Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

October 16, 2001

In reply refer to: KEW-4

Mr. Frank L. Cassidy, Chairman
Northwest Power Planning Council
851 SW Sixth Avenue, Suite 1020
Portland, OR 97204

Dear Chairman Cassidy:

We recognize that in the Northwest Power Planning Council's (Council) deliberations on project recommendations to the Bonneville Power Administration (BPA), the Council, in fulfilling its role as a regional planning body, will be considering a wealth of public policy issues that may influence the selection of projects recommended to us.
We offer the following comments and policy perspectives on the Plateau Provincial for your consideration. The focus of our review was on new proposals and on-going projects intended to benefit anadromous fish and bull trout. Our intent is to provide the Council with information that it can use as it prepares recommendations to the Bonneville Power Administration (BPA) for Fiscal Year (FY) 2002 fish and wildlife mitigation funding in the Columbia Plateau Province. Now, more than ever, there is a need to prioritize BPA-funded fish and wildlife projects in the Columbia River Basin as the ecosystem (All-H) approach to mitigation and recovery is implemented and the amount of desired funding for such an approach exceeds that which is available. Care must be taken to direct funding to the projects that provide the most biological benefit at the least-cost.

We believe that the real hope for implementation of an integrated and prioritized fish and wildlife mitigation and recovery program resides with development and implementation of Subbasin Plans through the Council's Subbasin Planning Process. It is through these Subbasin Plans that limiting factors and site-specific biological objectives will be identified that will, in turn, allow for a more targeted direction of available resources. Until those plans are agreed to and available to the region, we are advancing what we believe are reasonable ranking criteria in order to protect the region's current investment and to expand actions in ways that meet our Endangered Species Act obligations while being mindful of the interests of the ratepayers of the Pacific Northwest. We also believe that these ranking criteria should not be overly complex, while recognizing the enormous complexity of the issues, and should also be used to inform the subbasin planning process.

As BPA reviewed both the on-going projects and new anadromous fish and bull trout proposals for the Columbia Plateau Province, we considered the BPA/Council solicitation letter of March 7, 2001, the Independent Scientific Review Panel's Columbia Plateau Provincial Review Report (ISRP 2001-8), and comments from our own Fish and Wildlife Project Managers and Contracting Officer's Technical Representatives (PM/COTR).

The PM/COTRs did not comment on contractor past performance in this process. Although necessary, this task must be engaged methodically on a project-by-project basis. Our preferred strategy is to work first with the contractor to improve performance where that is an issue. We do not want to risk loss of a particular project through this review process if the performance issue appears to be resolvable between our PM/COTRs and the contractor. We believe that implementation of our Fish and Wildlife Policies and Procedures will greatly improve our ability to ensure the satisfactory performance of our contractors. In addition, we have not yet evaluated these proposals thoroughly for potential "in lieu" issues; that review is forthcoming.

Attached are a description of the ranking system we used, our general comments on the subbasins themselves and specific comments on the individual proposals. We hope that this information is helpful as you formulate funding recommendations to us. Please give me a call if you have any questions.

Sincerely,

Sarah R. McNary
Director, Fish and Wildlife

cc:
Dr. Brian Allee, Columbia Basin Fish & Wildlife Authority
Mr. Brian Brown, National Marine Fisheries Service
Mr. Doug Marker, Northwest Power Planning Council

REVIEW PROCESS

CRITERIA:

We gave **top priority** to existing (on-going) projects where the objectives have been, and still are, clear and where not funding the project would significantly jeopardize the investment that the region has made to date, whether or not the project meets a particular Reasonable and Prudent Alternative (RPA) action under the National Marine Fisheries Service's (NMFS) 2000 Biological Opinion or measure under the U.S. Fish and Wildlife Service's (USFWS) 2000 Biological Opinion on the FCRPS. We recognize that this is a subjective judgment. There are some on-going projects that we believe should not continue into FY02. In addition, there are some on-going projects that we believe should be put on hold until the development of specific subbasin plans that may, or may not, call for their continuance.

Criteria and Ranking Factors for this evaluation were drawn from the solicitation letter of March 7, 2001, the Independent Scientific Review Panel's (ISRP) Columbia Plateau Provincial Review Report (ISRP 2001-8), and internal discussions. Given the large number of proposals and the limited review time, this review is reported accordingly in a subbasin format with comments as appropriate. As we ranked the on-going project proposals, we used the following criteria. These criteria were also applied to new proposals:

In order for a project to be considered for funding in FY02, whether a new proposal or an on-going project, the project must:

- Be consistent with the Council's Fish & Wildlife Program;
- Not be in conflict with NMFS' or U.S. Fish and Wildlife Service's (USFWS) 2000 Biological Opinions or the Action Agencies Implementation Plan;
- Be consistent with Federal trust and treaty responsibilities;
- Have scientific merit (rely largely on ISRP);
- Be implementable (technical feasibility); and,
- Include the appropriate level of effort and costs.

RANKING SYSTEM:

New proposals and **on-going** projects that meet the above criteria were assigned to one of four categories based on the following:

Category A List – An **on-going** project that either addresses a specific RPA in NMFS' 2000 Biological Opinion or measures in the USFWS' 2000 Biological Opinion, or, if not, the objectives of the project have been, and still are, clear and where not funding the project would significantly jeopardize the investment that the region has made to date.

A **new** proposal that addresses a specific RPA in NMFS' 2000 Biological Opinion or a measure in USFWS' 2000 Biological Opinion, is consistent with the Action Agencies' Implementation Plan and/or provides for cost sharing through the U.S. Department of Agriculture's Conservation Reserve Enhancement Program (CREP).

Category B List – An **on-going** project that should await completion of a Sub-Basin Plan as it involves: a) significant and unresolved policy issues, b) substantial costs, and/or c) complexities that should not be addressed until a Sub-Basin Plan is completed.

Category C List – A **new** proposal that should await completion of a Sub-Basin Plan as it involves: a) significant and unresolved policy issues, b) substantial costs, and/or c) complexities that should not be addressed until a Subbasin Plan is completed; or should await BPA's development of a land and water acquisition policy.

Category D List - **New** proposals or **on-going** projects that do not meet all of the above criteria.

OTHER CONSIDERATIONS THAT MAY INFLUENCE PROPOSAL SELECTION

DIRECTION IN PROVINCIAL SOLICITATIONS

There are a number of fish and wildlife plans and reports in the region that espouse good priorities, strategies, and criteria for developing and selecting projects. This critical direction, however, was not included in the solicitation for Columbia Plateau Province proposals. Only a single, generic criterion, consistency with the Council's Fish and Wildlife Program, appeared as a requirement in the solicitation letter. Sponsors were only "encouraged" to note alignment of proposals with RPAs from the 2000 FCRPS Biological Opinions. Consequently, many projects are proposed that are meritorious, but are inconsistent with regional direction. This observation has led us to conclude that future solicitations must include sufficient direction to potential project sponsors to avoid unnecessary effort in preparation of proposals, and lack of prioritized focus in rebuilding fish and wildlife resources.

Future solicitations to implement the rolling provincial review process, future sub-basin plans, and the FCRPS Biological Opinions should include explicit direction with regard to the key priorities, strategies, and criteria arising from the plans and reports. This will focus subsequent proposals towards the priorities of BPA, the Council, NMFS and USFWS while being mindful of all applicable laws. The policy and technical direction in the solicitation should mirror the subsequent criteria used in the proposal selection process.

MANAGING AND MONITORING SPENDING LEVELS

As the rolling provincial review process continues, BPA, working closely with the Council, intends to maintain and review spending levels by province, by sub-basin, and by ESU to help ensure that available funds are appropriately allocated within the Columbia River Basin based on the priorities and strategies of the various fish and wildlife plans, the biological status of ESA-listed stocks, performance expectations of the Biological Opinions, and other biological and policy considerations.

WILDLIFE CREDITS FOR RIPARIAN HABITAT ENHANCEMENT

The wildlife mitigation portion of the Fish and Wildlife Program is based on replacing the habitat units lost by the development and operation of the FCRPS. BPA has been credited for habitat units by the purchase and management of private lands. For every one habitat unit existing within the purchased properties, BPA is credited for one unit of lost habitat. Under the fish mitigation portion of the Program, there has been considerable protection and enhancement of riparian lands for fisheries purposes. This riparian work is accelerating as a result of the NMFS' Biological Opinion and the availability of USDA funds to mitigate for effects of agricultural activities.

To date, BPA has not pursued credit for the benefits to wildlife from the riparian enhancement activities in the tributary watersheds for fish. Riparian habitat is largely what was lost by the development of the FCRPS and it is arguably the most critical and valuable of all wildlife habitats. BPA, in coordination with the Council and regional fish and wildlife managers, intends to investigate the value of its investments in tributary riparian habitat enhancement for wildlife and seek credit towards its mitigation obligations.

LEVERAGING USDA FUNDS FOR HABITAT ENHANCEMENT

NMFS has stressed, as a priority, the need to leverage substantial funding from the USDA to help rehabilitate riparian habitats on agricultural lands. In the Columbia Plateau Provincial Review, several Soil and Water Conservation Districts (SWCD) and the Oregon Watershed Enhancement Board have requested BPA funding for new staff to work with private landowners in implementing best management practices on anadromous fish habitat. Concurrently, state and tribal fishery agencies have proposed projects with similar objectives, requesting BPA funding to maintain existing staff and to implement new habitat enhancement work.

BPA wants these two groups to combine their efforts to make the most efficient use of ratepayer funds towards implementing the Council's Fish and Wildlife Program and achieving the NMFS' Biological Opinion's ESA performance standards. State and tribal staffs could be detailed to the local SWCD to ensure effective use of USDA funds while they are available. Alternatively, the SWCD could delegate to the existing state and tribal staffs the role that would be performed by the proposed new SWCD staff. By either means, BPA potentially could save the costs of hiring new SWCD staff.

Additionally, the tenure of the USDA funding is not clear. Therefore, the need for permanent SWCD staff at BPA expense is not clear. It is important that BPA funds not be used inefficiently to build and then maintain similar infrastructures at agencies and organizations, all of which are implementing similar programs with similar objectives. The extent to which BPA should support local and state infrastructure needs to be explored further.

DUPLICATION OF EFFORT AND INFRASTRUCTURE

Review of the ongoing and new proposals indicates considerable overlap between projects and agencies addressing the same activities and/or objectives within each of the major Columbia Plateau sub-basins. While it appears that many of these projects are well coordinated among various fishery agencies, tribes, and irrigation entities, the layering of implementing entities is resulting in inefficient use of BPA funds. This overlapping characteristic is found in habitat work, monitoring activities, and fishery operations. For example, in the Umatilla sub-basin several entities are collecting temperature data, conducting fish survival studies using PIT tags, and conducting fish salvage and passage operations at the same facilities, and enhancing riparian habitats.

While this coordinated effort was likely essential in the early years of Council Program implementation, in order to build commonality in mission and trust among state, tribal, and local governmental entities, these relationships are now sufficiently matured that cooperation among entities should occur in order to eliminate redundancies. This should reduce the annual costs of personnel and administrative overhead.

SUB-BASIN PLANS TO GUIDE HABITAT ENHANCEMENT

It is evident in reviewing habitat enhancement proposals from within the Columbia Plateau Province that the overall costs of accomplishing this work will be substantial and time consuming. It also appears that this work is prioritized largely by the willingness of landowners to participate and not necessarily by the prioritized need of achieving water quality standards or fish habitat priorities. Consequently, some of the habitat improvements are patchy and scattered. Other than some of the USDA-funded habitat work, BPA suggests that the Council consider limiting its new habitat funding recommendations until the sub-basin plans are completed that will provide a focus to the implementation of the critical projects. This should ensure that habitat work is driven more by the needed benefits to and expected effects on fish populations and water quality rather than the availability of landowners willing to participate.

Similarly, the sub-basin assessments and plans are needed to ensure that the least-cost habitat enhancement projects are being implemented to achieve the greatest fish benefits over the long term. Some proposals assert that the best method for widespread, long-term stream rehabilitation is passive habitat enhancement, generally involving riparian fencing and plantings. Conversely, other proposals espouse "bioengineering" that requires extensive and costly habitat enhancement actions often involving channel shaping, bank

reshaping and armament, placement of in-stream structures, plantings and fencing. The sub-basin plans are needed to ensure that priority actions are occurring in priority locations.

