

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

Section 1. General administrative information

**CLEARWATER SUBBASIN FOCUS
WATERSHED PROGRAM**

Bonneville project number, if an ongoing project 9608600

Business name of agency, institution or organization requesting funding
IDAHO SOIL CONSERVATION COMMISSION

Business acronym (if appropriate) ISCC

Proposal contact person or principal investigator:

Name JANET HOHLE
Mailing Address 220 EAST 5TH STREET
City, ST Zip MOSCOW, ID 83843
Phone (208) 882-0507
Fax (208) 883-4239
Email address _____

Subcontractors. List one subcontractor per row; to add more rows, press Alt-Insert from within this table

Organization	Mailing Address	City, ST Zip	Contact Name
NRCS	3244 Elder Street, Room 124	Moscow, ID 83843	David Hoover

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

SECTIONS: 3.1, 4.1, 7.6, 7.7, 7.8

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

The Clearwater and Nez Perce National Forests have completed a biological assessment for activities affecting steelhead trout. The National Marine Fisheries Service is presently preparing the Biological Opinion, which is

scheduled to be completed in January, 1998.

Other planning document references.

If the project type is "Watershed" (see Section 2), reference any demonstrable support from affected agencies, tribes, local watershed groups, and public and/or private landowners, and cite available documentation.

In addition to being co-coordinated with the Nez Perce Tribe, the following programs and planning documents endorse watershed management for anadromous fisheries issues and they all affect decision making in the Clearwater River subbasin.

Bonneville Power Administration. 1997. Watershed management program: final environmental impact statement.

Columbia Basin Fish and Wildlife Authority. 1997. Integrated watershed projects: the process and criteria for selecting watershed projects for the Columbia Basin fish and wildlife program.

Columbia River Basin Fish and Wildlife Program. 1994. Columbia River basin fish and wildlife program.

Columbia River Inter-Tribal Fish Commission. 1994. Wy-kan-ush-mi Wa-kish-wit (spirit of the salmon).

Independent Scientific Group. 1996. Return to the river, restoration of salmonid fishes in the Columbia River ecosystem.

National Marine Fisheries Service. 1995. Proposed recovery plan for Snake River salmon.

Nez Perce Tribe and Idaho Department of Fish and Game. 1990. Clearwater River subbasin salmon and steelhead production plan.

U.S. Forest Service and U.S. Bureau of Land Management. 1997. Interior Columbia basin ecosystem management project: upper Columbia River basin draft environmental impact statement.

U.S. Forest Service and U.S. Bureau of Land Management. 1995. PACFISH.

After the Clearwater Subbasin Focus Program was created and co-coordinators from the Idaho Soil Conservation Commission and the Nez Perce Tribe were named, a letter from Governor Batt was distributed throughout the subbasin inviting participation in the program. Letters of support for the program were received from the following agencies and companies: Clearwater Resource Conservation and Development Council, Inc., Idaho Department of Agriculture, Idaho Department of Lands, Idaho Fish and Game, Plum Creek Timber Company, and Potlatch Corporation.

Subbasin.

CLEARWATER RIVER SUBBASIN

Short description.

DEVELOP AND IMPLEMENT A COMPREHENSIVE SYSTEM TO COORDINATE MULTIPLE JURISDICTIONS, MULTIPLE AGENCIES, AND MULTIPLE PRIVATE LANDOWNERS IN THEIR EFFORTS TO PROTECT, RESTORE, AND ENHANCE ANADROMOUS FISHERIES HABITAT.

