

**MODEL WATERSHED DEVELOPMENT
IN EASTERN WASHINGTON**

ADMINISTRATIVE PROJECT SUPPORT

ANNUAL PROGRESS REPORT

Project Period:
October 1, 1996 to December 31, 1997

Prepared by:

Bob Bottman - Washington Conservation Commission
Brad Johnson - Asotin Model Watershed
Terry Bruegman - Tucannon Model Watershed
Duane Bartels - Pataha Model Watershed

Washington Conservation Commission
Olympia, WA 98504

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Eastern Washington Model Watersheds FY 1997 Final Report

BPA Project No. 92-026-02

Project Background and Goal

In 1992, acting for the State of Washington, the Conservation Commission entered into a contract with the Bonneville Power Administration under which the Commission agreed to prepare and implement watershed plans in three watersheds in Eastern Washington.

The Commission selected the Asotin County, Columbia, and Pomeroy conservation districts to act as lead agencies to prepare and implement plans for the Asotin Creek, Tucannon River, and Pataha Creek watersheds, respectively. The primary goal of these plans is to enhance and restore habitat for the Snake River spring chinook, Snake River fall chinook, summer steelhead, and bull trout.

The subcontracts executed between the Commission and these three conservation districts support a technical lead (earlier called watershed coordinator) position in each district. This report covers accomplishments of the three technical leads during federal fiscal year 1997.

FY 1997 Accomplishments

The annual reports of the three lead conservation districts are attached. A summary of accomplishments follows:

Asotin Creek Model Watershed – During FY 1997, the subcontract between the Commission and Asotin County Conservation District reimbursed the district for salaries and benefits for the technical lead and administrative assistant, travel costs incurred, and office equipment and goods and services purchased.

The technical lead worked with seven private landowners to install 12 fish habitat restoration projects totaling \$56,409. Also, 62 upland sediment basins were cleaned out at a total cost of \$46,043, and 6,200 feet of riparian fencing were installed at a total cost of \$19,967. On upland or riparian projects, landowners paid at least 25 percent of project costs. For in-stream fish habitat work, landowners paid at least 15 percent of the costs.

Tucannon River Model Watershed – The technical lead, working with the Natural Resources Conservation Service (NRCS) watershed management team, completed a reassessment of the watershed after the 1996 and 1997 flood events. Critical limiting factors identified were presented to the landowner steering committee and the technical advisory committee, and were amended into the draft Tucannon River Model Watershed Plan. The final draft version of the plan was printed and is currently in the review process required by the State Environmental Policy Act (SEPA).

The technical lead worked with 13 private landowners on 14 projects during FY 1997, which restored or protected over 6,800 feet of stream habitat. Riparian plantings to increase stream shading and reduce sedimentation totaled just over six acres. Also, maintenance was performed on five projects installed in 1996 and damaged by the recent floods. Upland projects included no-till management practices on 1,067 acres of production agriculture land. During FY 1997, the total cost of projects was \$208,961.

Pataha Creek Model Watershed – During FY 1997, the subcontract with the Pomeroy Conservation District was used to reimburse the district for salaries and benefits for the technical lead and administrative assistant, travel expenses, and goods and services needed in support of this project.

The Pataha Creek Model Watershed Plan was printed in final draft form and is presently undergoing SEPA review.

The technical lead worked with landowners in the watershed to install upland and riparian practices at 15 different sites to control the sediment load carried by Pataha Creek into the Tucannon River. A total of \$216,632 was used during 1997 to install these practices on private lands.

To: Washington State Conservation Commission

From: Asotin County Conservation District

Date: February 17, 1998

**Subject: Asotin Creek Model Watershed FY 1997 Final Report
Grant No. 96-48-MW**

The purpose of the Model Watershed Coordinator Grant was to help impact water quality and fisheries habitat concerns within the Asotin Creek Watershed by developing relationships between local landowners and resource agencies in the area.

The Asotin County Conservation District (ACCD) worked together with the Washington State Conservation Commission (WCC), Bonneville Power Administration (BPA), and the Natural Resource Conservation Service (NRCS) to install Best Management Practices (BMP's) within the Asotin Creek watershed.

