Bonneville Power Administration
Fish and Wildlife Program FY99 Proposal Form

How this form is structured

There are ten major sections to this form. Sections 1 through 5 are database-style fields in which specific information is being sought, so your input is restricted to the gray boxes below. *The boxes are pointers to indicate where to type; they will grow as you type more text, and they won't print as gray boxes.* These sections include: General Administrative Information; Key Words; Objectives, Tasks and Schedules; Relationship to Other Bonneville Projects; and Budget.

In Sections 1 through 5, each field is briefly described on the form itself, and for some fields more tips are shown in the status bar (bottom of the screen). For tables where more rows may be needed than are provided, press Alt-R from within the table to add a row at the end.

Sections 6 through 10 accept a narrative format in which more open-ended questions are asked and you may respond at length in paragraph form. Descriptions are provided on the form. These sections include: Abstract, Description, Relationships to Other Projects, Personnel, Information/Technology Transfer.

Steps to complete the form

1. First, read the Guidelines to Proposals.
2. Second, save this form. For ongoing projects, use your project number.DOC (example: 8909900.DOC). For new proposals, use a filename other than BLANK.DOC, preferrably, your agency acronym and your initials (example: NMFSWS1.DOC).
3. Press Tab to move to the first field (Title of Project), and start typing.
   NOTE: When you exit the Project Title or Project Number fields, your screen may display a "Header" box briefly. The form is updating itself, and will continue normally.
4. Fill in all fields (gray boxes) pressing Tab to advance from one field to the next. Then fill in narrative input areas, pressing down arrow to advance.
5. Print the completed document.
6. Save the document to diskette and mail both paper and diskette to:
   Bonneville Power Administration - EW
   ATTN: Connie Little
   FY99 Proposals
   P.O. Box 3621
   Portland OR 97208-3621

Call Jim Middaugh at the Northwest Power Planning Council (503) 222-5161 or (800) 222-3355 or email middaugh@nwppc.org if you have additional questions.

Proposals must be received to Bonneville by 5pm PST on Friday, January 23, 1998. Late proposals will not be reviewed for FY99 funding. This information will be the only material submitted for independent scientific review. It is essential that the relevant information be provided completely but concisely.

Section 1. General administrative information

Title of project. 75 characters or less; do not include the contractor name or acronym; use abbreviations if appropriate; start with action verbs, i.e., "Evaluate Coho...", not "Evaluation of Coho".

Educate/Support Yakima River Basin Groups

Bonneville project number, if an ongoing project 0

Business name of agency, institution or organization requesting funding
Yakima River Watershed Council

Business acronym (if appropriate) YRWC

Proposal contact person or principal investigator:

Name Phil Shelton
Mailing Address 402 E Yakima Avenue Suite 510
City, ST Zip Yakima Washington 98901
Phone 509 576 9042
Fax 509 576 8666
Email address yrwc@wolfenet.com

Subcontractors. List other agencies or entities that will receive funding under this project, either through sub-contracts managed by the project sponsor or, where multiple agencies are involved as joint sponsors, through primary contracts managed by Bonneville. If another entity will be responsible for the long term maintenance of the project, identify them here.

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

Organization	Mailing Address	City, ST Zip	Contact Name
none			

NPPC Program Measure Number(s) which this project addresses. Refer to 1994 Fish and Wildlife Program as amended in 1995; NPPC staff will proof this field and correct if necessary; separate multiple measure numbers with commas.

NMFS Biological Opinion Number(s) which this project addresses. If the project relates to the Kootenai Sturgeon Biological Opinion, the NMFS Hydrosystem Operations Biological Opinion, or other Endangered Species Act requirements, enter the Action Number and Biological Opinion Title.

Other planning document references. If the project is called for in the National Marine Fisheries Service *Snake River Salmon Recovery Plan*, or in *Wy Kan Ush Me Wa Kush Wit*, the Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs and Yakama tribes, in U.S. Forest Service or Bureau of Reclamation land management plans, or in local area subbasin or watershed plans, or in other planning documents, provide the name of the plan and reference citation where the need is identified.

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.