Section 2. Key words

<input checked="" type="checkbox"/>	Anadromous fish	<input type="checkbox"/>	Construction	<input checked="" type="checkbox"/>	Watershed
<input type="checkbox"/>	Resident fish	<input type="checkbox"/>	O & M	<input type="checkbox"/>	Biodiversity/genetics
<input type="checkbox"/>	Wildlife	<input type="checkbox"/>	Production	<input type="checkbox"/>	Population dynamics
<input type="checkbox"/>	Oceans/estuaries	<input type="checkbox"/>	Research	<input type="checkbox"/>	* Ecosystems
<input type="checkbox"/>	Climate	<input type="checkbox"/>	Monitoring/eval.	<input type="checkbox"/>	Flow/survival
<input type="checkbox"/>	Other	<input type="checkbox"/>	Resource mgmt	<input type="checkbox"/>	Fish disease
		<input checked="" type="checkbox"/>	Planning/admin.	<input type="checkbox"/>	Supplementation
		<input type="checkbox"/>	Enforcement	<input type="checkbox"/>	* Wildlife habitat en-
		<input type="checkbox"/>	Acquisitions	<input type="checkbox"/>	hancement/restoration

Section 3. Relationships to other Bonneville projects

970600	NEZ PERCE TRIBE FOCUS WATERSHED PROGRAM	FOCUS PROGRAM IS CO-COORDINATED BETWEEN IDAHO STATE AND NEZ PERCE TRIBE
9607700	CLEARWATER FOCUS PROGRAM ON-THE-GROUND PROJECTS	PROJECTS ARE THE RESULT OF WATERSHED PROGRAM

Section 4. Objectives, tasks and schedules

Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Facilitate subbasin assessment	a	Compile data collected on private lands within the subbasin.
		b	Facilitate compilation with data from federally and tribally managed lands; stratify priority watersheds.
2	Analyze existing programs affecting habitat work for anadromous fish issues.	a	Index all relevant programs in subbasin and compile set of minimum requirements for compliance with all programs.

		b	Synthesize task "a" with CBFWA's watershed selection criteria to create <i>Clearwater Focus Project Process</i> .
		c	Organize interdisciplinary technical advisory team (ITAT).
		d	Facilitate design of protocol for the ITAT to review proposals.
3	Identify potential project areas and project sponsors.	a	Research projects that are compatible with Clearwater Focus Program.
		b	Make presentations to groups in subbasin to ascertain project sponsorship interest.
4	Provide assistance and facilitate proposal development.	a	Present workshops to assist with proposal development and compliance with existing law.
		b	Facilitate ITAT
		c	Advocate subbasin projects through funding process.
5	Report Obligations	a	Submit quarterly reports.
		b	Submit final report or subbasin assessment report.

Objective schedules and costs

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	10/1998	12/1998	10
2	12/1998	09/1999	15
3	11/1998	09/1999	30
4	11/1998	09/199	30
5	12/1998	11/199	15
		Total	100%

Schedule constraints.

The Clearwater River subbasin habitat assessment is largely dependent upon work being performed by the U.S. Forest Service, U.S. Bureau of Land Management, Nez Perce Tribe, and Idaho Department of Fish and Game to establish existing conditions and an environmental baseline for spring chinook salmon, steelhead trout, bull trout, and westslope cutthroat trout. The habitat assessment will become the framework for long-term work in the Clearwater

subbasin; proposal development for projects in the near-term will be substantially based on previous planning prioritizations.

Completion date.

2015

Section 5. Budget

FY99 budget by line item

Item	Note	FY98
Personnel		\$38,000
Fringe benefits		12,920
Supplies, materials, non-expendable property	Includes: Costs for public meetings and workshops, newsletter publishing; I/E	11,000
Operations & maintenance	O&M relative to on-the-ground projects, see Project No. 9607700.	
Capital acquisitions or improvements (e.g. land, buildings, major equip.)	Monitoring Equipment	5,000
PIT tags	# of tags:	
Travel		6,000
Indirect costs	@10%	7,292
Subcontracts		
Other	GIS subcontracts	5,000
TOTAL		\$85,212

Outyear costs

Outyear costs	FY2000	FY2001	FY2002	FY2003
Total budget	\$90,000	\$95,000	\$100,000	\$105,000
O&M as % of total	SEE FY98	ABOVE		

Section 6. Abstract

The purpose of the Clearwater Subbasin Focus Watershed Program is to develop and implement a comprehensive system to coordinate multiple jurisdictions, multiple agencies, and multiple private landowners in their efforts to protect, restore, and enhance anadromous fisheries habitat. The system will incorporate existing subbasin requirements into the policies and goals of the Columbia Basin Fish and Wildlife Program. It is expected that increased opportunities for cooperative project design will result from the implementation of the Clearwater Focus Program (CFP) as well as increased optimization of funding sources.

