Northwest Power and Conservation Council

August 2, 2005

To: Council Members

From: Doug Marker,
Patty O'Toole

Subject: Preparation for the FY 2007-2009 Project Selection Cycle

PROPOSED ACTION: We do not request decisions at the August Committee and Council meetings. The staff want to discuss current issues with the Fish and Wildlife Committee and to present a brief status report on these issues to the full Council. The staff intend to present a draft Guidance Document for the selection cycle in September. That draft Guidance document will propose resolutions to most of these pending issues and request Council confirmation so that we can begin the project selection cycle.

BACKGROUND: The Council and staff have discussed for many months how to structure the project selection cycle to implement the priorities of subbasin plans. Important issues included:

- Reviewing research, monitoring and evaluation in systemwide reviews and reviewing habitat and production proposals in provincial reviews.
- Allocating the available budget by provinces and using Bonneville's current rate case funding assumptions.
- Expecting to make multi-year funding recommendations.

We expect the next project review cycle to begin this fall after Council approval of the Guidance Document, the proposal form, the initial provincial budget allocations and the schedule for the provincial review. The review cycle needs to call for proposals this fall to be able to result in project funding recommendations for Fiscal Year 2007-2009.

DISCUSSION: We want discussion and to confirm guidance from the Committee in the August meeting on the following issues:

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Discussion of the FY 2007-2009 project selection cycle
Draft
July 29, 2005

Purpose and content of the Guidance Document: We envision a document approved by the Council that describes the scope of the project selection cycle, the function of provincial reviews, and the assignment of proposal topic areas to systemwide review. By using a Guidance Document we can resolve the "rules" of the process. We expect to share drafts with Bonneville, the fish and wildlife managers and other interested parties in the course of bringing a proposal to the Council for approval. We expect to have a draft for your review in September.

Greg Delwiche sent a letter to the Council last week discussing Bonneville's current thinking about the scope and conduct of the project selection cycle. A copy of his letter is attached.

Target allocations: Last month we discussed with the Committee and Council using initial target allocations in this manner:

1. Starting with the allocation used by Bonneville in its rate case assumptions for 70 percent of the expense budget for production and habitat implementation, 25 percent for research, monitoring and evaluation, and 5 percent for coordination. The latter two categories would be reviewed in a systemwide process.

2. Establishing target allocations for provinces based on the historical funding recommendations from the Council. We are considering the allocations used by the Council in the last provincial review cycle with specific adjustments to add funding for estuary project implementation and the Columbia Cascade province because of the emphasis for off-site mitigation in the current Biological Opinion for the federal hydropower system.

3. Ensure that the Council's recommendations result in a 70-15-15 balance of emphasis between anadromous fish, resident fish and wildlife projects.

The Upper Columbia United Tribes, at least, have asked the Council to include an alternative allocation formula (attached in this packet). Additionally, the Council staff are still discussing alternative "base year" references for the historical allocation among provinces. The initial allocation should be resolved in the Guidance Document with the expectation that the Council could subsequently revise it.

Conduct of the provincial reviews: We have asked the Council members and state staff to advise us on how provincial review recommendations should be developed within each province. The recommendations would prioritize project funding and come to the Council. The processes used to develop project recommendations should involve the co-managers and other appropriate entities.

Roles and responsibilities: We need to describe how we expect some functions to be performed in the course of the review cycle including the ISRP, CBFWA, Bonneville and the ESA regulatory agencies.

The proposal form: We are asking for review of the current proposal form and suggestions for any necessary revisions. We expect to use substantially the same form with revisions to ask for relationship to subbasin plans, application of PISCES work elements and clarity of biological

objectives. The current form is attached. The final form would be confirmed in the Guidance Document.

Definitions of project categories: While we have discussed organizing the review into "compartments" of monitoring and evaluation, research, and coordination; those terms mean different things to different people. We are drafting definitions in the Guidance Document.

As an example, Steve Waste has drafted a memo of initial definitions of the monitoring and evaluation framework. His discussion draws from a number of regional documents. Steve's memo is still being reviewed by other Council and Bonneville staff, and it is provided as an attachment here to illustrate the nature of the guidance we are developing in this particular area.

Project scale monitoring and evaluation: We have designed the process to prioritize monitoring and evaluation that is integrated at a regional scale. However, we anticipate some basic monitoring to still be necessary for individual projects. We are discussing a modest budget level for such permissible monitoring and would propose that in the Guidance Document. We are working on a proposal for monitoring for artificial production projects.

Project performance audits: Council members asked us to consider how performance audits might be performed for several purposes. Among those is to determine that proposed products of project implementation are efficiently delivered, benchmarking of similar project work element costs, and use for cost-effectiveness analysis. An initial review could occur during the coming year and we will discuss the goals for such a review with the Committee.

Attachments:

1. Current draft Guidance Document outline --to illustrate scope and presentation format (most of the substantive detail is pending staff work and Council confirmation of issues noted above).
2. Memo from Steve Waste proposing structure of systemwide review of monitoring and evaluation
3. Current project proposal form
4. Letter from Greg Delwiche on Bonneville's interests in the project selection cycle

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Northwest Power and Conservation Council

DRAFT

Information and Instructions for the Development and Review of Proposed Projects to Implement the Council's Columbia Basin Fish and Wildlife Program Fiscal Years 2007 through 2009

Dear Interested Party:

Introduction

Purpose of the Document

In this sub- section we would:

- Explain that the Council and Bonneville are jointly soliciting for proposals for projects to implement the adopted fish and wildlife program in FY's 07 through 09.
- Explain that this document is provided to assist prospective sponsors in filling out the standard proposal form (link back to form).
- Explain that this document provides information relating to context, standards, definitions, process and schedule for the proposal development and review process.
- Give notice on aggregate schedule -- solicitation will begin on X, proposals are due by Y, and the Council decision-making will take place over period Z. We will refer reader to a detailed schedule in a separate section later in the document.

Context

In this sub-section we would:

- Provide a brief piece on the nature and origin of the Council, the Program and BPA's obligation to fund the program. Perhaps explain how this process is not the same as a pure grants program. Explain the critical role played by subbasin plans, and those program areas (systemwide) where those plans will not guide project decisions.

- Provide a brief piece explaining the Council's role, Bonneville's role and that of the ISRP as set out in the 1996 Amendment to the Act

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- Explain how the Council's recommendations and BPA's acceptance strives to develop a work plan that meets NWPA and ESA obligations of BPA for this period of time.

Allocating the available budget

In this section we would:

- State the funding commitment (tell people how much $$ is involved annually) -- we should explain how we would use an annual planning budget and its relationship to the actual spending target. We would explain how we arrive at a planning budget that is higher than the spending target.

- Explain that Bonneville and the Council have resolved to commit 70% of the annual budget to "on the ground work"; 25% to R, and M&E, and 5% to coordination. Refer reader to a subsection on definitions for these terms later in the document.
- We will explain how Bonneville administrative costs are deducted, and we will identify placeholders (ISAB, ISRP, Water Transaction Program, etc).