AGRICULTURAL COST SHARING

BPA has and still is spending considerable capital and O&M funds at the water diversion structures of private entities and public irrigation districts. This funding has been necessary to correct serious problems for the migration and rearing of salmon and steelhead. The cumulative costs of these activities, however, are becoming extreme in many sub-basins such as the Yakima. More cost sharing is necessary and/or greater scrutiny of the need for such investments. For example, re-screening an irrigation diversion solely because the current screen does not meet state or federal criteria may no longer be sufficient justification; actual documented fish losses (screen performance) may be more appropriate justification for BPA investment. BPA believes that funding for many non-essential passage improvements at irrigation diversions should be substantially cost-shared, with the O&M largely or totally paid by the irrigation entity, BOR, or other state and federal programs. BPA should use its funds in such projects only where the improvements are critical to the survival and recovery of the fish populations and are not in lieu of others' legal obligations.

LAND AND WATER ACQUISITIONS

BPA is developing land and water acquisition policies for our internal use and in order to guide project sponsors as they develop habitat proposals. BPA will advance these policies in close coordination with the Council's initiative to develop land and water acquisition mechanisms. In addition, and also in close coordination with the Council's land and water initiative, BPA is developing a Request for Qualifications for participation as local or regional water entities. These entities will develop various types of water transactions to satisfy both the Council's initiative and RPA 151 of the NMFS Biological Opinion. Both land and water acquisition policies should define the resource being mitigated, the various types of acquisition mechanisms, and what is actually needed, e.g., fee title purchase of land, perpetual conservation easement (and related long-term O&M obligations), or purchase of water rights to provide the benefits to fish and wildlife that we are seeking. The efficacy of land and water purchases to provide mitigation for fish, and the total extent to which the water entities may provide this mitigation in the form of water transactions, needs to be considered before future solicitations. Generally, land purchases are an expensive means of rehabilitating fish habitat. Land purchases might better be considered in the context of overall sub-basin plans and funding processes. BPA fully recognizes the need to protect functioning habitat, however it is critical that tools be rapidly developed to target our efforts in this regard to provide the most critical biological protection at the least cost.

SUB-BASIN PROGRAMMATIC REVIEWS

Large-scale projects with multiple components are underway in some parts of the basin. For example, the Yakima-Klickitat Fisheries Project (YKFP) consists of operations, maintenance, planning, monitoring and evaluation, and other types of activities. Currently, these various types of activities are being proposed, evaluated and funded as individual projects. This fragmented evaluation does not provide for a comprehensive review of ongoing projects, such as YKFP, that may be producing benefits greater than the sum of its parts. In addition, this approach does not benefit the projects themselves, as some (particularly the non-on-the-ground components) tend not to measure up well against criteria that screen for measurable benefits for fish.

BPA recommends that multi-faceted, large-scale projects, such as YKFP and Phase II screening activities in the Yakima subbasin, be "rolled up" and reviewed programmatically. It may also be necessary to evaluate the individual components for historical performance, implementation and cost considerations.

Walla Walla Sub-Basin

The Walla Walla River sub-basin contains listed Middle Columbia River Steelhead and bull trout. The status of both of these species is improving. Steelhead are being addressed by numerous recovery projects throughout the sub-basin. Bull trout abundance and distribution is better than previously thought when the species was listed. In the Walla Walla, new bull trout populations are being located that demonstrate good year class structure and adult spawning. Listed populations also appear to be rebuilding in the John Day, Umatilla, Yakima, Deschutes and Hood River sub-basins. Therefore, we may wish to focus more of our attention and resources in other subbasins where listed species are not faring as well. We need to think about prioritizing our efforts across subbasins and across provinces.

The Walla Walla sub-basin is not a high priority watershed for focus of ESA recovery efforts at this time based on the Action Agencies' 1- and 5-Year Implementation Plans. Also, in most cases, the on-going and new habitat proposals do not protect and connect the best habitat first, as prescribed in the Basinwide Salmon Recovery Strategy, the NMFS Biological Opinion, and the Implementation Plans. Restoration of degraded habitat also is not consistent with the Council's F&W Program, which calls for "building from strength" by focusing on the relatively healthy and productive habitats first. For example, some of the upper tributary spring chinook habitat is in excellent condition. Clearly there is serious habitat degradation elsewhere in the Walla Walla subbasin that must be corrected eventually as resources, priorities, and partnerships allow.

In the near term, efforts to improve fish survival and production in the Walla Walla might best be focused on flow and passage problems. Extensive fish passage improvements are required at over 25 irrigation sites in the subbasin for both adult and juvenile migrants. The subbasin also has serious flow depletion problems and associated degradation in water quality. We suggest that additional artificial production for areas above existing

steelhead and spring chinook out-planting programs be deferred until the preparation of a Walla Walla Subbasin Plan.

Although new Biological Opinion and F&W Program guidance may lower the priority of the Walla Walla sub-basin, considerable effort has already been expended and significant momentum is underway to mitigate the serious flow and passage problems. Numerous projects have been initiated in the basin that should not be delayed or stopped. However, new starts should be limited until higher priority sub-basins and populations are addressed.

Walla Walla (On-going)

1996-011-00 –Walla Walla River Juvenile and Adult Passage Improvements: This is a very expensive undertaking that does not sufficiently discuss its relationship to necessary stream flows. There also does not appear to be any cost sharing with irrigation entities. BPA will likely consider a criterion for funding that requires cost sharing on the part of the project sponsor; otherwise BPA recommends awaiting the preparation of a Walla Walla Subbasin Plan.

BPA Rank – B
NMFS designation – 500

1996-046-01 –Walla Walla Basin Fish Habitat Enhancement: Similar problems with planning to 1987-100-01 (Umatilla Subbasin). There appears to be poor coordination among habitat project sponsors in the basin (CTUIR or Columbia SWCD). Some of this may be due to "newness" of the CTUIR in the basin.

BPA Rank –B
NMFS designation – 400

1998-020-00 – Habitat Assessment: This needs to be carefully reviewed with #2000-039-00 for possible overlap of effort and costs.

BPA Rank – A
RPA – 154

2000-033-00 – Walla Walla River Fish Passage Operations (CTUIR): This project should have significant cost-sharing from irrigation entities, yet has none.

BPA Rank – A
RPA – 149

2000-038-00 – NEOH Walla Walla Hatchery (CTUIR): The spring chinook smolt program is not a high priority at this time. The focus of subbasin funds should be on completing the correction of critical habitat issues – flow and passage. Continue with adult spring chinook stocking program in the interim, since it seems to be the best strategy. This project should await preparation of a Walla Walla Sub-basin Plan.

BPA Rank – B

2000-039-00 – Walla Walla Basin Natural Production M&E (CTUIR): This needs to be carefully reviewed with #1998-020-00 and #2000-033-00 for possible overlap of effort and costs. All M&E here and elsewhere needs to be carefully reviewed for opportunities to consolidate and reduce costs and level of effort. One requirement for proceeding with spring chinook out-planting is a robust M&E component. Such a component must be described and funded.

BPA Rank – B
RPA – 180

Walla Walla (New)

25017 – Huntsville Screen: This proposal came in under BPA's 2001 Action Plan solicitation. BPA did not fund it but deferred it to the Plateau Provincial Review. If it were to be funded, the project should include cost sharing with owners/beneficiaries. However, the project should be funded by BOR. Project justification is based on not meeting screening criteria, but no actual observations of fish losses are indicated. This project is not located in a high priority subbasin for screening, based on NMFS' 2000 Biological Opinion.

BPA Rank – C
NMFS designation – 500

25065 – Infrared Radiometry: This project needs to be coordinated with the WDFW and CTUIR M&E projects to gain efficiencies in temperature data collection. This work should be completed to guide significant efforts in riparian habitat enhancement to the priority areas. Riparian buffer work should be delayed pending results of this project.

BPA Rank – A
RPA – 183
Improves Water Quality and/or Supports TMDL

25066 – Manage Water Distribution in the Walla Walla: This proposal would implement needed water measurement and monitoring improvements and increase water management as flow enhancement projects and actions are implemented in the Walla Walla Basin. However, the extent to which BPA should support local and state infrastructure needs to be explored further; therefore, this proposal should be deferred.

BPA Rank – C
Meets RPA – 152
NMFS designation – 500

25076 – Integrated Agroforestry: This proposal needs to await completion of a sub-basin plan to focus its concepts on priority habitat areas. The relationship between investments in uplands and along the riparian buffers needs to be better understood. This is an interesting concept that should initially be tried on a pilot project basis. The scientific merit is also uncertain related to monoculture of poplars vs. native plant species in the riparian zone.

BPA Rank – C
RPA – 154
NMFS designation – 400

25082 – Flow Restoration: No explanation is given for why the saved water can only be protected for 3-½ miles in-stream. There apparently is no further protection once the water passes the Washington state line. Flow protection in Washington should be pursued. The project is not technically feasible unless the 5-7 cfs can be protected through Washington, as well as Oregon. This proposal should be deferred for consideration by the Regional Water Entity and until development of Subbasin Plans in response to RPA 154.

BPA Rank – C
RPA – 151, 154
NMFS designation – 500

25094 – Touchet River Habitat: The upper Touchet River contains some the best remaining steelhead habitat in the upper Walla Walla River basin. It has also seen increasing use by spring chinook without any supplementation. This project should be funded to focus on passive habitat enhancement techniques and irrigation withdrawal screening. Recommend funding Section 4, Objectives 1 and 2 as they relate to passive habitat enhancement techniques. Fund Section 5, Objective 1b and c only, in riparian areas, and Objective 2. Fund Section 7 as it relates directly to passive habitat enhancement techniques in relation to salmonid productivity in cooperation with the WDFW. Overall budget for implementation should be reduced by 50% for all portions of passive habitat enhancement until specific areas of implementation are identified.

BPA Rank – A (if implemented as above)
Meets RPA – 149, 150, 153 and 154.
NMFS designation – 400

Umatilla Sub-Basin

The Umatilla sub-basin has a very complex (yet coordinated) fisheries enhancement program that is divided into several different projects implemented by numerous parties. There appears to be a fairly well defined division of labor for most efforts underway here – O&M etc. The real exception is probably M&E – see further comments below. While the objectives and science appear sound, there is a need to examine all of the proposals for gains in economic efficiencies in use of personnel, and administrative and overhead

costs. Some of these efficiencies could probably be gained through successful co-management between ODFW and CTUIR.

The high cumulative costs of the Umatilla fisheries program relative to funding needs elsewhere in the Columbia River Basin for other user groups and for ESA suggests the need for delay in some activities (e.g. increasing hatchery production of spring chinook) and dropping of some tribal and state riparian habitat improvement projects, that are very cost intensive, and replacing them with new local programs of the USDA that appear more cost-effective and come with considerable cost-sharing.

In the Umatilla Sub-basin, as in other sub-basins (e.g. Deschutes), there is now a significant amount of USDA funding available to enhance riparian buffers. These programs come with a great deal of cost-share funds. Soil and water conservation districts are requesting BPA funding for staff to oversee these programs. At the same time, staffs of state and tribal fishery entities are seeking BPA funds to perform similar work to accomplish similar objectives. The fieldwork proposed by agency and tribal personnel also tends to be very intensive and expensive for the amount of linear stream miles improved. These highly qualified and knowledgeable staff could be detailed to the local SWCD to implement USDA programs. If this cooperative approach were successful, BPA would accomplish substantial habitat enhancement at greatly reduced costs to ratepayers.

Umatilla (On-going)

1955-055-00 – F&W Law Enforcement: This is a new proposal, not an on-going project (this particular project number does not exist). If we were to fund it, we might consider cost sharing with BIA funds, as we did earlier. BPA certainly has an interest in protecting the very valuable fish that result from our extensive program investments. However, this basic function of fish and wildlife management is not a mitigation function. There appears to be an overlap in enforcement duties with other state, federal and tribal governments on tribal ceded lands.

BPA Rank – D

1983-435-00 – O&M Satellite Facilities (CTUIR): On the surface, the maintenance costs for these juvenile and adult facilities appear high, given the newness of the facilities. However, this project is much more than maintenance – it includes transport from the hatchery and all operational costs during the 4-8 week acclimation period. In addition, there has been considerable downward pressure on the budget over the last few years as it goes through CBFWA review.

BPA Rank – A

1983-436-00 – Facilities O&M (Westland Irrigation District): As stated above, the costs for satellite facility maintenance may appear excessive given the CTUIR's O&M project costs. The project includes no cost sharing by the irrigation districts or the BOR.

BPA will pursue cost sharing; otherwise cumulative passage costs throughout the Columbia River Basin will be excessive and restrict our ability to meet ESA and F&W Program responsibilities.

