

United States Government

Department of Energy  
Bonneville Power Administration

# memorandum

DATE: January 30, 2006

REPLY TO  
ATTN OF: KEC-4

SUBJECT: Supplement Analysis for the Watershed Management Program (DOE/EIS-0265/SA-249)

to: Jay Marcotte - KEWL-4  
Fish and Wildlife Project Manager

**Proposed Action:** Satus Creek Watershed Restoration Project  
(Yakama Reservation Watersheds Project - FY2006)

**Project No:** 1999-035-01

**Watershed Management Techniques or Actions Addressed Under This Supplement Analysis (See Appendix A of the Watershed Management Program EIS):** 1.2 Prohibit Further Channelization; 1.3 Restoration of Channelized River and Stream Reaches; 1.4 Pre-Implementation Evaluation of Proposed Enhancements; 1.5 Install Grade Control Structures and Check Dams; 1.6 Install Large Woody Debris Structures; 1.7 Install Other Habitat Complexity Structures; 1.8 Bank Protection Through Vegetation Management; 1.10 Structural Bank Protection Using Engineered Structures; 1.12 Hardened Fords; 1.15 Fish Passage Enhancements-Fishways; 1.16 Spawning Habitat Enhancements; 1.17 Rearing Habitat Enhancements; 2.1 Maintain Healthy Riparian Plant Communities; 2.3 Create Wetlands to Provide Near Channel Cover and to Store Water for Later Use; 2.6 Native Seed Inventories; 2.7 Avoid Exotic Species; 2.9 Mechanical Vegetation Removal; 2.12 Prescribed Burning; 2.14 Enhance Large Woody Debris Recruitment; 3.17 Sediment Basins; 3.29 Herbicide Application; 3.30 Apply Herbicides Selectively; 3.31 Herbicide Application Rates; 4.1 Irrigation Water Management; 4.2 Water Measuring Devices; 4.3 Soil and Crop Water Use Data; 4.7 Irrigation by Surface or Subsurface Means; 4.8 Water Conveyance: Ditches and Canals; 4.9 Water Conveyance: Ditch and Canal Lining; 4.10 Water Conveyance: Pipeline; 4.18 Purchase/Negotiate Water Right; 4.22 Avoid Excess Irrigation Flows; 4.23 Intake and Return Diversion Screens; 5.11 Harden Fords for Livestock Crossing of Streams; 6.1 Deferred Grazing; 6.7 Water Supply: Trough; 6.8 Water Supply: Well; 6.9 Water Supply Spring Development; 6.10 Access: Fencing; 6.14 Vegetation Stabilization: Critical Area Planting; 7.7 Reduce Risk of Road-Related Surface Erosion; 7.8 Drainage Control to Minimize Erosion and Sedimentation; 7.13 Grade Road; 7.14 Ditch and Culvert Cleaning; and, 7.19 Water Bars.

**Location:** Ahtanum Creek, Toppenish Creek and Satus Creek watersheds, Yakama Nation Reservation, Yakima Sub basin, Washington State

**Proposed by:** Bonneville Power Administration (BPA) and the Yakama Nation (YN)

**Description of the Proposed Action:** Yakama Nation Tribal biologists will collect data on existing conditions within the Ahtanum Watershed, Toppenish Watershed, and Satus Watershed in order to identify factors limiting production of salmonids with the intent of restoring anadromous fish populations to these watersheds.

Satus Creek Watershed Restoration Project (Project) activities will occur within the Yakama Nation Reservation boundaries. The collected data will be used in: (1) planning efforts to prioritize effective habitat restoration activities; (2) changes to current land management practices to minimize adverse effects to wildlife and fish habitat; and (3) vegetation management activities to promote healthy native plant communities in meadows, riparian areas, and floodplains.

Habitat restoration measures that will be implemented include: (1) reconnecting floodplains through restoration of channelized river and stream reaches; (2) measures to prohibit further channelization; (3) installation of grade control structures; (4) structural bank protection; (5) road revegetation; (6) fence line, meadow, and riparian revegetation; (7) enhancement of fish passage; (8) drilling wells; (9) improved irrigation facilities; (10) maintenance of range and riparian fencing; (11) installing range and riparian fence; and (12) defer grazing by leasing four grazing permits.

1 - 4). Floodplains will be enhanced using straw bale structures to provide for floodplain roughness in order to slow overland water flow, to allow for the deposition of sediment on to the floodplain, and to lower the chances of unwanted floodplain erosion. An abandoned side channel on Ahtanum Creek will be reconnected to the main creek stem by construction of several in stream structures, one temporary intake structure, and one cross-valley berm to protect the side channel against headcutting.

