

**Review of the Columbia River Basin
Fish and Wildlife Program
for Fiscal Year 1999 as Directed by the
1996 Amendment to the Northwest Power Act**

Report of the
Independent Scientific Review Panel
for the Northwest Power Planning Council

**APPENDIX A
ISRP COMMENTS ON PROPOSALS**

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APPENDIX A

ISRP COMMENTS ON PROPOSALS

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INTRODUCTION

This appendix includes the consensus comments on each proposal recorded during the ISRP's discussions of the proposals. These comments constitute a brief summary of the discussions of the individual proposals and do not capture the entirety of the discussions. During these discussions, the ISRP assigned each proposal to one of three categories: 1) adequate, 2) inadequate proposal or 3) inadequate proposal but a good idea (adequate purpose). The first two categories were a judgment on the technical quality of the proposal and did not necessarily reflect the need for or the priority of the work proposed. In many cases, an "inadequate" proposal did not provide enough information to allow the ISRP to determine if the project was meeting a legitimate need or if the methods to be used were sound and appropriate. By placing a proposal in the inadequate category, the ISRP is not making a recommendation to withhold funding, at least not this year. The third category included proposals that were technically inadequate, but it was clear to the ISRP that the project addressed important needs in the basin. The ISRP's review process is described in detail in the text of the report on pages 18 to 28.

The ISRP provides these comments for several purposes: to provide a portion of the basis for the ISRP's findings; to provide proposal writers with constructive feedback on how they might improve subsequent proposals and aspects of their projects; and to highlight areas of concern that need further analysis by fish and wildlife managers, the Council and BPA.

OCEAN/ESTUARY

Evaluate Estuarine and Nearshore-Ocean Migratory Behavior of Juvenile Salmonids

9035

ISRP Evaluation: Inadequate

The study design is inadequate and not well defined. The idea to force fish into the ocean before they naturally would is not based on sound science. There is no indication of what level of sampling may be necessary to make the intended inferences. The sampling size described appears extremely small. The proposal's linkage to Youngs Bay net pen study is good.

Ocean Survival of Salmonids Relative to Migrational Timing, Fish Health, and Oceanographic Conditions

9063

ISRP Evaluation: Adequate

This proposal is very well written and well conceived. Other related research is well described. The CORIE system raises concerns and is a major portion of the proposal's first year budget. The proposal does not describe or justify where the 12 stations will be located. Monitoring is not well described. The proposal is ambitious and perhaps should be run on a pilot basis for a year or two to see what is possible. Is BPA the appropriate funding source for this proposal? Does it match the Council RFP?

Effects of Ocean Conditions on the Growth & Survival of Salmonids

9157

ISRP Evaluation: Inadequate

The statistical design, especially sample size, is inadequate. However, it is good that the description of sample size attempts to take into account previously collected data. The proposal does not include assurances that ocean conditions and relevant ocean studies will be correlated and analyzed in a justifiable manner. The proposal lacks details on methodology and tasks and does not adequately reference the vast amount of literature on analysis of scale patterns.

Identify Marine Fish Predators of Salmon & Estimate Predation Rates

9702600

ISRP Evaluation: Inadequate

The proposal does not provide sufficient evidence that the estimations of predator population sizes can actually be carried out using mid-water trawl technology. It would be a major undertaking to assess the effects of three highly migratory piscivores on juvenile Columbia River salmon and the results may not be worthwhile. The proposal's focus is very narrow and is vague on tests of significance and the relationship between juvenile predation and adult returns. This proposal may be useful as a one-year pilot project to demonstrate the feasibility of the survey technology.

MAINSTEM

Smolt Monitoring Proposals

New Fish-Tagging System

8331900

ISRP Evaluation: Adequate

ISRP reviewers note that this long-term fish tag project will provide important information, but the impressive cost demands rigid accounting oversight to ensure the most economical study possible.

Monitor Smolts at the Head of Lower Granite Reservoir & Lower Granite Dam

8332300

ISRP Evaluation: Adequate

ISRP reviewers have some reservations. While the monitoring program is considered valid, the proposal is not well written, and the project's longevity is challenged. Collectively, the reviewers suggest that the Council consider a broad review of smolt monitoring.

Smolt Monitoring at Federal Dams

8401400

ISRP Evaluation: Inadequate proposal, adequate purpose

While reviewers endorse the purpose of the study, they comment that it does not adequately relate the intended work to other smolt monitoring projects or to the basinwide Fish and Wildlife Program. Further, the proposal neglects to correlate how numbers of smolt are to be related to recovery. Methods for data collection and monitoring are inadequate. Reviewers note the significant budget assigned to subcontractors, and suggest that these figures be reviewed by an appropriate oversight agency.

Smolt Monitoring by Non-Federal Agencies

8712700

ISRP Evaluation: Inadequate proposal, adequate purpose

The reviewers endorse the purpose of the study, but comment that it does not adequately relate the intended work to other smolt monitoring projects or to the basinwide Fish and Wildlife Program. Objectives and methods for data collection and monitoring are not adequately described. Vitae of key personnel are missing.

**Comparative Survival Rate Study (CSS) of Hatchery Pit Tagged Chinook
8712702**

ISRP Evaluation: Adequate

ISRP reviewers note the considerable aggregate cost of this and related efforts in what is presently the third year of a long-term program.

**Assess Smolt Condition for Travel Time Analysis: Physiology, Health, &
Survival
8740100**

ISRP Evaluation: Adequate

Notwithstanding their overall evaluation, ISRP reviewers note their belief that time-travel analysis is outdated and that the title of the proposal does not seem to fit the objectives and tasks proposed. Documentation of the need for continuing consultation on interagency, cooperative projects should be strengthened. This project seems to be headed into a long-term monitoring program. The review team asks if this is the best location for maintaining a long-term database and if the data are available via Streamnet.

**Columbia Basin PIT-Tag Information System
9008000**

ISRP Evaluation: Adequate

ISRP reviewers comment that the proposal is well done and justified. ISRP reviewers suggest that the proposal could have better documented the relationship of PTAGIS to other databases in the basin, and the project's relationship to the procurement of PIT tags described in proposal number 9008001. One reviewer asks if the data are different than in Streamnet, or is the effort redundant? The Council appears to be headed toward a very long-term commitment of funds with this project.

**Monitoring Smolt Migration of Wild Snake River Spring/Summer Chinook
9102800**

ISRP Evaluation: Adequate

ISRP reviewers note that this is a well-written proposal for basic studies on the migration of endangered/threatened salmon stocks. The panel asks if coordination with related projects, such as 9102900, is being conducted in the most efficient manner.

**Life History & Survival of Fall Chinook Salmon in Columbia River Basin
9102900**

ISRP Evaluation: Adequate

Notwithstanding their approval of a well-written proposal, ISRP reviewers caution that the proposal may be too optimistic in the scope of work proposed. The panel asks if coordination with related projects, such as 9102800 and 9406900, is being conducted in the most efficient manner. The reviewers also suggest that this project along with others dealing with fall chinook should be considered as part of a

broader effort with an overall umbrella proposal that explains the relationships of and need for all subcomponents.

Monitoring & Evaluation Statistical Support

9105100

ISRP Evaluation: Adequate

ISRP reviewers comment that this well-written proposal represents good basic research. This proposed work by a non-government agency provides valuable oversight for analysis of parameters such as: adult return rates, ocean survival, effectiveness of transportation, and smolt survival. The reviewers note that historic data have been impressively analyzed, but publications of results in peer reviewed journals are largely missing -- the ISRP encourages peer-reviewed publication of results. The reviewers also question whether the most efficient relationship exists between this project and the proposed project 9302900 (Survival estimates for the passage of juvenile salmonids through dams and reservoirs).

Evaluate Adult Migration in Lower Columbia River & Tributaries

9204101

ISRP Evaluation: Inadequate proposal, adequate purpose

Objectives and methods for data collection and monitoring are not adequately described. Relationships of proposed activities and tasks to recovery of salmon stocks are not adequately described. The reviewers comment that the proposal needs a greatly expanded discussion of intended methods. Vitae of key personnel are missing.

The Fish Passage Center

9403300

ISRP Evaluation: Adequate

The proposal draws criticism from ISRP reviewers on grounds that the proponents should link together all subprojects under an umbrella proposal such as this, but each major subproject should be justified in a separate proposal with principal investigator, budget, etc. One reviewer observes that the program is too complex to be adequately addressed in the present form and consequently the proposal is marginally acceptable. It is not clear that the most efficient relationship exists between this complex project and others such as Streamnet, PTAGIS, Federal and Non-Federal smolt monitoring, etc.

PIT Tag System Transition

9701000

ISRP Evaluation: Adequate

ISRP reviewers appreciate the need to change from an interrogation system based on 400 kHz frequency to one based on 134.2 kHz frequency. Nevertheless, they considered that this proposal can benefit from expanded description. The budget only includes capital acquisitions or improvements without detail on the overall

cost/benefits. They suggest that the proposal should ensure that the needs of all user groups will be satisfied.

PIT Tag Purchase & Distribution

9808001

ISRP Evaluation: Adequate

This is not a reviewable technical proposal. No work other than tag purchase is described. It is an accounting project only to save costs of tag purchases. We recommend support for this proposal as a necessary administrative approach to cost efficiency. This appears to be internal book keeping and not requiring a proposal as such.

Mainstem and Systemwide Information Support and Coordination

Streamnet: The Northwest Aquatic Information Network

8810804

ISRP Evaluation: Adequate

Notwithstanding their evaluation, ISRP reviewers suggest that the proposal could have better documented its relationship to PTAGIS and other databases in the basin. One reviewer asks if the data are different than in PTAGIS, or is the effort redundant? The Council appears to be headed toward a very long-term commitment of funds with this project.

Gas Bubble Trauma Proposals

Incidence & Effects of Gas Bubble Trauma on Early Life Stages of Salmonid & Resident Fishes Rearing in Shoreline Areas of the Hanford Reach & Below Bonneville Dam in the Columbia River.

9080

ISRP Evaluation: Adequate

This is a well-written proposal. There is a programmatic need for this work as this is an area of gas bubble trauma research that has not been addressed. This is a fairly straightforward study with field and lab components to be implemented by a knowledgeable staff. The proposal writers should describe why they emphasized habitats that are of limited extent in the basin.

Develop TDG Abatement Plan of Action Using Wheels Pools & Falls Approach

9115

ISRP Evaluation: Inadequate

Reviewers comment that the intended study appears overly simplistic and is deficient in development and technical detail.

Symptoms of GBT Induced in Salmon by TDGS of the Columbia & Snake Rivers

9300802

ISRP Evaluation: Adequate

ISRP reviewers note that this appears to be the only active study of the effects of GBT in adults, a commendable objective in smolt-to-adult research. They suggest the proposal could be improved by better describing the proposal's relationship to other research projects in the Columbia Basin.

Survival Estimates for the Passage of Juvenile Salmonids through Dams & Reservoirs**9302900**

ISRP Evaluation: Adequate

ISRP reviewers comment that this is a well-written proposal of necessary research, but question the extended duration of the project. Reviewers comment that the project appears to be moving toward a long-term monitoring and evaluation project and question the relationship to related projects such as: the Fish Passage Center, Streamnet, and PITAGIS. The reviewers also question whether the most efficient relationship exists between this project and the proposed project 9105100 (Monitoring and Evaluation Statistical Support).

Gas Bubble Disease Research & Monitoring of Juvenile Salmonids**9602100**

ISRP Evaluation: Adequate

ISRP reviewers comment that this is a good study with good peer-reviewed publications. The ability to remotely monitor the vertical movements of individual juvenile salmonids is a particularly worthy objective given the need to better understand the natural migration patterns of juveniles through dams and reservoirs. One reviewer questions whether this project should have a stronger working relationship with the project for monitoring of gas bubble disease in adults.

Mainstem Pacific Lamprey Research Proposals**Prioritize Research & Restoration Needs for Pacific Lamprey****9147**

ISRP Evaluation: Inadequate

The need for this project is unclear given the apparent relationship to Proposal Number 9402600, submitted by the Confederated Tribes of the Umatilla Indian Reservation, relating to Pacific lamprey research and restoration. The reviewers would prefer a unified proposal from cooperating individuals.

Pacific Lamprey Research & Restoration

9402600

ISRP Evaluation: Inadequate proposal, adequate purpose

While noting an apparent relationship with Proposal Number 9147 by the Oregon Department of Fish and Wildlife (Prioritize Research and Restoration Needs for Pacific Lamprey), the ISRP review panel found the Confederated Tribes' proposal lacks a clear statement of intended results. This proposal does not adequately relate the proposed work to the literature. Methods for fieldwork and monitoring of results are inadequately described. Vitae of key personnel are missing.

Mainstem Predator Control Proposals

Northern Squawfish Management Program

9007700

ISRP Evaluation: Inadequate

The scientific basis and logical need for this proposal are questionable. The proposal does not, for example, ensure that adequate time will be invested to critically assess whether predator control is effective in significantly reducing mortality of juveniles or increasing adult returns.

Evaluate Predator Control & Provide Technical Support for PATH

9007800

ISRP Evaluation: Adequate

Methods are well described. This study may suggest the direction in which predator control proposal number 9007700 should proceed, whether or not that proposal is funded. ISRP reviewers note that the proposal has two components: predator control and PATH meeting attendance, and that while the former is rated in the proposal, the proposal for the latter activity is marginal. The reviewers would prefer that requests for funds to attend PATH meetings be justified in a separate proposal and in an overall umbrella proposal for all PATH components.

Mainstem Fall Chinook Research Proposals

Water Temperature Effects on Fall Chinook Salmon in the Snake & Columbia Rivers

9078

ISRP Evaluation: Inadequate

Reviewers note that the proposal fails to reference existing water temperature data or that much of the work has been previously conducted by Oregon State University. Flow augmentation from Dworshak Dam is a prerequisite for the study, yet the proposal cites no agreements or contracts to assure those flow requirements.

**A Spawning Habitat Model to Aid Recovery Plans for Snake River Fall Chinook
9406900**

ISRP Evaluation: Adequate

ISRP reviewers note that this is a well-written proposal for basic studies on the habitat requirements of endangered/threatened salmon stocks. The reviewers also suggest that this project along with others dealing with fall chinook should be considered as part of a broader effort with an overall umbrella proposal that explains the relationships of and need for all subcomponents.

**Evaluation of Juvenile Fall Chinook Stranding on the Hanford Reach
9701400**

ISRP Evaluation: Adequate

ISRP reviewers comment that the proposal is well written, based in sound science, and has clear objectives. Understanding the effect of diel water fluctuations resulting from power peaking activities at Priest Rapids Dam on rearing juvenile fall chinook and the benthic community inhabiting the Hanford Reach is critical for managing this important stock. The reviewers ask, however, if all existing and available research and data regarding heat stress are being used effectively.

**Monitor & Evaluate the Spawning Distribution of Snake River Fall Chinook
Salmon
9801003**

ISRP Evaluation: Adequate

ISRP reviewers appreciate this proposal for its clearly expressed procedures and tasks for evaluation of supplementation efforts. The reviewers also suggest that this project along with others dealing with fall chinook should be considered as part of a broader effort with an overall umbrella proposal that explains the relationships of and need for all subcomponents.

**Monitor & Evaluate Yearling Snake River Fall Chinook Released Upstream of
Lower Granite Dam
9801004**

ISRP Evaluation: Adequate

ISRP reviewers note that this proposal will likely yield valuable information for evaluation of supplementation activities on endangered and threatened stocks. They note that this proposal does not include an explicit summary of past achievements. The reviewers also suggest that this project along with others dealing with fall chinook should be considered as part of a broader effort with an overall umbrella proposal that explains the relationships of and need for all subcomponents.

Other Mainstem Proposals

Determine if Salmon Are Successfully Spawning below Lower Columbia Mainstem Dams.

9105

ISRP Evaluation: Adequate

ISRP reviewers consider this effort of extreme importance. The proposal itself is not well written, however, and the proposed methods for sampling design may not be the best. The reviewers comment that the work should be coordinated or combined with other studies on juveniles. In addition, ISRP members inquire if the proponents intend to survey areas other than Hamilton Slough and caution that visibility bias is possible in surveying redds. Spawners may not have coded wire tags, posing a further concern for the accuracy of the study.

Evaluate Fall Chinook and Chum Spawning, Production and Habitat Use in the Mainstem Columbia River.

9131

ISRP Evaluation: Inadequate (see 9105 above)

The ISRP considers the proposal incomplete. Reviewers view the proposal deficient in justifying the work, even while they consider the objectives potentially of value. They recommend that this proposal be made part of Proposal Number 9105. Panel members commend the need to conduct studies in an average water year following the high water years of 1996 and 1997.

Assess Habitat for Anadromous Fish Upriver of Chief Joseph Dam

9018

ISRP Evaluation: Inadequate

This proposal is not adequately related to other projects. It is a good idea to get long-term natural production in the river but methods to accomplish objectives are not adequately described.

Etiology of Headburns in Returning Adult Salmonids

9030

ISRP Evaluation: Adequate

This proposal represents a commendable group effort. Notwithstanding the adequate rating, ISRP reviewers concluded that the proposal does not adequately establish a link between headburns and mortality, and question how significant is this injury, including the spatial extent of the problem. The reviewers also question if there will be an adequate fish population for this study and if three years are adequate to test various river flows.

**Use Unsteady Flow to Aid Mainstem Passage of Juvenile Salmonids
9047**

ISRP Evaluation: Adequate (Marginal)

The ISRP review observed that this study is predicated on the presumption -- possibly not well founded -- that Army Corps of Engineers stream data are readily available for use in mathematical models. The reviewers suggest that the proposal may exaggerate the importance of the work described. They add that the proposal should be a three-dimensional model rather than two-dimensional. Reviewers also note that the proposal does not advance plans for field-testing and that it assumes that unsteady river flow will be of benefit. They also ask if there is substantive literature to support the assumed relationship between unsteady flow and fish migration.

**Evaluation of Interactions between American Shad & Salmon in the Columbia River
9077**

ISRP Evaluation: Adequate

ISRP reviewers offer their evaluation with some reservations. They note that the proposal is unrelated to other projects and studies, and may be overly ambitious, with more objectives than can be accomplished in a single year. Also, they ask if sonar responses can distinguish between shad and salmon, and if trawl data, beach seining and pursing will produce adequate results to help establish distribution patterns. Further, the reviewers express some concern with respect to mortality to non-target species caused by trawling, seining and shocking.

**Evaluate Strobe Lights as a Juvenile Salmonid Guidance Behavioral Tool.
9108**

ISRP Evaluation: Adequate

ISRP reviewers praised the proposal as well written and well documented, if quite expensive. Even if passing fish might not make it past lower dams, the reviewers suggest the study will yield important information and, if successful, could be a valuable model for implementation at mainstem dams. They also note that run-of-the-river fish may not be available for the study.

**Numerical Evaluation of Flow Modification on Salmon Migration
9112**

ISRP Evaluation: Inadequate proposal, adequate purpose

Reviewers say the study should be related to other projects and exhibit coordination with existing literature and investigators. The ISRP suggests the proposal needs a more explicit discussion of evaluation methods and inference procedures.

**Evaluate Effects of Hydraulic Turbulence on the Survival of Migratory Fishes
9113**

ISRP Evaluation: Adequate

ISRP reviewers consider the proposal well written, but expressed concern about the validity of extrapolations from laboratory fish and models to field situations. In effect, do fish demonstrate the same behavior in laboratory and stream settings? The study should take steps to offer that assurance.

**Assess Impacts of Hydro Operations on Mainstem Habitats for Fish
9135**

ISRP Evaluation: Adequate

ISRP reviewers commended this quest for data to apply to potential drawdown scenarios, expressing mild surprise that such data are not already available. They also noted that the proposal does not discuss the behavior of water.

Mainstem Resident Fish Proposals

Inventory Resident Fish Populations in the Bonneville, The Dalles, & John Day Reservoirs

9079

ISRP Evaluation: Adequate

ISRP reviewers commend this as a good, basic proposal that is endorsed in NMFS and Council programs. They ask if the study intends to inventory all species, given that methods will vary with different species. If funded, this project should be coordinated with 9081.

Impact of Exotic Fishes & Macrophytes on Juvenile Salmonids Rearing in Littoral Areas of the John Day Reservoir

9081

ISRP Evaluation: Adequate

ISRP reviewers commend this as a good proposal for a likely mainstem problem. The proposed work is intended to define the problem, if any, to salmonids from vegetation and fish changes. The proposal has good objectives, tasks and methods and is well linked to previous predation work in channel. Although much talked about, the data this project would collect are not available.

SYSTEMWIDE

PATH Proposals

Technical Support for PATH

9098

ISRP Evaluation: Inadequate

This was a poorly written proposal and ranked near the bottom of the set in scientific quality. The proposal should stand alone and describe what PATH is. The proposed work should be better related to the Fish and Wildlife Program and other plans. The objectives are vague in relation to specific PATH tasks and no tasks are given for objective 3. It is not clear why there is a need for a separate proposal and funding when the principal investigator is already involved with PATH and other projects that receive funds for it. The scientific quality of the proposal does not warrant additional funding.

