

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, preferably, 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”.

Inform Public

Bonneville project number, if an ongoing project

Business name of agency, institution or organization requesting funding

Business acronym (if appropriate)

Proposal contact person or principal investigator:

Name Hank Marshall
Mailing Address 433 Hungry Hollow Road
City, ST Zip Oroville, Washington 98844
Phone (509) 485-3754
Fax
Email address

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.

No other agencies or contractors involved.

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

Organization¹	Mailing Address	City, ST Zip	Contact Name
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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.

Have been advised that Section 7.7 for Okanogan Watershed may apply

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

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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. N/A

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.

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.

N/A

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. Project informs public of basic ground and surface water characteristics, water quality assessments, population impacts, regulatory requirements, basic water law, water use history and future trends.

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 **X Ecological interactions**

Activities

Mark *** Anadromous fish**

X Education

Project Types X Watershed

* Anadromous fish	Construction	X Watershed
Resident fish	O & M	Biodiversity/genetics
Wildlife	Production	* Population dynamics
Oceans/estuaries	Research	Ecosystems
Climate	Monitoring/eval.	Flow/survival
Other	Resource mgmt	Fish disease
X Ecological inter- actions	X Education	Supplementation
	Planning/admin.	* Wildlife habitat en- hancement/restoration
	Enforcement	
	Acquisitions	

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.

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
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None known

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

Task abc

Objective
1. Inform Public

- Task**
- a. Coordinate subject selection with Bonneville**
 - b. Procure equipment (audio/visual)**
 - c. Prepare presentations**
 - d. Hire personnel (one assistant)**
 - e. Contact target groups**
 - f. Arrange for times and facilities**
 - g. Arrange for supplemental authoritative input**
 - h. Advertise program**
 - i. Update program according to need**

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.	06/1998	09/2001	100 %
Personnel	06/1998	09/2001	70%
Administration	06/1998	09/2001	10%
O&M	06/1998	09/2001	2%
Supplies	06/1998	09/2001	4%
Equipment	06/1998	09/2001	14%
TOTAL			100%

Schedule constraints. Identify any constraints that may cause schedule changes. Describe major milestones if necessary. Conflicts with supplemental speaker schedules or presentation facilities, equipment failure or illness could cause schedule changes.

Completion date. Enter the last year that the project is expected to require funding. FY 2001 for basic information. Abbreviated program should be continuing as an update

on program changes and problems.

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		\$80,000
Fringe benefits: Meals with target group representatives & speakers		900
Supplies, materials, non-expendable property		5,000
Operations & maintenance		2,500
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		15,900
PIT tags	# of tags:	
Travel: including meals and overnight lodging.		6,200
Indirect costs:		
Subcontracts		
Other	Administrative; phone, insurance, expendable supplies	5,000
TOTAL		\$ 115,500

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	\$115,500	115,500	115,500	115,500
O&M as % of total	2%	2%	3%	3%

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:

- Specific items in any solicitation being addressed
- Overall project goals and objectives
- Relevance to the 1994 Columbia Basin Fish and Wildlife Program (benefit to fish and wildlife)
- 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 paragrapg form) Objective is to provide the public with scientifically supportable background information concerning water resources, quality and regulatory requirements that will enable them to make informed decisions about watershed management. This information will promote understanding of agency programs as well the needs of fish and wildlife populations, and, through feed-back, provide responsible agencies with insights into public concerns. This liaison is intended to mitigate public anxiety and distrust by clarifying the scientific basis that should form the foundation of regulatory decisions that affect both the traditional lifestyle and the economy of the watershed . Monitoring can take place by preparing discussion outlines or summaries that will be submitted the funding agency for comment and/or oversight adjustment prior to presentation. Results may be judged by public response to projected programs and program attendance. Most relevant subject areas can be covered for the designated watershed target groups within two years. A reduced program should be a continuing process to provide the public with an updated perspective.

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) The Okanogan Watershed consists of a hard working, independent rural population with a history of solving their own problems based upon their own judgement and experience. Many view government (agency) intrusion into this process with distrust and resentment, and fear the potential for additional unfunded mandates and the “taking” of private property and water rights. Many have little time to devote to the study of the ecological considerations involved in agency programs, nor access to the information supporting them. The result is often an uninformed resistance to almost any agency program.