5). Once the NF Simco Road is ripped, it will be revegetated with the appropriate shrub (snowberry, serviceberry) and tree species (alder, larch, pine, fir) for the site after consultation with the Yakama Nation Forestry department. The site is approximately one acre in size. The planting method will utilize an auger to create a six inch hole. Then the tree or shrub will be planted into the hole with fertilizer and water added. Post-road obliteration revegetation will preclude continued use of the road corridor, and provide for ground cover.

6). A ten acre site within the Corsetto riparian, livestock-exclosure fence will be revegetated with 800 - 1000 individual plants composed of dogwood, willow, and cottonwood (1- to 5-gallon containers). This will assist with recovery of the vegetation inside of the livestock exclosure. Grazing has negatively affected the vegetation in Rentschler's Meadow. Once the FY05 aspen planting success rate at this meadow has been analyzed and shows a greater than a 70 percent survival rate, FY06 planting will proceed. Approximately 300 aspen (1- and 5-gallon containers) will be planted along the NF Dry Creek. The project's planting method will utilize an auger to create a six inch hole. Then the tree or shrub will be planted into the hole with fertilizer and water added. Revegetation practices in riparian and floodplain areas may protect and stabilize banks, minimize erosion and sedimentation, and restore the native plant community.

7). The enhancement of fish passage is important to the intent of restoring anadromous fish populations to the Toppenish Creek, Ahtanum Creek, and Satus Creek watersheds. Branch Creek, which is a major tributary to Willy Dick Creek, will have both the upper and lower culverts removed. These culverts are currently perched, and a partial barrier to fish passage at lower flow rates. Rock grade control or an armored riffle will be installed to replace the culverts.

On the mainstem of Ahtanum Creek at RM 16.5, the Herke Eglin irrigation diversion is located. Currently, the diversion is not screened and is entraining juvenile and adult salmonids. The diversion is approximately 0.6 miles long and mimics stream function by flood irrigating floodplains adjacent to Ahtanum Creek, which is a net benefit to the creek. If additional non-BPA funding is found, initial project scoping and feasibility studies will begin in FY06 for a passive fish screen installation.

8 – 9). To assist in managing the migration of cattle from low elevations in the spring to higher elevations in the early summer, a stock well and water pipelines will be constructed on Toppenish Ridge West. Cattle are turned out on May 1<sup>st</sup>, and currently travel quickly approximately 25 miles to the headwater meadows of Satus Creek and Toppenish Creek. The cattle tend to linger in these headwaters and contribute significantly to the damage of sensitive riparian areas. As the cattle move quickly to the summer pasture areas, a large quantity of good forage is bypassed in route. The Toppenish Ridge fence will hold cattle on the north side of Toppenish Ridge, preventing them from accessing riparian and creek habitats. New wells are necessary to provide drinking water that can be piped to stock tanks for the cattle while they are held in the uplands to graze. One ground water well and a gravity flow pipeline, approximately two miles long, will be constructed. This well and pipeline will enable grazing to occur on 3,500 acres of ground, and the quantity of feed normally available each year will allow cattle to be pastured in this area well into June. Site visits will be made to all stock wells, stock tanks, and improved springs to determine condition and functionality. Repairs to all structures will be made on an as-needed basis so that all will be in good repair during the times of the year in which they are in use. A diversion off of Toppenish Creek, the Olney Lateral, is operated during the non-irrigation months (November through early April) to maintain an instream minimum flow of 10 cfs to insure that excess water from the Olney Lateral is not dumped as tailwater into Simcoe Creek, thus causing a false attraction of Toppenish steelhead into Simcoe Creek. Yakama fisheries project staff members direct water intake amounts for the Wapato Irrigation Project's upper and lower canals on Ahtanum Creek.

10). This project supports the maintenance of over 158 miles of range unit boundary fence and 15 miles of riparian fence. The range unit fencing is located along the perimeter of the project's leased range units. Maintenance of range fencing will allow for upland grass and forb species to revegetate, and prevent cattle trespass into the riparian areas. The riparian fence is distributed as follows: 8.5 miles in the Ahtanum watershed; 2 miles in the Toppenish Watershed; and 5 miles in the Satus Watershed. Restoration of riparian areas is done as a way of improving water quantity and quality. Restoration can increase summer low-water flows because wetlands serve as a source of water that gradually discharges into streams. Wetlands also decrease high flow events through functioning as water storage area during high flow events. They also can decrease water temperature because they are vegetated and therefore have a shaded water surface. Passive wetland restoration will be accomplished by maintaining fencing, to prevent use of the riparian area by livestock.