Technical Assistance with Life Cycle Modeling

9303701

ISRP Evaluation: Adequate

This was an adequate proposal ranked near the midrange of the set. The title should identify this as a PATH proposal. The objectives are adequate, if somewhat vague. It is unclear just what this investigator has contributed to PATH. We could use an evaluation of his (and other participants) performance in PATH. The proposal is not well correlated with life cycle changes.

PATH Facilitation, Technical Assistance, & Peer Review

9600600

ISRP Evaluation: Adequate

This is a well-written proposal for the coordination function in PATH, but no abstract is given (needed for use for other purposes). It ranked near the top of the set and is a productive proposal for a needed process.

PATH--Participation by State & Tribal Agencies

9600800

ISRP Evaluation: Adequate

This is a well-written proposal that is well coordinated with other PATH proposals and studies. It ranked near the top of the set.

Provide Scientific Input to the PATH Process

9600801

ISRP Evaluation: Inadequate

This proposal was generally deficient in scientific quality and demonstrated a disregard for the proposal process. It ranked near the bottom of the set. It did not list other PATH projects and should have. No background on PATH was provided that could have been obtained from other proposals if the work had been coordinated.

Provide Technical Support in the Plan for Analyzing & Testing Hypotheses

9601700

ISRP Evaluation: Adequate

The ISRP reviewers judged this cursory proposal as marginally adequate and ranked it in the midrange of the set. No other PATH projects were listed as related, although in the text it did reference the ESSA coordination proposal. The proposal does not provide an abstract but contained a generally good background. No references are cited. For consistency, the title should use the PATH acronym.

PATH--UW Technical Support

9700200

ISRP Evaluation: Inadequate

This was an apparently hastily written proposal that was incomplete. It ranked low in the set. It did not reference the Fish and Wildlife Program or NMFS plans in the initial section, but did in text. It listed only two other projects for coordination (only one PATH project). The objectives were very general and no tasks were listed. The proposed plans were better described in text, but not stated as objectives. Although the abstract was good, the background was hastily written. This proposal needs to be coordinated with 8910800, 9601900 and 9018. Personnel are unclear: how much time is being put in by the personnel, who are they?

Analytical Support-PATH & ESA Biological Assessments

9800100

ISRP Evaluation: Adequate

This proposal is well written, referenced and technically adequate. It is integrated with PATH. The objectives, tasks and hypotheses are good. However, there is no indication of what climate data will be used and how it will be analyzed. It ranked in the middle top of the set. It gives no clear hypotheses other than regime scale forcing, and the methods are somewhat vague (what data?).

Coded-Wire Tag Proposals

Coded-Wire Tag Recovery Program

8201300

ISRP Evaluation: Adequate

This is an adequate proposal that ranked high in the set. It is a needed regionwide program that provides extensive support for wide-ranging activities. The percentage of funding by BPA is not given, but probably should not be all of it. With its long history and several proposals (not well coordinated) the coded-wire tag program is suggested for independent technical evaluation in the near future (without a moratorium on funding).

Annual Fish Marking-Missing Hatchery Production Groups

8906500

ISRP Evaluation: Inadequate

This is a poor proposal that ranked low in the set. The writers did not follow instructions on preparation of the proposal. The basic marking is a good idea, but the proposal contains loosely related objectives and is poorly written. This proposal includes objectives 4 and 5 on rearing upriver brights fall and spring chinook, but these objectives are not closely related to the title. The proposal title is archaic and sensible only if you know the project history. How can the groups be missing if they are being marked? There is not an adequate explanation of “missing.” The proposal appears to duplicate project number 8201300 (Coded Wire Tag Recovery Program) and needs coordination (independent review?) with other coded-wire tag proposals. A rethinking of the whole coded-wire tag program may be needed to bring it up to date.

Annual Coded Wire Tag Program (Washington) - Missing Production Groups

8906600

ISRP Evaluation: Adequate

This is a good proposal. The overall program is well described especially in contrast to the other related coded-wire tag proposals. The “missing production groups” title is archaic and needs changing. Facilities and equipment are not described. This proposal should be included in an overall coded-wire tag evaluation.

Annual Coded Wire Tag Program -- Missing Production OR HTCH (ODFW)

8906900

ISRP Evaluation: Adequate

As with 8906500, the title is bad and there is a need for review and coordination across the coded-wire tag projects. However, this proposal was better written and ranked in the middle of the set. It includes good objectives, tasks, rationale and history, and it is well related to the Fish and Wildlife Program and the biological opinion. It does not give relationships to the PSMFC coded wire tag project (8201300) and the abstract is poor. Are the data being used as expected?

Regional Coordination and Independent Science Proposals

Facilitation Services for the Regional Forum

9117

ISRP Evaluation: Adequate

Although hiring a facilitator for the forum seems good to do from a technical perspective, this proposal does not fit the review criteria. ISRP review is probably moot, as participants have already agreed to do it. The proposal does not include evaluation of success. This task does not have that much to do with the Fish and Wildlife Program. We question whether BPA should be a funding source for this purpose.

Implement Wy-Kan-Ush-Wit Watershed Restoration Plan Now

9132

ISRP Evaluation: Adequate

This is a well-written proposal ranked in the upper third of the set. The rationale and proposed work are described well. The work is mostly administrative, but should help coordination and improve proposals. The proposal does not clarify why coordination cannot be done now without additional BPA funds. This raises the generic question of the need for coordination proposals when individual projects have overhead built in that could be considered as funding for coordination.

Prepare Draft Annual Implementation Work Plan

8906200

ISRP Evaluation: Adequate

This is a necessary project that should be supported (ranked in the upper midrange of the set), but the proposal has problems. The objectives include more than the title suggests and seem to describe all the objectives of CBFWA. Past costs are not included. The section on project history is not responsive to the BPA instructions. Information that would have been useful if the proposal is for all of CBFWA funding would include how/when was CBFWA formed, when did the AIWPs start, when was the first Multiyear Work Plan, and what are the relationships to the Foundation. OR, if the proposal is limited to the title, then we need more specific history of the AIWP. The proposal should better describe methods, infrastructure, and specialist groups.

**Operate Independent Scientific Advisory Board
9600500**

NOT REVIEWED

**Independent Scientific Advisory Board Support
8907201**

NOT REVIEWED

Systemwide Law Enforcement Proposals

**Enhance Harvest & Habitat Law Enforcement for Anadromous Salmonids &
Resident Fish in the Columbia River Basin**

9202401

ISRP Evaluation: Not rated -- Enforcement.

**Enhance Law Enforcement for Fish & Wildlife & Watersheds of the Nez Perce
9202409**

ISRP Evaluation: Not rated -- Enforcement.

Miscellaneous Systemwide Research and Habitat Proposals

**Transfer Attributes From 1:100,000 to 1:24,000-Scale Hydrography
9048**

ISRP Evaluation: Adequate

This is an adequate proposal with good objectives and well-planned work. It ranked in the midrange of the set. This project could be useful, especially to compare water quality, but it is unclear how they are going to monitor the usefulness of this work. They should have a means to document who uses their product. It is not entirely clear why there is need for the scale change. No relationships to other projects are given. The text says it is a continuation of a previous project, but previous history and efforts are not well documented.

**Feasibility Study for a State-Wide Water Quality Data Sharing Mechanism in
Oregon**

9049

ISRP Evaluation: Inadequate

This is a poor proposal ranked low in the set. It does not explain present databases and their inadequacies. The proposal does not describe specific plans to work with agencies such as EPA or ODEQ, in spite of support letters. The work may be needed, but the proposal is not technical enough to tell.

**Develop Tools to Evaluate the Effects of Selective Fisheries on Chinook
9083**

ISRP Evaluation: Adequate

This is an adequate proposal ranked in the midrange of the set. There is a programmatic need for this study because the present coded wire tag system makes various assumptions about non-selective fisheries and equal distribution of catch. If the region were to use a selective fishery it would wipe out the current assumptions. The proposal is well linked to the Fish and Wildlife Program measures by number and in text. The proposal cites Gorton amendment requirement for consideration of ocean conditions. However, the proposal contains several weaknesses. The background data on what was done for coho is administrative rather than technical. Facilities are not described so that they can be evaluated for adequacy. Objective 2 does not have tasks. Methods could be better explained, and built-in monitoring and evaluation should be provided. The principal investigator is listed as full time when we know he has other projects based on reviewed proposals. It appears he is well over 100% committed; thus, other personnel need to be identified. The proposal needs to be coordinated with 8910800, 9601900 and 9018.

**Educate Landowners & Agencies on Salmon Stream Restoration Methods
9099**

ISRP Evaluation: Inadequate

This is a poorly written, disjointed proposal that ranked near the bottom of the set. It is full of misspellings. The objectives do not fit the project. The proposal does not make clear why there are a stream temperature study and a stream health study in the midst of an education proposal. No collaboration is evident with other Fish and Wildlife Program projects doing stream/watershed restoration. They do not adequately reference research and findings from Oregon State University work in Eastern Oregon. Although parts of the work are probably needed, the proposal as a whole is inadequate.

**Columbia River Basin Fish Key
9125**

ISRP Evaluation: Inadequate

The proposal title “key” does not match the proposed objectives: to write a comprehensive book on fishes of the basin. The full proposal was too long for the Fish and Wildlife Program format, and was not included. The need is not justified (the work may be needed, but this is not demonstrated in the abbreviated proposal). No attempt was made to coordinate with other projects except to get information from them. The proposal does not provide context of what is already known about fishes in the system. The proposal ranked near the bottom of the set.

Influence of Marine-Derived Nutrient Influx on Columbia River Basin Salmonid Production

9136

ISRP Evaluation: Adequate

This is a well-prepared proposal on an innovative topic that was ranked in the upper third of the set. It includes good phasing of work and good strategy to enlist cooperators in developing a plan. It is rather open ended as to what would actually be done (leaves this to Phase I to decide). It needs more focus on the experimental aspects of the project, but deserves “seed money.” It should be supported as an innovative, new approach.

Produce Watershed Analysis Procedure for Salmon Habitat Restoration

9142

ISRP Evaluation: Adequate

This is a well-documented and well-written proposal that ranked in the lower midrange of proposals in this set. It is connected to the Fish and Wildlife Program, Return to the River, Upstream, CBFWA, etc. Watershed analysis as a science is in a developmental phase; thus, investing money to analyze the methods is needed. This proposal does not specifically describe the current watershed analysis methods and frameworks, and it should. It is not clear that a separate standard guide for the Fish and Wildlife Program projects is needed, but it may be.

Evaluate Disease Interactions between Wild & Hatchery Salmonids

9143

ISRP Evaluation: Adequate

The proposal is adequate and ranked in the upper midrange of the set. It has good planned collaboration and well-referenced science. The OSU facilities are especially good. However, the problem is not well defined and thus the need for the work is not persuasively stated. The proposal needs to better describe which pathogens and diseases would be studied (list differs between survey and challenges).

Develop Open Formula Diets to Yield Quality Smolts

9148

ISRP Evaluation: Inadequate

This proposal may be scientifically sound, but it is not well justified for the Fish and Wildlife Program. The proposal does not describe collaboration with other Fish and Wildlife Program projects, even with hatchery projects. It was not clear whether the question of feed preparation has been previously examined.

**Evaluate & Monitor Bacterial Cold Water Disease (BCWD) Caused by
Flavobacterium Psychrophilum Impacting Hatchery-Raised & Wild Salmonid
Populations in the Pacific Northwest**

9149

ISRP Evaluation: Inadequate

The proposal was rated as poor, ranking near the bottom of the set. It should better explain the details of BCWD being a problem at hatcheries. It relates the proposed work to the Fish and Wildlife Program only generally. The objectives are pretty curt and the proposal never tells what tools are available now for assaying BCWD bacteria. There are not enough details to judge whether the methods are appropriate and no attempt is shown of coordination with other Fish and Wildlife Program projects.

Statistical Support for Salmonid Survival

8910700

ISRP Evaluation: Adequate

This is a good proposal ranked near the top of the set. It includes direct linkage to other projects and has a highly productive history. The project provides necessary upkeep and improvements of the model and radiotelemetry statistics seems like a reasonable addition.

Monitor & Evaluate Modeling Support

8910800

ISRP Evaluation: Adequate

This is an adequate proposal even though it does not relate its work to the Fish and Wildlife Program. It ranked in the midrange of proposals in the set. The project objectives appear very productive and provocative and include successful tech transfer via the worldwide web. The proposal claims that the model incorporates about everything. But how? The history and background are good (but more a statement of accomplishment than need for more work). Why model, why integrate? It is surprising that the proposal does not explicitly link it to other Fish and Wildlife Program projects, since it is one of the main integrating projects in the Fish and Wildlife Program. The proposal needs to be coordinated with 8910800, 9601900 and 9018 by the same principal investigator. It appears he is well over 100% committed if all the work is funded; thus, other personnel need to be identified.

Performance/Stock Productivity Impacts of Hatchery Supplementation

9005200

ISRP Evaluation: Adequate

This is an excellent study that ranked high in the set although the proposal quality could be improved. The objectives are written more as tasks but are well planned. The abstract is not adequate but the science is good. This project has been ongoing since around 1990 and should have provided a more specific description of results--where does the study stand now?

Physiological Assessment of Wild & Hatchery Juvenile Salmonids

9202200

ISRP Evaluation: Adequate

This is a well-written proposal for productive work that ranked in the upper third of the set. It has especially good coordination with other Fish and Wildlife Program projects.

Spring Chinook Salmon Early Life History

9202604

ISRP Evaluation: Adequate

Although for the Grande Ronde, this proposal was grouped with the systemwide proposals because of its systemwide implications. It was rated highly, in the top 10 of the set. It includes especially good connections to the Fish and Wildlife Program and to other projects. Although too long for the BPA format, the objectives and tasks are well laid out. The project background is well documented.

Life-Cycle Model Development & Application to System Planning

9203200

ISRP Evaluation: Adequate

Although judged as adequate (midrange of the set), this proposal was poorly related to the Fish and Wildlife Program/NMFS measures. From the proposal, it is hard to judge whether additional work on the model is really needed. Previous efforts seem to have been productive and this is a Forest Service/BPA/et al. collaboration. Funds seem not to be really needed and were under spent in the past.

Assessment of Captive Broodstock Technology

9305600

ISRP Evaluation: Adequate

This is a good proposal with good objectives, and it ranked in the top 10 of the set. It is well related to the Fish and Wildlife Program and NMFS Recovery Plan. The abstract is good but the proposal is too long. The background and methods are also too long and detailed but are very informative.

Second-Tier Database for Ecosystem Focus

9601900

ISRP Evaluation: Adequate

This is an adequate proposal rated in the upper midrange of the set. The proposal does not clarify why the problems inherent in the primary databases are not fixed instead of adding a second tier (this proposal). There is little explanation of how the 2nd tier is done. The objectives are not the same in table and text. The work is not so much collaborative as competitive, but this is all laid out and stated in terms of the need to cooperate. This project seems to be the result of frustration with other projects not doing what was expected.

**Avian Predation on Juvenile Salmonids in the Lower Columbia River--Phase II
9702400**

ISRP Evaluation: Adequate

Although specific for the lower river and estuary, this proposal was grouped with the systemwide proposals because of its wide application. It is a well-written proposal that ranked near the top of the set. It is good basic research on an important topic and the proposal is well documented with lots of references. Is the food or the habitat attracting the birds? The proposal needs to propose various alternatives for management actions. Actual potential control methods are pretty vague. This proposal does not address the real problems associated with most releases of hatchery fish and barged fish. There is no indication of how a colony might be relocated.

Systemwide Native and Bull Trout Proposals

**Document Native Trout Populations
9033**

ISRP Evaluation: Adequate

This proposal addresses trout populations in the Wind, Big White Salmon, Little White Salmon, and Klickitat subbasins. It is well written and is for much needed basic distributional work. Electrofishing could be risky with at-risk stocks, and fly-fishing catch-and-release mortality can be high; thus, alternative passive survey procedures such as snorkeling should be considered. The DNA analysis to identify hybridization looks good. It is a big drawback that the proposal describes little attempt at collaboration with others, yet coordination, especially with 9405400, is needed.

**Bull Trout Population Assessment in the Columbia River Gorge, WA
9095**

ISRP Evaluation: Adequate

This proposal addresses bull trout populations in tributaries of the Columbia River Gorge. It is a straightforward study with genetics. The proposal should list personnel and provide linkages to other BPA studies. It does note ODFW collaboration. The proposal is not related to 9033, but it looks like the efforts are duplicitous regarding bull trout. 9033 does include assessment of more than bull trout.

**Bull Trout Genetics, Habitat Needs, Life History, Etc. in Central & NE Oregon
9405400**

ISRP Evaluation: Adequate

This is a good study that will help define the bull trout problem (ranked in the top 10 of the set). The proposal's strengths are excellent objectives and tasks, good methods and approach, and evidence of a strong collaborative effort with other agencies and groups. Progress to date is given somewhat generally, although

publications are referenced. The schedule is ambitious, but they seem to be keeping up. The WDFW bull trout assessment proposals (9033 and 9055) should be coordinated with this work.

Systemwide White Sturgeon Proposals

Monitor Reproductive Physiology of Columbia River White Sturgeon 9019

ISRP Evaluation: Adequate (Marginal)

The ISRP review concluded that while this represents basic research with long-term value for the species, it is not well related to the overall Fish and Wildlife Program or to other studies in the Upper Columbia Basin. Reviewers also asked if the study results will apply to up-river stocks. The reviewers note that the technical background and justification are well described.

Assessing Genetic Variation among Columbia Basin White Sturgeon Populations 9084

ISRP Evaluation: Adequate

This is an especially good proposal ranked in the top 10 of the set. It contains excellent linkage to the Fish and Wildlife Program measures, and excellent linkage to other fish and wildlife program/BPA projects, both conceptually and in shared samples. We assume the genetic methods are good; the presentation of them is excellent. It is not clear how much genetic difference is a real and significant difference nor is it clear if they will track over an extended time frame. No plans are described to see if the patterns remain stable over time (monitoring).

Effects of Catch & Release Angling & Exhaustive Stress on the Physiology, Mortality, & Reproductive Performance of White Sturgeon 9134

ISRP Evaluation: Adequate

This is a well-written proposal for well-justified work. However, the experimental design for the laboratory work is not well explained. In addition, the proposal describes little interaction with other sturgeon studies in the basin (and could do it). It could provide the DNA samples for 9084. This proposal highlights the need for coordination of sturgeon work in the basin.

Nutritional Status of Columbia River White Sturgeon 9150

ISRP Evaluation: Adequate

Notwithstanding the adequate evaluation, ISRP reviewers note a major shortcoming is that the study does not describe the relationship between nutrient availability and salmonid carcasses, nor does it compare hatchery and wild fish. The reviewers also note that laboratory results with young fish may not readily transfer to field situations.

**White Sturgeon Mitigation & Restoration in the Columbia & Snake Rivers
8605000**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal is inadequate technically, ranking in the lower third of the set. The project could stand scrutiny after more than 10 years of work, although it has been productive in getting papers out. The proposed objectives are primarily administrative and the technical merits are not conveyed. BPA should look at the very high cost in relation to the products. There are broad-brush statements with little detail on actual merits. The proposal does not justify this large expense for sturgeon in relation to the needs for salmon restoration. Is this project cost/effective? The work is evaluated here (as a systemwide proposal) because of other sturgeon work in the basin with which this work should be coordinated. The ISRP recommends a programmatic review of the sturgeon work, including this project.

Umbrella Wildlife Proposals

**Washington Department of Fish & Wildlife Habitat Units Acquisition
9609400 (9106100)**

ISRP Evaluation: Inadequate proposal, adequate purpose

Although the purpose is appropriate, this is an inadequate proposal that ranked near the bottom of the set. The proposal writers should have described the enhancement activities. There should be better monitoring of biodiversity and wildlife populations. There is little technical content to review. The project history section takes a project-by-project approach that should be used in the methods section. There are many subprojects that could be better described. This is clearly inadequate documentation for the expenditure of over \$3 million/year. Why are there significant indirect costs in the budget, when a substantial amount of the budget is for land acquisition? This financial aspect needs review beyond the ISRP.

**Securing Wildlife Mitigation Sites-Oregon
9705900 (9705914)**

ISRP Evaluation: Not Rated (see individual Oregon wildlife proposals)

This looks like an umbrella for all the Oregon wildlife projects. Each of those was individually reviewed; consequently, the ISRP did not rate this proposal. This proposal does not clearly describe how it is linked to component projects. The proposal instructions are not followed -- too long a "short description", too long an abstract, no staff listed, and relationships to other projects are not in Section 3 (although in Section 8). The proposal needs to give specific objectives in addition to general, administrative objectives. The history of wildlife mitigation administration in the Fish and Wildlife Program, which is found in all the Oregon wildlife mitigation projects, is well stated. The methods are general, but good, and the proposal is well referenced. The programmatic need is nearly all administrative,

but plans and reports are referenced. It is a marginal quality proposal for the high cost.