The Model Watershed Grant reimbursed the District for salaries and benefits for the Coordinator and Administrative Assistant, travel costs incurred, and office equipment and goods and services purchased. The District used funds to purchase a BARS Accounting Program for payroll and expenses, which also has mailing listing and the tree sales program. This was a worthwhile purchase and saves the District on tax time and end of the month reporting. The District also received help paying for Internet and copier lease services. Since the ACCD does not have a source of revenue at the present time, this Grant has helped payroll and general office function.

The Coordinator has been extremely busy implementing upland and riparian BMP's. It has been a very successful cost-share year with numerous practices being implemented within the watershed to help improve water quality and restore fisheries habitat. Three sheets have been include to show practices installed and cost-share percentages paid during 1997.

This Grant is an excellent example of what can be accomplished with landowner participation and available funding to help improve our natural resources.

1997 BPA Fish Habitat Restoration Projects

Projects	Total Costs	BPA Costs	Landowner Costs	Landowner In-kind
Schlee #1	\$13,209.42	\$11,913.65	\$1,295.77	\$360.00
Koch #2	\$10,550.40	\$8,479.18	\$2,071.22	\$150.00
Blankinship #3 & 4	\$5,642.65	\$4,319.24	\$1,323.41	\$150.00
Hood #5	\$5,558.20	\$4,265.03	\$1,293.17	\$360.00
Thiessen #6 & #7	\$6,102.95	\$4,827.58	\$1,275.37	\$360.00
Headgate #8	\$10,521.27	\$10,521.27	\$00.00	\$360.00
Hagenah #10, 11, 12	\$4,824.10	\$3,676.19	\$1,147.91	\$480.00
Totals	\$56,408.99	\$48,002.14	\$8,406.85	\$2,220.00

In-kind contributions by the landowner are not included in the total cost. Landowner In-kind was determined at \$15.00 per hour and includes: signing up for the projects, showing the District and the contractors the sites, and time spent while work was being completed. Most of the landowners removed fence to help gain access to the sites. Two of the landowners helped during construction to keep cost down and use available resources to complete the job.

Most of the projects were cost-shared 75%, with higher percentages paid if the projects incorporated large woody debris for fish habitat. Landowner participation was strictly on a voluntary basis. Landowners signed a ten year maintenance agreement and all projects will be monitored and evaluated for effectiveness.

1997 Sediment Basin Cleanouts

Cooperator	# of ponds	Total Cost	BPA Cost	Landowner
Appleford	1	\$776.25	\$582.19	\$194.06
Ausman, B	4	\$2,594.50	\$1,945.88	\$2,052.00
Ausman, K	2	\$2,430.00	\$1,822.50	\$607.50
Barkley	2	\$1,477.25	\$1,107.94	\$369.31
Dodd	8	\$5,006.25	\$3,754.69	\$5,193.56
Flerchinger	3	\$2,092.50	\$1,569.38	\$523.12
Forgey	7	\$1,708.50	\$1,281.38	\$427.12
Heitstuman	2	\$742.50	\$556.88	\$347.62
Johnson	3	\$3,273.75	\$2,455.31	\$818.44
Kurdy	1	\$499.86	\$374.90	\$124.96
Kuther	1	\$630.00	\$472.50	\$157.50
Petty, P	5	\$3,487.50	\$2,615.63	\$871.87
Petty, T	7	\$4,140.00	\$3,105.00	\$1,035.00
Polumsky	1	\$1,080.00	\$810.00	\$270.00
Reeves	6	\$4,857.25	\$3,642.94	\$2,213.31
Scheibe	1	\$1,001.25	\$750.94	\$736.31
Totals	54	\$35,797.36	\$26,848.06	\$15,942.30

* Indicates landowner paid for sediment to be hauled from the basin.

X Indicates landowner hauled sediment while the basin was being cleaned.

In-kind contributions by the landowner are not included in the total cost. Landowner in-kind was determined at \$15.00 per hour and includes: signing up for practices, showing the district and contractors the basins, and time spent while work was being completed. The two landowners in-kind who hauled the sediment was determined at \$30.00 per hour.

