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July 10, 2012

DECISION MEMORANDUM

TO: Council Members

FROM: Lynn Palensky, program development

SUBJECT: Decision Memorandum: Council recommendations on Resident Fish, Data

Management and Regional Coordination Category Reviews – projects and

associated programmatic issues

Introduction

Pursuant to Section 4(h)(10)(D) of the Northwest Power Act, the Northwest Power and Conservation Council has been engaged in a review of Resident Fish, Data Management and Regional Coordination Projects that implement the Council's Columbia River Basin Fish and Wildlife Program. This document, when final, will contain and explain the Council's recommendations to the Bonneville Power Administration for the funding and implementing of these projects for Fiscal Years 2013 through 2017.

<u>Part 1</u> below provides the background on the review, including the description of these three categories, the review process, and the projects reviewed. <u>Parts 2-4</u> will cover the programmatic issues as well as some project-specific recommendations for the three categories – Part 2: Resident Fish; Part 3: Data Management; and Part 4: Regional Coordination. As has been true in the past, the review of the individual projects illuminates a set of broader policy or programmatic issues that affect the Council's review and recommendations for a collective set of the projects. Possible resolutions for the programmatic issues are provided in each Part for Fish and Wildlife Committee and Council consideration. The final version of this document will contain the Council's decisions on the set of programmatic issues, which in certain cases will then be conditions or recommendations that accompany the relevant project recommendations.

Part 5 is a list (spreadsheet) of project-specific recommendations for individual projects for the Resident Fish, Data Management and Regional Coordination categories, along with a description of the form and duration of our recommendations. The project recommendations are associated

503-222-5161 800-452-5161 Fax: 503-820-2370 with Parts 2-4 of the decision document as many of the recommendations point to a programmatic issue for full resolution. The spreadsheet lists the projects reviewed in this category, with Bonneville's FY 2012 planning budgets, requested FY 2013 budgets and the Council recommendation for each project as well as conditions or comments to be considered a part of the recommendation.

Finally, Part 6 will contain the formal explanations by the Council responsive to the specific requirements of Section 4(h)(10)(D) of the Northwest Power Act. This includes the written explanations required of the Council in those few instances in which the Council's project funding recommendations do not follow the recommendations of the Independent Scientific Review Panel. The Council will also explain how it complied with the requirements in Section 4(h)(10)(D) to "consider the impact of ocean conditions on fish and wildlife populations" and "determine whether the projects employ cost-effective measures to achieve program objectives" when making project funding recommendations.

Part 1: Background -- Categories, Projects, and Review Process

Under Section 4h of the Northwest Power Act, the Council develops a program to "protect, mitigate and enhance" fish and wildlife affected by the hydroelectric facilities on the Columbia and its tributaries. Section 4(h)(10)(A) of the Power Act then calls on the Bonneville Power Administration to use its fund and other authorities to protect, mitigate, and enhance these same fish and wildlife "in a manner consistent with" the Council's fish and wildlife program. Bonneville directly spends hundreds of millions of dollars every year to fund mainstem and offsite mitigation projects that implement measures in the Council's program, along with resident fish, data management and regional coordination projects.

Section 4h(10)(D) of the Northwest Power Act then directs the Council to review projects proposed for funding by Bonneville to implement the Council's Fish and Wildlife Program. The Council engages in this review with the assistance of its Independent Scientific Review Panel (ISRP). The Council and Bonneville work together to develop the information necessary to make this review process successful. Past review processes have taken many forms including program-wide solicitations, review of projects by geographical organization (the rolling provincial review), and targeted solicitations. Beginning in 2009, the Council and Bonneville, with advice from the ISRP, decided to review projects in functional categories (wildlife, monitoring, evaluation and research, artificial production, resident fish in the areas impassible for anadromous fish), to be followed by a review of certain projects, especially habitat actions, organized by subbasin and province, commonly referred to as "geographic review".

The central purpose of the broad category reviews is to highlight issues apparent only by looking at similar projects collectively, such as duplication and redundancy, relevance and relative priority, coordination, consistency of approach and methods and costs, and collective consistency with the broad basinwide objectives and strategies in the Fish and Wildlife Program. Organizing the reviews by category also recognizes differences in project types, especially highlighting those with longer-term commitments. The category reviews thus focus on existing commitments and these existing commitments are of many years' standing and have been the subject of numerous reviews in the past. So an important function of the category reviews is to evaluate project results and how well the projects have adapted proposed future work based on those

results, and how well the project sponsors have responded to the scientific and management issues identified in previous reviews. The scientific and administrative review for the projects should enable the Council and Bonneville to make long-term funding decisions and establish appropriate longer-length review cycles for many of these projects.

The category reviews include six steps: planning; project sponsors' reports and proposals, ISRP review; public review; staff review and recommendations, and final Council recommendation. Detailed information about the Resident Fish, Data Management and Regional (Program) Coordination review is found on the Council's website at www.nwcouncil.org/fw/budget/2013/Default.asp. The webpage describes the steps in the review process and includes a link to the list of the projects reviewed or included as part of the review context.

Part of the planning for the resident fish review included a decision to include all activities within the non-anadromous fish portions of the basin known as the "blocked areas." This meant reviewing projects or parts of projects that occur in these areas involving artificial production, habitat improvements, research, and monitoring.

In September 2011, the Council and Bonneville together began this review of projects in the categories of resident fish, data management and regional coordination (or "program coordination"). The Council's 2009 Fish and Wildlife Program focuses in particular on implementation and performance and commits to developing a better monitoring and evaluation framework for the Fish and Wildlife Program. The goal is improved performance and reporting on progress and effects under the Program and improved decision making on actions in an adaptive management fashion.

A broad set of principles and information relating to monitoring, evaluation, research, and reporting of results has also been important for this review. As noted above, the Council has focused in recent years on improving these elements of the Fish and Wildlife Program. One goal of this particular review has been to improve consistency with the provisions on monitoring, evaluation, research and reporting in the Council's Fish and Wildlife Program, in the Council's final programmatic and project recommendations in the Research, Monitoring and Evaluation category review completed in 2011, and in the body of scientific guidance on monitoring and etc. that the Program has developed over the years with the assistance of the independent science panels.

These same considerations have also informed the ongoing development of the Council's draft Monitoring, Evaluation, Research and Reporting Plan (also known as the MERR Framework). The MERR Framework is an overarching and comprehensive framework for research, monitoring, evaluation, and reporting of results that the Council has been working on as another facet of its commitment in the 2009 Fish and Wildlife Program. The MERR framework provides umbrella guidance for the development and refinement of research, monitoring and evaluation implementation strategies for particular areas of the Program, including the Anadromous Salmonid Monitoring Strategy (ASMS), the Wildlife Monitoring Implementation Strategy (WMIS) and the Resident Fish Monitoring Strategy (RFMS). The Council has not formally adopted either the MERR Framework or the related implementation strategies, and the MERR Framework and implementation strategies are *not* a source of decision-making criteria for the review. Instead, the principles and considerations informing the review of the monitoring and

etc. elements of the projects in this review are the same principles and considerations informing the development of the MERR Framework and its implementation strategies. Part of the record in the review includes feedback from the ISRP on drafts of the Resident Fish Implementation Strategy (RFIS) and Wildlife Monitoring Implementation Strategy (WMIS), feedback that was also helpful for this category review.

The ISRP began its review in September 2011, beginning with project site visits for the resident fish projects. As noted above, under Section 4(h)(10)(D) of the Northwest Power Act, the Council is to conduct its review of projects with the assistance of an Independent Scientific Review Panel appointed by the Council. The ISRP is asked "to adequately ensure that the list of prioritized projects recommended is consistent with the Council's program," and to make project recommendations to the Council "based on a determination that projects: are based on sound scientific principles; benefit fish and wildlife; and have a clearly defined objective and outcome with provisions for monitoring and evaluation of results." The ISRP issued a single preliminary report on the projects in the three categories on February 8, 2011 (see www.nwcouncil.org/library/report.asp?docid=662).

For the projects within the current review categories, project sponsors were asked in September 2011 to submit the necessary information for ISRP and Council review by the end of November 2011. The sponsors were asked to include project descriptions, work elements, a report on results, and proposed work for the next five fiscal years, and proposed budgets. The project sponsors entered the information directly into the Taurus database (cbfish.org) in a set proposal format.

The review process also included a 'review in context' of nine related projects recently reviewed by the ISRP and Council. It did not make sense to ask for project submissions so soon after the recent review, but information on these projects was included in the review to provide the necessary context for the full category.

The ISRP released its preliminary in February 2012 and concluded that 24 of the project proposals met the ISRP's science review criteria either in whole or in part or with certain qualifications. The ISRP noted that for most of the remaining 30 projects, the ISRP needed further information before it could conclude its review, and asked for a response by the sponsor to a preliminary set of review comments. The ISRP made a specific programmatic recommendation that applied to the 17 regional coordination proposals. The Council invited public comment on the preliminary ISRP report and that period remained open through the release of the final report, until May 4th, 2012.

Project sponsors submitted responses to the Council and the ISRP on March 7, 2012. The ISRP then issued its final review report on April 3, 2012. See www.nwcouncil.org/library/report.asp?docid=27. The ISRP found that 14 proposals met scientific review criteria, 37 proposals met criteria with some qualifications, and 3 proposals did not meet criteria. In the preliminary review, the ISRP made a specific programmatic recommendation that applied to the 17 regional coordination proposals. In addition to these 71 proposals, the ISRP considered 9 "contextual" projects that had been recently reviewed in another process but were included in the review for reference because of their relation to the proposals under review.

In addition to individual project reviews, the ISRP's report contains comments on issues that cut across projects and apply to the Program in general. Topics covered include non-native fish management, trout stocking strategies, monitoring and evaluation, regional coordination, results reporting, and process issues.

As required by the Act, the Council invited public to comment on the ISRP's report and the projects under review. The comment period ended May 4, 2012. While there is no requirement for the Council to seek public comment on subsequent Committee and or Council recommendations, the Council has that option and may consider doing so in the event that there are contentious decisions, or follow-up requests from interested parties. www.nwcouncil.org/library/report.asp?docid=668.

The Council staff, working in cooperation and consultation with Bonneville staff, began reviewing the project information, comments from the sponsors and others on the projects, the ISRP's reports, public comment on the ISRP report, and other information to develop project recommendations and frame programmatic issues.

Under Section 4(h)(10)(D) of the Act, the Council completes the review process by deciding on its project recommendations to Bonneville to implement the Council's Fish and Wildlife Program. The Act specifies that in making these recommendations, the Council is to "fully consider" the recommendations of the ISRP. If the Council decides not to accept a recommendation of the ISRP, the Council must explain in writing its reasons. The Council is also to "consider the impact of ocean conditions on fish and wildlife populations" and "determine whether the projects employ cost-effective measures to achieve program objectives" when deciding on is project-funding recommendations. "The Council, after consideration of the recommendations of the Panel and other appropriate entities, shall be responsible for making the final recommendations of projects to be funded through BPA's annual fish and wildlife budget."

Before turning to the substantive programmatic and project-specific issues and recommendations in Parts 2-5, this part concludes with an overarching issue concerning the form and duration of the project recommendations. The Council's recommendations include the following set of general expectations regarding the duration and implementation of specific project recommendations:

Duration and conditions of multi-year project recommendations

The Council's multi-year funding recommendations for projects extend from FY2013 through FY 2017. The duration of any particular project recommendation is specified in the project-specific recommendation on the attached spreadsheet. These vary from one to five years depending on the type of project, the project conditions, when the project is due to be completed, and if there is delivery of a product to review prior to a recommendation for additional years of funding. For example several projects have a short-term funding recommendation that is accompanied with a recommendation to develop a larger plan or report with may refine the evolution of the project in the out-years. In this case, the out-year funding recommendations are generally based on the submission and Council review of the plan or process. This is not unlike recommendations Council provided in the RM&E/AP review for ocean, sturgeon, tagging, and lamprey projects.

Review considerations

The Council's recommendations are based on sound scientific principles, the reviews of the projects by the Independent Scientific Review Panel, review of the projects in the context of the Fish and Wildlife Program, and other considerations and information developed during the review process. Collectively, the body of work recommended is intended to support and address the Council's Fish and Wildlife Program, as also integrated with the requirements of the two Biological Opinions (FCRPS and Libby) and the commitments made by Bonneville with the parties to the Columbia Fish Accords.

Funding considerations and expectations

The Council's project recommendations do not include recommended project budgets or annual budgets. The spreadsheets each have a column that shows Bonneville's current FY 2012 budget, and the sponsor-requested budget for FY 2013 to provide a general sense of annual project cost. A multi-year funding recommendation that does not set a particular budget allows Bonneville and the sponsors' flexibility in contracting and spending over the life of the project recommendation. Bonneville may also identify areas for cost savings within the work elements and the funding conditions identified by staff. In each case, Bonneville will have the flexibility to negotiate with sponsors through contracting to finalize work and budgets. Actual spending by Bonneville for each project should be sufficient to maintain project integrity as the ISRP reviewed it and as recommended by the Council. The Council's multi-year implementation recommendation does include the following general expectations:

- 1. The ISRP's science review of the projects is sufficient for the duration recommended for the project. Additional review generally will not be needed for the duration of the recommendation, with two exceptions: (1) when the project recommendation is conditioned upon the ISRP reviewing a deliverable (such as a comprehensive management plan or report) within or at the end of the funding period, or (2) when new components outside of the scope or intent of the project at the time of this review are proposed by the project sponsor or Bonneville during the funding period. In these cases, the delivered product or the new project components will be reviewed by the ISRP and a funding recommendation made by the Council based on this new or supplemental information.
- 2. Bonneville will provide start-of-year budgets annually, for each project in this portfolio prior to the beginning of each fiscal year, which should also include: (1) trend information to show how and why the overall budget will change from the previous year, and (2) how inflation and cost-of-living adjustments are to be applied, if any; (3) any modifications to scope negotiated with the project sponsor; and (4) report back to the Council in general how the Council recommendations were dealt with in contracting, and (5) Bonneville will work with the Council to track and follow-up on items or project conditions that require the sponsor to deliver products as part of the funding recommendations.
- 3. Bonneville will work with sponsors to address ISRP qualifications and other conditions during contracting when and as recommended by the Council.

- 4. Bonneville will provide adequate funding to maintain the integrity of the project as reviewed by the ISRP and recommended by the Council.
- 5. In the event that cost savings are found in projects within this review, Bonneville will notify the Council of those savings and engage in a discussion of where the cost savings will be utilized within Bonneville's Fish and Wildlife Program implementation plan.