LOWER COLUMBIA SUBREGION

Lower Mid-Columbia Mainstem

Restore Chinook Salmon Passage into Woodard Creek and Enhance Spawning Habitat

9058

Lower Columbia

ISRP Evaluation: Inadequate proposal, adequate purpose after revision

Although the revised proposal includes good monitoring provisions, the original and the revised proposals give virtually no linkages to the Fish and Wildlife Program, except to note the goal to increase the Woodard Creek pool per mile ratio from 6 upward toward the “CBFWA FWP” recommended ratio of 56. However, no specific pool per mile ratio was noted as an objective. There may be strong reasons to do this work in this location, however the proposals fail to make that case. Also, the proposals lack detail to ensure a high probability of project success. There was no mention of a watershed analysis to prioritize restoration activities. This looks like a technical approach to watershed restoration, yet this may be a good site for passive restoration. The objectives listed in different parts of the proposal do not match. The ISRP asks why is this project appropriate for BPA funding and what contribution will cooperators provide.

Classify Riparian and Wetland Vegetation in the Columbia Basin of Washington

9089

ISRP Evaluation: Inadequate after revision

The project personnel appear to be competent and capable of the work proposed; however, the proposal fails to place the proposed work into larger contexts of the Fish and Wildlife Program, general land management needs and salmon restoration in the basin. The language seems to indicate at some points that a new integrated riparian/wetland classification system would be developed (in which case the budget seems too light). At other times, it seems to indicate merely that the proposal is for funds to be used by personnel to fit data from Washington State into an existing riparian and wetland database. It is unclear what remains to be done. The proposal is unclear about what pieces of the problem are solved, what remains to be done, and why BPA funding is needed rather than WDNR. The proposed work may indeed be a worthwhile project. However, the proposal fails to adequately and convincingly present enough background, context, and linkages to other activities and needs in the basin to merit approval in its present form.

Evaluate Columbia River Select Area Fisheries 9306000

ISRP Evaluation: Adequate

The proposal is rated adequate, however there are criticisms. The proposal does not provide good information on past results; the sponsors state conclusions rather than offer evidence; and stocks to be used for production are not specified. Further, the proposal discusses strays into other hatcheries, but not into streams. Once fisheries are developed and clientele are established, pressures may emerge to continue the program despite possible impacts. If the sponsors truly wish a commercial fishery for the Lower Columbia, the ISRP reviewers comment that this may be it -- but the proposal begs considerable improvement. Some of the listed objectives may already have been accomplished as well. The ISRP urges that an independent source conduct monitoring, and that BPA closely examine the budget. The investment of \$4.1 million thus far to determine feasibility should be examined.

Securing Wildlife Mitigation Sites-Oregon, Mitchell Point 9705909

ISRP Evaluation: Inadequate

ISRP team members suggest the proposal defies proper review because few tasks specific to Mitchell Point are described. The Mitchell Point site is not well described. The proposal is virtually identical with project number 9705904 and the reviewers feel that the boilerplate language could be minimized. Still, the reviewers state that the study is well within the scope of parent wildlife issues and programs.

Chinook Watershed

Restore Chinook Watershed 9123

ISRP Evaluation: Adequate

This project is a test of the “normative” concept in a lower Columbia River tributary without a dam. The proposal is well presented, logical and particularly appealing as it has many different interfaces. It integrates various aspects of biology, ecology, and aquaculture. It includes links to higher education, high school and various interest groups from the local community. It has an outreach educational program designed to initiate long-term changes in rural community values coincident with the ecosystem restoration. However, the proposal lacks details of methods, current status, and monitoring and evaluation for objectives and tasks. The references cited are sound. The budget should be scrutinized for justification of publications and facilities improvement costs.

Cowlitz River Subbasin

Implement Best Management Practices 9088

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal presents a logical sequence of tasks and objectives to improve water quality and habitat conditions in the local watershed. However, no specific benchmarks are identified, so it is difficult to judge how the principal investigators are going to conduct monitoring and evaluation. The proposal demands a leap of faith that best management practices are sufficient and adequate to achieve habitat restoration and to increase salmon abundance. Other than an initial link to the Fish and Wildlife Program, no mention was made of the project's effects on salmon or habitat. This proposal is similar to other watershed proposals in that it does not give a good summary of its funding portfolio.

Development of a Cowlitz Watershed Management Plan 9127

Cowlitz

ISRP Evaluation: Adequate

ISRP reviewers commend this proposal as well prepared and impressively stated. It is a good effort to systematically address preparation of a Cowlitz plan, although (1) the one-year effort may be overly ambitious for a very modest budget and (2) an analysis of the apparent failure of earlier efforts would be helpful. Links with the Fish and Wildlife Program, the watershed, and watershed councils are well defined, along with tasks and objectives.

Lewis River Subbasin

Conduct Baseline Habitat and Population Dynamics Studies on Lampreys in Cedar Creek 9104

ISRP Evaluation: Adequate

The ISRP review team ranks this proposal high among Lower Columbia studies. The proposal is a refreshing change from business-as-usual and offers a strong commitment to submit study results for peer review and publication. The project features a balanced, well-coordinated team of investigators with great emphasis on monitoring and evaluation. ISRP reviewers praise the proposal's description of baseline data and habitat use, and commend its statements of objectives, hypotheses and tests. They also endorse the selection of a study site below Bonneville Dam. The sole criticism of the proposal is its lack of direct ties to other projects and its mild explanation of programmatic need and relationships.

Willamette River Subbasin

McKenzie River Habitat Proposals

McKenzie Watershed Habitat Assessment & Project Prioritization

9036

ISRP Evaluation: Adequate

While objectives are specific, the ISRP review team comments that methods are too vague (e.g., identify, work with, etc.) and overall, the proposal offers inadequate detail. The sponsors are commended for their intent to conduct a watershed assessment before actual work performance.

Acquire Fish & Wildlife Habitat in the McKenzie Watershed

9037

ISRP Evaluation: Adequate

ISRP reviewers state that the proposal adequately describes present conditions of the habitat but does not fully relate how sponsors intend restoration or describe their intended monitoring effort. Mention of earlier projects is commended, as well as the proposal's description of its relationship to a future watershed assessment. More details would enhance the proposal, including some discussion of who should properly pay for watershed projects.

Evaluate Spring Chinook Life History-Habitat Relationships in the McKenzie Watershed

9038

ISRP Evaluation: Adequate

This well-written proposal points to an evaluation of spring chinook life history and the species' relationship to its habitat in the McKenzie River watershed. ISRP reviewers state that objectives and tasks seem well matched, and the need to monitor habitat for adult spawning and rearing is persuasively described. Contrarily, the objectives of tagging are not clearly described, and the proposed sampling size may not yield adequate data. Further, reviewers say it is unclear how the sponsors intend to compare different life history types and smolt-to-adult survival.

McKenzie River Focus Watershed Coordination

9607000

ISRP Evaluation: Adequate

ISRP review notes that the McKenzie River watershed has experienced extensive growth and development, with the result that coordination is urgently required for riverine protection and enhancement. The proposal is stated quite reasonably, with built-in monitoring and evaluation. It is commended for its analytical approach. The matrix demonstrates awareness of the need for a comprehensive methodology as well.

Other Willamette Proposals

Inspection Service for Little Fall Creek Passage

8612400

ISRP Evaluation: Inadequate

The need for a fish ladder over a natural barrier is suspect, especially if it endangers a native trout population above the barrier. The proposal is inadequately presented.

Willamette Hatchery Oxygen Supplementation

8816000

ISRP Evaluation: Adequate

ISRP reviewers commend the proposal's excellent presentation of methods, progress and findings to date, but note that it is void of new objectives. This study demonstrates that Michigan raceways are not working, yet several basin hatchery projects do not cite this study. The study is nearing completion, and results will be published, yet the proposal is deficient in detailing the current status of the report-writing phase.

Bull Trout Assessment -- Willamette/ McKenzie

9405300

ISRP Evaluation: Adequate

The ISRP review team terms this a "very important" issue that has been examined now for four years, but with many unknowns remaining. The reviewers comment that the proposal presents a systematic approach that is short on methods, but is coordinated with a number of other projects. Sponsors should better explain future work in the context of past results. After four years of effort, they should have published peer-reviewed reports by this date.

Burlington Bottoms Wildlife Mitigation Project

9107800

ISRP Evaluation: Inadequate proposal, adequate purpose

The project has been ongoing for 5 years, so they should describe what they have learned from past actions and how this will affect future actions. It is good that they mention monitoring for biodiversity, but they do not present specifics on results measured to date.

Amazon Basin/Eugene Wetlands Phase II

9205900

ISRP Evaluation: Adequate

This is basic operation and maintenance. ISRP reviewers state that the proposal describes the removal of non-native plant species and replanting with native species. The plan could benefit from greater detail of the work in progress, and its justification.

**Implementation of Willamette Basin Mitigation Program -- Wildlife
9206800**

ISRP Evaluation: Inadequate proposal, adequate purpose

The proposal is weak on objectives, methods, and explanation of the project's history. They do not detail the methods to achieve mitigation. The proposal is very vague.

**Implementation of Willamette Basin Mitigation Program -- Watershed
9206801**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal lacks detail on the properties to be enhanced and is very vague. The proposal creates the impression that so far, work has been all planning and no implementation. This project should be better linked to 9206800. The proposal needs better reference points for monitoring. BPA should look at the budget; the total proposed seems like a large amount to spend for planning alone.

**Securing Wildlife Mitigation Sites-Oregon, McKenzie River Islands
9705906**

ISRP Evaluation: Adequate

The ISRP review team commends the proposal for its intended benefits to both fish and wildlife, and finds the justification adequate. However, the proposal offers only very general discussion, and is deficient in describing the island(s) and their contribution to the mitigation effort. Monitoring and methods should be described in greater detail as well.

**Securing Wildlife Mitigation Sites-Oregon, EE Wilson WMA Additions
9705907**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal lacks detail about the specific site being acquired and reasons for specific methodology. The proposal should provide justification for the approach to restoration described. Why are exotic species being considered? This series of proposals repeats general information but presents very little specific information. Monitoring is not adequately described.

**Securing Wildlife Mitigation Sites-Oregon, Multnomah Channel
9705908**

ISRP Evaluation: Adequate

The ISRP reviewers comment that wildlife mitigation proposals in this series all employ essentially a narrative template, but this one offers better information about the intended site(s). The discussion here is superior as well in providing detail about specific activities, methods, objectives, and costs.

**Tualatin River National Wildlife Refuge Additions
9705916**

ISRP Evaluation: Adequate

Notwithstanding their recommendation, ISRP reviewers suggest that the proposed budget may be excessive. They comment also that greater detail is required on objectives and methods, and the proposal should identify related proposals.

Sandy River Subbasin

**Lower Columbia River Wetlands Restoration & Evaluation Program
9061**

ISRP Evaluation: Adequate

The study's principal attributes are its strong cost-sharing component, its linkage with other agencies and institutions, and its role in wildlife mitigation. The ISRP review team comments, however, that the proposal is vague on methodology, does not adequately describe fish benefits, and offers overly succinct objectives and tasks. Concluding that work already appears to be in progress without Bonneville Power Administration funding, reviewers ask whether the U. S. Forest Service or BPA should properly fund this study of a refuge administered by USFS.

**Sandy River Delta Riparian Reforestation
9062**

ISRP Evaluation: Adequate

The proposal is well presented, advances significant cost-sharing and has clear matches between budget, personnel, scheduling, objectives, and tasks. The ISRP review team notes, however, that there is little justification provided for the work other than a decline in USFS funding. Reviewers comment that much preliminary work has already been done, and they commend the preparation of a watershed analysis.

Wind River Subbasin

Wind River Ecosystem Restoration 9154

ISRP Evaluation: Adequate

The ISRP reviewers praise the proposal as well-written, even if products (discussed on page 11 of the proposal) do not appear to match all objectives. The reviewers suggest products should be expressed in terms of the expected biological improvements.

Hood River Subbasin

Evaluate the Status of Columbia River Sea-Run Cutthroat Trout 9145

ISRP Evaluation: Adequate

Notwithstanding that ISRP reviewers suggest that BPA carefully examine the budget for FY 1999 budget for Objective 1 and a portion of Objective 2, they view this as a clearly stated effort to perform valuable and timely assessments of declining Lower Columbia coastal stocks. They view as adequate the presentation on study background and methods, but invite greater detail. They suggest the proposal is too non-specific on streams the sponsors intend to sample and survey, and recommend that they concentrate on sea-run cutthroat above Bonneville Dam.

Hood River Production Program

The ISRP found the Hood River Production Program proposals to be adequate when they are linked together as a set. The proposals generally are well done, have fundamental linkage, and would better be presented as part of an overall watershed plan. However, the proposals are not of uniform quality and one reviewer notes that without the overall quality of most of the proposals, he would have judged the Hood River Production Program-Pelton Ladder proposal number 8902900 unacceptable. ISRP reviewers comment that the HRPP proposals do not adequately describe project history in terms of results, particularly for the chinook and steelhead supplementation project. They make the same observation with respect to wild production, fish passage, supplementation, and habitat conditions in the Hood River subbasin. Concern is expressed that results will not be available until the year 2002 and beyond, and reviewers ask how if at all it may be possible to re-direct the study's management if an evaluation cannot be completed until 2006?

**Hood River Production Program (HRPP)
8805303**

ISRP Evaluation: HRPP Adequate as a set

The ISRP notes that this is a difficult proposal to judge – and argues that suites of linked proposals/projects that form one larger project or program should be submitted and reviewed in depth as a single project in a single, large integrated proposal for multi-year funding. Nonetheless, this proposal is well written and is the master project in the Hood River Production Program series of proposals. The ISRP commends the sponsors for providing linkages to the other related proposals; this is in contrast to some of the production project proposals in other subbasins that did not describe adequate linkage. The reviewers are encouraged that the steelhead supplementation portion of the proposal describes a shift to indigenous Hood River stocks and proposes to eliminate passage of out-of-basin stocks into the subbasin.

**Monitor Actions Implemented under the Hood River Production Program
8805304**

ISRP Evaluation: HRPP Adequate as a set

This well-written proposal provides the monitoring and evaluation for the Hood River Production Program, 8805303. The monitoring and evaluation objectives are well integrated with the overall objectives of the production program and include objectives and methods to 1) determine the current status of indigenous populations of resident and anadromous salmonids and 2) minimize detrimental impacts on indigenous populations.

**Hood River Production Program--Pelton Ladder—Hatchery
8902900**

ISRP Evaluation: HRPP Adequate as a set

This is a weaker proposal, as written, than the other proposals in the Hood River Production Program. It lacks the clarity and logical presentation of its sister proposals and without those proposals would likely have been judged inadequate. This is a hatchery operation and maintenance project for the Pelton Round Butte facilities. The proposal presents no design for collection or matings and does not adequately describe the project history. Even though there are separate Hood River Production Program monitoring and evaluation projects 8805303 and 8805304, this proposal should include provisions for monitoring and evaluation of the operation and maintenance work.

**Hood River Production Program -- Oak Springs, Powerdale, & Parkdale O&M
9301900**

ISRP Evaluation: HRPP Adequate as a set

Regardless of the adequate evaluation, the proposal needs to better describe methods and tasks. There are different objectives listed on pages 3 and 8. The proposal contains considerable internal redundancy, although it is fairly complete and roughly comparable to the other Hood River Production Program proposals. It

suffered from deficiencies in details on the mating matrix design, small broodstock sample sizes, and justifications for the sizes (or lack thereof). Even though there are separate Hood River Production Program monitoring and evaluation projects 8805303 and 8805304, they should monitor and evaluate the operation and maintenance work.

Hood River Production Program--PGE: O&M 9500700

ISRP Evaluation: HRPP Adequate as a set

This proposal provides good detail but reads like a contract not a proposal. It is strictly an operation and maintenance proposal that specifies details of funding responsibilities between BPA, PGE, and ODFW. The contract proposal, while minimalist in nature, was adequate for review, straightforward and persuasive.

Hood River Fish Habitat Project 9126

ISRP Evaluation: HRPP Adequate as a set

ISRP reviewers praise this proposal as extremely well written and persuasive, exemplary in demonstrating (in Sections 2 and 8 of the proposal) the contributions of a single element to a much broader, multi-project program. Elsewhere, however, reviewers comment that the proposal might better describe the goal of this proposal and critically analyze the intended actions. They suggest a lack of fine detail on monitoring and evaluating in the proposal, even though those actions are identified in a separate proposal and results are to be expressed in an annual report. It is unclear if a watershed analysis was prepared, and what prescriptions arise for that analysis. Finally, the reviewers state that the proposal is in need of "reference points" that address such questions as: How much is enough? Who should pay -- irrigation district or BPA? And how is it intended that landowners be motivated to improve fish habitat?

White Salmon River Subbasin

White Salmon River Watershed Enhancement Project 9156

ISRP Evaluation: Adequate

Reviewers praised it as "a very well-done proposal with exciting possibilities for real accomplishments in watershed enhancement and restoration." The plan involves ground-level actions of real substance, advancing this well beyond the planning phase of most other watershed council projects. ISRP reviewers consider tasks and objectives well done, well matched and well integrated across disciplines and within the local community. The proposal has cost-sharing and collaboration elements with other Federal, tribal and local entities. In their critique, reviewers said the proposal could set forth a more systematic plan with expanded detail. Among other things, they asked what the proponents may be able to learn from other watershed

councils regarding organization. Is there a structure for the land stewardship plan? Who will absorb the costs of road decommissioning, fence building, diversion screens and materials? Nonetheless, the proposal is well regarded.

COLUMBIA RIVER PLATEAU SUBREGION

Columbia River Plateau Mainstem and Multi-Basin

Confederated Tribes of the Umatilla Indian Reservation 9092

ISRP Evaluation: Not Reviewed – Law Enforcement

Oregon Fish Screening Project 9306600

ISRP Evaluation: Adequate

The objectives are not consistently stated throughout the proposal (sections 4 and 7), but it is good that they include the objective to improve survival rates. The monitoring program is not adequately described.

Begin Implementation of Year 1 of the K Pool Master Plan Program 9603201

ISRP Evaluation: Inadequate

The proposal repeatedly references an unpublished master plan and does not provide enough technical justification, methods or monitoring. The objectives and tasks are stated well. The description of the sturgeon broodstock program and juvenile rearing are not in sufficient detail to complete a review. The lamprey work is interesting and potentially fruitful.

Wanaket (Formerly Conforth Ranch) Wildlife Mitigation Project 9009200

ISRP Evaluation: Adequate

The proposal does not adequately describe technical justification, monitoring or methods. The seasonal recharge of the wetlands appears to be a worthwhile goal.

Securing Wildlife Mitigation Sites 9705911

ISRP Evaluation: Inadequate

This proposal provides programmatic justification but not technical justification. It lacks specific details on the project itself. It is good that they describe the place they plan to acquire and some benefits to both fish and wildlife.

Juniper Canyon & Columbia Gorge Wildlife Mitigation Project (CTUIR Lease of Corps Lands)

9705915

ISRP Evaluation: Inadequate

This proposal is too vague to determine precisely what will be done. The methods, monitoring, and technical justification are inadequately described.

Klickitat Subbasin

Monitor Water Quality & Quantity in Eastern Klickitat County

9001

Klickitat

Monitor Water Quality & Quantity in L. Klickitat R. & Its Tributaries

9002

ISRP Evaluation: Inadequate

The proposals need to describe their linkage to the Fish and Wildlife Program and provide better technical justification. Past results should be presented in Section 7.D. The sampling sites and the present water quality parameters are not described. The proposal should be more explicitly tied to the YKFP.

Protect Klickitat River & Wind River Salmonids

9066

ISRP Evaluation: Law Enforcement - Not Assessed

Klickitat Passage/Habitat Improvement M&E

9506800

ISRP Evaluation: Inadequate proposal, adequate purpose

The technical justification is too vague. The general description of YKFP is good. It was difficult to determine whether this is a project to implement watershed analysis or a supplementation project. The proposal's integration with other YKFP projects is well done. The earlier completion of the watershed analysis is a positive feature, but the proposal gives no interpretation or summary of the results of that analysis. The proposal gives no indication how the watershed analysis affects management decisions. How will the fish be sampled? How will the fishways be improved? The objectives in section 7.b are not consistent with objectives stated elsewhere.

Lower Klickitat River Riparian & In-Channel Habitat Enhancement Project

9705600

ISRP Evaluation: Inadequate

This is a well-written proposal, but it should provide more specifics regarding methods and better technical justification. The proposal does not provide enough information to ensure that they will arrive at a technically justifiable baseline. Photo-monitoring would be useful, but vegetative surveys should be used to document project success.