Sediment basin cleanouts were cost-share 75% with the landowner paying for the cost to haul the sediment. Landowner participation was strictly on a voluntary basis.

1997 BPA Riparian Fencing Projects

Cooperator	ft of fence	Total Cost	BPA Cost	Price per ft	Avg. buffer
Schlee *	250 ft	\$205.57	\$205.57	\$.82	25 ft
L. Hood	837 ft	\$4,674.07	\$4,674.07	\$5.58	43 ft
Blankinship	1,366 ft	\$3,142.39	\$3,142.39	\$2.30	45 ft
Lick Creek ~	1,575 ft	\$6,702.83	\$1,702.83	\$1.08	50 ft
G. Thiessen	3,073 ft	\$5,242.61	\$5,242.61	\$1.70	83 ft
Totals	7,101 ft.	\$19,967.47	\$14,967.47	\$2.74 avg.	xxx

* Materials provided by landowner.

~ BPA Cost was for labor only. Forest Service provided materials.

TO: Conservation Commission

FROM: Columbia Conservation District

DATE: June 4, 1998

**SUBJECT: Tucannon River Model Watershed FY 1997 Final Report
Grant No. 96-46-MW**

The District Coordinator, working with NRCS Watershed Management Team completed the reassessment of the Tucannon River and the impacts of the 1996 and 1997 floods. Critical limiting factors identified through the reassessment were presented to the Landowner Steering and Technical Advisory Committees. The combined committees amended the Tucannon River Model Watershed Plan to reflect the changed watershed ecosystem as assessed. The final draft plan was printed in preparation of the SEPA Review process.

The combined committees identified projects based on critical limiting factors identified in each stretch of the river for the 1997 work season. Thirteen projects involving 14 different landowners were selected for development. Working with NRCS, the local watershed Inter-Disciplinary Team (IDT), and landowners project plans and budgets were developed. The Biological Assessment was submitted to NMFS and concurrence received. One landowner opted not to sign the final project agreement and was dropped from the list. In addition to these new projects five O&M projects were identified on the 1996 projects and one hold over project from 1996 were scheduled for construction. Landowners obtained HPA permits and secured contractors to perform the work.

The 13 new and one 96 carryover instream projects installed the following bio-engineered habitat enhancement structures:

- * Rock Barbs
- * Root Wads
- * Root Wad Revetments
- * Vortex Rock Weirs
- * LWD
- * Gravel Bar Shaping
- * Off Channel Rearing
- * Deflectors
- * Riparian grass seeding
- * Riparian DSP

These structures restored, enhanced, and protected 6828 ft. of fish stream. Project site seeding and dormant stock plantings (DSP) totaled 6.3 acres.

In addition 5 O&M projects on 1996 projects were completed. These projects were implemented to maintain the structural integrity of the projects. All in all, the 1996 projects faired very well. One must remember they were constructed with the best intent and engineering, yet were in a flood ravished river that was geomorphologically unstable. New and O&M projects totaled \$208,960.59 in implementation costs.

Upland enhancement utilized No-till practices on 1067.7 acres of production agriculture land. The interest to implement a continual direct seeding rotation practice is increasing. The district board is excited about this prospect. The new direct seeding rotations are proving effective at keeping soil from eroding and entering the rivers, however, the economic burden placed on producers during the 3 to 5 year transition phase is resulting in slow overall acceptance. Cost share funding is needed to offset this financial burden to producers through the transition phase.

Numerous tours were conducted. Tour guests included WDFW, regional media representatives, state, regional and national NRCS, legislative members, Washington Association of Wheat Growers, WSU students, landowners, and local citizenry. Local, regional, and national articles and media attention focused on the watershed resulted in increased interest in the restoration process developed by local citizenry and lead by the district.

A monitoring and evaluation program was developed in cooperation with WDFW and NRCS as approved by the Landowner Steering and Technical Advisory committees. The district will help fund WDFW staff to implement the plan. The district will work with NRCS to implement a “whole resource” evaluation program.