Project funding package

Each category has its own set of projects, issues and funding requests. Collectively, for projects in all three categories, Bonneville's projected budget for FY 2012 totals \$49,987,065. While the sponsor's project budget requests can vary from year to year, the first year budget requests are provided in the spreadsheet for all 71 (non-contextual) projects. The total budget request for all three categories by sponsors for FY 2013 is \$57,751,322.

Part 2: Resident Fish - Issues and Recommendations

Resident Fish Programmatic Issues and Project-Specific Recommendations

The next three parts identify a set of overarching programmatic issues that arise out of the review of the projects in these categories. The Council's recommendations on the programmatic issues are to be accorded the same weight as the project-specific implementation recommendations. In many cases the Council's programmatic recommendations have become conditions or recommendations that accompany the relevant project recommendations, as explained further in Part 5 (project recommendation spreadsheet).

1. Follow-up plans and reports (management plans, synthesis, retrospectives, etc).

While all projects have specific and detailed recommendations to be dealt with in contracting or follow-up work, many of the projects in the Resident Fish category come with a recommendation to lead, assist with or participate in the development of a larger plan or report.

In most cases the product is to be submitted to the Council for ISRP review and Council review within a defined period. The report or plan is intended to guide future implementation of the project, either within the funding period, or prior to the next review cycle, or as part of the reporting of results. In some cases, funding in out years is directly linked to the outcome and review of the information, and in other cases, it may simply result in the evolution of an ongoing project. The table below provides a summary list of the resident fish projects that have a follow up report due from this review.

Table 1. List of the follow-up plans and reports with a description of the deliverable and the due date.

ID	Title	Sponsor	Deliverable	Due Date
199101904	Hungry Horse Mitigation-Creston Hatchery	US Fish and Wildlife Service (USFWS)	Assist in the development of a joint M&E plan for the interconnected Flathead River system.	Prior to FY 2015
199404300	Lake Roosevelt Data Collection	Spokane Tribe	Co-lead Kokanee Plan for Lake Roosevelt with partners WDFW (1991-047-00) and STOI (1991-046-00 and 1994-043-00).	March 2013
199104600	Spokane Tribal Hatchery Operations and Maintenance (O&M)	Spokane Tribe	Co-lead Kokanee Plan for Lake Roosevelt with partners WDFW (1991-047-00) and STOI (1991-046-00 and 1994-043-00).	March 2013
199104700	Sherman Creek Hatchery Operations and Maintenance (O&M)	Washington Department of Fish and Wildlife (WDFW)	Co-lead Kokanee Plan for Lake Roosevelt with partners WDFW (1991-047-00) and STOI (1991-046-00 and 1994-043-00).	March 2013
199101901	Hungry Horse Mitigation/Flathead Lake Restoration and RM&E	Salish and Kootenai Confederated Tribes	Co-lead retrospective report for the interconnected Flathead River system for Project # 199101903 and to include a joint M&E plan as described for project # 199101904.	Prior to FY 2015

199101903	Hungry Horse Mitigation Habitat Restoration RM&E	Montana Fish, Wildlife and Parks (MFWP)	Co-lead retrospective report for the interconnected Flathead River system, including a joint M&E plan as described for project # 199101904.	Prior to FY 2015
199201000	Fort Hall Habitat Restoration	Shoshone- Bannock Tribes	Habitat restoration plan.	March 2014
200714900	Non-Native fish Suppression in Graham Creek	Kalispel Tribe	Progress report on Northern Pike suppression in Box Canyon.	Prior to FY 2015
200740500	Rufus Woods Habitat/Passage Improvement, Creel and Triploid Supplementation	Colville Confederated Tribes	Report addressing ISRP issues and concerns for all aspects of project implementation.	Prior to FY 2015
199501500	Duck Valley Reservation Reservoir Fish Stocking O&M and M&E	Shoshone- Paiute Tribes	Reservoir Management Plan.	March 2014
199404900	Kootenai River Ecosystem Restoration	Kootenai Tribe	Synthesis report for Kootenai River projects (1988-065-00, 1994-049-00, 2002-002-00, 2002-008-00, 2002-011-00).	Timeline for deliverable due 12/31/12
200200200	Restore Natural Recruitment of Kootenai River White Sturgeon	Kootenai Tribe	Synthesis report for Kootenai River projects (1988-065-00, 1994-049-00, 2002-002-00, 2002-008-00, 2002-011-00).	Timeline for deliverable due 12/31/12
200200800	Reconnect Kootenai River with Historic Floodplain	Kootenai Tribe	Synthesis report for Kootenai River projects (1988-065-00, 1994-049-00, 2002-002-00, 2002-008-00, 2002-011-00).	Timeline for deliverable due 12/31/12
198806500	Kootenai River Fishery Investigations	Idaho Department of Fish and Game (IDFG)	Synthesis report for Kootenai River projects 1988-065-00, 1994-049-00, 2002-002-00, 2002-008-00, 2002-011-00.	Timeline for deliverable due 12/31/12
198503800	Colville Hatchery Operation and Maintenance (O&M)	Colville Confederated Tribes	Trout stocking plan, including project specific concerns.	Prior to FY 2015
200811700	Rufus Woods Redband Net Pens	Colville Confederated Tribes	Trout stocking plan, including project specific concerns.	Prior to FY 2015

<u>Council recommendation:</u> All projects that have a follow-up deliverable of a plan or report should assume that the Council may form a different recommendation for the project based on the Council and or ISRP review of the follow-up deliverable. The work to develop and respond to the collaborative reports should be adequately funded through the individual

project budgets. However, if necessary, this work can be funded through Regional Coordination contracts as well.

2. White sturgeon

White sturgeon were historically highly migratory throughout the Columbia Basin and ranged freely between freshwater and marine environments. Dam construction has fragmented the historical population into a series of subpopulations to which the marine environment is no longer available. Most impounded populations are recruitment-limited due to a lack of suitable spawning habitat or flow conditions suitable to produce significant recruitment in the available habitat.

The RME/AP review included four white sturgeon projects in the lower river (that is, from the mouth of the Columbia upstream to Priest Rapids on the Mainstem and up to Lower Granite Dam in the Snake River). The sturgeon projects in the Resident Fish review include those populations above Chief Joseph Dam (i.e., Kootenai River and Lake Roosevelt). These projects, as well as those recently reviewed in the RME/AP review; collectively include research, monitoring, evaluation, hatchery, and habitat elements.

The ISRP's review of the specific projects was favorable, albeit with comments about differing approaches certain elements and activities: White sturgeon research, management, and restoration are at a crossroads in the Columbia Basin precipitated by passage and recruitment issues. Greater coordination among agencies and tribes in goals, objectives, and actions is needed. To this end, White Sturgeon Strategic Planning Workshops for the Lower Columbia and Lower Snake River impoundments were convened in 2009, 2010, and 2011, in part to head toward a clear vision for sturgeon in the Basin. Some progress has been made, but difficult issues remain. Key aspects of sturgeon proposals reviewed in the ISRP's resident fish review reflect differing approaches to addressing the recruitment issue, including recruitment limitation research, habitat restoration, and hatcheries. The design of the 2012 workshop should use a Structured Decision Making approach to resolve the difficult issues identified.

<u>Council recommendation:</u> The Council recommends that the Council continue to encourage the sturgeon experts in the basin to continue to collaborate on activities, priorities and research at the Sturgeon Workshops. Sturgeon projects in this review - both in the Kootenai River and in Lake Roosevelt– reflect project-specific recommendations to coordinate on sturgeon activities.

3. New work elements

Some proposals included new or greatly expanded work elements. Some examples are expanded outreach and education activities that range up to 15% of the project budget, completing a baseline assessment of native mussel populations, operating a new invasive mussel cleaning station, and developing databases. Those are the most obvious new work elements, and there may be more that were overlooked. Most of these new work elements received positive ISRP review. Council is supportive of the new work elements, but also recognizes that they may require additional funding. In deciding whether and how to implement the new work elements,

the most critical consideration is to ensure the project integrity and intent is maintained as reviewed by the ISRP and recommended by the Council.

<u>Council recommendation:</u> Fund these projects as reviewed and recommended. The Council expects that in its contracting process these projects will be funded to maintain the intent and scope of the projects as reviewed and recommended.

4. The Council continues to evaluate the distribution of funding to provide fair and adequate treatment across the Program.

<u>Council recommendation</u>: Bonneville should maintain the budget allocation recommended in the Council's Fish and Wildlife Program of 70% of the total budget to anadromous fish activities, 15% to resident fish, and 15% to wildlife.

Part 3:

Data Management Category Review - Issues and Recommendations

Data Management Programmatic Issues and Council recommendations

Background

The Council is charged with evaluating and reporting on the Fish and Wildlife Program (Program) implementation and progress. Program assessment occurs at multiple scales -- from project to program level - and thus, the Council relies on data that are appropriately synthesized for these scales. The Council supports the approaches and tools that will ensure management of data that facilitates sharing of environmental, biological, and implementation information that contribute to program evaluation. Council guidance related to these two charges are described within the 2009 program, and this guidance is being refined with the region's assistance through the Council's draft MERR Framework (http://www.nwcouncil.org/fw/merr/Default.asp).

The Council, through its program, currently supports many projects that collect data. The Council also supports several regional data-management projects and sub-regional database projects that provide access to data from multiple sources, either by storing or serving as a portal to the data from these sources. Also related to data management, the Council supports the development of guidance and tools for improving management and for facilitating sharing of data through its Regional Coordination projects. Given the program's investment in data collection, management, and sharing, and the requirements for program evaluation and reporting, it is critical that these data be appropriately managed, be used optimally, and contribute to program assessment needs.

Currently, data- related work that is funded through the program can be grouped into three broad categories (1) regional data-management projects, (2) sub-regional databases, and (3) individual project level data management.

- (1) Regional Data Management Projects: What we generally refer to as regional datamanagement projects are designed, specifically to manage, store and or synthesize data and information for specific users and the public (e.g., PITAGIS and StreamNet). These data management projects incorporate data from multiple sources and are not restricted to an individual project's field data or to organizing data collected by an agency or tribe.
- (2) Sub-Regional Databases: These are projects or work elements within projects that contribute to the development, maintenance, and/or management of databases that are designed to store data collected in the field from one or more organizations (e.g., Idaho Fish and Wildlife Information System and CRITFC's Tribal Data Network).
- (3) Individual Project Data Management: Occurs within individual projects that collect data for a specific project objective. These projects are associated with work elements for collecting data and may also include development and management of individual entities' database systems.

During the current category review of regional data management, sub-regional database projects, and individual resident fish projects that collect data, several issues related to data management

became evident. Specifically, these issues consist of the need to implement approaches and tools that ensure management of collected data that facilitates data sharing and, improve accessibility of data required for informing program evaluation and reporting needs.

To address the needs at all projects levels, Council recommendations are organized into three-parts:

- 1. General Data Management and Sharing;
- 2. Program-Specific Data Management and Sharing; and,
- 3. Regional Data-Management and Sub-Regional Database Project-Specific Data Management and Sharing.

1. General Data Management and Sharing

<u>Council recommendations</u>: To address the general data management and sharing needs within program funded projects, Council recommends the following:

- 1) All data collected by program funded projects must be publicly available in accordance with applicable state and federal laws¹. The program recommends all data be available upon request annually and within 6-months of project completion or following completion of a significant phase of research. To address this legal requirement, Bonneville should require all projects collecting data to store and manage their data and its metadata in a manner that facilitates accessibility to the public, such as through the use of web-services, regional data-management projects, and sub-regional databases.
- 2) All projects collecting data can provide user-limited access to different levels of synthesized data to ensure appropriate use of data while providing easy access to more highly synthesized data to a wider array of users. In general, more highly synthesized data may be of most use and interest to the general public, whereas the more detailed and original data should be accessible to managers, in real time if appropriate. Upon request, however, all data must be made available to all potential users.
- 3) All projects collecting data through the Program should ensure the longevity and usefulness of the collected data be using data management approaches and tools that facilitates its sharing such as by providing comprehensive documentation of metadata and employing data stewards. This may be best achieved by data-collecting entities participating in regional forums and workshops addressing these topics and by taking advantage of data management and data-sharing guidance and technologies generated by these efforts (e.g., PNAMP, StreamNet, and Coordinated Assessments for Salmon and Steelhead (CA) projects).
- 4) All regional data management projects publish their data electronically on a regular basis (i.e., not a static PDF or Word document), and consider using a dynamic data-sharing system for regularly requested information. These regional projects may need to respond to data input in real time for time-sensitive evaluations. As feasible, regional databases, should rely on web-services to access data instead of storing data from multiple sources

¹ Freedom of Information Act 5 U.S.C. '552 (1994 & Supp. II 1996), Data Quality Act (uncodified, as amending the Paperwork Reduction Act 44 U.S.C. 3501 et. seq.), PL 105-277 (Shelby Amendment).

within a data warehouse. Furthermore, as the region's environmental and biological information efforts have matured (along with technology), the time is right for the region to focus on the highest priority data which will influence management decisions, program evaluation and its adaptive management, as well as assessing the most effective and efficient ways to share and store data (see Council recommendation #2 below for program priority data).

- 5) All sub-regional databases should use web-services to provide access to priority data for broad-scale evaluation and reporting needs, such as for the program. Other data should be published electronically on a regular basis (i.e., not a static PDF or Word document) through a website (see Council recommendation #2 below for program priority data).
- 6) All individual project data that are required for program evaluation and reporting should be made accessible by making these data web-services accessible or by submitting these data to a sub-regional databases or regional data-management project. For anadromous fish data and wildlife data, this appears to be fulfilled by existing regional datamanagement projects and sub-regional databases with some potential to improve the accessibility and prioritization of these data. Resident fish data management is evolving and would benefit from investment in needed infrastructure to make priority data accessible through web-services, subregional database, or a regional data management project; thus facilitating access to resident fish data that are needed for program evaluation and reporting (see Council recommendation #2 below for program priority data).