Fifteenmile Creek Subbasin

Acquire 1860 Fifteenmile Creek Irrigation Water Right & Convert to Instream Water Right

9087

ISRP Evaluation: Adequate

This proposal is well written and includes an adequate description of tasks and objectives. It describes an opportunity to purchase a water right and use it to increase in-stream flow. Monitoring and legal protection for the water is included in the proposal. The “ecological monitoring” needs more development. The amount of water that will be saved is small and may be insignificant in terms of salmon recovery. It would help to know how much in-stream flow is needed for recovery. Will monitoring establish this?

Evaluate Effects of Habitat Work Conducted in Fifteenmile Creek

9146

ISRP Evaluation: Adequate

The technical justification for this project is poor. If there are data going back to 1960s, they should have been summarized and presented in the proposal. Given the availability of historical data, the power of the proposed tests should have been determined. The proposal needs to take into account ocean productivity, drought, floods and other environmental conditions. The proposal does not show the relationship to other monitoring projects.

Fifteenmile Creek Habitat Restoration Project

9304000

ISRP Evaluation: Adequate

This proposal is well written. It includes continuing operation and maintenance of nine hundred in-stream structures, but the proposal does not reference a well-known report that was critical of the use of in-stream structures. The proposal should show the relationship to project 9146 and should present the results of temperature monitoring.

Deschutes Subbasin

Trout Creek Habitat Proposals

Restore/Enhance Trout Creek at Ashwood Phase I and II 1999 Funding 9003 & 9004

ISRP Evaluation: Inadequate

Is there a watershed analysis that indicates the work described in these proposals is needed? If so, it should be presented. The proposals do not include a description of the results of past habitat projects. The budget is very high for the size of restoration area described. The proposal should describe its relationship to other habitat restoration projects in Trout Creek.

Irrigation System Replacement Trout Cr. at Willowdale II 1999 Funds 9005

ISRP Evaluation: Inadequate

This proposal lacks specific information about the stream, the habitat, and the methods used to improve the habitat. Protection of fish and wildlife is not well described.

Restore/Enhance Trout Creek at Willowdale 1999 Funding 9006

ISRP Evaluation: Inadequate

This proposal needs to be combined with the other watershed proposals. Links to ODFW Trout Creek projects are not well described. If the four push-up dams are replaced with a single concrete diversion structure, what does this mean in terms of total water saved in Trout Creek?

Trout Creek Habitat Restoration Project 9404200

ISRP Evaluation: Adequate

Justification for emphasis on instream structures is not well described. The relationship of this project to a comprehensive strategy for Trout Creek or watershed analysis is not provided. The Trout Creek proposals should be integrated and related to a comprehensive strategy.

Securing Wildlife Mitigation Sites-Oregon, Trout Creek Canyon 9705910

ISRP Evaluation: Inadequate proposal, adequate purpose

The proposal describes the general history of the wildlife mitigation program but does not describe the specific actions this project is intended to address. Is there a comprehensive strategy for Trout Creek? This proposal is in a different subbasin than project 9705913, but the wording is nearly identical.

Other Deschutes Proposals

Jefferson Co./Middle Deschutes Watershed Coordinator/Council Support 1999 9007

ISRP Evaluation: Inadequate

This proposal needs to be combined with the other watershed proposals.

Central Oregon Watershed Enhancement & Outreach 9040

ISRP Evaluation: Inadequate proposal, adequate purpose

This project has worthy goals: controlling juniper and educating irrigators and youth on the importance of water conservation. The relationship to the Fish and Wildlife Program is not given. The proposal does not provide guarantees that water saved would go to instream use for fish and wildlife.

Bakeoven Riparian Assessment 9133

ISRP Evaluation: Adequate after revision

The revised proposal includes collaboration with ODFW and is adequate. However, monitoring details are still vague. The demonstration livestock enclosure is a good idea, but the proposal should provide more details on why it is needed and where it will be located. Watershed analysis is an important positive aspect of the project.

Warm Springs Reservation 1999 Watershed Enhancement Project 9138

ISRP Evaluation: Adequate

This proposal is well written and includes a clear statement of tasks and products. The project has been funded since 1980, but the project history did not give adequate description of past results. The objectives are not stated in a way that provides specific, measurable criteria for success. The budget for supplies needs more explanation and justification. It appears high.

Preserve Cryogenically the Gametes of Selected Mid-Columbia Salmonid Stocks 9153

ISRP Evaluation: Adequate

This proposal is well written and generally technically complete. The proposal should specify where the gametes will be collected. The programmatic need is not well defined, but ESA concerns make this a critical area for research and management activities. The project should be funded.

**Buck Hollow Watershed Enhancement
9303000**

ISRP Evaluation: Adequate

The goals to decrease water temperatures are well described, concrete, and ambitious. The proposal is not well organized. The basis for habitat targets is not given, and the monitoring is weak.

**Upper Deschutes Basin Watershed Coordinator/Council Support 1999
9103**

ISRP Evaluation: Inadequate after revision

The revised proposal does not provide enough detail on the watershed assessment such as who will implement it and what protocols will be used. The proposal does not describe how enhancement projects will be selected. Scientific oversight and monitoring are not sufficiently addressed. It is not integrated with other BPA habitat projects in the Deschutes.

**Securing Wildlife Mitigation Sites-Oregon, South Fork Crooked River
9705913**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal does not give details specific to the project. This is a wetland project but uses the same language as project 9705910.

John Day Subregion

**Mitigate Effects of Runoff & Erosion on Salmonid Habitat in Pine Hollow
9012**

ISRP Evaluation: Adequate

This proposal does a good job of addressing both fish and wildlife needs. It brings together a diverse group of interests. Monitoring data should be reported (published) not just stored in files. The proposal needs to clearly describe the results of watershed assessments, potential downstream effects of the project, and connection to other projects in basin.

**Eliminate Gravel Push-Up Dams on Lower North Fork John Day
9045**

ISRP Evaluation: Adequate

This proposal would eliminate adult and juvenile fish passage problems. The goals are reasonable. The objectives, tasks, and subtasks are not clearly defined. The objective is to improve water quality, but there are no measurable end points. It lacks a fisheries context. It is not clear how this proposal relates to the Fish and Wildlife Program.

**South Tower Fire Recovery Projects
9091**

ISRP Evaluation: Inadequate

This proposal is incomplete. Several sections are not filled out. It did not take into account recent literature on fire ecology. It also needs a fisheries context and needs to be linked to the Fish and Wildlife Program. The proposal does not describe likely outcomes of work.

**John Day Watershed Restoration
9137**

ISRP Evaluation: Adequate

This is a very thorough and especially impressive proposal. However, monitoring should be described in more detail. Technical justification was extensive, but it could use a more explicit fisheries context. The budget indicates a one-year expenditure of funds, but it is not clear if the budget accounts for costs of future operation, maintenance, and monitoring.

**Monitor Natural Escapement & Productivity of John Day Basin Spring Chinook
9144**

ISRP Evaluation: Adequate

This research is needed. The staff is well suited for the task. We question termination in 2003. That may be too soon to provide reliable baseline or index data. The proposal needs to provide more information about how PATH will use the information generated by this project.

**North Fork John Day Habitat Improvement
8400800**

ISRP Evaluation: Inadequate proposal, adequate purpose after revision

The revisions do not significantly change the original proposal. The original proposal falls into unacceptable level because it lacks adequate description of the project activities and gives inadequate justification. However, the purposes appear worthwhile. The budget does not appear to provide enough money to maintain instream structures as described in the proposal. Are the instream structures designed to survive floods? Do they mimic nature?

**Protect & Enhance John Day River Fish Habitat
8402100**

ISRP Evaluation: Adequate

This project has been funded for several years so it needs to present more information on accomplishments and the results of monitoring.

**North Fork John Day Area Riparian Fencing
9303800**

ISRP Evaluation: Inadequate proposal, adequate purpose after revision
The revisions do not significantly change the original proposal. The original proposal falls into unacceptable level because of insignificant description and little justification. However, the purposes appear worthwhile.

**North Fork John Day River Dredge Tailings Restoration
9605300**

ISRP Evaluation: Inadequate proposal, adequate purpose
This appears to be a good idea, but the proposal does not justify the project. This is the most important spawning habitat in the North Fork of the John Day, but this fact is not described in the proposal. The proposal needs to reference other related projects.

**Monitor Fine Sediment & Overwinter Sedimentation in John Day & Grande
Ronde
9703400**

ISRP Evaluation: Adequate
This proposal is very well done. Is 5 years adequate to establish a statistical baseline? The project should include the design of a monitoring plan to cover a broad area if a relationship between surface fines and redd sedimentation is confirmed. The proposal referenced a Chapman paper but did not appear to take concerns raised in that paper into full account.

**Acquisition of Pine Creek Ranch
9139 and 9140**

ISRP Evaluation: Adequate
The purpose is not to purchase the land but to restore ecosystem health. Use of passive restoration is positive. Monitoring design is not described. What are the specific benefits for fish and wildlife?

Willow Creek

**Securing Wildlife Mitigation Sites-Oregon, Horn Butte
9705904**

ISRP Evaluation: Inadequate
ISRP team members suggest this proposal defies proper review because few tasks specific to Horn Butte are described. The Horn Butte site is not well described. The proposal is virtually identical with proposal 9705909 and the reviewers feel that the boilerplate language could be minimized. Still, the reviewers state that the project is well within the scope of parent wildlife issues and programs.

Rock Creek

Rock Creek Watershed Assessment & Restoration Project 9159

ISRP Evaluation: Adequate

This proposal is well written. It describes the use of both the federal and Washington State watershed analysis, which is a positive feature. Biological monitoring and the current assessment of salmonids need to be better described.

Umatilla Subregion

Umatilla Hatchery Program

The ISRP evaluated the Umatilla Hatchery Program as a set and found them to be inadequate proposals with adequate purposes, although proposals 8902401 and 9000500 were found to be adequate individually.

Operate & Maintain Umatilla Hatchery Satellite Facilities 8343500

ISRP Evaluation: Inadequate proposal, adequate purpose as a set

The proposal needed more specific results in the history section. Have the facilities achieved their goal? What are the goals? This proposal needed to be better edited. The ISRP would have preferred an experiment that more carefully compared the survival of supplemented salmon to the survival of naturally produced salmon.

Trap & Haul in the Umatilla & Walla Walla Basins 8802200

ISRP Evaluation: Inadequate proposal, adequate purpose as a set

This project has been going on for almost 10 years, but little direct evidence is presented on how well it is working. It needs greater demonstration of the objectives and the benefits.

Evaluate Juvenile Salmonid Outmigration & Survival in the Lower Umatilla 8902401

ISRP Evaluation: Adequate proposal, adequate purpose as a set

This proposal included a good explanation of hypotheses, assumptions and products. However, hypothesis three is inadequate, and technical justification is weak. The proposal referred extensively to other documents but did not give a complete explanation of why we need to know about juvenile migration and what problem will it solve. The project should be coordinated with Umatilla satellite facility project 8343500. Four years most likely will not provide enough time to develop a solid database and draw conclusions. The study should extend one generation beyond the February 1996 flood. Publication of results should include more than just an annual report.

**Umatilla Hatchery Operation & Maintenance
8903500**

ISRP Evaluation: Inadequate proposal, adequate purpose as a set
Many details were left out. This project should be examined in the comprehensive hatchery review. Were statements about increased survival from acclimation actually realized or assumed? This project should be combined with 9000500 so the total cost of hatchery operations could be displayed.

**Umatilla Hatchery Monitoring & Evaluation
9000500**

ISRP Evaluation: Inadequate proposal, adequate purpose as a set
This proposal spelled out the research methods and provided null hypotheses, which the ISRP appreciated. Objectives were clearly stated but the proposal was poorly edited in places. The history of operation of the hatchery has been long enough that a summary of monitoring and evaluation findings should have been presented. Studies on oxygenated raceways in a Willamette River hatchery were recently conducted but were not referenced in this proposal.

Other Umatilla Proposals

**Research/Evaluate Restoration of NE Ore Streams & Develop Mgmt Guidelines
9016**

ISRP Evaluation: Adequate

This was one of the best proposals reviewed and includes an excellent conceptual foundation. The graph on page 7 was very helpful. The focus on passive restoration was viewed favorably by the ISRP. The proposal includes a good experimental approach with hypotheses and control sites, consideration of plant, animal, and environmental variables, and data for normative conditions. The ISRP was pleased that they propose to study non-game fishes. The ISRP strongly recommends this project for funding.

**Strategies for Riparian Recovery: Plant Succession & Salmon
9141**

ISRP Evaluation: Adequate

This study covers a key area of needed research because it focuses on ecological management of riparian zones. The proposal's drawback was that it was not well integrated with other projects and its relation to the Fish and Wildlife Program was not clearly stated. *Return to the River* calls for food web studies, but the proposal did not clearly relate to *Return to the River*. Studies of the dynamics of fish community needed more detail. In spite of these shortcomings, the ISRP strongly recommends this project for funding.

**Enhance Umatilla River Basin Anadromous Fish Habitat
8710001**

ISRP Evaluation: Adequate after revision

The revised proposal thoroughly described the project rationale and proposed treatments. Comments on the original proposal included the following: The study mentioned obtaining baselines in one year but that is not enough time to acquire data to determine power of test. This proposal may be overly optimistic because it is extremely difficult to sample and study insect populations. Watershed analysis should precede study design. The proposal does not give the relationship to 8710002.

**Protect & Enhance Coldwater Fish Habitat in the Umatilla River Basin
8710002**

ISRP Evaluation: Adequate after revision

The revised proposal placed an emphasis on soft engineering and wider buffers to protect a 50-year floodplain. Comments on the original proposal (before revision) suggested that results should be measured in terms of fish and their life histories. In addition, the project history was insufficiently described, methods were vague, administration costs were high, the core purpose was not expressed well, and site-specific projects and watershed analysis were not described. However, these shortcomings were substantially improved in the revised proposal.

**Umatilla & Walla Walla Basin Natural Production M&E Project
9000501**

ISRP Evaluation: Adequate

This proposal was thoroughly written and the technical justification and methods seem adequate. The project is in its sixth year; thus, the proposal would have benefited from a concise summary of results to date, such as smolt to adult return rates.

**Umatilla Passage O&M
8343600**

No proposal submitted.

**Power/Repay O&M for USBR CPR Pumping Project
8902700**

No proposal submitted.

**Enhance Squaw Creek Watershed for Anadromous Fish & Wildlife Habitat
9506001**

ISRP Evaluation: Adequate

Objectives were well described, especially the narrative section. The ISRP liked the idea of putting debris on the flood plain rather than directly in the river. Insufficient details were given on monitoring.

Walla Walla Subregion

Assess Fish Habitat & Salmonids in the Walla Walla Watershed in Washington 9010

ISRP Evaluation: Adequate

This proposal lacks specific detail on the river, its fisheries, temperature, sediment and other environmental conditions. The methods section is too general and needs more detail. They state they are going to use instream flow incremental method (IFIM) but do not acknowledge the limitations of this method.

Screens & Traps on the Walla Walla & Touchet 9601100

ISRP Evaluation: Adequate after revision

The revised proposal added little on methods, but the technical justification with regard to summer steelhead was improved. The proposal did not clearly show the relationship the Fish and Wildlife Program. The objectives listed in section 4 were not consistent with the objectives listed in section 7. Project benefits should be stated. Monitoring and evaluation should be included to check for effectiveness.

Adult Fish Passage Improvement – Walla Walla River 9601200

ISRP Evaluation: Adequate after revision

The revised proposal provides sufficient technical justification and better historical context.

Walla Walla Basin Fish Habitat Enhancement 9604601

ISRP Evaluation: Adequate

The watershed analysis should be completed first and then restoration activities based on the results of that analysis can be proposed. The proposal does not ensure monitoring will be implemented. The emphasis on passive restoration is good. The proposal describes a good effort to integrate habitat improvements with other watershed improvements (adults and juvenile passage). The objectives, tasks, background, and methods are well described

Yakima Subregion

Yakima Fisheries Program: Artificial Production

The ISRP evaluated the Yakima/Klickitat Fisheries Program artificial production proposals as a set and found them to be inadequate, although many possessed good ideas.

Yakima Hatchery Construction

8811500

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This proposal needs to be more clearly written: the work for FY99 is not specified, the stage of progress is unclear, the short description does not match the objectives listed in Section 4, and the project title and work described do not match. The proposal provides little detail on the hatchery construction. For example, it does not specify the number of ponds to be built. The proposal provides adequate detail on objectives, history of the project and historical runs. However, the methods for monitoring are not well explained nor are production constraints. The smolt to adult survival rate is reported but evidence for these figures is not documented. The proposal is related to many projects but not the supervision project. This is large-scale production but the assumptions regarding supplementation are not described well enough to justify the scope of the project.

Yakima/Klickitat Fisheries Project Management

8812001

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This is an inadequate proposal considering the breadth of the YKFP. The proposal uses boilerplate language and does not sufficiently convey the current state of the project nor future efforts for FY99 and beyond.

Video Fish Monitoring Project

8812005

ISRP Evaluation: [YKFP] Inadequate proposal, adequate purpose
This proposal provides good descriptions of objectives, tasks and project history. The need to use video could be better explained.

Fisheries Technician Field Activities

8812008

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This is FTE support, but the proposal describes the overall project design rather than the specific work to be carried out by the technicians. The budget and justification for these FTEs should be part of the proposals for the projects where the work will be carried out. The budget should be closely analyzed.

**Supplementation Fish Quality (Yakima)
9105500**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This is a well-organized proposal for needed work. The proposal appears to be overly optimistic in its projection of the amount of work that can be accomplished.

**O&M of Yakima Fish Protection, Mitigation & Enhancement Facilities
9503300**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
The proposal lacks adequate description of past and future work. This may be a necessary project, but the proposal does not convey the need.

**Yakama/Klickitat M&E Program
9506300**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This proposal is excellent and generally complete. It does a good job of laying out the whole YKFP. However, it does not clearly describe monitoring and evaluation of survival from smolt to adult (SAR). The proposal mentions the video monitoring proposal with respect to SARs but those monitoring activities do not appear to be focused on PIT tags and, thus, are not sufficient to estimate SARs.

**Upper Yakima Species Interactions Studies
9506402**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This is a well-written proposal with clear objectives. The problem is justified more in terms of policy than technical need. It does not adequately describe results to date. The project has a good history of publication.

**Policy/Technical Involvement & Planning for Yakima Klickitat Fisheries
Project
9506404**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This project does not present enough information for us to conduct a meaningful review. The purpose and costs of the subcontracts should be specified.

**Monitor Supplementation Response Variable for the Yakima Klickitat Fisheries
Project
9506406**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
The title does not represent the project. The relationship to other YKFP projects is not clear.

**Supplement & Enhance the Two Existing Stocks of Yakima River Fall Chinook
9603301**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
The proposal gives little specifics on fall chinook. It needs to provide better technical detail specific to the project. It uses the same boilerplate language as some of the other YKFP projects.

**Evaluate the Feasibility & Potential Risks of Restoring Yakama River Coho
9603302**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
The project history does not discuss coho nor does it give results of previous work-- only administrative references. The methods are not specific; the proposal only describes what will be done, not how. The description of monitoring is vague.

**Operation & Maintenance for Upper Yakima River Supplementation Facility
9701300**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
The narrative should be more project specific rather than relying on the general YKFP boilerplate language.

**Development/Refinement of Natural Production Objectives & Strategies
9706200**

ISRP Evaluation: YKFP Inadequate proposal, adequate purpose as a set
This is a good idea, but the implementation does not appear to be well thought out. As a stand-alone modeling effort, there is really no way to validate it; however, if it were integrated with the design of the overall supplementation experiment and monitoring effort being implemented in the Yakima Basin it would be very valuable.

Yakima Fish Screen Proposals

**Evaluate the Effectiveness of Fish Screens
8506200**

ISRP Evaluation: Adequate
This proposal is well written, but should describe the positive results that will be obtained. The Phase I and II screen projects are not well described. The proposal addresses a definite problem and proposes a good way to approach it. BPA should review the budget.

**Yakima Phase II Screen Fabrication
9105700**

ISRP Evaluation: Adequate
This is a good, straightforward proposal. The proposed work is not easily amenable to scientific review, but the proposal does provide the necessary information for the

type of project and is a needed element of work. It explains that monitoring is covered in another proposal.

Yakima Phase II Screens – Construction

9107500

ISRP Evaluation: Adequate after revision

The revised proposal clearly describes phase II. The original proposal was incomplete -- no project description or personnel. The proposal should show its relationship to project 9105700.

Yakima Screens Phase II - O&M

9200900

ISRP Evaluation: Adequate

The proposal is basically well done. It is succinct and thorough and demonstrates the need. The results of previous monitoring should be described.

Yakima Education Proposals

Teach Adults to Become Holistic Master Watershed Stewards

9032

ISRP Evaluation: Adequate

This proposal should receive additional review by educational specialists. The proposal is innovative and involves significant coordination and collaboration among many key land use and resource managers. The goals are worthwhile. The proposal has a scientific focus but does not reference scientific papers and does not adequately detail the curriculum. It should include monitoring to determine how well the individuals are being educated and what they are doing with this knowledge.

