

# Restoring Anadromous Fish Habitat in Big Canyon Creek Watershed

**Annual Report**  
**2002 - 2003**



DOE/BP-00005268-1

November 2003

This Document should be cited as follows:

*Koziol, Deb, "Restoring Anadromous Fish Habitat in Big Canyon Creek Watershed",  
Project No. 1999-01500, 10 electronic pages, (BPA Report DOE/BP-00005268-1)*

Bonneville Power Administration  
P.O. Box 3621  
Portland, Oregon 97208

This report was funded by the Bonneville Power Administration (BPA), U.S. Department of Energy, as part of BPA's program to protect, mitigate, and enhance fish and wildlife affected by the development and operation of hydroelectric facilities on the Columbia River and its tributaries. The views in this report are the author's and do not necessarily represent the views of BPA.

**ANNUAL REPORT  
FY2003**

**Restoring Anadromous Fish Habitat  
in Big Canyon Creek Watershed**



(Performance Period: September 1, 2002 – August 31, 2003)

Bonneville Power Administration  
Project No. 1999-015-00  
**Contract No. 5268**  
**MOUNTAIN SNAKE PROVINCE**  
**CLEARWATER SUBBASIN**

Project Sponsor

Nez Perce Soil and Water Conservation District  
1630 23<sup>rd</sup> Ave Suite 501  
Lewiston, ID 83501  
(208) 746-9886 ext 118  
Fax: (208) 798-3164

Project Manager: Deb Koziol.  
Email: [deb.koziol@id.usda.gov](mailto:deb.koziol@id.usda.gov)

Financial Contact: Diana Menzel  
Email: [npswcd@lewiston.com](mailto:npswcd@lewiston.com)

Sponsor Contact: Todd Wittman, NPSWCD Chair

**Goal I. Develop and implement BMPs on agricultural, grazing, timber and urban land uses to protect and/or restore fish and wildlife habitat, streambank stability, watershed hydrology, water quality, and floodplain function.**

**Objective 1. Initiate landowner contact and participation.**

**Task A. Identify eligible landowners.**

The Task is completed based on information from county assessors' offices.

**Task B. Develop GIS based land ownership coverage on lands in Nez Perce county.**

The digitized land ownership boundaries for the Nez Perce county side of Big Canyon Creek is 100% completed. In addition, land parcel numbers are being collected on the Lewis county side of the watershed to better develop the GIS ownership coverage.

**Task C. Conduct an initial public informational meeting.**

A mass mailing, 2 radio public service announcements (PSAs), 1 newspaper PSA, and flyers posted at the town post offices announced the two public meetings. In addition to the NPSWCD's presentations at the meetings, Nez Perce Tribe- Department of Fisheries Resources Management (NPT-DFRM) and Natural Resources Conservation Service (NRCS) also completed presentations on their individual projects and activities in the watershed. 100% completed. In addition, a second public meeting was conducted to allow landowners a better opportunity to attend.

**Task D. Accept applications for project participation.**

Six applications for new land were accepted during this year. In addition, three landowners currently with project contracts requested additional work added to their contracts.

**Objective 2. Develop outreach materials to assist in landowner participation, general education of habitat needs, and implementation of BMPs.**

**Task A. Revise existing NPSWCD fact sheets to explain project contracting and administration procedures.**



Four fact sheets were 100% completed during the year and are currently being distributed. In addition, fact sheets on the agricultural and riparian practices completed with the Big Canyon project were developed. In order to ensure technical accuracy, these fact sheets were submitted to NRCS engineering staff for review and approval. These fact sheets will be available in the project's CY03.

**Task B. Develop information materials to explain project goals and specific fisheries needs.**

Meetings were held with NPT-DFRM to gather information for the fact sheets. However, it was decided to expand the Task to produce a more comprehensive product. The goal is now a 15+ page publication which focuses on fish species, habitat needs, watershed ecology, and conservation work in each subwatershed in the area. In order to accomplish this, Latah Soil and Water Conservation District, Lewis Soil Conservation District, and NPT-DFRM are also providing information and assistance. The publication is currently approximately 30% completed. A third of the watershed pages are completed. Layout and design plan is completed. Life cycle graphics, text and layout completed. Presently gathering information on fish species, graphics and images, and forestry and plant life. Tentative completion date is November 2003 and was included as part of project's FY03 SOW.