2. Program-Specific Data Management and Sharing

To address evaluation and reporting needs from the program, the Council has been working on a draft Monitoring, Evaluation, Research, Reporting and Data Access Framework (MERR Framework) (also see discussion of how the Council describes the role of the MERR report on pages 3-4). The draft MERR Framework includes a proposed approach for evaluating and reporting on Program progress and the status of the Basin's fish and wildlife. This approach includes developing and refining program biological objectives, the Council's research plan, improving project annual reporting to address priority information needs², and an annual High-Level Indicators (HLI) report to improve how the Council communicates the status of fish and wildlife and program actions in the basin. In combination, outcome of this review process, and guidance in the program and its draft MERR Framework, identify program priority data needs and processes to refine these priority data, including:

- Reporting on Council's HLIs (draft HLIs Report) and supporting Fish and Wildlife <u>Indicators</u> (SOTR),
- Tracking program's biological objectives,
- Information needs of Biological Opinions recognized by the program,
- Council processes informing program needs as described in Part 4: Regional Coordination Issues and Recommendations including outcomes related to "Participate and contribute to ongoing work to improve program reporting, evaluation and

² The Council currently is focusing on developing and refining the program's evaluation and reporting priorities (e.g., Council's High Level Indicators (HLIs), program management questions, program biological objectives, and Bonneville's FCRPS BiOp reporting needs) and reporting tools (e.g., Bonneville's standardized project sponsor's Annual Reporting template, Council's HLIs report).

assessment" and "Participate and contribute to Council- sponsored/requested topical forums, reports and workgroups to aid in program development and implementation."

To date, the MERR and HLI report efforts have demonstrated the need to improve data management and sharing within the basin that are needed to inform program level evaluation and reporting needs, as well as the importance of having easy access priority information (e.g., SOTR, StreamNet). As the Council continues to develop its program evaluation and reporting approach for anadromous fish, resident fish, wildlife, and program tasks related to the draft MERR and its HLI report, the Council can help further advance these efforts by providing additional support through policy and organizational structure, as needed.

<u>Council recommendations</u>: To address these evolving data needs for program evaluation and reporting, Council recommends the following:

- 1) Data-sharing be focused on priority Program data, and that the shared data should not be limited to non-synthesized data, but also include, the synthesized information such as population estimates and redd abundance for use by the Council and public.
- 2) Priority data for program evaluation and reporting should be accessible through regional data management projects (data accessed through data warehouse and/or web-services) and not through static documents (e.g., PDF, Word)
- 3) The Council should focus on improving data sharing among individual projects, sub-regional databases, and regional data-management projects to provide program priority data at the appropriate level of synthesis to assist with program evaluation. This consists of supporting the recommendations described under '1. General Data Management and Sharing Council recommendations "as well as supporting existing process that contribute to this need, such as:
 - a. The Anadromous Salmonids Monitoring Strategies' (ASMS) Coordinated Assessments for Salmon and Steelhead process (co-lead by PNAMP and the Foundation)
 - b. Resident Fish Monitoring Strategy and the Wildlife Monitoring Implementation Strategies being develop by resident fish and wildlife managers through the MERR Framework's implementation strategies for linking exiting data to Council draft management questions and HLIs.
 - c. Development of data guidance for proper management and facilitating sharing
 - d. Development of tools to facilitate access to data (e.g. data exchange templates)
 - e. Development, refining and updating of the fish and wildlife indicators reported in the Status of the Resource (SOTR) that serve to inform Council HLIs.
 - f. Continue to support products and related coordination functions that assist the Council in Program evaluation and reporting needs. These products and functions include those described in Table 1 under "Part 4: Regional Coordination Issues and Recommendations", such as: "Participate and contribute to ongoing work to improve program reporting, evaluation and assessment" and "Participate and contribute to Council- sponsored/requested topical forums, reports and workgroups to aid in program development and implementation."
 - g. Provide technical and policy comments or recommendations to Council-related documents and/or processes.

- 4) To inform program evaluation and reporting needs, entities with program funded projects that collect program priority data should engage in collaborative efforts aiming to address these needs (e.g., RFMS, WMIS, ASMS and CA). Some entities providing data needed for synthesized variables, though these data may not be funded solely by the Program, may use Program Coordination funds to engage in activities supporting data sharing and synthesis and use Program Data Management funds to make the required data accessible to the program (e.g., Coordinated Assessments, SOTR).
- 5) The Committee recommends that the Council engage in a regional data management and sharing discussion through a Program Evaluation & Reporting Committee (PERC). The PERC would provide guidance related to Council oversight and management of data management needs and activities, and associated challenges and opportunities This guidance would be directed towards existing and evolving regional level datamanagement projects and data-sharing processes.

To ensure that the PERC remains focused on Council program needs, the committee should be:

- chaired by a member of the Council's Fish and Wildlife Committee;
- led by an experienced facilitator; and
- be comprised of policy and technical representatives. Representation and participation on the committee would be voluntary. Representatives may include biologists and data managers/stewards representative each from states, tribal and federal fish and wildlife agencies, Non-Government Organizations, and public utilities working in the Columbia Basin.

The PERC would serve to provide a/an:

- Confirmation of priority tasks and sideboards and schedule
- Understanding our existing world by providing brief overviews of
 - O Data-management projects and data-sharing processes that can provide access to program priority data.
 - Program policy guidance regarding priority data needs for program evaluation and reporting, both current and future.
 - Current and future availability and accessibility of synthesized data needed for Program evaluation and reporting data needs (e.g. HLIs, project sponsors' Annual Reports to Bonneville).
- Discuss current and future plans for addressing the infrastructure needed to facilitate efficient sharing of priority program data (e.g., data stewards),
- Discuss emerging data management needs and how these may be addressed by the region and through the program (e.g. Data repository for genetics information).

To test the value-added and effectiveness of the PERC, Council recommends a threemonth trial assignment in which PERC would address a narrowly defined tasked. Council recommends:

- Focusing on the data needs related to the Council's HLIs (draft and in-use)
- Assessing how these data needs can be further addressed by modifications to existing Bonneville funded work and (e.g., StreamNet, Tribal Data Network,

- SOTR, PNAMP Coordinated Assessment project, Resident Fish Monitoring Strategy, Wildlife Monitoring Implementation Strategy, and Anadromous Salmonid Monitoring Strategy).
- Engaging the following subset of the data management project sponsors in this three-month trial PERC assignment: StreamNet, Tribal Data Network, PNAMP and SOTR.
- Producing a report with recommendations to Council on Bonneville funded projects.
- The future of PERC, in terms of follow-up to data management issues assessed by PERC, should be determined by the conclusion of the trial period.

3. Project-Specific Council recommendations – Regional Data Management projects and Sub-Regional Database project

a. Project 1989-062-01 Program Coordination and Facilitation Services provided through the Columbia Basin Fish and Wildlife Foundation (Foundation)

An existing task of the project consisting of manager and Council input, focuses on developing fish and wildlife <u>indicators (FWI)</u> and aggregating related data to support the Council's Program <u>HLIs</u>. Another task of the Foundation project, presents the FWI data in a highly summarized manner that is easily accessible to the public through the Status of the Resources (SOTR). The information gathered by tasks also may serve to inform Program implementation and evaluation needs including assessments at the subbasin and provincial level. The products related to these two tasks are important for addressing to the program's evaluation reporting needs, and are critical to the Council's HLIs report. For brevity, these two tasks are referred to as "reporting tasks" from this point forward. This work is currently under contract through FY 2012 (in this case, through March 31, 2013). PERC should determine and detail the future implementation of the SOTR and the development of the FWIs.

Council recommendation:

- a. PERC should determine and detail the future implementation of the two reporting tasks described above SOTR and the development of the FWIs .
- b. The project also provides important historical project information through their website that is valuable to the Program and should receive input from Council and managers regarding maintenance and content of this web resource. The content of the website, including past project proposals, should be maintained as this is critical information for the Program and its coordination. Bonneville should provide a long-term storage and accessibility plan for the past project proposals.

b. Project 2003-072-00 Habitat and Biodiversity Information System for Columbia River Basin

Council recommendation:

Revise proposed work based on the following recommendation through FY 2013: This work should remain narrowly focused on Program evaluation needs and evolve towards web-service data accessibility for facilitating meeting these needs. Guidance from the wildlife managers and Council should guide wildlife and terrestrial related work needed for Program evaluation and reporting needs related to HEP, CHAP, subbasin and provincial assessments, and wildlife HLIs. The sponsor will work with Bonneville to incorporate all HEP data into the NWHI database by end of FY2013 (also see project-specific recommendation for NHI in Part 3-3b). Furthermore, if the PERC moves forward, it would be expected that the council recommendations based on the guidance from this committee would be incorporated in this work.

c. Project 1988-10-804 StreamNet

Council recommendation:

Fund as proposed with the following supplemental recommendations through FY 2013:

- Data access under this work should continue to evolve towards a more accessible platform for various users and optimize dynamic web-services to facilitate coordinated data-sharing and data depiction.
- As feasible, this work should expand to include additional managers (and data collecting entities³) that currently cannot easily provide access to their data, whether raw or synthesized, to improve accessibility to their data.
- StreamNet should strive to be a comprehensive data portal (e.g. linking to and
 depicting data from other sources etc.) for locating fish data needed to inform
 Program implementation and broad Program evaluation, emphasizing on using webservices. With respect to salmonid fish data, data collectors could provide their data
 directly to StreamNet while non-salmonid fish data could be made accessible to
 StreamNet through web-services from resident fish databases or a resident fish data
 portal.
- Data stored and accessed through StreamNet should include synthesized information, e.g. population estimates, needed for informing Program implementation and broad Program evaluation.
- Data made accessible through StreamNet should focus on data funded by Bonneville and priority data for the program. Identification of Bonneville funded projects that collect fish data should be based on project information available at cbfish.org.
- As necessary, prioritization of Bonneville funded data should be informed by Bonneville and Council's evaluation and reporting needs for the program (e.g., ISRP retrospective reports, Report to Congress, and HLI reports), and Bonneville FCRPS BiOp reports. Furthermore, if the PERC moves forward, it would be expected that the council recommendations based on the guidance from this committee would be incorporated in this work.

³ Data collecting entities include state, tribal, and federal agencies as well as other Program funded entity such as umbrella projects (e.g. LCREP) or databases (e.g. DART, PTAGIS)

• Sponsor to participate on the PERC as requested by the Council to assist in developing recommendations of the PERC.

d. Project 1998-004-01 Columbia Basin Bulletin

Council recommendation:

Fund as proposed with the following supplemental recommendation through 2017: If not already being done, make Columbia Basin Bulletin publications accessible through the StreamNet Library to facilitate broader distribution and access.

e. Project 199008000 Columbia Basin PIT Tag Information System (PITAGIS)

<u>Supplemental Council recommendation</u> (to Council Decision July, 2011):

This work should accommodate all PIT Tag data generated in the Columbia River Basin, both long term and short term monitoring data, especially those data funded by Bonneville through the program. This includes tributary PIT-Tag based monitoring data currently stored in other databases such as ISEMP's STEM database, and resident fish PIT Tag data. Furthermore, if the PERC moves forward, it would be expected that the council recommendations based on the guidance from this committee would be incorporated in this work.

f. Project 2008-505-00 StreamNet Library

Council recommendation:

Fund as proposed through FY 2013 with the following caveats:

This work should provide access to documents that are not easily attainable; provide an important archive service for documents; and allow for inter-library loan requests to access hard to access scientific journal articles and other documents for individuals not associated with a university library. This work could be improved to meet the needs of Council, Bonneville and basin state and tribal agencies by:

- Serving as an access point for Council, ISRP, ISAB, Bonneville documents by having
 these be searchable and findable through the library's search engine, thereby improving
 the visibility and accessibility of Columbia River Basin related publications, including
 Council and Bonneville documents, by enhancing the connection to web-based search
 engines.
- Modifying the public name of the library name to more properly reflect its content and services. The name StreamNet Library does not convey the broad spectrum of basin, and out of basin, documents it houses.
- Exploring the possibility of collaboratively publishing (digital) synthesis, strategies, and reports for the Fish and Wildlife Program and establishing these documents as a lower-grade ongoing-publication series of the Council/Bonneville. This could be accomplished by having these documents be peer reviewed by the ISRP, ISAB, or selected reviewers.

g. Project 2008-50-700 Tribal Data Network

Council recommendation:

Fund as proposed through FY 2013 with the following caveat:

This work should meet the needs of CRITFC members as related to program evaluation and reporting needs, as well as exploring the potential to assist non-CRTIFC tribal members. This work should evolve to provide web-service access to tribal anadromous and resident fish and aquatic habitat data collected by CRITFC members so that these data are easily available through web-services. This data-sharing and accessibility should not be limited to raw data, but also make accessible the synthesized information, such as abundance estimates, for the Council and public users. Furthermore, if the PERC moves forward, it would be expected that the Council recommendations based on the guidance from this committee would be incorporated in this work. Sponsor to participate on the PERC as requested by the Council to assist in developing recommendations of the PERC.

h. Project 2004-00-200 Pacific NW Aquatic Monitoring Partnership

PNAMP receives program funding to provide a forum to coordinate monitoring activities and develop common monitoring approaches in the Pacific Northwest including the Columbia River Basin. PNAMP was established in 2003 as an alliance of federal, state, tribal, local, and private aquatic monitoring programs in the Pacific Northwest in response to a need to coordinate as needed the different organizational mandates, jurisdictional needs, issues and questions related to fish and habitat monitoring.

Council recommendation:

Fund as proposed with the following caveat through FY 2013:

As necessary, prioritization tasks funded by Bonneville should be informed by Bonneville and Council's evaluation and reporting needs for the program (e.g., ISRP retrospective reports, Report to Congress, and HLI reports), and Bonneville FCRPS BiOp reports. Furthermore, if the PERC moves forward, it would be expected that the council recommendations based on the guidance from this committee would be incorporated in this work. Sponsor to participate on the PERC as requested by the Council to assist in developing recommendations of the PERC.

Part 4:

Regional Coordination – Issues and Recommendations

Regional Coordination Issues and Recommendations

I. Background

The "Regional Coordination" category includes project proposals from individual state fish and wildlife agencies, individual tribes, or organizations consisting of a number of agencies, tribes or both. Prior to the 2007-2009 project-selection process the term "regional coordination" did not exist to describe a group of projects funded under the program. At the time, the Council relied mainly on one membership organization, the Columbia Basin Fish and Wildlife Authority (CBFWA) to help coordinate the activities of the different agencies and tribes involved in Program implementation. CBFWA was formed in 1987 and was and still is the largest membership organization of fish and wildlife managers in the Columbia Basin. Its membership at one time included 13 tribes, four state agencies and the two federal "Services" (NOAA) and US Fish and Wildlife Service (USFWS), although the number of members has declined since 2009. CBFWA was established by charter as an informal collaborative for the region's fish and wildlife managers to:

- 1. Coordinate the efforts of its members to protect and enhance fish and wildlife resources of the Columbia River Basin through joint planning and action;
- 2. Provide a forum to facilitate the exchange of information among members on matters affecting anadromous fish, resident fish, and wildlife resources and their habitat in the Columbia River Basin for informed, coordinated decisions and joint actions;
- 3. Provide more effective review of other uses of the Basin in relation to fish and wildlife.