Yakima Basin Environmental Education

9405900

ISRP Evaluation: Inadequate proposal, adequate purpose

The proposal needs to better describe its curriculum and the expected benefits to fish and wildlife in the basin. The proposal is not adequately related to watershed councils or other education programs.

Little Naches Habitat Proposals

Little Naches Streambank Restoration

9065

ISRP Evaluation: Adequate

This is a brief, straightforward proposal that includes clear objectives and links to another project. The proposal needs more detail on monitoring and evaluation. The proposal explained its objective to fix the stream banks but did not adequately explain the fishery benefits in the context of the local populations. The proposal briefly mentioned a watershed analysis but did not detail the prescriptions gleaned from it. Photo-points and snorkeling are not going to be enough monitoring to determine whether there have been fishery benefits. The proposal should provide more information on life histories and on fish use in the reach and in downstream and upstream reaches. It should be linked to 9158.

Little Naches River Riparian & in-Channel Habitat Enhancement Project

9158

ISRP Evaluation: Adequate

The proposal text leaves the impression that this is a continuing project so it needs to describe why more review is necessary after so much preliminary work has already been done. The proposal did not clearly describe how it arrived at the limiting factors nor whether the land management activities that led to these problems have been corrected. It is good that the major land managers are participating and that the entire system has been evaluated. Specific prescriptions from the watershed analysis need to be presented, specifically in regards to the use of instream structures. The description of monitoring is insufficient.

Yakima Agricultural Habitat Proposals

9068-9076

These proposals are all very similar but there is little information presented showing that they are being coordinated or that they are responding to watershed analysis. This group of proposals should be part of a coordinated package. Except for 9068 & 9069 they are not linked to the Fish and Wildlife Program. The proposals should describe legal assurances that the water saved is allocated to instream fisheries use.

Improve Stream Habitat through Reduction in Farm Runoff

9068

ISRP Evaluation: Adequate

This is a very well-prepared and well-presented proposal with clear objectives, tasks, and monitoring and evaluation. However, the proposal does not demonstrate that the water saved will provide significant benefits to fish and wildlife in the watershed. The ratio of government and private funding is not well explained. The

proposal should be coordinated with other projects in the basin. The proposal should give legal assurances that the water saved is allocated to instream use and not just used by downstream irrigators.

Enhance Upper Yakima River Basin Fish Habitat

9069

ISRP Evaluation: Adequate

This is a well-presented proposal with clear objectives. More emphasis could be placed on field monitoring of results to ground truth the FOCS computer-tracking model. It should be field monitored in coordination with projects 9068 and 9704900 and should be coordinated with other projects in the basin. The proposal should give legal assurances that the water saved is allocated to instream use and not just used by downstream irrigators.

Improve Water Quality through Sedimentation & Nutrient Reduction

9070

ISRP Evaluation: Inadequate proposal, adequate purpose after revision

The revised proposal is not tied to the overall watershed assessment. The objectives need to be more clearly written. Monitoring needs to be described. It appears to be linked to the other cost share irrigation conversion proposals, but makes no mention of any of them. Although this proposal's main objective is to control feedlot runoff, it does have some irrigation improvement objectives; consequently, the proposal should give legal assurances that the water saved is allocated to instream use and not just used by downstream irrigators.

Improve Yakima River Water Quality

9071

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal makes only cursory links to other projects and even more superficial links to the Fish and Wildlife Program. The proposal does not describe coordination with other projects in the basin. The rationale, technical justification, and monitoring need better descriptions.

Improve Return Flow Water Quality

9072

ISRP Evaluation: Inadequate proposal, adequate purpose

Monitoring is not adequately described. This proposal is not linked to the Fish and Wildlife Program. The problems in the watershed need to be described in the context of constraints on fish production. The proposal should describe coordination with other basin projects. The proposal should give legal assurances that the water saved is allocated to instream fisheries use.

**Improve Water Quality Monitoring Program
9073**

ISRP Evaluation: Inadequate

There is no detail in the proposal on exactly what will be measured. The proposal needs to describe the design of the monitoring program, as well as coordination with other basin projects. The funding for this proposal should be tied to the funding of 9071.

**Construct Sediment Settling Basins
9074**

ISRP Evaluation: Inadequate proposal, adequate purpose

The history section needs to be expanded. The methods are not well described. The proposal should provide information on background measurements and the specific effects on water quality from the earlier projects. The proposal needs to better describe coordination with other basin projects

**Construct Wetlands
9075**

ISRP Evaluation: Inadequate

The proposal does not describe coordination with other proposals in the basin or linkages to the Fish and Wildlife Program. It does not address literature critical of constructed wetlands and does not clearly link tasks to the budget.

**Evaluate Return Flow Recovery
9076**

ISRP Evaluation: Inadequate after revision

The revised proposal includes brief summaries of projects, but it did not add the information lacking in the original. The original proposal did not describe coordination with other projects in the basin or linkages to the Fish and Wildlife Program. It is too vague and lacked detail throughout. It should contain legal assurances that the water saved is allocated to instream use for fish and wildlife and not just used by downstream irrigators.

Other Yakima Habitat Proposals

**Coordinate/Facilitate Watershed Project Planning/Implementation
9067**

ISRP Evaluation: Inadequate proposal, adequate purpose after revision

The revised proposal made little improvements from the original. The original is incomplete and makes no direct or indirect links to Council program measures. It needs to provide more information regarding facilities, monitoring and rationale. Although the project has been going on for approximately five years, the project history and results are not presented in adequate detail.

**Reestablish Safe Access into Tributaries of the Yakima Subbasin
9100**

ISRP Evaluation: Adequate

This is a well-written proposal for needed work. The proposal does not describe whether the re-colonization will be natural or from artificial production. Monitoring and the expected benefits should be described in more detail.

**Restore Upper Toppenish Creek Watershed
9101**

ISRP Evaluation: Adequate

They should include measurement of peak and base flows in their monitoring efforts since their improvement is a goal of the project. The proposal does not clarify how the land management practices that caused the degradation will be corrected. The survey work already funded has not been completed.

**Ahtanum Creek Watershed Assessment
9102**

ISRP Evaluation: Adequate

This is the sort of planning and assessment project that should be completed before proposing restoration projects. The watershed analysis should be completed first before funding for additional work is funded. It describes a heavy reliance on instream flow incremental method (IFIM), but this method has not been proven effective in all ecosystems. If they use this method, they must calibrate it locally.

**Acquisition of Water and Floodplain Fisheries Habitat in the Yakima Basin
9109**

ISRP Evaluation: Adequate

Monitoring is not well described. The proposal indicates that purchases will be prioritized on an ecological basis but does not describe priority areas or ecological criteria. The proposal should describe its relationship to Bureau of Reclamation acquisitions. The proposal's scientific approach is valid. The budget should be scrutinized and cost sharing should be considered.

**Stabilizing Stream Channels in the Cabin Creek Watershed
9114**

ISRP Evaluation: Adequate

This proposal is not justified biologically. The structures will be expensive to maintain over time. It is good that watershed analysis was done but the proposal does not clearly describe how the analysis was used. They need to site more literature on the success of the approach. Why should BPA pay for repairing logging damage (policy)?

Construct Sediment Settling Basin

9160

ISRP Evaluation: Inadequate

The expected results of the activity are not well described. There is no budget for the construction of the settlement basin. Relation to the Fish and Wildlife Program is not addressed.

Improve Return Flow Water Quality from Farms

9161

ISRP Evaluation: Inadequate

This proposal lacks detail. It needs to describe the expected results of the proposed activities. There is no budget for the improvements.

Improve Water Quality Monitoring Program

9162

ISRP Evaluation: Inadequate

The proposal is vague, especially the monitoring. Project coordination needs to be better described. Should BPA be funding this kind of work?

Analyze Ahtanum Creek Storage Project

9164

ISRP Evaluation: Inadequate after revision

The proposed activity may be counter-productive. This proposal is not related to the Fish and Wildlife Program or other BPA projects. It should be coordinated with 9102.

Satus Watershed Restoration

9603501

ISRP Evaluation: Adequate

This is a well-written proposal--good balance of concepts and details. The proposal describes a well-planned project, with significant progress already. The watershed-scale conceptual foundation is excellent. It is well integrated with other projects. Minor criticisms include a failure to give details on the personnel. The technical background could be described better.

Teanaway River Instream Flow Restoration

9704900

ISRP Evaluation: Inadequate after revision

The revised proposal does a much better job of describing the problem. However, it needs to provide more details on methods, personnel, past results, and objectives. It lists tasks that in other places in the proposal they state are already done.

Yakima Basin Side Channels

9705100

ISRP Evaluation: Adequate

The proposed activity is likely to be beneficial to fish and wildlife. The monitoring and technical background need to be better described. The methodology lacks specific details.

Enhancement between Selah & Union Gaps

9705200

ISRP Evaluation: Adequate

The monitoring and technical background need to be better described. The proposal should state if the stream reaches flowing through the land proposed for acquisition are important for migration, rearing or both. The budget should be scrutinized. If the entire budget is for acquisition of land and easements and no labor costs are included why are there indirect costs?

Toppenish-Simcoe Instream Flow Restoration

9705300

ISRP Evaluation: Adequate

The proposal is conceptually sound and is a good idea. The budget should be scrutinized to see if there is duplication between operation and maintenance and indirect costs.

Yakama Nation--Riparian/Wetlands Restoration

9206200

ISRP Evaluation: Adequate

This proposal does a good job of describing the past history of this project and other protection activities and is tied into watershed analysis.

Yakima Resident Fish Assessment Proposal

Assess Resident Fish within Toppenish Creek & Satus Creek

9110

ISRP Evaluation: Inadequate

This proposal is incomplete. The narrative does not contain enough information for the project to be reviewed on its technical merits.

Tucannon/Asotin Subregion

Evaluation of Fall Chinook Salmon Production and Habitat Conditions in the Lower Tucannon River

9008

ISRP Evaluation: Adequate

We agree the study should determine the origin of the fish, identify current habitat conditions, and conduct intra-gravel survival studies. However, the sample size appears small for the egg basket study. The limiting factor analysis is not complete. For example, food supply factors are missing.

Implement Eastern Washington Model Watershed Plans (Withdrawn)

9202602

ISRP Evaluation: Withdrawn

This proposal was folded into projects 9401805, 9401806, and 9401807.

Enhance Habitat for Spring Chinook, Summer Steelhead, & Bulltrout

9401805

ISRP Evaluation: Adequate after revision

This proposal does not adequately describe the technical justification for the proposed actions. Benefits to fish and wildlife are not well explained.

Enhance Habitat for Spring & Fall Chinook, Summer Steelhead, & Bulltrout

9401806

ISRP Evaluation: Adequate after revision

This proposal is the best among three habitat enhancement proposals for this subbasin. The monitoring program is well described.

Enhance Habitat for Fall Chinook, Steelhead, & Bulltrout

9401807

ISRP Evaluation: Adequate after revision

The revised proposal provides more information. The location of sediment sampling sites should be shown on a map. Since the project has a history, the proposal should present results obtained to date (pre-project temperatures, sedimentation, etc). The no-till practices may lead to more herbicide and pesticide use; they should describe to what extent they will limit herbicide and pesticide use. The proposal includes language about fecal coliform counts, but this is not the easiest or most relevant way to monitor fish habitat. The terms “clearing” and “snagging” raise a red flag; does this mean the removal of beneficial structures. The removal of fish migration barriers is not described in enough detail to ensure that they are not removing snags that are beneficial to fish. The benefits to fish and wildlife are not well explained. The methods and monitoring for this project are not well described.

Crab Creek Subbasin

Rasor Ranch Acquisition/Crab Creek Watershed Restoration Project 9116

ISRP Evaluation: Adequate after revision

The revised proposal was deemed adequate because it improved the description of flood simulation. However, the monitoring plans remain vague. The original proposal includes good technical justification, describes the specific property to be purchased, and attempts to integrate fish and wildlife. The methods, monitoring and relation to other projects are not described with sufficient detail.

MID-COLUMBIA SUBREGION

Wenatchee Subbasin

Replace Chumstick Creek Culvert 9044

ISRP Evaluation: Adequate

The proposal adequately details methods and objectives for this type of project and describes some benefits to fish and wildlife, but it does not provide sufficient details on the populations that would be affected by opening access to additional reaches of Chumstick Creek. The ISRP questioned whether BPA was the appropriate funding agency for this project.

Remove 23 Migrational Barriers & Restore the Riparian Vegetation on Chumstick Creek 9050

ISRP Evaluation: Adequate

The sequence of objective and tasks were well described. The proposed monitoring program was adequate. This was a good proposal. The ISRP strongly recommends funding this project.

Reduce Erosion, Identify Access, & Improve Aquatic Health in & Adjacent to the Bonneville Power Line Corridor 9054

ISRP Evaluation: Adequate

The monitoring was not very well described. The emphasis on riparian and habitat improvement would likely benefit fish and wildlife, but the proposal was poorly written. Nevertheless the goals of the project seemed worthwhile.

Entiat Subbasin

Implement Entiat Model Watershed Plan

9031

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal mentions the Entiat River watershed analysis but does not provide criteria for selecting sites for instream or riparian structural improvements. This area is in the stages of post wildfire recovery and active habitat improvement could be justified, but the proposal does not describe this. The objectives and monitoring are weak. The technical justification is not well described. General management plans are better described than the specific project.

Methow Subbasin

Enhance & Protect Fisheries in the Wolf Creek Watershed

9015

ISRP Evaluation: Adequate

Overall, the goals appear worthy. However, the proposal does not specify that the water saved will be reserved for instream uses. It also does not describe the benefits to fish and wildlife. This is an irrigation improvement to a large private ranch and the ISRP wondered if BPA was the right funding source.

Methow Tributaries Fish Passage

9024

ISRP Evaluation: Adequate

The proposal was not related to the Fish and Wildlife Program. It was a good idea to determine where road crossings are a barrier to bull trout. The ISRP questioned whether BPA should fund this project or the USFS.

Prevent Mortality in Methow Endangered & Proposed Fish

9025

ISRP Evaluation: Inadequate

This proposal contained inadequate technical justification, no information on monitoring, and no linkage to the Fish and Wildlife Plan.

Expand Respect the River

9026

ISRP Evaluation: Adequate after revision

The revisions make the proposal marginally adequate, but there was still not enough detail or technical content regarding the program. The public education idea was good but the proposal did not convey how it would be implemented.

Prevent Pollution of Methow River

9027

ISRP Evaluation: Inadequate

There was no technical justification given for this proposal.

Reduce Sediment in Frazer Creek, Beaver Creek, Methow River

9028

ISRP Evaluation: Inadequate

The proposal does not give a relation to the Fish and Wildlife Program. It needs to provide more information on how Frazer Creek is important to the basin as a whole. The proposed project would likely be beneficial but does not give sufficient details on how it would benefit. The ISRP questioned whether BPA should be funding this.

Increase Stream Flow in the Methow River & Provide Trail-Based Recreation

9039

ISRP Evaluation: Adequate after revision

The revised proposal did a good job of specifically addressing questions about technical benefits. Comments on the original proposal were that it was not clearly linked to the Fish and Wildlife Program, did not specify that the water saved will be reserved for instream uses, nor did not sufficiently describe the projected benefits to fish and wildlife. Some of these concerns were addressed in the revision. This is an irrigation improvement project and the ISRP wondered whether BPA was the right funding source.

Coordinate Assessment & Prioritization of Key Habitats in the Methow Basin for Protection & Restoration

9086

ISRP Evaluation: Adequate

This proposal was well written and justified. It provided background information and literature. Two years of data may not be enough to construct a baseline. It contained inadequate information on the qualifications of the principal investigators. The budget should be scrutinized; the costs appear high.

**Methow Basin Side Channel Habitat Construction
9097**

ISRP Evaluation: Adequate

This proposal needs much more detail; where will side channels be located and how will they remain unaffected by irrigation withdrawals. The conceptual foundation to reconstruct flood plains is good. The expected production of smolts may be optimistic. The budget should be scrutinized; specifically, indirect costs look high.

**Establish the Methow Watershed Council
9155**

ISRP Evaluation: Adequate

This proposal, as with all watershed council proposals, should be reviewed on a separate level because it is primarily an administrative proposal and its existence is a policy question.

**Evaluate the Feasibility & Risks of Coho Reintroduction in Mid-Columbia
9604000**

ISRP Evaluation: Significant reservations

The first objective listed is to return natural production of coho to the area, but the technical section indicates that this project's goal is to establish a hatchery population. It appears to be an artificial production/supplementation project presented as a natural production project. The proposal does not describe why coho have declined, and if the reasons for decline have been corrected. The methods section is incomplete. Snorkeling at night is not sufficient for monitoring populations and little other monitoring is described. This project relates to proposal 9086, but does not give a relationship to the Fish and Wildlife Program. The ISRP has significant reservations about this proposal.

**Identify Resident Fish & Macroinvertebrate Taxa & Function in Anadromous
Habitat
9046**

ISRP Evaluation: Adequate

The purpose of the project is to describe the baseline on macroinvertebrates, but two years may not be enough time considering the difficulty of studying macroinvertebrates. The proposal listed nine objectives but only described the methods for two of the objectives. Overall, the project seems worthwhile.

Okanogan Subbasin

Improve Anadromous Fish Habitat & Passage in Omak Creek 9017

ISRP Evaluation: Adequate

The proposal included a good description of removing railroad rubble but did not describe in sufficient detail how the project would improve riparian areas. The goals of the project seemed worthwhile.

Restore & Enhance Anadromous Fisheries & Habitat in Salmon Creek 9604200

ISRP Evaluation: Adequate

The proposal lacked sufficient details on enhancement activities, but provided a good description of coordination activities.

UPPER COLUMBIA SUBREGION

Upper Columbia Mainstem and Moses Lake

Lake Roosevelt Hatchery Proposals

The ISRP evaluated the Lake Roosevelt hatchery proposals as a set and found them to be inadequate. The proposals state goals of maintaining wild stocks, however the methods and objectives described would likely be detrimental to the wild stocks. The programmatic need for these projects cannot be determined without knowing the impact on the native fish and the effects of past activities on native fish are not described. The hatcheries have not achieved their production goals. The proposals do not adequately address whether they are overloading a system that is already at capacity, nor do they consider the effects of the *Mysis*. This set of proposals needs to be better integrated, as the activities they propose have potentially interrelated effects. The mix of values and goals that these proposals represent, particularly those of maintaining harvest and ecosystem health, is not necessarily biologically compatible. Monitoring and evaluation needs to be complete to determine if these mixed goals can be attained concurrently.

Produce Kokanee Salmon in Net Pens for Release into Lake Roosevelt 9094

ISRP Evaluation: Lake Roosevelt Hatchery Proposals - Inadequate as a set

This proposal is for net-pen production of fish to augment ongoing supplementation projects. The proposal does not adequately describe its interactions with other projects. How the work meets the definition of supplementation is not explained.

This proposal does not provide the technical justification to allow judgment of whether the project will be successful. The proposal should describe how net pens might impact the ecosystem and its biota and should give assurance that problems are unlikely and monitoring and evaluation would allow problems to be detected and avoided.

**Chief Joseph Kokanee Enhancement
9501100**

ISRP Evaluation: Lake Roosevelt Hatchery Proposals - Inadequate as a set
This proposal is for one part of the work to determine the impacts of supplementation and management projects above Chief Joseph on the wild fish. Results of previous activities are not reported and it is hard to follow what is to be done. The production activities should be more closely linked with the two monitoring and evaluation programs.

**Colville Tribal Hatchery
8503800**

ISRP Evaluation: Lake Roosevelt Hatchery Proposals - Inadequate as a set
This is a well-written and clearly argued proposal, but the ISRP found the proposal not to be biologically supportable. The proposed use of non-native fish stocks is not biologically justified and is in conflict with restoration and maintenance of Pacific Northwest ecosystems. Although the proposal states the reasons that non-native stocks have been chosen for use in establishing naturally-producing populations, some of these proposed stocks have been shown to be harmful to bull trout and other native species. The Council's FWP prioritizes the use and protection of native stocks. Even the "native" stocks listed in the proposal are "naturalized" non-native species. The proposal provides a good context of why a hatchery is beneficial to recovery efforts, but it does not adequately address ecosystem interactions.

**Spokane Tribal (Galbraith Springs) Hatchery O&M
9104600**

ISRP Evaluation: Lake Roosevelt Hatchery Proposals - Inadequate as a set
The ISRP had many unanswered questions about work described in this proposal. The project type "supplementation" is listed in the table but not explained. "Supplementation" does not correspond to the way Sherman Creek Hatchery fish will be used (project 9104700). The genetic and ecological effects of hatchery fish on wild fish or other organisms are an important scientific concern, but are not adequately considered in the proposal. Monitoring and evaluation are left to another proposed project, which potentially compromises the effectiveness of monitoring and evaluation and makes scientific evaluation of the proposal difficult.