11). A fence, 0.75 mile in length, will be installed to prevent cattle from accessing Toppenish Creek thus protecting the riparian zone. Installation will include gates and water gaps appropriate to assist in grazing management.

There is approximately 1.5 miles of fence line to install on the north slope of Toppenish Ridge. There is a 0.6-mile fence to construct in order to prevent cattle from accessing the watercourse draining Lincoln Meadow. Construction includes gates, water gaps, and two cattle guards. All fence installation will be constructed to National Resource Conservation Service specifications, and will follow the HIP BO terms and conditions.

12). By leasing four range units in the Logy Creek Watershed, grazing will be deferred in nearly the entire Logy Creek Watershed, and includes approximately 20 miles of the Satus Creek corridor. In total, this project leases more than 140,000 acres including more than 30 stream miles of high quality steelhead spawning and rearing habitat in Satus Creek and Logy Creek.

**Analysis:** The compliance checklist for this watershed management project was completed by Brandon Rogers, Yakama Nation Fisheries Biologist II (attached signed on 12/06/2005). The Project meets the standards and guidelines for the Watershed Management Program Environmental Impact Statement (EIS) and Record of Decision (ROD).

Pursuant to its obligations under the Endangered Species Act (ESA), BPA requested a list of federally endangered, threatened, and proposed species with the potential to occur in the project area from the U.S. Fish and Wildlife Service (USFWS). The letter from the USFWS (attached dated 03/12/2004) states that bull trout (*Salvelinus confluentus*), bald eagle (*Haliaeetus leucocephalus*), marbled murrelet (*Brachyramphus marmoratus marmoratus*), northern spotted owl (*Strix occidentalis caurina*), Canada lynx (*Lynx canadensis*), gray wolf (*Canis lupus*), grizzly bear (*Ursus arctos* = *U.a. horribilis*), and Ute ladies'-tresses (*Spiranthes diluvialis*) may occur within the project area. Critical habitat for the northern spotted owl and bull trout may occur. Because there have been no additional listings of these species or any new occurrences of listed species in this area, the species list was not updated in FY06. Yakama Nation Tribal biologists (B. Rogers biological assessment 2004) confirmed that bald eagles have been casually observed near Simcoe Creek south of the project area during the winter and early spring; Ute ladies'-tresses are endemic to moist soils, wetland and riparian habitats, and the proposed work site is located at the lower elevation range for the species; and that bull trout is considered a resident population in Ahtanum Creek, mainly confined to the upper watershed.

Because there are no eagle nests near proposed FY06 project areas, project activities are not within close proximity to any known bald eagle use sites, and historic sightings of bald eagles have been irregular and greater than 15 miles from the project area during the late summer low water flow period proposed as timing for project activities, BPA made a determination of no effect to bald eagle, and did not initiate ESA Section 7 consultation with USFWS. If there could be any effect to this species as a result of project activities proposed near eagle nests, use areas, or during winter months in areas where eagles are located, project activities will cease and consultation with USFWS will be initiated.

Ute ladies'-tresses have two known populations in Washington State, located in Okanogan and Chelan counties. Stream banks within the proposed project area of Ahtanum Creek provide potential habitat for this species. There are no known Washington Natural Heritage Informational System records of any plant species within the vicinity of the project area.

No plants were discovered during surveys for Ute ladies'-tresses along the Ahtanum Creek approximately 3.5 miles northwest of the project site. BPA made a determination of no effect to Ute ladies'-tresses as a result of FY06 proposed project activities, and did not initiate ESA Section 7 consultation with USFWS. Project activities will cease and consultation with USFWS will be initiated if there could be any effect to this species during project activities.

Surveys suggest that bull trout are either at very low abundance within the proposed project reach of Ahtanum Creek, or are not present. Stream surveys suggest the best spawning and rearing habitat is well above the project location within the tributary forks of Ahtanum Creek. There are only two records of adult bull trout in the main stem of Ahtanum Creek over the last decade, one three miles downstream and the other 18 miles downstream of the proposed project stream reach. This project has the potential to adversely affect bull trout in the short-term through sedimentation or physical injury. As a result of FY04 proposed project activities, BPA made the determinations of may affect, not likely to adversely affect for bull trout. Consultation with USFWS was completed as per document; USFWS 04-0480 (attached dated 09/23/2004).