Assessment criteria for this proposal is defined by the product described for each program objective. These products include: Clearwater subbasin assessment; administrative system and review protocol for project proposals designed and implemented; creation of interdisciplinary technical advisory team; compilation of potential projects; workshop presentations and assistance for focus proposal development.

Section 7. Project description

a. Technical and/or scientific background.

The Clearwater River subbasin drains approximately 9,645 square miles, 2,490 square miles of which are above Dworshak Dam and not accessible to anadromous fish. (Nez Perce Tribe & Idaho Department of Fish and Game, 1990) The major watersheds that are accessible to anadromous fish are: The Lochsa, Selway, South Fork, Middle Fork, and mainstem Clearwater River which includes the Potlatch River. Anadromous fish habitat within the Clearwater ranges from the pristine conditions found in the Selway-Bitterroot Wilderness Area to the Clearwater mainstem. Habitat affected by land management actions in the subbasin are representative of natural resource economies and include: agriculture, logging, mining, and livestock ranging.

Based on the aboriginal history of the Nez Perce Tribe, anadromous fish managers conclude that the historical numbers of chinook salmon and steelhead trout returning to the Clearwater River were substantial prior to construction of dams on the Columbia River and the Lewiston dam on the Clearwater River. The Lewiston dam was removed in 1972 however, thus re-opening major habitat for anadromous fish. Nevertheless, in July, 1997, the National Marine Fisheries Service announced that the A and B-run steelhead were listed as threatened under the Endangered Species Act (ESA) in the Clearwater River subbasin; fall chinook have been designated as endangered within the Snake River system.

The building blocks for the Columbia River Basin Fish and Wildlife Program's (FWP) *Integrated System Plan for Salmon and Steelhead Production in the Columbia River System* (1991) are the subbasin plans prepared for the 31 major watersheds in the Columbia River basin, of which the Clearwater River is one. The subbasin order of organization is substantially supported by the FWP's third principle for rebuilding salmon and steelhead in the Columbia River basin:

3. The region should approach habitat and production activities from a total-watershed perspective, not as activities that occur in isolation from land and water conditions in watershed. Special priority should be give to projects that are part of model watersheds or other coordinated watershed programs, especially those with local community involvement. (Columbia River Basin Fish and wildlife Program, 1994, p4)

Consequently, the Clearwater Subbasin Focus Program was initiated on September 15, 1996 with Bonneville Power Administration (BPA) contract funding through the sponsorship of the Idaho State Soil Conservation Commission and the Nez Perce Tribe. The Soil Conservation Commission and the Nez Perce Tribe have retained separate coordinators to jointly administer the program. This action directly implemented Section 7.7A.4 of the FWP, Coordination of Watershed Activities and will become the basis for implementation of the remainder of Section 7.7 and Sections 7.6 Habitat Goal, Policies, and Objectives, and 7.8 Implement State, Federal and Tribal Habitat Improvements.

The unique partnership between the Idaho State Soil Conservation Commission and the Nez Perce Tribe provides a network to connect resource managers and users in the Clearwater River subbasin. The Soil Conservation Commission forms a direct link to private landowners in the agricultural community and other state agencies while the Nez Perce Tribe provides the link to federal agencies, especially in regard to resource management responsibilities. Subbasin management and ownership is illustrated below.