**Sherman Creek Hatchery O&M
9104700**

ISRP Evaluation: Lake Roosevelt Hatchery Proposals - Inadequate as a set
This project is not well justified in the context of other work in the basin. The proposal lacks adequate detail and substance. The proposal is for operation and maintenance, and the goals and successes of the project for which operation and maintenance are provided need to be given for the proposal to be evaluated.

**Monitor, Evaluate, & Research the Lake Roosevelt Fishery
9404300**

ISRP Evaluation: Lake Roosevelt Hatchery Proposals - Inadequate as a set
This proposal is for monitoring and evaluation of the Lake Roosevelt fishery, which is a good idea and of clear programmatic value, but the proposed work is not tied to an adequate conceptual framework and modeling methods are not well enough described to evaluate. It is not clear how the data being gathered will be used in constructing, evaluating, or analyzing the proposed ecosystem model. The model should be described before gathering data, to help qualify the type of data that needs to be collected. This on-going project should report results-to-date, by which its scientific soundness and success could better be judged.

**Volunteers Rear 500,000 Net Pen RBT above Grand Coulee Dam
9500900**

ISRP Evaluation: Lake Roosevelt Hatchery Proposals - Inadequate as a set
This proposal is for work that is not well linked to the other mitigation programs. The assumption that a harvest of 180,000 can be produced from 500,000 fish is not technically justified in the proposal, and plans to assess and avoid ecosystem-level effects of net pens are not given. BPA should look at the budget.

Other Upper Columbia Mainstem and Moses Lake Proposals

**Evaluate Rainbow Trout Habitat/Passage Improvements of Tributaries to Lake Roosevelt
9001800**

ISRP Evaluation: Adequate
This proposal is well organized and includes good descriptions and goals for evaluation of habitat improvement activities. However, the proposal provides no history and no summary or descriptions of concrete results from past activities and monitoring; thus, there is no indication of how good their data really are. If the sampling is done primarily in shallow streams and rivers, electrofishing would be a better sampling method than hydroacoustics. A great deal of work is proposed (perhaps overly optimistically) to be completed in one year.

**Assess Limiting Factors of the Lake Roosevelt White Sturgeon Population
9502700**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal describes the need for the activity but no approach is given. Although the project is to assess factors limiting sturgeon, the proposal does not clearly address measurement and assessment of these. This is a continuing project, but insufficient project history is given. The description of methods is too vague to ensure that the objectives are obtainable.

**Restore Moses Lake Recreational Fishery
9502800**

ISRP Evaluation: Inadequate

This is a poorly written proposal that lacks adequate scientific justification of project goals and methods. The proposal is for a highly managed non-native harvest fishery and the choice of fish stocks is not biologically justified. The proposal does not adequately ensure that the proposers have sufficient understanding of the reasons for fisheries decline in Moses Lake to restore the fishery. The experimental design is not clearly presented or justified, and the proposal does not adequately describe the methods to be used for some very complicated actions. Additionally, the effects of angling are not well described.

**Resident Fish Stock Status above Chief Joseph and Grand Coulee Dams
9700400**

ISRP Evaluation: Inadequate proposal, adequate purpose

It is a good idea to conduct a resident fish stock status project, but this proposal does not ensure that the project will be well implemented. The proposal lacks both methodological detail and a clear conceptual framework. The objectives are not consistent. BPA should examine the budget.

**Hellsgate Big Game Winter Range Continuing Acquisition
9013**

**Hellsgate Big Game Winter Range
9204800**

ISRP Evaluation: Adequate

If these are both part of the tribal habitat mitigation project, they should be listed together. There is a programmatic need for these projects, but the proposals do not make clear how they would be implemented. There is no description of how lands will be prioritized for purchase. There is no description of long-range goals and how these can be evaluated. Conservation easement requirements are not noted.

**Albeni Falls Wildlife Mitigation Project
9206100**

ISRP Evaluation: Adequate

This proposal stresses conservation of native riparian lowlands, which are a good target for mitigation because these lands were disproportionately lost with

development of hydroprojects. The methods for maintenance and evaluations are very brief, and would benefit from a more detailed description. The budget should be scrutinized; there should be a timetable for land purchase versus management.

**Colville Confederated Tribes Performance Contract (Credits For Habitat)
9506700**

ISRP Evaluation: Inadequate

This proposal appears to be linked with 9204800 and the two should be combined and the overall program related and explained. Both proposals appear to be purely for operation and maintenance. This proposal says it is for land purchase, but nothing is budgeted for land purchase. The idea is good, but the proposal is inconsistent and unclear.

**O & M Funding of Wildlife Habitat on STOI Reservation for Grande Coulee
Dam**

9800300 (was 9129)

ISRP Evaluation: Adequate

This is a good wildlife habitat proposal, which gives details on project history and methods. The proposal describes how lands will be prioritized for purchase. Strengths of the proposal include emphasis on passive management and the focus on direct measures of at least one population (deer), though consideration of other populations would be of value. The proposal could have better addressed habitat fragmentation and unit size.

Coeur D'Alene Subbasin

**Implement Fisheries Enhancement Opportunities--Coeur d'Alene Reservation
9004400**

ISRP Evaluation: Inadequate as a whole, but some portions are adequate

Although the ISRP recommends combining integrated projects in one proposal, this proposal is too diffuse and divergent and lacks focus. The habitat study and restoration aspects of the project appear beneficial, but these activities appear to be limited to provision of production and harvest opportunities. The proposal does not make clear the scientific need for or likely efficacy of the hatchery, as described. If the habitat work is done properly, stocking may not be necessary. However, the habitat manipulation techniques described in the proposal appear misguided. The proposal discusses evaluation of the need for supplementation, but it appears the proposers intend to implement hatchery production before completing their background study or watershed analysis. The budget does not appear to be consistent with the objectives. The ISRP does not support this proposal.

**Lake Creek Land Acquisition & Enhancement
9004401**

ISRP Evaluation: Adequate

This proposal is well organized and gives important details for judging its value to the fish and wildlife program: specific parcels of land appear to have been selected for acquisition, the focus of activities is on riparian habitat, and benefits to both fish and wildlife are listed. However, the methods for restoration are not well described and the proposal is inconsistent on objectives and budget. The budget for land acquisition appears not to be included.

Pend Oreille Subbasin

**Lake Pend Oreille Fishery Recovery Project
9404700**

ISRP Evaluation: Adequate

This proposal is clearly written and for needed research. The monitoring methods are well described, especially the food web studies, but the model should be described in greater detail. The project should be for a longer time (e.g., 10 years) to allow better determination of fish population changes (trends) and their possible correlation with lake factors.

**Kalispel Tribe Resident Fish
9500100**

ISRP Evaluation: Inadequate

This proposal is for resident fish substitution. The project involves a number of conflicting goals. The goals of assessing and creating trout habitat to benefit trout populations, and at the same time stocking and fostering populations of large-mouth bass, seem likely to conflict. The methods section is inadequate; reference to an annual report is not sufficient presentation of methods to allow their evaluation.

**Box Canyon Watershed Project
9700300**

ISRP Evaluation: Inadequate proposal, adequate purpose

This is a proposal to fund a watershed analysis, but it does not provide adequate technical justification for the work. There is little description of methods or monitoring. The proposed analysis appears to be a good idea, but the proposal does not ensure that it will be done well.

**Kalispel Pend Oreille Wetlands Wildlife Mitigation Project
9106000**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal presents a good idea, but it gives no methodological detail to justify the quality of the work to be done. No rationale is given for the management decisions that would be made.

COLUMBIA HEADWATERS SUBREGION

Flathead Subbasin

Evaluate Effects of Food Web Changes on Native Fish Restoration Strategies 9111

ISRP Evaluation: Not Reviewed

Scientific Peer Review Group Evaluation: Adequate

This proposal was reviewed solely by the Scientific Peer Review Group rather than by ISRP members because the principal investigator had been an ISAB/ISRP member and the ISRP wished to avoid any conflict of interest. The Scientific Peer Review Group rated the proposal highly. They found the proposal to be outstanding with direct ties to the goals of the Columbia River Fish and Wildlife Program. The objectives are clear, the experimental design is sound, and the rationale is well presented. The proposal is very detailed; however, some major, indeed sweeping, statements are unsubstantiated, and some of these may also be unsubstantiable. For example, on p. 7 it is claimed that “Flathead Lake...in many respects...functions in a similar manner to the lower Columbia oceanic-riverine system.” This finding is not referenced. Also on page 7, there is no reference or other evidence presented for the assertion that the various environmental perturbations mentioned “interact synergistically with introduced species to stress native fish species in the Flathead basin and throughout the Columbia River system.” To invoke synergism seems to be an overstatement for what may (absent evidence) really be a more chaotic situation. The proposal lists a fine staff of researchers, but their FTEs are not shown. These individuals surely have major responsibilities for teaching and for other research projects, so how much time can they really spend on this very demanding project? Is the schedule reasonable?

Libby & Hungry Horse Modeling Technical Analysis 8346500

ISRP Evaluation: Adequate

This proposal rated near the middle of the set, it would seem more reasonable for this proposal to be submitted as a subproject under an overall project umbrella. More specific linkage with project 9502500 would help. The proposal did not provide sufficient details on methods. Specifically, the methods to link with instream flow incremental method (IFIM) models are unclear. The proposal is well tied to regional work in the Fish and Wildlife Program and other programs (Corps, ESA), and it is well linked to past ISG/ISAB review and recommendations. The project has been productive in the past and needs updating through additional work. User-friendliness of models is a good goal. The schedule is uncertain because of a sabbatical by the principal investigator.

**Hungry Horse Fisheries Mitigation Plan Flathead Lake
9101901**

ISRP Evaluation: Adequate

This is a marginal proposal that was one of the poorest in the set. It reads as a monitoring and evaluation project for basic fisheries data: creel survey, fish sampling. It needs to be part of an overall umbrella project for all Hungry Horse projects, but the proposal itself does not relate the work to other Hungry Horse projects. The standard surveys are good for long-term data records. The status of the populations was not described well enough to be sure the next steps are needed. The work plan for tributary reclamation is not clear. The proposal is linked administratively with other projects, but division of labor is not clearly presented.

**Hungry Horse Mitigation --Watershed Restoration & Monitoring
9101903**

ISRP Evaluation: Adequate

This is an excellent proposal, among the best of the set. It is well connected to the Fish and Wildlife Program and other planning documents. It includes cooperation with related local projects. The work is based on an approved mitigation/implementation plan and seems productive at habitat restoration. The objectives, methods, and monitoring and evaluation look good, although the proposal seems heavy on the monitoring relative to the restoration work. It is difficult to determine which activities are most significant.

**Hungry Horse Mitigation--Hatchery-Based Implementation of Native Fish
Recovery
9101904**

ISRP Evaluation: Inadequate, adequate in part

The proposal was one of the poorest of the set. The proposal describes a switch from artificial production of kokanee to westslope cutthroat, rainbow trout (for stocking) and experimental bull trout cultures. This is a good attempt at adaptive management after the failure of the kokanee experiment. The westslope cutthroat production approach looks good, but the scientific community has recommended against bull trout supplementation in the Flathead. It is good that they are going to work cooperatively to follow a plan. The validity of loss estimates must be assumed, but should be explained. The methods are well described, but the objectives could be better presented. The role of the “fish production coordinator” is unclear.

Mitigation for Excessive Drawdowns -- Hungry Horse Dam Component 9401002

ISRP Evaluation: Adequate

Although adequate for funding, this proposal has some problems. It ranked near the middle of the set. The number of radios/sample size is too small. This project is closely related to proposal number 9401001 in the Kootenai Subbasin. A stated goal is to manage temperature to control lake trout in the river, but releasing warm water may have adverse effects on bull trout and should be reconsidered. There has been little success controlling lake trout in Flathead Lake. The proposal has good ties to the Fish and Wildlife Program and other BPA projects locally, but the objectives are often tasks and do not clearly relate to the background information. The title does not reflect the work proposed. The justification to do the work needs to be better explained. This is a conglomeration of small projects lumped together (headwater, tailwater, etc.). The FTE costs seem low for the amount of work being proposed, which may warrant scrutiny beyond the ISRP.

Flathead River Instream Flow Project 9502500

ISRP Evaluation: Adequate

This is nominally part of a continuing project, but it is proposed to be contracted out as if it is new work. If this is not yet funded, why does it have a 95... number? It is not clear who is going to do the work or if the work to be contracted out is just the instream flow incremental method (IFIM) work. Technically, the proposal ranked near the middle of the set. They may be relying too much on the IFIM model. If they are going to use IFIM, they need to look hard at their assumptions. They should calibrate their IFIM biologically, not just physically. The proposal explains a good overall strategy and is well referenced to the Fish and Wildlife Program and other planning documents. However, the objectives in section 4 do not match those in section 7b.

Focus Watershed Coordination-Flathead River Watershed 9608701

ISRP Evaluation: Inadequate proposal, adequate purpose

The watershed coordination is important, but the methods in this proposal are vague and there is no monitoring or basis for adaptive management. It would be very difficult to identify limiting factors solely on a literature review.

Kootenai Subbasin

Enhance & Protect Imperiled Native Fish Species through Improved Education & Public Information

9041

ISRP Evaluation: Adequate

This was a hard proposal to review because it is educational in focus, but the educational purpose to help anglers identify different species is valuable. The proposal gives little information on monitoring for results and evaluating the program. Relationships to other projects are vague (no specific projects). The objectives list is good, including monitoring achievement. The project seems worthwhile, but review is not truly a scientific call. The project should have more direct ties to other BPA projects. Is BPA an appropriate funding source for this? Where is the Council's policy line between mitigation and education?

Purchase Conservation Easement from Plum Creek Timber Company in Thompson and Fisher Rivers

9124

ISRP Evaluation: Adequate

This highly ranked proposal appears to be a valuable opportunity that may not come around again to protect threatened bull trout. However, it does not describe what the constraints on timber harvest will be; the status quo may not be good enough to ensure long-term benefits to fish and wildlife. It is directly linked to mitigation for Libby and Hungry Horse dams. The map does not clearly show the specific site. The shared cost between BPA and other parties does not appear disproportionate.

Mitigation for the Construction & Operation of Libby Dam

8346700

ISRP Evaluation: Adequate

This project has been going on since 1982, but the first tasks listed are documentary (administrative planning) tasks. These tasks include completing the Final Libby Mitigation Program (needed to be on a par with the Flathead subbasin) and operational guidelines for target fish species at various flow regimes. These will likely be good planning products, but the proposal seems to duplicate what other Kootenai projects may be doing and offers little physical mitigation. Coordination with other Kootenai projects should be explained. The reliance on instream flow incremental method (IFIM) should be viewed with caution. If IFIM is implemented, it would hardwire use of heavy bioengineering techniques that could be costly to maintain in the long-term. This program should be organized into an umbrella proposal with subproposals on the major objectives. Extending the project to 2055 seems optimistic, especially for "pilot" projects. The proposal quality was in the midrange of the set.

Kootenai River White Sturgeon Studies & Conservation Aquaculture

8806400

ISRP Evaluation: Adequate

This is a well-written proposal (one of the best of the set); it follows the recovery plan (FWS) and breeding plan, and it is well linked to other studies and to the Fish and Wildlife Program measures. It could be better related to other Kootenai proposals. There needs to be an umbrella proposal for all Kootenai/white sturgeon projects. The kokanee work may be a stretch and the time frame may be a bit long. The budget suggests major expenditures.

Kootenai River Fisheries Investigations**8806500**

ISRP Evaluation: Adequate

This is a well-organized proposal that is well tied to other work in region, states clear objectives, and has a record of good productivity. It was among the best of the set. Its focus is largely on sturgeon, which should be reflected in the title. The methods are pretty brief but adequate. There needs to be an umbrella proposal for all Kootenai/white sturgeon projects (particularly relating this proposal and 8806400).

Mitigation for Excessive Drawdowns at Hungry Horse & Libby Reservoirs - Libby Dam Component**9401001**

ISRP Evaluation: Adequate (with caution)

This proposal fell in the lower half of the set. The list of tasks and objectives, which is heavy on fact gathering, may be overly ambitious to accomplish in the near future. The proposal is well coordinated with other regional projects and well positioned with the Fish and Wildlife Program and other plans. It is not well explained why this work is related to drawdowns. The proposal writers did not follow instructions on length. This project is closely related to 9401002 in the Flathead Subbasin.

Kootenai River Fisheries Investigation M&E Supplemental Budget**9401200**

ISRP Evaluation: Inadequate

If this work is needed it should be part of other proposals and justified as such. This proposal is for FTE support and cannot be judged technically. The extra funds were not justified in the proposal.

Improve the Kootenai River Ecosystem**9404900**

ISRP Evaluation: Adequate

This proposal rated poorly compared to others in the set (but still acceptable). The proposal is for a very descriptive study monitoring basic ecosystem features. The proposed consideration of pollution impacts is good. The proposers should not assume that using one method will capture the necessary data on all species. The

proposal is well related to the Fish and Wildlife Program. The river work is not “ecosystem” (habitat) but fish oriented. The tributary work is more ecosystem oriented. The write-up does not seem current; FY 96 results are given. The methods are provided in detail but there is not much rationale. It needs better coordination with other Kootenai River projects, including others by the KTOI.

**Focus Watershed Coordination--Kootenai River Watershed
9608720**

ISRP Evaluation: Inadequate proposal, adequate purpose
This is a Watershed Council proposal that falls short of providing concrete plans. Thus, it ranked low in the set. The abstract needs to be better written. The objectives are not clear in text. It shows a strong collaboration with two Kootenai projects and should include more coordination with other projects. The focus here is on public interaction, which may be different enough from other efforts in the basin to warrant funding.

LOWER SNAKE SUBREGION

Lower Snake Mainstem

**Recondition Wild Steelhead Kelts for Repeat Spawning
9090**

ISRP Evaluation: Inadequate
This proposal is for a different technological approach to increasing fish populations, “reconditioning” of potential repeat spawners. The proposal has a number of significant flaws. It does not adequately describe reconditioning and needs more scientific information on repeat spawners. A study of the occurrence and importance of repeat spawners would provide important data. The reconditioning portion of the proposal should be viewed with caution, as it could be harmful to steelhead populations, particularly if repeat spawners are important to reproduction.

**Protect Critical Salmonid Habitat & Habitat Restoration Investments
9202408**

ISRP Evaluation: Inadequate, Law enforcement
This is a weak proposal for law enforcement to ensure efficiency of other programs. Although some desired results are listed, data or criteria for achieving these results are not given.

**Assessing Summer & Fall Chinook Salmon Restoration in the Snake River Basin
9403400**

ISRP Evaluation: Adequate

This is a well-written proposal that includes basic research on habitat and fish life history, as well as a comparison of hatchery and wild fish. Under objective 3, the proposal includes a broodstock management plan, but does not detail the criteria or data collection to develop the plan. Source stocks and the genetic and other risks are not described or assessed. The need for a broodstock plan or facility is not justified. **The ISRP does not support the broodstock portion of the study.** This is a four-year old project that have should reported some results.

**Pittsburg/Captain John Rapids/Big Canyon Acclimation Facilities (This
Combines Projects 9801005, 9801007, & 9801008)
9801005**

ISRP Evaluation: Inadequate

This proposal is for acclimation, rearing, and release of fall chinook salmon with the ultimate goal of increasing chinook production, but the proposed work is not technically well justified. There are many biological goals in the Fish and Wildlife program with which this project could conflict, and these are not adequately taken into account. The goal to double production may not be possible and attempts to do so could harm the ecosystem.

**Demonstrate that a Translucent Pipeline Feels Normal to Fish
9052**

ISRP Evaluation: Inadequate

This proposal is poorly written. The idea presented is not scientifically well justified. The work has no clear programmatic value.

**Evaluate Status of White Sturgeon in the Hells Canyon Reach Snake River, ID
9056**

ISRP Evaluation: Adequate

The proposed work and its value are clearly described and the study design looks good. Reviewers had only minor cautionary comments about the proposed work. Relying on angling for sampling may bias the sample by age; however, the principal investigators are primarily interested in older fish, which are susceptible to angling. The principal investigators appear to have a narrow expectation of what age-structure indicates a healthy population.

**Consumptive Sturgeon Fishery-Hells Canyon and Oxbow Reservoirs
9093**

ISRP Evaluation: Inadequate

This proposal is for evaluation of a put-and-take sturgeon fishery. Although a measure addresses this, the action also conflicts with many others measures. The proposed work is not biologically supportable. Although the activities have strong

potential to affect other organisms, there is no monitoring and evaluation for populations other than sturgeon, so effects on other organisms cannot be detected.

Clearwater

Clearwater Anadromous Fish Hatchery Proposals

Nez Perce Tribal Hatchery

8335000

ISRP Evaluation: Inadequate

This proposal is for hatchery supplementation of fall and spring chinook salmon. However, the proposal does not establish that the proposed activities are likely to result in benefits to fish and wildlife and the proposed activities are likely to cause problems for wild fish and other biota. Overcoming egg mortality in streams has not been shown to increase fish populations. Fish passage remains as an unaddressed problem to the work. This proposal relies on references to extensive past studies, but does not adequately describe findings from the studies. A clear monitoring and evaluation plan is not yet developed.

