

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

**Section 1. General administrative information**

**Increase Stream Flow In The Methow River And  
Provide Trail-Based Recreation**

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**Bonneville project number, if an ongoing project**    9039

**Business name of agency, institution or organization requesting funding**  
Chewuch Canal Company

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**Business acronym (if appropriate)**

**Proposal contact person or principal investigator:**

**Name**                      Craig Boesel  
**Mailing Address**    Box 234  
**City, ST Zip**            Winthrop, WA 98862  
**Phone**                    (509) 996-2488  
**Fax**  
**Email address**

**Subcontractors.**

<b>Organization</b>	<b>Mailing Address</b>	<b>City, ST Zip</b>	<b>Contact Name</b>
Randy Sackett, PSE Consulting Engineer	281 Riverside, Suite 2	Winthrop, WA 98862	Randy Sackett
Individual	P.O.Box 71	Winthrop, WA 98862	Brad Martin
James D.King and Associatest	P.O. Box 1017	Omak, WA 98840	Jim King
Reeder and Karro	102 South Glover Street	Twisp, WA 98856	Rolf Bergerson
Natural Resource Conservation Service		Spokane	

**NPPC Program Measure Number(s) which this project addresses.**  
Please add these numbers if applicable

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

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**Other planning document references.**

The proposed project meets the lead objectives of the Methow Basin Plan (Methow Valley Water Planning Pilot Project January, 1994) which were to “respect existing rights and increase stream flow to improve fish and wildlife habitat; to allow for growth; and to preserve and enhance the unique quality of the Methow Valley.” (page 1, executive summary.) The Chewuch River Watershed Analysis (Forest Service, Winthrop Ranger District, November, 1994) states that; “The desired condition for the Chewuch Watershed is that ecosystem function within the watershed is maintained or restored over space and time. Human use continues and is compatible with natural processes .....so the functioning of the ecosystem is maintained.”

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**Subbasin.**

Methow River Subbasin

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**Short description.**

Study feasibility of changing a 12-mile earthen irrigation canal to a piped irrigation supply with an associated non-motorized recreation trail

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**Section 2. Key words**

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
X	Anadromous fish		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
		X	Planning/admin.		Supplementation
			Enforcement		Wildlife habitat en-
			Acquisitions		hancement/restoration

**Other keywords.**

irrigation, water quantity, irrigation ditch, recreation, trail

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**Section 3. Relationships to other Bonneville projects**

Project #	Project title/description	Nature of relationship


## Section 4. Objectives, tasks and schedules

### *Objectives and tasks*

<b>Obj 1,2,3</b>	<b>Objective</b>	<b>Task a,b,c</b>	<b>Task</b>
1	determine political and fund-raising climate for proposed project	a	talk with each landowner who might be affected
		b	talk with monetary sources such as the Methow Conservancy, Methow Institute Foundation, Bonneville Power Administration, RTCA Washington Recreation Coalition, etc.
2	determine legal standing of proposed project	a	research the power and limitations of the Chewuch Canal Company ditch right-of-way
		b	research liability of having trail on ditch right-of-way
3	determine if others will share any increased liability	a	hammer out a draft agreement with entity such as Methow Sport Trails Association, so that trail could go under their liability umbrella
4	estimate cost of proposed pipe and trail construction	a	survey existing ditch, find problem areas for the proposed changes, and estimate cost of engineering to overcome problems
		b	estimate cost of materials needed to make proposed changes
		c	estimate cost of construction
5	determine cost of restoring vegetation after construction	a	estimate cost of replacing water-greedy vegetation such as cottonwood trees (which will die) with more 'natural' vegetation such as ponderosa pine and bitterbrush
6	determine environmental document needs	a	determine if an Environmental Assessment or Environmental Impact Statement would be needed, and estimate the cost

7	report findings	a	prepare a report of all findings to the Chewuch Canal Company Board of Directors and other interested parties
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**Objective schedules and costs**

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	4/1999	9/1999	28.00%
2	2/1999	3/1999	28.00%
4	5/1999	9/1999	31.00%
5	5/1999	9/1999	7.00%
6	6/1999	9/1999	4.00%
7	4/1999	10/1999	2.00%
			TOTAL 100.00%

**Schedule constraints.**

No known schedule constraints on this proposed part of the project; any subsequent construction of the project would be open to political delays if there was major opposition or to delays if funding was slow.

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**Completion date.**

2010

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**Section 5. Budget**

**FY99 budget by line item**

Item	Note	FY99
Personnel	Craig Boesel, Chewuch Canal..contract management	\$ 700
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		
Subcontracts		14140
Other		
<b>TOTAL</b>		<b>\$14,840</b>

**Outyear costs**

<b>Outyear costs</b>	<b>FY2000</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03</b>
Total budget				
O&M as % of total				

**Section 6. Abstract**

Think of this a Ditches-to-Trails pilot project. The proposal is a feasibility study on an idea to replace a 12-mile earthen canal with a buried pipe line to eliminate water loss from seepage and evaporation. The perfectly graded ditch right-of-way (with its beautiful route and views) would become a non-motorized recreation trail which would connect the Chewuch River Valley, Winthrop, Pearrygin Lake, and the mid-Methow River Valley.

The over-all goals of this project are to increase stream flow in the Chewuch and Methow Rivers, to conserve irrigation water, to augment trail-based recreation (a main-stay of the Methow Valley economy) and to give residents a safe non-motorized transportation route along the Chewuch and mid-Methow river valleys.

