

United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: 9/27/99

REPLY TO
ATTN OF: KECN-4

SUBJECT: Supplement Analysis for the Watershed Management Program EIS (DOE/EIS-0265/SA-21)

TO: Mark Shaw - KEWN-4
Fish and Wildlife Project Manager

Proposed Action: Asotin Creek Model Watershed FY 1999 In-Stream Habitat Projects

Budget No: F5196

Watershed Management Techniques or Actions Addressed Under This Supplement Analysis (See App. A of the Watershed Management Program EIS): 1.3 Restoration of Channelized River and Stream Reaches, 1.6 Install Large Woody Debris Structures, 1.7 Install Other Habitat Complexity Structures, 1.8 Bank Protection through Vegetation Management, 1.9 Structural Bank Protection Using Bioengineering Methods, 1.16 Spawning Habitat Enhancements, 1.17 Rearing Habitat Enhancements, 2.1 Maintain Healthy Riparian Plant Communities, 2.2 Plant/Protect Conifers in Riparian Areas for Thermal Cover, 2.4 Provide Filter Strips to Catch Sediment and Other Pollutants, 2.14 Enhance Large Woody Debris Recruitment, 6.2 Planned Grazing System, 6.3 Control Grazing Intensity, 6.4 Pasture and Hayland Management.

Location: Various locations in the Asotin Creek Watershed, WA.

Proposed by: Bonneville Power Administration (BPA), and the Asotin County Conservation District (ACCD).

Description of the Proposed Action: There are seven projects associated with the Asotin Creek Model Watershed for 1999: U.S. Forest Service (USFS) Project #1, Schlee Meander Reconstruction O&M, Koch Meander Reconstruction O&M, Koch Site #2, Heitstuman Site #3, Heitstuman Site #4, and Thiessen Site #5. These projects include restoration of in-stream fish habitat and re-establishing meander geometry to bankfull discharge dimension. In addition, re-establishing riparian vegetation and re-introducing large woody debris (LWD).

On USFS lands located in the North Fork of Asotin Creek, completion of large woody materials and random boulder placements where stream access is available. At the time of construction, structure locations were selected and based on limited stream corridor disturbance and maximum fish benefit potential. An existing forest road accesses the site for equipment and materials brought in. This project is jointly agreed upon between the USFS and the conservation district. Revegetation of the site will occur in spring of 2000.

Frank Koch #2 site is located adjacent to the 1998 project site. Last year three rock vanes were placed on the left bank shifting velocities away from a vulnerable bank and began establishing a stream meander. Due to lack of large woody materials last year, the right bank was not addressed. Now the importance for completion of the stream restoration efforts as the stream reestablishes a meander pattern in response to last years in-stream structure placements is great. Placement of large woody materials on approximately 200 feet of the right bank enhances fish habitat potential, establishes a bankline for the development of a riparian vegetative corridor, and maintains the limited existing riparian vegetation. An area approximately 200 feet wide and 400 feet long at this site was re-vegetated this spring. Disturbances of the plantings will be replanted in the spring of 2000.

Wayne Heitstuman #3 is located above where Dry Gulch enters Asotin Creek and up-stream of pool forming structures installed in 1997. Wayne Heitstuman #4 is located about a half mile downstream of project 3. An area, approximately 75 feet long, on the left bank on an outside corner will have large woody materials placed in the stream parallel to the bankline and on the bank woven between existing trees. Large woody materials will be placed on Gene Theissen #5 on the alternating near bank regions, first on the right bank and then on the left. Each section treated reaches approximately 150 feet in length. The forementioned projects' purpose includes enhancing the fish habitat cover and catching floating woody materials and suspended sediment by creating a more fertile and complex riparian vegetative zone. Revegetation will occur on all sites in the spring of 2000.