Supported through private and public funding. See section 7 and attached letters of endorsement

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Subbasin. List subbasin(s) where work is performed. Use commas to separate multiple subbasins. Coordination projects or those not affecting particular subbasins may omit this field.

Yakima River Watershed

Short description. Describe the project in a short phrase (less than 250 characters). Give information that is not in the title. If possible start this field with an action verb (protect, modify, develop, enhance, etc.) rather than a noun (this project protects). There is room for a more detailed project abstract later in the narrative section, so please keep this answer short.

Educate Yakima River Watershed target audiences as to holistic watershed planning approach and its benefits for fish and wildlife habitat, a sustainable economy, and community quality of life.

Section 2. Key words

For identifying and sorting, mark key words below that most specifically describe this project. Under each heading (Programmatic Categories, Activities, Project Types), find the **one** item that most applies to your project, and mark it with an X in the Mark column. If other items in the same heading also apply, mark them with a plus sign or asterisk.

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
X	Anadromous fish		Construction	X	Watershed
X	Resident fish		O & M		Biodiversity/genetics
X	Wildlife		Production		Population dynamics

	Oceans/estuaries		Research	X	Ecosystems
	Climate	X	Monitoring/eval.		Flow/survival
	Other	X	Resource mgmt		Fish disease
			Planning/admin.		Supplementation
			Enforcement	X	Wildlife habitat en-
			Acquisitions		hancement/restoration

Other keywords. If there are other key words that would help identify your project, enter them below, separated by commas; example key words: DNA, stock identification, life history, sampling, modeling, nutrient dynamics, predation, hydrodynamics, gas bubble disease, disease names, hatchery-wild interactions, ecological interactions.
Education, Public awareness, Agency coordination, Watershed Council.

Section 3. Relationships to other Bonneville projects

Describe any interdependencies with other projects funded under the Fish and Wildlife Program. Don't include general relationships to other projects, but target those that depend on this project being funded, or vice versa. There is room in Section 7 below to comment on other relationships or to describe these more fully.

If you need more rows, press Alt-R from within this table.

Project #	Project title/description	Nature of relationship

Section 4. Objectives, tasks and schedules

This section has three parts: a) Objectives and tasks table, b) Objective schedules and costs table, c) other schedule fields. Instructions for each part follow the headings.

Objectives and tasks

Briefly describe measurable objectives and the tasks needed to complete each objective. Use Column 1 to assign numbers to objectives (for reference in the next table), and Column 3 to assign letters to tasks. Use Columns 2 and 4 for the descriptive text. Objectives do not need to be listed in any particular order, and need only be listed once, even if there are multiple tasks for a single objective. List only one task per row; if you need more rows, press Alt-R from within this table.

Obj 1,2,3	Objective	Task a,b,c	Task
1	Enable Yakima River Watershed Council to design aand execute administrative,	a	Maintain and support Yakima River Interagency Council project identification and conduct activities

	planning, organizational and education activities.		
		b	Develop and conduct public and target audience, watershed approach, education programs

Objective schedules and costs

Partition overhead, administrative, support, and any other common costs shared among objectives. The percentages for all objectives should total 100%. Enter just the objective numbers from Column 1 in the above table. Enter start and end dates for each objective using the mm/yyyy format (e.g. 05/2002 for May, 2002).

If you need more rows, press Alt-R. **Press Alt-C to calculate total.**

Objective #	Start Date mm/yyyy	End Date mm/yyyy	Cost %
1	4/1998	9/1998	100
			TOTAL 10000.00%

Schedule constraints. Identify any constraints that may cause schedule changes. Describe major milestones if necessary.

Completion date. Enter the last year that the project is expected to require funding.
1998

Section 5. Budget

This section has two tables: 1) FY99 budget by line item, and 2) Outyear costs. Instructions for each part follow the heading.