Table 1 Agency Representation within the Clearwater Subbasin, Idaho State

<u>Federal</u>	<u>Idaho State</u>
Army Corps of Engineers	Department of Lands
Bureau of Land Management	Division of Environmental Quality
Clearwater National Forest	Idaho Fish and Game
National Marine Fisheries Service	Soil Conservation Commission
Natural Resources Conservation Service	Department of Water Resources
Nez Perce National Forest	
U.S. Fish and Wildlife Service	<u>Local</u>
<u>Nez Perce Tribe</u>	Clearwater Basin Advisory Group
NPT Executive Committee	County governments - 5
NPT Fisheries	Municipalities - 28
NPT Land Services	Soil and Water Conservation Districts - 5
	Watershed Advisory Groups - 3

Sources: NPT & IDFG, 1990; Clearwater Focus Watershed Project, 1997

Table 2 Management and Ownership in the Clearwater River Subbasin

<u>Entity</u>	<u>Square Miles</u> (% of area available to anadromous fish)
U.S. Forest Service	4243 (59) Eastern portion of subbasin. Management in

Private	2411 (34)	Western portion of Clearwater River subbasin
Idaho State	290 (4)	
Nez Perce Tribe	154 (2.2)	
BLM	58 (0.8)	

Source: Nez Perce Tribe & Idaho Department of Fish and Game, 1990

b. Proposal objectives.

Objective 1: The first objective is to facilitate the characterization of watersheds within the Clearwater River subbasin to establish existing conditions and to establish an environmental baseline of fisheries habitat. The project was originally driven by the two national forests in the subbasin to form the necessary data base for biological assessments regarding steelhead trout and future consultation with the National Marine Fisheries Service. The project has since been expanded to include spring chinook salmon, bull trout, and westslope cutthroat trout as well as lands not managed by the U.S. Forest Service.

Attaining this objective will result in a subbasin assessment of the condition of anadromous fish habitat and prioritization of areas for protection, restoration, or enhancement.

Objective 2: In coordination with the Nez Perce Tribe's Clearwater Focus Program co-coordinator, the Idaho Soil Conservation Commission's Focus co-coordinator shall design a Clearwater Focus Process (CFP) to guide project proposal development and evaluation of anadromous fisheries habitat work to be considered for funding by BPA and other available resources. The process will synthesize existing systems within the subbasin and function as a coordination tool for all anadromous habitat project implementations.

An interdisciplinary technical advisory team will be recruited to provide assistance as amendment of the Clearwater River subbasin assessment is needed and to evaluate proposals annually. The interdisciplinary nature of this team will reflect the watershed management philosophy behind the Clearwater River subbasin Focus Program.

Successful attainment of this objective will result in an administrative system to use to prioritize projects for funding consideration, creation of an interdisciplinary technical advisory team, and a protocol for the team to review project proposals.

Objective 3: In coordination with the Nez Perce Tribe's Clearwater Focus Program co-coordinator, the Idaho Soil Conservation Commission Focus Program co-coordinator shall identify potential project areas and proponents that meet the requirements and criteria contained in the CFP.

Successful attainment of this objective will result in an initial public review of the CFP, compilation of potential projects identified before the Focus Program originated, and a prioritization of potential project areas from the subbasin habitat assessment.

Objective 4: Develop and present workshops to interested project proponents. Provide assistance with proposal development and function as a proposal advocate for those selected by the interdisciplinary technical advisory team.

Successful attainment of this objective will result in project proposals that reflect areas prioritized by the Clearwater River subbasin assessment and/or relative projects to the NPPC Fish and Wildlife Plan.

c. Rationale and significance to Regional Programs.

The concepts behind habitat preservation, restoration, and enhancement are predicated on the notion that all components within an ecosystem are related; the physical, biological, and chemical characteristics are intricately related to create an unique synergism. This is reflected in the “Habitat Goals, Policies, and Objectives section of the *Columbia River Basin Fish and Wildlife Program*.