**Section 7. Project description**

**a. Technical and/or scientific background.**

The Chewuch Canal takes water from the Chewuch River near Boulder Creek and carries it approximately 12 miles into and out of Pearrygin Lake, through Winthrop and down along the mid-Methow River valley. The water supplied helps maintain the level of Pearrygin Lake and brings irrigation water to ranches and residences along its whole length. Pearrygin Lake, which has a state park on its shores as well as several resort businesses, is an important recreation site.

The Chewuch Canal, established in 1910, drops one inch per hundred feet and lies in a 50-foot right-of-way. The Chewuch Canal Company, which manages the largest private ditch in the Methow Valley, has water rights to 200 cubic feet per second from the Chewuch River. It also owns rights to the top 5 feet of water in Pearrygin Lake. The company serves about 160 users, from simple residences to large ranches.

The earthen canal runs along a beautiful route through the Chewuch and mid-Methow Valleys. Bed-and-breakfast and other recreation businesses, such as the Chewuch River Ranch, a dude ranch, would be served by a non-motorized trail.

The canal is open and has considerable seepage along its length. This seepage maintains a narrow, human-dependent riparian ecosystem. There is also evaporation from the canal

and tremendous transpiration from the vegetation(willow, cottonwood, etc.) which is established along the ditch.

Safety would be increased, since the open ditch would be closed and because local residents, now forced to bicycle, ride, and hike along the narrow county road, would have a safe, pleasant alternate route.

The trail would likely become part of the Methow Valley Sport Trails Association system, and part of the non-motorized trail-based recreation that is a backbone of the valley's recreation industry, particularly in the winter.

**b. Proposal objectives.**

- 1) understand the probability of success of a proposed change from an open irrigation canal to a piped water source with an accompanying trail.
- 2) determine the steps necessary to complete the change from an open irrigation ditch to a piped water source with a trail
- 3) estimate the cost of changing from an open irrigation ditch to a piped water source and trail

**c. Rationale and significance to Regional Programs.**

In their "Return to the River" document put out in September of 1996, the Independent Scientific Group said that "Because of the vast spatial scale of human activities that have caused degradation of habitats in tributary streams (especially including....cropland and irrigated agriculture...), it is unlikely that site-specific interventions can successfully offset the adverse ecological effects of land use activities. Instead, significant modification of land use patterns and practices, which if correctly implemented could result in the re-establishment of key natural biophysical processes.....will be necessary for restoration at appropriate ecological scales." The proposed project, making more efficient use of water along 12 miles of the Methow and Chewuch river valleys and increasing stream flow in the Methow and Chewuch rivers, is just such a project. In addition, the proposed project would aid the increasingly recreation-based Methow Valley economy and improve the non-motorized transportation system within the valley.

The Scientific Group goes on to name "modification of irrigation practices.....and re-establishment of instream flows in key reaches...." as interventions which may be beneficial to watersheds. (page 354)

**d. Project history**

This would be a pilot project.

**e. Methods.**

The public contact work would be carried out by a qualified local person, the legal work by an attorney-at-law, the engineering and construction cost estimates by a qualified, certified engineer, and the environmental analysis projections and estimates by a person experienced in National Environmental Policy Act requirements and processes. Their joint expertise concerning such projects should result in a competent feasibility study for the project.

**f. Facilities and equipment.**

Equipment required for a feasibility study would be minimal and would be provided by the sub-contractors.

**g. References.**

Independent Scientific Group. September, 1996. Return to the River; Restoration of Salmonid Fishes in the Columbia River Ecosystem; Development of an Alternative Conceptual Foundation and Review and Synthesis of Science underlying the Columbia River Basin Fish and Wildlife Program of the Northwest Power Planning Council.

Forest Service, Winthrop Ranger District. November, 1994. Chewuch River Watershed Analysis

Methow Valley Water Planning Pilot Project. December 1993. Draft Methow River Basin Plan (prepared by the Planning Committee, with the assistance of Roundtable Associates of Olympia, Washington)

## **Section 8. Relationships to other projects**

There is a general effort throughout the Methow Valley to improve irrigation water uses, particularly connected with irrigation canals. This proposal fits into that overall effort.

## **Section 9. Key personnel**

Craig Boesel, Manager, Chewuch Canal Company. Life-long Methow Valley Resident. Rancher. Bachelor of Science degree in education.

Please note that the following highly qualified and experienced people are not yet formally attached to this project. Who actually works on the project would be finalized

with contracts. It is likely that James King and Associates, or a similar firm, would handle the subcontracts and compile the actual feasibility report.

James King, ex-Okanogan County Planner, now a private contractor. Has a large array of experience in projects such as this, and other planning and development work.

Randy Sackett, PSE. Engineer with his own Winthrop-based firm. In the winter, has a second business, North Cascades Heliskiing. Strong advocate for the recreation industry in the Methow Valley. Would prepare the engineering portion of the feasibility study.

Brad Martin. Life-long Methow Valley resident. President of the Methow Conservancy, a non-profit foundation dedicated to the conservation and stewardship of the Methow Valley's natural, historic and scenic resources. Would talk landowners with ditch rights-of way.

Natural Resource Conservation Service. The highly knowledge engineers in this service would probably be called upon for assistance in preparing the feasibility study.

## **Section 10. Information/technology transfer**

The feasibility report for the Chewuch Canal conversion would be made available to all interested parties and could serve as a pilot study for possible later proposals of a "Ditch to Trail" nature.