FY99 budget by line item

List FY99 budget amounts for each category. If an item needs more explanation, provide it in the Note column. If the project uses PIT tags, include the cost ($2.90/tag). **Press Alt-C to calculate total.**

Item	Note	FY99

Personnel	Half of one salary for one person. YRWC covers balance, including support staff.	$15,000
Fringe benefits	30%	$4,500
Supplies, materials, non-expendable property	Office supplies plus phone, fax, and e-mai \and copier	$5,000
Operations & maintenance	Administer/Support Interagency Council. Design and conduct education programs including media buys.	$105,000
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		
PIT tags	# of tags:	
Travel		$ 500
Indirect costs		
Subcontracts		
Other		
TOTAL		$130,000

Outyear costs

List budget amounts for the next four years, and the estimated percentage of those costs for operations and maintenance (O&M).

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

Section 6. Abstract

A condensed description to briefly convey to other fish and wildlife scientists, managers and non-specialists the background, objectives, approach and expected results. **In under 250 words,** include the following:

a. Specific items in any solicitation being addressed
b. Overall project goals and objectives
c. Relevance to the 1994 Columbia Basin Fish and Wildlife Program (benefit to fish and wildlife)
d. Methods or approach based on sound scientific principles
e. Expected outcome and time frame
f. How results will be monitored and evaluated

Type here (provide answers in paragraph form)

The YRWC is an open forum of diverse interests that provides opportunity for community learning and dialogue concerning watershed viability and facilitates community actions to restore and preserve watershed health. Governance is by consensus.

Tasks are accomplished, in part, through coordination with, and support of, local, state, federal, and tribal agencies, information transfer, and public involvement in agency decision-making processes.

Since inception, YRWC, has pursued a watershed approach, has educated its 400 members, its volunteer committee members, and communities about watershed resource issues; developed a comprehensive watershed plan to address ecosystem viability within prevailing constraints; and formed an interagency council comprised of state, local, federal, and tribal representatives to achieve restoration and protection of watershed health values.

Maintenance of IAC and YRWC's continuing public education for watershed communities are the primary activities for which funding is sought.

The IAC's stated goal is to cooperatively identify and conduct projects to improve watershed health. Focus is on anadromous fish restoration via improving habitat, water quality, and instream flow values, plus other resource improvements. IAC cooperative efforts will leverage resources, strengthen partnerships, and facilitate access to one another and to the public.

Continuing education and public watershed involvement accomplished by identifying existing educational programs through IAC; YRWC design and development of public media advertising, direct mail campaigns, speakers bureau, and target group programs. Content to promote watershed approach, identify resource problems; outline and promote action strategies. Goal is to produce informed and motivated watershed stewards in the Yakima basin.

Program success will be assessed by environmental improvements already being monitored by watershed agencies; by levels of public participation in watershed programs and by changes in on-farm practice yielding water quality improvements, and other local activities expected to result in a healthy watershed.

Section 7. Project description

This full description of the project should be in sufficient detail to include the following information under headings a through g **(maximum of 10 pages for entire project description)**:

a. Technical and/or scientific background. The overall problem should be clearly identified with background history and scientific literature review, if a research project. Location should be specific, if relevant. Goals and objectives of the 1994 Fish and Wildlife Program (FWP), NMFS Biological Opinion, or other plans in relation to the proposed project should be stated and described in some detail. Indicate whether the project mitigates losses in place, in kind, or if out-of-kind mitigation is being proposed.

Show how the proposed work is a logical component of an overall conceptual framework or model that integrated knowledge of the problem. The most significant previous work history related to the project, including work of key project personnel on any past or current work similar to the proposal, should be reviewed. All work should be adequately referenced and listed at the end of this field.

Type here (provide answers in paragraph form)

For millennia, there have been voices over the water in what today is known as the Yakima River Basin; a geographically diverse area that covers 6,155 square miles of central Washington State; and, is an integral part of the greater Columbia River ecosystem. Except for a sliver of that vast time out of memory, the voices were in concert with their environment. Increasingly, over the past two hundred years, and since 1855 in particular, the voices over the water have swelled in number, echo multiple, diverse values, and represent a radical departure from the past. Today, humans impose descriptive models upon water that are chemical, political, cultural, biologic, theological, mythic, economic, legal, and often, self-serving.

As Aldo Leopold writes in, A Sand County Almanac, "The water must be confused by so much advice."