- Explain historical allocation principle and base year(s) used.
    - Explain adjustments made for ESA and the like (estuary and Col. Cascade at the moment). Present application of this (show where the money is going) by reference to a version of the spider diagram that follows this section immediately below.
    - Explain that the diagram below also shows funds available for the compartments on the Systemwide side.

General Process Structure

In this section we would:

- Explain that the distribution of funds discussed above warrants a particular structure for reviewing and deciding upon proposals -- and state that the "spider diagram" [presented right here] illustrates that (and includes the allocation figures attached to the applicable boxes).

- We would lay out the review steps in bullets like:

    - Solicitation for all new and existing and Systemwide and Provincial proposals;
    - Provide the deadline for submitting proposals;
    - ISRP review of first block of proposals, and a schedule for a preliminary report to Council;
    - Public comment on preliminary report; fix-it-loop for proposals;
    - ISRP review of responses and final report on first block back to the Council;
    - Systemwide R, M&E, and Coordination work-plan proposal developed regionally;
    - Subbasin/Province work plan proposals developed locally;
    - Council review and decision on proposed subbasin/province work plans and Systemwide R, M&E and Coordination.

Next, we take each of the bullets above as an individually titled section and dig into detail. This is the real meat of the guidance memo. In addition to standards, instructions, guidance, we can provide legal and policy context where appropriate, including;

- definitions for "on the ground" projects "research and monitoring and evaluation" projects, and "coordination" projects,
- discuss the appropriate level of province compartment project scale m&e and research -- definitions and a cap on % of such activities for province compartment projects discussed.
- explain the heavy emphasis on SB plans as guidance on the Province side of the process throughout most bullets above;
- explain the framework and how that framework was developed that for organizing and prioritizing projects on the Systemwide side;
- guidance to the ISRP if applicable would be noted here, also note statutory review standards;
- the role of local groups for developing work plans and the necessity of co-manager involvement will be discussed here;
- explain the expectations for the involvement of Bonneville and ESA entities at the front of the process;
- clearly state how the Council table is the decision-maker, and will be the forum for addressing disputes, should any develop in the local prioritization (province) or regional prioritization (systemwide); explain the standards for council decision-making and how it will communicate its recommendations to Bonneville.

Schedule

In this section we would:

Lay out a schedule graphic showing how we will sequence the province groups through -- the format used for green, blue, red subbasin plans, the bullet points above being the x-axis milestones.

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Northwest Power and Conservation Council

August 2, 2005

MEMORANDUM

TO: Fish and Wildlife Committee

FROM: Steve Waste, Manager Program Analysis and Evaluation

SUBJECT: Monitoring in the Context of a Systemwide Review

Action

This is an informational memo and no action is required by the Committee.

Recommendation

Staff recommends the Council continue to support the development of a coordinated approach to monitoring in the region through the Systemwide Review.

Background

This memo explains one element of the guidance document being developed for the FY 07-09 project selection process, the need for a regional approach to research and monitoring, that would best be handled through a systemwide solicitation.

Developing a Regional Framework for Monitoring in the Systemwide Solicitation

Traditionally, monitoring in the Fish and Wildlife Program has been conducted to evaluate work at the project scale, across all subject areas. While work at this scale has intrinsic value, it cannot substitute for the lack of a monitoring program of sufficient scope to provide a basis upon which the program as a whole can be evaluated, and re-directed. A decade ago, the Scientific Review Group stated:

> *We again call for immediate development and implementation of a system-wide monitoring and evaluation program that is also responsive to critical uncertainties.*
>
> -- Critical Uncertainties in the Fish and Wildlife Program (SRG 93-2)

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Thus, a key challenge is how to evaluate resource management efforts at different scales in a way that is scientifically defensible and ecologically meaningful e.g., how to link monitoring efforts at the watershed or subbasin scale with efforts at the larger scale of evolutionarily significant units.

Differentiating Between Research and Monitoring - In tandem, research and monitoring are two program elements that provide the basis for evaluation. Although often associated, they are different types of activities.

> *Monitoring data can describe what happened; research is often needed to help explain why and how it happened…. Monitoring involves measuring and sampling physical, chemical, and biological attributes of the resources. Research involves analysis or experiments to establish mechanisms that explain observed correlations.*
>
> -- Comprehensive Monitoring, Assessment and Research Program, CALFED, 1999.

Thus, monitoring measures change while research identifies the causes of the change. The purpose of monitoring and evaluation in the Fish and Wildlife Program is to assure that the effects of actions taken under the program are measured and analyzed to provide better knowledge of the results, and then use this knowledge to direct future actions.

Research is necessary to provide scientifically credible answers to questions pertinent to management that are complicated by uncertainty. Although the guidance document will differentiate between "research" and "monitoring" as described above, the term "research" is used broadly to include more than just dedicated hypothesis testing. For example, "research" is often used to describe estimation, pattern recognition, observation, categorization, studies involving the collection of data to better quantify important known relationships, and improvements in statistical methods.

The differences between research and monitoring and evaluation can be difficult to differentiate, especially for large-scale questions, e.g., hydrosystem and habitat actions. In cases where actions are based on the extrapolation of results from small-scale research projects, they constitute research on a larger scale and may require long-term monitoring. For example, understanding the effect of habitat conditions on the performance of fish and wildlife populations requires replicated observational studies or intensive research level experiments to be conducted at large spatial and long temporal scales.

Description of the Types Monitoring

In the Columbia River Basin several large-scale planning documents have Categorized monitoring in a hierarchical sequence e.g., the All-H Paper, the 2000 Biological Opinion, and the draft ISRP Retrospective Report. The three levels of this sequence are: trend monitoring (Tier 1), statistical monitoring (Tier 2), and effectiveness monitoring (Tier 3). The three types of monitoring differ in terms of their application, and along spatial and temporal scales. The following descriptions of the types of monitoring are composites of definitions

developed by the Pacific Northwest Aquatic Monitoring Partnership, the Action Agencies, CBWFA, NOAA, and the Independent Scientific Review Panel. It is important to understand that these different types of monitoring are related, may overlap to some degree, and their naming conventions are not universal. In fact, the recent release of the monitoring section of the ISRP's Retrospective Report has reinvigorated discussion about the clearest way to define the tiers.

Implementation and Compliance Monitoring

Implementation monitoring documents the type of management action, the location, and whether the action was implemented properly or complies with established standards. It does not require environmental data and is usually a low-cost monitoring activity. This is normally associated with a restoration project where an engineered solution has been constructed, or where a best management practice has been implemented. Thus, implementation monitoring is the monitoring of task completion in a specific project. For example, the researcher may report miles of stream fenced, number of culverts removed, irrigation diversions maintained, implementation of an experiment, numbers of fish PIT tagged, etc. Compliance monitoring is a form of post project auditing of project performance.