**Objective 3. Collect and finalize watershed-planning data.**

**Task A. Complete riparian multi-layer assessment for the Big Canyon Creek watershed (This is a carryover task from FY01).**

The report is 100% completed and was sent to BPA COTR.

**Task B. Complete GIS road layer information.**

Coordinated on road layer with Nez Perce County and NPT-DFRM. Basic road coverage is 100% complete.

In addition, additional watershed coverages were completed to assist in planning and documentation. These coverages included historic upland game bird and big game habitat, ownership, and land use.

**Objective 4. Complete BMP plans and ensure regulatory compliance.**

**Task A. Select project applications for site evaluations and plan development.**

100% completed with all applications ranked.

**Task B. Complete initial site reviews and collect resource data.**

Field visits were conducted to collect inventory data for approved project applications. Data was collected on such things as conservation problems, livestock use, sediment, nutrients, stream inventories, and wildlife habitat.



**Task C. Develop conservation plans, which identify site specific BMPs to address fish habitat needs.**

Completed conservation plan documents for 1,838 acres of land including cropland, grazed rangeland, and wetlands. Worked closely with landowners to determine conservation problems and potential solutions.

**Task D. Design identified BMPs. (This is a carryover task from FY01 and was formerly identified as "Objective 3, Task 3.1".)**



Completed designs for all agricultural structural practices listed under Objective 5, Task B. Completed landowners' operation and maintenance plan requirements for those practices. In addition, began designing Livestock Waste Storage Facility, two Livestock Off-site Watering Systems, and Fencing to be installed in September (FY03).

**Task E. NEPA compliance.**

Used Idaho Fish and Game's Conservation Data Center ArcView-GIS database to ensure known threatened and endangered species locations would not be impacted by landowner projects. Completed wetland determination documentation for practices considered wetlands as per NRCS policy. All documentation put in landowners' folders.

**Task F. SHIPO and other regulatory compliance.**

Completed cultural resources requests through SHIPO and USFS for all ground disturbing structural practices. Worked with NRCS Cultural Resources technician to complete field surveys when SHIPO determined further field investigations were necessary. Completed US Corps of Engineers 404 permits when needed. All "approval to proceed" documentation is located in landowner contract folders.

**Objective 5. Supervise and inspect BMP installation. (This is a carryover objective from FY01 and was formerly identified as "Objective 4, Task 3.1-4.3".)**

**Task A. Revise the existing contractor list and prepare contractor agreements**

Advertised for additional contractors and updated lists.

**Task B. Install and inspect BMPs.**

Laid out practices, met with landowners and contractors, and completed construction inspections for 25 Water and Sediment Control Basins, 8075 linear feet of Grassed Waterways, 2 Livestock Offsite Watering Facilities, 350 Tree/Shrub Plantings, 200 linear feet of Channel Vegetation, and 1730

linear feet of Riparian Fencing. All BMPs were designed and constructed following NRCS Field Office Technical Guide standards and specifications. In addition, in the watershed, installed 2 Water and Sediment Control Basins, 200 Tree/Shrub Plantings, and 10 acres of Pasture and Hayland Seeding utilizing other funding sources.



**Task C. Implement noxious weed control BMPs.**

Hand-pulled noxious weeds on approximately 2 acres of sensitive riparian areas. Yellow starthistle biocontrol releases were limited this year due to the seasonal population variation of insects.

**Goal II. Organize, coordinate and lead interagency and locally led conservation efforts.**

**Objective 1. Complete interagency coordination activities.**

**Task A. Conduct interagency coordination meeting.**

Numerous meetings with NPT-DFRM to coordinate watershed activities. Additional coordination meetings with NRCS- Lewiston, Idaho Fish and Game, NRCS- Nez Perce, Lewis County Soil Conservation District, NRCS- Boise, NPT-Watershed, Idaho DEQ, and Clearwater Focus Group.

**Task B. Develop a web-based information sharing process for Big Canyon watershed activities.**

Website is currently under construction. Site should begin to be accessible in October 2003.

**Objective 2. Coordinate with the Nez Perce Tribe Department of Fish Resources Management (NPT-DFRM) to complete culvert inventories and complete topographic surveys.**

**Task A. Coordinate landowner access agreements in order for the NPT to complete culvert inventories on private land.**

Assisted NPT-DFRM by featuring an article about their project in the watershed newsletter, sending out a mass mailing, having project speakers at the public meetings, and providing information to landowners.