The history of water use and development centers around a few key events that in turn reflect larger trends. These events and trends make manifest the several values conferred upon water in this arid land and the various instrumentality's, i.e. laws, rulings, customs, institutions and actions, the community has invoked to realize and protect these values.

Time Immemorial - 1855 -- Until 1855, when the Confederated Tribes of the Yakama Indian Nation entered into a treaty with the United States, the streams in the Yakima basin had primarily provided the necessary environment to sustain great anadromous and resident fish populations. The local residents sustained themselves from fish and accordingly the fish became a central part of their culture.

At about that time some agricultural irrigation was initiated by the Catholic priests in the Ahtanum Creek watershed just prior to the signing of the treaty. Additionally, very little governmental involvement took place during that period from either the state or federal levels in regard to water policy.

1855-1905 -- During this period, tremendous non-Indian settlement of the Yakima basin took place and efforts to divert water to irrigate annual crops, hay and pasture immediately took place. Private canal companies began to organize in the late 1860's and 1870's. In 1891, the Northern Pacific Railroad—the largest development for that time—started diverting at Sunnyside Diversion Dam. By the year 1902 and passage of the Reclamation Act, there was an estimated 121,000 acres under irrigation in the Yakima Basin. At that time with only natural runoff available, shortages in water were already being experienced. Government continued to be non-integral. Water rights were obtained through appropriation and beneficial use.

1905- 1951 - In 1905, after investigating and measuring flows in the Yakima River and its tributaries, the then US Reclamation Service, with the encouragement of local representatives, sought to construct storage facilities as a technical fix for solving the existing water shortages. More control over the resource would also permit the irrigation of additional acres.

However, prior to construction of these reservoirs and conveyance facilities, the Secretary of the Interior required existing water claimants to enter into agreements limiting their diversions to agreed monthly maximums. These "Limiting Agreements", entered into by some 50 claimants, were challenged in court in 1994 and determined to be binding on the signatories thereto, controlling over greater historical beneficial diversions, and inclusive of the tributaries to the Yakima River.

In 1905 the Washington legislature passed legislation permitting the US to withdraw the then unappropriated waters of the Yakima basin. That withdrawal continued until 1951 and allowed the Reclamation Service to begin construction of the six dams and reservoirs of the Yakima Project. The last, Cle Elum Dam and Lake Cle Elum, were completed in 1933. In 1917, the Washington legislature passed a comprehensive statutory scheme defining the law in regard to water rights. That statute remains mostly unchanged.

However, even with 1,070,000 acre-feet of storage capacity it soon became apparent the water supply was not sufficient to meet the demand during drought years (with the added but then unaddressed problem of the Yakama Indian Nation's treaty reserved right for fish). When the Bureau of Reclamation lost in a lawsuit that attempted to limit contract deliveries to Sunnyside patrons, the US sought to resolve conflicting water right claims by way of a stipulated settlement in lieu of a general adjudication. In what has become known as the 1945 Consent Decree, Kittitas Reclamation District v. Sunnyside Valley Irrigation District, Civil No. 21 (Eastern District of Washington, 1945), the US agreed to deliver certain quantities of water from the Total Water Supply Available (a combination of all surface water resources, including storage, in the basin) to non- proratable (Senior) and proratable (Junior) water claimants. The quantities set forth in the Consent Decree and the Limiting Agreements have controlled water delivery in the basin since 1945.

1951-1977 -- In this period, river operations have proceeded under the guidance of the Bureau of Reclamation and the requirements set forth in the 1945 Consent Decree. Agricultural production has increased to a $750,000,000 industry with over 500,000 acres of land under irrigation at this time. However, the 1945 Consent Decree does not provide for fish flows, the Yakama Indian Nation sought adjustments to the existing regime on two occasions.

In 1977, the Nation filed in federal court to have their treaty reserved water rights quantified. That matter was eventually transferred to state

court as part of the adjudication known as Acquavella and the issue of the impact of the 1945 Consent Decree on that right was addressed in that proceeding. The specifics of that deliberations are discussed in more depth below, but in general, memorialized two non-proratable and two proratable irrigation rights as well as a minimum instream flow for fish, all within the mainstem Yakima River. Other reserved rights were established for on-reservation flows and at usual and accustomed fisheries.