Monitoring of restoration projects is used to assess the status of implementation and contract compliance. All projects funded by the program will conduct this minimal level of monitoring to ensure accountability and facilitate project tracking and reporting. Absent extenuating circumstances, the cost of implementation monitoring should be held under 5% of the project cost. A percentage of program projects should have annual compliance monitoring post project completion. This may require the development of a compliance monitoring program with one contractor specifically tasked to monitor and assess multiple completed projects.

Tier 1 Trend Monitoring

The purpose of this type of monitoring is to estimate the status of fish populations and watershed conditions, and to track over time indicators of habitat, water quality, water quantity and other factors that impact watershed health. Observational studies of this type are appropriately called mensurative or observational experiments because data are collected at more than one point in space or time without some type of random assignment of treatments (e.g., management actions, including reference areas with no treatment) (Hurlbert 1984) with the objective of comparing areas or times and answering particular questions. The spatial scale is large and varies from watershed scale (HUC 6), to ESUs, to the entire Pacific Northwest. Tier 1 monitoring is not necessarily expensive or time consuming. The proper role for Tier 1 monitoring is often to provide long term, daily (yearly), low cost, repeatable data with enough accuracy and precision to detect trend, change, differences, or correlations in the face of background noise. For example, Tier 1 monitoring counts of adults passing a weir on a study stream to natural spawning grounds might indicate an increasing trend in the percentage of hatchery fish. When trends or changes are detected, then relatively short-term research projects can be developed to help explain why the trend or change occurred.

Tier 2 Statistical Monitoring

Tier 2 monitoring projects are also observational experiments involving collection of data on a probabilistic sample of units from one or more study areas (populations) at one or more points in

time (Table 2). Tier 2 monitoring differs from Tier 1 in that statistical inferences using classical statistical methods can be made on status and trends of parameters for the study areas or populations. Statistical conclusions apply to the areas or populations sampled, not just the units on which data were collected.

The ISRP has stated that a good model for Tier 2 statistical monitoring of salmon abundance status and trend is the Oregon Plan for Salmon and Watersheds Monitoring Program as implemented in the Oregon coastal coho streams. The Oregon Plan, successfully implemented for estimation of coho distribution and abundance, applied a rigorous design for probabilistic site selection to answer key monitoring questions.

Individual projects should support larger Tier 2 statistical monitoring projects by using the same methods to select study sites and the same methods for data collection. For example, a project to monitor habitat in a watershed can most easily provide Tier 2 data for monitoring of habitat in the larger subbasin if the same probabilistic site selection and field data collection methods are used. The more site selection and data collection methods differ, the more difficult it is to aggregate data to larger regions.

Many important Tier 1 or 2 monitoring projects may not yield results of interest to managers until a significant period of time has passed to establish "baselines" for the study areas, trends/changes are detected, or correlations/regressions results are replicated. The experience of the ISRP is that often 10 to 15 years are required before Tier 1 or 2 status and trend monitoring projects are viewed as successes.

Tier 3 Effectiveness Monitoring

This type of monitoring attempts to establish "cause and effect" or inferential relationships between fish conditions, habitat conditions, and/or management actions. It pertains to evaluation of projects and programs meant to protect or enhance habitat conditions or fish production. These studies are complex and technically rigorous, and often require measuring many parameters under a very structured statistical design to detect the variable affecting change. In their report, Review of Strategies for Recovering Tributary Habitat (ISAB 2003-2), the ISAB recommended that intensive watershed monitoring at selected locations be included in overall strategies for evaluating habitat improvement projects. Understanding the effect of habitat conditions on salmonid population performance requires replicated observational studies or intensive reach level experiments at large spatial and temporal scales. Few evaluations of tributary habitat in the Columbia River basin have successfully adopted either approach. According to the ISRP, Tier 3 effectiveness monitoring can be accomplished through replicated mensurative or observational studies or through "randomized treatment" experiments.

As defined by the ISRP, randomized treatment experiments incorporate treatments (one or more of which may be designated as a reference(s)) that are randomly assigned to study units (Hurlbert 1984). The key difference between mensurative and randomized treatment experiments is that, in the latter, treatments (including references) ARE randomly assigned to study units. These "true" experiments generate the strongest conclusions of research designs and require the minimum assumptions or professional judgment. Examples of randomized treatment experiments leading to Tier 3 effectiveness monitoring would include: 1) projects to evaluate the effects of different levels of fertilization on growth and survival of juvenile salmonids with streams selected randomly for reference and treatment groups; 2) projects to evaluate the survival rates of

juveniles migrating past a dam with different levels of spill systematically assigned to time periods with a random starting point; 3) laboratory experiments to evaluate the swimming ability of lamprey through different types of ladders with lamprey randomly assigned to the different ladders; and 4) projects to evaluate the effectiveness of various watershed habitat treatments on survival of parr with treatments randomly or systematically assigned to watersheds.

A good example of planning for Tier 3 effectiveness monitoring in a randomized treatment experiment in the Columbia Basin was the original design of the Idaho Supplementation Study (ISS) on Chinook salmon. However, randomized assignment of treatments to streams in this large-scale study was not conducted and the study has reverted to a mensurative experiment. The result is that objective unambiguous conclusions concerning the effects of supplementation (the treatment) are not justified by the study design. Inferences will be based on subjective judgment concerning the validity of assumptions and models. The ISRP cautioned that large scale randomized treatment experiments as required to fully meet the effectiveness monitoring objectives of the Action Agencies (2003) will be difficult to accomplish in the Columbia Basin. However, that Action Agencies report this proposed approach has been modified and will be modified in the 2006 Federal RME Plan update.

Current Fish and Wildlife Program Supported Monitoring Activity

The Fish and Wildlife Program already supports monitoring work under each of the three tiers. However, in order to begin developing a regional approach to monitoring the Council has supported the efforts of PNAMP and work under the Collaborative, Systemwide Monitoring and Evaluation Project, or CSMEP. CSMEP is a co-coordinated effort to improve the quality, consistency, and focus of fish population and habitat data to answer key monitoring and evaluation questions relevant to major decisions in the Columbia Basin.

CSMEP grew out of NOAA/USFWS/Action Agency articulated needs for monitoring and evaluation, and was given very strong endorsement by the ISRP, CBFWA and NWPCC in the Mainstem/Systemwide Review in fall 2002. The project was intiated in 2003 with Fish and Wildlife Program funding and is administered by the Columbia Basin Fish and Wildlife Authority (CBFWA), with participation of over 30 scientists from federal, state and tribal fish and wildlife agencies, and outside experts. Specific goals for CSMEP are to: 1) document, integrate, and make available existing monitoring data on listed salmon, steelhead, bull trout and other fish species of concern, 2) critically assess strengths and weaknesses of these data for answering key monitoring questions, and 3) collaboratively design and implement improved monitoring and evaluation methods, working with other programmatic entities, to provide better information for key decisions in the Columbia Basin. The CSMEP project is addressing questions that span the three tiers, as related in the following table.

