DATE: March 8, 2000

REPLY TO ATTN OF: KECN-4

SUBJECT: Supplement Analysis for Yakima Fisheries Project, (DOE/EIS-0169-SA-03)

David Byrnes
Project Manager – KEWN-4

Proposed Action: Yakima Fisheries Project – Use of Washington Department of Fish and Wildlife's Yakima Hatchery and Acclimation and Research Activities

PL-6: F3204

Location: Yakima, Yakima County, Washington; and Easton, Kittitas 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), Supplement Analysis (DOE/EIS-0169-SA-01) completed in May 1999, and Supplement Analysis (DOE/EIS-0169-SA-02) completed in August 1999. The purpose of this Supplement Analysis is to determine if a Supplemental EIS is needed to analyze the use of the WDFW's existing Yakima Hatchery for rearing and possibly incubating coho. Additional acclimation and research activities for coho are also analyzed.

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.

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:

1. The transfer of coho rearing, incubation, and adult holding activities from the Prosser Hatchery to WDFW's currently mothballed Yakima Hatchery.

2. Upgrades and repairs to the existing facilities at the Yakima Hatchery, including
   - Replacement of a well pump and starter on an existing well
   - Upgrading the alarm system
   - Plumbing upgrades
   - Replacement of the heating system
   - Replacement of fish screens
   - Painting
   - Repairs to personnel housing and installation of air conditioning
   - Repairs to raceways - sealing with a thin coat of concrete
   - Installation of a water chiller to regulate incubation water temperature.

3. Minor modifications to two of three existing ponds known as "Easton Ponds" located just northeast of the Easton exit of Highway 90. These ponds are leased by WDFW from the Washington Department of Transportation and are managed to provide "put and take" rainbow trout fishing opportunities for the public. The ponds would be modified to hold 250,000 coho smolts for acclimation purposes for approximately two months – late March to early June.

4. A temporary one-time increase for 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. This training would use two vacant raceways at the Jack Creek acclimation site to conduct research to help determine whether training smolts to avoid predators is a viable technique to include in the overall hatchery experimental design.

The May 1999 Supplement Analysis addressed the release of up to 1,000,000 coho smolts into the Naches and upper Yakima. These fish are to be used in research into the feasibility and impacts of re-establishing a self-perpetuating population of coho in the Yakima basin. Initially, 700,000 of these fish will come from out-of-basin hatcheries, while the remaining 300,000 will come from coho returning to the basin. The 300,000 smolts were originally planned to be incubated and reared at the Prosser Hatchery. The Supplement Analysis addressed the collection of up to 600 adults per year to develop a locally adapted Yakima coho broodstock. It is anticipated that, if the coho supplementation is successful, up to 1 million coho smolts will be produced from the local broodstock, and the number of smolts imported from outside the basin will decrease correspondingly. 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, WDFW has offered for the project to lease it's existing Yakima Hatchery, which was mothballed in 1993.

The hatchery is located at the east end of the Yakima Airport, off of 16th Avenue. It was in operation from 1933 until 1993, and was used to raise rainbow trout and steelhead. The facilities consist of a head box on Spring Creek and a well with a system to pipe water to a series of 20 rearing raceways and 10 circular rearing tanks and to an incubation building. A storage building, shop, office, and two residences are also located on site. While the facilities are generally in good condition, several repairs and upgrades are required to bring them back to full operating capacity. These are discussed below in section 4.

The use of four acclimation sites to acclimate coho was also addressed in the May 1999 Supplement Analysis. These sites were listed as the Stiles and Lost Creek Ponds in the Naches subbasin and the Cle Elum Hatchery Slough and an unidentified site in the upper Yakima subbasin. The Easton ponds have been selected as the unidentified site. The only permanent modifications needed are to install a pre-fabricated, metal outlet works/fish screen structure and less than 10 cu. yards of fill in the discharges of each of the two ponds. For spring of 2000, temporary barrier nets will be used instead of the fish screens to retain coho smolts in the two ponds until release.