Funding came directly from Bonneville Power Administration (Bonneville) to CBFWA, and CBFWA then subcontracted with the members for time and travel reimbursement for participating in work meetings. Over the past several years, CBFWA's expenses averaged \$1.6 million per year.

Over the past 30 years, three tribal membership organizations also formed to focus on fish and wildlife in the Columbia River Basin – the Columbia River Intertribal Fish Commission (CRITFC), the Upper Columbia United Tribes (UCUT), and the Upper Snake River Tribes Foundation (USRT). Four Columbia River treaty tribes -- the Nez Perce Tribe, the Confederated Tribes of the Warm Springs Reservation, the Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes and Bands of the Yakama Indian Nation -- established CRITFC in 1977 to help protect the tribes' treaty-guaranteed fishing rights and their management authority in traditional fishing locations. All members of CRITFC also became members of CBFWA, and after the enactment of the Northwest Power Act, CRITFC largely relied on CBFWA to help coordinate the tribes' participation in implementation of the Council's program.

Similarly, five Upper Columbia tribes formed UCUT in 1982 to represent their interest in ensuring a healthy future for the traditional territorial lands of their ancestors and for proactively and collaboratively promoting Indian culture, fish, water, wildlife and habitat. The UCUT's

members include by the Confederated Tribes of the Colville Reservation, the Kootenai Tribe of Idaho, the Coeur d'Alene Tribe, Spokane Tribe of Indians and the Kalispel Tribe of Indians. Prior to 2009, UCUT relied largely on CBFWA to help coordinate its member's participation in the implementation of the Council's program.

More recently, in 2008, USRT formed to represent three upper Snake River tribes in much the same way that UCUT does. USRT members include the Shoshone Bannock Tribes of the Fort Hall Reservation, Shoshone-Paiute Tribes of the Duck Valley Indian Reservation, the Burns Paiute Tribe and the Ft. McDermitt Paiute and Shoshone Tribe. USRT strives to coordinate a unified Tribal response to address common resource issues within the Snake River Basin, which protect and nurture the Tribal languages, cultures and traditions.

Until recently CRITFC, UCUT and USRT did not directly receive Bonneville funding for coordination. But as these membership organizations became more engaged in the Council's program, they began to receive coordination funding directly from Bonneville, and the Council has lumped their funding into a general regional coordination category. Meanwhile, many of the original state and tribal members of CBFWA have withdrawn from that organization and began receiving and spending coordination funding directly from Bonneville. CBFWA still receives coordination funding allocated to CBFWA by its new and remaining members. While all these coordination projects have been lumped together into one category, there is a great deal of variation between the activities that are performed by the entities and projects included in this category.

All these agencies and tribes and organizations now propose to continue to perform coordination functions, either as single entities or, in some cases, by allocating a portion of their share of coordination funding to one or more of the larger membership organizations described above. CBFWA recently split its functions into 2 separate entities, CBFWA and Columbia Basin Fish and Wildlife Foundation (Foundation). CBFWA continues to serve its membership needs and continues to receive Bonneville funding as allocated from its 10 members. The Foundation proposed facilitation services work in FY2013 and beyond, however, does not have funding secured for membership services beyond March 31, 2013.

Post 2007-2009 Project Review: Coordination funding allocated to and by individual agencies and tribes

Following the 2007-2009 project review process, as the Council continued to review and discuss the Program's coordination needs, a proposal by the Kalispel and Spokane Tribes advanced an "equal share" approach to all members of CBFWA. Specifically the proposal would allow any member of CBFWA wishing to withdraw its membership to receive 1/19th "share" of the CBFWA budget (therefore reducing the overall contracted amount with CBFWA), and that entity would then be allowed to determine how best to allocate their coordination funds. That proposal was supported by both the Council and Bonneville. As fish and wildlife agencies and tribes withdrew their funding from CBWFA, they were given a choice by Bonneville as to what they could do with their "share" of the funding. They could either keep the funding, or choose to contribute all or part to CBFWA, or to another membership organization. The Council agreed with the notion of the 1/19th share for any entity that did not want to remain as a member of CBFWA, amounting to about \$132,000 per entity. This amount, while forming a basis for how

much funding each fish and wildlife state or tribe might receive, was not directly linked to clearly defined Program needs or tasks.

The "share" concept behind "regional coordination" work has so far been based more on a budget number than on what it costs for addressing Program needs and functions. In addition, differences in work and overhead costs between a single entity and CBFWA have not been fully considered. Generally, the work CBFWA performed is different than the work being performed by an individual entity. CBFWA work focused on providing technical data assistance to members as well as providing facilitation and convening services on behalf of all the members and in an advocacy role for budgets and programs some of its' members proposed. In many cases, individual entities are focused more locally or for internal coordination needs (see objectives in proposals at http://www.cbfish.org/Review.mvc/Display/543).

During the 2007-2009 review, the ISRP recommended a set of metrics for use in evaluating projects aimed at coordination activities. The ISRP suggested metrics for measuring success, member satisfaction, and the quality and quantity of coordination work being accomplished outside of the more traditional mitigation, protection or restoration-type projects. Some examples of the ISRP's recommended metrics are listed below and were later incorporated into the guidance for the 2010-2012 project review:

When describing objectives for your coordination project consider and discuss value added by your proposed project in terms of:

- changes in behavior
- value to members
- *user evaluation of product utility*
- *lack of redundancy*
- member assessment of effectiveness and impact
- benefits to fish and wildlife of enhanced coordination activities.
 - o Specific projects or resources benefited by the project
 - Specific effect of coordination on conservation and management

2009 Program Amendments and the 2011 Category Review of Research, Monitoring and Evaluation Projects

In 2007 many of the fish and wildlife agencies and tribes developed a guidance document to define differences between regional coordination and watershed or project coordination⁴. The managers defined regional coordination as work having implications at a basin or at minimum, province-level scale, although the document is not always clear in its description of when an activity seeks to benefit a local or "internal" function as opposed to activities that target a more regional, provincial, or basinwide scale. As part of the 2009 program amendment process, the Council worked to on improve the guidance provided for "regional coordination" The 2009 Fish and Wildlife Program included language in the section titled "Program Coordination" that sought

⁴ CBFWA. 2007. Regional Coordination for the Fish and Wildlife Program Today and Tomorrow: Current status and proposed future definitions. http://www.cbfwa.org/Committees/MAG/meetings/2007_0821/DRAFTCoordinationDefinitions_8-13-07release.pdf

to define the functions of "regional coordination" to help guide the work toward accountable and truly "regional" program functions and needs.

The Council further advanced the direction for regional coordination work during the programmatic review of research, monitoring, evaluation and artificial production projects that included in 2011. The ISRP and Council both called out specific needs for coordination and participation in particular subject areas over the next 2-3 years to assist with program development, implementation, and policy development at both regional and basinwide levels. See an excerpt below from the programmatic recommendation on coordination out of the RME review:

What are known as "regional coordination" projects will be reviewed as a category after the RME/AP review. But this review has highlighted a set of coordination issues under the Fish and Wildlife Program that could use focused attention. For one thing, the ISRP often noted a significant lack of necessary coordination among projects aimed at the same end, often compounded by a lack of a strategic plan tying together the work. This includes projects involving ocean research, the projects aimed at estuary habitat improvements and the monitoring and evaluation of effectiveness in the estuary, the projects making up the program's effort at assessing and improving conditions for lamprey, the various predation projects, and the monitoring and evaluation of conservation enforcement activities. Other areas within the monitoring and evaluation and artificial production activities exhibit extensive and necessary efforts at coordination (e.g., the habitat effectiveness work), involving personnel from federal, state, tribal and other entities. And yet little or none of this coordination takes place under the umbrella of or involves the coordination elements of the entities funded under the "regional coordination" projects. These factors illustrate in high relief the Fish and Wildlife Program's recognition that coordination efforts and funding should be focused through a set of functional activities that need coordination, and not necessarily on the basis of entities desiring coordination funding.

As noted in many of the programmatic issues above, the ISRP identified a range of topic areas that suffered from a lack of coordination in a number of ways, and the Panel often recommended a similar set of solutions intended to increase coordinated efficiencies and effectiveness. This includes developing coordinated synthesis reports; sharing data and information through scientific papers and science/policy forums; holding regular workshops focused on specific species, methods, or geographic areas, and on several topics; and the drafting of basin-wide management plans.

Council recommendation: The Council concurs with many of the recommendations the ISRP made for increased coordination. As a result, the Council's recommendations address these needs on (1) a project-specific basis; (2) through programmatic recommendations; (3) as a follow-up item to consider in the future (e.g. holding a technical forum on a particular topic in the next year or two).

In addition, during the upcoming category review of regional coordination, the staff will extract the coordination components from the research, monitoring and evaluation and artificial production projects (and other functional projects, such as habitat activities) to help bring about a consistent review of all coordination activities under the Fish and Wildlife Program. The Council will be closely guided in this review by the provision on Program

Coordination in the 2009 Fish and Wildlife Program, Section VIII(F). The Council will also take a careful look at the regional coordination projects, to see how well they line up with the coordination needs of the program. As the Council and Bonneville review the regional coordination projects, we may find it appropriate to contract with the recipients of regional coordination funding to take on specific tasks identified in this review to increase basin wide understanding of our collective work and accomplishments for fish and wildlife.

www.nwcouncil.org/fw/budget/2010/rmeap/2011_06decision.pdf (programmatic issue 12).

II. 2011-2012 Category Review of Regional (Program) Coordination Projects

All of the information outlined above then fed into the review of the "regional coordination" category of projects in this combined review process. The Council built upon three main sources to further refine the work needs under regional coordination activities:

- 1) 2009 Fish and Wildlife Program language on Program Coordination"
- 2) Metrics for coordination activities recommended by the ISRP in its report during the 2007-09 project review process (ISRP 2007-14)
- 3) Final Council Recommendations for Research, Monitoring, Evaluation, and Artificial Production Projects for FY 2012 and beyond -- Programmatic Issue #12.

Based on these sources, the Council provided the following guidance to those developing coordination project proposals for this review:

The Council benefits from the coordinated efforts of many groups, committees, and organizations in implementing the Council's Program on an ongoing basis. Continued coordination of various Program elements is expected, supported, and in some cases financed by Bonneville. The elements below represent the key areas in which the Council seeks continued coordinated efforts from fish and wildlife managers and interested parties throughout the region. Coordination funding should be focused on the following activities that support Program implementation at a Program level:

- Data management (storage, management, and reporting)
- *Monitoring and evaluation (framework and approach)*
- Developing and tracking biological objectives
- Review of technical documents and processes
- Project proposal review
- Coordination of projects, programs, and funding sources within subbasins
- Facilitating and participating in focus workgroups on Program issues
- *Information dissemination (technical, policy, and outreach)*

Any entity or organization receiving funding for coordination of Program activities must develop a work plan detailing the coordination elements, objectives, deliverables, and budget. All coordination work will be reviewed as part of the Council's project review process and as necessary, scientific, and administrative review. The Council will recommend to Bonneville the level and type of coordination required to implement the Program.

Review Objectives:

To evaluate and recommend activities and tasks (under the above categories) that directly informs and supports Fish and Wildlife Program implementation, reporting, and policy development at the Program level.

In an attempt to distinguish Program coordination activities from individual project implementation coordination, we include guidance to help make that distinction. Either way, there should be a strong nexus between the coordination activities and the program.

A strong nexus would contribute to or inform Program policy development; lead to broad-scale Program implementation; and be reportable back to the Council. A weaker nexus (or no nexus) would be an activity that would still be performed absent the Program; internal to the funded organization; or, related to individual project management and coordination.

Proponents will be asked to describe their proposed activities for program coordination that should include but are not limited to:

General:

- Convener/facilitation services for Council-requested workgroups and forums
- Participation at Program-related workgroups, forums, and meetings that serve to inform Program priorities as requested
- Participation in a regularly-scheduled Council-convened processes to coordinate information and issues with all coordinating entities within the Council's Fish and Wildlife Program
- Support for collecting, maintaining, and disseminating raw and derived data (redd counts, population estimates, etc.) from the Basin to inform broader reporting needs (e.g., provincial or ESU/DPS, basinwide, and Program-level)
- Assist the Council in organizing and facilitating science reviews for the Council and ISRP; including site visits, project presentations, and special meetings
- Support and participation in subbasin plan, provincial, or Program progress reporting

Specific:

- New and continued synthesis/management plans/RM&E development on ISRP/Council topics of interest: lamprey, sturgeon, tagging, estuary, ocean, etc.
- Participating in the Council's Fish Tagging Forum
- Participation in ongoing development of the Program's M&E framework and approach
 - MERR Plan and development of its sub-components such as related RME
 Implementation strategy (e.g., draft Anadromous Salmonid Monitoring Strategy
 and the associated coordinated assessment process for data sharing and the draft
 resident fish implementation strategy,)
 - Support for synthesis/analysis of data
- For Council high-level indicators, Council objectives, etc.
- Participation in wildlife-related issues: wildlife forum, NHI data, HEP, land-management issues (e.g. weed control)

Final ISRP Programmatic Recommendation

The ISRP, in its Preliminary Review of the Proposals in the Resident Fish, Data Management, and Regional Coordination Category Review, labeled each regional coordination proposal as "Qualified (see Programmatic Issue)." The ISRP's conclusions were based primarily on the fact that the ISRP did not consider the proposed work to be scientific in nature. But the panel did offer suggestions on how "the development of meaningful indicators to measure success could provide ways to effectively and efficiently carry out the objectives of the Fish and Wildlife Program".

The ISRP also encouraged the Council to decide whether regional coordination is an area for scientific investigation and by whom. The ISRP identified four alternatives, and others may be identified as this issue gets policy discussion.