Tier 1. Ecosystem Status	
1.1	What is the distribution of adult salmonid fishes across broad regions?
1.2	What is the ecosystem status for Columbia River Basin (CRB) fish populations?
Tier 2. Population and Habitat Status Monitoring	
2.1	What is the size of CRB fish populations?
2.2	What is the annualized growth rate of CRB fish populations?
2.3	What is the freshwater productivity (e.g., smolt or subadult /female) of CRB fish populations?
2.4	What is the age-structure of CRB fish populations?
2.5	What is the fraction of potential natural spawners that are of hatchery origin?
2.6	How frequently do resident fish spawn?
2.7	What life history types make up different populations?[1]
2.8	What is the biological condition of CRB fish spawning and rearing habitat?
2.9	What is the chemical water quality in CRB fish spawning and rearing habitat?
2.10	What is the physical habitat condition of CRB fish spawning and rearing habitat?
Tier 3. Monitoring Effectiveness of Specific Recovery Actions (habitat, hydro, hatchery, or harvest management)	
3.1	Have specific projects affected habitat conditions and local fish population survival, abundance or condition?
3.2	Did groups of projects within a subpopulation or sub watershed on aggregate affect fish survival, abundance or condition in a larger demographic unit?
3.3	Are particular classes of projects effective?
3.4	What are the mechanistic connections between recovery actions and fish population responses?

ISRP Retrospective Recommendations on Monitoring in Subbasin Plans

The ISRP has made the following recommendations in regard to monitoring:

> 1. Develop a sound Tier 1 trend monitoring procedure based on remote sensing, photography, and data layers in a GIS. Landscape changes in terrestrial and aquatic habitat and land use should be monitored for the smallest units (i.e., pixels or sites) possible. Future technology may allow low cost remote sensing of important parameters such as water temperature. Accuracy and precision of data layers in the GIS should be evaluated using "blind" classification of randomly selected units by on-the-ground verification during field visits. Large-scale Tier 1 trend monitoring of fish populations might include fish counts and condition in by-pass systems at dams, adult counts at dams, and adult counts at weirs. (*Staff Note:* These are considered Tier 2 under the Federal RME Plan, All H Strategy, CSMEP, and BiOp.) However, Tier 2 monitoring is often more cost-effective because counts can be made during a random or systematic sample of time.
>
> 2. Cooperate with Columbia Basin-wide attempts to develop common Tier 2 probabilistic (statistical) site selection procedures for population and habitat status and trend monitoring. Use common protocols for on-the-ground or remotely sensed data collection. In so far as possible, measurement of indicator variables should be co-located on the same sites. Cooperate with status and trend monitoring plans being developed by the Action Agencies for implementation of the EPA EMAP probabilistic selection of aquatic sites in pilot projects in the Wenatchee, John Day, and Upper Salmon Subbasins (BPA Draft Report "Research, Monitoring & Evaluation For the NMFS 2000 FCRPS

[1] This question is critical for bull trout, which have adfluvial, fluvial or resident life history types.

Biological Opinion"). The implementation and refinement of subbasin plans provides the opportunity to promote the collection of research and monitoring data with common methods throughout the entire Columbia Basin. Use of probabilistically selected sites should be made as soon as possible to avoid inherent biases in subjectively selected and non- co-located study sites.

3. As data are obtained on status and trends of wildlife or fish populations and habitat, develop empirical (e.g., regression) models for prediction of current abundance or presence-absence of focal species. Potential predictor variables include not only physical habitat variables (flow, temperature, etc.), but also measures of habitat recovery actions that are currently in place or are implemented in the future. Use the empirical models to evaluate the relative importance of physical factors and habitat improvements and to predict abundance or presence-absence throughout major sections of the subbasin. If adequate coverage exists with current study sites, it may be advisable to conduct initial analyses on current data.

4. Make best professional judgment, based on available data, as to whether any new research in the spirit of the Intensive Watershed Monitoring approach should be initiated immediately. Most new intensive research should arise as a result of the interaction of existing inventory data with new data arising in population and habitat status and trend monitoring. The ISRP judges that the approach in these four steps is the most likely to accomplish successful large-scale, long-term RM&E programs. An extensive long-term status monitoring program identifies important and unexplained trends and changes, i.e., identifies the intensive research that if conducted would explain the "why." Tier I trend monitoring by remote sensing procedures and Tier 2 statistical monitoring provide indications of trend and change in indicator variables, but the "why" of certain trends and changes is usually not well understood. Tier 1 and 2 monitoring lay the groundwork for wise choices about when and where more extensive or intensive Tier 3 research-oriented monitoring is needed.

Analysis

Framework for a Coordinated Regional Approach to Monitoring

The development a regional monitoring network will continue to require planning, assessment, and research. Projects that address dedicated research questions, or planning needs essential to the development of a permanent regional monitoring network, will be considered priority projects. The results of such work must have broad application; i.e., provide a basis for extrapolation regionally, or across like provinces. The development of a coordinated regional approach to monitoring has been underway for about two years. Several large-scale planning documents serve to underpin this approach by identifying common objectives and priorities. Source documents that have contributed to the conceptual foundation of the regional approach include:

- Section of ISRP's Retrospective Report on monitoring - *NPCC*
- Research Plan for the Columbia River Basin - *NPCC*
- Strategy for Coordinating Monitoring of Aquatic Environments in the Pacific Northwest - *PNAMP*

- Considerations for Monitoring in Subbasin Plans 2004 - *PNAMP*
- Proposed Design and Evaluation of Preliminary Design Templates - *CSMEP*
- Research, Monitoring, and Evaluation (RME) Plan for the NOAA Fisheries 2000 Federal Columbia River Power System (FCRPS) Biological Opinion - *Action Agencies*
- Updated Proposed Action for the FCRPS Biological Opinion Remand - *Action Agencies*
- Scope of Work for Implementation of the Northwest Environmental Data Network Project - *Northwest Environmental Data Network*

At this stage of its development, the framework is best characterized as a matrix with the entities responsible for monitoring on one axis, and the range of monitoring needs on the other. At present, some of the cells can be filled with relevant ongoing projects or programs of the relevant entities. However, it is incumbent upon the region to initiate work to fill the cells that do not currently host project or programmatic activity.

The Council, PNAMP, and the Federal Caucus have and continue to host discussion of the gaps and the appropriate roles and responsibilities of the regional entities in regards to assignments to fill them. Implementations strategies are the means for filling in the gaps in the framework, brick by brick. Through the FY07-09 project selection process, the Council will support the completion of a design of integrated monitoring that would have the following components:

Habitat
- Watershed conditions
- Project effectiveness

Populations
- Status and trends, distribution
- Artificial production effectiveness

Artificial production
- Effectiveness and core artificial production parameters (genetics, disease, etc.)

Implementation Strategies for Developing A Regional Monitoring Framework

The following strategies will be implemented by appropriate combinations of the entities interested in developing a regional approach to monitoring.

