Bonneville Power Administration
Fish and Wildlife Program FY98 Watershed Proposal Form

Section 1. General administrative information

Title Enhance Habitat For Fall Chinook, Steelhead And Bulltrout

Bonneville project number, if an ongoing project 9401807

Business name of agency, institution or organization requesting funding
Pomeroy Conservation District

Business acronym (if appropriate) PCD

Proposal contact person or principal investigator:

Name	Duane G. Bartels
Mailing Address	P.O. Box 468
City, ST Zip	Pomeroy, WA 99347
Phone	509 843 1998
Fax	509 843 3665
Email address	Habitatman@aol.com

Subcontractors.

Organization	Mailing Address	City, ST Zip	Contact Name
N/A			

NPPC Program Measure Number(s) which this project addresses.

NMFS Biological Opinion Number(s) which this project addresses.
7.7b3

Other planning document references.
Snake River Salmon Recovery Plan, Pataha Creek Model Watershed Draft Plan, Washington Department of Wildlife draft Wild Salmonid Recovery Plan.

Subbasin.
Pataha Creek, Tributary to Tucannon & Snake River

Short description.
Enhance fish habitat, reduce sediment load from Pataha Creek, reduce water temperature, improve and enhance riparian vegetation and promote cooperation between landowners and agencies involved in Pataha Creek Model Watershed Plan.

Section 2. Key words

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
X	Anadromous fish	X	Construction	X	Watershed
+	Resident fish		O & M		Biodiversity/genetics
+	Wildlife		Production		Population dynamics
	Oceans/estuaries		Research	+	Ecosystems
	Climate		Monitoring/eval.		Flow/survival
	Other	+	Resource mgmt		Fish disease
			Planning/admin.		Supplementation
			Enforcement	+	Wildlife habitat en-
			Acquisitions		hancement/restoration

Other keywords.
Implementation

Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship
9202602	WA Modelatershed Leads	Technical lead to Implement WS Plans

Section 4. Objectives, tasks and schedules

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Improve instream fish habitat and quantity	a	Construct log and rock vortex weirs, place woody debris, root wad reventment and incorporate root wads in bank stab. projects
		b	6000 tree and shrub plantings
2	Reduce water temperature	a	6000 tree and shrub plantings

		b	Riparian fencing 20,000 ft.
		c	Riparian buffer strips 20 acres
		d	Streambank Stabilization with incorporation of fish habitat
3	Reduce erosion and sedimentation rates	a	No-till seeding 5,000 acres
		b	terrace construction 50,000 ft.
		c	Grasses Waterway 10,000 ft.
		d	sediment basins 10 new
		e	6000 tree and shrub plantings
4	Reduce bacteria Counts	a	Off-site watering facilities 4 new sites
		b	Riparian fencing 20,000 ft.
		c	Riparian buffer strips 20 acres
5	Improve and reestablish riparian vegetation	a	Riparian fencing 20,000 ft.
		b	Riparian buffer strips 20 acres
		c	6000 tree and shrub plantings
6	Maintain perennial flow	a	Riparian fencing 20,000 ft.
		b	Riparian buffer strips 20 acres
		c	6000 tree and shrub plantings
		d	increased irrigation management
7	Remove fish migration barriers	a	volunteer groups and landowners
8	Utilize cost-effective ways to treat resource problems	a	Analyze all practices and projects
9	Promote Cooperation	a	IDT team
10	Improve & Maintain rangeland and forest Health	a	Increased # of Management plan

Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	1/1998	12/1998	10.00%
2	1/1998	12/1998	5.00%
3	1/1998	12/1998	50.00%
4	1/1998	12/1998	5.00%
5	1/1998	12/1998	5.00%
6	1/1998	12/1998	5.00%
7	1/1998	12/1998	5.00%
8	1/1998	12/1998	5.00%
9	1/1998	12/1998	5.00%
5	1/1998	12/1998	5.00%

			TOTAL 100.00%

Schedule constraints.
Improving and maintaining habitat requires long term commitments between landowners and all agencies involved. Long term cost-share availability on all projects and practices is necessary for continued landowner involvement in the watershed program.