In 1980, the Nation sought protection of certain fish redds in the upper portion of the Yakima River between the mouths of the Cle Elum and Teanaway Rivers. In October, Judge Justin Quackenbush of the Federal District Court directed the Bureau of Reclamation, acting through the Yakima Project Superintendent, to release water from Yakima Project reservoirs to keep the salmon eggs alive. Pursuant to an order by that court, the "flip-flop" operation was eventually conceived which forces fish to spawn at a lower elevation in the stream channel of the Yakima River during the spawning season. Thus, less water is needed to be released from storage during the winter to keep the redds under water and maintain the eggs.

In 1997, the water resource stakeholders are somewhat different and play different roles than they did in 1897. Farmers are successfully pushing in two directions: through their demand for more efficient methods of bringing water to the crops while increasing the value of those products through international expansion, specialty crops and consistent quality. The Yakama Nation has succeeded in bringing the interests of the fish back into the forefront. Irrigation districts have changed the norm in conveying water throughout the Yakima basin with a level of engineering sophistication and a commitment to self-regulation of their industry to improve water quality. Government, through a variety of agencies, has been mandated to respond to all of these needs and form partnerships to ensure water will be available for economic and ecological values. Sometimes these interests find ways to work together but historically their relationships have been formed through conflict.

Perhaps the singularly binding issue that faces all residents of the basin is the impending listing of various species of fish in the Yakima watershed as "endangered" or "threatened" pursuant to the Endangered Species Act. That listing will affect not only future planning decisions but will also likely affect historic and present-day operations. Additionally, Judge Stauffacher's decision as to the treaty reserved fishery right requiring a minimum instream flow has significantly affected river operations: a possible doubling or tripling of that instream flow to satisfy ESA would further compound these effects.

While human activities of the past have deposited layers of polluted sediment in the lower Yakima River, legislatures, courts, and

communities have laid down layer upon layer of laws, customs, engineering, scientific study, cultural attitudes, and institutional policies regarding water.

The Yakima River Basin is representative of water-use and water resource management in the West. Of the many water-related issues extant in the river basins of the arid west, most, if not all, are in play in the Yakima Basin. Of significance are:

- Indian treaty rights,
- Historical irrigation water rights,
- Over-appropriation of water,
- Reservoir development,
- Irrigation development,
- More than 100 years of agricultural development,
- A timber and forest products industry
- A growing recreation and tourism industry
- A growing population that, increasingly, is ethnically-mixed and environmentally-conscious
- Growth management laws
- Increasing water demand for anadromous and resident fish
- Increasing domestic and industrial use.
- An on-going general adjudication of water rights
- Clean Water Act, section 303d enforcement, (TMDL process)
- Endangered Species Act (candidate) listing in August 1996,
- An active watershed council
- Extensive federal agency presence and pervasive involvement

Since its inception in 1994, in the midst of a three-year drought, the Yakima River Watershed Council has brought the various water stakeholders of the region to one table to implement actions that will address the demands of all water interests based on the management of annual snow-pack supply.

The human and ecological demands of the Yakima River exceed the stream's supply, given the way the system is currently managed. The reality surfaces in many ways but perhaps most starkly when junior water right holders are unable to receive a full share of water (nine times since 1973), and anadromous and resident fish populations continue their persistent decline.

Because the instream resource currently is inadequate to provide fully for the competing demands, disagreement has ensued over who/what will utilize those flows. Some advocate ways to increase supply. Others advocate decreasing demand. Still others advocate technical-fix solutuions. Yet others advocate modification of social behavior.

Additionally, because one group can only improve their situation at the expense of another group, efforts to change the system one direction or the other are stymied.

The result has been much legal wrangling and political disputation but very little in the way of long-term solution implementation. For most of this century water allocation is an argument waiting for the next shortage and legal confrontation.