Habitat Monitoring Strategy, Watershed Conditions

Develop and implement pilot projects for testing monitoring actions. Support the Upper Columbia, John Day, and Upper Salmon Pilot Studies as testing areas for comparing protocols and sampling methods. Support the design of routine monitoring and reporting of the key parameters that were used by EDT and QHA. This would follow the approach of Washington State in their application of a modest number of key high level indicators; i.e., the seven key parameters of the 52 assembled in EDT that collectively cover the range of watershed conditions. Much of this data is already being collected at the reach scale, but is not being manipulated for high scale evaluations. It will be important to regularly assess the effectiveness of these

parameters for programmatic scale evaluation. A PNAMP subcommittee is working to develop a recommended set of indicators for regional application.

Identify the key questions that could be addressed with coordinated watershed level monitoring in support of management. Identify the current and proposed metrics, monitoring designs, and evaluation methods that could be used to answer these questions.

The initial set of these questions includes the following:

1. What is the status of freshwater habitat within streams of the Pacific Northwest at a subbasin and statewide scale? What are the trends?
2. What is the status of water quality in streams of the Pacific Northwest at a subbasin and statewide scale? What are the trends?
3. What is the status of riparian condition (e.g., vegetation, seral state and number of roads) along streams of the Pacific Northwest at a subbasin and statewide scale? What are the trends?
4. What is the status of upslope condition (e.g., vegetation, seral state, and number of roads) along streams of the Pacific Northwest at a subasin and statewide scale? What are the trends?

Some restoration projects will generate data that is relevant to regional monitoring objectives at scales beyond the project; i.e., watershed, subbasin, province, ESU, or basinwide. The data generated by such restoration projects present an opportunity to help populate a regional database that can be manipulated for analytical purposes; i.e., the assessment of program elements. One example is the need for collection of data on the high level indicators that the region agrees should provide the basis for evaluation at the basin scale. More specifically, data relevant to the assessment of progress towards or away from provincial scale objectives provides an example of use for program assessment of data collected at projects. In order to develop data that constitutes a common currency, it is essential that projects generating data for higher scale monitoring purposes must utilize data collection protocols endorsed by PNAMP for regional use.

Habitat Monitoring, Project Effectiveness

Develop a recommended network of Intensively Monitored watersheds (IMW) and reach specific studies for effectiveness monitoring. Intensively monitored watersheds are designed to address key questions in a disciplined scientific manner. All possible factors need to be considered: accurate measures of fish populations including spawners entering the watershed and juvenile migrants leaving the watershed, and accurate estimates of mortality factors such as marine conditions, harvest, hydropower, predation, and other factors directly affecting salmon abundance and survival. Without a holistic approach, it will not be possible to determine the response of salmon to habitat restoration and other management efforts. Recommend a strategy for placing IMWs throughout the Pacific Northwest to monitor and evaluate "cause and effect" relationships between habitat restoration and management actions, and changes in fish population responses and other viable salmonids population criteria.

Members of PNAMP and other entities working with support from the Pacific Coastal Salmon Recovery Fund have already identified watersheds for the intensive monitoring of restoration project results. The PNAMP Effectiveness Monitoring Workgroup has developed a document to

help guide this analogous activity, "Establishing a Network of Intensively Monitored Watersheds in the Pacific Northwest." The Fish and Wildlife Program is supporting this work via Project #200301700 "Develop and Implement a Pilot Status and Trend Monitoring Program for Salmonids and their Habitat in the Wenatchee and Grande Ronde River Basins." This project is an example of current development of Tier 2 statistical monitoring for status and trend of salmonids and aquatic habitat over three large subbasins in the Columbia Basin. Concurrently, the Bonneville Environmental Foundation is also supporting analogous work in the Chinook River in the lower Columbia and Kootenai. We would concentrate on supporting these current efforts and avoid significant technical investments in other watersheds. This means that project monitoring would rely on low-cost methods such as photopoints.

Identify the key questions that could be addressed by coordinated project effectiveness monitoring in support of management. Identify the current and proposed metrics, monitoring designs and evaluation methods needed to answer these questions. The initial set of these questions includes:

1. What categories of restoration projects are most effective at the reach scale in terms of design longevity, habitat restoration, and local fish abundance?
2. What categories of restoration projects have demonstrated actual improvements in fish production within the watershed?
3. What is the location and functionality of fish passage barriers affecting listed species in the region? What are the trends?
4. What is the location and functionality of fish restoration projects throughout the region?

Population Status, Trends and Distribution

Seek prioritization of monitoring requirements through agreement with the NOAA Science Center and Technical Recovery Teams and confirm through PNAMP. A key issue could be the Program's relationship to specific requirements that may fall outside of their traditional fish and wildlife management responsibility. Identify, develop and recommend a standardized set of metrics and compatible protocols for sampling designs and data collection. Coordinate and recommend standardized sampling protocols and field data collection procedures between Status/Trend, Effectiveness, and Implementation Monitoring efforts.

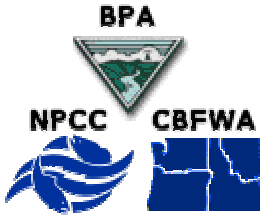
Identify the key questions that could be addressed with coordinated fish population monitoring in support of management. Identify the current and proposed monitoring metrics, monitoring designs, and evaluation methods that could be used to answer these questions. The initial set of these questions includes the following:

1. What are the overall abundances of adult salmonid populations within each ESU, subbasin, and state? What are the trends?
2. What is the current distribution of adult salmonids within each subbasin and state? What are the trends?
3. What is the freshwater productivity (e.g., smolt/female) of each population within the ESU, subbasin, and state? What are the trends?

Populations: Artificial Production Effectiveness

Monitoring the effects of artificial production on population health is an issue that lacks a regional forum. Such work is currently conducted project-by-project, yet constitutes a significant component of the current monitoring budget. Can ongoing work be prioritized for concentrated monitoring of representative projects, similar to the habitat effectiveness monitoring strategy?

Some ongoing artificial production projects have monitoring planning or research elements embedded in them. When these elements address monitoring questions or needs relevant to the region such projects should no longer be viewed solely as hatchery projects, but should be identified as dedicated monitoring or research projects warranting long-term funding commitments. The Council acknowledges that the continuation, or addition, of work elements relevant to monitoring at the regional scale may significantly increase the annual funding requirements of the project, and that not all project sponsors will be interested in expanding this aspect of their work. However, in cases where sponsors are willing to continue their ongoing work and expand it to help the region address key monitoring questions they will be providing great service. Consequently, similar to the initiative for prioritizing watershed condition parameters, key attributes of hatcheries should be identified for consistent performance reporting.