BPA Rank – A

1987-100-01 – Enhance Umatilla River Habitat (CTUIR): As we do for Project #1987-100-02 (below), BPA prefers to fund in FY02 only the habitat enhancement work for which previous funding obligations have been made under this project, plus O&M needed to maintain benefits, and an M&E program associated with the work performed to-date. We wish to defer any new commitments for funding, both for the habitat enhancement costs and staffing, pending resolution of issues described below. We do this with considerable reservation, given the strong local support and the habitat improvements that the sponsor and its local partners have made so far.

BPA believes it is time to reassess direction and priorities for habitat enhancement in the Umatilla subbasin and, indeed, across all subbasins and provinces. For example, the work proposed here appears diffuse (18.5 miles in 9 different watersheds) and not focused on priority areas. BPA greatly prefers to fund riparian habitat enhancement work that is guided by a subbasin plan. The ISRP withheld its support for this project until "a subbasin watershed assessment and prescription plan" is provided, and the proposal states (p. 3 of narrative) that Washington State University is presently completing such an assessment. BPA particularly desires two things from the assessment and subsequent proposals:

1) An inventory of the productive and relatively undisturbed reaches on private lands in the watershed (if any) that may be at risk, and a plan for how to protect them (NMFS Biological Opinion Action 150 and the "Watershed Health" strategy of the Implementation Plan).

2) Better integration of BPA-funded habitat enhancement work with other conservation programs, such as those of the USDA. Habitat work in the Umatilla sub-basin needs to be consolidated as it is being performed by a number of entities and likely causing inefficiencies in administration, supervision, and oversight. As recommended above, state and tribal habitat personnel could be detailed to the SWCD and implement the USDA funding available in proposal # 25077. BPA could take full advantage of the significant USDA funding available and conserve ratepayer funds for other priorities. BPA-funded projects like this have been criticized for their relatively high costs, and this project is requesting a budget increase of 38% ($140K) over what was predicted for FY02. We want to see a better effort to include other funding sources in local habitat enhancement toolboxes before additional BPA funds are committed.

BPA's financial resources are limited. The large number and high cost of projects proposed so far in the provincial review process, particularly for the Columbia Plateau Province, would exhaust the entire FWP budget if all high priority and "fundable" projects were actually funded by BPA. This underscores the need to ensure that each project, whether ongoing or new, is focused on priority needs and is efficiently addressing those needs. We wish to see this project reconsider its direction and focus

before committing funds beyond the maintenance level for FY02 described above. This applies to project #1987-100-02, as well.

We wish to continue an M&E program on habitat enhancement work completed under this project to-date, and we note that project #1990-005-01 is funding some of that M&E. We would like the project sponsor and ODFW to participate in a review and possible reorientation of the ongoing habitat M&E in the subbasin, as recommended also by the ISRP. Late 2001 would be timely for such a review, and BPA representatives would plan to participate.

BPA Rank - B
NMFS designation – 400

1987-100-02 – Enhance Umatilla River Improvement (ODFW): In FY02, BPA prefers to continue only the habitat enhancement work that was funded in prior years, O&M needed to maintain the benefits of that work, and an M&E program associated with the work performed to-date. We wish to defer any new commitments for funding, both for the habitat enhancement costs and staffing, pending resolution of issues described below. We do this with considerable reservation, given the strong local support and the habitat improvements that the sponsor and its local partners have made so far.

BPA believes it is time to reassess directions and priorities for habitat enhancement in the Umatilla subbasin and, indeed, across all subbasins and provinces. While the proposal notes that the proposed work is based on habitat surveys (citing Boyce 1986) and "a prioritized list of streams needing habitat improvement," (proposal narrative, p. 3) the ISRP withheld its support for this project until a subbasin watershed assessment and prescription plan" is provided. BPA does not necessarily desire a rigorous assessment, but we do wish to see two things:

1) An inventory of the productive and relatively undisturbed reaches on private lands in the watershed (if any) that may be at risk, and a plan for how to protect them (NMFS Biological Opinion RPA 150 and the "Watershed Health" strategy of the Implementation Plan).

2) Better integration of BPA-funded habitat enhancement work with other conservation programs, such as those of the USDA. We do note the significant OWEB cost-share with this project, but also the substantial increase in BPA funding requested. BPA-funded projects like this have been criticized for their relatively high costs, and some have even advised us that detailing project staff to the local SWCD would be more financially responsible. We want to see a better effort to include other funding sources in local habitat enhancement toolboxes before additional BPA funds are committed.

We recognize the importance of Birch Creek within the subbasin and the region, because of the historical and intensive habitat enhancement worked performed there so far. We wish to continue an M&E program on this stream and would like project sponsors and the CTUIR to participate in a review and possible reorientation of the ongoing habitat M&E in the subbasin, as recommended also by the ISRP. Late 2001 would be timely for such a review, and BPA representatives would plan to participate.

BPA Rank – B
NMFS designation – 400

1988-022-00 – Umatilla River Fish Passage Operations (CTUIR): Although these activities, e.g., operating and maintaining fish ladders, bypasses, screens, and trap and haul equipment, are essential in the Umatilla sub-basin, this project should consider cost-sharing from the irrigation districts and/or BOR, since the work is mitigation for BOR irrigation activities.

BPA Rank – A

1988-053-02 – Construct Hatchery Supplement: Given the high costs of Umatilla sub-basin habitat enhancement work, this project should be deferred pending completion of essential habitat and passage work. Compared to other sub-basin needs, additional spring chinook production capacity appears to be a much lower priority, particularly when such production can be achieved at existing Mitchell Act hatcheries. Also, before going to full production in the Umatilla sub-basin, BPA needs to assess its upcoming production costs for other sub-basins required to meet ESA conservation needs not yet addressed as they are in the Umatilla sub-basin. The project also did not address critical harvest issues to which the production is directed. Capital infrastructure in support of additional production is premature.

BPA Rank – B

1989-024-01 – Umatilla Salmonid Outmigration (ODFW): Research in the basin needs to be refocused. There have been extensive efforts to evaluate the hatchery experiment. Unless there are critical uncertainties in hatchery operations (oxygen supplementation is one), the focus should shift more to determining what parts of the plan are not working. Efforts should shift toward "monitoring" of hatchery contribution. The straying of fall chinook is the main problem that has created out-of-basin ESA issues. The research should focus on this.

BPA Rank – A
RPA – 185

1989-027-00 – Power Repay Umatilla Basin Project: This is a non-discretionary project required by Congress. The proposal should be clearer about how the water/power exchange is used to benefit anadromous fish. The proposal provides no such information. The CTUIR and ODFW plan for the use of this water very carefully. Data show that up- and down-stream passage mortalities have decreased markedly since this project was put in place.

BPA Rank – A

1989-035-00 – Umatilla Hatchery O&M (ODFW): Although BPA understands that the Annual Operating Plans are the product of multiple reviews involving several ODFW

staff, and extensive negotiations with CTUIR, the budget of $92,000 seems excessive. We also understand that total O&M funding for the hatchery has been consistent over the years and comparable to other similar hatcheries. It seems appropriate for the resource managers involved in this project to look for ways to reduce overall costs.

BPA Rank – A

1990-005-00 – Umatilla Fish Hatchery M&E (ODFW): A considerable amount of the research here is a comparison of different types of hatchery raceways. We need to consider whether enough knowledge has been gained given the number of years this evaluation has been funded. Before funding, ODFW and CTUIR should prepare an efficiency analysis. In addition, this project's focus has moved from evaluating the lower river facilities to assisting in tagging additional fish in a cooperative effort with CTUIR. Perhaps it's time to refocus all research in the Umatilla basin. It appears that the CTUIR and ODFW have arbitrarily divided the duties between ODFW (hatchery evaluation) and natural production (CTUIR). With the winding down of hatchery evaluations, ODFW is refocusing and is doing more "natural production" work. This project might be fundable if a more detailed project description addressed the questions raised by the ISRP.

BPA Rank – A

1990-005-01 – Natural Production M&E (CTUIR): All of the activities in the Umatilla sub-basin should be evaluated for efficiency issues. A number of different projects have similar objectives and tasks that might be equally successful with lower administration, supervision, and overhead costs. For example, this project and project no. 1989-024-01 (ODFW, p. 15) are both addressing juvenile fish survival using PIT tag technology. BPA would likely obtain this information at less cost if this work were consolidated. Additionally, at least three BPA-funded projects are collecting temperature data in the Umatilla sub-basin; it might be collected more cost-effectively by a single entity. BPA will consider not funding the harvest monitoring activities of the Tribe at this time since BIA funds are no longer available. Monitoring of Tribal steelhead harvest has questionable value when annual estimates are only 25 to 39 fish. Again, we strongly suggest an efficiency analysis be conducted among ODFW, CTUIR, etc., to determine how to meet the objectives in this sub-basin at least cost.

BPA Rank – A

Umatilla (New)

25016 – Birch Creek Habitat (USGS): BPA agrees with the ISRP that this proposal should not be funded, as written. It is very important to BPA - for both the NMFS' Biological Opinion implementation and Council Fish and Wildlife Program accountability - that studies are developed and funded that measure the effects of the many and costly habitat improvement actions that we are funding. Also, Birch Creek provides a very good opportunity - in part because of the magnitude of the habitat enhancement effort in that watershed - to measure the effects on the steelhead population

as well as on the physical and biological environment. However, the proposal's description of methods is long on data collection and modeling, but does not describe well the sites, treatments (and controls, as noted by the ISRP), and analytical methods that would be necessary to scientifically "evaluate the cause and effect relationship between specific habitat enhancement actions and changes in water temperature, stream-flow, physical habitat, and aquatic communities" (proposal narrative, p. 3). We might be willing to accept on faith and the sponsor's good reputation that the desired and promised product would be produced if this were a less-costly project.

Within Birch Creek, ODFW is conducting an ongoing basic monitoring program to support its habitat improvement work (project # 1987-100-02). However, we wish to see this and similar M&E work in the Umatilla sub-basin reviewed with external parties both to identify tasks and methods that may be unnecessary and to identify important and cost-effective improvements that could be added.

BPA Rank - C
Meets RPA – 154 and 183 (perhaps)
Improves Water Quality and/or Supports TMDL

25029 – Westland-Ramos Habitat: This project could be undertaken with irrigation district funds or with BOR funds instead of ratepayer funds. At a minimum, such work should include significant cost sharing. There is no doubt that the work is needed. It appears that some earlier passage work that BPA funded wasn't as effective as it should have been. We recognize that, in the past, resource managers did not view passage as holistically as is the case now. Instead, point source problems (i.e., dams/screens) were addressed in isolation. The result is that the stretch of river between Feed Canal and Westland has been a continual problem, with high bed load and a wandering channel. This project proposes to address these issues.

BPA Rank – C
NMFS designation – 500

25047 – Morrow County Buffer: This and similar USDA-backed programs should be supported as the cost-share provisions are substantial. As stated above, we should consider having CTUIR and ODFW staffs integrated into this program on personnel details, thereby eliminating or deferring the fishery agencies proposed riparian habitat work and eliminating the need for the SWCD to hire duplicative personnel at BPA expense.

BPA Rank – A
Meets RPA – 153
NMFS designation – 400

25055 – Echo Meadows Recharge (Innovative Project No. 2001-015-00): Personnel costs are excessive at $200,000/FTE. Indirect costs also appear to be very high. This project is an expansion of an existing "innovative" project, but the flow enhancement

results of the existing project are not yet available. Defer consideration of this project pending evaluation of the first year of the "innovative" project in achieving in-stream flows during the summer and fall months.

BPA Rank – C

25059 – Progeny Marker: The proposal should include additional out-year costs assuming development of the marker is successful. In the later years, the tribe would want to apply the marker to its propagation program and collect juvenile fish to test for the marker. The proposal only addresses a marker for juvenile progeny of naturally spawning, hatchery-origin fish. A progeny marker should be able to measure the return of that progeny as an adult, after its rearing time in the ocean. This would be a better measure of the success of a hatchery-origin fish spawning in the wild. The proposal should be expanded to seek chemical marks that could be measured throughout the subsequent adult life stage. Strontium, while providing a marker for juvenile progeny, may not work to distinguish fish at the later adult stage after ocean rearing.

BPA Rank – A
Meets RPA – 153
RPA – 184

25077 – Umatilla Buffers: This is an outstanding program with substantial cost-sharing capability. This work should be coordinated with the Morrow County proposal to address priority needs. Work needs to be prioritized on fish and water quality needs and not just landowner interest. Again, the more expensive state and tribal work in the Umatilla and Walla Walla sub-basins should be deferred pending use of the USDA funds. The riparian work should be guided by fish distribution and need and needed improvements in water quality (lower temperatures). This work might better be focused by completion of the aerial FLIR evaluation proposed for the Walla Walla to determine temperature "hot spots".