Leo Jungert #6 is located along Asotin Creek Road and lower in the watershed in relation to the other proposed projects. The benefit to fish habitat seems not as high, but this site contains numerous abandoned cars that either lay in the stream or on the verge of entering the stream. Asotin County Emergency Service received a grant from DOE to remove the vehicles. In the permit from Washington Department of Fish and Wildlife (WDFW) includes statements recommending improvements protecting the streambank and improve fish habitat. The removal of the vehicles during low flow and streambank protection and fish habitat coincide with 4J hooked rock vanes on the left bank. The structures would reduce the width to depth ratio and provide pool habitat for migrating adults and rearing for juveniles. WDFW redd surveys show that spawning steelhead use this section of the Mainstem. Revegetation of project site in the spring of 2000.

Upon monitoring and assessment of the Dan Schlee Meander Reconstruction Project #7 (installed in September of 1997), two minor operation and maintenance items are addressed. Discharges, exceeding bankfull flows by at least six times, have passed through this site and maintained its pattern and no structural failures occurred in spite of the flows. Revegetation of the project in spring of 2000. The assessment indicates two channel characteristics needing to be addressed in 1999.

1. A headcut migrated 100 feet from offsite location. The bottom vortex weir of the Schlee Site held in place, in spite of a 24" headcut. O&M needs an additional vortex rock weir approximately 30 feet below the original weir. The low set vortex rock weir provides toe protection to the original weir, in addition to, providing more pool habitat and a step pool morphology.
2. The width:depth ratio needs lowering from 16 to 13 feet to help facilitate bedload movement at bankfull discharge.

Upon monitoring and evaluation of Koch's Meander Reconstruction Project in May of 1999, a determination was made that the site survived flows 10 times the bankfull discharge, in spite of the initial lack of vegetation needed for root cohesion in the banks and reestablished floodplain. Some

Operation and Maintenance (O&M) are needed. The goal of these adjustments bring the current condition closer to a reference site condition and support healthy riparian growth and root matrix. The assessment indicates two minor O&M adjustments that need attention in 1999:

1. Lower the bankfull width:depth ratio from 17 to 12 feet. This allows for adequate depth to achieve enough shear stress to efficiently transport bedload and maintain a healthier thalweg.
2. Three additional J hook vanes at the end of the first three meander bends. These additions help maintain a lower width to depth ratio while increasing the number of large pools for fish habitat. They would alternate from the left bank, to right bank, and left bank again to help maintain the meander pattern and reduce width to depth ratio.

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

Steelhead have been known to spawn throughout the mainstem of Asotin Creek, upstream of the mouth of George Creek. No steelhead or chinook spawning has been recorded on-site. Steelhead and chinook are listed as threatened and endangered in the watershed. Biological assessments were submitted to USFWS and NMFS. A determination of “no effect” was determined for the peregrine falcon and bald eagle; a determination of “may affect, not likely to adversely affect” has been determined for the Snake River steelhead, spring/summer chinook salmon and bull trout. USFWS and NMFS both concurred with these findings.

No known cultural resources are listed on State Historical Preservation Officer’s database for this location. If during site investigation or practice installation cultural resources are found, Natural Resources Conservation Service policy and procedures will be followed.

Findings: The project is generally consistent with Section 7.6 A, A1, A2, 7.6B, B1-B6, 7.6C, 7.6D, 7.7 & 7.7A, of the Northwest Power Planning Council’s Fish and Wildlife Program. The attached Supplement Analysis finds 1) that the proposed actions are substantially consistent with the Watershed Management Program EIS (DOE/EIS-0265) and ROD, and; 2) that there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Eric N. Powers
Eric N. Powers
Environmental Project Lead - KECN

CONCUR: /s/ Thomas C. McKinney
Thomas C. McKinney
NEPA Compliance Officer

DATE: 9/29/99

Attachments:
NEPA Compliance Checklist
USFWS Concurrence Letter
NMFS Concurrence Letter

cc:

H. Nigam – DOE/EH-42

B. Beraud - KECN-4

N. Weintraub - KECN-4

L. Croff - KECP-4

M. Shaw - KEWN-4

P. Key - LC-7

Official File - KECN (EQ-14)

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