DOE/EIS-0265/SA-275)

TO: Sarah Branum - KEWL-4
Project Manager

Proposed Action: Hofer Dam Fish Passage Project

Project No: 1996-011-00

Wildlife Management Techniques or Actions Addressed Under This Supplement Analysis

(See App. A of the Wildlife Mitigation Program EIS): 1.8 Bank Protection Through Vegetation Management; 1.14 Reduce Scour and Deposition at Hydraulic Structures; 1.15 Fish passage Enhancement-Fishways, 4.23 Intake and Return Diversion Screens, 4.25 Consolidate/ Replace Irrigation Diversion Dams

Location: Walla Walla County, Washington. T. 7N, R. 33E, S. 15 and 22.

Proposed by: Bonneville Power Administration (BPA), Washington Department of Fish and Wildlife (WDFW), Walla Walla County Conservation District, the Salmon Recovery Funding Board (SRFB), US Fish and Wildlife Service (USFWS), and The Washington State Energy Facility Site Evaluation Council (EFSEC).

Description of the Proposed Action: BPA is proposing to address fish passage issues at Hofer Dam, the fish screen, and a nearby siphon structure. The goal is to enhance passage conditions in the Touchet River for juvenile and adult salmonids by removing barriers and improving the juvenile fish screen and bypass.

The Hofer Dam is located in southeast Washington on the Touchet River, approximately 4.1 miles upstream from its confluence with the Walla Walla River. The dam is used to divert water for irrigation for the Eastside and Westside Irrigation Districts. In 1996, Confederated Tribes of the Umatilla Indian Reservation (CTUIR) commissioned studies to identify improvements for Mid-Columbia Basin steelhead and spring Chinook fish passage in the Walla Walla Basin. The study identified Hofer Dam as an adult salmonid passage problem primarily during Summer and Fall low flow conditions. The siphon is a second dam-like barrier ¼ mile downstream of Hofer Dam that has also been identified as a partial barrier to fish passage. These fish barriers are identified in both the Snake River Salmon Recovery Plan and the Walla Walla Sub-basin Plan. In addition the screen facility at Hofer Dam does not meet current state or federal fish screen criteria for salmonids, therefore the facility also creates a problem for juvenile salmonid passage downstream in the spring and early summer. The old screens will be replaced with traveling belt screens that meet current federal and state fish screening criteria. Poorly screened fish diversions are also identified as imminent threat to listed and other native species in the above mentioned plans.

A wood support and plastic sheeting set of flash boards is installed each year that raises the dam crest about one foot. The flashboards run across the entire dam section (60 feet) adjacent to the right bank including the exit of the fish-way structure. The dam will be modified by removing the flash boards and supports, replacing them with a concrete cap. In addition, a fish ladder will be added to the dam. Downstream of the dam, the fishway excavation area will be isolated by constructing a concrete block cofferdam. The headgate structure is integrated into the right abutment of the dam. The headgate itself is a manually operated slide gate and an 80 foot long, 44 inch diameter culvert runs from the downstream end of the

intake chamber to the open irrigation ditch. The existing fish screens are located on the canal approximately 75 feet further downstream from the end of the headgate culvert. The screens were installed sometime in the 1940s or early 1950s and do not meet current state or federal criteria for fish passage. The proposal is to remove the existing screens from their present location, and replace the existing headgate with the new screens and a new diversion pipe, so that the new screens will be located on the west bank of the river. A trench will be excavated behind the existing diversion and a 42 inch pipe installed to supply water to the existing irrigation box. Once this pipe is in, a cofferdam will be built across the Touchet River at an angle to isolate the screen construction area from the flowing water. This cofferdam will either be a water-filled bladder structure, sheet pile, rock fill, or a concrete block dam.

Once the fishway and screen construction is complete, the cofferdam will be removed, the old diversion pipe plugged and flow allowed through the new screen. During this activity when the channel below the dam is dry, a new constructed riffle will be built on the stream bed by placing a graduated size rock mix.

The siphon is an irrigation pipe that runs across the river from right to left bank approximately ¼ mile downstream of Hofer Dam. The riverbed began down cutting around the pipe. In an attempt to stabilize the pipe, irrigators poured concrete over the pipe all the way across the river. This concrete structure created additional down cutting of the riverbed and over time it has become a partial barrier during most flows. At the inverted siphon location, a sandbag cofferdam will be constructed just upstream of the existing concrete structure and water diverted into a 36 inch pipe. The pipe length will be 100 feet and discharge downstream of the proposed construction riffle. An additional sandbag cofferdam will be built at the pipe outlet so the construction area is isolated from the Touchet River flow. The channel will be trench excavated, new steel pipe placed and backfilled. Once water is flowing in the pipe, the dam will be removed and a new constructed riffle built on the stream bed by placing a graduated-size rock mix. Pumps will be used on a short term basis on site to divert the heavy silt laden water during this transition out into the surrounding floodplain. At the conclusion of the project, all bare and disturbed soils will be seeded and hay mulched. Riparian restoration efforts will address riparian habitat lost due to construction, but the current riparian is not representative of the streams riparian habitat natural condition. To mitigate, native vegetation will be used to replace lost vegetation.

The objective of this project is to eliminate the barriers and improve the juvenile fish screen and bypass that will result in survival benefits for juvenile and adult Mid-Columbia Basin steelhead and other salmonid species that exist in the basin. The project has been designed by Anchor Engineers in 2005-2006 and has full funding. The design was approved by National Marine Fisheries Service engineers for optimal fish passage (8/01/2006). Partners for project funding include BPA, Salmon Recovery Funding Board (SRFB), US Fish and Wildlife Service (USFWS), and The Washington State Energy Facility Site Evaluation Council (EFSEC).