BPA Rank – A
Meets RPA – 153
NMFS designation – 400

25081 - Birch Creek Passage (ODFW): BPA prefers to fund part of the proposed work with some qualifying conditions. Birch Creek has received substantial BPA investments (especially relative to its size) in the past, and approximately $1.5 million has been requested for FY02 (projects 1987-100-02, 25016, and 25081), exclusive of requests for more global M&E projects (i.e., 25010 and 25088) that would include this watershed. We believe that fully funding these Birch Creek requests may unduly limit funds for other projects, subbasins, and provinces where needs may be greater.

Nevertheless, this project has some advantages. Tributary passage improvements are a very high off-site mitigation priority for BPA, perhaps higher than habitat enhancement, depending on circumstances. We are particularly interested in passage projects that also

increase or secure in-stream flows (e.g., the proposed Whitney Diversion project) and that provide cost sharing. We understand that the Weinke Diversion project depends upon a cost-share from OWEB or another party to pay for the pumping equipment, while BPA funds would cover dam removal and bank stabilization. These passage barriers impede but do not entirely block adult steelhead. They probably are complete barriers for upstream movement of juveniles, although the number of juveniles potentially affected is not known. Unfortunately, the proposal does not describe (e.g., with a map) the locations of the proposed projects with respect to steelhead spawning and rearing areas and relative to other passage barriers. A subbasin plan or other management planning document that clearly listed the priority problems and preferred remedies would have helped us understand the advantages of the proposed work.

BPA gives qualified support for funding the Weinke and Whitney removals, one in 2002 and the other in 2003 at the discretion of the sponsor. Weinke is the tallest of the dams and is the lowest on the mainstem, according to the project sponsor, therefore providing probably the greatest benefit of the six actions proposed. Our support depends upon the sponsor obtaining other funding for the pumping station. BPA actually prefers that the water right be obtained for in-stream use and would be willing to consider partial funding to obtain and convert that right. Similarly, for the Whitney project, we would greatly prefer that BPA-funded dam removal be part of a package that also secured the water right for in-stream use, but securing that right would not be a requirement. A new and reasonable budget would be required for the reduced level of work.

Although BPA desires to evaluate the effectiveness of passage barrier removal, we do not recommend an M&E objective for this project at this time. We hope to evaluate similar actions in other subbasins where the BOR will be funding for implementation and effectiveness evaluations.

BPA Rank – C (with limited funding of certain components under conditions describe above)
NMFS designation – 400

Deschutes Sub-Basin

As with the Umatilla and Walla Walla sub-basins, the Deschutes has a substantial and new USDA riparian enhancement program available to rehabilitate critical fish habitat. The BPA-funded program should take advantage of this opportunity and shift its contractor personnel to assist in the efficient use of USDA funds. New BPA-funded habitat work should be deferred largely or entirely, given the extensive scope of the USDA program.

The Deschutes sub-basin also includes proposal no. 23019 – Trout Creek Culvert Replacement ($128,000) and proposal no. 26006 Trout Creek Stream-flow Enhancement ($133,500) resulting from BPA's Action Plan solicitation. These proposals are on hold pending review of BPA's policy on funding fish and wildlife mitigation projects on Federal lands.

Deschutes (On-going)

1988-053-06 – Hood River Hatchery O&M: This project intends to re-establish a self-sustaining spring chinook salmon population in the Hood River subbasin. Broodstock are collected from Hood River. Broodstock are held at the Parkdale Facility. Incubation and rearing are completed at Round Butte Hatchery-Pelton Ladder.

BPA Rank – A

1994-042-00 – Trout Creek Restoration (ODFW): BPA favors funding parts of this project in FY02:

1. Completion of the watershed assessment (in cooperation with project 1998-028-00) and project planning (Planning and Design Objective 1, tasks a, b, and c).
2. O&M of existing habitat improvements (part of O&M Objective 1).
3. Ongoing M&E, subject to a review of needs, methods, potential redundancy and coordination (e.g., with proposed projects 25010 and 25088), and funding responsibilities.

We do not wish to fund any new habitat enhancement work in Trout Creek in FY02 through this project (however, see recommendation for COE cost-sharing work through project 1998-028-00).

Trout Creek has received substantial BPA investments (especially relative to its size) in the past, and at least $1.1 million has been requested for FY02 (projects 1994-042-00, 1998-028-00, and 25040), exclusive of requests for more global M&E projects (i.e., 25010 and 25088) that would include this watershed. We believe that fully funding these Trout Creek requests may unduly limit funds for other projects, subbasins, and provinces where needs may be greater.

This project and project no. 1998-028-00 are pursuing similar tasks and could gain efficiencies in administration, supervision, and overhead costs if combined or reallocated. Trout Creek has over 6 FTE for habitat work between the two projects. This appears excessive this far into implementation. Approximately 70% of the anadromous fish-bearing streams are presently covered by protective agreements, and we recognize this as the fruits of many years of productive effort by the project sponsor, cooperating landowners, and other local partners. We wish to maintain those benefits through appropriate O&M in 2002 and to ensure that any future agreements – based on priorities following completion of the watershed assessment – will provide high value relative to needs/opportunities for BPA funding in other subbasins and provinces.

We also wish to evaluate all habitat M&E in the watershed, particularly with respect to ongoing commitments for BPA funding. For example, the need for annual steelhead smolt monitoring needs better justification. Now that three years of data have been

collected, consideration should be given to waiting 3-5 years and repeating the monitoring effort. In the meantime, the equipment and perhaps personnel could gather similar data in other watersheds. We appreciate the use of a biological target (i.e., 100,000 smolts per year), but recommend that the target might better be defined in terms of smolts per index redd (or other measure of spawning escapement). Spawning ground counts should continue in some form (see comment on random sampling, below). Like smolt monitoring, temperature monitoring also may not require annual measurements, i.e., gather base data, and then repeat the monitoring every 3-5 years for comparison. BPA must consider the cumulative costs of such annual monitoring when undertaken throughout the Columbia River Basin. Also, with additional habitat work being undertaken, enough time must be allowed to measure any differences in temperature as the habitat work is completed and becomes effective. Monitoring and evaluation work proposed through this project must also be reconciled with new proposals (25010 and 25088) to employ different methods in Oregon streams including Trout Creek. For example, how might this project incorporate random sampling designs (e.g., EMAP) to provide more useful data and/or cost savings?

BPA recognizes the value of the enhancement work performed in Trout Creek and the opportunity that the watershed provides to measure the effectiveness of that habitat enhancement work. However, we do not support funding for any <u>new</u> M&E in this project in 2002 or continuation of M&E beyond 2002 until a comprehensive, well integrated, and well-justified M&E plan is developed for the Trout Creek watershed.

BPA Rank – B (however, A for the 3 elements identified above)
NMFS designation – 400

1998-028-00 - Trout Creek Improvement (Jefferson County SWCD): BPA favors funding parts of this project in FY02:

4. Completion of the watershed assessment (in cooperation with project 1994-042-00) and project planning (Planning and Design Objective 1).
5. The $350,000 cost-share for the COE stream habitat enhancement (part of C&I Objective 1).

BPA does not wish to fund any new habitat enhancement work in Trout Creek in FY02, except for the cost-share for the COE project. This will leverage the $650,000 contribution from the COE. Other new habitat enhancement projects should await completion of the watershed assessment and an evaluation of habitat enhancement needs, opportunities, and priorities.

We do not wish to fund M&E through this project until there has been a thorough review of needs, methods, potential redundancy and coordination (e.g., with proposed projects 25010 and 25088), and funding responsibilities for the Trout Creek watershed. For example, we wish to consider the value of photopoint-based monitoring relative to the costs in this proposal and to consider the role of the project sponsor (and BPA funds) in monitoring flow and temperature at an established USGS gauging station. BPA

recognizes the value of the habitat enhancement work performed in Trout Creek and the opportunity that this watershed provides to measure the effectiveness of that habitat enhancement work. We wish to see a comprehensive, well integrated, and well justified M&E plan before BPA funds habitat M&E in the Trout Creek watershed beyond 2002.

This project states cost-sharing, but the information is incorrect. It contains considerable BPA funds from other projects and even from one task of this project. Only non-BPA funds should appear in the cost-share category.

BPA Rank – B (A for the 2 elements identified above)
Meets RPA – 154

Deschutes (New)

25009 – Wasco County Watershed Councils: Although we want to encourage participation of the Wasco County SWCD, and the individual watershed councils, in the preparation of a Deschutes Sub-basin Plan, funding of that work has normally not been a BPA responsibility. We need to review the level of our involvement in such activities since the number of watershed councils and conservation districts in the entire Columbia River Basin is large. We are very encouraged at the level of cost sharing provided in this proposal.

BPA Rank – C
Meets RPA – 154

25014 – Riparian Buffers: Excellent cost-share opportunity for BPA. As stated above, BPA will strongly encourage consideration of partnering ODFW personnel with SWCD to apply these USDA funds rather than funding new ODFW riparian work or funding new staff for the SWCD. This proposed work would occur downstream of the Pelton-Round Butte dams complex.

BPA Rank – A
Meets RPA – 153
NMFS designation – 500

25015 – Buckhollow Emergency Flow: This project was funded in 2001 as part of BPA's Action Plan solicitation, project no. 2001-054-00 ($22,800). It appears that the SWCD may be proposing this flow enhancement for 2002. If the project was successful in 2001 and water is again short in 2002, BPA would likely fund this effort a second time. If funded in 2002, costs for stream gauging can be eliminated, as these would be obtained in proposal no. 25075. Buck Hollow and Bakeoven Creeks contribute 40 percent of the warm water adapted wild steelhead in the Deschutes River sub-basin.

BPA Rank – A (conditional)
Meets RPA – 149 and 152

25040 - Trout Creek Baseline Measurements: Although this project addresses a very important need (monitoring the effectiveness of habitat improvements) in a stream where steelhead population effects (in addition to environmental effects) may well be measurable, we believe it is not timely and is too costly. Because the COE plans to begin actual fieldwork in the summer of 2002, there will be only a few spring months of 2002 in which to collect baseline data. One year of data is not adequate to describe baseline environmental conditions, and only a few months of data are even less useful. At $239,000, those data would be expensive. The proposal also does not state which metrics might be most useful for clearly identifying biologically meaningful effects of the stream habitat enhancement work.

BPA Rank - C
Improves Water Quality and/or Supports TMDL
RPA - 154

25048 – Upper Deschutes Riparian Buffers: It is not clear if this project plans to use the same USDA funds as project no. 25014. If so, these funds would be better applied in Wasco County, in the lower Deschutes, in the habitat of anadromous fish. BPA does not intend to fund habitat work that occurs in that part of the Deschutes River Basin that lies above the Pelton-Round Butte dams complex.

BPA Rank – D
NMFS designation – 400

25074 – Deschutes Water Exchange (Deschutes Resources Conservancy): This proposal addresses an important topic of water use throughout the Columbia River Basin. If successful, this concept could and should be expanded to many other critical water sub-basins. However, this proposal should be deferred for consideration by the Regional Water Entity that is created in response to RPA 151. The Exchange could seek local entity status under the Water Entity RFQ. Some aspects of the proposal, not directly dealing with water transactions, could be considered for separate funding within the Provincial Review process.

BPA Rank – C
Meets RPA – 152 and 151

25075 – Buck Hollow Hydrology: This proposal is very cost-effective and important M&E for the Buck Hollow habitat enhancement program and could be essential in future water monitoring for leased or acquired water. Buck Hollow contributes 10 to 15 percent of the wild steelhead in the Deschutes River and 25 to 30 percent of the warm water adapted wild steelhead in the river.

BPA Rank – A
Meets RPA – 183

Tucannon Sub-Basin

As with the other sub-basins, it is evident from reviewing the Columbia Plateau proposals that the pace and intensity of habitat enhancement could easily outpace available funds. As we stated earlier, BPA, the Council, and fishery co-managers should consider a general, initial strategy of a balanced approach to habitat enhancement that includes an emphasis on passive habitat enhancement (e.g. riparian protection) with a lesser degree of more active "bioengineering" of stream channels. This interim strategy should be applied until all of the sub-basin plans can be finished and assessed comprehensively. This passive/active balanced habitat policy would complement the F&W Program and BiOp strategies of focusing on protecting the best habitat and connecting good habitats. There will, of course, always be needed exceptions to delaying some bioengineering projects, but the focus of habitat work should be on the fishery and water quality benefits of a healthy riparian zone.

