

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

**Section 1. General administrative information**

**Focus Watershed Coordination-Flathead River Watershed**

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**Bonneville project number, if an ongoing project** 9608701

**Business name of agency, institution or organization requesting funding**  
Confederated Salish & Kootenai Tribes and Montana Fish, Wildlife and Parks

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**Business acronym (if appropriate)** CSKT, MFWP

**Proposal contact person or principal investigator:**

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**Subcontractors.**

<b>Organization</b>	<b>Mailing Address</b>	<b>City, ST Zip</b>	<b>Contact Name</b>

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

10.2B, 7.7A, 7.7B pages 7-40 through 7-43, measures 10.1B, 102A.2, 10.2B, 10.3B, 10.3B.12, 10.4B, 10.6C.1

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

This project is related to bull trout which are currently under a proposed rule to be listed under the Endangered Species Act (62 FR 32268) and to westslope cutthroat trout which have been petitioned for listing under the ESA.

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**Other planning document references.**

Hungry Horse Fisheries Mitigation Plan (approved by NPPC)

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Hungry Horse Fisheries Implementation Plan (approved by NPPC)  
 Montana Bull Trout Scientific Group, Status reports  
 South Fork of the Flathead River Conservation Agreement  
 Kerr Mitigation Plan/FERC relicensing documents  
 Confederated Salish and Kootenai Tribes Tribal Fisheries Management Plan  
 Confederated Salish and Kootenai Tribes Draft Forest Management Plan  
 Confederated Salish and Kootenai Tribes Comprehensive Resource Plan  
 (see References)

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**Subbasin.**

Flathead River drainage as well as in Flathead Lake, Swan Lake and the lower Flathead River drainage and downstream of Kerr Dam.

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**Short description.**

This program fosters "grass roots" public involvement and interagency cooperation for habitat restoration to offset impacts to fishery resources in the Flathead watershed..

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**Section 2. Key words**

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

**Other keywords.**

Bull trout, westslope cutthroat, maintains biologic diversity and genetic integrity, native species recovery, community involvement, watershed planning, interagency and international coordination

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

Project #		Nature of relationship
9101903		Implements mitigation plan
9101901	Hungry Horse Fisheries Mitigation-Salish and Kootenai Tribes	Habitat restoration and monitoring; identify stream restoration projects
9608720	Focus Watershed Coordinator -	Sister project

	Kootenai River Watershed	

## 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	Identify watershed entities	a	Identify agencies, interest groups and individuals with an interest in watershed management. This will be ongoing throughout the project as new groups and programs arise.
		b	Determine the extent to which these groups or individuals can be involved and how.
2	Enhance communication network	a	Work with other agencies and individuals to coordinate efforts thereby avoiding duplication and increasing efficiency. This will also be ongoing throughout the project.
3	Establish watershed forums	a	Facilitate the forming of local citizens working groups and provide professional expertise and resources necessary for the working group to create an implementable watershed plan.
		b	Provide for the involvement of volunteers, landowners and educational institutions in the implementation of projects.
4	Evaluate the condition of the watershed and identify limiting factors	a	Compile a watershed assessment bibliography consisting of existing aquatic habitat surveys, riparian habitat surveys, aquatic population surveys, and other relevant biological and land use surveys pertaining to the Flathead River watershed...
		b	Utilize analytical techniques as well as information within the bibliogrpahy to identify and address limiting factors.