Analysis: The compliance checklist for this project was completed by Dave Karl, with the Washington Department of Fish and Wildlife (7/3/2006), and meets the standards and guidelines for the Watershed Management Program Environmental Impact Statement (EIS) and Record of Decision (ROD).

Endangered Species Act: Species listed under the federal Endangered Species Act (ESA) that may occur in the general vicinity of the project area are bald eagle, Canada lynx, Ute ladies'-tresses (plant), bull trout, steelhead (all listed threatened species), and steelhead critical habitat. The Washington ground squirrel and the yellow-billed cuckoo are candidates for listing under the ESA.

BPA determined that the proposed actions would have no effect on bald eagle, Canada lynx or Ute ladies'-tresses. The eagle has no documented nesting or roost sites near Hofer Dam. At a recent site visit, no eagles were observed and no nesting structures or roosting habitat was present. The lynx has no prey species present due to urbanization of the area. The habitat is agriculturally based and is mainly cleared, open lands at elevation under 1000 feet. There have been no known lynx sightings in the area. The Ute ladies'-tresses has no habitat available in the vicinity due to the presence of heavily impacted agricultural lands.

Fisheries biologists from USFWS and WDFW concur that bull trout have not been documented in the lower Touchet River, and water temperatures during the in stream work window are potentially lethal to bull trout in the proposed project area. The nearest known bull trout sighting is approximately 70 miles upstream from the project area in the Touchet River, but they are thought to have historically migrated from the Touchet River into the Walla Walla and the Columbia Rivers (personal communication w/ WDFW District Fish Biologist, Glen Mendel). There are populations of bull trout in the upper Walla Walla, Mill Creek, and Touchet River systems. Removal of the barriers associated with this project could potentially provide future biological interconnectivity between these isolated populations resulting in a long term beneficial effect. BPA determined that the proposed actions would have no effect on bull trout. Bull trout critical habitat is not present.

Mid-Columbia Basin steelhead will not be directly affected by the construction of the project. There is potential for some effects to migratory steelhead (adults and sub-adults) caused by increased sediment from the project. Due to the distance of the proposed project to the migratory routes, best management practices implemented at the project site, and timing of the project, increased sedimentation is not likely to adversely affect steelhead during their migration. The project site does not have spawning or suitable spawning or rearing habitat for steelhead trout and therefore will not affect other life stages. Coverage for the proposed activities is provided through BPA-NOAA Habitat Improvement Program Biological Opinion.

Biological surveys for the Washington ground squirrel have been conducted in the area, but no individuals or populations were located. The yellow-billed cuckoo has no habitat available. There have been no known sightings of either species within the project area.

Cultural Resource Information: A cultural resources survey was conducted in 1998 in the Hofer Dam area as part of a larger project (Steinmetz, Shawn. 1998. A Cultural Resources Survey of the Bonneville Power Administration Walla Walla River Valley Structure Improvement for Anadromous Fish Migration, Umatilla County, Oregon. Confederated Tribes of the Umatilla Indian Reservation, Cultural Resources Protection Program, August 13, 1998.) The survey appears to have covered the dam and headgate construction areas, but not the siphon construction area. In compliance with Section 106 of the National Historic Preservation Act, Ray Tracy was contracted to complete a cultural resources evaluation of the proposed project site including the siphon area and road access areas as well as to evaluate the historic significance of the fish screens, siphon, and Hofer Dam. (Tracy, Ray. 2006. A Cultural Resources Evaluation of the Hofer Dam and Siphon Fish Passage project: Walla Walla County, WA, Walla Walla County Conservation District). Based on the findings, BPA concluded that there would be no effect on historic resources associated with the project. In the unlikely event that archaeological or historic materials are discovered during project activities, or if the nature of the undertaking changes, ground-disturbing work will cease, and an archaeologist will immediately be notified and work halted in the vicinity of the finds until they can be inspected and assessed. The State of Washington Department of Archaeology and Historic Preservation concurred with these findings and recommendations on August 22, 2006.

Environmental Land Audit: No environmental land audits are required for this work.

Permit Information: Standard water quality protection procedures and best management practices will be followed during the implementation of this project. The proponent has obtained all applicable local, state and federal permits and approvals which include a Nationwide 27 programmatic permit from the Army Corps of Engineers (ACOE) for section 404 of the Clean Water Act and Washington Department of Ecology (WDOE) water quality certification under Section 401.

Public Involvement Information: The Conservation District made public advertisements of the project meetings. Meetings were open to all interested parties and were attended by all stakeholders listed and local irrigators that will be involved. The final design was developed by public and agency involvement, comments received by the irrigators were adopted and incorporated into the design.

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.

/s/ Michelle O'Malley

Michelle O'Malley

Environmental Protection Specialist

CONCUR:

/s/Katherine S. Pierce

Katherine S. Pierce

NEPA Compliance Officer

DATE: September 5, 2006

Attachments:

NEPA Compliance Checklist

Cultural Resources Evaluation on Hofer Dam and Siphon Fish Passage Project (Tracey, Ray)

cc: (w/o attachments)

Mr. Dave Karl, WDFW Watershed Steward, PO Box 456, Walla Walla, WA 99362

Mr. Rick Jones, District Manager, Walla Walla Conservation District, 1501 Business One Circle, Suite101, Walla Walla, WA 99362-9526