

memorandum

DATE: November 7, 2000

REPLY TO
ATTN OF: KEC-4

SUBJECT: Supplement Analysis for Yakima Fisheries Project, (DOE/EIS-0169-SA-04)

to: David Byrnes
Project Manager – KEWN-4

Proposed Action: Yakima Fisheries Project – Construction/modification upgrades to the Prosser Hatchery and the Marion Drain Hatchery facilities.

Project No.: F3204

Location: Prosser and Toppenish, Yakima County, Washington.

Proposed by: Bonneville Power Administration (BPA) and Co-Managed by the Yakama Nation (YN) and the Washington Department of Fish and Wildlife (WDFW).

1. Introduction

The Bonneville Power Administration is funding ongoing studies, research, and artificial production of several salmonid species in the Yakima and Klickitat river basins. BPA analyzed environmental impacts of research and supplementation projects in the Yakima basin in an Environmental Impact Statement (EIS) completed in 1996 (USDOE/BPA 1996), and in the following Supplement Analyses: DOE/EIS-0169-SA-01, completed in May 1999; DOE/EIS-0169-SA-02, completed in August 1999; DOE/EIS-0169-SA-03, completed in 2000. The purpose of this Supplement Analysis is to determine if a Supplemental EIS is needed to analyze the construction/modification upgrades to the Yakima Klickitat Fisheries Project (YKFP) fall chinook and coho experimental facilities at the Prosser and Marion Drain Hatcheries. Construction/modifications are in support of the experimental acclimation, rearing and incubating activities for coho and fall chinook.

2. NEPA Analysis to Date

The Yakima Fisheries Project Final Environmental Impact Statement (YFP EIS) (USDOE/BPA 1996) analyzed impacts of undertaking fishery research and mitigation activities in the Yakima River Basin. The EIS focused on the impacts of construction, operation and maintenance of anadromous fish production facilities in order to conduct research designed to increase knowledge of supplementation techniques. Spring chinook were the priority species analyzed in the EIS. A Supplement Analysis (DOE/EIS-0169-SA-01) analyzed the potential impacts of fall chinook and coho supplementation research activities and evaluated a detailed monitoring program. A second Supplement Analysis (DOE/EIS-0169-SA-02) analyzed the impacts of housing and spawning channel additions at the Cle Elum Hatchery and minor upgrades to the Prosser Hatchery for the fall chinook and coho programs. A third Supplement Analysis (DOE/EIS-0169-SA-03) analyzed the impacts of using WDFW's Yakima Hatchery for coho rearing, incubation and adult holding activities as well as upgrades and repairs to the existing

facilities at the Yakima Hatchery. In addition, SA-03 analyzed the impacts of minor modifications to two of three existing ponds known as “Easton Ponds” located just northeast of the Easton exit of Highway 90, and a one-time temporary increase for the year 2000 in the number of coho smolts to be imported into the basin from 1,000,000 to 1,060,000 for predator avoidance training research.

3. Description of the Proposed Action

The Yakima Fisheries Project is co-managed by the YN and the WDFW. The project consists of the collection of salmonid broodstock, incubation of eggs and rearing of fry in hatcheries, the acclimation and release of smolts, and related ecological studies in the study of natural production. The proposed actions to be analyzed under this Supplement Analysis are the construction/modifications of the experimental hatchery facilities at Prosser and Marion Drain in support of the Yakima Basin fall chinook and coho populations.

1. Prosser Hatchery:

Upgrades to the existing Prosser Hatchery include the following:

- Improve and further safeguard the water delivery system to the rearing sites. Design and install a gravity flow water system from the Chandler Canal Screen Pump Station to the hatchery facilities.
- Install intake structures to the acclimation sites to ensure water delivery to rearing ponds.
- Install an overflow discharge system, backup supply pipe, and waste pond.
- Install larger capacity packed column egg incubators.
- Install backup generator to ensure safe rearing conditions.
- Construct a generator building.
- Prepare a gravel pad for the office/security trailer.
- Build an adult spawning shed.
- Add sixteen portable steel raceways with bolted liners (8'x98'x4'9" each) to provide adequate rearing and holding capabilities.
- Construct a storage building for equipment and feed.