The primary goal of this proposal is to inform the public of the justification for agency programs, the scientific support for that justification, the regulatory requirements behind the programs and the options available for solutions to resulting problems. The secondary goal is to produce an attitude supporting a cooperative team approach, with the

involved agencies, in which disagreements are reconciled by negotiation and the use of established legal vehicles. In this context, this proposal generates public support for all scientifically justified programs, and, additionally, provides for reasonable consideration of cost to benefit ratios.

The most recent efforts that relate to perspectives generated in this proposal are: representing the County Cattlemen's Association in matters of ecology and water for approximately 3 years, member of the Okanogan Watershed Committee for 1 year and member of recently created Salmon Creek Committee. For past experience and qualifications please see Section 9.

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) Objectives are to produce a level of understanding within the general public that will mitigate distrust and resistance to agency programs, and replace it with a team approach to problem solving that uses negotiation and available legal options to produce mutually acceptable solutions. Please see a. above.

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) The rationale for this proposal is that for reasons identified in a. above, there is much local public resistance to most agency programs. Public resistance can result in program delays, unnecessary expenditures, political intervention, community fragmentation, law enforcement intervention, adverse publicity and a spin-off that adversely affects other programs. If any of these affects can be mitigated or eliminated by a proposal such as the one submitted here, it would seem like a prudent investment. A further consideration may be that to have credibility with the community, under circumstances described in a. above, the person presenting the program must be one whom they know and who understands and can solidly represent their lifestyle and concerns. It is doubtful that any program

would have much local public support if it did not incorporate local representation in its implementation. A final consideration may be that although some informative presentations have been offered by agencies, many of these are at distant locations and others do not provide the background information necessary for general public understanding. As a result, the significance of the information is understood by a relatively small number of people. One must not forget that the agencies are represented by professionals familiar with the subject, and their level of presentation often neglects the average citizen's lack of background in the material presented.

- 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) **NOT APPLICABLE**

- 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) In describing methods, it is necessary to recognize that the goal is to reach the public with information. Most presentations are delivered during evening hours when people are tired and attention spans are shortened. As a result, the program should be relatively short and entertaining as well as informative. Each subject, within the program being presented, should be supported by audio/visual representation. This can be accomplished either on video tape or by computer projections. Photos or videos should be used to describe critical physical

areas, e.g. a specific ecosystem, dam site or pollution source. Some of this material can be obtained in the field, and some can be transferred to video from still photos and agency reports. Clear and simple diagrams should be projected when statistical data is presented and a subject abstract showing key points should be shown on the screen when text is involved. At the end of each audio/visual presentation the program should be summarized by recapping salient points on the screen.

A process that has been successful in the past has been to begin with an anecdote or a series of anecdotes that relates the subject to common experience. This is followed by an audio/visual presentation of the subject under discussion by means video tape or computer projection. This portion of the program should not take more than 35-40 minutes. Discussion follows according to interests, and interests should be noted for consideration by funding agency.

Preparation for this type of presentation requires obtaining video and still photo coverage of critical areas, placing information from agency or other reports on video tape or computer programs, abstracting information from conference proceedings and summarizing this on the audio/visual medium and preparing each subject or combination of subjects for presentation to the public in the time frame specified. Some short cuts may be available, in that many agencies have video or color slide productions that describe their programs that might be borrowed or copied.

Prior to presentation, each program would be summarized and presented to the funding agency for comment or oversight adjustment. The completed series could be used in other watersheds on a continuing basis.

Subjects proposed for presentation include:

1. Hydrologic cycle, Okanogan and Methow hydrographic profiles, how much water is available, a) ground water, b.) surface water, c) fossil water, how do we know and how accurate is our data.
2. Water quality issues, Federal Clean Water Act 303d list, constraints placed upon states.
3. ESA, relationship between water quality and quantity, hatcheries and genetic contamination, options and best management solutions.
4. FWS Draft Salmonid Policy, affects on private ownership.
5. D.O.E. water quality and needs assessments, HB 1309 Ecosystem Standards.
6. Water quality test procedures, their scope and accuracy.
7. Standards for instream flows, how much water does a salmon need, when is it needed, using windows of opportunity.
8. Pros and cons of computer modeling.
9. Water conservation, recycling, storage, irrigation options, municipal inerties.
10. Population and development impacts, Methow and individual allotments, tribal sales.
11. Bonneville mitigation agreement.
12. Overview of Washington water law.
13. Growth Management and Critical Areas regulations
14. Protecting individual water rights.
15. Past and present watershed status.
16. Legal trends and decisions, Hillis vs D.O.E., Public Trust Doctrine.
17. Water marketing, banking, spreading, transfers, water control boards, Reclamation Law, examples in CA, AR, NM and CO.