		c	Identify gaps in knowledge which hamper management decisions and give rise to future research and data collection needs.
		d	Identify time frames to address limiting factors.
5	Coordinate cooperative implementation and funding	a	Provide coordination to facilitate watershed-based fish and wildlife habitat improvement plans and projects.
		b	Identify potential federal, state, tribal and private funding sources for implementation of watershed based projects.
		c	Provide assistance to agencies, private groups and local citizens to find cooperative funding for habitat improvement projects.
		d	Establish a technical advisory committee from governmental and tribal agencies and private consultants. This group should consist of expertise from fields of hydrology, fisheries, wildlife.
6	Establish watershed monitoring and evaluation	a	Coordinate between CSKT, MFWP, Flathead Basin Commission and Yellow Bay research station and other agencies to establish TMDLs and a drainage wide water quality inventory.
7	Transfer information	a	Produce a model watershed plan that will be used by districts, communities and agencies in the future as a guide for watershed planning, funding and resource management.
8	Local and regional coordination	a	Contact BPA and NPPC planning staffs as often as needed, but no less than once per quarter to keep them abreast of the progress in the planning and implementation process.
		b	Coordinate with NRCS, USDA, MFWP, Conservation Districts and others to assure cooperative

			planning and implementation of watershed planning.
9	Implement temporary and permanent easements and long-term management agreements in key subbasins to protect investments in habitat improvements.	a	Work with landowners and federal, state, tribal agencies to create easements and long-term management plans for long-term species and habitat protection.

**Objective schedules and costs**

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	5/1997		2.00%
2	5/1997		5.00%
3	7/1997		25.00%
4	5/1997		25.00%
5	10/1997		30.00%
6	9/1998		3.00%
7	1/2005		3.00%
8	5/1997		5.00%
9	5/1998		.02
			TOTAL 100.00%

**Schedule constraints.**

Permitting, public scoping, interagency coordination, and cost-share funding opportunities will introduce uncertainty into the timing of project implementation. Moving ahead with several projects simultaneously ensures a continues string of completed ...

**Completion date.**

At this stage, funding is proposed to continue through the year 2007. However, it is too early to predict an exact completion date due in part to the potential schedule constraints listed above.

**Section 5. Budget**

**FY99 budget by line item**

Item	Note	FY99
Personnel	1.0 FTE watershed coordinator	\$32,000
Fringe benefits		\$9,000
Supplies, materials, non-expendable property	Office supplies, computer software, copies	\$2,000
Operations & maintenance	Phone and internet fees, office space,	\$11,000

	administrative support	
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		
PIT tags	# of tags:	
Travel	Vehicle and mileage	\$7,500
Indirect costs	13.2%	\$12,000
Subcontracts		
Other	Cost-share with other agencies/groups	\$26,500
<b>TOTAL</b>		<b>\$100,000</b>

***Outyear costs***

<b>Outyear costs</b>	<b>FY2000</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03</b>
Total budget	\$100,000	\$100,000	\$100,000	\$100,000
O&M as % of total	11.00%	11.00%	11.00%	11.00%

**Section 6. Abstract**

This program specifically fulfills the watershed approach and watershed coordination specified in sections 7.7A and B pages 7-40 through 7-43 and 10.2B in the 1994 Columbia Basin Fish and Wildlife Program. This program also complements ongoing BPA programs (see Section 8).

The Flathead Drainage in Montana has experienced a severe decline in the range and number of two native trout species (bull trout, westslope cutthroat trout). Bull trout are currently proposed for listing under the Endangered Species Act and westslope cutthroat have been petitioned for listing. A balanced system-wide watershed approach to achieve ecosystem equity is necessary to reverse the downward trends in native species and protect healthy populations within the Flathead River watershed.

This program fosters “grass roots” public involvement and interagency cooperation to achieve this goal both efficiently and cost effectively. Since both bull and westslope cutthroat trout are international and interstate in nature, long term persistence will require interstate and international cooperation and coordination.

It is therefore important to fully fund the Flathead Model Watershed Project for the remainder of FY98 through the completion of the project.