Currently, Prosser is used to incubate, rear, and hold an increasing number of Yakima fall chinook as well as coho. These increases will require additional facilities for coho rearing, incubation, and adult holding. To address this problem, sixteen portable raceways would be set up at the Prosser Hatchery. These are in lieu of the proposed raceways at the Yakima Hatchery, formerly considered in SA-03. The Yakima Hatchery will not be used for the YKFP program.

2. Marion Drain Hatchery:

The Marion Drain Hatchery is a part of the Yakima/Klickitat Fisheries Project. It operates under the Lower Yakima River Supplementation and Research Project. One of the goals of this project is to increase the number of Marion Drain fall Chinook through supplementation. In

order to provide an adequate and reliable water supply a new well and pump are needed at the Marion Drain Hatchery. The well would be a back-up water supply and for incubation at the hatchery. The old well is crumbling in and clogging the pump, which makes it inoperable. The new well will be located on the hatchery grounds which is all on disturbed ground. Permits must be obtained prior to any ground disturbing activity.

- Install an adequate water supply by replacing the existing well with a new well and pump which is vital to the incubation and rearing of the Marion Drain fall chinook.
- Drill well and install a pump to provide a minimum of 450 gallons/minute

4. Analysis

Table 1: Construction/modifications at Prosser Hatchery

Activity	Impacts
Improve water delivery system by replacing pump with a gravity flow water system.	Low to no impact. Using the existing trench, a new water line will be placed between the Chandler Canal Screen Pump Station to the hatchery facilities. The inlet ditch pipe similar to PVC will be installed and covered up. The area has been previously disturbed.
Install intake structures to acclimation sites to ensure water delivery to rearing ponds.	No impact. Area is previously disturbed. Beneficial effect. Existing screens at the creek intake and at the outfall will be replaced. This will prevent resident fish from entering the water intake and will prevent hatchery fish from being released into the creek.
Install larger capacity egg incubators.	No impact. Adding stacked heath trays.
Construct generator building and install back up generator.	Low to no impact. Currently using BOR backup system for Chandler & Prosser. With added chiller and pumps, there is not enough power using BOR's system. This entails laying approximately a 16'x16' cement foundation for the generator to rest upon. The area has been previously disturbed.
Construct an open spawning shed.	Low to no impact. Consists of extending the existing cement pad next to the freezer and installing a roof. The area has been previously disturbed.
Install portable raceways, necessary pipelines, and access road with truck turnaround.	Low impact. Installation involves leveling the ground such that the gravity feed pipelines are operable, and excavating a 2-3' ditch for the 20" pipe. Further excavation and graveling would occur on the existing road for the delivery and hauling area. The area has been previously disturbed.
Construct a storage building for equipment and dry feed.	Low to no impact. Storage building approximately 48'x20' consisting of a pole building with a cement foundation and a roof. The area has been previously disturbed.
Expand waste pond.	Low to no impact. Using existing pond, the size would be enlarged to approximately 20'x20'. The area has been previously disturbed.
Fence the entire facility.	Low to no impact. Fencing consists of replacing some of the existing fencing and adding on to protect entire project area. All areas previously disturbed.

Table 2: Installation of New Well at Marion Drain Hatchery

Activity	Impacts
Installation of a new well at Marion Drain Hatchery.	Low to no impact. This activity is the replacement of an existing well, which has deteriorated. There is no in-river work to be done. Spoils will be appropriately discarded and will not be allowed to escape into Marion Drain.