Completion date.
The Pataha Creek Model Watershed has completed 4 years of limited funding programs. The program is building each year and at least 5 more years will be needed to make measurable differences in the habitat enhancement program. 2003.

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
Personnel		
Fringe benefits		
Supplies, materials, non-expendable property		
Operations & maintenance		$10,000
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		
PIT tags	# of tags:	
Travel		
Indirect costs		
Subcontracts	Instream fish habitat projects	$48,000
Other	Upland Conservation , riparian buffer, fencing.	$135,000
TOTAL		$193,000

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget	$203,000	$213,000	$223,000	$233,000
O&M as % of total	5.00%	5.00%	5.00%	5.00%

Section 6. Abstract

The Pataha Creek Watershed was designated as a “model watershed” in 1993 by the Northwest Power Planning Council and the Bonneville Power Administration.

Chinook salmon have never been documented in Pataha Creek. It is too small for adults and does not presently support juveniles because of high water temperature, excessive turbidity and sediment deposition. It is considered "critical habitat" because it drains into the Tucannon River which supports both spring and fall chinook. The Pomeroy Conservation District has provided a cost-share program to encourage further use of approved conservation practices that will treat temperature and sediment problems to lessen their negative impacts to the Tucannon River fish population.

Although the primary emphasis of the watershed plan is on the improvement of chinook salmon critical habitat, the involved parties realize that populations of other fish species, such as steelhead and bull trout have declined and that implementation of the plan should improve habitat quality for them.

As practices are implemented, both upland and in the stream and riparian area, a monitoring and evaluation process is being used to document success or failure of the practice. Water temperature and total suspended solids is currently be analyzed and documented in the districts local soil testing lab. Future testing for fecal coliforms, ammonia and other selected elements will be done as testing programs with the local soil lab and high school is completed. Before and after photo documentation of project sites is ongoing. Quarterly reports of costs of implemented practices will be sent to funding authorities.

Section 7. Project description

a. Technical and/or scientific background.

The Pataha Creek Model Watershed was designated as a "model watershed" in 1993 by the Northwest Power Planning Council and the Bonneville Power Administration. Currently the final draft of the watershed plan is being completed and will be adopted at a public hearing the first quarter of 1998.

Due to the high value of the fish resource in the Tucannon River, there have been many studies and planning efforts directed at restoring resource conditions in this watershed. Pataha Creek, as the largest subwatershed in the Tucannon watershed has been identified as one of the primary contributors of sediment to the Tucannon River. This watershed plan is not meant to duplicate any of the previous plans but, rather, to coordinate the application of the previously recommended activities. The major publications central to the Pataha Creek Model Watershed Plan include:

Tucannon River Watershed Plan (USDA 1991): This plan was prepared under authority of PL-566 and recommends certain conservation practices that would lower water temperature and reduce the amount of sediment delivered to the stream. This plan provides federal cost-share funds to private landowners to help establish the recommended practices. Instream habitat improvement, however, was not included as part of the planning or funding of this project.

Sediment Transport, Water Quality and Changing Bed Conditions, Tucannon River, Washington (Hecht et al. 1982): This plan identified and discussed the effects of land use and other watershed influences on the water quality and fish habitat of the river. It also discussed the effects of reduced water quality on the aquatic populations within the stream.

Ecological Investigations on the Tucannon River, Washington (Kelley and Associates 1982): This study is the second part of the 1981 USDA report listed above, and includes the related biological investigations for the report.

Southeast Washington Cooperative River Basin Study (USDA 1984): The objective of this study was to provide a basin-wide evaluation of existing land management and stream habitat conditions related to erosion and sediment problems.

Tucannon Basin Final Report - Assessment of Ongoing Management Activities (USDA Forest Service 1993): This report analyzes the potential impacts of forest activities, within the Umatilla National Forest, on chinook salmon in the Tucannon River.

The Pomeroy Conservation District was selected as the lead agency for this project because of its strong connection with local landowners and its ability to implement on- the-ground solutions to sedimentation entering the Tucannon River and other fish habitat concerns.

The local NRCS, as well as the State Office Watershed Planning Team, provide in-kind services in the form of technical assistance, design, and project construction inspection for the district. The Landowner Steering Committee represents the views and needs of the local community while a Technical Advisory Committee includes representatives from the affected private, state and federal agencies and provides the technical expertise and knowledge to introduce ideas and plans necessary to accomplish the project.