CBFWA Home

FISH & WILDLIFE PROGRAM BUDGET TRACKING

Request for New Funding for FY 2006

View Edit Comment Add Docs

VIEW AND EDIT MODIFICATION

Scroll down to the "Edit Section x" buttons to edit each section

Table of Contents

Part 2. Current Status of Modification Request
Part 3. Comments on this Modification Request

PART 1 OF 3. ADMINISTRATION AND BUDGETING

SECTION 1: GENERAL ADMINISTRATIVE INFORMATION

	Initial Request Date	Status	BOG Meeting Date
Process Information:	June 24, 2005	In Process	Not yet assigned to a BOG Meeting Date

Modification Type:	FY 2006 Within-Year New
BPA Project Number:	
BPA Project Name:	
COTR/BPA Project Manager:	No COTR Assigned
Agency, Institution or Organization Requesting Rescheduling:	CBFWA
Funding Type:	
Project Leader:	
Short Description:	
Province:	
Subbasin:	

CONTACT PERSON

First Name:	
Last Name	
Address:	
City, State Zip:	
Phone:	
Fax:	
Email:	

ADMINISTRATIVE CONTACTS

Primary Administrative Contact

Name	
Address:	
City, State Zip:	
Phone:	
Fax:	
Email:	

Secondary Administrative Contact:

Name	
Address:	
City, State Zip:	
Phone:	
Fax:	
Email:	

Note:		**Note:**	

Section 2a: Description (Species Information)

Target Species	

Edit Sections 1 and 2a

Section 2b: Description (Location Information)

Location(s) at which the action will be implemented	**Latitude**	**Longitude**	**Location Description**
	No Locations Entered		

Edit Section 2b

Section 2c: Information Transfer

In what ways will information from this project be transferred or used?	

Edit Section 2c

Section 2d: Description (BiOp Information)

NMFS and/or FWS Biological Opinion that this funding request addresses	Strategy NMFS &/or USFWS	How proposed actions will address the BiOp (i.e., substrategy / limiting factor / metric to be achieved)

Edit Section 2d

Section 2e: Description (Objectives)

Objectives of this proposed project There are no objectives associated with this proposal.

Edit Section 2e

Section 3: Is This Funding Request Related to Other Projects in the Basin?

Other projects that are related to this request	Project #	Project Title/Description	Nature of Relationship

Edit Section 3

Section 4: Estimated Budget for Planning & Design phase

Work element-based estimated budget Planning & Design	Objective	Work Element	Work Element Title	Work Element Description	Description of Metrics	Task Duration in FYs	Estimated Budget	Subcontractor?

Outyear work element-based estimated 2007 - 2010 budget Planning & Design	Work Element	Work Element Outyear Description	Starting FY numbers only	Ending FY numbers only	Estimated cost

Outyear totals Planning & Design

EDIT SECTION 4

SECTION 5: ESTIMATED BUDGET FOR CONTRUCTION/IMPLEMENTATION PHASE

Work element-based estimated budget Contruction/Implementation	Objective	Work Element	Work Element Title	Work Element Description	Description of Metrics	Task Duration in FYs	Estimated Budget	Subcontractor?

Outyear work element-based estimated 2007 - 2010 budget Contruction/Implementation	Work Element	Work Element Outyear Description	Starting FY numbers only	Ending FY numbers only	Estimated cost
Outyear totals Contruction/Implementation					

EDIT SECTION 5

SECTION 6: ESTIMATED BUDGET FOR OPERATIONS & MAINTENANCE PHASE

Work element-based estimated budget Operations & Maintenance	Objective	Work Element	Work Element Title	Work Element Description	Description of Metrics	Task Duration in FYs	Estimated Budget	Subcontractor?

Outyear work element-based estimated 2007 - 2010 budget Operations & Maintenance	Work Element	Work Element Outyear Description	Starting FY numbers only	Ending FY numbers only	Estimated cost
Outyear totals Operations & Maintenance					

EDIT SECTION 6

SECTION 7: ESTIMATED BUDGET FOR MONITORING & EVALUATION PHASE

Work element-based estimated budget Monitoring & Evaluation	Objective	Work Element	Work Element Title	Work Element Description	Description of Metrics	Task Duration in FYs	Estimated Budget	Subcontractor?
Outyear work element-based estimated 2007 - 2010 budget Monitoring & Evaluation	Work Element	Work Element Outyear Description				Starting FY numbers only	Ending FY numbers only	Estimated cost
Outyear totals Monitoring & Evaluation								

EDIT SECTION 7

SECTION 8: TOTAL BUDGET

ITEMIZED ESTIMATED BUDGET

Item	Note	FY 2006 Cost

TOTAL ESTIMATED BUDGET

Total FY 2006 budget for this project	$ 0

OUTYEAR BUDGET TOTALS

Not applicable

COST SHARING

Organization	Item or Service Provided	Amount ($)	Cash or in-kind?

EDIT SECTION 8

SECTION 9: NARRATIVE, MAPS AND PROJECT DOCUMENTS

No documents are associated with this request

EDIT SECTION 9

Part 2 of 3. Current Status of Modification Request

This proposal has not yet been submitted.

Part 3 of 3. Comments on this Modification Request

There are no comments on this proposed modification.

PART 2. Narrative

Important notes

Please only type in the places indicated and do not delete section headings.

Steps to complete Part 2

1. Provide as much detail as you need in the spaces marked "(Replace this text with your response in paragraph form)." Do not leave parentheses around your response.
2. If appropriate, insert tables, graphics or maps into this document. For help in adding graphics, contact Amy Langston at 503-229-0191 or sysadmin@cbfwa.org.
3. This document will be used on the Internet. If you make reference to online documents, include web addresses and use Word's hyperlink tool to make those addresses active links in the document. Contact Amy for help.
4. You can spellcheck this document using Word's spellcheck tool.
5. Save this document using your project ID number as the file name, and add an "n" to the end, like "198906201n.doc".
6. Email the document to Amy Langston at Amy.Langston@cbfwa.org

Project ID[?1]**:** (Replace this text with your response)
Enter the project ID if BPA has assigned you one. If you do not have a project id, or do not know, leave the field blank.

Title[?2]**:**
Enter project title

Section 9a. Project description[?3]

Provide project detail for headings a through h.[0] **It is important to clearly identify ties to the subbasin plans, at http://www.nwcouncil.org/fw/subbasinplanning/Default.htm**.

a. Abstract [?4] *(Place mouse on highlighted section titles to view additional detail about content sought for subsection. If the title text of each subsection is not highlighted, click on View → Markup to view this information.)*
Describe the project and work to be accomplished in the next few years. Please limit to 300 words.

b. Technical and/or scientific background[?5]
Clearly identify the problem your project addresses. Describe the background, history, and location of the problem. Identify and, if necessary, expand upon the problem as it is described in the subbasin plans. For habitat-related projects, summarize and cite relevant watershed assessments. For research-related projects, include a scientific literature review which should cover the most significant previous work history related to the project, including work of key project personnel on any past or current work similar to the proposal. The purpose of the literature review is to place the proposed research in the larger context of what work has been done, what is known, and what remains to be known. All references should be concisely summarized, cited, and listed in section h below.

c. Rationale and significance to Regional Programs[?6]
Describe why your project is needed. Specifically, describe the relation of your proposed project both to the objectives identified in the subbasin plan and to the goals and objectives of the 2000 Fish and Wildlife Program (FWP), NMFS Biological Opinion, or other plans. Make a convincing case for how the proposed work will further goals of the FWP and the subbasin plan. Relate project objectives and hypotheses as specifically as possible to the subbasin plan, FWP objectives and measures or to other plans. Show how the proposed work is a logical component of an overall conceptual framework. Any particularly novel ideas or contributions offered by the proposed project should be highlighted and discussed.