- 1. Continue with the emerging model of formula-funded coordination without including scientific investigation.
- 2. Encourage those making regional coordination proposals to identify important research questions for study along with their coordination efforts.
- 3. Hire an outside contractor to evaluate the regional coordination process and the effectiveness and efficiency of its outcomes.
- 4. Have Council engage in more monitoring of regional coordination outcomes and analyze whether these outcomes are contributing to achievement of Fish and Wildlife Program goals and objectives.

The ISRP further commented that the main deficiency of all regional coordination proposals is that they do not place "emphasis on outcomes". The sponsors do not discuss hypotheses; include quantitative (and qualitative) measures and metrics; or present summary tables, graphs, and trends. Key questions, hypotheses, relationships, data gathering and analysis, reporting of results, and revisions based on what is learned may be desirable, even for projects funding coordination activities. The ISRP recommended greater emphasis on trying to measure outcomes and include in the proposal an adaptive management framework for designing, implementing, evaluating, and revising coordination activities.

III. Committee approach for Regional Coordination Projects recommendations

This section outlines the issues the Council needs to address to form recommendations for this category. The three subsections are as follows:

- A. Council priority work anticipated over the next two years;
- B. A list of entities with coordination proposals, including budget requests; and
- C. Council recommendations.

A. Council's current and anticipated priority coordination work for FY2013-2014

Table 1 lists what the Council believes are the priority needs for program coordination for the next two years, FY2013-2014. In other words, these activities are well-suited for program-level regional coordination funding since the Council will need the assistance from partners throughout the region. All of the work below is intended to be of benefit at a basinwide or regional scale and should inform the Council for policy, program performance evaluation, and implementation decisions. In contracts, coordination needs for individual projects should be

funded from project budgets.

Table 1. Council Priority Work for FY2013-14 for Regional Participation/Coordination

Function	Deliverables or Outcomes
Participate and contribute to Council-sponsored/requested topical forums, reports and workgroups to aid in program development and implementation	 Planning, preparation and logistics for geographic reviews (presentations and site visits) as requested by Council. Predation workshops on invasive species, Non-Native species Columbia Basin Sturgeon Workshops Fish Tagging Forum PERC to develop recommendations on program data needs, sharing and accessibility Wildlife Crediting Forum Council's Research Plan Track Council's Fish and Wildlife Committee meetings and disseminate relevant information to members/stakeholder groups. Regularly check on updates to the Council's website for relevant Council/ISRP/ISAB reports and disseminate relevant information to members/stakeholder groups. Development of management plans, synthesis and retrospective reports that are responsive to the Council and ISRP
Participate and contribute to ongoing work to improve program reporting, evaluation and assessment including (PERC, coordinated assessment meetings, Committees to develop HLI's)	Forums Lamprey workgroup meetings Resident fish Committee Anadromous Fish Committee Wildlife Committee Fish Screening Oversight Committee
	 Continued development of MERR and related products (e.g., HLIs, Biological Objectives, Research Plan, effectiveness reporting, and monitoring design) Development, refining and updating of the fish and wildlife indicators reported in the Status of the Resource (SOTR) that serve to inform Council HLIs Monitoring Design or Protocol in development of approach(s) for regional habitat status and trend and effectiveness monitoring Protocol and Method Development Data Management Strategy and Data Steward Coordination
	Policy Guidance Prioritize data needs for the program Recommendations for data sharing and accessibility Provide technical and policy comments or recommendations to Council-related documents and/or

	processes
Attend and participate in key program-related regional forums where policies, programs, and actions affect fish and wildlife are planned and implemented	 Planning and preparation to present and/or implement program-funded conferences, or program-funded programs such as AFEP, YKFP, CRITFC, CREC, Lake Roosevelt Forum, LSRCP, CHaMP, hatchery evaluation and effects team.
Participate and contribute to subbasin and/or provincial level coordination of Program activities	Coordinate among entities within a subbasin and/or province, projects, programs, and funding sources, for the purpose to enhance collaboration among entities receiving Bonneville implementation funding (e.g. prioritization of work, efficient sharing of resources).

B. Current coordination funding (FY 2012)

Table 2 below lists the entities with current regional coordination funding. The table also shows the financial commitments from individual entities to membership organizations to assist with coordination functions on their behalf.

Table 2. Bonneville's current FY12 Regional Coordination budget

FY12 Regional Coordination						
Entity	Tribe/entity project # (if retained)	balance to CBFWA (1989-062- 01)	to UCUT (2007-108- 00)	to USRT (2007-407- 00)	to CRITFC (1998-031- 00)	subtotal
NOAA	\$0	\$132,711	\$0	\$0	\$0	\$132,711
USFWS	\$0	\$132,711	\$0	\$0	\$0	\$132,711
Burns-Paiute	\$0	\$72,711	\$0	\$60,000	\$0	\$132,711
Sho-Bannock	\$0	\$72,711	\$0	\$60,000	\$0	\$132,711
Sho-Paiute	\$0	\$72,711	\$0	\$60,000	\$0	\$132,711
Umatilla	\$0	\$82,926	\$0	\$0	\$49,785	\$132,711
Yakama	\$0	\$82,926	\$0	\$0	\$49,785	\$132,711
Warm Springs	\$0	\$82,926	\$0	\$0	\$49,785	\$132,711
Nez Perce	\$82,926	\$0	\$0	\$0	\$49,785	\$132,711
Kootenai	\$0	\$77,248	\$55,463	\$0	\$0	\$132,711
Colville	\$69,673	\$0	\$63,038	\$0	\$0	\$132,711
Kalispel	\$78,797	\$0	\$53,914	\$0	\$0	\$132,711
Spokane	\$78,078	\$0	\$54,633	\$0	\$0	\$132,711
Coeur d'Alene	\$78,078	\$0	\$54,633	\$0	\$0	\$132,711
Salish-Kootenai	\$132,711	\$0	\$0	\$0	\$0	\$132,711

IDFG	\$132,711	\$0	\$0	\$0	\$0	\$132,711
Montana	\$82,711	\$50,000	\$0	\$0	\$0	\$132,711
ODFW	\$132,711	\$0	\$0	\$0	\$0	\$132,711
WDFW	\$132,711	\$0	\$0	\$0	\$0	\$132,711
Accord funding					\$38,071	\$38,071
	\$1,001,107	\$859,580	\$281,679	\$180,000	\$237,212	\$2,559,578
new partners:						
Grande Ronde	\$132,711	\$0	\$0	\$0	\$0	\$132,711
Cowlitz	\$132,711	\$0	\$0	\$0	\$0	\$132,711
Siletz	\$12,022					\$12,022
Fort McDermitt						
TOTAL:	\$1,278,551	\$859,580	\$281,679	\$180,000	\$237,212	\$2,837,022

C. Council recommendations

(1) Priority Coordination Work: The Council recommends that Bonneville use the list of work functions and work products in Table 1 above as the basis for developing contracted scopes of work with associated funding for regional coordination. This list of priority work needing regional coordination is intended to be of benefit to the Program at a basinwide or regional scale and should be developed to inform the Council for policy and implementation decisions. This list should be reviewed and updated every two years.

The Council does not expect that each entity funded will have interest, time or financial resources to participate in all the activities in this list of Council priority work (Table 1). The Council does expect that the entities receiving coordination funding use their coordination funding to participate in activities on the list (Table 1). In other words, each organization should undertake a subset of the work identified in Table 1, at their discretion, and with the funding received for regional coordination work. This work should be stated as specifically as possible in the contract scope of work.

<u>Council recommendation</u>: All work indentified in a regional coordination project scope of work should originate from Table 1.

(2) Regional Coordination Budget: From 2007 to 2012, the number of fish and wildlife agencies and tribes, and membership organizations receiving direct funds to perform regional coordination functions has grown. The number of entities receiving funding has grown primarily because entities have chosen to take on coordination functions on their own instead of deferring that responsibility to CBFWA. In 2009 Bonneville set a placeholder budget for this group of projects of \$2,825,000 dollars for all projects conducting this coordination work. The amount of the overall budget allocated by Bonneville to these regional coordination projects has remained close to this 2009 total through Bonneville's 2012 planning budget. The Council members have

agreed in the past to this placeholder. As directed in the 2009 Program, the Council is to recommend the *level and type* of coordination that is required to implement the program. Current FY 2012 funding is **\$2,837,022**.

<u>Council recommendation</u>: The Council recommends a two-year annual budget cap of \$2.7 million for all regional coordination funding. This number is generally based on a formula of \$132,000 x 20 (current number of individual tribes and states receiving direct coordination funding).

<u>Council recommendation</u>: Bonneville should continue to negotiate the individual budgets for entities receiving coordination funding based on work plan.

<u>Council recommendation</u>: Council and Bonneville should revisit/reassess the overall budget every two years.

(3) Who does the work?

The Council benefits from participation by the fish and wildlife agencies and tribes and other organizations to implement work that is basin-wide or program-level in nature. The Council should focus on recommending the specific work and functions that need to be coordinated by any entity receiving coordination funding in the basin. In addition to the existing individual agencies and tribes (Table 2), there may be other entities in the basin that can help to accomplish this work, or to help facilitate coordination of the specific work products outlined in the table describing the Council's priority work (Table 1).

<u>Council recommendation</u>: Bonneville should determine the most appropriate state fish and wildlife agencies and tribes to accomplish the work described in Table 1, which may include but should not be limited to those organizations listed in Table 2. The Council recommends that program coordination funding support for membership organizations (e.g. CBFWA, CRITFC, USRT and UCUT), be: 1) at the discretion of the individual members; and 2) from their individual allocations.

<u>Council Recommendation:</u> The Council does not recommend direct funding to federal agencies for regional coordination activities. However, the Council recommends that the funding currently allocated to NOAA and USFWS for coordination be held in reserve to support reporting activities such as the HLI development, SOTR and coordinated assessments in FY2013 and beyond. The Council will make funding recommendations to Bonneville for these activities.

(4) Additional Council recommendations:

<u>Funding Period:</u> Two-year contracts for this work with each entity who receives coordination funding.

<u>Contract Starts:</u> Bonneville should begin the contracts for all of the entities receiving coordination funding at or around the same timeframe (e.g., April and May) so they have similar start/end dates to expedite biannual review.

<u>Project-specific recommendations:</u> Sponsors may be asked to provide a report that addresses project-specific ISRP recommendations and concerns contained with the final review for regional coordination projects as well as those in the 2007-2009 review, as applicable. Sponsors are encouraged to consider tracking and assessing coordination outcomes and measuring success, as feasible, over the next two years ahead of future review cycles (see ISRP suggestions in Programmatic Issue E of *ISRP 2012-06*).

Sponsor Reporting:

In the annual reports, sponsors should identify how the coordination funding was spent, including, but not limited to: what documents they contributed to and how; which meetings were attended; and what products resulted from their coordination activities, specifically in relation to the menu of options provided by the Council.

Part 5: Project Specific Recommendations (Attached spreadsheet)

- Resident Fish
- Data Management
- Regional Coordination

l n	Category	ID	Title			Acc		FY12 Working		Council Recommendations
LII	Category	טו	Title	Эропзот			Ор		Requested	Council Recommendations
1	Resident Fish	198503800	Colville Hatchery Operation and Maintenance (O&M)	Colville Confederated Tribes	No	х		\$1,403,419		Implement with conditions through FY 2014. Sponsor to develop a trout stocking plan, including project specific concerns, as described by the ISRP, prior to FY 2015. Funding recommendation beyond FY 2014 based on favorable ISRP and Council review of the trout stocking plan.
2	Resident Fish	198806400	Kootenai River White Sturgeon Aquaculture Conservation Facility	Kootenai Tribe				\$3,207,025	\$0	Contextual review. No new recommendation. Refer to Council decision for Step Review on October 14, 2010. Also refer to the Resident Fish Review and Recommendations for White Sturgeon in Part 2.
3	Resident Fish	198806500	Kootenai River Fishery Investigations	Idaho Department of Fish and Game (IDFG)				\$1,015,894	\$967,244	Implement with condition through FY 2017. Sponsors to collaborate in the development of a synthesis report for Kootenai River projects (1988-065-00, 1994-049-00, 2002-002-00, 2002-008-00, 2002-011-00) as described by the ISRP. By the end of calendar year 2012, sponsor to submit timeline and plan to Council for the development of the synthesis report.
4	Resident Fish	199001800	Lake Roosevelt Rainbow Trout Habitat and Passage Improvement	Colville Confederated Tribes	Yes	Х		\$1,563,010	\$794,746	Implement through FY 2017.
5	Resident Fish	199004400	Coeur D'Alene Reservation Fisheries Habitat	Coeur D'Alene Tribe	Yes			\$1,549,288	\$1,775,697	Implement through FY 2017.
6	Resident Fish	199101901	Hungry Horse Mitigation/Flathead Lake Restoration and Research, Monitoring and Evaluation (RM&E)	Salish and Kootenai Confederated Tribes	Yes (Qualified)			\$533,350	\$628,500	Implement with condition through FY 2017. Prior to FY 2015, sponsors to colead in the development and submission of a retrospective report for the interconnected Flathead River system, as described by the ISRP for Project # 199101903 and to include a joint M&E plan as described for project # 199101904 and that addresses ISRP comments. Do not implement Lake Trout reduction program (Deliverable 3) until the ISRP has reviewed the Flathead Lake Environmental Assessment and has favorable Council review to proceed with full implementation.