Clearwater Habitat and Anadromous Fish Research Proposals

Characterize & Quantify Residual Steelhead in the Clearwater River, ID

9011

ISRP Evaluation: Inadequate, perhaps technically sound if coordinated with proposal 9082 (below)

This proposal is generally well written; however, there is not adequate justification of the need for the work. The problem to be studied is not clearly described and the proposal does not show how the study addresses programmatic needs. The question to be addressed appears to be of interest but not of high importance. The proposal also does not show that the goals of the study are reachable with the study described. The proposal does not identify the treatments and controls for the experiment. How many “treatments” (differing in hatchery or release regimens) are there? Exactly what hatchery practices will be tested? How was it determined that the sampling effort would be sufficient? The experimental design is probably adequate if coordinated with proposal 9082, but the proposal does not detail its connection with proposal 9082, although the principal investigators have the same address, and the subjects seem related.

Evaluate Feed Strategies to Reduce Residualism & Promote Smolting in Steelhead

9082

ISRP Evaluation: Inadequate, perhaps technically sound if coordinated with proposal 9011 (above)

This proposal is generally well written; however, the programmatic value of the work is not justified. The proposal does not establish that reducing residualism will address the ultimate problem of low fish survivorship and return. The experimental design is adequate if tied to 9011, but no connection is shown, although the principal investigators have the same address and the projects appear to be related. The proposal does not mention volitional release, which other hatchery systems claim reduces residualism. Although the project title says “reduce residualism”, the study focuses on adult returns, and residualism is apparently not measured. It appears that the principal investigator will not be able to distinguish residualism from mortality. The goal of the study may not be attainable with the study design described. Objectives 3 and 5 of the proposal appear worthwhile. The proposal should show that the supplementation is more beneficial and not just less damaging than alternative actions.

Evaluate Status of Pacific Lamprey in the Clearwater River Drainage, ID

9057

ISRP Evaluation: Adequate

This is a well written, clearly and thoroughly presented proposal for needed data on the life history and population status of lamprey. There may be a bias in the described sampling of juvenile habitat (only sampling where juveniles are expected); thus, sampling may need to be re-addressed.

Restore Anadromous Fish Habitat in the Little Canyon Creek Subwatershed

9059

ISRP Evaluation: Inadequate proposal, adequate purpose after revision

Restore Anadromous Fish Habitat in the Nichols Canyon Subwatershed of the Big Canyon Creek Watershed

9060

ISRP Evaluation: Inadequate proposal, adequate purpose after revision

Although the proposed work should be worth doing, and undoubtedly could do a lot of good if well-implemented, the proposals lack plans to measure (1) amount of soil prevented from entering the stream, (2) improvement in fish habitat, and (3) improvement in fish populations. A “predictive model” is probably inadequate for evaluation. The scientific basis for the work is not adequately described, although the effort may benefit fish and wildlife. What is the plan for inspection and compliance after year 5? Cost seems very high for a volunteer effort. The revision included more information on best management practices but did not provide sufficient details overall. The sampling locations for monitoring are not specified. Monitoring of fish redds is not described. The expected result is decreased sediment delivery, but the plan to monitor this is inadequate.

Restore West Fork Little Bear Creek for Steelhead 9118

ISRP Evaluation: Inadequate

This proposal is poorly written and does not describe how it fits into salmonid recovery in the Columbia River Basin. The problem is not well described nor is the number of miles of stream that are to be treated. As proposed, this project could result in a cycle of construct-flood-construct. The causes of the destruction should be addressed.

Protecting & Restoring Big Canyon Creek Watershed 9120

ISRP Evaluation: Inadequate after revision

This proposal lacks adequate scientific detail and justification. There is no evidence that the project is cast in the context of the watershed. The stated methods of stream habitat work are not well chosen and the proposal does not establish that personnel are qualified to do the proposed work. Some of the methods are of unproven benefit to fish and are more likely to do the opposite. In particular, there is overemphasis on using engineered structures and non-native plants. The proposal does not show how the work will benefit fish. The plan also does not seem to have enough emphasis on fencing (livestock exclusion and control), as it suggests that plantings are expected to be damaged by domestic livestock. No evidence is presented that the planting is needed. If livestock are fenced out, plants usually establish successfully. Restoring a more natural stream course (channel pattern) is not mentioned, e.g., relocating the channel, which has apparently been straightened, into old meanders or otherwise giving it more sinuosity. Restoring meanders and fencing might do most of what is needed to restore proper fish habitat, and the elaborately engineered structures might not be needed. Merely “stabilizing” stream banks is not very beneficial for fish if the stream course is too straight or otherwise the wrong shape. It is not clear how many miles of stream will be treated, but appears to be 4 miles. If so, \$814,000 is a lot of money—over \$200,000 per mile. This proposal sounds like a road project; is this appropriate for BPA funding?

Rehabilitate Lapwai Creek 9122

ISRP Evaluation: Inadequate after revision

This proposal appears to be almost solely a hard-engineering project. No justification is given for the actions to be taken and existing damage is not described in adequate detail. There is no evidence that watershed context has been considered. The plan lacks evidence of fish habitat knowledge. It is unclear that a channel form suitable for salmon or trout will be restored. The proposal does not say how “drop structures” are designed or how they will be built, and the importance of large woody debris is ignored. Council should consider if this project is appropriate for BPA funding.

**West Fork Squaw Creek Fish Passage Project
9163**

ISRP Evaluation: Adequate

This proposal is straight-forward and clear, and the project should be of value to fish. It includes a good description of the problem and of the habitat to be made available, but is brief on methods. The proposal should cite the abundant literature on culvert problems and solutions for fish. It should describe how or why the proposed bridge will be adequate, though it is expected that it will be far better than the culvert. It was not clear to reviewers that this work should be eligible for BPA funds.

**Enhance Fish, Riparian, & Wildlife Habitat within the Red River Watershed
9303501**

ISRP Evaluation: Adequate

The proposal's emphasis on experimental restoration is a strength, as are the inclusion of strong monitoring and evaluation protocols, and the transferal of these to education. The methods seem unnecessarily invasive and intensive. For instance, fertilizing and irrigating plantings suggests that the plantings are not expected to be self-sustaining. BPA should look at this budget, which seems expensive for restoration of only 4.4 miles of stream.

**Protection & Restoring the Lolo Creek Watershed
9607702**

ISRP Evaluation: Adequate

Restore Lolo Watershed

9607706

ISRP Evaluation: Adequate

These proposals adequately describe the problems and the likely benefits to fish and wildlife. However, each also has some negative aspects, as detailed below. Methods for measuring reduced sediment delivery to the stream are not adequately described. This proposal lacks a good monitoring plan. The watershed analysis should be done before the restoration activities, not after. The roads that will be de-commissioned are not well described. Do these roads cause the sediment problems?

**Protecting & Restoring Squaw & Papoose Creek Watersheds
9607703**

ISRP Evaluation: Adequate

Restore Squaw & Papoose Watersheds

9607707

ISRP Evaluation: Adequate

These proposals adequately describe the problems and the likely benefits to fish and wildlife. However, each also has some negative aspects, as detailed below. The proposals do not tell how reduction in sediment delivery will be measured. BPA should look at the budget. Is this cost sharing for BPA when Forest Service and NPT do the work and BPA is the funding source for both. It appears that in 1998,

\$109,328 will be spent to obliterate 10 miles of road. This is \$10,900 per mile or 4 times as much as in project #9607706 (Lolo Watershed). Why the disparity?

Final Design for Fish Passage Improvements at Lower Eldorado Falls

9607704

ISRP Evaluation: Inadequate

The goals of this proposal are not scientifically sound. The proposal is for work that would introduce non-native species, by opening the way for anadromous fishes to invade an area where they did not naturally occur, but where westslope cutthroat trout (and undoubtedly other fauna) do occur. Such efforts have become a controversial issue. The probable effects of anadromous invasion on the native biota should be discussed in the proposal.

Restore McComas Meadows

9607705

ISRP Evaluation: Inadequate after revision

This proposal is unclear. It does not adequately describe the history of the project and the area. The proposal is for stream protection along with planting of riparian vegetation. Although the proposal states that grazing has been removed for ten years, it does not adequately describe what is causing the current problems. In particular, if livestock have been excluded, one would expect that ample vegetation should regenerate. The proposal does not demonstrate that planting is needed. The proposal also is vague on habitat improvement methods, and the horticultural center is not described in enough detail. The budget is not adequately explained and should be analyzed by BPA (\$525,553 (1997-2003) to treat only 2.5 miles of stream)

Clearwater Subbasin Focus Watershed Program

9608600 and 9706000

ISRP Evaluation: Inadequate after revisions

The revised proposals include clearer objectives than the original, but the proposals remain carelessly written and not clearly justified. There is little description of implementation of restoration activities. These proposals list many partners. Can the partners do the analytical phase of scoping the problem without BPA funding?

Dworshak Dam Related Proposals

Evaluate Movement Patterns of Bull Trout in Dworshak Reservoir

9055

ISRP Evaluation: Adequate

This proposal is for good basic research on a threatened species with a clear tie to the Fish and Wildlife Program. The proposal defines a clear problem and need for study, but could better justify that the work to be done is important to recovery of bull trout. Although the sample size is good for a radio-tagging effort, it may not be adequate to meet all project objectives.

**Dworshak Dam Impacts Assessment & Fisheries Investigation
8709900**

ISRP Evaluation: Adequate

This proposal is for a fish management study that primarily considers the use of strobe lights to guide fish with the primary purpose to reduce entrainment and improve a reservoir fishery. The proposal does not clearly relate what is to be measured to the desired goals. There is a need for the information to be collected on kokanee populations and dam operations, but the problem with fish populations is not well described. In particular, the proposal does not establish that entrainment is causing the problem. It also does not describe the effects of the work on other fish and, generally, does not provide clear descriptions of how this project relates to others.

**Dworshak Impacts/M&E & Biological-Integrated Rule Curves
8740700**

ISRP Evaluation: Inadequate

This proposal is for work to identify dam-operation strategies to mimic a natural downstream hydrograph. The goal, understanding dam consequences on river hydrology and biology, is important to the fish and wildlife program. However, the proposal is often vague and confusing. In particular, methods are vague and there appears to be confusion of reservoir versus river health. The proposal states that rule curves will be based on analysis of plankton, which indicate reservoir conditions, but does not describe monitoring fish. The proposal emphasizes that there is potentially a difficult compromise between benefits for downstream anadromous fish versus above-dam resident fish.

Clearwater Resident Fish Artificial Production Proposals

**Nez Perce Trout Ponds
9501300**

ISRP Evaluation: Inadequate

This proposal for a put-and-take sports fishery is poorly written. Reviewers comment that the proposed work is not in the best interest of native species in the Columbia River Basin. The project deals with one of the most manageable of fishery situations (trout in ponds), yet there is evidence of mistakes in the past. The proposal does not demonstrate that the project managers implemented elementary principles of pond construction and management, which possibly would have avoided the mistakes. The proposal indicates that steps will be taken toward correcting past mistakes, but some major types of improvement in construction do not seem to have been considered (e.g., most advantageous pond location with respect to water supply, and ability to drain). Increasing depth of the existing ponds is essential, but the plan does not indicate that enough depth will be added to prevent winterkill or increase trout growth. Trout growth in these ponds has been

poor compared with other ponds in the region which are better built. The water sources for the ponds are inadequately described. The plan does not show that creating off-stream-channel ponds was considered; this would be far preferable and could probably greatly reduce or eliminate the ponds' apparent severe problems with siltation and nutrients. The proposal also indicates weak measures to reduce the bullhead population. Stronger measures should have been described such as for the ponds to be drained and the bullheads completely eradicated. The reference list is inadequate. It should contain basic books and articles on pond management for fish.

Genetic Inventory of Westslope Cutthroat Trout in the N Fork Clearwater Basin

9501600

ISRP Evaluation: Inadequate, adequate in part

The goal of this proposal appears to be to support a consumptive sports fishery. However, the project includes a genetic inventory, which would be valuable. The proposal suggests that the principal investigators intend to develop a genetically pure broodstock, but the justification for this is not well described or documented. The ISRP does not consider broodstock development or supplementation to be biologically supportable at this time. More must first be known about the fitness of fish in the wild. The proposal does not include a schedule that specifies actions that would result from various findings. These actions should include termination of the project if it does not look like it will be successful.

Grande Ronde and Innaha Subbasins

The Grande Ronde Northeast Oregon (NEOH) Proposals

The ISRP evaluated the Grande Ronde NEOH proposals as a set and found them to be inadequate. The proposals are for management actions associated with a very small number of returning salmon. Thus, it is particularly important for the work to be well coordinated, but the proposals are not adequately related to each other. These proposals include the use of captive broodstock and supplementation, but the proposals' description of methods does not ensure that the remaining population will not be harmed by the proposed activities. The objectives to expand the hatcheries are not well justified.

Northeast Oregon Hatchery Master Plan

8805301

ISRP Evaluation: Grande Ronde NEOH - Inadequate as a set
This proposal includes planning and construction.

**Plan, Site, Design, & Construct NEOH Hatchery--Umatilla/Walla Wall
Component**

8805302

ISRP Evaluation: Grande Ronde NEOH - Inadequate as a set

NE Oregon Hatchery Master Plan & Facilities (ODFW)

8805305

ISRP Evaluation: Grande Ronde NEOH - Inadequate as a set

This is in part a proposal to construct satellite hatchery facilities and ponds. The proposal does not describe how broodstock will be mined, which is a risky endeavor. The proposal does not adequately describe the relation of the work to the other Grande Ronde NEOH facilities. The methods should give assurance that the remaining population will not be harmed by the proposed activities, but they do not.

Grande Ronde Supplementation -- O&M/M&E -- Nez Perce Tribe Lostine

9800702

ISRP Evaluation: Grande Ronde NEOH - Inadequate as a set

The time specified to do pre-project evaluation to establish a baseline appears inadequate. Using six fish from the same brood year bottlenecks the population; thus, the effort is unlikely to achieve the goals and objectives of the project. How long do they need to run this program to reach their intended results? Are they accelerating inbreeding depression? The proposal does not adequately describe a monitoring and evaluation program. This proposal also does not ensure that the activities will not be harmful to the wild stocks. This proposal is not well justified as a research or conservation tool.

**Conduct Satellite Facility O&M & Program M&E for Grande Ronde Spring
Chinook Salmon**

9800703

ISRP Evaluation: Grande Ronde NEOH Inadequate as a set

Grande Ronde Captive Broodstock Proposals

Grande Ronde Basin Spring Chinook Captive Broodstock Program

9801001

ISRP Evaluation: Adequate

The proposal includes work to provide basic data on broodstock and wild populations that is important to have before the NEOH production and supplementation activities are implemented. These aspects of the project do not rely on the NEOH Grande Ronde hatchery to be implemented. Additionally, a population at critically low levels is targeted for attempted preservation using captive brood techniques.

**Captive Broodstock Artificial Propagation
9801006**

ISRP Evaluation: Adequate

This proposal includes work to provide basic data on broodstock and wild populations that is important to have before the NEOH production and supplementation activities in the Grande Ronde are implemented. These aspects of the project do not rely on the NEOH Grande Ronde hatchery to be implemented. The hatchery portions of the proposal include attempts to preserve several native populations.

Other Grande Ronde Production and Habitat Proposals

**Imnaha River Smolt Monitoring Program Project
8712703**

ISRP Evaluation: Adequate

This proposal is for work that provides valuable research data on life histories. However, the methods are vague and results to date are not explained. The proposal describes a lack of coordination with project 8712700; more efforts should be made to coordinate the projects.

**Grande Ronde Model Watershed - Project Planning/Support
9202601**

ISRP Evaluation: Adequate

The ISRP found this to be a very good watershed council proposal. The project appears to have a good track record of success, with a technical advisory committee. The description of the monitoring and evaluation could be improved to provide more detail.

**Grande Ronde Model Watershed Habitat Projects
9402700**

ISRP Evaluation: Adequate

This proposal clearly describes specific past and future activities of the Grande Ronde Model Watershed Project. The specific projects are well described, though applications of some management techniques are not well justified in the proposal. For instance, large-scale noxious weed control treatment is not always needed or biologically effective.

**Wallowa Basin Project Planning
9403900**

**Implement the Wallowa County/Nez Perce Tribe Salmon Recovery Plan
9702500**

ISRP Evaluation: Adequate after revision

9403900 is a proposal for a tribal liaison. It should be joined with 9702500, which describes the activities to be done by the liaison. The original proposals did not describe objectives, methods, or technical justification for activities. The revised proposal provides sufficient technical justification and more detail overall on the need for planning and coordination, but it does not clearly explain methods. The project needs to have clear criteria by which success of activities will be evaluated.

**Monitoring Water Quality with Data Collection Platforms
9029**

ISRP Evaluation: Inadequate

This is a proposal to collect data, but its relationship to the FWP is not developed. Plans for analysis and evaluation of the data are not given, nor is the need for the data established.

**Propagate Native Plant Species for Revegetation & Riparian Restoration
Projects
9085**

ISRP Evaluation: Adequate

This proposal is for a practical and simple goal, increasing use of native plant species in restoration projects. The goal is to grow about ten species of native plants. Methods for accomplishing the work are not well developed. Propagation methods should maximize genetic diversity within each species, but methods to achieve this are not detailed in the proposal. The proposal does not describe long-term plans for where plants will be propagated and grown. The proposal also does not list the projects that this project will service; thus, it also does not demonstrate the need to plant the plants. BPA should examine whether sites to be revegetated should be funded by BPA.

**Public-Private Cooperative Resource Management in the Lower Joseph Creek
Watershed
9119**

ISRP Evaluation: Adequate

This appears to be a watershed council proposal. The proposal's strengths include a good description of tasks and milestones, a quantifiable completion date of one year, and the use of a geomorphologist to provide needed expertise. The proposal does not describe how ecological inputs will be considered.

**Protect & Enhance Fish Habitat in Grande Ronde Basin Streams
8402500**

ISRP Evaluation: Adequate after revision

This proposal does not do a good job of presenting technical justification for the proposed work, though the goals are of value. The method section is vague and lacks description of how data will be analyzed and used. Monitoring and evaluation need to be better developed, and results-to-date of this long-term project should be presented for evaluation. For instance, the proposal lists the use of transect sampling and photo points as monitoring techniques, but does not describe how resulting data will be analyzed and interpreted. The biggest weakness with this proposal is that it has been implemented for fourteen years yet few results are described or reported; this brings success and accountability of the project into question. Many relevant studies on the Grande Ronde are not referenced or noted in the proposal. The proposal should give criteria for choosing areas for restoration.

**Upper Grande Ronde Habitat Enhancement
9608300 (was 9128)**

ISRP Evaluation: Inadequate proposal, adequate purpose after revision

The original proposal is not clear. Technical justification is inadequate and objectives and planned activities are vague. The description of monitoring is inadequate, and the proposal lacks criteria with which to measure the project's success. The revised proposal did a better job detailing the location of the project but otherwise did not improve significantly from the original.

**Northeast Oregon Wildlife Mitigation O & M Trust Fund
9096**

ISRP Evaluation: Adequate

**Northeast Oregon Wildlife Mitigation Project
9608000**

ISRP Evaluation: Adequate

Proposal 9096 is not particularly well written but includes the necessary information to establish a trust fund. It is the same proposal as 960800, but it is not clear if they are alternative proposals. The description of fire suppression raises concerns whether the land will be administered in a manner most beneficial to the habitat. Land management activities should be better described and justified.

**Securing Wildlife Mitigation Sites-Oregon, Ladd Marsh WMA Additions
9705905**

**Securing Wildlife Mitigation Sites-Oregon, Wenaha WMA Additions
9705912**

ISRP Evaluation: Adequate

These proposals are for acquisition of wildlife habitat. Both proposals give a good list of indicator and target species, but neither quantifies the habitat debt or what portion of the debt the project will mitigate. The land targeted for purchase appears to be valuable for both fish and wildlife.

Salmon River Subbasin

Chinook and Steelhead Natural Production and Supplementation Research

Analyze the Persistence & Spatial Dynamics of Snake River Chinook Salmon 9064

ISRP Evaluation: Adequate

This proposal is well written, states clear methods, and references relevant information. It offers a novel approach that could give illuminating and useful insights for salmon management. The data to be collected are useful independent of the hypotheses being tested.

Assess Adult Steelhead Escapement in the Secesh River System 9151

ISRP Evaluation: Adequate

This is a well-written proposal for valuable basic information. The Secesh River is a good area for the study. The proposal states the target product and deadline and describes how data will be analyzed. The proposal could be improved in several areas: The sampling scheme is not adequately described, nor is how data will be used to evaluate the method. The proposal should describe what reaches are to be sampled. Also, adequacy of the project timeline needs to be established (e.g., will the study allow enough time to quantify the abundance and timing of spawning?).