d. Relationships to other projects [?7]
Describe the relationships and links between your project and other relevant projects in progress in the Columbia Basin and elsewhere. Put your project into the context of other work funded under the FWP and specifically those in the subbasin plan. Indicate how your proposed project relates to, complements or includes collaborative efforts with other

proposed or existing projects, specifically those in your watershed, subbasin and province. If the proposed project requires or includes collaboration with other agencies, organizations or scientists, or any special permitting to accomplish the work, such arrangements should be fully explained. If the relationship with other proposals is unknown or is in conflict with another project, note this and explain why.

e. Project history[?8] (for ongoing projects)
If the project is continuing from a previous year, the history must be provided. This includes projects that historically began as different numbered projects (identify number *and short title*). For continuing projects, the proposal primarily will be an update of this section. List the following: a) project numbers (if changed), b) adaptive management implications, c) project reports and technical papers, d) years underway, e) summary of major results achieved, f) past costs

Special attention should be paid to reporting of results (expand upon the results reported in Past Accomplishments, Part 1, Section 2.) Reporting of results needs to be more than a list of tasks accomplished. Wherever possible, results need to be provided in biological terms quantifying benefits and other impacts to fish and wildlife. If applicable, show results in graphs, tables, or maps.

Include an objective assessment of factors that may limit success of the project. Discuss any particularly novel methods offered by the proposed project.

f. Proposal biological objectives, work elements, milestones, work element budget, spending plan[?9]
Present your project's biological objectives, work elements, milestones, and spending plan to implement the work elements (use and expand upon the work elements from the Budget Tables in Part 1, the on-line form, Sections 4-7). Present these in a numbered list; outline and link by work element; and group appropriately to avoid redundancy.

For detailed information about work elements, see the BPA website at http://www.efw.bpa.gov/contractors/statementsofwork.aspx.

Objectives: List the ultimate goals, visions, or long-term desires for your project (e.g., increase harvest, restore or maintain or protect a certain population, maintain species diversity, etc) and as much as possible match these with the subbasin plans objectives and strategies. In addition, provide objectives that are measurable in biological terms (e.g., harvest rates at 1 fish/angler/day annually, number of redd counts, population targets) and have a time element (e.g., accomplish by August 2002). Research proposals must concisely state the hypotheses and assumptions necessary to test these. Non-research projects must also state their objectives. In addition to the broad goals and biologically measurable objectives of your project, clearly identify any products (reports, structures, etc.) that would result from your efforts, but be sure to describe the purpose that the products are intended to meet.

g. Facilities and equipment[?10]

All **major** facilities and equipment to be used in the project should be described in sufficient detail to show adequacy for the job. For example, the proposal should indicate whether there are suitable (based on contemporary standards) field equipment, vehicles, laboratory and office space and equipment, life support systems for organisms, and computers. Any special or high-cost equipment to be purchased with project funds should be identified and justified. This section should be no longer than a few paragraphs.

Page: 14

[0]If you have key technical documents specifically related to your project that are cited and summarized in the proposal form, you may submit these as background reference material for the peer reviewers. These documents may include project master plans, monitoring and evaluation plans, watershed assessments, and peer-reviewed articles generated from the project. Please note that your project will be evaluated based on the proposal, so all critical information needs to be provided in the proposal. Simply referencing another document will not suffice. It is not necessary to send in cited material, but if you do, please note it in the right hand column of the reference table. If your document is available on the web (e.g. through BPA) please provide the web address. If not on the web, but you have an electronic copy please provide it by email or disc. If only available in hard copy send that. Send all materials to the same address you send the proposal form.

Page: 14

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

h. References[?11]

If you have key technical documents specifically related to your project that are cited and summarized in the proposal form, you may submit these as background reference material for the peer reviewers. These documents may include project master plans, monitoring and evaluation plans, watershed assessments, and peer-reviewed articles generated from the project. Please note that your project will be evaluated based on the proposal, so all critical information needs to be provided in the proposal. Simply referencing another document will not suffice. It is not necessary to send in cited material, but if you do, please note it in the right hand column of the reference table. If your document is available on the web (e.g. through BPA) please provide the web address. If not on the web, but you have an electronic copy please provide it by email or disc. If only available in hard copy send that. Send all materials to the same address you send the proposal form.

Reference (include web address if available online)	Submitted w/form (y/n)
(Replace this text with your response; use regular Word commands to add/del/move rows)	

Section 9i. Key personnel[?12]

Page: 15

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

Special notes about the use of this form for UPA projects:

Please review the following additional items that have been requested by the ISRP and include responses as part of the applicable narrative subsections. They are:

Subbasin Plans (information is called for in sections b, c, and d of narrative section). In addition to the NOAA Fisheries analyses and the UPA, the proposal should explain how the proposed projects fit into the Council's Methow, Wenatchee, and Entiat subbasin plans. Do the proposed projects address priority objectives identified in the Management Plans? Do the proposed projects address limiting factors identified in the Assessments? (Entrainment, in-stream flow, channel morphology, riparian protection, riparian enhancement.) This is an excellent opportunity to put the subbasin plans to work and to compare them with NOAA Fisheries analyses and the UPA. Again, the proposal should describe how the projects are consistent with the plans, not just recite that the projects are consistent with the plans. In the same way, consistency with the Council's Fish and Wildlife Program is one of the ISRP's review criteria.

Project Selection and Prioritization Criteria (Council suggests including as part of section f). A description of the criteria used to select and prioritize projects should also be summarized. If specific projects and specific sites are not yet selected, the ISRP will base its review on the description of the criteria that will be used to select the projects.

Active Restoration (Council suggests including as part of section f). Certain restoration methods require more detailed description than other actions. Specifically, if active restoration is proposed, justification should be provided on why alternative passive methods were not selected.

Monitoring and Evaluation (Council suggests including as part of section f). This is a key ISRP review criterion, and the proposal should identify: 1) project specific "implementation" monitoring such as photo-points for restoration projects, stream gauges for water transfer proposals, etc., and 2) awareness, cooperation, and coordination with regional monitoring efforts such as the Wenatchee habitat action effectiveness proposal, the Action Agencies' RME plan, and the Pacific Northwest Aquatic Monitoring Partnership (PNAMP) effort.

Page: 12
[?1]Enter the project ID if BPA has assigned you one. If you do not have a project id, or do not know, leave the field blank.
Page: 12
[?2]Enter project title
Page: 12
[?3]Provide project detail for headings a through h.[?3] **It is important to clearly identify ties to the subbasin plans, at http://www.nwcouncil.org/fw/subbasinplanning/Default.htm**.
Page: 12
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Page: 12
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[?7]Describe the relationships and links between your project and other relevant projects in progress in the Columbia Basin and elsewhere. Put your project into the context of other work funded under the FWP and specifically those in the subbasin plan. Indicate how your proposed project relates to, complements or includes collaborative efforts with other proposed or existing projects, specifically those in your watershed, subbasin and province. If the proposed project requires or includes collaboration with other agencies, organizations or scientists, or any special permitting to accomplish the work, such arrangements should be fully explained. If the relationship with other proposals is unknown or is in conflict with another project, note this and explain why.