The Predator Avoidance Training research is part of the experimental design of the Yakima/Klickitat Fisheries Project. Research personnel were anticipating using some of the 1,000,000 coho imported or raised in the basin for this research. However, the entire 1,000,000 fish for 2000 are critical to the experimental designs for other research objectives. Also, this may be the last year there are vacant raceways available at the Jack Creek facility to conduct this research. Therefore, research personnel have requested an additional 60,000 coho be imported to the basin for this research in 2000.

4. Analysis

Table 1: Upgrades and Repairs Required for Yakima Hatchery

Activity	Impacts
Replacement of well pump and starter on existing well	No impact. No ground disturbance. Area is previously disturbed. The water permits for the well are current.
Upgrade of alarm system	No impact. Will occur entirely within existing facilities.
Plumbing upgrades	Low to no impact. Approximately 500 feet of new water line will be placed between the well and the raceways. The area has previously been modified and disturbed.
Heating system replacement	No impact. Will occur entirely within existing facilities.
Screen construction	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.
Painting	No impact. Will occur entirely within existing facilities.
Housing repairs/installation of air conditioning	No impact. Will occur entirely within existing facilities.
Raceway sealing	No impact. Sealing will be done to existing raceways.
Installation of water chiller	No impact. Will be placed in area that is already disturbed, probably within an existing building.

Table 2: Modifications Required for Easton Pond Coho Acclimation

Activity	Impacts
Placement of barrier nets in two ponds to acclimate fish (pilot program for spring, 2000)	No impact from placement of barrier nets. They are held in place with rebar stakes pounded into the ground. Low impact to fishers. Two of three ponds at the site would be closed to public fishing from late March to early June to accommodate the coho acclimation.
Placement of steel box with outlet pipe and screen into 2 discharge channels, and placement of fill around steel boxes (longer-term program)	Low impact. Minor ground disturbance. Area is previously disturbed. Less than 10 cu. yd. of fill per structure. No jurisdictional wetland, but is located within floodplain of Yakima River. All applicable permits will be obtained. Installation will occur in summer or fall, 2000 Low impact to fishers. Two of the three ponds at the site (the two equipped with the outlet control works/fish screens) will be closed to public fishing from late March to early June to accommodate the coho acclimation.

Table 3: Predator Avoidance Training Research

Activity	Impacts
Use of Jack Creek acclimation raceways	No impact. Facilities are in place and no modifications would be needed.
Import of an additional 60,000 coho smolts for research purposes	Low impact. This would be a one-time increase in the total number of fish imported. It is only a 6% increase, and the number of smolts that survive the training and are released into the Yakima River would be even smaller. Smolts will come from lower Columbia River hatcheries and would be tested for diseases and other problems before release.

- As discussed in Tables 1 and 2, the impacts of the proposed upgrades to the Yakima Hatchery and the Easton Ponds 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 impact to fishers has been discussed by WDFW with the Easton Memorial Day Committee, the non-profit citizens group that is developing the park at the ponds. They are supportive of this "multiple use" of the ponds. The addition of the fish screens will also allow WDFW to better manage the put and take rainbow trout fishery and prevent impacts from it on the native Yakima River fish.
- The movement of coho hatchery activities from the Prosser Hatchery to the Yakima 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 and SA-01.

5. Findings

As documented in this Supplement Analysis, the potential impacts from the movement of coho hatchery activities from the Prosser Hatchery to WDFW's Yakima Hatchery, the facility upgrades at the Yakima Hatchery, the modifications at Easton ponds, and the Predator Avoidance Training research activities are not substantially different from those discussed in the Yakima Fisheries Project EIS (DOE/EIS-0169), ROD, Supplemental Analyses (SA-01 and SA-02), 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/s Nancy H. Weintraub
Nancy H. Weintraub
Environmental Project Lead – KECN

CONCUR: s/s Thomas C. McKinney DATE: March 8, 2000
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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.

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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

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