**Section 7. Project description**

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

Currently, the Flathead watershed has been radically altered by hydropower and other land uses. With the construction of Hungry Horse, Bigfork and Kerr dams, the Flathead River system has been divided into isolated populations. In the drainage, two native trout species are likely candidates for listing by the U.S. Fish and Wildlife Service as federally protected endangered species over the next few years (petitions for listing have already been submitted for bull trout which was determined to warrant listing and westslope cutthroat trout have been petitioned the listing with listing being expected shortly). The biological effects have become apparent relatively recently (see References section for bibliography of publications relating to the condition of the watershed). Many streams in the drainage have become remarkably unstable during the last two decades. Past legal and illegal species introductions are causing problems for the remaining ecosystems. This project fosters in-kind, out of place mitigation in order to offset the impacts of hydroelectric power to 72 miles of the South Fork of the Flathead River and its tributaries upstream of Hungry Horse Dam.

Key subbasins within the Flathead drainage, which are critical to native species restoration, are experiencing a rapidly progressing change in land ownership and management patterns. Subdivision and residential development of agricultural and timber lands adjacent to waterways in the drainage poses one of the greatest threats to weak but recoverable stocks of trout species. Plum Creek Timber Company, a major landholder in the Flathead drainage is currently divesting itself of large tracts of its lakeshore and streamside holdings' basinwide. Growth of small tract development throughout the area and its tributaries is occurring at a record rate. Immediate to short-term action is required to protect stream and riparian corridors through many of these areas if cost-effective recovery efforts are to be implemented.

For more information pertaining to scientific background warranting funding of this project, please see the Flathead River Watershed and Physical Parameter Review in the Reference section.

In order to properly address the issues above, other segments of society and other (non-BPA) funding sources must be incorporated into the solution. As stated in the 1994 Fish and Wildlife Program (section 7.7), "Comprehensive watershed management should enhance and expedite implementation of actions by clearly identifying gaps in programs and knowledge, by striving over time to resolve conflicts, and by keying on activities that address priorities." A watershed coordinator helps to initiate and facilitate efforts for addressing the issues mentioned above and pulling together a plan for mitigation. If recovery of the fisheries resources is to be successful in the drainage, locally led recovery plans are going to provide the greatest chance for success. Without local support it is unlikely that local governments and individual citizens are going to allow government initiatives to be implemented.

**b. Proposal objectives.**

This project will result in a coordinated effort toward addressing resource concerns within the Flathead River basin from a watershed perspective. Pilot projects initiated under this project will help guide the plan for fisheries and wildlife losses caused by Hungry Horse Dam construction and operation. This project will also include on-the-ground habitat improvement and protection measures toward the same goal.

The watershed coordinator will continually search the literature for funding opportunities and new research studies relating to the condition of the Flathead River watershed. Through working with other agencies and landowners and utilizing existing information (e.g., Hungry Horse Mitigation and Implementation Plan, Montana Bull Trout Scientific Group Status Reports, Confederated Salish and Kootenai Tribes Comprehensive Resource Plan, and other documents found in the Flathead River Watershed and Physical Parameter Review), key limiting factors will be identified for native fish and wildlife within the drainage. Limiting factors will be identified and addressed for each subbasin. Subbasins will then be prioritized according to their recovery potential for each major species. Locally based watershed working groups will then be initiated and recovery strategies formulated and implemented. Easements and long-term management plans will ensure that our efforts are long lasting. Other assurances that our efforts will be long lasting are CSKT ordinances such as the Aquatic Lands Conservation Ordinance, CSKT Streamside Ordinance, CSKT Tribal Forestry Best Management Practices, and CSKT Water Quality Ordinance. Improved biological production and increased fish growth potential in the tributaries, rivers and closed basin lakes and ponds are an expected outcome of these efforts.

A Model Watershed Plan will result from the efforts of this program. This plan will provide background, identify limiting factors, areas of priority and concern, resource issues, etc. within the Flathead River basin and implementation strategies to address each limiting factors.

For more specific proposal objectives, see the objective and tasks Section 4.