As the twenty-first century approaches, it has also become apparent society in general, and the human inhabitants of the Yakima watershed, place a multiple set of values on the disposition of water. Irrigated agriculture continues as a cornerstone of the economy and community life. But courts, lawmakers, and community custom recognize that water is essesntial to other values as well. For humans, fish, wildlife, plants, and the smallest of organisms, water constitutes the network of life on which all depend.

The Yakima River Watershed Council, since its inception in 1994, continues to be the open forum and point of convergence for the multiple interests the community vests in water and water uses. Water is the natural point of public discussion as all life is, by definition, connected to the available water. When availability is modified, restricted, expanded, divided, or degraded, then the links between the competitors for the available water can become strained and/or break. Legal and political dispute ensue.

The Watershed Council asserts the time has arrived to begin anew the community's work to improve our century-old water management system; to solidify the Yakima Basin's reputation as a premier agricultural region while, simultaneously securing the health of our natural environment via its restoration and protection..

The goal of the Council is to develop a plan, through consensus, to secure water for the multiple values the community has established in the allocation and management of its available water. Water supply, water conservation, water quality, habitat restoration, and water supply system management are the terms of the equation to balance any planning effort

The Endangered Species Act, Clean Water Act, and the Washington State Growth Management Act are emerging factors in the Yakima Basin water equation. To lessen impacts on our economy while complying with the law and providing a healthy environment for all, we must continue, in earnest, to find a community-common solutions. If local communities are truly to do best for their quality of life within the context of their watershed environment, they must know best.

The Yakima River Watershed Council is pleased to present for your consideration the enclosed applications for specific water resource projects in the Yakima Basin. The value and effectiveness of these projects have earned

them position in a holistic approach to Yakima River ecosystem improve and protection within the greater Columbia River system. The YRWC offers these project proposals as a community-developed package under the umbrella of the Yakima River Watershed Council

The YRWC is an open forum of diverse voices that provides opportunity for community learning and dialogue concerning watershed viability and facilitates community actions to restore and preserve watershed health within the parameters of economic, legal, and institutional constraints. Governance is by consensus. With this grant funding, The YRWC intends to continue the process of bringing the diverse interests of the watershed to one table for the purposes of organization, education, project identification, and project implementation.

In 1994, the citizens of the Yakima River watershed responded to insufficient water supply and deteriorating water quality by undertaking a self-funded, ecosystem, community-based approach for watershed restoration and protection. This community response to common problems manifested itself in the formation of the Yakima River Watershed Council

The Council succeeded in bringing together a wide spectrum of diverse interests -- agriculture, business, banking, environmentalists, timber interests, hydroelectric interests, academics, local government, and tribal interests-- to prepare a comprehensive watershed plan. After three years, all interests are still at the table, and a draft plan document has gone to state, local, federal, and tribal agencies for review.

This effort, remarkable as it is, would not have been possible were it not for vigorous financial support by both the private and public sectors. To date, YRWC has raised approximately $900,000. The sum represents $707,000 in private funding and nearly $200,000 in public funding from the Washington Department of Ecology, the US Bureau of Reclamation, Benton County, Benton County REA, and from a significant number of municipalities throughout the watershed. These and other agencies have responded in kind with technical and policy support via personnel participation.

This new spirit of cooperation afoot in the watershed is also reflected in the cooperative efforts of the Roza and Sunnyside Valley Irrigation Districts in the formation of a Joint Board of Control (BOJC). Their joint board is in the process if committing their own resources to improve water quality values in irrigation return drains. Both the YRWC and the BOJC, and others have been expending efforts to educate landowners and the general public as to the needs and methods of non-point source pollution reduction, waterway buffering, and fish and wildlife habitat restoration. These and other efforts can be leveraged with the funds requested this community umbrella grant application.

This clustering of funding requests exemplifies the three-county communities commitment to a watershed approach with a broad based of public and private support. While the enclosed requests do not meet the level of funding required to correct our serious water quality and habitat conditions, we have agreed to set the overall FY 1998 request at a modest sum, because first, a limited time remains in this cycle, and, secondly, these are projects which can be quickly implemented, but that have long-term, high impact potential, third, substantial cost-share funds are available in 1998, and finally, a successfully-funded grant would represent a significant step forward in addressing the watershed's compromised ecosystem viability. We are fully confident we will deliver significant and measurable results.