The District Coordinator worked to secure funding for future plan implementation by attending numerous meetings and workshops on fish habitat restoration and ESA issues. Pursuing state funding through the legislature was initiated and facilitated by Representative Dave Mastin. BPA funding has tightened, however, Terry has been asked to be a part of the Columbia Basin Fish & Wildlife Authority (CBFWA) evaluation and funding process at the Sub-Region Team level.

Planning for 1998 projects was began in October. Nineteen project sites were identified by the IDT. Project sites are located throughout the river basin and involve 17 private landowners and the WDFW. NRCS engineers began work on conceptual drawings.

To: Washington State Conservation Commission

From: Pomeroy Conservation District

Date: 6/2/98

Re: 96-47-MW Grant Final Report

The Washington State Conservation Commission was provided with a grant from the Bonneville Power Administration (BPA) in 1993 for the purpose of funding a pilot effort to encourage private landowners to join government agencies in finding solutions to loss of salmon habitat and critical riparian area. The Commission passed part of these funds through the Pomeroy Conservation District for the development of a Pataha Creek Model Watershed Plan. The goal of the plan was to set into motion efforts to return the Pataha Creek Watershed to its productive capacity for salmon spawning and rearing. After further study, it was determined that the Pataha's impact on the Tucannon River was a main factor.

The Pataha's high delivery of sediment and high water temperatures into the spawning and rearing area of the lower Tucannon River was determined to be the main problem in the Pataha Creek Watershed.

The conservation district hired a watershed coordinator to bring together the technical experts of state and federal agencies with private landowners to jointly find solutions to habitat problems within the watershed. The technical representatives provide the scientific background and information on the critical needs of the fish while the landowners provide the common sense backstop to ensure that the action items suggested by the agencies are attainable, physically and financially, within the watershed.

The Pomeroy Conservation District has worked with the Washington State Conservation Commission, Bonneville Power Administration, and the Natural Resource Conservation Service since the beginning of this pilot program. We have jointly implemented conservation practices to help reduce the erosion and resulting sedimentation moving from our uplands into the Tucannon River. We have also installed practices within the riparian area to improve bank stability, riparian vegetation and instream fish habitat.

This grant (96-47-MW) was used for salaries and benefits for the Coordinator and Administrative Assistant, travel expenses, and goods and services needed for the administration of this grant.

The practices shown on the following page were implemented during the time period of the coordinator grant. This implementation has helped move our program closer to meeting our goals of reducing the sedimentation and stream temperature in the Pataha Watershed to levels that will not adversely affect the spawning and rearing area in the Tucannon River.

<i>Practices Installed</i>	<i>Cost</i>	<i>Quantity</i>
Bank Stabilization Projects	\$46,277.42	1,740 ft.
Buffer Strips (Upland,Riparian)	\$13,615.00	20.5 acres
Clearing and Snagging	\$ 907.33	495 feet.
Critical area seeding	\$ 300.00	3 acres
Demostration Projects	\$ 4,464.79	2 using solar water pumps
Riparian Fencing	\$11,788.89	8,200 ft.
Grass and Legume planting	\$ 1,344.87	87.9 acres (1,318 tons this year)
Log and root wad harvest	\$14,273.75	Materials for Pataha, Asotin in-stream, bank projects
Monitoring Equipment	\$ 1,405.79	Water sampling
No-till seeding	\$35,428.25	2,056 acres (30,840 tons saved this year)
Off-site Watering	\$21,780.58	4 sites built excluding over 500 head of livestock from direct access to stream
Sediment Basins	\$ 1,649.00	5 basins constructed or cleaned
Streamcrossing	\$ 7,456.67	3 sites constructed
Stripcropping	\$ 8,472.66	575 acres (2,875 tons saved this year)
Subsoiling	\$14,166.25	1,417 acres (4251 tons saved this year)
Terraces	\$26,478.53	39,763 feet (902 ton saved this year)
Tree planting	\$ 2,615.73	10,000 whips and rooted stock planted
Grassed Waterways	\$ 2,770.71	6,848 ft. constructed
Log Weirs	\$ 1,436.00	3 weirs constructed for fish habitat

Total	\$216,632.22	