Monitor & Evaluate Genetic Characteristics of Supplemented Salmon & Steelhead 8909600

ISRP Evaluation: Adequate

This is a well-written proposal for needed information. This is the kind of work that should be done before major hatchery projects are implemented or expanded. Methods are thoroughly described and results to date have been published in the open literature. The small sampling of returning adults may limit what information can be gathered.

Salmon Supplementation Studies in Idaho Rivers 8909800-8909803

ISRP Evaluation: Inadequate proposals, adequate purpose

These are a series of proposals from NPT, IDFG, the Sho-Ban Tribe, and USFWS. The proposals are for important research with desirable objectives. However, the proposals do not adequately describe experimental design and methods to ensure that the studies will achieve scientifically sound results. Although the proposals state that lengthy reports justify the experimental design, the important aspects of the design, why they were chosen, and their strengths and limitations should be summarized in the proposals. Otherwise, the technical soundness of the work cannot

be evaluated. This project is over eight years old, but the progress and results to date are not adequately described. Reviewers wondered whether the small numbers of returning fish would allow the objectives of the work to be accomplished. Careful design of experiments and analyses might minimize these sorts of problems.

**Steelhead Supplementation Studies in Idaho Rivers
9005500**

ISRP Evaluation: Adequate

This proposal has three objectives. The first objective is to compare wild and hatchery returns, but returns have not been high enough to implement this objective. This should be done only with considerable caution, due to the extremely small numbers of fish remaining. The second objective is to evaluate whether returning hatchery adults spawn naturally. The third objective is to gather baseline background data. The baseline study ought to be done. The experimental design should be described in greater detail, but is adequate to establish that such important factors as replication, control, and power have been taken into account. The paired watershed design is a good approach and the power analysis establishes that an ecologically meaningful project can be conducted with the sample size possible.

**Idaho Natural Production Monitoring & Evaluation Program (INPMEP)
9107300**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal is for archival data, including data from the supplementation studies. The proposal is diffuse and unfocused, with no clear relationship of activities. The description of tasks lacks detail, and sampling procedures are not described. The proposal needs to provide a conceptual framework for evaluating the data. The proposal does not describe the quality of the data or how that might be assessed. For instance, are data adequate to detect status and trends of populations?

**Monitor Listed Stock Adult Chinook Salmon Escapement
9703000**

ISRP Evaluation: Adequate

There is a programmatic need for the information this proposal is to gather. The area to be monitored is a reference site against which supplementation can be gauged. The video technique appears adequate.

Snake River Chinook Recovery Projects: Artificial Production, Captive Rearing and Captive Broodstock Proposals

Johnson Creek Artificial Propagation Enhancement -- O&M & M&E

9604300

ISRP Evaluation: Inadequate

This proposal is to build a new facility for collecting and raising new broodstock (a small-scale production initiative), but it does not give adequate justification of the need for this activity. The proposal does not adequately describe or justify the methods to be used, though it states that NATURE's technology will be used and evaluated. Likely effectiveness of supplementation is not well addressed, though the five-generation supplementation timeframe is consistent with RASP guidelines.

Manchester Spring Chinook Broodstock Project

9606700

ISRP Evaluation: Adequate

This proposal is for work to provide an insurance program for stock in critical condition in the wild. This proposal describes the benefits and the risks of their planned activities. The Manchester facility provides salt water rearing that has proved beneficial. Personnel appear to be highly technically competent. The effectiveness of broodstock supplementation needs to be carefully analyzed.

Listed Stock Chinook Salmon Gamete Preservation

9703800

ISRP Evaluation: Adequate

This is well written proposal for a timely activity. It provides a partial alternative to captive broodstock for short-term preservation of critically low populations and breeding cohorts.

Captive Rearing Initiative for Salmon River Chinook Salmon -- M&E

9700100 and 9801002

ISRP Evaluation: Adequate

These proposals are for a captive rearing program to preserve endangered stocks of Snake River chinook salmon. The proposals do not reference relevant NMFS studies on captive rearing. Captive rearing is a new approach and should be implemented cautiously. The relationship of 9700100 to 9801002 needs to be better described. 9801002 includes what appears to be a good monitoring and evaluation project. The research and monitoring should come before full-scale supplementation actions. This project should be combined with those for which it is intended to provide monitoring and evaluation, so that overall soundness of the project, including its evaluation aspects, can be judged.

Redfish Lake Sockeye Salmon Captive Broodstock and Snake River Sockeye Research Proposals

Redfish Lake Sockeye Salmon Captive Broodstock Program

9107200

ISRP Evaluation: Adequate

This proposal is for important research on an endangered species that needs to continue and is adequately described. The proposal should clarify at what point the project will be determined a success or a failure. The development of hypotheses to be tested is weak, but could be considerably strengthened with a little more thought; a few are confounded or otherwise not testable, but many are tractable.

Redfish Lack Sockeye Salmon Captive Broodstock Rearing & Research

9204000

ISRP Evaluation: Adequate

This proposal addresses a critical situation, as very few sockeye have returned to Redfish Lake in recent years. The size of the remaining fish population constrains what can be done, and it may be too late for captive broodstock to be effective. Nevertheless, the attempt to preserve the stock is warranted.

Life History & Genetic Analysis of *Oncorhynchus Nerka*

9009300

ISRP Evaluation: Adequate

This is a well-written proposal for work that is very important to the program because it traces the genetic effects of hatchery fish on wild fish.

Snake River Sockeye Salmon Habitat & Limnological Research

9107100

ISRP Evaluation: Inadequate

This proposal is for management and research to enhance sockeye salmon populations in Redfish Lake. The focus on whole lake limnology is a strength. The key management technique being tested is whole-lake fertilization. Fertilization is potentially damaging and the proposal does not sufficiently describe the technical justification for using this method. The proposal does note the success of Canadian fertilization programs and a suggestive short-term result was obtained in Redfish Lake. However, the proposal does not demonstrate that fertilization is necessary, likely to be effective, or safe to use in their situation. In particular, potential effects to the lake's food web, and how they can be monitored and evaluated, are not addressed. The experimental design, which compares lakes with both salmon and fertilization to one lake with neither, is flawed by confounding and lack of replication or control.

Salmon River Artificial Production Proposal

Salmon River Production Program

9705700

ISRP Evaluation: Inadequate proposal

This is a poor proposal that lacks adequate detail to justify either the ideas underlying the proposed work or the methods of execution of the work. It appears that methods of operation, supplementation, and monitoring and evaluation are not yet determined. There is not technical justification for the proposed work.

Salmon River Subbasin Habitat Proposals

Restore the Salmon River, in the Challis, Idaho Area, to a Healthy Condition through the Efforts of a Collaborative, Locally Based, Watershed Group

9009

ISRP Evaluation: Adequate

This is a reasonable proposal to restore twelve miles of the Salmon River. The work is biologically justified, but there is little description of methods; in particular, are natural features to be restored? Geomorphological expertise should be included. The monitoring section lists who will do the monitoring but does not describe the monitoring adequately. The budget is efficiently allocated to restoration activities with low administrative costs.

Restore Habitat within Dredge Tailings on the Yankee Fork Salmon River

9014

ISRP Evaluation: Adequate

This is a worthwhile, reasonable proposal. The incorporation of expertise in geomorphology is a strength. The methods should be more thoroughly described.

Reduce Sediment Delivery from Kline Mountain Road to the S.F. Salmon River

9034

ISRP Evaluation: Inadequate

There is not adequate justification of programmatic need in this proposal. Monitoring is not adequately described nor is the reduction of sediment input. This is an appeal to BPA to reduce sediment delivery from Forest Service roads. Is BPA the appropriate funding source for this road improvement?

Stabilize Blowout Creek (South Fork of Meadow Creek)

9051

ISRP Evaluation: Inadequate after Revision

This proposal is for a complicated stream and riparian habitat restoration project. Reviewers had many questions about the methods to be used. The proposal does not explain the methods to be used. In particular, the ISRP asks what methods will be used to save the species in the current channel during restoration. Citing the Rosgen

method without adequate description of specific methods is not adequate. Geomorphological expertise should be included. Monitoring also is not well described. Use of prescriptions from a watershed analysis is a positive aspect.

Assessment Salmon River Subbasin

9121

ISRP Evaluation: Inadequate

This proposal has a valuable general goal and addresses a large area of important fish habitat. However, the proposal is vague and too little detail is given to justify the work. The proposal appears to be for an assessment of existing information; no on-ground assessment activities are planned. The objectives section is vague and criteria for assessment or decision-making are not detailed. Methods and monitoring plans are vague or absent. The proposal should describe other assessment efforts and its relation to them.

Feasibility of Sockeye Salmon Reintroduction to Wallowa & Warm Lakes

9152

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal is for a good purpose, but the work as proposed is not supportable. The project endorses an ecosystem approach to the problem, which is a positive, but a clear conceptual framework is not posed. The work relies on models, which are not described, and no personnel are shown as having the needed modeling expertise. It is not clear how this could support successful salmon reintroduction. The proposal should have a defined window for success, beyond which efforts should not be extended.

Idaho Model Watersheds Admin/Impl Support

9202603

ISRP Evaluation: Adequate after revision

The original proposal was poor, giving inadequate description of benefits to fish and wildlife. The revised proposal described monitoring in greater depth, but still has only marginally adequate description of methods. 9202603 and 9401700 are linked and should be combined for project review.

Idaho Model Watershed Habitat Projects

9401700

ISRP Evaluation: Adequate after revision

The original proposal was poor on technical background. It described good general objectives, but it was not clear what methods would be used to achieve these objectives. The revised proposal gives a much clearer explanation of how watershed assessment was used to establish restoration priorities and monitoring.

**Salmon River Anadromous Fish Passage Enhancement
9306200**

ISRP Evaluation: Inadequate proposal, adequate purpose

This proposal is for an irrigation project; BPA should establish whether it should be eligible for program funding. Reviewers noted that the proposal gives no guarantees that the water to be conserved will be reserved for instream use.

**Idaho Fish Screening Improvement--O&M
9401500**

ISRP Evaluation: Adequate

This proposal identifies a clear problem and describes the benefits it will provide to fish. The work is likely sound and of value; however, monitoring is not adequately described.

**Salmon River Habitat Enhancement
9405000**

ISRP Evaluation: Adequate

This is a well-written proposal for critical habitat that is of programmatic value. It includes good monitoring and evaluation plans.

**Irrigation Diversion Consolidations & Water Conservation--Upper Salmon
River Idaho
9600700**

ISRP Evaluation: Adequate

This is a good proposal for a good idea to conserve water, but the proposal does not ensure that the water will be dedicated to instream use. Monitoring is not sufficiently described.

**Introducing Systems Science to Planning & Implementing Fish & Wildlife
Recovery in the Watershed
9043**

ISRP Evaluation: Inadequate proposal, adequate in part

This proposal suggests using systems models to explore the outcomes of different land use decisions that are alternatives in restoration. The proposal identifies the problems that will be addressed and establishes the value of a modeling approach. The objective to develop a model appears supportable, but the implementation phase is not technically justified. Evidence that the proposed work could obtain needed coordination with other groups is not presented. Although modeling is generally considered to offer an economical alternative to other ways of gathering data for decision-making, this proposal is surprisingly costly. Activities to follow the modeling phase are not adequately described.

UPPER SNAKE SUBREGION

Upper Snake Mainstem

Idaho Water Rental--Resident Fish & Wildlife--Phase III 9106700

ISRP Evaluation: Adequate

This proposal is well related to other projects and describes programmatic need for the proposed work. The experimental design needs to be developed in more detail, but the project is still in evaluation phase. The proposal describes past results, but should do so with more interpretive detail.

Habitat Restoration/Enhancement Fort Hall Reservation 9201000

ISRP Evaluation: Inadequate

This proposal is diffuse and confusing, with many unjustified projects and methods. The habitat restoration portion of the proposal is well written and well justified, and past efforts appear to be successful; however, the supplementation portion of the project, intended to create a subsistence and trophy fishery, is not technically justified. The proposal indicates that the project has been successful in exposing spawning gravels and that native Yellowstone cutthroat trout remain in the stream (p. 5); thus, the fish population should regenerate without supplementation with hatchery fish. The planned supplementation seems to involve the idea of diluting away the genetic introgression in the Yellowstone cutthroat stock by injecting gametes from a pure strain at the rate of 20-30% per year. No genetic staff is shown, and no genetic basis for this plan is given. There is not support for the genetically pure broodstock methods on which the proposed work relies. The goal of deterring non-game fish species also should be viewed cautiously. Additionally, some of the study methods are inappropriate or poorly chosen. For example, Mesa and Schreck (1989) did not advocate using a “modified single-pass method” of electrofishing for population estimates to reduce injury, and the Shannon-Weaver diversity index probably cannot be equated with “invertebrate community health,” as the proposal implies. A more aggressive and clear-cut grazing scheme is needed. Literature review on results of habitat work is too skimpy.

Shoshone-Bannock/Shoshone-Paiute Joint Culture Facility 9500600

ISRP Evaluation: Inadequate

This proposal is for a hatchery facility, but the hatchery does not appear to be technically justified. The proposal is for hatchery production of native stocks of cutthroat trout and for production of rainbow trout for use in put-and-take fisheries. However, the area has a history of ecological problems with resident fish caused by introduction of hatchery rainbow trout. Also, it is not clear that hatchery cutthroat are needed, as native stocks are present, and the genetic and ecological effects of

hatchery fish could be problematic. The proposal does give needed consideration to genetics, but, although tasks involve genetic analyses, no geneticists are listed and no methods for this are detailed.

**Public Fisheries Education/Enhanced Protection of Resident/ESA Species
9202406**

ISRP Evaluation: Adequate

The proposal clearly describes a problem regarding bull trout identification. The proposed solutions are increased education and enforcement. The principal investigators previous work in these areas is highly regarded. Monitoring and evaluation should be better described.

**Evaluate Rebuilding the White Sturgeon Population in the Upper Snake River
9700900**

ISRP Evaluation: Adequate

This is a strong proposal in all parts. It provides good background, history, and rationale for work that addresses previously identified critical uncertainties. Data will be collected to define and test management objectives and outcomes.

**Snake River Native Salmonid Assessment
9800200**

ISRP Evaluation: Adequate

This proposal is for assessment of life history, population status and trends, and threats to native salmonids, directed to meeting the goal of protecting and restoring self-sustaining populations at harvestable levels. The proposal describes relations to other projects to avoid duplicating efforts and gives attention to avoiding negative effects of research on fish populations. The proposal is for work over a very large area, and may be overly optimistic regarding this, although the proposal does describe prioritizing streams to estimate population size. The panel noted that population structure should be measured as well. The proposal is well referenced.

**The Shoshone-Bannock Critical Ecosystem Reclamation, Recovery & Recharge
Project (Ecosystem Project)
9042**

ISRP Evaluation: Inadequate, adequate educational purpose

Teaching youth restoration activities is worthy, but more detail should be given on the restoration activities to be undertaken. In the current proposal, projects are not adequately described to judge their technical soundness or value. Some methods that are listed seem poor choices. For instance, use of rip-rap and incubation techniques should be viewed with caution and could be harmful. The proposal should ensure that biologists will be involved in the scientific aspects of the project.

**Southern Idaho Wildlife Mitigation
9505700**

ISRP Evaluation: Adequate

This is a very good wildlife mitigation proposal. It is integrated with other projects and describes benefits to many fish and wildlife species. It identifies criteria for prioritization of lands for acquisition. Negative points include some confusion of tasks with objectives, which are thus sometimes vague, and an emphasis on active restoration without justifying the need for a management intensive approach. The 1999 budget total should be checked.

Malheur Subbasin

**North Fork Malheur River Bull Trout and Redband Trout Life History Study
9107**

ISRP Evaluation: Adequate

This is a poorly written proposal, but a good idea. The proposed work would provide important basic information that would be valuable to the region. Monitoring is not well described.

**Stinkingwater Salmonid Project
9701900**

ISRP Evaluation: Adequate

This proposal is for good baseline assessment work, to provide data for decision-making that will precede further management activities. The goals are protection and enhancement of resident fishes in an area that contains naturalized brook trout from previous stocking. The project history and methods are well written.

**Acquisition of Malheur Wildlife Mitigation Site
9106**

ISRP Evaluation: Adequate

This proposal for land acquisition to mitigate wildlife losses aptly describes the land to be acquired and justifies the acquisition. The hay production portion of the proposal should be viewed cautiously, as it may involve conflicting goals. For instance, is water from the stream to be used to irrigate hay? The restoration and management activities may be more intensive and active than is required. The ranch to be acquired is tied to BLM land and State lands; thus, management should be coordinated.

**Burns Paiute Mitigation Coordinator
9130**

ISRP Evaluation: Adequate

This is a well-written proposal. The description of process and methods are adequate, however, the proposal does not sufficiently describe tangible results or the specific projects to be undertaken by a coordinator. The proposal should be

combined with those for actual work to be undertaken, so that the scientific soundness and value of the project can be evaluated.

Owhyee Subbasin

Reintroduction of Salmon & Steelhead-Mary's Creek & Owyhee River on the Duck Valley Reservation

9022

ISRP Evaluation: Inadequate

Returning anadromous fish to the Owyhee is a worthy goal, but the proposed work is not technically convincing. Getting the fish over Hells Canyon Dam may be the easiest part of the proposed work. The effects of non-native predator fish, high water temperatures, and agricultural factors are not addressed in the proposal; these are likely of high importance and must be considered in designing a convincing plan.

Genetic Analysis of Native Fish on the Duck Valley Indian Reservation

9020

ISRP Evaluation: Inadequate

This is a poorly written proposal, with vague objectives and methods, but is for a good idea. There should be an overall assessment of fish and biota in the area. Inadequate detail is given on methods (e.g., sample sizes and locations, methods for analyzing genetic data, etc), so the technical quality of the work cannot be judged.

Stocking Fish in Lakes & Streams on the Duck Valley Indian Reservation

8815600

ISRP Evaluation: Inadequate

This proposal is for a put-and-take sports fishery; it is not a supplementation proposal. The proposal does not adequately consider impacts on resident fish, and results to date of the project are not presented. The proposal lacks adequate plans for monitoring and evaluation. No mention is made of stocking rates or of return-to-the-creel rates, even though a creel census has apparently been conducted. Much equipment is listed, but most of it does not look relevant to a stocking program. The proposal presents no information on the suitability of the waters for the kinds of fish being stocked.

Billy Shaw Wetlands Catch & Release Fishery O&M

9501500

ISRP Evaluation: Inadequate

This proposal is disjointed. Proposed work ranges from protecting and enhancing wetlands to cleaning campgrounds and stocking undetermined fish species. The plan to develop a sport trophy fishery is shaky, particularly because the fish species to be used has not been selected. Do the proposers know that native fishes (trout and others) are not already present? The need for the project is not demonstrated. The

planned stream habitat techniques are questionable. The combination of habitat work and stocking is not well related or well justified and appears to be questionable. The ISRP believes the proposed work could be harmful to native fish and is not biologically supportable.

Enhance & Protect Habitat & Riparian Areas on the Duck Valley Indian Reservation

9701100

ISRP Evaluation: Adequate

This proposal is for a diversity of activities, some of which are clearly needed and valuable and other of which are either too poorly developed to be judged or have poorly justified methods or goals. The scheme for fencing spawning areas (p. 5) looks inadequate. It appears the proposal is to protect and maintain some fairly arbitrary sites. The proposal includes a task to establish a recreational vehicle dumpsite but does not describe how this will benefit fish and wildlife. Many of the methods are not adequately explained. The proposal lists planting trees and native plants and not using rocks and large debris; if this is intended as attempting natural restoration, the methods sound appropriate for an area that has been disturbed in the past. The survey of resident fish and invertebrates is a good idea.

Mitigate Wildlife Losses on the Duck Valley Indian Reservation

9021

ISRP Evaluation: Inadequate

This proposal is vague and poorly written, with confused objectives. It confuses losses with status; "Losses" implies a time trend, for which the proposal does not provided data. The budget should be examined by BPA. Although the project has laudable goals (e.g., a wildlife inventory), its relation to the Fish and Wildlife Program is unclear and the methods are inadequately described.

Enforcement of ESA Laws on the Duck Valley Indian Reservation

9023

ISRP Evaluation: Inadequate

This proposal is not technically complete. The objectives and planned activities are not well described. Enforcement or better enforcement may very well be needed, but this proposal presents no solid justification for it. It is not clear how the proposed work would be implemented or evaluated.

Boise River Subbasin

Kirby (Atlanta) Dam Fish Ladder 9053

ISRP Evaluation: Adequate

This is a poorly written proposal, but a good idea. The objective is biologically sound and should be done. Scientific background and justification are provided. The proposal should not be in the “Watershed” category.

TABLE OF PROPOSALS IN ORDER LISTED ABOVE

The description of the columns in the table and how the ISRP arrived at its findings is described in detail in the text of the report on pages 18 to 28.

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