18. Determining hydraulic continuity, Methow Pilot Planning Study, Methow Ground Water Plan.

19. Riparian area management.

Public would be accessed via advertised open public meetings, through service club programs and through professional and recreational group meetings. There are more than 20 of these active within the watershed. Access could be supplemented by a weekly column in the local newspaper and/or inclusion in regularly scheduled agency public information releases.

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) Equipment to be used includes: one vehicle, office space, 2 file cabinets, 2 work tables, 1 desk, three chairs, computer projection equipment and/or video camera and copying equipment with tripod, projection screen and TV monitor and an overhead projector for preparing the audio/visual portions of presentations, typewriter and/or word processing equipment, with printer, and access to fax and phone for administrative communication, correspondence and required reports.

It is possible that some of this equipment would be available on a share basis with some agencies or available through government surplus or excess lists.

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 Administration, Portland, Oregon.

Type here (provide answers in paragraph form) Although this is not a technical proposal, the references used in support of the intended subject presentations are listed as follows. Reference numbers correspond to the subject numbers identified in section 7, e., above. Although these are key references, they are by no means the only references supporting each subject area.

1. Parker, G. (USGS)1994. The Water Resources of Washington. Washington Water Policy Alliance, Seattle, 15 Nov. 1994.

Albrook, R. 1973. Technical Supplement to the Hydrographic Atlas, Okanogan-Methow River Basins Study Area (D.O.E.)

2. Federal Water Pollution Control Act, 33 USC, 466, Sect. 303d.

FOCUS, 1994. Water Quality in Washington State. (D.O.E.)

3. WDFW, 1997. Draft EIS for Wild Salmonid Policy, April 1997.
Geary, T. 1996. At What Point Do We Question ESA's Costs. Capital Press 5 Jan. 1996.
4. WDFW, 1997. Draft EIS for Wild Salmonid Policy, April 1997.
5. Milton, J. 1995. Needs Assessment for the Okanogan Watershed, (D.O.E.)
Ecosystem Standards Advisory Committee, 1994. HB 1309 Ecosystem Standards at direction of Washington State Legislature.
6. WAC 173-201A, 1992. Water Quality Standards for Surface Waters of the State of Washington.
WAC 173-200, 1992. Water Quality Standards for Ground Waters of the State of Washington.
McDonald, H. Wantland, D. 1959. Developments in Geophysical Procedures for the Location of Ground Water, Convention of the American Society of Civil Engineers, Cleveland, Ohio.
7. Payne, T., Weithamp, D., Slattery, K. 1995. Setting Instream Flows. Washington House of Representatives Agriculture & Ecology Committee Water Conference.
Beecher, H. 1990. Standards for Instream Flows. Rivers, vol, No.2.
8. Hall, N. Ed. 1991. Exploring Chaos. W.W. Norton Co. N.Y. London.
9. Mack, R., Huyette, B., Fleskes, C., Slagle, E. 1995. Development & Municipal Water Rights, Interties & Public Water Supply Systems. Washington House of Representatives Agriculture & Ecology Committee Water Conference.
10. Same as 9 above.
Postel, S. 1984. Water, Rethinking Management in an Age of Scarcity. Worldwatch paper 62. W.W. Norton Co. N.Y. London.
11. Bugert, R. 1997. Mid Columbia P.U.D.'s Habitat Conservation Plans (50 year agreements). Presented to Okanogan Watershed SAC 22 May 1997.
12. Mack, R. 1994. Basic Water Law Translated. Washington Water Policy Alliance Symposium, Seattle, 15 Nov. 1994.
13. Warren, L., Williams, J., Campbell, T. 1994. Water and Growth Management, How Can It All Work? Washington Water Policy Alliance Symposium, Seattle, 15 Nov. 1994.
14. Proceedings of Water Rights Symposium sponsored by the Washington Cattlemen's Association, Pasco, WA. 27 Sept. 1997.
15. Okanogan Technical Committee reports 1997-98.
16. Same as 14, above.
17. Wubena, R., Schwisow, M. 1994. Transfers and Conservation, Valuable Tools to Meet Tomorrow's Challenges. Washington Water Policy Alliance Symposium, Seattle, 15 Nov. 1994.
Olsen, D., Turpin, J., Miller, J. 1995. Water Transfers and Marketing. House of Representatives Agriculture & Ecology Committee Water Conference. CWU, Sept. 1995.
18. Methow Valley Water Pilot Planning Committee, 1994. Methow River Basin Plan. (D.O.E.).
Ground Water Management Area Committee, 1976. Methow River Basin Water Resources Management Plan. (D.O.E.).