The Pomeroy Conservation District has received funding from the Washington State Conservation Commission and the Bonneville Power Administration to help fund the Watershed Technical Lead position and provide cost-share for practices to reduce the sediment entering the Tucannon River. The last three years the Pataha Creek Model Watershed has received and used $323,000 for the implementation of upland conservation practices and fish habitat enhancement projects. During the same time we have received additional funding from the Conservation Commission for general district operation.

b. Proposal objectives.

A local landowner steering committee was elected by landowners within the watershed and a technical advisory committee was established using agency technical personnel with expertise in fish and wildlife management.

The following goals were jointly established by these two committees to:

* improve instream fish habitat quality and quantity while maintaining and restoring natural stream stability ;
* reduce water temperatures;
* reduce erosion and sedimentation rates;
* reduce bacterial counts and improve DO levels;
* improve and reestablish riparian vegetation;
* maintain perennial flow of Pataha Creek to its mouth;
* remove barriers to improve fish migration;
* utilize cost-effective ways to treat identified resource problems;
* promote cooperation and agreement between landowners and resource agencies in decision making for resource use and fish habitat improvement;
* improve and maintain rangeland condition, and
* improve and maintain forest health.

* To improve instream fish habitat quality and quantity while maintaining and restoring natural stream stability, the model watershed will be constructing log and rock vortex weirs, placing woody debris in the stream and using root wad revetments and incorporating root wads into all bank stabilization projects. Tree and shrub planting will also improve habitat.

* To reduce water temperatures, an additional 6000 dormant stock plantings will be planted at strategic sites during the spring of 1998 using students, volunteers and Salmon Corp members. Riparian fencing and buffer strips projects will be completed during the year.

* To reduce erosion and sedimentation rates, extensive implementation of additional upland cost share practices will be installed. Over 5,000 acres of spring and fall no-till seeding of wheat and barley will be scheduled. An additional 50,000 ft. of terrace construction and rebuild is planned, 10,000 additional feet of grassed waterway and 10 sediment basins. Additional upland conservation practices such as deep subsoiling, strip cropping, divided slopes and other approved conservation practices will be used to reduce the erosion of the cropland and the resulting sedimentation entering the Pataha Creek and Tucannon River. The above mentioned riparian fencing and buffer strips will also aid in the reduction of sedimentation by allowing the stream banks to recover natural vegetation along with allowing spring planted trees, shrubs and grasses to establish themselves.

* To reduce bacterial counts and improve DO levels, riparian fencing and off-site watering facilities will be developed to provide water sources away from the stream and controlled access to the riparian area. The off-site watering will affect several overwintering feed lots.

* To improve and reestablish riparian vegetation, riparian fencing and riparian buffer strips will be constructed and established. Controlling livestock access to the stream corridor will greatly improve the tree, shrub and grass community.

* To maintain perennial flow of Pataha Creek to its mouth, a better managed riparian zone will be addressed through fencing and buffer strips. With average flow years and managed irrigation withdrawal, a perennial flow should be achieved.

* To remove barriers to improve fish migration, landowners in cooperation with Washington State Department of Fish and Wildlife and other agencies, will remove known barriers that restrict migration of all fish species within the system. This will be an ongoing program as new barriers develop spontaneously.

* To utilize cost-effective ways to treat identified resource problems, an ongoing cost analysis of all projects and practices is completed. These costs are reviewed and any projects or programs that are not cost effective are restricted or eliminated from the program. Any new research or techniques developed are reviewed and if they are determined to bring a practice back to cost effectiveness, this practice is reinstated.

* To promote cooperation and agreement between landowners and resource agencies in decision making for resource use and fish habitat improvement, an Interagency Disciplinary Team has been set up. This team will consist up of the landowner, an NRCS engineer, Wash. St. Fish and Wildlife personnel, the watershed technical lead and any other personnel related to the project. They will review, analyze, and select project sites that meets everyone's criteria, therefore developing trust and interaction between everyone involved.