The Tucannon habitat enhancement efforts have displayed this balance fairly well. In-stream structures have accelerated habitat capacity, stabilized river channel, and set the basis for riparian recovery (passive habitat enhancement). In the Tucannon, in-stream structures are not utilized in all cases. Many of the projects are riparian only. Passive, riparian habitat enhancement is conducted on all in-stream projects, in conjunction with the Conservation Reserve Enhancement Program (CREP), and on sites identified by resource agency personnel. Some in-stream projects involve large woody material only. Only about 19% of this basin's total budget goes to "bioengineering" of stream channels, while 25% goes to passive habitat enhancement. In addition, the "bioengineering" projects all contain a riparian habitat enhancement component. In the case of the Tucannon, "bioengineering" of stream channels is an important part of the overall habitat enhancement program.

Tucannon (On-going)

1994-018-06 – Tucannon Watershed Plan: BPA recommends funding to maintain the base coordination and planning function of watershed coordination, Section 4, Objective 1 and Objective 2 as it relates to passive implementation planning; Section 5, Objective 1b & c and Objective 2 for implementation of passive habitat enhancement; Section 6, O&M of existing structures; and Section 7, Objective 1 and 2 for M&E of existing program. Objective 7 should only be funded after there is coordination with the ongoing Lower Snake Compensation M&E program in the Tucannon. It appears that this M&E program may begin to answer the ISRP's question concerning changes in salmonid productivity due to watershed enhancement.

BPA Rank – A (if implemented as directed above)

Meets RPA – 149c – Passage, screening and flow not the responsibility of others, 150 – Protect currently productive habitat, 153 – Agricultural incentive programs such as CREP, and 154 – Subbasin Planning and Assessment Substrategy.

2000-019-00 – Tucannon Spring Chinook Captive Broodstock: This is a very good project and appears to employ a least-cost approach. This project will last for a defined, short period of time. The primary concern is genetics. Fish for captive broodstock are taken from fish that are already "in the program". They need to infuse wild gametes more frequently.

BPA Rank – A
RPA – 176 and 177

Tucannon (New)

25019 – Tucannon Road Restoration: The proposal suggests work that should be normal USFS road maintenance. If BPA were to decide to fund the proposal, it should be implemented in a single year rather than spreading over four years. At the proposed $16,000 to $20,000 annual cost, the project's administrative costs within BPA would not be worth the effort. Alternatively, this work should be integrated into a larger habitat improvement proposal to make its implementation more efficient. The project sponsor did not respond to the ISRP's questions during the review process and the ISRP does not recommend BPA funding of the proposal.

BPA Rank – D
NMFS designation – 400

25072 – Wooten Wildlife Area: The proposal is excessive and not a BPA responsibility.

BPA Rank – D
NMFS designation – 400

Yakima River Sub-Basin

Yakima (On-going)

Fragmentation of proposal presentations is a recognized issue with two groups of ongoing projects in this subbasin. The first group of related projects is that associated with the Yakima Klickitat Fisheries Project (YKFP). The second group is associated with Yakima Phase II Screens. While these projects are presented individually, there is coordination among the managers to ensure there is no duplication. Both groups of projects were initially approved by the Council as a single project. Only through the implementation phase did the multiple projects surface as a means to organize work with the different agencies.

BPA will continue to work with the sponsors to ensure there is coordinated planning within these two groups of projects. Additionally, BPA will work with the sponsors and Council staff to improve the overall presentation/organization of these projects to reflect two "programs." The projects are identified as follows:

Yakima Klickitat Fisheries Project:

1988-115-25	**Design and Construction (YN)**
1988-120-25	**Management, Data, and Habitat (YN)**
1995-063-25	**Monitoring and Evaluation (YN)**
1995-064-25	**Policy/Technical (WDFW)**
1997-013-25	**Operations and Maintenance (hatcheries) (YN)**
1997-053-00	**Yakima River Side Channels (habitat) (YN)**
1998-034-00	**Reestablish Safe Access (habitat) (YN)**

Yakima Ph II Screens:

1985-062-00	**Ph II Screens Passage Improvement Evaluation (PNL)**
1991-075-00	**Yakima Phase II Screens – Design & Installation (BOR)**
1991-057-00	**Yakima Phase II Screens - Fabrication (WDFW)**
1992-009-00	**Yakima Phase II Screens - O&M (WDFW)**
1995-033-00	**Yakima Phase II Screens - O&M (BOR)**

The ISRP raised a number of questions regarding the YKFP in the areas of organization of proposals (difficult to relate individual proposals to one another) and purpose and design of the project's monitoring and evaluation activities. BPA will continue to support efforts to improve the organization of the proposals and work with the co-managers (WDFW and YN) to address the issues raised in the ISRP's comments. The YKFP Policy Group (YN and WDFW project leaders) is taking the ISRP's comments very seriously and is evaluating how best to address the issues they raise in their final report.

Yakima Phase II Screen projects reflect a "program" that was initially approved by the Council in 1991. The five projects reflect how the implementation for this program was organized. The two projects tied to construction (1991-057-00 – WDFW/Yakima Screen Shop and 1991-075-00 – BOR) balance the construction as follows. The BOR designs and installs the screens while the WDFW/Yakima Screen Shop fabricates the screens. The BOR and WDFW split the O&M between them, with BOR responsible for screens located on BOR or YN reservation lands and WDFW responsible for the balance. Pacific Northwest Labs (PNL) performs monitoring of all the screens and reports the results to the BOR and WDFW managers for corrective actions.

The Phase II Screen program has been delayed for several years due in large part to coordination/land access issues with landowners. The managers estimate that work on the final group of three screens should be completed by 2004 – if no additional delays are experienced.

There is an issue with this program, as well as other irrigation programs funded by BPA, regarding the terms and conditions of operating and maintaining these screens. The current Phase II program has BPA funding the on-going O&M expenses of the new screens that are "above and beyond" the original expenses to the irrigator for operating their original screen. BPA would like to review with the Council the potential for another

entity to pick-up some or all of the O&M costs associated with the program. This is an important issue for BPA and the Council to review.

1985-062-00 – Passage Improvement Evaluation (PNNL): No cost-share from BOR whose screens they are. Although this is an important project, it would appear that BOR should be funding it and not BPA. There are several projects that relate to Yakima Phase 2 screens. Effort should be directed at streamlining Yakima Basin irrigation diversion screen fabrication, installation, O&M and M&E and at ensuring that the agencies that are responsible for the mitigation work are the ones actually funding it; or, depending on agreed-to crediting mechanisms among BPA, the Council and NMFS, there is some level of appropriate cost-share.

BPA Rank – B
Meets RPA – 183

1988-115-25 – Yakima/Klickitat Fisheries Project (YKFP) Design and Construction: No cost-share. This project provides for new office space and an interpretive center for YKFP. It does not directly address an RPA. YKFP should be put in one large project bundle for consideration.

BPA Rank - B

1988-120-25 – Yakima/Klickitat Fisheries Project (YKFP) Management: This project includes management of the YKFP, data, and YN habitat planning activities, and includes the annual YKFP research review. Through this project, BPA funds 13.75 FTE to manage a large and complex production project in the basin; however, there is no cost-share. Should be considered as part of whole YKFP; as an individual project, it does not reflect the true costs of the entire YKFP.

BPA Rank – A

1991-057-00 – Yakima Basin Phase 2 Screens – Fabrication (WDFW): No cost-share. Not priority subbasin under RPA #149, but priority activity everywhere. All Phase II screening projects in Yakima should be considered as a bundle so redundancies can be identified.

BPA Rank – A
NMFS designation – 500

1991-075-00 – Yakima Basin Phase 2 Screens – Design & Installation (BOR): No cost share. RPA #149 (see comments above). The rationale for $1 million cost is unclear; this cost needs to justified. PNNL, BOR, WDFW and any others relating to Phase II screens need to be considered as whole project to identify redundancies.

BPA Rank – A
NMFS designation – 500

1992-009-00 – Yakima Basin Phase 2 Screens - O&M (WDFW): No cost-share. RPA #149 (see above). Phase 2 screens should be considered as one project.

BPA Rank – A

1992-062-00 – Yakama Nation - Riparian/Wetlands Restoration: Perhaps 10 FTE are excessive and more of the funds could go into on-the-ground work. Good leveraging. BPA is working with the Yakama Nation to re-organize the implementation of this wildlife/habitat project that seeks to protect high value habitat located on the Yakama Reservation. This project features land maintenance activities and cultural/archaeological resource documentation once lands are secured.

BPA Rank – A
NMFS designation – 400

1995-033-00 – Yakima Basin Phase 2 Screens O&M (BOR): There is no cost sharing and the project appears to overlap with 1992-009-00. See Phase II screen comments above. There may be excessive costs because of redundancy.

BPA Rank – A

1995-063-25 – Yakima/Klickitat Fisheries Project Monitoring and Evaluation: No cost-share. This project funds 42 FTE. The project incorporates the biologists and techs that perform the various duties called for in collecting and analyzing performance data that will guide the YKFP managers in adaptive management of the program. The M&E plan for the project calls for a major monitoring effort and this project is designed to fulfill this objective. As per the ISRP review, the spring chinook juvenile behavior objective should not be funded.

BPA Rank – A
Meets RPA – 183
RPA - 184

1995-064-25 – Policy/Technical Involvement and Planning in the Yakima/Klickitat Fisheries Project (WDFW): No cost-share. This project provides for the management of policy and technical oversight of the Yakima/Klickitat Fisheries Project via the project's Policy Group and Scientific and Technical Advisory Group as delineated in the agreed-upon project management structure. Need to identify potential redundancies (see YKFP comments above).

BPA Rank – A

1996-035-01 – Satus Watershed Restoration: Highly productive area. Cooperative partnerships. Project activities have been successful in managing grazing in the watershed.

BPA Rank – A
NMFS designation – 400

1997-013-25 – Yakima/Klickitat Fisheries Project Operations and Maintenance: See YKFP comments above.

BPA Rank – A

1997-051-00 – Yakima Side Channels: All projects within the Yakima/Klickitat Fisheries Project should be considered together and ensure that all pieces have been approved in the 3-step process by Council.

BPA Rank – A
RPA – 150

1997-053-00 – Toppenish-Simcoe In-stream Flow Restoration and Assessment: No cost share. Highly productive area. Flow augmentation primary to this project; land acquisition should not necessarily be part of this.

BPA Rank – A
NMFS designation – 500

1998-033-00 – Restore Upper Toppenish Watershed: There is evidence of additional funds being available in this watershed, i.e., BIA's commitment of financial and technical support for road and stream crossing improvements - $420,000; Yakama Nation commitment of congressionally-allocated funds to reestablish floodplain function - $1,440,000; and Tribal livestock permittees assistance with developing livestock management infrastructure - $4,000 (in-kind). It is not clear whether any of these funds are being offered for this particular project.

BPA Rank – A
NMFS designation – 500

1998-034-00 – Yakama Nation Yakima/Klickitat Fisheries Project (YKFP) Reestablish Safe Access into Tributaries of the Yakima Subbasin: No money requested for 2002; no funding request until 2003. The project has experienced delays due to land and coordination issues with local landowners. Due to delays in FY 2001, the sponsor has asked BPA to "carry-forward" the unobligated FY 2001 funds for use in FY 2002.

BPA Rank – A

1999-013-00 – Ahtanum Creek Watershed Assessment: No cost-share. Does not appear to be currently highly productive habitat or a high priority sub-basin. The sponsor requests the same funding as for productive areas (Satus, Toppenish); potentially not cost-effective.

BPA Rank – C
Meets RPA – 154

Yakima (New)

25012 – Assessment of Bull Trout Populations in the Yakima River Watershed: No cost-share. This proposal should be combined with WDFW's project no. 1999-024-00, Bull Trout Population Assessment in the Columbia River Gorge.

BPA Rank – C

25013 – Restore Riparian Corridor at Tapteal Bend, Lower Yakima River: No cost-share. This is a severely degraded area; therefore, not consistent with Program or NMFS' Biological Opinion, which emphasize protecting highly productive habitat.

BPA Rank – C
NMFS designation – 500

25021 – Implement Actions to Reduce Water Temperatures in the Teanaway Basin: No cost-share. Although this is a priority subbasin for the State of Washington and contains spring chinook and bull trout, we may want to defer until subbasin planning is complete.

BPA Rank – C
Improves Water Quality and/or Supports TMDL
NMFS designation – 400

25022 – YKFP Big Creek Passage & Screening: Reopening passage to creek that has degraded lower end is low priority. Defer for now.

