

**Bonneville Power Administration
Fish and Wildlife Program FY99 Proposal**

Section 1. General administrative information

**Irrigation System Replacement Trout Cr. @
Willowdale II 1999 Funds**

Bonneville project number, if an ongoing project 9005

Business name of agency, institution or organization requesting funding
Jefferson County Soil & Water Conservation District for Trout Creek Council

Business acronym (if appropriate) JCSWCD

Proposal contact person or principal investigator:

Name Marie Horn
Mailing Address 243 SW 3rd St
City, ST Zip Madras, Or 97741
Phone (541)475-3144
Fax (541)475-6793
Email address

Subcontractors.

Organization	Mailing Address	City, ST Zip	Contact Name

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

Section 7 7.6,7.7

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

Other planning document references.

Wy Kan Ush Me Wa Kush Wit; Trout Creek Assessment; Natural Resources Conservation Service, Trout Creek Watershed Council; Jefferson Co. SWCD Long Range Plan; Oregon Dept. of Fish/Wildlife; Local Landowners/Landmanagers in Trout Creek;

Subbasin.

Trout Creek Watershed

Short description.

Decrease sedimentation and stream disturbance, Improve water quality/quantity, by replacing push-up dams with a infiltration sump/pump system.

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.

steelhead, candidate species for listing ESA

Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship
-9366	NE Or. Screens/Passage	Trout Cr. Watershed Plan
94022	T.C.Habitat Restoration	Trout Creek Watershed Plan
9303000	Buckhollow Enhancement	Basin Plan
9405400	Bull Trout Studies C/NE Or.	Stock Status

Section 4. Objectives, tasks and schedules

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Improve Irrigation System	a	Water Quantity/Quality
2	Decrease stream disturbance	b	rid push-up dams

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Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	5/1999	10/1999	85.00%
2	5/1999	10/1999	15.00%
			TOTAL 100.00%

Schedule constraints.

none foreseen

Completion date.

1999

Section 5. Budget

FY99 budget by line item

Item	Note	FY99
Personnel	Project manager	\$2,000
Fringe benefits		
Supplies, materials, non-expendable property		
Operations & maintenance		
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		
PIT tags	# of tags:	
Travel		
Indirect costs	Clerical support, telephone, film/developing, etc.	\$1,750
Subcontracts	Construction	\$25,000
Other		
TOTAL		\$28,750

Outyear costs

Outyear costs	FY2000	FY01	FY02	FY03
Total budget				
O&M as % of total				

Section 6. Abstract

The Trout Creek Watershed Council is developing a long range plan to reduce sedimentation, reduce temperature and increase water quantity and quality. This will be accomplished by riparian restoration/enhancement projects and working with private landowners/managers to improve livestock management and reduce the impacts on riparian vegetation.

Push-up dams will be consolidated by constructing cement diversions and/or infiltration sump/pump systems. The goals of projects in Trout Creek are to improve steelhead and redband trout habitat.

The improvements will be decreased sedimentation due to less disturbance in the stream by ridding push-up dams, improved water quantity and quality remaining in the stream, enhanced fish and wildlife habitat. The project is expected to be completed in Fall 1999.

Landowners are developing or updating their Farm plans with NRCS. The Trout Creek Council, JCSWCD and Oregon Dept. of Fish and Wildlife along with private landowners/landmanagers will be responsible for monitoring and evaluating the project. Funds will be solicited for monitoring and data recording.

Similar projects have been completed in Cave Junction and John Day, Or. ODFW has played a major role in this construction , with matching funds and technical advice.

Section 7. Project description

a. Technical and/or scientific background.

Trout Creek has a history of flashiness that leaves damaged riparian areas in its wake. The flashiness has resulted from timber harvest practices, erosion in the headwaters, degraded riparian areas and juniper encroachment in the uplands. After the 1964 flood, the Corps of Engineers placed berms in Trout Creek. There have been resultant consequences from washed out and eroded berms. The Corps has been contacted and will be conducting a study as soon as funds are available. The goal of Trout Creek Watershed Council is to restore, enhance and improve riparian and uplands areas to develop a proper functioning watershed with retention and slow release of water being a major goal. Landowners are interested in replacing and/or consolidating push-up dams with cement diversions or sump/pump structures. NRCS has designed several versions of sump/pump systems and with ODFW have constructed one in Junction City and John Day, Or. The

landowner has obtained permits to change the diversion site. He currently has push-up dams and is replacing it with the sump/pump system through this funding request. This system will allow more water to remain in the creek and will decrease disturbance and sedimentation. This will increase steelhead and red band trout habitat.

Jefferson Co. SWCD has a published Trout Creek Watershed Resources and Inventory and Problem Assessment. In 1984 the Or. Dept. of F&W and twenty-one landowners, with funding from BPA did a project that include 140 miles of fencing, 750 cu. yds. of spawning gravel, 4,956 instream structures, 21,000 ft. of juniper riprap, 10 off stream livestock water developments, 17 irrigation-pump fish screens and 13 rotary fish screens for irrigation ditches.

Funding from Governors Watershed Enhancement Board (GWEB), Bureau of Reclamation and Corps of Engineers is also being sought to restore and enhance Trout Creek. Bureau of Reclamation has funded and completed an on-site evaluation of Trout Creek and this will be used to develop priorities for other projects. Trout Creek Watershed Council is developing Long Range and Action Plans using current assessments, evaluations and studies to address uplands, grazing management, riparian concerns and timber issues in Trout Creek. The positive benefits are decreased sedimentation, improved water quality and quantity, and decreased temperature. Proposed projects in Trout Creek will improve steelhead and red band trout habitat.

b. Proposal objectives.