* To improve and maintain rangeland condition and forest health, additional range management plans will be developed that will reduce the overgrazing and improve the overall health of the rangeland. The forest health on private land will be addressed through the Department of Natural Resources and USDA forest land will be addressed by the US Forest Service.

The Pataha Creek Model Watershed program through the Pomeroy Conservation District generates the following reports and education/information material:

* Quarterly reports submitted to Conservation Commission and BPA
* Pomeroy Conservation District Newsletter
* Technical project designs for each project or practice
* Biological Assessment for creek projects submitted to BPA and NMFS
* NEPA Checklist submitted to BPA
* Project Completion reports to BPA
* Numerous articles to local paper during year.
* Watershed Project articles published in BPA "Circuit" and "Journal" publications
* Watershed Project story to be published in "Furrow Magazine" in March 1998

The Pomeroy Conservation District is dedicated to the reduction of sediment entering the Tucannon river and improving the fish and wildlife habitat throughout the Pataha Creek Watershed. It is promoting a holistic ecosystem for watershed protection and restoration and requires long-term commitments between landowners, state and federal agencies. Our work in the Pataha Creek Watershed can improve the habitat quality of both the Tucannon and Pataha watersheds and will allow greater juvenile and adult survival during the freshwater lifestage. This could result in more offspring surviving, migrating to the ocean and returning to the watersheds as adults.

c. Rationale and significance to Regional Programs.

The rationale behind the ongoing Eastern Washington Model Watersheds and the Implementation funding is based on the goals found in the 1994 Fish and Wildlife Program, part 7.7b, "Model Watersheds." Funding for the implementation of the Pataha Creek Model Watershed Plan will use an adaptive management approach. Adaptive management is a process of action based on a continuous loop of planning, monitoring, evaluation and adjustment. The benefit of adaptive management is the ability to respond to new technology, changes in societal demands, or new legislation. As project components are applied, they will be monitored for their degree of success so that adjustments, if necessary, can be made in the future. This built in flexibility ensures effective implementation and achievement of project goals.

d. Project history

The Pomeroy Conservation District received funding from BPA of $20,000 to install demonstration projects in 1985. Riparian fencing, tree planting, off-site watering and fish passage projects were installed. From October of 1992 through Sept. 1997 BPA has provided $554,410 to the Washington State Conservation Commission to support the three Model Watershed Technical Lead positions. The contract # for those funds is 9292602. Under this contract, the Pomeroy CD has received an average of $46,000 over the last two years for the Technical Lead Position.

Over the same period of time the Pomeroy CD has received $312,000 from BPA for the installation of upland conservation practices and direct instream fish habitat enhancement projects. The contract # for those funds is 9401807.

Under contract 9401800, Washington Model Habitat Projects, the Pomeroy CD received $193,000 in 1997 for water quality and in-stream habitat enhancement projects. Project reports will be submitted after the first of year. Of this funding, $58,615 has been spent on direct in-stream fish habitat enhancement projects on eight different sites on Pataha Creek, $14,043 on logging and hauling of woody material, root wads, and logs for projects in the Asotin and Pataha Watersheds, $34,000 for no-till spring and fall seeding over the next 3 years, $12,000 on terrace construction and rebuilds, $20,000

riparian fencing and buffer strips and $50,000 for cost-sharing of additional upland conservation practices allocated for the spring through fall of 1998. Funding for 1998 projects are uncertain at this time.

The Pomeroy CD also received funding in 1996 directly from BPA for Early Action Projects in the amount of $80,650. $49,000 of this funding was used on for 2 separate off-site water facilities, extensive work done on two project sites with riparian fencing, bank stabilization, riparian buffer strip, tree planting and fish habitat enhancement. The remaining funds will be utilized in two other off-site watering facilities, two spring developments, three bank stabilization projects and installation of 3 log and rock vortex weirs. Project reports will be submitted after the first of the year.