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

As stated above, this project complements other projects such as the Excessive Drawdown Mitigation program (project 9401000), Hungry Horse Mitigation/Habitat Improvements (9101903), Hungry Horse Fisheries Mitigation (9101901), Hungry Horse Mitigation (9101904) and its sister project in the Kootenai system (9608702). This project is supported by the Flathead Basin Commission, Lake, Lincoln, Sanders, and Flathead County Conservation Districts, the Natural Resource Conservation Service, Citizens for a Scenic Lake County and the Yellow Bay Biological Station. Activities are being coordinated with these agencies/groups to implement plans and projects in the future. All of these activities further the FWP goals of habitat restoration from a coordinated, watershed perspective.

**d. Project history**

This project began in 1997 and has only existed for a portion of a year. In its first six months, the Confederated Salish and Kootenai Tribes Watershed Program has begun coordinating and assisting in several local projects including Dayton Creek, east and south forks of Valley Creek, Marsh Creek, and the Jocko River. The watershed coordinator has worked closely with the Flathead Basin Commission, Bull Trout Restoration Team, Lake, Lincoln, Sanders and Flathead County Conservation Districts, NRCS personnel, Tribal personnel, and several locally led community interest groups. These relations have increased communication, allowed the coordinator to become more familiar with the issues at hand, and promoted coordinated efforts increasing efficiency and avoiding duplication.

As this project is in its infancy (initiated May 1997), no project reports other than quarterly reports have been completed at this early stage.

Adaptive management implications that must be addressed in management documents and procedures include documented transboundary movements of target species, the effect of predatory lake trout on target species, and the presence of discrete populations of bull and cutthroat trout in the basin.

**e. Methods.**

This program fosters “grass roots” public involvement and interagency cooperation to achieve the goal of habitat restoration. Public scoping will be conducted by approaching existing public groups and private landowners to assess their needs and soliciting cooperation. One-on-one interviews will be used to obtain candid insights. Given the unique stakeholders and personal dynamics of each subbasin within the Flathead drainage, it seems unlikely that a single uniform approach to establishing local watershed groups is going to be successful. Local watershed plans are going to have to be dynamic to meet the needs of local communities as well as promote the persistence of target fish and wildlife species. The Model Watershed Plan for the Lemhi, Pahsimeroi and East Fork of the Salmon River (Idaho Soil Conservation Commission 1995) and the Grande Ronde will be used as templates for process but it is expected that significant deviation will occur according to differing resource needs of the Flathead drainage.

When on-the-ground projects are implemented, pre- and post-treatment surveys will be used to compare various habitat restoration, passage improvement and offsite mitigation efforts. Photo points measure the success of revegetation and bank stabilization projects. Habitat surveys quantify shifts in cover, pool-riffle run ratio and substrate. Population assessments compare species relative abundance, population structure, and survival recruitment. Redd surveys estimate adult spawning population and describe habitat requirements. Migration counts compare strength of spawner populations. Please refer to related projects 9101903 (Hungry Horse Mitigation/Habitat Improvements), 9101903 (Hungry Horse Fisheries Mitigation) and the Confederated Salish and Kootenai Tribes Tribal Fisheries Management Plan for a more detailed explanation.

**f. Facilities and equipment.**

The CSKT complex contains several buildings containing office space, computer equipment, and vehicle compounds sufficient for project staff. This project works closely with those projects mentioned above in Section 7c making SCUBA and snorkel gear, electrofishing equipment, GPS equipment and sampling/monitoring equipment available from these programs. These resources will be utilized when deemed necessary.

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

The Flathead Focus Watershed program plays a crucial role in directly integrating the other four Hungry Horse mitigation projects (9101901, 9101904, 9101903, 9401000). This program also uses its resources toward watershed protection and restoration with the U.S. Forest Service, Lake, Lincoln, Sanders and Flathead County Conservation Districts, the Natural Resource Conservation Service, Montana Fish, Wildlife and Parks, the U.S. Fish and Wildlife Service, the Flathead Basin Commission, Yellow Bay Biological Station as well as private citizens and interest groups.

The Flathead River Focus Watershed Coordinator will also be exchanging information with its sister project, the Kootenai Focus Watershed Coordinator. Through sharing information, both projects will benefit from each others' successes and failures.