ī	n C	ategory	ID				Acc	FY12 Working		Council Recommendations
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							0.0			
		esident ish				In Part (Qualified)		\$1,917,686		Implement with conditions through FY 2017. Prior to FY 2015, sponsors to colead in the development and submission of a retrospective report for the interconnected Flathead River system, as described by the ISRP for Project # 199101903 and to include a joint M&E plan as described for project # 199101904 and that addresses ISRP comments. Sponsor to address the ISRP comments regarding deliverables 1, 3 and 4 in contracting. Implementation of deliverable 9 to be coordinated with deliverable 3 in Project # 199101901. See Part 6 of the decision document for an explanation in support of deliverables 6 and 7 in light of the ISRP recommendation. This recommendation contains some funding for Sekokini Springs. BPA shall continue to work with sponsor to fully implement the Council's recommendations and budgets approved for Sekokini Springs in April, 2011. BPA shall ensure timely and full implementation for the overall project, including Sekokini Springs.
		esident ish		Hungry Horse Mitigation- Creston Hatchery	US Fish and Wildlife Service (USFWS)	No		\$156,893		Implement through FY2017 with condition. Sponsors to assist in the development of a joint M&E plan as described by the ISRP as part of the retrospective report for the interconnected Flathead River system, prior to FY2015 (See recommendation for project # 1991-01-903). See Part 6 of the decision document for an explanation supporting this project in light of the ISRP review.
	Fi	ish		Spokane Tribal Hatchery Operations and Maintenance (O&M)		Yes (Qualified)		\$711,017		Implement with conditions through FY 2017. Sponsors to co-lead in the development and submission of a Kokanee Plan for Lake Roosevelt with partners WDFW (1991-047-00) and STOI (1991-046-00 and 1994-043-00) called for in the current ISRP Review and the previous ISRP Review Document 2009-16. Final plan to be submitted by March 2013 to inform implementation in 2014 and beyond.
		esident ish		· ·	=	Yes (Qualified)		\$325,229		Implement with conditions through FY 2017. Sponsors to co-lead in the development and submission of a Kokanee Plan for Lake Roosevelt with partners WDFW (1991-047-00) and STOI (1991-046-00 and 1994-043-00) called for in the current ISRP Review and the previous ISRP Review Document 2009-16. Final plan to be submitted by March 2013 to inform implementation in 2014 and beyond.

		atogon:	ID					 		Council Recommendations
L	Ca	ategory	טו	Title	Sponsor		Acc ord	FY12 Working	Requested	Council Recommendations
	1 Re	esident	199201000	Fort Hall Habitat	Shoshone-Bannock	Yes	Х	\$441,250	\$323,111	Implement with condition through FY 2014. By March 2014, sponsors to
	Fis	sh		Restoration	Tribes	(Qualified)				develop and submit for a ISRP review a comprehensive habitat restoration plan
										to address ISRP qualifications. Council funding recommendation beyond 2014
										based on favorable ISRP and Council review of the plan.
	2 Re	esident	199404300	Lake Roosevelt Data	Spokane Tribe	Yes		\$1,314,199	\$1,924,991	Implement with conditions through FY 2017. Sponsors to co-lead in
	Fis	sh		Collection		(Qualified)				development and submission of a Kokanee Plan for Lake Roosevelt with
										partners WDFW (1991-047-00) and STOI (1991-046-00 and 1994-043-00) called
										for in the current ISRP Review and previous ISRP Review Document 2009-16.
										Final plan to be submitted by March 2013 to inform implementation in 2014
										and beyond. ISRP qualifications 3 and 4 to be addressed in contracting. Council expects that sponsors will coordinate with other BPA-funded native western
										mussel activities in the Basin. Refer to Data Mgmt Review and Rec's (Part 3) for
										data collection and database aspects of the project.
	l3 Re	esident	199404700	Lake Pend Oreille	•	Yes		\$1,000,995	\$975,000	Implement through FY 2017.
	Fis	sh		Kokanee Mitigation	Fish and Game (IDFG)					
-	4 Re	esident	199404900	Kootenai River	Kootenai Tribe	Yes		\$1,797,685	\$2,140,625	Implement with condition through FY 2017. Sponsors to develop a synthesis
	Fis			Ecosystem Restoration		(Qualified)		φ = γ, σ , γ, σ σ σ		report for Kootenai River projects (1988-065-00, 1994-049-00, 2002-002-00,
				,						2002-008-00, 2002-011-00) as described by the ISRP. By the end of calendar
										year 2012, sponsor to submit timeline and plan to Council for the development
								4.5.5.4.5.5		of the synthesis report.
				Kalispel Tribe Resident	Kalispel Tribe	Yes		\$602,190		Implement with conditions through FY2017. Prior to reintroduction, Sponsors
	Fis	Sn		Fish Program		(Qualified)				to develop monitoring plan for reintroduction of westslope cutthroat trout to Goose Creek for ISRP review. Prior to FY2015, progress report on bass
										production and fishery to be submitted to the ISRP for review.
	l6 Re	esident	199500400	·	•	Yes		\$894,401	\$890,000	Implement through 2017. Sponsor should consider developing a retrospective
	Fis	sh		J	Wildlife and Parks					report as described by the ISRP, following the completion and review of the
				·	(MFWP)					Hungry Horse Mitigation Retrospective and for the next review cycle.
				Monitoring and Evaluation (RM&E)						
				Evaluation (Riviae)						

Ln	Category	ID	Title		ISRPRec	Acc		FY12 Working		Council Recommendations
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1	Resident Fish	199500900	Lake Roosevelt Rainbow Trout Net Pens		Yes (Qualified)			\$182,644	\$185,384	Implement through FY 2017. See recommendations for related projects WDFW (1991-047-00) and STOI (1991-046-00 and 1994-043-00).
18	Resident Fish	199501100	Chief Joseph Kokanee Habitat Enhancement	Colville Confederated Tribes	Yes	Х		\$754,484		Implement through FY 2017. Refer to Data Managment Review and Recommendations (Part 3) for database development aspects of the project.
19	Resident Fish	199501300	Nez Perce Trout Ponds	Nez Perce Tribe	Yes (Qualified)			\$212,016	\$218,950	Implement with condition through FY 2017. Sponsor to address ISRP qualifications as part of contracting.
20	Resident Fish	199501500	Duck Valley Reservation Reservoir Fish Stocking O&M and M&E	Shoshone-Paiute Tribes	Yes (Qualified)			\$534,239		Implement with condition through FY2017. Sponsors to develop and submit a Three-Reservoir Mgmt plan as described by the ISRP to help inform implementation in the FY2015 and beyond. The Plan should be submitted by March 2014.
2:	Resident Fish	199502700	Lake Roosevelt Sturgeon Recovery		Yes (Qualified)			\$505,982	\$628,522	Implement with conditions through 2017. 1) Not to exceed current infrastructure and sturgeon production level (experimental phase: with 10,000 naturally produced post-hatch sturgeon (deliverable 6)) until initial step review complete in Project 2007-272-00. 2). As part of step review, sponsor to address ISRP qualification 2. 3) Prior to implementation of food web/predation activities, sponsor to submit for ISRP review design and approach methods for predation (deliverable 4) and food web (deliverable 5) components as requested by ISRP in qualification #1. Refer to Data Managment Review and Recs (Part 3) for database development aspects of the project. Also refer to the Resident Fish Review and Recommendations for White Sturgeon in Part 2.
2:	Resident Fish	199700400	Resident Fish above Chief Joseph and Grand Coulee Dams	' '	Yes (Qualified)			\$762,842	\$800,237	Implement with condition through 2017. Sponsor to address ISRP qualifications 1&3 in contracting. Refer to Data Managment Review and Recommendations (Part 3) for database development aspects of the project.
23	Resident Fish	199701100	Duck Valley Reservation Habitat Enhancement		Yes (Qualified)			\$328,187	\$328,000	Implement with condition through 2017. Sponsor to address ISRP qualifications in contracting.

Ln	Category	ID				Acc		FY12 Working		Council Recommendations
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24	Resident	199701900	Evaluate Life History of	Burns-Paiute Tribe	Yes			\$212,016	\$425,255	Implement through 2017.
	Fish		Native Salmonids in					. ,		
			Malheur River Subbasin							
25	Resident	200102800	Banks Lake Fishery	Washington	Yes			\$276,940	\$382,000	Implement through FY2017 with condition. Sponsor to address ISRP
	Fish		Evaluation	Department of Fish	(Qualified)					qualification (ten elements) in contracting.
				and Wildlife (WDFW)						
								4		
26			Ford Hatchery	Washington	Yes			\$141,651	\$144,616	Implement through FY2017 with condition. Sponsor to address ISRP
	Fish		· '	'	(Qualified)					qualification regarding creel methodologies in contracting.
			Maintenance	and Wildlife (WDFW)						
27	Resident	200103100	Resident Fish	Lake Roosevelt Forum	Yes			\$21,202	\$20,750	Implement through 2017. Sponsors should consider adding relevant ISRP
_,	Fish		Symposium		(Qualified)			¥==,===		programmatic issues from the Resident Fish Category Review to the list of
					,					topics in future Forums.
28	Resident	200103200	Coeur D'Alene Fisheries	Coeur D'Alene Tribe	Yes			\$300,000	\$434,919	Implement with condition through 2017. Sponsor to address ISRP qualifications
	Fish		Enhancement-Hangman		(Qualified)					in contracting.
			Creek							
								4	4	
29			Hangman Creek Wildlife	Coeur D'Alene Tribe	Yes			\$310,000	\$386,033	Implement through 2017.
20	Fish		Restoration Restore Natural	Kootenai Tribe	Yes			¢E 9E0 000	¢14 110 F04	Implement with condition through 2017. Changers to develop a synthesis
30	Fish		Recruitment of Kootenai	Rootellal Tribe	(Qualified)			\$5,850,000	\$14,110,504	Implement with condition through 2017. Sponsors to develop a synthesis report for Kootenai River projects (1988-065-00, 1994-049-00, 2002-002-00,
	1 1511		River White Sturgeon		(Qualified)					2002-008-00, 2002-011-00) as described by the ISRP. By the end of calendar
			Thirte willie Stargeon							year 2012, sponsor to submit timeline and plan to Council for the development
										of the synthesis report. Also refer to the Resident Fish Review and
										Recommendations for White Sturgeon in Part 2.
31	Resident	200200300	Secure and Restore Fish	Salish and Kootenai	Yes			\$106,009		Implement through 2017.
	Fish		and Wildlife Habitat in	Confederated Tribes						
			Montana							

Ln	Category	/ ID	Title		ISRPRec	Acc	Bi	FY12 Working	FY13	Council Recommendations
						ord	Ор		Requested	
32	Resident Fish	200200800	Reconnect Kootenai River with Historic Floodplain	Kootenai Tribe	Yes (Qualified)			\$521,478	\$596,606	Implement with condition through 2017. Sponsors to develop a synthesis report for Kootenai River projects (1988-065-00, 1994-049-00, 2002-002-00, 2002-008-00, 2002-011-00) as described by the ISRP. By the end of calendar year 2012, sponsor to submit timeline and plan to Council for the development of the synthesis report. In addition, sponsor to address ISRP qualification for a Objective 2. Implementation of future reconnect projects based on favorable ISRP review of prioritization approach.
33	Resident Fish	200201100	Kootenai River Operational Loss Assessment	Kootenai Tribe				\$735,462		Contextual review. No new recommendation. Refer to Council decision for Wildlife Category Review decision in July 2009.
34	Resident Fish	200203700	Freshwater Mussel Research and Restoration	Umatilla Confederated Tribes (CTUIR)	Yes	Х		\$297,684	\$280,583	Implement through FY2017. Council will expect that sponsors will coordinate with other BPA-funded western mussel activities in the Basin.
35	Resident Fish	200600800	Mainstem Columbia Amendments Research at Libby Dam	Montana Fish, Wildlife and Parks (MFWP)	Yes (Qualified)			\$356,718	\$476,750	Implement with condition through FY2017. Sponsor to address ISRP qualifications in contracting.
36	Resident Fish	200700300	Dworshak Dam Resident Fish Mitigation	Idaho Department of Fish and Game (IDFG)	In Part			\$216,257		Implement through FY2017. Deliverable 2 (enclosure experiments) to be implemented for two years only through FY2014. See Part 6 of the decision document for an explanation supporting deliverable 2 in light of the ISRP review.
37	Resident Fish	200702400	Coeur D'Alene Trout Ponds	Coeur D'Alene Tribe	Yes (Qualified)			\$63,038	\$61,268	Implement with condition through FY2017. Sponsor to address ISRP qualifications in contracting.
38	Resident Fish	200714900	Non-Native fish Suppression in Graham Creek	Kalispel Tribe	In Part (Qualified)			\$254,970	\$424,190	Implement with conditions through FY2017 with the exception of objective 3. Implement objective 3 through FY2013. Implementation of objective 3 beyond 2013 based on favorable ISRP of the coordinated effort by Kalispel Tribe and IDFG to address the ISRP concerns regarding the lake trout removal effort. Sponsor to address ISRP qualifications for objective 4 (progress report on Northern Pike suppression in Box Canyon) and submit for ISRP review prior to FY2015 to inform out year implementation.

Ln	Category	ID			ISRPRec	Acc ord	Bi	FY12 Working		Council Recommendations
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39		200715700	Bull Trout Status and	Confederated Tribes	Yes	Х		\$148,842	\$151,938	Implement with condition through FY2017. Sponsor to address ISRP
	Fish		Abundance on Warm Springs Reservation	Of Warm Springs	(Qualified)					qualifications in contracting.
40		200717000	South Fork Snake River	Idaho Department of	Yes			\$267,909	\$268,000	Implement through FY2017.
	Fish		Yellowstone Cutthroat Trout Recruitment and	Fish and Game (IDFG)						
			Survival Improvement							
			,							
41		200724600	Restoration of Bull Trout	Kalispel Tribe	Yes			\$406,580	\$430,756	Implement through FY2017.
	Fish		Passage at Albeni Falls Dam							
42	Resident	200737200	Lake Roosevelt Sturgeon	Spokane Tribe	Yes			\$262,656	\$269,733	Implement with conditions through completion of Step Review Process. (Also
	Fish		Hatchery		(Qualified)					see related project 1995-027-00 - Lake Roosevelt Sturgeon Recovery.) Also
42	Dasidant	200740500	Rufus Woods	Colville Confederated	Yes	X		¢222.407		refer to the Resident Fish Review and Rec's for White Sturgeon in Part 2.
43	Fish	200740500	Habitat/Passage	Tribes	(Qualified)	, ,		\$233,497	\$288,298	Implement with conditions through FY2014. Sponsor to develop and submit a report addressing ISRP issues and concerns for all aspects of project
			Improvement, Creel and		(\(\alpha \)					implementation. Funding recommendation beyond FY2014 based on favorable
			Triploid							ISRP/Council review of the report.
	Danidant	200040000	Supplementation	Cabilla Canfadanatad		V		¢240.024	ĆE40.200	Contact of an inv No and an analysis of the Council decision of
44	Fish	200810900	Resident Fish Research, Monitoring and	Colville Confederated Tribes		Х		\$210,024	\$518,269	Contextual review. No new recommendation. Refer to Council decision on RM&E/AP review June 2011.
	1 1311		Evaluation	Tribes						TWICE// II TEVIEW JUITE 2011.
45	Resident	200811100	Twin Lakes	Colville Confederated		Х		\$492,473	\$192,982	Implement North Twin Oxygenation activities through FY 2017. Sponsor to
	Fish		Enhancement	Tribes	(Qualified)					address current ISRP qualifications (ISRP 2012-2) to demonstrate progress in
										community efforts to reduce external nutrient loading in their next annual report. Expansion into South Twin Lake based on favorable ISRP review of
										statistical results from lake comparison study indicating both cost benefit and
										benefit to fish.
46		200811200	Resident Fish Loss		Yes	Х		\$463,426	\$467,000	Implement with condition through FY2013. Sponsor to develop assessment
	Fish		Assessment	Tribes	(Qualified)					tools for methodologies assessing hydrosystem impacts. Funding recommendation beyond FY2013 based on favorable ISRP and Council review
										recommendation beyond F12013 based on lavorable ishe and council review