The Pomeroy CD has received cost-share funding from the Washington State Conservation Commission for upland and riparian management practices in 1995 in the sum of $183,333. The following practices were installed with this funding:

Bank Stabilization:	$21,819		5 signups.
Buffer strips:	$ 6,375	30 acres	2 signups
Clearing and snagging:	$ 977	200 ft.	2 signups
Critical area seeding	$ 2,010	13.4 acres	2 signups
Solar power demo site	$ 4,465		Conservation District
Divided slope	$ 2,132	290 acres	2 signups
Grass planting	$ 1,345	88 acres	1 signups
Grasses Waterway	$ 5,190	15,000 ft.	6 signups
No-till seeding	$56,862	3,800 acres	27 signups
Sediment Basins	$ 4,644	12 basins	9 signups
Stripcropping	$ 9,313	633 acres	4 signups
Subsoiling	$26,729	2,620 acres	13 signups
Terraces	$33,515	164,800 ft.	33 signups
Tree Planting	$ 6,496	10,000 ft.	4 signups

e. Methods.

Long-term habitat enhancement retention is expected as a result of Plan and project installation. Monitoring and evaluation assessments will provide guidance for structural enhancement through the adaptive management process.

The Pataha Creek Model Watershed plan identifies factors for monitoring and evaluation. These factors are the basis for pre and post construction assessments for water quality and habitat enhancement projects. NRCS staff evaluates and monitors projects for structural performance integrity.

f. Facilities and equipment.

The Pomeroy Conservation District obtains help from the Natural Resources Conservation Service through a working agreement called the "Memorandum of Understanding." Other USDA agencies currently working with the district under such an agreement are: U.S. Forest Service, Garfield County, Farm Service Agency, Asotin Conservation District, Conservation Commission, Department of Ecology and Cooperative Extension Service.

The NRCS provides the District with in-kind services including: technical assistance, office space, office equipment, phone service and vehicle use. The total match exceeds $25,000 per year.

The district currently uses the internet and has two computers. A copier machine is leased by the conservation district and is shared with NRCS that reimburses the district at $.06 per copy.

There is no current equipment needs identified as needing purchased with project funds.

g. References.

Pataha Creek Model Watershed Plan
Tucannon River Watershed Plan (USDA 1991):

Section 8. Relationships to other projects

The budget for BPA Project No. 9602602 (Implement Eastern Washington Model Watershed Plan) directly relates to this proposal. The model watershed technical leads are responsible for what get put on-the-ground in each watershed. Cooperation between the districts and landowners is good, and projects are being installed on private property with local support and buy-in.

However, landowners need to know that the long term funding mentioned when this project began will continue to be available. The idea of locally led decisions as a "grassroots system" would be hard to sell to landowners who bought into an idea only to have the funding source withdrawn.

Section 9. Key personnel

Resume for Duane Bartels
Pataha Creek Model Watershed Technical Lead

Education: Associate Degree Electronics, Spokane Community College 1967

Current Employers: Pomeroy Conservation District , Pomeroy, WA. Other employment is as a self-employed wheat farmer.

Current Responsibilities: Manage the everyday operation of the Pomeroy Conservation District. This includes handling all the districts finances and record keeps. Coordinates and implements the district plan for the short and long term conservation of our districts natural resources. Oversee the district cost-share program for soil conservation through erosion reduction practices and the improvement of fish and wildlife habitat through improved riparian management and instream fish habitat improvement. Since 1993, directed the research and planning of the Pataha Creek Model Watershed Plan, and directed implementation of many practices set forth in the watershed plan. Works to direct technical assistance provided by the NRCS to get the most effective conservation and restoration practices on the ground.

FTE / Hours Spent on this project: .75 FTE / 1,300 Hours

Previous Recent Employment:

* 1989 - Present District Mgr. Pomeroy CD
* 1987 - 1989 Truck Driver
* 1985-1994 Owner Operator of Convenience Store
* 1983 - 1985 Soil technician for Soil Conservation Service
* 1966 - 1983 Self employed wheat, alfalfa farmer

Expertise: Involved in the conservation movement since 1966. Elected to district board as supervisor in 1976 until 1983. Served as chairman of the board for five of those years until going to work for Soil Conservation Service as a Soil Technician. As a Soil Technician, received training in soil sciences, basic engineering and other courses pertaining to soil and water conservation. Born and raised in this county and have lived here practically all my life. Have actively farmed since 1966 when I took over the family farm. Having been born and raised in the county, I know the farmers personally and am familiar with their operations. This has helped facilitate the development of the model watershed plan by getting local farmers to participate in the watershed planning process, and also to get the practices on the ground and in the stream. I have attended many conferences on no-till farming, and have used the practice over the last seven years. I have helped to introduce the concept to many farmers in the county and many are adapting the practice as part of their farming operations.