1. The proposed objectives are to *improve/update/replace existing irrigation method.*

a. Construct a sump/pump infiltration system.

3. The proposed objective is to *decrease sedimentation:*

a. Replace push-up dams and decrease stream disturbance.

c. Rationale and significance to Regional Programs.

The Trout Creek Watershed is part of the drainage of the Deschutes Basin. The basin is located in central Oregon and drains into the Columbia water system. The Deschutes Basin works with the Trout Creek Watershed Council and Jefferson Co. SWCD to coordinate efforts to develop a basin wide approach to watershed health. Jefferson Co. SWCD has been instrumental in developing two Watershed Councils in Jefferson County and are working closely with the Councils to coordinate efforts with other agencies to implement watershed health planning. The proposed project has been constructed in John Day and Junction City, Or with the help of Natural Resources Conservation Services and Oregon Dept. of F&W. These agencies will play a major role in this project. Monitoring and maintenance will be provided by the landowner and Jefferson Co. SWCD and Trout Creek Watershed Council.

d. Project history

N/A

e. Methods.

The projects in Trout Creek will be approached with the intentions of bringing continuity to restored and enhanced areas of the watershed. BPA has invested funding for fencing, streambank stabilization and revegetation in the riparian areas. This project will improve/increase water quality and water quantity to Trout Creek by allowing more water to remain in the stream and decrease stream disturbance by eliminating push-up dams used for irrigation purposes. This infiltration sump/pump system will leave the stream intact by drawing water through buried pipe and pumping to fields, eliminating flood irrigation. .

This improvement will increase steelhead, red band trout and wildlife habitat. It will decrease sedimentation and water temperature.

The landowner will monitor the water increases to the stream and collect data for evaluating similar projects in Trout Creek. Results will be shared with interested agencies and other watersheds.

f. Facilities and equipment.

The project will be facilitated and administered by Jefferson Co. Soil and Water Conservation District (SWCD). the SWCD will provide office space and staff assistance to the project manager. Major construction will be sub-contracted out. Oregon Dept. of F&W will assist with this project, Natural Resources Conservation Service has designed several versions of this system and will assist in deciding which one best fits the individual needs of the landowner. Riparian vegetation will be placed as needed.

g. References.

Section 8. Relationships to other projects

In 1985 BPA funded a project in Trout Creek through ODFW for riparian restoration and enhancement. ODFW has continued to enhance this project with Access and Habitat(A&H) and Restoration and Enhancement (A&E) program funds.

The Corps of Engineers have placed Trout Creek on their project list for a study of berms placed after the 1964 floods. The berms have eroded and washed out causing sedimentation concerns.

Private landowners and land managers serve on the local Watershed Councils. Councils in Jefferson County (Trout Creek Watershed Council and Willow Creek Watershed Council) are developing Action plans with the coordination and cooperation of ODF&W, Oregon Dept. of Forestry (ODF), US Forest Service (USFS), Extension Service, Natural Resources Conservation Service (NRCS), Jefferson Co. SWCD, and Oregon Trout.

Landowners are working with NRCS to develop new or update existing farm plans to address all natural resource concerns on their property and how they affect the watershed. JCSWCD is in the process of hiring a Watershed technician for resource management planning. Once these plans are developed they will be used to develop and implement projects in the watershed that will coordinate efforts among landowners and land managers in the watershed, to approach concerns in a holistic manner.

Ochoco Lumber and other private timber owners/managers are working with the Watershed Councils to address timber management concerns. Watershed Council members also serve on the Cattleman's Assoc. and will advise on livestock management concerns.

The Trout Creek Watershed Council along with Jefferson Co. SWCD will act as the catalyst to bring together concerned landowners/land managers and agencies to work towards building Trout Creek into a proper functioning condition watershed with economic benefits to landowners./land managers and improved fish and wildlife habitat.

Section 9. Key personnel

Marie Horn, Watershed Coordinator will act as project manager for projects in Trout Creek watershed.

Marie Horn also works for the JCSWCD as Office manager.

Her responsibilities are to oversee watershed projects and administer all record, payroll and data information.

Marie works closely with personnel from the Watershed Councils, ODFW, USFS, ODF, Oregon Trout, OSU Extension Service, NRCS, private timber managers, and concerned landowners and landmanagers.

As Watershed Coordinator and SWCD Office Manager, Marie has access to information, project types and results of watershed restoration efforts on-going in other watersheds such as Buck Hollow, managed by Ron Graves. The goals of Trout Creek Watershed Council and JCSWCD are to improve fish and wildlife habitat and restore Trout Creek to a proper functioning watershed, thus improving water quality, quantity, by decreasing sedimentation, restoring vegetation and addressing uplands concerns.

Section 10. Information/technology transfer

Information from this project will be shared by promoting the efforts of the Watershed Councils in Jefferson County. Public tours will be developed with the assistance of OSU Extension service. OSU Extension Service has educational projects that include watersheds and how they function, these programs are designed to reach school age and young adult students. JCSWCD works with OSU on these educational projects.

The Watershed Coordinator gathers and shares information among other watersheds. Projects will be published in local news media. Workshops for the public, private landowners and landmanagers will be developed that will teach Proper Functioning Conditions (PFC) watersheds. All projects in Trout Creek will work towards this goal.

This project will be monitored by the landowner and Trout Creek watershed Council and JCSWCD and all data will be shared