This is intended to supplement the Relationships table in Section 3 of the on-line form; consequently, some information will need to be repeated from Section 3. This narrative

section allows for more detailed descriptions of relationships, includes non-interdependent relationships, and includes those not limited to BPA funded projects.
Page: 13
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For detailed information about work elements, see the BPA website at http://www.efw.bpa.gov/contractors/statementsofwork.aspx.
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Page: 14
[?11]If you have key technical documents specifically related to your project that are cited and summarized in the proposal form, you may submit these as background reference material for the peer reviewers. These documents may include project master plans, monitoring and evaluation plans, watershed assessments, and peer-reviewed articles generated from the project. Please note that your project will be evaluated based on the proposal, so all critical information needs to be provided in the proposal. Simply referencing another document will not suffice. It is not necessary to send in cited material, but if you do, please note it in the right hand column of the reference table. If your document is available on the web (e.g. through BPA) please provide the web address. If not on the web, but you have an electronic copy please provide it by email or disc. If only available in hard copy send that. Send all materials to the same address you send the proposal form.

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

Department of Energy

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

ENVIRONMENT, FISH AND WILDLIFE

July 29, 2005

In reply refer to: KE-4

Ms. Melinda S. Eden, Chair
Northwest Power and Conservation Council
851 S.W. Sixth Avenue, Suite 1100
Portland, OR 97204-1348

Dear Ms. Eden:

I am writing to provide some suggestions for the upcoming solicitation process that will guide fish and wildlife project selection for the 2007-2009 time period. In our recent Power Function Review (PFR) meetings, BPA committed to continuing the regional transition to a more performance standard-based approach for Columbia Basin Fish and Wildlife Program (Program) implementation and management, with our overall goal being continuous improvement in delivering on-the-ground benefits to fish and wildlife. The upcoming project solicitation process presents a tremendous opportunity to further advance our shared goals for maximizing benefits, within established budget levels, to fish and wildlife populations affected by the hydrosystem, in a way that reflects managing to identified and prioritized biological objectives.

With regard to the solicitation process itself, I believe a few guidelines can provide a basic structure that is consistent with the Program's needs and strategic direction. These general guidelines include:

- The solicitation document should guide project sponsors to develop proposals for projects that directly relate to the prioritized recovery strategies identified in individual subbasin plans. For example, if low summer streamflows and high water temperatures are identified in a particular subbasin plan as primary limiting factors inhibiting the growth of targeted populations, then the solicitation document should prompt proposals in that subbasin that improve on this limiting factor. In addition, the solicitation document should guide sponsors to clearly reference the identified priority strategy in the subbasin plan that the proposal is intended to be consistent with, and such proposals that are consistent with identified recovery strategies should accordingly be given the highest priority for funding.
- Current projects and future project proposals should be evaluated on the basis of outcomes (that have either been achieved or are expected) that contribute to the achievement of explicit biological (i.e., populations) or environmental (i.e., streamflows) performance objectives. And, these performance objectives need to be linked to priority restoration strategies identified in the individual subbasin plans.

- Expected implementation time-frames for achieving biological or environmental objectives should be clearly articulated in project proposals.
- Given that BPA's final PFR decision for a $143M Program expense budget for FY07-09 was based on increasing funding for on-the-ground work by $15M to provide for new subbasin plan- and Updated Proposed Action-driven habitat enhancement work, by managing to a 70/25/5 allocation between on-the-ground work (habitat enhancement and hatchery O&M), RM&E and coordination/information management, the portfolio of projects selected for funding should generally be consistent with these proposed compartmental budget guidelines. As such, the project solicitation process should be designed to prioritize projects within each compartment by subdividing the total expense budget into these three compartments.
- Overall (combined expense and capital) levels of investment in anadromous fish, resident fish and wildlife mitigation should be consistent with the 70/15/15 allocation reflected in the Council Program
- Explicit consideration of cost-effectiveness, in terms that reflect the potential of selected priorities and strategies to achieve the maximum biological benefit to fish and wildlife, at the lowest cost.
- Explicit consideration of restoration responsibilities, and in areas where such responsibilities are shared (i.e., habitat restoration on federal lands, population status monitoring of ESA listed stocks, irrigation diversion screenings), priority should be given to projects that reflect a targeted level of cost sharing with other responsibly entities.

It should be noted that these guidelines are neither exhaustive nor exclusive to BPA's needs. I offer them here to contribute to regional discussions, as we work together to refine our project implementation practices and to also address the expectations of Program participants. During what will be a period of transition through a relatively short three-year rate-period, BPA's goal is to target spending to prioritized biological outcomes that the region can financially and politically sustain through subsequent rate periods. Again, we would expect that the region will make maximum use of the subbasin management plans adopted into the Program, in developing a project solicitation process that tracks and manages projects from proposal to conclusion.

With an emphasis on upfront planning to achieve the broadest biological benefits to fish and wildlife populations affected by the federal hydrosystem, we suggest the following conceptual approach to project solicitation and selection:

- Identify priorities – by target species, geographic locale, and strategy, among and between provinces – to address the limiting factors articulated in subbasin plans rolled-up to a provincial scale, using the "currency" of population and environmental characteristics or conditions.
- While BPA believes conducting a Program amendment process for developing province-level biological and environmental objectives is extremely important, it is not possible to complete such an process prior to the FY07-09 solicitation. However, we encourage the Council to pursue a streamlined approach for developing province-scale budgets based on high level biological and environmental objectives for each province.

- Structure science and policy review of proposals to evaluate biological value, cost effectiveness and linkage to identified priorities in subbasin plans.
- Assess "head room" for new starts in succeeding years, based on expected time frame for completion of selected projects and consideration of the logical sequencing of projects. For subsequent solicitations, describe a proactive approach to planning that schedules "new start" implementation to fill-in behind completed projects, while still allowing for some flexibility.

One possible approach for developing provincial budgets could be to quickly convene a facilitated workshop with fish and wildlife co managers to collaboratively develop a high level and prioritized set of biological and environmental objectives for each province. From this, province level budgets could be set for use in the solicitation process.

Designing this new fish and wildlife project solicitation, including the evaluation and selection approach, will require careful consideration and attention to these and other issues. I look forward to working with you and your staff in ensuring that BPA does its fair share in this effort, and to also continue our efforts in improving our management of the post-recommendation elements of the program.

Sincerely,

Signed G.K. Delwiche

Gregory K. Delwiche
Vice President, Environment, Fish & Wildlife

cc:
Mr. Doug Marker, Northwest Power & Conservation Council
Mr. Brian Lipscomb, Columbia Basin Fish & Wildlife Authority
Mr. Tom Iverson, Columbia Basin Fish & Wildlife Authority