Resume for Robert P. Bottman
Contact Person at WA State Conservation Commission

Education: Bachelor of Science, Environmental Health, Montana State University Boseman, Montana, 1967. Graduate, Executive Management Development Program, University of Washington, 1986

Current Employers: State of Washington, Conservation Commission, Olympia, WA

Current Responsibilities: Under the direction of the Commission's Executive Director, functions as manager of coordination of the agency's grants program, including the Centennial Clean Water Fund grants, the statewide Basic Funding Allocation grants program, the Pudget Sound grants program, the Dairy Waste Management grants program, and special purposes grants programs as appropriate. The Grants Officer coordinates funding and development of environmental efforts related to nonpoint pollution and resource conservation projects for approximately 140 grants annually. The Commission's grants program for the 1997-99 Biennium has encumbered $11.3 million in state and federal funds.

FTE / Hours Spent on this project: .05 FTE / 80 Hours

Previous Recent Employment:

* 1980 - Present Washington State Conservation Commission
* 1971 - 1980 Washington State Department of Ecology
* 1967 - 1971 U.S. Air Force

Expertise: Seventeen years of budget, contract, grants, personnel and administrative experience with the State of Washington and its 48 local conservation districts. Prior to that, nine years of field work experience resolving point and non-point water pollution issues in southwest Washington.

Resume for Jeff Harlow
District Conservation for NRCS in Pomeroy, WA

Education: B.S. in Agricultural Economics 1975, Washington State University

Current Employers: USDA Natural Resources Conservation Service.

Current Responsibilities: Assist the Pomeroy Conservation District to carry out a coordinated soil and water conservation program in Garfield County. I am the USDA Service representative in the field office and work with other agencies where a joint effort is required to develop and conduct soil and water conservation programs. I direct the field office operations and provide technical assistance to urban and rural landusers as individuals or in groups in the development, applications, and maintenance of soil and water conservation plans and resource inventories and evaluations. Analyze work loads, develop annual plans of operation, and establish goals in line with needed available manpower, and other resources. Provide technical assistance to units of government in broad resource planning. Also develop and revise as needed, technical guides and job sheets for the field office. Collect or supervise the collection of the data and information necessary for the development and revision of the guides and sheets. Am responsible for the administration of the field office and the supervision of the staff. Maintain a system of required service records and prepare periodic reports from these. Contribute to the Department's rural development function by providing information to farmers, ranchers, and other rural residents, on the finds of assistance available from the several USDA agencies in the county including nature of programs and how and where to apply for assistance.

FTE / Hours Spent on this project: .5 FTE / 1,300 Hours

Previous Recent Employment:

* 1987 - Present USDA NRCS
* 1975 - 1987 Dryland wheat, barley, pea farmer

Expertise: Professional knowledge of a broad range of soil and water conservation principles, methods, and techniques sufficient to assess, analyze and evaluate complex natural resource conditions, interpret related social and economic conditions and to devise and implement short or long-term conservation plans or integrated resource development project plans. Knowledge and skill to develop soil, water, and resource conservation plans for individuals, groups, and units of government, involving varied soil patterns and practices. Knowledge and skill in written and oral communication techniques sufficient to clearly explain soil and water conservation issues, problems and solutions to diverse groups or rural and community landowners, units of government, residents, and agri-business representatives. Knowledge of related disciplines including: agronomy, hydrology, soils, range management, forestry, and applicable engineering elements, in order to recommend alternative resource development strategies or design

and conduct feasibility studies for multipurpose projects or formulate difficult major resource conservation cost sharing proposals.
board as supervisor in 1976 until 1983. Served as chairman of the board for five of those years until going to work for Soil Conservation Service as a Soil Technician. As a Soil Technician, received training in soil sciences, basic engineering and other courses pertaining to soil and water conservation. Born and raised in this county and have lived here practically all my life. Have actively farmed since 1966 when I took over the family farm. Having been born and raised in the county, I know the farmers personally and am familiar with their operations. This has helped facilitate the development of the model watershed plan by getting local farmers to participate in the watershed planning process, and also to get the practices on the ground and in the stream. I have attended many conferences on no-till farming, and have used the practice over the last seven years. I have helped to introduce the concept to many farmers in the county and many are adapting the practice as part of their farming operations.