BPA Rank – C
NMFS designation – 500

25023 – Yakima/Klickitat Fisheries Project - Manastash Creek Fish Passage and Screening: No budget for 2002. Waiting for Phase I to be completed, which will identify alternatives. Consistent with RPA #149, but Yakima is not priority in first year. Very expensive. Do not know what results would be. Restores production/access to blocked habitat. This project is sponsored by WDFW and duplicates activities that are planned in project 1998-034-00, Re-establish Safe Access. Under Re-establish Safe

Access, the sponsor, in coordination with BPA, is funding a plan to identify water conservation opportunities for irrigators within the Manastash subbasin. Depending on the findings and recommendations from this plan, scheduled to be completed in early 2002, irrigation improvements may be implemented.

BPA Rank – C
NMFS designation – 500

25024 – Yakima/Klickitat Fisheries Project - Wilson Creek Snowden Parcel Acquisition: Somewhat degraded area; may not be consistent with Program or NMFS' Biological Opinion. Land acquisitions should be deferred until the development of sub-basin plans and BPA's land and water acquisition policies.

BPA Rank - C
RPA – 150

25025 – YKFP - Secure Salmonid Spawning and Rearing Habitat on the Upper Yakima River: Defer until the development of sub-basin plans and BPA's land and water acquisition policies. This is currently productive habitat, a very expensive project, and may not be the best value for the investment.

BPA Rank - C
RPA – 150

25026 – Yakima Tributary Access and Habitat Program (KCWP): Focuses on opening blocked habitat. May fund strategic planning at this time. However, we suggest that subbasin planning be used to identify priorities to evaluate the implementation phase of this project.

BPA Rank – C
NMFS designation – 500

25031 – Naches River Water Treatment Plan Intake Screening Project: This proposal was considered under BPA's Action Plan solicitation earlier this year as proposal no. 23044.

BPA Rank - D
NMFS designation – 500

25032 – Wenas Wildlife Area Inholding Acquisitions: No cost-share. This is currently productive habitat and mainly a wildlife project. We need to determine total wildlife crediting obtained to date in the Yakima Basin prior to continuing on with land acquisition projects. This proposal should be deferred until the development of sub-basin plans and BPA's land and water acquisition policies.

BPA Rank - C
RPA – 150

25034 – Develop a Nutrient/Food-Web Management Tool for Watershed-River Systems (PNNL): No cost-share. This proposal develops a method to assess nutrients in water and associated benefits to juvenile fish by using computational fluid dynamics, watershed and food chain models. This is not a critical uncertainty (therefore, does not meet an RPA); however, it is interesting research. It should be deferred for now.

BPA Rank - C

25036 – Impact of Flow Regulation on Riparian Cottonwood Ecosystems: This proposal would provide information on riparian cottonwood and geomorphic response to regulated flows in the Yakima Basin and compare it to the responses of an unregulated reach of the Flathead River with the objective of enhancing flows to enhancing riparian habitats in the Yakima Basin.

BPA Rank - C
RPA – 183

25044 – Application of Biological Assessment Protocol to Evaluate Passage of Juvenile Salmonids Through Culverts in the Yakima Basin (PNNL): This proposal would apply laboratory-developed protocol for assessing juvenile salmonid passage through roadway culverts. It is probably not a critical uncertainty (therefore, does not meet an RPA). Other guidelines (WDFW) exist that can be used for culvert improvements to allow fish passage. It should be deferred for now.

BPA Rank - D
Improves Water Quality and/or Supports TMDL
NMFS designation – 500

25054 – Increase Naches River In-stream Flows By Purchasing Wapatox Hydroelectric Project: This proposal is being considered under BPA's Action Plan solicitation as proposal no. 23028. Although the proposal is consistent with RPA #149, the Yakima is not a priority subbasin. The BOR and Pacificorp should fund this proposal.

BPA Rank - D
NMFS designation – 500

25058 – Fish Passage Inventory and Corrective Actions on WDFW Lands in the Yakima Subbasin: This proposal would inventory fish passage structures and intake screens, identify required corrective actions, and complete corrective actions where high priority passage problems exist. The habitat assessment and planning part of this

proposal appears to meet RPA #154, the corrective actions themselves do not. The Yakima is not a priority subbasin.

BPA Rank – C
RPA- 154

25062 – Growth Rate Modulation in Spring Chinook Salmon Supplementation: No cost-share. This proposal develops hatchery-rearing protocols to reduce excessive production of early maturing male chinook salmon, improve smolt-to-adult survival and reduce negative ecological impacts of hatchery fish on wild fish. This proposal addresses a critical uncertainty and the results should be applicable basin-wide. No out-year costs are identified.

BPA Rank – A
RPA – 184

25078 – Acquire Anadromous Fish Habitat in the Selah Gap to Union Gap Flood Plain, Yakima River Basin, and Washington: BOR will match costs 1:1. This is a BOR proposal, but the Yakima is not priority sub-basin under NMFS' Biological Opinion. This proposal should be deferred until the development of sub-basin plans and BPA's land and water acquisition policies.

BPA Rank - C
Meets RPA – 150

25090 – Determine Quantitative Values for the Perpetual Timber Rights on the WDFW Oak Creek and Wenas Wildlife Areas: This proposal would determine the quantitative value of the Perpetual Timber Rights on WDFW's Oak Creek and Wenas Wildlife Areas. This proposal does not include actual acquisition of easement. Costs are high for little direct benefit. Defer for now.

BPA Rank - C

25095 – Pesticides and the Environmental Health of Salmonids in the Yakima Subbasin: No cost-share. This proposal would evaluate the effects of pesticides on the physiology and fitness of chinook salmon and incorporate empirical data into a spatially explicit model of population viability in the Yakima subbasin. This is not a critical uncertainty.

BPA Rank – C

25100 – Protect Normative Structure and Function of Critical Aquatic and Terrestrial Habitat: No cost-share. Productivity of this urban area is questionable.

This proposal should be deferred until the development of sub-basin plans and BPA's land and water acquisition policies.

BPA Rank - C
NMFS designation – 400

John Day Subbasin

John Day (On-going)

1984-021-00 – Protect and Enhance Anadromous Fish Habitat in The John Day Subbasin: Although expensive, short-term leases (15 years) are as long or longer than any other program doing riparian protection except those that purchase perpetual easements or buy the land in fee title. Some of these 15-year leases are just about to come up for renewal. ODFW has been experiencing positive feedback from most landowners that they want to continue in the program. There have been some significant improvements to the riparian habitat and stream width-to-depth ratios from this project. ODFW has developed a very good program with the same ODFW representative managing the project for the last 17 years. They know how to implement effectively the fencing, watering devices, maintenance and monitoring of the project. Other groups trying to initiate similar programs use their expertise. They focus the work in the highest priority areas for salmon and steelhead in the John Day Subbasin.

BPA Rank – A

1993-066-00 – Oregon Fish Screening Project: This project continues an apparently effective ODFW irrigation diversion screening program by installing 20 replacement fish screening devices in the John Day Basin and 1 unscreened and 5 replacements in the Walla Walla Basin.

BPA Rank – A
Meets RPA – 149
NMFS designation – 400

1994-054-00 – The Population Structure of Bull Trout in the John Day River and Abundance of Bull Trout in Mill Creek (ODFW); Bull Trout Abundance Monitoring in the Lower Deschutes River (CTWSIR): All of this work by ODFW and the Tribe would be covered under this project number; however, BPA does not believe that the funding of AFS protocol evaluations is its responsibility.

BPA Rank – B

1997-034-00 – John Day Sediment: This project monitors surface fine sediment and over-winter sedimentation in cleaned gravel in spring chinook spawning habitats. It analyzes potential trends and relationships in data, and relates them to salmon survival.

BPA Rank – A
RPA – 154

1998-016-00 – Monitor Natural Escapement & Productivity of John Day Basin Spring Chinook: The existing project was loaded up in the ISRP fix-it loop with large, costly, controversial, and only marginally related objectives from proposal #25088 (ODFW). This needs to be sorted out. However, the original proposal is good and fundable and supports the pilot M&E effort in the John Day Basin, having been modified since last year to incorporate easily accommodated sampling for listed steelhead. BPA recommends funding the original proposal. However, we do not recommend funding the project as it presently exists, because of the added objectives.

BPA Rank – A (original project proposal) and D (project after fix-it loop)
Meets RPA – 153
RPA – 183

1998-017-00 – North Fork John Day Gravel Dams: This project eliminates gravel push-up dams in the lower North Fork John Day River and replaces them with permanent pumping stations. This results in removal of passage impediments and elimination of annual in-stream modifications.

BPA Rank – A
RPA – 149

1998-018-00 – John Day Watershed Restoration: This project implements protection and habitat enhancement actions to improve water quality, water quantity, and fish habitat, and eliminate passage barriers for anadromous and resident fish.

BPA Rank – A
RPA – 149
NMFS designation – 400

1998-022-00 – Pine Creek Ranch: This project would conduct various construction, operation and maintenance and monitoring and evaluation activities on Pine Creek Ranch. It is important for BPA to preserve its investment in wildlife habitat.

BPA Rank – A
Meets RPA – 149

1999-010-00 – Mitigate Effects Of Runoff & Erosion On Salmonid Habitat in Pine Hollow Creek and Jackknife Canyon: This project uses a good approach by developing and facilitating a watershed council with the landowners (farmers and ranchers) actively involved. ODFW, BLM, NRCS and other technical staff are asked to

help provide direction and assistance with project work. The focus is on upland management that will reduce erosion and increase in-stream flow in the summer. The project sponsor has had some trouble implementing all of the projects because of their dependence on landowners to provide some cost-share and some of the labor in implementation.

Some question whether this area in the lower John Day Subbasin should be prioritized for fish. Pine Creek gets limited use by steelhead. As few as 4 and as many as 14 redds have been found in recent years' spawning surveys with an upward trend. The sponsor is requesting $22,000. Based on cost, it is a very good approach, and is providing an upward trend in steelhead numbers.

BPA Rank – A
NMFS designation – 400

1999-088-00 – Columbia Plateau Water Right Acquisition Program: Oregon Water Trust has demonstrated success in handling water acquisition. Any new acquisitions should be deferred for consideration by the Regional Water Entity. Oregon Water Trust should seek acceptance as a Local Entity under the Water Entity RFQ.

BPA Rank – A
Meets RPA – 149 and 151

2000-015-00 – Oxbow Ranch Management and Implementation: BPA/CTWSRO MOU requires BPA funding. This project supports the pilot M&E effort in the John Day Basin.

BPA Rank – A
Meets RPA – 149 and 150

2000-031-00 – North Fork John Day River Subbasin Anadromous Fish Habitat Enhancement Project: The watershed assessment portion of this project is a very small component ($10,000) and it is not providing assessment work for the entire North Fork John Day River. The assessment is still being developed with the strategy to do just a couple of watersheds that make up a small component of the entire John Day Basin because of limited funds and personnel to do the work. ODFW has provided direction to the Umatilla Tribe on where they should focus their efforts. In fact, ODFW would be focused there also except for limited personnel and the distances they would have to travel to do the work.

The tribe is having some difficulty getting the project rolling because they have new personnel and this is a new area for their focus. They are also trying to figure out how to coordinate their program with the USDA CREP program in this area. They have made good faith efforts to do this. It is too soon to know whether they will be able to have a successful long-term program in the area but they are focused in the right locations and coordinating with other organizations such as watershed councils, USDA and others.

BPA Rank – A (for watershed assessment portion); B for balance.
NMFS designation – 400

John Day (New)

General Comments:

The ISRP appropriately noted that some of the John Day R, M&E proposals were redundant (see below). However, BPA does not believe that a solution is to refer this problem to "An interagency monitoring coordination committee responsible for tier 2 monitoring in Oregon [to] integrate this project with other projects monitoring escapements, water quality". The proposals are sponsored by two Oregon agencies (ODFW and ODEQ) and the interagency coordination committee is led by Oregon (OWEB) and presently is active only for the Oregon coast. Important Columbia River Basin constituents are not aware of the committee, let alone represented in/on it. BPA, the Council and CBFWA could benefit from a process to eliminate or at least reduce redundancy in proposals.

Project Specific Comments:

25003 – Forrest Ranch Acquisition: This proposal (proposal no. 23054) was submitted under the Council/BPA High Priority solicitation of November 13, 2000. It was recommended for BPA funding and BPA is currently in negotiations with the landowner.

25006 – Provide Coordination and Technical Assistance to Watershed Councils and Individuals in Sherman County, Oregon: Under this proposal, one watershed council coordinator and two planner/designers would provide support to five watershed councils in Sherman County.