Ln	Category	ID				Acc		FY12 Working		Council Recommendations
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4	7 Resident	200811500	Lake Roosevelt Burbot	Colville Confederated	In Part	Х		\$0	\$435,140	Implement Objective 1, deliverable 1 only through completion and not beyond
	Fish		Population Assessment	Tribes						FY2017 (Analysis of Fall Walleye Index Netting Bycatch Data). Sponsor to submit
										revised proposal based on this analysis for ISRP/Council for review and
										recommendation prior to additional assessment efforts in Lake Roosevelt.
48	Resident	200811600	White Sturgeon	Colville Confederated	Yes	Х		\$414,398		Implement with condition through FY2017. Sponsor to submit to the ISRP,
	Fish		Enhancement	Tribes	(Qualified)					specific objectives and methods for physical habitat modeling (deliverable 4)
										and deliverables 5 and 6 (Determine behavioral impacts on larval sturgeon
										exposed to heavy metals; and Assess rates of contaminant bioaccumulation to
										assess recruitment failure) as requested by the ISRP in qualification #1.
										Implementation of deliverables 4, 5 and 6 based on favorable review by the
										ISRP. Refer to Data Managment Review and Recommendations (Part 3) for database development aspects of the project. Also refer to the Resident Fish
										Review and Recommendations for White Sturgeon in Part 2.
49	Resident	200811700	Rufus Woods Redband	Colville Confederated	No	Х		\$167,163	\$310,818	Implement with conditions through FY2014. Sponsor to develop a trout
	Fish		Net Pens	Tribes						stocking plan, including project specific concerns, as described by the ISRP, prior
										to FY2015. Funding recommendation beyond FY2014 based on favorable ISRP
										and Council review of the trout stocking plan.
50		200900800	Climate Change Impacts	Columbia River Inter-	Yes	Х		\$328,300	· ·	Implement with condition through FY2017. Sponsor to address ISRP
	Fish				(Qualified)					qualifications in contracting including a description of how data and models
				Commission (CRITFC)						produced by the project will be applicable and accessible to the region.
								\$34,772,618	\$46,707,119	
5	L Data	198810804	StreamNet -	Pacific States Marine	Yes	Х	Х	\$2,034,576		Refer to Data Managment Review and Recommendations - Part 3. Implement
	Mgmt		Coordinated Information					7 = , 5 5 1, 5 1 5	<i>+-,,</i>	with conditions through FY2013: See project specific recommendation in Part 3 -
			System (CIS)/ Northwest		(3,3,3,3,7)					3c. In addition, sponsors to assist in the development of regional data priorities,
			Environmental Database	,						storage and accessibility guidance for the Columbia Basin including data for
			(NED)							anadromous and resident fish and wildlife as described in 1A. Funding
										recommendation beyond FY2013 based on the outcome of the regional data
										discussion (PERC) and final Council recommendation.
52			· ·	Pacific States Marine			Х	\$2,616,917		Contextual review (Council decision on RM&E/AP review June, 2011) with
	Mgmt			Fisheries Commission						supplemental recommendation in Data Mgmt Review and Recommendations
				(PSMFC)						Part 3-3e.

	Catana	lin.								Council Personne detions
	Category	טון	Title	Sponsor		Acc ord		FY12 Working	Requested	Council Recommendations
						0.4			nequesteu	
Ę	3 Data	199403300	Fish Passage Center	Fish Passage Center,			Х	\$1,461,609		Contextual review. No new recommendation. Refer to Council decision on
	Mgmt			Pacific States Marine						RM&E/AP review June, 2011.
				Fisheries Commission						
				(PSMFC)						
5	4 Data	199601900	Data Access in Real Time	University of	Yes		Х	\$293,938	\$333,387	Implement through 2017.
	Mgmt		(DART)	Washington						
	5 Data	199800401	Columbia Basin Bulletin	Intermountain	Yes			\$148,412	\$148,412	Implement through 2017.
-	Mgmt	200207200	Habitat and Diadinamita	Communications	Vac		V	¢1.CF 021	¢1 120 200	Defende Dete Management Deview and Decomposed tions in Deut 2 Insulancent
-	6 Data Mgmt	200307200		Northwest Habitat Institute	Yes (Qualified)		Х	\$165,821		Refer to Data Managment Review and Recommendations in Part 3. Implement in part and with conditions through FY2013; see project specific
	Wigitt		Columbia River Basin	Institute	(Quaiiiica)					recommendation Part 3-3b. Funding recommendation beyond FY2013 based on
										the outcome of the regional data discussion (PERC) and final Council
										recommendation.
	7 Data	200600600	Habitat Evaluation	Columbia Basin Fish						Contextual review (Council Wildlife decision on July 2009). Continue funding
	Mgmt		Project	and Wildlife Authority						HEP survey work through FY2013 with supplemental recommendation: BPA to
				(CBFWA)						work with sponsor and NWHI to incorporate all HEP data into the NWHI database by end of FY2013 (also see project-specific recommendation for NHI
										in Part 3-3b). Funding recommendation beyond FY2013 based on the outcome
										of the regional data discussion (PERC) and final Council recommendation.
Ç	8 Data	200850500	Streamnet Library	Columbia River Inter-	Yes		Х	\$460,570	1	Refer to Data Managment Review and Recommendations. Implement with
	Mgmt				(Qualified)					conditions through FY2013; see project specific recommendation in Part 3-3c.
				Commission (CRITFC)						Funding recommendation beyond FY2013 based on the outcome of the
										regional data discussion (PERC) and final Council recommendation.
	9 Data	200850700	Tribal Data Network	Columbia River Inter-	Yes	Х		\$362,032	\$1,533,751	Refer to Data Managment Review and Recommendations in Part 3. Implement
	Mgmt				(Qualified)					with conditions through FY2013: See project specific recommendation in Part 3-
				Commission (CRITFC)						3g. In addition, sponsor to participate on the PERC and assist in developing
										recommendations of the PERC. Funding recommendation beyond FY2013
										based on the outcome of the regional data discussion (PERC) and final Council
										recommendation.

		Catagori	ID				Acc	_	FY12 Working		Council Recommendations
-	n C	Category	טו	Title	Sponsor		ord			Requested	Council Recommendations
(50 C	Data	201007500	Upper Columbia	Upper Columbia			Χ	\$154,000	\$319,436	Contextual review. No new recommendation. Refer to Council decision on
	Ν	∕Igmt		Implementation and	Salmon Recovery						RM&E/AP review June, 2011. Also refer to Data Managment Review and
				Action Effectiveness	Board						Recommendations; recommendations from regional data discussion process
				Monitoring							described in Part 3-2 may inform the data Mgmt and sharing aspects of project
	-4 5	2.1.	201100000	Call additional and	F. C.			V	64.245.762		beyond 2013.
1		Data Vigmt	201100600	Columbia Habitat and Monitoring Program -	Environmental Data Services, NOAA,			Х	\$4,245,762		Contextual review. No new recommendation. Refer to Council decision on RM&E/AP review June, 2011. Also refer to Data Managment Review and
		vigilit		Pilot (CHaMP-P)	Quantitative						Recommendations; recommendations from regional data discussion process
				i noc (onami i)	Consultants Inc, South						described in Part 3-2 may inform the data Mgmt and sharing aspects of project
					Fork Research, Inc.,						beyond 2013.
					Terraqua, Inc.						
(200400200	Pacific Northwest	US Geological Survey	Qualified		Х	\$583,045		Implement with condition through FY2013: In addition, sponsor to participate
	N	Mgmt		Aquatic Monitoring	(USGS)	(see					on the PERC and assist in developing recommendations of the PERC as
				Program (PNAMP) Coordination		Prgmtc)					described in Part 3-2Funding recommendation beyond FY2013 based on the outcome of the regional data discussion (PERC) and final Council
	+	Data		Coordination					\$12,526,682	\$6,939,476	
		vata Vigmt							\$12,320,00 2	30,333, 4 70	
(198906201	Program Coordination	Columbia Basin Fish	Qualified			\$859,580	\$1,572,245	Implement in part and with conditions through 2013 for data-related functions:
	C	Coord		and Facilitation Services	and Wildlife	(see					see project specific recommendation in Part 3-3a. Funding recommendation for
					Foundation (CBFWF)	Prgmtc)					the data aspects of project beyond FY2013 based on the outcome of the
											regional data discussion (PERC) and final Council recommendation. See
											Regional Coordination review (Part 4) for recommendations on coordination
-	54 F	Regional	199506425	Policy, Plan and	Washington	Qualified			\$192,772		functions. Implement through FY2017 with condition. Sponsor to assist in addressing ISRP
		Coord	233330123	Technical Support of	Department of Fish	(see			Q 1 3 2 , 1 7 2	ψ±33,300	comments from the RM&E/AP review on YKFP projects #1995-063-25 and
				Washington Dept of Fish	· ·	Prgmtc)					#1997-013-25, as appropriate, during contracting.
				and Wildlife -							
				Yakima/Klickitat							
				Fisheries Project							

Ln	Category	ID				Acc		FY12 Working		Council Recommendations
						ord	Ор		Requested	
65	Regional	199803100	Implement Wy-Kan-Ush-	Columbia River Inter-	Qualified	Х	Х	\$237,212	\$248,358	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Mi Wa-Kish-Wit	Tribal Fish	(see					
				Commission (CRITFC)	Prgmtc)					
66	Regional	200710600	Spokane Tribe	Spokane Tribe	Qualified			\$78,078	\$78,781	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination		(see					
					Prgmtc)					
67	Regional	200710800	Upper Columbia United	Upper Columbia	Qualified			\$281,679	\$288,721	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Tribes (UCUT)	United Tribes (UCUT)	(see					
			Coordination		Prgmtc)					
68	_	200716200	Kalispel Tribe	Kalispel Tribe	Qualified			\$78,797	\$78,797	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination		(see					
	Danianal	200740700	Hanna Canla Divan Taile	Hanan Caalaa Dissan	Prgmtc)		V	Ć4.40.2.44	¢200.000	Can Danis and Canadination Davison and Danagement dations. Dark 4
69	_	200740700	Upper Snake River Tribe		Qualified		Х	\$148,341	\$280,000	See Regional Coordination Review and Recommendations - Part 4.
	Coord		(USRT) Coordination	Tribes Foundation	(see					
70	Pegional	200001000	Coeur D'Alene Tribe		Prgmtc) Qualified			\$78,078	\$82.030	See Regional Coordination Review and Recommendations - Part 4.
1	Coord	200901000	Coordination	Coedi D'Alelle ITibe	(see			\$78,078	\$82,030	See Regional Coordination Neview and Recommendations - Fart 4.
	Coord		Coordination		Prgmtc)					
71	Regional	200902500	Grand Ronde Tribe	Confederated Tribes	Qualified			\$132,711	\$131.020	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination	of Grand Ronde	(see			, - ,	, , , ,	
					Prgmtc)					
72	Regional	201004400	Colville Regional	Colville Confederated	Qualified			\$69,673	\$71,130	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination	Tribes	(see					
					Prgmtc)					
73	Regional	201101200	Cowlitz Tribe	Cowlitz Indian Tribe	Qualified			\$132,711	\$153,332	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination		(see					
					Prgmtc)					
74	_	201200200	Oregon Regional	Oregon Department	Qualified			\$132,711	\$132,711	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination	Of Fish and Wildlife	(see					
				(ODFW)	Prgmtc)					

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Ln	Category	ID	Title	Sponsor	ISRPRec	Acc	Bi	FY12 Working	FY13	Council Recommendations
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							Ι΄.			
75	Regional	201200300	Washington Regional	Washington	Qualified			\$132,711	\$132,711	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination	Department of Fish	(see					
				and Wildlife (WDFW)	Prgmtc)					
76	Regional	201200400	Idaho Regional	Idaho Department of	Qualified			\$132,711	\$132,710	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination	Fish and Game (IDFG)	(see					
					Prgmtc)					
77	Regional	201200500	Siletz Tribe Coordination	Bonneville Power	Qualified			\$0	\$130,771	See Regional Coordination Review and Recommendations - Part 4.
	Coord			Administration	(see					
					Prgmtc)					
78	Regional	201200600	Nez Perce Tribe	Nez Perce Tribe	Qualified			\$0	\$132,711	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination		(see					
					Prgmtc)					
79	Regional	201200800	Montana Regional	Montana Fish,	Qualified			\$0	\$132,711	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination	Wildlife and Parks	(see					
				(MFWP)	Prgmtc)					
80	Regional	201200900	Salish-Kootenai Tribe	Salish and Kootenai	Qualified			\$0	\$132,000	See Regional Coordination Review and Recommendations - Part 4.
	Coord		Coordination	Confederated Tribes	(see					
					Prgmtc)					
								\$2,687,765	\$4,104,727	

Part 6: Council explanations addressing the formal requirements of Section 4h(10)(D) of the Northwest Power Act

Council explanations addressing the formal requirements of Section 4h(10)(D) of the Northwest Power Act

Part 6 contains the formal explanations by the Council responsive to certain specific requirements of Section 4(h)(10)(D) of the Northwest Power Act. This includes the written explanations required of the Council in those few instances in which the Council's project funding recommendations do not follow the recommendations of the Independent Scientific Review Panel. The Council also explains how it complied with the requirements in Section 4(h)(10)(D) to "consider the impact of ocean conditions on fish and wildlife populations" and "determine whether the projects employ cost-effective measures to achieve program objectives" when making project-funding recommendations.