Administrative support and conduct of the Yakima River Interagency Council and YRWC's continuing public education for watershed communities are the primary activities for which funding is sought. The Interagency Council support tasks are to be accomplished, in part, through coordination with and support of local, state, federal, and tribal agencies, information transfer, and public involvement in agency decision-making processes.

The Interagency's stated goal is to cooperatively identify and conduct projects to improve watershed health. The Interagency Council focuses on projects addressing anadromous fish restoration via elevating habitat, water quality, and instream flow values, plus other resource improvements. The Interagency Council's cooperative efforts will leverage resources, strengthen partnerships, and facilitate access to one another and to the public.

Continuing education and public watershed involvement will be accomplished by identifying existing educational programs through Interagency Council. The YRWC will continue with the design and development of public media advertising, direct mail campaigns, a speakers bureau, and target group events such as group-specific workshops, service club presentations and the popular Salmon Walks, field trips to observe spawning salmon conducted by Yakama Nation and public school personnel. The content is designed to present and promote watershed approach planning , identify resource problems, relate watershed values to quality of life values and then, outline and promote on-ground action strategies. Goal is to produce informed and motivated watershed stewards in the Yakima River basin.

Program success will be assessed by environmental improvements already being monitored by watershed agencies; by levels of public participation in watershed programs and by changes in on-farm practice yielding water quality improvements, and other local activities expected to result in a healthy watershed. It is the strategy of YRWC, when and where appropriate, to coordinate education efforts with the established programs of Public School Educational Service Districts, Washington

State university Cooperative Extension, and Washington Department of Ecology

b. Proposal objectives. Specific, measurable objectives or outcomes for the project should be presented concisely in a numbered list. Research proposals must concisely state the hypotheses and assumptions necessary to test these. Non-scientific projects must also state their objectives. Clearly identify any products (reports, structures, etc.) that would result from this project. For example, an artificial production program may state the species composition and numbers to be produced, their expected survival rates, and projected benefits to the FWP. A land acquisition proposal may state the conservation objectives and value of the property, the expected benefits to the FWP, and a measurable goal in terms of production. Methods and tasks (in heading e, below) are to be linked to these objectives and outcomes (by number).

Type here (provide answers in paragraph form)
The Interagency's stated goal is to cooperatively identify and conduct projects to improve watershed health. The Interagency Council focuses on projects addressing anadromous fish restoration via elevating habitat, water quality, and instream flow values, plus other resource improvements. The Interagency Council's cooperative efforts will leverage resources, strengthen partnerships, and facilitate access to one another and to the public.

c. Rationale and significance to Regional Programs. The rationale behind the proposed project should be presented and project objectives and hypotheses related as specifically as possible to the FWP objectives and measures or to other plans. You should make a convincing case for how the proposed work will further goals of the FWP. Relevant projects in progress in the Columbia Basin and elsewhere should be listed and discussed in relation to the proposed project. Arrangements should be identified and documented for cooperation and synergistic relationships among the proposed project, *other project proposals*, and existing projects. Any particularly novel ideas or contributions offered by the proposed project should be highlighted and discussed.

Type here (provide answers in paragraph form)

d. Project history (for continuing projects). If the project is continuing from a previous year, the history must be provided. This includes projects that historically began as a different numbered projects (identify number *and short title*). For continuing projects, the proposal primarily will be an update of this section. List the following:

- project numbers (if changed)
- project reports and technical papers
- summary of major results achieved
- adaptive management implications
- years underway (see attached spreadsheet)
- past costs (see attached spreadsheet)

Type here (provide answers in paragraph form)

e. Methods. How the project is to be carried out based on sound scientific principles should be described (this is applicable to all types of projects). Include scope, approach, and detailed methodology. If methods are described in detail in another document, summarize here and cite reference. The methods should include, as appropriate, but not be limited to such items as:

- tasks associated specifically with objectives
- critical assumptions
- description of proposed studies, experiments, treatments or operations in the sequence that they are to be carried out
- any special animal care or environmental protection requirements
- any risks to habitats, other organisms, or humans
- justification of the sample size
- methods by which the data will be analyzed
- methods for monitoring and evaluating results
- kinds of results expected

Each proposer should complete the methods section with an objective assessment of factors that may limit success of the project and/or critical linkages of the proposal with other work (e.g., a smolt monitoring program, etc.).