BPA Rank – C
Meets RPA – 153
NMFS designation – 400

25050 – Provide incentives to convert to direct seed/no-till farming in Sherman County, Oregon: Under this proposal, the SWCD will provide incentive for two of three crop years for farmers to convert to no-till/direct seed farming. No-till provides improvement in watershed hydrology and reduces sedimentation. Prior to commitment of funding, this proposal needs to be reviewed by the Regional Water Entity.

BPA Rank – C
Meets RPA – 153
NMFS designation – 400

25051 – Columbia Plateau Natural Resources Collaborative (NRCS): Under this proposal, the NRCS would provide assistance to local watershed groups on subbasin planning, ESA/CWA integration, and implementation funding to facilitate conservation

application to restore salmon and water quality on private lands. However, the extent to which BPA should support local and state infrastructure needs to be explored further; therefore, this proposal should be deferred.

BPA Rank – C
Meets RPA – 154

25061 – John Day Fish Passage Barrier Inventory (OWEB): ISRP ranked "not fundable". Resource managers in the basin are concerned about the lack of coordination on this proposal by OWEB and suggest that the work has already been done. It appears that many of the barriers have been identified previously but that their prioritization for removal has not. This project would support the pilot M&E effort in the John Day Basin.

BPA Rank – C
Meets RPA – 154

25067 – Manage Water Distribution in the John Day Basin: Provides water management and measurement resources needed in John Day. However, the extent to which BPA should support local and state infrastructure needs to be explored further; therefore, this proposal should be deferred.

BPA Rank – C
Meets RPA – 152
NMFS designation – 500

25069 - John Day Monitoring (CTWSRO): Coordinate with other monitoring activities proposed by OWRD, OWEB, ODFW, and ODEQ. This proposal is a high priority and fundable, but should not be funded until it is integrated and coordinated with other M&E efforts in the subbasin. For example, the first two objectives may be funded by a direct contract with OWEB. Other objectives relate closely to tiers 1 and 3 monitoring that is desirable (e.g., flood irrigation study) and/or being proposed or conducted by other projects (e.g., water quantity and quality monitoring). Both CBFWA and the ISRP point out the need to coordinate to reduce overlap and to ensure that data protocols are consistent with ODEQ proposal #25010. This will take some time. Although the proposal looks like a cost-effective and innovative project, it lacks some details regarding methods (e.g., for evaluating flood irrigation).

BPA Rank – A, with modification to enhance coordination.
Meets RPA – 183

25073 – Wheeler SWCD Riparian Buffers: This proposal would implement a riparian buffer program using cost-share funding from USDA, State of Oregon and private landowners($2.7 million).

BPA Rank – A
Meets RPA – 153
NMFS designation – 400

25080 – Gilliam SWCD Riparian Buffers: This proposal would implement a riparian buffer program using cost-share funding from USDA, State of Oregon and private landowners ($3.5 million).

BPA Rank – A
Meets RPA – 153
NMFS designation – 400

25084 – Develop GIS Layers for Generation of Specific Natural Resource GIS Maps and Analysis: This proposal would develop data sets for use in comparative analysis of multiple factors affecting fish and wildlife values in the four subbasins. This data can help integrate basin-wide natural resource planning and decision-making. The ISRP commented: "Why should this project be funded by BPA and not by the state of Oregon? It seems that most of the results are to be housed in the ODFW and are to be used by Oregon agencies." The extent to which BPA should support local and state infrastructure needs to be explored further; therefore, this proposal should be deferred.

BPA Rank – C
Meets RPA – 154

25085 – Eradication of Brook Trout from Winom Creek to enhance Bull Trout Habitat: No cost-share. ISRP questions whether bull trout in this location need to be protected from the brook trout. The U.S. Forest Service (USFS) should fund.

BPA Rank – D

25086 – Purchase Perpetual Conservation Easement on Holliday Ranch and Crown Ranch Riparian Corridors and Uplands: This proposal should proceed upon successful negotiation of MOU with involved parties.

BPA Rank – A
Meets RPA – 150

25087 – Desolation Creek Rehabilitation and Meadow Restoration: This project would recover or reconstruct stream channel and rehabilitate Desolation Meadow on the North Fork of Desolation Creek on USFS land. This work would enhance a degraded area, rather than protect a productive area. USFS should fund.

BPA Rank – C
NMFS designation – 400

25102 – Columbia Plateau Water Rights Acquisition: This project would acquire existing water rights on a voluntary basis through purchase, gift and water conservation projects, and transfer to in-stream water rights under Oregon state law; target acquisitions

to maximize fulfillment of habitat objectives for in-stream flows. Prior to commitment of funding, this proposal needs to be reviewed by the Regional Water Entity.

BPA Rank – C
Meets RPA – 151 and 152

Main-Stem Columbia & Snake Rivers

Project proposals on the main-stem Columbia and Snake rivers in the Columbia Plateau raise several important fiscal and biological policy issues. First, many of the proposals relate to mitigating the operational effects of a specific COE hydroelectric project, within the boundaries of that project. If the Corps funds these proposals, the costs are allocated amongst the project purposes according to that project's repayment formula, with ratepayer funds only paying for the power share. If BPA funds these proposals, we should be assured that we can credit BPA's annual repayment to the U.S. Treasury for the costs allocable to other project purposes. The Province also contains Grant PUD's Priest Rapids and Wanapum dams. Proposals mitigating the operational effects of these projects should be funded by the PUD and not BPA.

The Province contains the Hanford Reach fall chinook population. This population is one of the healthiest and most studied in the basin. The tributary habitats and fish populations are much less understood and in much greater need of enhancement.

Wildlife mitigation for flooded riparian habitat appears to be based on a calculation of lost habitat units. The proposals indicate that BPA purchase of wildlife lands would give BPA a wildlife mitigation credit of 1 for every 2 of the purchased land's habitat units. BPA has not adopted this crediting mechanism and continues to assume a 1 to 1 credit. The fisheries mitigation program and actions addressing the Clean Water Act are heavily emphasizing the enhancement of riparian habitat throughout each sub-basin.

Main-stem Columbia & Snake (On-going)

1991-029-00 - Fall Chinook Migrating in Lower Granite Reservoir: Considerable data have been collected through this project concerning the effects of flow on the migration and survival of juvenile fall chinook. Despite this information, different scientists still draw varying conclusions. Given the apparent complexity of the issue, including analysis that suggests that it is not possible to separate the effects of flow from water temperature and turbidity, it may not be possible to achieve the project's first objective of determining the effect of flow on chinook survival. In the case of the second objective, managing flow and storage in-season to assist in the juvenile migration, is dependent on utilizing available stored water that is of suitable temperature (cool). It would be useful if the Technical Management Team could describe what specific information is needed to facilitate real-time operational recommendations to help ensure that the scope of this project and its deliverables are appropriately focused.

BPA Rank - A

Meets RPA - 105, 143 and 190

1994-018-07 – Garfield County Sediment: This project proposes to expand beyond its work in the Pataha watershed into three other small watersheds. These streams all contain wild populations of listed steelhead. There is currently very little use of the upper mainstem Pataha Creek by steelhead, and these three watersheds combined appear to have greater potential for steelhead enhancement than the upper Pataha Creek. The primary goal for the mainstem Pataha Creek watershed is to improve water quality for the lower Tucannon (reduced sediment and temperature), not on steelhead habitat enhancement.

Recommend funding to maintain the base coordination and planning function of watershed coordination, Section 4, Objective1. Objective 2 should focus on Alpowa Creek. This assessment should be focused in coordination with the Conservation Commission and the Washington Department of Fish and Wildlife. Limited effort may be placed in Deadman and Meadow Creeks and in the main Pataha in coordination with the Conservation Commission in preparation for subbasin planning. Objective 3 should focus in Alpowa Creek, but not to the exclusion of CREP coordination in the other watersheds. Fund Section 5, Objective 1 only in Alpowa Creek after an initial assessment shows a direct link between cropland sediment runoff and steelhead productivity. This should only be funded if an integrated M&E program is established in cooperation with the Washington Department of Fish and Wildlife, Washington State University, and appropriate USDA research personnel. Objectives 2 and 3 should only be funded in high priority areas in Pataha Creek as it affects the lower Tucannon and in Alpowa Creek. Fund Section 7, with M&E focused on Alpowa Creek and possibly on existing M&E sites in Pataha Creek, but only after a review of the potential for ongoing M&E to be related to changes in salmonid productivity and the effects of temperature and sediment in the lower Tucannon.

BPA Rank – A (only if implemented as above.)
Meets RPA – 150, 152, 153
NMFS designation – 400

1994-069-00 – Hanford Reach Fall Chinook: This project has already spent $975,000 and proposes to spend another $860,000 over the next five years. The project should complete its initial objective of estimating the Reach's chinook salmon carrying capacity in 2003 and then end. The new, second objective is not a priority compared to needed tributary mitigation.

BPA Rank – B

1997-014-00 – Fall Chinook Stranding: This project began in 1997 as a 3-year project to be completed in 1999. It received additional funding for 2000 and 2001. Grant County PUD has been providing co-funding since 1997 under contract with WDFW. Grant County's current contract with the WDFW expires in December of 2001 and the last completion report Grant received was for the 1998 sampling year. The proposal

author has not contacted Grant regarding continued co-funding for 2002 and Grant has no plans to extend or renew the contract beyond 2001. We recommend that new funding not be provided for additional fieldwork on this project. Instead, efforts should be focused on finalizing reports that are already three years behind.

This is an excessively detailed data collection and analysis project for a fish population that is healthy. This is especially true given the measured chinook mortalities the project has measured the past 3 years, i.e., 0.3% to 0.5% population mortality at the fry stage of a healthy population is likely inconsequential to the viability of the population. This impact, for this population, at the fry stage could be viability noise. BPA may consider having a consultant perform a PVA or similar analysis on this Hanford fall chinook population with the above mortality levels and report both the consequences of the mortality and options for ameliorating the mortality, should it be considered a problem. For example, the lost fry, if really significant, might be offset by allowing an additional 60 – 100 adult fish escape to spawn. Alternatively, the Priest Rapids hatchery could increase its six million production by 100,000 0+ smolts as this is already a heavily supplemented population. $1.6 million has already been spent on this project and $1 million more is proposed. These funds could be more usefully spent within a sub-basin.

Grant County PUD is also concerned about the perceived need for extending the duration of this study, regardless of the funding source. In Grant's opinion, 5 more years of monitoring and intensive sampling will unnecessarily delay implementation of a long-term flow management program to address the effects of flow fluctuations on fall chinook fry. We now have detailed mortality data from 1999, 2000 and 2001 that correspond to high, average and very low water years. We believe that the data expected from the study are now available. An additional five years of funding would unnecessarily delay development of a long-term agreement as each party anticipates new data that might be more favorable to their position. This proposal needs to be deferred until its components can be reviewed for consistency and effectiveness.

BPA Rank – B

Main-stem Columbia & Snake (New)

25033 – Potential Main-Stem Habitat: This is a project that addresses the operational effects of COE dams. If funded, the proposal should be directed only to the COE Snake River projects (habitat for ESA-listed fish) and not the Hanford Reach, habitat for the healthy fall chinook population. This habitat already has been studied extensively. The proposal makes no mention of any radio tagging studies indicating fall chinook spawning in dam tailraces. The proposal specifies 5.11 FTE for $85,000. This appears wrong.

BPA Rank – C
Meets RPA – 155

25035 – Fall Chinook Fallback at Priest Rapids: This project is a funding responsibility of Grant PUD. The proposal does not address a listed population, but a

healthy one. The proposal requires considerable funding for studying fallback at the dam when the problem may be caused more by the new operations at Priest Rapids Hatchery that prevents hatchery fish from entering the facility. This should be addressed prior to an expensive fallback study.

BPA Rank - D

25037 – Effects of American Shad: This project is a funding responsibility of Grant County PUD as it addresses a potential passage problem at Priest Rapids Dam. BPA research on this topic should be undertaken at a COE dam. This is one of several proposals that examine the effects of American shad. If significant, adverse interactions are found to be occurring between the shad and salmonids, the fishery managers should consider a means by which this invasive species could be controlled.

BPA Rank - D

25038 – Effects of Hydropower on Fall Chinook: This project is a funding responsibility of Grant PUD since it addresses operations of its Priest Rapids and Wanapum dams. The proposal focuses on the healthy, Hanford Reach fall chinook population that is not listed and is not as high a priority as tributary fish populations.