Explanations as to how the Council responded to the recommendations of the Independent Scientific Review Panel

Section 4(h)(10)(D) requires the Council to "fully consider the recommendations of the Panel when making its final recommendations of projects to be funded through BPA's annual fish and wildlife budget." If the Council "does not incorporate a recommendation of the Panel, the Council shall explain in writing its reasons for not accepting Panel recommendations." Finally, "[t]he Council, after consideration of the recommendations of the Panel and other appropriate entities, shall be responsible for making the final recommendations of projects to be funded through BPA's annual fish and wildlife budget." The Council has carefully and fully considered the project review reports of the ISRP, and with the few exceptions explained here, the Council has followed the panel's recommendations in formulating the Council's project funding recommendations. The few exceptions requiring an explanation all come from the resident fish category.

Hungry Horse Mitigation Habitat Restoration and Research, Monitoring and Evaluation (1991-019-03)

As one aspect of this many-faceted project, the Montana Department of Fish, Wildlife and Parks proposed to assess the after-effects of the treatment of mountain lakes in the Flathead River basin with rotenone, part of the overall effort to recover the habitat capacity for and thus abundance of native cutthroat trout. The two relevant work elements or deliverables proposed included an effort to quantify the environmental determinants indicating rotenone decay and to assess the rate and diversity of the recolonization of macroinvertebrate and zooplankton communities after rotenone treatment. The ISRP concluded that these two work elements did not meet scientific review criteria largely because there is already a basis in the existing scientific literature for understanding the fate and persistence of rotenone and the nature and rate of recolonization. The project proposal did not identify unique circumstances or uncertainties requiring assessment in the field rather than relying on work done elsewhere.

Montana Fish, Wildlife and Parks responded partly by questioning the underlying basis for the ISRP's conclusion. The agency provided information indicating contradictory findings from

previous rotenone studies that in their view preclude making general conclusions about the effects of rotenone on aquatic invertebrates. More important, Fish, Wildlife and Parks provided information indicating a commitment by the agency and its partners -- in an environmental impact statement, in records of decisions, and in community outreach -- to monitor and evaluate the impact of rotenone treatment on lake conditions. The Council has been informed that rotenone treatment of lakes was a controversial step in the cutthroat recovery effort, and the agency helped to gain approval for this step by promising its partners and the public that it would provide direct monitoring and evaluation evidence of the recovery of healthy lake conditions as described in the environmental reviews associated with the project. To support this commitment, the Council decided to recommend these work elements along with other elements of the project that the ISRP did not dispute.

Hungry Horse Mitigation -- Creston National Fish Hatchery (1991-019-04)

As a related part of the Hungry Horse mitigation effort noted above, in this project the U.S. Fish and Wildlife Service proposes to continue allowing the use of its Creston National Fish Hatchery to produce fish for lake harvest. The lead sponsors of this work are actually the Montana Department of Fish, Wildlife and Parks and the Confederated Salish-Kootenai Tribes.

The ISRP concluded that the proposal did not meet scientific review criteria, stating that the Hungry Horse Mitigation sponsors have "not provided the kind of information necessary for a scientific review of the biological or fishery benefits and costs." The primary basis for the ISRP's conclusion was the lack of "a monitoring and evaluation plan [] against which to evaluate claimed success and mitigation benefits." This meant, among other things, that there is "no direct support for the sponsor's claim that the lake fisheries divert harvest pressure from local sensitive areas...." The ISRP called for a comprehensive monitoring and evaluation plan within the overall context of the Hungry Horse Mitigation project and then "an evaluation summary of biological and fishery data; and evidence of diverted pressure benefiting the local sensitive populations. While the sponsor provided some very basic information which the ISRP identified for inclusion in results reporting, for example the sites stocked and health/pathogen certifications, the broader reporting requested based on a foundational M&E plan was not provided."

The Council agrees with and supports the ISRP's conclusion about the need for an adequate monitoring and evaluation plan, and a project evaluation based on that plan, if this production program is to continue. The Council is recommending as a condition of continued project implementation that the agencies leading the mitigation effort collaborate over the next two years on the development of a monitoring and evaluation plan as described by the ISRP and a retrospective evaluation of the work in the Flathead River basin, for review by the ISRP and Council. Continued implementation of this production project in and beyond FY 2015 depends on a favorable outcome of this plan and review.

The Council does not consider this recommendation to be inconsistent with the ISRP's conclusion. But the Council is providing this explanation because the Council's project recommendation does allow the project to continue to be implemented for another two years on

these conditions, despite the ISRP's conclusion that the project does not meet scientific review criteria.

Dworshak Dam Resident Fish Mitigation (2007-003-00)

One work element or deliverable in this project proposed to continue what are known as the "enclosure experiments," experimental work in enclosures in the reservoir by the project sponsor (the Idaho Department of Fish and Game) to assess the effects of nitrogen fertilization on the growth of blue-green algae. The ISRP concluded that this work element did not meet scientific review criteria, commenting that the enclosure experiments are not adequately justified especially given what is already known in the scientific literature about the effects of fertilization.

For reasons similar to those described above with regard to the evaluation of the effects of rotenone treatment in the Flathead River basin, the Council is recommending that the experiments continue to conclusion as designed, for two further years only through FY 2014 (other aspects of the project are to continue through FY 2017). The recommendation reflects the information the Council received about the need Idaho Fish and Game has to respond to public concerns expressed about the proposed addition of nitrogen to the reservoir for fertilization. The experiments are intended to fulfill a commitment to demonstrate to the public and to the agency partners at Dworshak Dam (including the Corps of Engineers) that nitrogen fertilization is not the cause of and does not exacerbate the blue-green algae blooms that currently affect the reservoir.

Non-Native Fish Suppression in Graham Creek (2007-149-00)

One objective proposed in this multi-objective project is to maintain stable or reduced numbers of lake trout, with a related work element focused on removing lake trout. The ISRP concluded that this aspect of this project did not meet scientific review criteria. In the ISRP's view, "[b]ased on the apparent lack of success of past efforts to decrease lake trout and increase bull trout abundance, and the problems posed by recreational activities to trapping lake trout [], success of future efforts is highly uncertain."

Based on the ISRP review and other information, the Council has recommended funding for the lake trout removal objective for one year only, through FY 2013. Implementation of this objective beyond FY 2013 depends on the success of the Kalispel Tribe and the Idaho Department of Fish and Game in reshaping the proposed work to address the ISRP's concerns and receiving a favorable review of that reshaped proposal from the ISRP.

As with the Hungry Horse fish production project, the Council does not consider this recommendation to be inconsistent with the ISRP's conclusion. But the Council is providing this explanation because the Council's project funding recommendation does allow an objective and deliverable to receive funding for one further year despite the ISRP's conclusion that the objective does not meet scientific review criteria.

Colville Hatchery Operation and Maintenance (1985-038-00) and Rufus Woods Net Pens (2008-117-00)

The ISRP concluded that the trout production aspects of these coordinated projects did not meet scientific review criteria, commenting that "[t]he sponsor needs to develop a trout stocking master plan which guides the annual stocking, provides a basis for Fish and Wildlife Program proposal review, and provides for evaluation of the success of the program." The Council agreed with the views of the ISRP, recommending that implementation of this project require the project sponsor to develop a trout stocking plan as described by the ISRP prior to FY 2015. Implementation beyond FY 2014 will be dependent on a favorable ISRP and Council review of the trout stocking plan.

Again, the Council does not consider this recommendation to be inconsistent with the ISRP's conclusion. But the Council is providing this explanation because the Council's project recommendation does allow the project to continue to be implemented for another two years on these conditions to develop the stocking plan, despite the ISRP's conclusion that the project does not meet scientific review criteria.

Consideration of ocean conditions

Section 4(h)(10)(D) provides that "in making its recommendations" to Bonneville, the Council is to "consider the impact of ocean conditions on fish and wildlife populations." Congress provided no other guidance as to the meaning of this consideration. The Council's initial policy response to this charge came in an issue paper titled *Consideration of ocean conditions in the Columbia River Basin Fish and Wildlife Program* (Council Document No. 97-6; http://www.nwcouncil.org/reports/1997/97-6). This paper continues to guide how the Council responds to the direction to consider ocean conditions in its project funding recommendations.

Our regional understanding as to how ocean conditions affect Columbia River salmon and other anadromous fish populations continues to increase, even while much uncertainty remains both about how ocean conditions affect Columbia populations and about the management implications of that information. Our increasing knowledge does include greater appreciation for the impact of the ocean on salmon abundance and the degree of variation in the marine environment. The key scientific principle guiding the Council's consideration is that salmon and steelhead handle environmental variation throughout their life cycle and over time, including within the ocean portion of their lives, by having a broad array of biological characteristics within and between populations.

In addition, while the fish and wildlife program and projects cannot influence the ocean environment, actions can be taken to improve water quality and habitat in the estuary and near-shore environments. These transition zones are critical to the survival of young salmon.

Consequently, the Council's 2009 Fish and Wildlife Program describes the ocean environment as an integral component of the Columbia River ecosystem. The primary strategy called for in the program is to "identify the effects of ocean conditions on anadromous fish survival and use this

information to evaluate and adjust inland actions." The Fish and Wildlife Program then included set forth two strategies to guide the program's activities with regard to the freshwater plume, the near-shore ocean, and the high seas:

1. Manage for Variability

Management actions should strive to help anadromous fish and other species accommodate a variety of ocean conditions by providing a wide range of life history strategies. Continue monitoring and evaluation of the Columbia River plume and ocean conditions for impacts on salmonid survival. Monitor salmon returns and climate-change impacts on ocean conditions in order to identify factors affecting survival in the ocean and plume.

2. Distinguish Ocean Effects from Other Effects

Monitoring and evaluation actions should recognize and take into account the effect of varying ocean conditions and, to the extent feasible, separate the effects of ocean related mortality from that caused in the freshwater part of the life cycle.

The Fish and Wildlife Program's biological objectives for population and environmental characteristics and its strategies for the mainstem, estuary, habitat, and artificial production add further consideration of relevance. Taken together, the three primary ways the Council acting under the program can take into account ocean conditions in general and influence salmon survival in the ocean are to evaluate proposals and recommending funding for projects that:

(1) further improve our understanding of the effects of ocean conditions on salmon populations;

(2) improve productivity and preserve and extend life-history diversity in salmon populations; and (3) improve estuarine and near-shore conditions.

Turning to these particular reviews, however, the relevance of the obligation to consider ocean conditions is minimal. Coordination and data management projects are not affected by environmental conditions of any type, obviously, while by definition resident fish reside in freshwater environments and marine environments are relevant, if at all, in only a highly indirect way.

Meanwhile, as an outcome of the Council's recent review of all the monitoring, evaluate, research and artificial production projects, the Council is currently in the middle of an effort to reshape the ocean research under the Fish and Wildlife Program, based on recent synthesis of research and information to date. The point of that reshaping will be to take what we have learned about ocean effects so far and use that information to refocus the research on what are still the key uncertainties that relate to program management.

Cost-effectiveness measures

Section 4(h)(10)(D) further provides that in making the project funding recommendations, the Council is to "determine whether the projects employ cost-effective measures to achieve program objectives." As with the command to "consider ocean conditions," Congress did not

provide any further explanation or guidance as to the meaning of this provision. The legislation did not specify any particular approach to cost-effectiveness analysis or define in any particular what is meant by a "cost-effective measure." The provision does not require, for example, the use of a single measure of biological effectiveness as a basis for comparison among projects, nor the use of strictly quantitative analysis. And while the logic of the Council's program might focus most of the cost effectiveness analysis among and between project proposals, the literal wording calls for a cost-effectiveness analysis only *within* projects, that is, whether any particular project employs the best of possible alternative methods to meet its objectives.

Given this context, the Council has worked over the years to understand the state of the art in natural resource economics and cost-effectiveness analyses to help guide the Council in making the determination required. Soon after Congress adopted this amendment to the Power Act in 1997, the Council, with the help of its staff economists and its newly-formed Independent Economic Analysis Board (IEAB), developed an approach to the cost-effectiveness analysis in a document tiled *Methods of Economic Analysis for Salmon Recovery Programs*, Council Document No. 97-12 (July 1997) ("methods analysis"). The Council first used this methods analysis to initiate the cost-effectiveness determination in the project review process for Fiscal Year 1998. It remains the basis today for the analysis and determination.

The methods analysis concluded that several problems make it difficult for the Council to undertake a quantitative cost-effectiveness comparison between Columbia River fish and wildlife projects using a single, quantified measure of benefits to determine which projects produce the greatest benefits per dollar. The problems include the lack of agreement on measures of biological effectiveness; the fact that the complex life-cycle of anadromous and resident fish makes it difficult to isolate the biological effects of particular activities or to compare different biological effects of different kinds of projects; and the fact that in the project review process, different project sponsors propose vastly different types of activities, and thus different kinds of cost and economic information, which makes cost comparisons difficult.

These observations remain valid. There are sound reasons to believe projects produce benefits to fish and wildlife, as explained below, but not in a directly predictable single quantity. A quantitative cost-effectiveness comparison still requires a greater understanding of the direct biological effectiveness of individual actions than we have now.

The methods analysis noted, however, that there is much more to cost effectiveness than a quantitative comparison of the costs of alternative ways to achieve a single biological objective. Much can be done to review the efficiency of projects, to improve the likelihood that the projects selected will be the most cost effective, and to improve project management. Cost-effectiveness review drives toward procedures for project review, selection, and management that emphasize efficiency and accountability.

Based on these considerations, the methods analysis recommended four strategies to improve the likelihood that the projects recommended for funding are those that employ cost-effective measures to the greatest degree:

- Strategy 1: The best assessment of the effectiveness of fish and wildlife projects comes from the review by the Independent Scientific Review Panel (ISRP).
- Strategy 2: Improve the amount, quality, and comparability of project cost information.
- Strategy 3: Evaluate the record of existing projects over time. Projects that have been ongoing for some time should have yielded some measurable effects or have contributed some concrete addition to the region's knowledge about fish and wildlife problems.
- Strategy 4: Introduce selective audits on projects, oriented toward determining whether the contracting process contains the procedures necessary to manage the project's cost and effectiveness.

The Council's experience over the years has added to or elaborated on this set with three further strategies: (1) clarify, specify, and quantify program objectives as much as possible; (2) develop other elements of project review besides ISRP review that also provide accountability benefits; and (3) flag certain projects and programs for more in-depth review of benefits and costs.

The Council acted consistent with these strategies in the just-completed review of the resident fish, data management and coordination projects. In particular, the Council relied heavily on the views of the independent science panel in shaping its recommendations, selected certain program areas for further synthesis and review in order to evaluate just how effective key program areas are, and used this review both to evaluate projects and to continue to call for improvements in reporting in order to have a better basis for evaluating projects over time.