19. U.S. Dept. of Interior, Bureau of Land Management Riparian Management Series TR 1737-4 through 1737-11.

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) As indicated in Section 7c, above, many rural areas approach any government agency sponsored program with distrust and resistance. Much of this appears to be the result of a lack of understanding of the problems, the proposed solutions and the available options. Experience has indicated that a public information program, such as the one proposed, could mitigate the distrust and resistance, and many of the problems (identified in Section 7c) that result from these responses. As a consequence, successful application of the proposed program could benefit any government agency project that relates to water management, wildlife management and the protection of endangered or threatened species.

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) Project Manager: H. Marshall, hours; FTE exempt. Duties: Complete responsibility for project organization, development delivery, budget and coordination with funding agency for oversight. This includes developing each program from appropriate references, organizing program material into audio/visual, lecture and discussion segments, arranging public presentation schedules and facilities, coordinating oversight with funding agency, personally delivering program to public, and providing feed-back reports to funding agency. Qualifications: Ph.D., University of Alaska, 1969; Post Doctoral Sabbatical (under the auspices of Dept. of the Army) with world's foremost authority in my field, at University of Copenhagen Medical Facility, 1974. Since 1975 to present, self employed as owner/operator of beef cattle ranch. From 7/80 to 10/87 Chief of Administrative Services Division for USBR on the Oroville-Tonasket Irrigation Construction Project. Duties included acts in management assistance capacity to Project Construction Engineer.

coordination and planning of public involvement activities, compliance with EEO guidelines, assuring safety procedure followed, coordination and preparation of budgetary and programming fiscal documents, continual monitoring of Bureau and Departmental Instructions and Presidential Orders to assure compliance and continual review of Federal Procurement Regulations. Advises PCE on current personnel management practices and procedures and general project administration. Directs and participates in procurement and property management and responsible for vehicle utilization and building and facility maintenance and security. Represents PCE in meetings with Regional Office, Irrigation District Officials, local government officials and a variety of businesses and institutions. Conclusions can commit Project to certain courses of action. Represents Project in environmental matters. Advises PCE and management staff on personnel ceilings, budgetary and regulatory constraints. Acts in capacity of PCE during his absence. Was instrumental in the selection and establishment of office automation program for this 83 million dollar Project. These duties were performed concurrently with the operation and management of the cattle ranch.

From 11/69 to 5/75, Research Physiologist for Army Research Institute of Environmental Medicine. Duties; Plans leads and conducts broad and long range research and related clinical investigations. After discussion of scope of research problems and broad objectives, plans overall research attack and performs extensive preliminary and intermittent background research, designs studies based on own original theoretical formulations. Provides broad advisory services and liaison and maintains extensive contacts in area of research specialization. Maintains liaison and coordination with other laboratories, Divisions, DoD agencies, universities and scientific societies and research institutions.

Since this is not a research proposal, my publication list is not really applicable. A copy, however, is included with the hard copy for general information regarding familiarity with scientific publication and procedures.

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) Methods of information distribution to the public have been discussed above. Subject material will be provided to the funding agency, prior to presentation, for oversight evaluation, and subsequent to each presentation a feed-back report on public acceptance and concerns will also be provided.

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.