

# memorandum

DATE: February 18, 2005

REPLY TO  
ATTN OF: KEC-4

SUBJECT: Supplement Analysis for Yakima/Klickitat Fisheries Project, Lake Cle Elum Coho Acclimation Site (DOE/EIS-0169-SA-11)

TO: David Byrnes  
Project Manager - KEWL-4

**Proposed Action:** Yakima/Klickitat Fisheries Project – Under the Monitoring and Evaluation Program (M&E), the coho acclimation research task would be modified to include a new site located in Lake Cle Elum near the Cle Elum dam, in the upper Yakima River, WA.

**Project No.:** F3204

**Location:** Cle Elum, 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).

## Introduction

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, however, Coho feasibility studies, potential harvest benefits, and predation impacts for returning natural production of Coho salmon to the Yakima River Basin were also evaluated. Subsequent Supplement Analyses (SA's) have analyzed the potential impacts of research activities relating to this experimental design program (DOE/EIS-0169-SA-01 through SA-10). The purpose of this Supplement Analysis (SA) is to determine if a Supplemental EIS (SEIS) is needed to analyze the changes proposed in the Yakima Klickitat Fisheries Project (YKFP) Coho Program feasibility studies.

## Description of the Proposed Action

The proposed action to be analyzed under this SA is the addition of a new fixed acclimation site in the upper Yakima. Current acclimation sites include the Cle Elum Hatchery Slough (RM 183), Easton Ponds (RM 201), and Bonne Pond (RM 179.5) in the Upper Yakima, and Lost Creek Pond (RM 39) and Stiles Pond (RM 9) in the Naches. The new site, known as the Cle Elum Lake site, is located in the upper Yakima at the Cle Elum Lake Dam.

## Background and Analysis

The Bonneville Power Administration is funding ongoing studies, research, and artificial production of several salmonid species in the Yakima and Klickitat river basins. In the EIS, BPA analyzed environmental impacts of research and supplementation projects in the Yakima basin. Included in the YKFP Project is the Yakima basin's Coho program component covering feasibility studies for re-establishing a self-sustaining coho population and a significant fall fishery for coho in the Yakima River Basin, while keeping adverse ecological impacts within specified limits.

This project is part of the Cle Elum Lake Anadromous Salmon Restoration Feasibility Study to evaluate the interim infrastructure modification and juvenile passage efficiency at the Cle Elum dam. The Yakima Project Storage Dams Fish Passage Assessment Plan discusses the need for early feasibility research regarding juvenile passage at the existing storage dams in the Yakima system. Coho smolts are currently being imported into the Yakima Basin for the YKFP coho reintroduction feasibility study, however, adult coho returns to the basin are not sufficient to adequately seed currently available spawning and rearing habitat downstream of the storage reservoirs. Therefore, adult coho would not be available to trap elsewhere in the basin and haul above Cle Elum Dam to initiate natural spawning and juvenile production. However, a sufficient number of hatchery coho salmon smolts are readily available every year and would be a reliable source of smolting salmonids for evaluation of juvenile passage modifications at Cle Elum dam.

The expansion of the YKFP coho re-introduction study would import 12,000 coho smolts from a lower Columbia River hatchery for release into Cle Elum Lake in early spring (February – May), near the juvenile bypass facilities. The smolts would be pit tagged to evaluate downstream passage survival using the newly installed pit tag detector located in the outlet flume of the modified gate structure at the dam. The smolts would be volitionally released from the net pens when smolts from other acclimation ponds within the upper Yakima begin actively migrating.

The main group (10,000) would be released from net pens installed within one half mile of the modified outlet structure. A smaller group of 1,000 smolts would be released immediately below the dam. This smaller group would be monitored for survival comparisons to Roza and Prosser dams. The pit tags would be detectable at Chandler, McNary and Bonneville dams. A third group of 1,000 pit tagged smolts would be released in various sized groups directly into the outlet flume to calibrate the pit tag efficiency of the new detection facility installed in the flume.

Smolts from the calibration release groups would be collected (by electro fishing or other methods) in the plunge pool or directly downstream after passing down the flume to determine if they sustained any injuries during their passage out of the lake.

Future evaluations may also be expanded to include other locations in Cle Elum Lake and/or tributary releases to evaluate smolt migration through the reservoir and homing of returning adults to release tributaries. Smolts surviving the reservoir releases would return as adults in the following fall and be available to utilize and evaluate interim adults fish passage facilities (e.g. trap and haul).

This SA does not examine or review the "implementation phase" of the YKFP Coho project. Additional review will be required prior to the initiation of the implementation phase for Coho production in the Yakima Basin.

The YKFP Project EIS studied 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 project is adaptively managed to allow

appropriate refinements to the supplementation program and the associated monitoring and evaluation program.

In support of the Coho feasibility studies, additional environmental documentation was prepared including a Biological Assessment on Bull Trout for the Yakima/Klickitat Fisheries Project 1999-2004 (BPA et al. 1999a), and a Biological Assessment on Mid-Columbia River Steelhead for the Yakima/Klickitat Fisheries Project 1999-2004 (BPA et al. 1999b). During provincial reviews, the YKFP program, including the coho component, was reviewed by the Pacific Northwest Power and Conservation Council (NPCC) and critiqued by the Independent Scientific Review Panel (ISRP). The Yakima Basin Subbasin Summary prepared in 2001 also includes the YKFP coho program.

The out migration survival of coho from the Lake Cle Elum acclimation site would be closely monitored. The coho monitoring and evaluation staff would perform monitoring tasks in accordance with the draft Yakima Coho Master Plan (Hubble and Woodward, 2003). Pit tag detection recorded by project personnel would be analyzed to determine out migration success from Lake Cle Elum, and downstream timing and survival.

No additional effects beyond those discussed in the EIS, subsequent supplement analyses or ESA consultations are expected by the proposed action. There would be no land disturbance activities that would affect historical or cultural resources.

## Findings

As documented in this Supplement Analysis, the potential impacts from expanding the YKFP coho re-introduction feasibility studies to include the Lake Cle Elum site for coho acclimation are not substantially different from those discussed in the Yakima Fisheries Project EIS (DOE/EIS-0169), ROD, Supplement Analyses (SA-01 through SA-10), 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/ Patti Smith 2-18-05

Patricia R. Smith

Environmental Protection Specialist – KEC-4

CONCUR: /s/ Thomas McKinney DATE: 2-18-05

Thomas C. McKinney

NEPA Compliance Officer – KEC-4

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.

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- 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
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- USDOE/BPA 2005. Supplement Analysis for Yakima Fisheries Project, DOE/EIS-0169-SA-10. Portland, OR

cc:

Dr. David Fast, Yakama Nation

Mr. Todd Newsome, Yakama Nation

Mr. Pat. Spurgin, Yakama Nation

Mr. Mel Sampson, Yakama Nation

Mr. John Easterbrooks, Washington Department of Fish and Wildlife

Dr. Todd Pearsons, Washington Department of Fish and Wildlife

bcc:

H. Nigam, Department of Energy/EH-42 (FORS BLDG., Rm 3E080)

L. Croff – KEC-4, Bonneville Power Administration

T. McKinney – KEC-4, Bonneville Power Administration

P. Smith – KEC-4, Bonneville Power Administration

N. Weintraub – KEC-4, Bonneville Power Administration

D. Byrnes – KEWL-4, Bonneville Power Administration

P. Key – LC-7, Bonneville Power Administration

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