Resume for Charles J. Shawley
Soil Technician for Natural Resources Conservation Service

Education: Associate Degree in Welding, Spokane Community College, Spokane, WA

Current Employers: USDA Natural Resources Conservation Service

Current Responsibilities: Planning, design, construction inspection of structures for sediment loss on farm ground and stream banks.

FTE / Hours Spent on this project: .5 FTE / 1320 hrs.

Previous Recent Employment:

* 1992 - Present Natural Resource Conservation Service
* 1970 - 1992 Dryland Wheat Farmer

Expertise: Born and raised on wheat ranch. Worked with farm equipment all my life. Have worked the last six years in the Pomeroy Office of NRCS and during that time have received extensive training in all fields of soil and water conservation. I have recently served as EWP project inspector on the Tucannon and Touchet River.

Resume for Richard Stauty
USDA Natural Resources Conservation Service

Education: AA Environmental Interpretation, Vermilion Community College, Ely, Minnesota. Additional course work in Earth Science and Education, University of Minnesota, Duluth, Minnesota. BS Crop Science and Plant Protection, University of Idaho, Moscow, Idaho.

Current Employer: USDA Natural Resources Conservation Service, Pomeroy, WA.

Current Responsibilities: Responsible for planning, design, and installation of riparian and fish habitat improvement structures in the three model watersheds of southeastern Washington. Assist conservation districts and landowners in securing local permits and in agency consultations.

FTE / Hours Spent on This Project: .33 FTE / 1,320 Hours

Previous Recent Employment:

* 9/94-Present: Soil Conservationist, NRCS, Pomeroy, WA.
* 7/91-9/94: Soil Conservationist, NRCS, Vancouver, WA.
* 1/83-7/91: Soil Conservationist, NRCS, Moscow, Id.
* 7/81-1/83: Soil Conservationist, NRCS, Hailey, Id.

Expertise: Training in Erosion and Sediment Control Systems, Soil Bioengineering, Hydraulics for Technicians, Environmental Concerns in Conservation Planning and Application, Forest Water Quality, And Cultural Resource Training.

Resume for Roberta L. Lewis
USDA Natural Resources Conservation Service

Education: BS Civil Engineering (emphasis in Water Resources), University of Nevada, Reno. Registered Professional Engineer (Civil) in states of Idaho and California.

Current Employer: USDA Natural Resources Conservation Service, Pomeroy, WA.

Current Responsibilities: Watershed Project Engineer for Asotin Creek, Pataha Creek, and Tucannon River Model Watersheds.

FTE / Hours Spent on This Project: .33 FTE / 1,320 Hours

Previous Recent Employment:

* Jan. 97-Present: Engineer, NRCS, Pomeroy, WA.
* Water Conservation Program Manager, Upper Columbia Area Office
* Inter-Field Office Engineer, NRCS, Nevada

Expertise: Construction Inspector for Emergency Watershed Project: Dozier-McCaw site on Touchet River. Attended Erosion and Sediment Control Systems training by NRCS, May 1997. Attended Geomorphology Seminar by NRCS, March 1997. Work with BPA/NPPC on planning of instream flow enhancement projects on Teanaway and Yakima Rivers. Designed and supervised construction of 14 watershed projects in 1997.

Section 10. Information/technology transfer

The Pomeroy CD produces newsletters and articles for the local newspaper for circulation to Garfield County residents and other conservation districts and their personnel. A recent article on the Pataha Creek Model Watershed will be published in "The Furrow" magazine which is distributed world wide. It was one of four watersheds in the United States selected for the conservation issue of this magazine. The local schools are involved in our watershed projects with tree plantings, insect inventories and water analysis. The district has provided an aquarium to the grade school where it is used to hatch and raise trout. Tours have been provided for landowners, other conservation districts, agency representatives and legislators.