With design modifications reducing impacts to bull trout in the FY06 proposed project, USFWS was contacted to determine if consultation re-initiation was required. ESA Section 7 consultation with USFWS will be not be re-initiated for FY06 proposed projects, and USFWS will not alter their concurrence based on an email from USFWS biologist Greg VanStralen (attached dated 12/19/2005). Proposed project activities will: implement conservation measures; monitor the construction process; immediately report any known take of bull trout to, and request advice from, the USFWS on how to proceed with the in stream work should known take occur; and cease in stream work until USFWS consultation is initiated if there could be any effect to this species during project activities.

Middle Columbia Steelhead, a threatened species under the jurisdiction of NOAA Fisheries, occurs in the project area waterways. Critical habitat has been designated. BPA determined that the proposed project meets the requirements of the Fish and Habitat Improvement Program (HIP) Biological Opinion (BO) (attached authorization letter from BPA to B. Rogers, dated 01/27/2006) when conducted in accordance with the applicable, non-discretionary, HIP BO terms and conditions (attached dated 10/19/2005). This provides for coverage under Section 7 of the Endangered Species Act and for coverage of Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act. In order to conduct Section 7 and EFH consultation using the HIP BO, all proposed activities must fall within the activities covered, all effects must have been considered, and the activity must be conducted in accordance with the applicable terms and conditions identified in the HIP BO.

A Section 10(a)(1)(A) scientific research permit number 1532 (attached dated 06/15/2005) has been obtained. This permit authorizes the Columbia River Intertribal Fish Commission (CRITFC) annual take of listed salmonids while conducting investigations of Middle Columbia River steelhead use and life histories in three tributaries to the Yakima River.

The deployment and operation of three each, five-foot rotary screw traps in Ahtanum Creek, Satus Creek, and Toppenish Creek to capture out-migrating steelhead smolts from November to early June is covered under this permit.

A cultural resource review of the portions of the proposed project sites that will be subject to ground disturbance will be completed prior to implementation of proposed project activities. This review will include a literature search and a field survey by a qualified cultural resource specialist. The project area is located on the Yakama Reservation, and the Yakama Nation Cultural Resources Program will determine if the project will have an effect on cultural or historic resources. BPA initiated Section 106 consultation with the Yakama Nation Tribal Historic Preservation Officer on January 10, 2006 (attached). A cultural resources review of the proposed project site is being completed by the Yakama Nation Cultural Resources Department for the project, prior to implementing any ground disturbing activities. This review will include a literature search and a field survey by a qualified Tribal cultural resource specialist. If any cultural or historic resources are identified in the project area, appropriate mitigation will be done, in conjunction with the Tribe. If cultural deposits are found during any phase of the proposed project, or if the nature of the undertaking changes, ground-disturbing work will cease and a Yakama Nation cultural resource specialist will be contacted immediately.

Standard protection measures for activities in or near streams and wetlands will be followed during the implementation of the Project. The necessary permit approvals for this project either have been obtained or are in the process of being obtained. The HIP BO non-discretionary terms and conditions include mitigation measures for construction activities. The installation of weirs and

associated in-stream work need permit approvals, including a Joint Aquatic Resources Permit Application (JARPA) in Washington State, and work is not authorized to begin until the applicant has obtained all required permits and approvals. If the work should change, no work will be authorized to begin until the applicant has obtained all required permits and approvals.

Public involvement has taken place as part of the Project. Tribal members and Tribal staff will implement the Project on Tribal land. Tribal members are kept aware of the activities of the Fisheries Resource Management Program through the Natural Resources Quarterly Bulletin, which is made available to the public. Information is also disseminated through announcements on the Tribal radio station, and announcements and articles in the local newspaper. Non-tribal members have access to these sources of information. Students at the local college, Heritage College, are exposed to the project through some of the curriculum.

**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/ Sandra Ackley

Sandra Ackley  
Fish and Wildlife Biologist

CONCUR:

/s/ Katherine S. Pierce

Katherine S. Pierce  
NEPA Compliance Officer

DATE: January 31, 2006

Attachments:

Completed NEPA Compliance Checklist for Watershed Management Projects, 12/06/2005  
USFWS Listed Species Letter, 03/12/2004  
USFWS 04-0480 Concurrence Letter, 09/23/2004  
Email from G. VanStralen, USFWS, 12/19/2005  
HIP BO Authorization Letter from BPA to B. Rogers, 01/27/2006  
HIP BO Approval Terms and Conditions, 10/19/2005  
Section 10(a)(1)(A) permit number 1532, NOAA NMFS, 06/15/2005  
Section 106 Cultural Resource Consultation Request Letter, 01/10/2006

cc: (w/ attachments)

Mr. Brandon Rogers, Fisheries Biologist II, Yakama Nation