Type here (provide answers in paragraph form)

Continuing education and public watershed involvement will be accomplished by identifying existing educational programs through Interagency Council. The YRWC will continue with the design and development of public media advertising, direct mail campaigns, a speakers bureau, and target group events such as group-specific workshops, service club presentations and the popular Salmon Walks, field trips to observe spawning salmon conducted by Yakama Nation and public school personnel. The content is designed to present and promote watershed approach planning , identify resource problems, relate watershed values to quality of life values and then, outline and promote on-ground action strategies. Goal is to produce informed and motivated watershed stewards in the Yakima River basin.

Program success will be assessed by environmental improvements already being monitored by watershed agencies; by levels of public participation in watershed programs and by changes in on-farm practice yielding water quality improvements, and other local activities expected to result in a healthy watershed. It is the strategy of YRWC, when and where appropriate, to coordinate education efforts with the established programs of Public School Educational Service Districts, Washington State university Cooperative Extension, and Washington Department of Ecology

f. Facilities and equipment. All major facilities and equipment to be used in the project should be described in sufficient detail to show adequacy for the job. The proposal should indicate whether there are suitable (based on contemporary standards) field equipment, vehicles, laboratory and office space and equipment, life support systems for

organisms, and computers, for example. Any special or high-cost equipment to be purchased with project funds should be identified and justified. Reference to other proposals is allowed but note that limitations of those proposals could effect the evaluation of the ones citing them.

Type here (provide answers in paragraph form)

g. References. (Not included in 10-page limit for this section.) Provide complete citations to all publications referred to in Sections 6a-f. List in order: author(s), date, title, report number, publisher or agency, location. References will not be read by reviewers; the substance of any reference should be described in the text and the source cited. Sample citation:

> Rondorf, D.W., and K.F. Tiffan. 1997. Identification of the spawning, rearing and migratory requirements of fall chinook salmon in the Columbia River Basin. Annual Report 1995. DOE/BP-21078-5, Bonneville Power Adminsitration, Portland, Oregon.

Type here (provide answers in paragraph form)

Section 8. Relationships to other projects

Indicate how the project complements or includes collaborative efforts with other projects; put the work into the context of other work funded under the FWP. If the proposed project requires or includes collaboration with other agencies, organizations or scientists, or any special permitting to accomplish the work, such arrangements should be fully explained. If the relationship with other proposals is unknown or is in conflict with another project, note this and explain why.

This is not intended to duplicate the Relationships table in Section 3. Instead, it allows for more detailed descriptions of relationships, includes non-interdependent relationships, and includes those not limited to specific Bonneville projects.

Type here (provide answers in paragraph form)

Section 9. Key personnel

Include names, titles, FTE/hours, and one-page resumes for key personnel (i.e. principal investigator, project manager), and describe their duties on the project. Emphasize qualifications for the proposed work. Resumes should include name, degrees earned (with school and date), certification status, current employer, current responsibilities, list of recent previous employment, a paragraph describing expertise, and up to five recent or especially relevant publications or job completions.

Type here (provide answers in paragraph form)

Section 10. Information/technology transfer

How will technology or technical information obtained from the project be distributed or otherwise implemented? Methods can include publication, holding of workshops, incorporation in agency standards or facilities, and commercialization.

Type here (provide answers in paragraph form)
Media publication, workshops and target group events, newsletters, field trips

Congratulations!

Thank you for completing the FY99 Proposal Form. Please print and save this file to diskette, and mail both to the address shown at the top of this document. To ensure a thorough review of your proposed work, this form will be screened for completeness. If it is not complete, it may be returned to you with a request for additional information.