## **Section 9. Key personnel**

The Flathead River Focus Watershed program is staffed by Lynn S. DuCharme. Prior to this position, Lynn worked as a soil consultant for Ecosystem Management as a soil scientist and for Gallatin County Health Department as an Environmental Health Specialist. Prior to the health department, she worked for Soil Service Company, Inc. as a soil consultant. She completed her Masters degree in Soil Science at Montana State University in May of 1994. Lynn worked part time while getting her B.S. degree in Environmental Science for Environmental Information Services performing wetland delineations and other environmental assessments. All of these employment positions and educational opportunities provided a diverse array of environmental background as well as helped strengthen Lynn's people and communication skills. Her educational background provides a strong base for this position with a wide array of coursework and projects in the environmental studies area.

### **RESUME**

Lynn S. DuCharme  
Flathead River Focus Watershed Coordinator  
Project 9608701

#### **Education**

**Montana State University**, Bozeman, MT 59715  
Master of Science in Soil Science, May 1994, GPA 3.9  
**Stockton State College**, Pomona, NJ 08240  
Bachelor of Science in Environmental Studies, May 1991, GPA 3.69 (3.81 at Stockton Stage College, 1994, 1998-1991)  
**Indiana University of Pennsylvania**, Indiana, PA 15705  
**Abraham Lincoln High School**, Philadelphia, PA 19136, Rank: 5<sup>th</sup> of 490

### **Relevant Courses**

Calculus I and II, Biometric, Biometry, Statistics for Scientists & Engineers, Chemistry I & II, Physics I, Cell Biology, Organisms & Evolution, Mammalogy, Ecological Principals, Field Ecology, Physical Geography, Environmental Issues, Soil Science, Soil Physics, Soil Genesis & Land System Models, Soil Classification, Soil & Plant Water Relations, Plant & Soil Science Graduate Seminar

Groundwater Hydrology, Water Quality, Groundwater Contamination  
Soil & Hazardous Waste Management, Pollution Seminar, Soils & Overburden Rehabilitation

**Research projects:** Wetland Delineation, Soil Genesis Research

### **Relevant Work Experience**

Environmental Information Services July 1989-Aug. 1991  
Field Assistant – Assisted with wetland delineations. Performed soil borings, identified and evaluated vegetation, helped prepare reports.

Stockton State College  
Teaching Assistant for the following courses: Soil Science, Physical Geography, Ecological Principals

Member of Sea Isle City Environmental Commission Sep. 1990-Aug. 1991  
Soil Services Company, Inc. Nov. 1993-Jan. 1994  
Soil Scientist – Designed and placed septic systems. Assisted in archeological studies. Erosion and sedimentation control plans. Drafting.

Gallatin City-County Environmental Health Department Apr. 1994-Apr. 1995  
Environmental Health Specialist – Reviewed soil profiles, septic system design and septic permit applications. Inspected septic systems. Radon program. Preliminary subdivision review.

EcoSystem Management Apr. 1995-July 1996  
Soil Scientist – Design and place septic systems. Perform soil borings, perc tests, prepare reports.

Questa Mortgage May 1996-Apr. 1997  
Loan officer – Analyzed borrowers' ability to repay debt, job stability, etc. Prepared residential mortgage packages for submittal to lenders.

Confederated Salish and Kootenai Tribes Apr. 21, 1997-present  
Flathead River Focus Watershed Coordinator

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

One of the primary goals of this program is to produce a cooperative watershed plan with input from various federal, state and local agencies as well as private landowners and stakeholders. This document will be available for reference and information to all local and regional interests. Currently, cooperative opportunities exist between BPA, BOR, Army Corps, USFS, MFWP, NRC, State, County, and other Tribal programs, Counties, National Fish and Wildlife Foundation, sporting and conservation groups, and British Columbia, Canada. Also, the Flathead Basin Commission, Flathead River Network, and

the Lake County working group have shown great interest in cooperative work toward watershed restoration, education, workshops, etc.