Maintaining and improving the productivity of salmon and steelhead habitat is an extremely complex task. It requires coordination of virtually all activities that occur in a subbasin. The Council maintains that the best approach to watershed restoration is for activities to be cooperatively undertaken by federal, state, private, and tribal parties. Furthermore, if watershed restoration is to be successful, instream restoration should be accompanied by riparian and up slope restoration. (FWP, p7-32)

The Clearwater Subbasin Focus Program has been initiated to accomplish the kind of coordination needed to achieve this work. The program is co-coordinated by the state of Idaho and the Nez Perce Tribe to bring together all of the governments, agencies, individuals, and concerns that exist within the subbasin. (see Section 7a, Tables 1 & 2)

The form and function of the Clearwater Subbasin Focus Program are driven by the “Habitat Policies” (Fish and Wildlife Program, 1995). To summarize, the program will directly implement the following:

1. Improve and maintain coordination of activities to protect and improve the productivity of salmon and steelhead stocks.
2. Develop and implement procedures to ensure compatibility and compliance with the Council's habitat goal, policies and objectives.
3. Give highest priority to habitat protection and improvement in areas of the Columbia Basin habitat has low or medium productivity. Give priority to projects that are part of an integrated watershed approach and promote partnerships with private landowners.

4. Maximize the benefit to cost ration.
5. Investigate and seek cost share opportunities.
6. Promote public outreach and education.

There are two Idaho State projects on-going in the Clearwater subbasin that are related to the Focus program. The bull trout restoration work and the water quality efforts relative to Section 303(d) of the Clean Water Act. These projects are providing additional documentation and data useful to anadromous fish habitat restoration planning and will present opportunities for project cooperation throughout the subbasin. The Clearwater National Forest has recently completed a study of landslides from the 1995-1996 winter events within the forest. This work has defined the need for modification of management techniques to attend to sediment load delivery to forest streams and identified areas of specific concern. Fisheries research is currently being conducted throughout the subbasin by the Idaho Department of Fish and Game, Nez Perce Tribe, and both the Clearwater and Nez Perce National Forests, efforts that are mutually beneficial to habitat work implemented through the focus program.

The Clearwater Focus program - coordination is directly related to all work conducted under BPA Project Number 9607700 (Focus program on-the-ground projects), BPA Project Number 970600 (Nez Perce Focus program - coordination), BPA Project Number 9303501 (Red River project), BPA Project Number 9607701 (McComas Meadows - USFS).

d. Project history

The Idaho Soil Conservation Service component of the Clearwater Subbasin Focus Program began on September, 1996 with BPA contract funding (\$50,000) for project number 9608600. A program co-coordinator was hired in November, 1996, but resigned in April, 1997. A new co-coordinator was hired in late May, 1997. The Nez Perce Tribe's component of the program was initiated in March, 1997 with BPA contract funding (\$50,000) for project number 970600.

The following data bases have been compiled: existing resource management systems, planning documents, and regulations; a technical bibliography of work completed in the Clearwater subbasin; and a list of current, recent past, and planned habitat work. Interviews with representatives of all agencies with responsibilities in the Clearwater subbasin have been conducted. A subbasin-wide concurrence has been achieved for the program from agencies, organizations, and industry. Numerous presentations have been given to introduce the Clearwater Subbasin Focus Program to the public, watershed/environmental groups, and agencies. The two co-coordinators meet frequently throughout the year for strategy development, planning, site inspections, project development, and meeting presentations.

e. Methods.

The Clearwater Subbasin Focus Program proposal described in this document represents the planning sequence required to develop an administrative process that is capable of coordinating different jurisdictions, different agencies with program objectives that may vary from one another, various land ownership and management responsibility, multiple legal constraints, potential funding sources, available personnel, and provide opportunity for public involvement.

The proposed work will be conducted using the following methodologies: library research; analysis, assessment, and synthesis of existing systems to design an administrative process relative to technical needs/criteria; design and delivery of educational presentations; public relations and meeting facilitation procedures; written and oral communication with technical and non-technical interests.

The critical assumption upon which the program was initiated was the anticipation that all groups, governments, industries and individuals with resource interests in the Clearwater subbasin would endorse a watershed level coordinated effort to address fisheries concerns. The work to date has substantiated that assumption and is documented by agency and industry letters of support. Furthermore, the program has enhanced the cooperative relationship between the state of Idaho and the Nez Perce Tribe regarding resources issues.