**Goal III. Public education and technology transfer**

**Objective 1. Conduct educational workshops.**

**Task A. Conduct one noxious weed educational workshops for watershed landowners.**

Coordinated with the Nez Perce Tribe Bio-control Center and University of Idaho to conduct a yellow starthistle biological control workshop. Landowners collected and released over 1,500 insects on their own property at no cost.



**Task B. Publish 4 newsletters per year.**

All newsletters completed as per schedule. Over 1,300 people in the watershed are currently on the newsletter mailing list.

In addition, conducted the 19<sup>th</sup> Annual Sixth Grade Environmental Awareness Days which taught over 400 area youth about natural resource issues. Classes with hands-on learning activities were taught on subjects such as agriculture, fisheries, wildlife, conservation, and archeology. Additional hands-on classes on soils and agriculture were held for a local junior high school's Agricultural Days on a farm in Big Canyon.

**Objective 2. Landowner education.**

**Task A. Meet one-on-one with landowners in the watershed.**

Met with every landowner with a project contract at least once on their property to discuss project goals, fish habitat resource needs, and discuss opportunities for habitat improvement on their land. Met with most landowners numerous times, especially if construction occurred on their land this year. Estimate over 400 hours were spent meeting or talking directly with watershed landowners during the year

In addition, Soil Quality Test Kit evaluations were completed on four sites in the watershed this year. Evaluations tests collected data on physical, chemical and biological parameters of soil quality. The selected sites had four different management systems with the same soil type, topography, and aspect. These Soil Quality Evaluations were completed as part of a NPSWCD project evaluating sites throughout the county. The evaluation test results will be distributed to each participating landowner in a Soil Health Report.

Throughout the year, numerous educational displays were created for the Lewiston USDA Service Center office on topics such as alternative watering systems for cattle, noxious weeds, and fish limiting factors. A display on soil

quality was also created for the Idaho Association of Soil Conservation Districts' Annual Conference held in Idaho Falls, Idaho. NWSWCD created a display booth on the effects of soil erosion at the 2002 Nez Perce County Fair. Brochures, fact sheets, and other materials were handed out by NPSWCD staff who were available at the booth to answer questions.

#### **Goal IV. Monitor and evaluate BMP effectiveness in improving fisheries habitat.**

##### **Objective 1. Complete BMP effectiveness on selected BMPs.**

###### **Task A. Collect site specific BMP effectiveness data relating to sediment reductions, stream temperature, riparian restoration, erosion control, and stream morphology changes as appropriate.**

Assisted with Water and Sediment Control Structure multi-year effectiveness project.

In addition, a field trial was begun through the project to determine if a bonded fiber matrix (BFM) erosion prevention material would be effective instead of the considerably more expensive mulch and netting material currently used. BFM has been used primarily to reduce erosion on roadsides, but it has not been utilized as an agricultural BMP in this area for critical area erosion. Also, NPSWCD is coordinating a field trial on viability of establishing a Canada Thistle biological control agent.



##### **Objective 2. Determine stream temperatures effects on fish habitat.**

###### **Task A. Collect stream temperature data.**

Collected HOBO data logger stream temperature data at 6 locations within the Big Canyon Creek watershed. Working with StreamNet to submit year's worth of data, as well as data collected from previous years and for other watershed's in the county.

###### **Task C. Complete photomonitoring at BMP sites.**

Documented practice sites with digital photos with copies in landowners' contract folders.

###### **Task D. Complete annual status reviews (ASR) at BMP sites.**

Completed qualitative and/or quantitative site reviews of each management and structural practice in landowner project contracts. Reviews were conducted on the 2,255 acres of land which includes 86 structural and vegetative practices currently under contracts. The reviews were

completed by conducting field visits, writing the report, then meeting with the landowner to discuss it. The reviews ensure the landowner is completing continued operation and maintenance activities as per the landowner's project contract. Any deficiencies found with the operation and maintenance were addressed with the landowner.

**Goal V. Successfully administrate the BPA project.**

**Objective 1. Complete required progress reports.**

**Task A. Complete monthly fiscal invoice reports.**

Reports submitted on schedule, except for September and October invoices, due to the delay in the contract's FY02 SOW and budget approval.

**Task B. Complete quarterly fiscal and narrative report.**

Reports all submitted.

**Task C. Completed year end fiscal and narrative report and CY03 Work Statement.**

FY03 Statement of Work submitted to BPA. Annual/year end reports will be completed as per schedule.