BPA Rank - D

25045 – Water Level Changes on Fall Chinook: This project addresses the Hanford Reach fall chinook and should be funded by Grant PUD. The proposal appears to duplicate project no. 1997-014-00. It addresses a healthy, unlisted fish stock. The habitat needs of these chinook should also be enhanced by implementation of proposal no. 25060 – Burbank Sloughs.

BPA Rank - D

25049 – Simulating Environment for Migrating Salmon: This is a good proposal for addressing Snake River ESA-listed fish, both adult and juvenile fall chinook, and adult steelhead.

BPA Rank – A
Meets RPA – 141 and 143

25052 – Sex Reversal in Fall Chinook: This proposal addresses the potential causes of possible sex reversal as a result of urban or agricultural pollution. WDFW does not thermally mark chinook at Priest Rapids Hatchery, so this is not a possible cause of the apparent sex reversals. This proposal is very closely related to the ongoing work of Nagler. Scientific review should determine if both projects are needed, or if the ongoing Nagler project is sufficient to address the issue.

BPA Rank – C

25053 – Bull Trout Movement in the Snake: The proposal needs to be coordinated with any COE plans to expand the counting period at Snake River dams per the USFWS' Bull Trout Biological Opinion. The project appears to be necessary and cost-efficient. Consideration should be given to expanding the proposal to integrate radio tagging of Bull Trout populations from other Snake River tributaries to assess their movement past Snake River dams – make use of proposed radio receiver effort. This project will help BPA implement actions 11.A.3.1.d and 11.A.3.1.f in the USFWS' Biological Opinion. It is a well presented and justified proposal with a reasonable budget. Furthermore, the proposal could benefit from some minor additional tasks and budget (probably < 10%) to collect bull trout for radio tagging in the lower Tucannon and to radio tag specimens that occur incidentally in the juvenile collection systems at lower Snake River dams. This will better satisfy the USFWS' Biological Opinion and help address an ISRP concern about sufficient samples. The project sponsor is agreeable to this.

BPA Rank – A
Implements USFWS' Biological Opinion

25060 – Burbank Sloughs Habitat: This is a substantial proposal, restoring nearly 2,000 acres of potential salmonid rearing habitat. It corrects previous wildlife mitigation actions of McNary Dam. If BPA funds the project, it should get appropriate credit on its repayment to the Treasury. It is critical that the enhancement of this shallow water habitat take into account the effects of pool fluctuations and the presence of invasive, predatory species. The proposal should also consider the effects of opening up this habitat on the lifecycle of predatory fish species to ensure it doesn't overly enhance their numbers and, therefore, the predatory effect on juvenile salmonids. This project may require expansion of the northern pikeminnow control project.

BPA Rank – A (power share)
Meets RPA – 152
NMFS designation – 400

25063 – Subbasin Planning Coordinator for Oregon: This project provides a state coordinator to integrate subbasin planning with the Oregon Plan for Salmon and Watersheds. The extent to which BPA should support local and state infrastructure needs to be explored further; therefore, this proposal should be deferred.

BPA Rank – C
Meets RPA – 154

25064 – Lower Granite Juvenile Fall Chinook: This proposal would describe passage timing, genetic lineage, scale patterns, and locations of fall chinook salmon that hold over in Lower Granite Reservoir during the winter. This proposal would meet objectives of the NMFS Biological Opinion.

BPA Rank – A
RPA – 190

25070 – Hanford Fall Chinook Spawning Habitat: This proposal may duplicate project no. 1994-069-00, which itself should give BPA and the fishery managers sufficient information on chinook spawning habitat and carrying capacity. Again, the region does not need to excessively study this healthy fish population. This proposal would "provide another technique" to accomplish what other BPA-funded projects are already addressing. The project would have little application elsewhere as main-stem spawning habitat is already being addressed by the above project, #1990-003-00, which examines habitat below Bonneville Dam, and proposal no. 25033, which would address habitat in the Snake River.

BPA Rank - D
RPA – 183

25079 - GIS Based Model for Hanford Reach (USFWS): The intent of this proposal is to make a 2-Dimensional model of the Hanford Reach. It is essentially a duplication of many existing aquatic habitat models currently available through the efforts of Battelle, the Pacific Northwest National Laboratory and the USGS-BRD. While the proposal sponsor claims that this model will enable quantification of juvenile fall chinook stranding, two-dimensional models such as the one described by this proposal do not enable quantification of fish impacts. If this were possible, Grant PUD and the WDFW would not have expended thousands of hours of field sampling over the past 5 years on this issue. The sponsor also claims that the model would allow enumeration of fall chinook spawning. Again, if this were true, aerial redd counts conducted by PNNL, and fall chinook redd counts and monitoring conducted by Grant PUD under the Vernita Bar Agreement, would not be necessary.

BPA Rank - D

25091 – Main-stem Habitat Assessment: The work proposed here is a high priority in various plans. However, the proposal addresses ecological interactions focused mainly on the Hanford Reach fall chinook. The region could probably benefit from this kind of work if it were redirected to Snake River fall chinook and other 0-age migrants, such as summer chinook. The proposal also addresses the likely adverse interactions of the invasive species, American shad, on native salmonids. But it is a series of hypotheses to be tested, not a complete proposal. BPA believes that the proposal should be reworked and submitted in the upcoming Mainstem and System-wide Province solicitation.

BPA Rank - C

Other (New)

25010 – Regional Stream Conditions and Stressor Evaluation: This proposal would evaluate the status and trends of key factors limiting listed species within subbasins by

developing a statistically based model to characterize baseline conditions and identify conditions at regional reference sites. BPA believes that this project could be referred to an *ad hoc* work group along with related R, M&E projects in Oregon subbasins. This proposal covers the Deschutes, John Day, and Umatilla subbasins and proposes sampling designs and methods that are very similar to several other proposals for the same subbasins. The *ad hoc* committee would define a reasonable preliminary R, M&E program for each subbasin and identify, with proposal sponsors, which projects and organizations can best fill that program. Comments from CBFWA and the ISRP noted these redundancies and the need to resolve them.

Nevertheless, the EMAP sampling design and the utility of sampling high quality reference sites are desirable to some extent, particularly for a prototype subbasin like the John Day. BPA agrees with the ISRP's desire to use this project as a model for habitat monitoring. The budget appears reasonable, but no justification is provided for why so many reference sites must be sampled each year in each of the three subbasins to characterize what constitutes high quality habitat. The number seems excessive, particularly in the John Day subbasin where the project sponsor (ODEQ) is already conducting a 4-year EPA-funded EMAP (i.e., representative) study that apparently includes some high quality sample sites. There are other redundancies that must be resolved. Both this proposal and ODFW's proposal #25088 would collect much of the same data (although variables are not listed in either proposal) in the same subbasins. This proposal needs further review.

BPA Rank –C
Improves water quality and/or supports TMDL
RPA - 154

25011 – Assess Riparian Condition Through Spectrometric Imaging of Riparian Vegetation: This proposal does not provide for cost-share. It would use a different method to collect some of the same riparian data in the same subbasins as another ODEQ proposal (#25010), as an EPA-funded ODEQ project in the John Day, as an ODFW proposal (#25088), and as ongoing BPA-funded M&E projects, yet none of these efforts are mentioned in the proposal. This proposal applies to all Oregon streams in the Columbia Plateau, but the proposal is very unclear about which streams and how much of the stream systems will be covered. The proposal also justifies its work largely for developing TMDLs, but TMDLs have already been completed for two of the four subbasins within the geographic scope of this proposal (the Walla Walla in 2001 and the Umatilla in 2000). This proposal is presently justified only for the John Day subbasin, where it could be tested (e.g., for data quality or cost efficiency) against on-the-ground M&E projects that will be conducted there. Although the ISRP says "Fundable," BPA believes it is a low priority and, if funded, we would recommend limiting its application to the John Day Basin and require close cooperation with other projects. The proposal is inadequate and should not be funded as is.

BPA Rank – C

Meets RPA – 150 and 155
Improves Water Quality and/or Supports TMDL

25056 – Conduct Watershed Assessments for Priority Watersheds on Private Lands in the Columbia Plateau: Subbasin plan should identify priority areas for assessment work; defer until plan is completed.

BPA Rank – C
Meets RPA – 154

25068 – Rock Creek Improvement: Costs appear insufficient to accomplish much work. The proposed work appears very piecemeal. BPA believes that a recommendation for this proposal should await a sub-basin plan and the Technical Recovery Team's ESA guidance. Otherwise, this relatively small proposal could evolve into a major funding commitment before the priority of the Rock Creek sub-basin is understood relative to ESA needs and the work already being performed in other sub-basins that addresses the same or higher priority species.

BPA Rank – C
NMFS designation – 400

25088 – Salmonid Population and Habitat Monitoring in the Oregon Portion of the Columbia Plateau: This project should not be funded, either in its original entirety or as the daughter projects that were broken out during the ISRP fix-it loop. The project should not be funded because:

1) It is a large and expensive ($2.0 mill.) aggregation of relatively unrelated objectives that should have been submitted as separate projects. This is essentially an omnibus funding proposal (not a unified umbrella program proposal), which should be discouraged by the Council, ISRP, and BPA. It was "dissolved" in the fix-it loop. Council staff has still not been able to interpret what parts of the original proposal the ISRP considered "Fundable," and the CBFWA funding recommendations are not consistent with its own rearrangement of the objectives.

2) The objectives are not adequately described and justified. For example, Objective 1 involves complex and costly ($682K in FY02 alone) monitoring that is described by a mere two paragraphs in the proposal narrative. References cited in those two paragraphs also are not very informative. Objective 7 (3 new enforcement officers, $310K in FY02) receives only seven lines of description/justification. The current Council/ISRP/BPA project solicitation and selection process was meant to ensure that funded projects are supported by thorough, professional-quality proposals. This proposal is very inadequate and should not be funded, especially in the amount requested.

3) The proposal does not adequately describe how its work would be integrated with the several existing and new monitoring programs within the same agency (e.g., steelhead spawning ground surveys), with sister agencies (e.g., ODEQ's proposal #25010 and the

current EPA-funded project in the John Day), or with other ongoing and overlapping monitoring (e.g., CTUIR projects in the Umatilla and Walla Walla). At present, there appears to be considerable redundancy with other work, and we may have more M&E work going on in some subbasins than is useful or necessary.

4) The sponsor does not propose cost sharing and states in the budget summary of this $2.0 million proposal that cost sharing is "not applicable." Oregon is supporting the Oregon Plan sampling (analogous to Objective 1 in this proposal) in coastal streams, why not in the interior? The sponsor is presently funding some monitoring (e.g., steelhead spawning ground surveys) that is proposed for BPA funding through this project. Would this project replace or duplicate the state-funded work? Under objective 7 (3 new OSP officers), the sponsor does not describe the need or the incremental benefit that the additional officers would generate for the FWP. The Council and BPA should expect cost-share and better financial justification from the sponsor for big and expensive projects like this.

Although BPA's recommendation would be to reject the entire proposal, there may be some way to salvage specific parts (objectives) of the proposal and ultimately fund some of them. Again, it is not clear what the ISRP recommendation is for any of these objectives.

BPA Rank – C

25092 – Palouse River Restoration: This proposal calls for a substantial commitment of funds at too early a stage. BPA recommends awaiting development of a sub-basin plan for the Palouse. Any proposal for the Idaho portion of the sub-basin should be integrated with a Washington proposal as the major portion of the sub-basin is in Washington. This project proposes to enhance habitat that appears to be low priority relative to the NMFS' Biological Opinion and F&W Program strategies of addressing the best habitat first. Also, the USFS and NRCS appear to be operating in the sub-basin to enhance habitat. BPA should consider a strategy to allow these agencies and their funds to take the lead role in stream and riparian rehabilitation. BPA should avoid using its funds in the Palouse to create a complex and expensive array of entities all focused on the same objectives.

BPA Rank – C

25097 – Salmon and Steelhead Habitat Inventory and Assessment Project (SSHIAP): This proposal would provide a freshwater and riparian data system for salmonid-bearing subbasins in Washington and link pesticide information to this data system. The extent to which BPA should support local and state infrastructure needs to be explored further; therefore, this proposal should be deferred

Meets RPA – 154
BPA Rank – C
Improves Water Quality and/or Supports TMDL

25099 – Oregon CREP Improvement Project: Good match with RPA #153. If BPA is going to help fund this effort, it would be important for the soil and water conservation districts, states, tribes, etc. and CREP folks to get together to identify the issues that are preventing the federal programs from being implemented more efficiently. There have been no convincing arguments to date as to why funds are so limited.

BPA Rank – A
Meets RPA – 153 and 154