Proposed contract work will result in the development and implementation of an administrative process to select projects based on technical criteria for anadromous fish habitat work developed by resource professionals within the Clearwater subbasin. Project proponents will develop proposals and the process will be used to select and amend proposals where necessary. Where the subbasin habitat assessment verifies or justifies variation in FWP functioning habitat criteria (Fish and Wildlife Program, 1994), modification to those will be initiated.

Locally driven and designed watershed plans are complicated by the numbers of different interests usually represented. The Clearwater River subbasin is no exception to this and might be represented by more than the average volume of enthusiasm from each end of the environmentally concerned spectrum. It is at the same time true that the Clearwater River subbasin contains an unusually large number of dedicated resource specialists and jurisdictional strengths. The Fiscal Year 1999 program will not be measured by whether it is successful or not, but rather how successful. The measure of accomplishment will be directly proportional to the number of valid projects that successfully proceed through the Clearwater Subbasin Focus Program.

f. Facilities and equipment.

The Idaho Soil Conservation Commission's Focus co-coordinator has office space, fax, phone, furniture, and supplies support provided by the U.S.

Natural Resources Conservation Service; a surplus vehicle has been provided by the Idaho Department of Fish and Game.

g. References.

References

Bonneville Power Administration. 1997. Watershed management program: final environmental impact statement.

Columbia Basin Fish and Wildlife Authority (NPPC). 1997. A method and criteria for evaluating the technical merits and feasibility of watershed and habitat projects.

Columbia River Basin Fish and Wildlife Program (NPPC). 1994. Columbia River basin fish and wildlife program.

Columbia River Inter-Tribal Fish Commission. 1995. Wy-kan-ush-mi wa-kish-wit (Spirit of the salmon).

Huntington, Charles. 1997. Final report: fish habitat and salmonid abundance within managed and unroaded landscapes on the Clearwater National Forest, Idaho. Prepared for Eastside Ecosystem Management Project.

Huntington, Charles. 1994. Stream and riparian conditions in the Grande Ronde basin.

Independent Scientific Group (NPPC). 1996. Return to the river restoration of salmonid fishes in the Columbia River ecosystem.

Meehan, William (ed). 1991. Influences of forest and rangeland management on salmonid fishes and their habitats.

National Marine Fisheries Service. 1997. Draft proposal-decision matrix.

National Marine Fisheries Service. 1995. Proposed recovery plan for Snake River salmon.

Nez Perce Tribe and Idaho Department of Fish and Game (NPPC). 1990. Clearwater River subbasin salmon and steelhead production plan.

Nez Perce Tribe and U.S. Treaty. 1855.

Roper, B.B., Dose, J.J. & Williams, J.E. 1997. Stream restoration: is fisheries biology enough? *Watershed Restoration* 22:5.

U.S. Clearwater National Forest. 1997. Landslide study.

U.S. Forest Service and U.S. Bureau of Land Management. 1997. Interior Columbia River basin ecosystem management project: upper Columbia River basin draft environmental impact statement.

U.S. Forest Service and U.S. Bureau of Land Management. PACFISH. 1995. Decision notice/decision record: strategies for managing anadromous fish-producing watersheds in eastern Oregon and Washington, Idaho, and portions of California.

Wallowa County and the Nez Perce Tribe. 1993. Salmon recovery plan for Wallowa County.

Section 8. Relationships to other projects

As discussed elsewhere in this document, the Clearwater Subbasin Focus Program is co-coordinated on behalf of Idaho State by the Soil Conservation Commission and on behalf of the Nez Perce Tribe by Tribal Fisheries. Resource specialists throughout the subbasin represent an array of federal, state, and tribal agencies charged with similar missions, albeit sometimes driven by slightly different objectives. The intent of the Focus Program is to coordinate all activities affecting habitat conditions in the subbasin to maximize the result of efforts regarding resource management actions, habitat protection, habitat restoration, or habitat enhancement.