- As discussed in Tables 1 and 2, the impacts of the proposed upgrades to the Prosser Hatchery and Marion Drain Hatchery are similar to or less than those specifically evaluated in the EIS for hatchery and acclimation facilities construction. All proposed work is on disturbed sites and would pose little to no additional impacts.
- The addition of the sixteen portable raceways at the Prosser hatchery will allow the local broodstock component of the Yakima smolt supplementation program to grow; however, the total numbers of research fish will not exceed the level identified in the YFP EIS SA-01 and approved by the Northwest Power Planning Council's Columbia Basin Fish and Wildlife Program. The only exception would be the one-time 6% increase due to research needs in 2000.
- The supplementation program, including broodstock collection, acclimation, releases, and monitoring, has been evaluated in detail in the YFP EIS, SA-01, SA-02 and SA-03.
- The well being replaced at the Marian Drain Hatchery would be located in the same general vicinity as the previous well. Appropriate permits must be obtained prior to ground disturbing activities. Spoils from the drilling operation must be appropriately discarded.
- A cultural resources summary report by Greg Cleveland, YN Archeologist, indicates that the Marion Drain Hatchery, formerly the 'Old Zimmerman' place, was included in a cultural and archaeological review of the Toppenish Creek Corridor. Findings indicate that the proposed project will have no affect to historic or cultural resources. If the scope of these undertakings is revised or if historical or archeological resources are discovered during project activities, work must be halted and the YN archaeologist would be consulted.
- The expansion at the Prosser Hatchery would take place on BOR lands, which have been previously disturbed. Therefore, the determination of effect for this site is there is no potential for effect. The ground is covered with spoils from the construction of the Prosser canal and diversion including borrow or back dirt, fines, cobbles and occasional large boulders. Project excavation would not be deep enough to scarify or impact the original surface. All work would take place away from the river. According to Mark Dillion, BOR Archeologist, a cultural resource survey was completed by the Archeological Historical Society (AHS) in 1988 providing clearance for this site. If the scope of these undertakings is revised or if historical or archeological resources are discovered during project activities, work must be halted and the YN and BOR archaeologists would be consulted.

5. Findings

As documented in this Supplement Analysis, the potential impacts from the facility upgrades at the Prosser Hatchery and the Marion Drain Hatchery are not substantially different from those discussed in the Yakima Fisheries Project EIS (DOE/EIS-0169), ROD, Supplemental Analyses (SA-01, SA-02 and SA-03), and related biological assessments and biological opinions. No additional impacts would occur in connection with these activities. There are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, a supplement to the YFP EIS is not needed.

/s/ Patricia Smith

Patricia R. Smith

Environmental Project Manager – KECN

CONCUR: /s/ Thomas C. McKinney DATE: 11/07/00

Thomas C. McKinney

NEPA Compliance Officer

Documentation on file:

Bonneville Power Administration, Yakama Indian Nation, Washington Department of Fish and Wildlife (BPA, YIN, WDFW). 1999a. Biological Assessment on Bull Trout for the Yakima/Klickitat Fisheries Project 1999-2004. March 1999.

BPA, YIN, WDFW. 1999b. Biological Assessment on Mid-Columbia River Steelhead for the Yakima/Klickitat Fisheries Project 1999-2004. April 1999.

National Marine Fisheries Service. 1999. Biological Opinion on Artificial Propagation in the Columbia River Basin. National Marine Fisheries Service, Northwest Region, Portland, OR.

United States Department of Energy, Bonneville Power Administration (USDOE/BPA). 1996. Yakima Fisheries Project Final Environmental Impact Statement. DOE/EIS-0169. Portland, OR

USDOE/BPA. 1999. Supplement Analysis for Yakima Fisheries Project, DOE/EIS-0169-SA-01. Portland, OR

USDOE/BPA. 1999. Supplement Analysis for Yakima Fisheries Project, DOE/EIS-0169-SA-02. Portland, OR

USDOE/BPA. 2000. Supplement Analysis for Yakima Fisheries Project, DOE/EIS-0169-SA-03. Portland, OR