Within the subbasin approximately 34% of the lands are privately owned, generally located in the lower elevations where the geomorphology is more conducive to agriculture and urban development. These areas are directly affected by land management actions and constitute a significant area of concern relative to riparian function. Private lands are also not always subject to the same types of resource management as federal, state, or tribal lands and opportunities for habitat protection, restoration, or enhancement might not be advocated with the same vigor. It is not the intention of the Clearwater Subbasin Focus Program to preclude existing economic activities. However, one objective is to create opportunities for cooperative agreements that might protect, restore, or enhance anadromous fish habitat through increased public education, awareness, access to resource professionals, and cost-share funding.

The three project numbers directly associated with the Clearwater Subbasin Focus Program are: BPA Project 9607700 (Projects); BPA Project 9608600 (Coordination - Idaho Soil Conservation Commission); and BPA Project 970600 (Coordination - Nez Perce Tribal Fisheries). These are inextricably bound projects. They are organized by separate project and contract numbers for purposes of organizational accounting and contracting procedures. Two other ongoing projects are also directly related to the Focus Program, they are: BPA Project 9303501 (Red River Restoration - Idaho County Soil and Water Conservation District) and BPA Project 9607701 (McComas Meadows - USFS)

Section 9. Key personnel

Janet Hohle, Clearwater Subbasin Focus Program Co-coordinator (1 FTE)

Education

Institution	Location	Attendance	Major	Degrees
Washington State University	Pullman, WA	6/92-8/94	Education	Ed.M
University of Idaho	Moscow, ID	1-6/92; 5/94	Education	n/a
University of Washington	Seattle, WA	1/77 - 8/78	Geology	B.S.
University of Iowa	Iowa City, IA	1971-1975 (52 hrs)	General	n/a

Certificates: Idaho: All subjects grades 1-8; Washington: Elementary education grades K-8 ;

Professional Organizations: National Council Teachers of Mathematics; Phi Delta Kappa; Washington Science

Employment History

May, 1997 to Present **Clearwater Subbasin Focus Program Co-coordinator** Idaho Soil Conservation Commission. Moscow, Idaho. Duties: Analyze programs, laws, policies related to watershed management. Facilitate development of criteria to identify critical fisheries habitat. Develop system to apply criteria to watersheds for project development and administration. Prepare plan documents for watershed habitat work coordination. Give educational presentations and workshops for watershed management and proposal development. Provide assistance to project proponents with proposal development, implementation, monitoring, and assessment.

March, 1996 to May, 1997 **Mineral/Aggregate Specialist** Oregon State Department of Land Conservation and De

1994-1996 **Teacher** Substitute for grades 4-12 in Idaho and Washington school districts. Summer school science teacher-Upward Bound, University of Idaho.

April, 1985 to November, 1991 **Geology Department Director** Colville Confederated Tribes. Nespelem, Washing

April, 1982 to April, 1985 **Mineral Analyst** Colville Confederated Tribes. Keller, Washington.

January, 1979 to April, 1982 **Geologist** Colville Confederated Tribes. Nespelem, Washington.

The co-coordinator has extensive professional experience with interdisciplinary resource management, development, and problem solving in areas with multiple jurisdictional issues associated. During her tenure with Colville Confederated Tribes, the co-coordinator was responsible for competitive federal contracting. Demonstrated expertise includes resource issue coordination, public education, communication, and systems analysis.

Relevant Job Completions: 1) Data base compilations for system planning in the Clearwater River subbasin; 2) Legal interpretation and application of new Oregon State Administrative Rule for Goal 5 (natural) resources; 3) Statewide workshops in Oregon to train county and state personnel on new Goal 5 Rule; 4) Mineral exploration and Development system design and implementation on the Colville Indian Reservation; 5) International mineral marketing campaign for the Colville Tribes Mount Tolman ore body.

Section 10. Information/technology transfer

One significant function of the Clearwater Focus Program is to make sure that all resource managers and users in the subbasin know what information is available and what projects are being planned or implemented. This function will

be performed by the establishing networks developed by both co-coordinators, subbasin newsletters, and the development of a more formal project planning process. It is anticipated that most if not all projects will be cooperative efforts between more than one agency. This design goal will also increase the distribution potential of information gained from project work and subsequent monitoring and assessment of that work.