Northwest Power and Conservation Council

September 27, 2012

MEMORANDUM

TO: Committee Members

FROM: Fish and Wildlife Staff

SUBJECT: Committee Decision on Program Evaluation and Reporting Committee (PERC) Recommendations

INTRODUCTION

In the Council's July 2012 decision for Data Management projects, the Council recommended 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 data-management projects and data-sharing processes. This effort was to be a three month focused endeavor which would result in implementation recommendations on a subset of data management-related projects at the October and November Council meetings.

The PERC met twice with regional partners. The first meeting was August 22nd in Spokane and the second was September 13th in Portland. Based on those discussions and presentations, recommendations were developed for PNAMP, NW Habitat Institute (NHI), the related project work of the HEP Team, Status of the Resource Report (through CBFWF) and StreamNet. Attached are the PERC's recommendations for the Committee to consider for a recommendation to the full Council. You will find the draft set of recommendations on Page 4. Depending on the outcome of the Committee's discussion, we can talk about next steps to moving forward.

This set of recommendations appends the July 2012 recommendations. Aside from the specific follow-up recommendations for this subset of projects, all other recommendations, expectations and assumptions of the July 2012 recommendations still apply. See http://www.nwcouncil.org/fw/budget/2013/Default.asp

As with our recent category review recommendations, staff does not recommend specific budgets, but rather the work or work products. You will see reference to budget reductions and

percentages and those apply only in the near term. The following recommendations for implementation assume a three-year implementation timeframe.

BACKGROUND

Also included in the document for reference is the full set of recommendations on Data Management from the July 2012 decision. Specifically, the July 2012 recommendations for the PERC stated:

1) 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 data-management projects and data-sharing processes.

2) 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
     - 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 three-month 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.

DRAFT PERC Recommendations

September 25, 2012

Northwest Habitat Institute (NHI)

NHI was involved in subbasin planning; specifically in storing and making available the upland environmental data for subbasin planners in GIS format. NHI was involved in conducting CHAP for the Willamette.

Recommendation:

1. Carry contract forward for three months into FY2013 at a $25,000 level. Council recommends no further funding for NHI.

2. BPA to work with NHI to store unique data at StreamNet.

Habitat Evaluation Procedures (HEP)

The contract to manage the HEP team is currently managed by CBFWA. The HEP team, led by Paul Ashley has been conducting HEP surveys around the basin since 2000. HEP surveys were conducted prior to 2000, but were not conducted under a standardized methodology. The data for the HEP surveys resides with the individual managers and on disks with Paul Ashley. According to the wildlife managers, the vegetation data collected in the surveys are important to preserve and to preserve it in one central repository. Paul retires in less than two years and he has trained others on the team to conduct surveys into the future, however, a succession plan is needed.

Recommendation:

1) Reconvene the Wildlife Crediting Forum (WCF) to address needs and future plans for HEP; specifically to make recommendations to the Council on:

- The need, if any, for future HEP surveys
    - Describe the need for HEP surveys to support active management decision making
    - frequency and duration of that work
    - recommended succession plan as the current HEP team leader transitions to retirement
- Is there a need to archive the existing vegetation transect data into a central repository?
- Forecast the need to access information such as GIS maps or tools from NHI in the future.

2) The WCF should convene as needed to develop recommendations and suggested outcomes for review by the Fish & Wildlife Committee by January 1st 2013 on needs identified above.

StreamNet

StreamNet is a cooperative regional data delivery project that provides access to summarized fish related data in standardized and geo-referenced. StreamNet supports the program by storing data and

making data and information provided by others accessible to the region. StreamNet is guided by a steering committee made up of data stewards in the four states and a rep from the USFWS; there is little regional policy-level guidance.

Recommendations:

1. Budget reduction within the range of 10 to 15%, which is commensurate with the reduction being sought from project managers throughout the Columbia River Basin.
2. Provide an ongoing forum consisting of Council and BPA representatives to direct data management including an annual policy guidance meeting with the Council's Fish and Wildlife Committee.
3. Prioritize BPA-funded data for incorporation into StreamNet before non-BPA funded CRB data. Data collected using BPA funds should only be used for collecting Columbia River Basin Data.

PNAMP

PNAMP is largely a coordination body that strives to develop and encourage compatible and standardized data collection, methodologies and access within the Pacific NW including the CR. Most of the current funding comes from BPA to achieve those goals and to help develop tools to facilitate that work. The funding from BPA over the past three years has risen dramatically, primarily to support FCRPS BiOp activities that include coordinated assessments for viable salmonid population parameters (data exchange templates) and monitoringmethods.org website.

Recommendation:

1. Budget reduction within the range of 10 to 15%, which is commensurate with the reduction being sought from project managers throughout the Columbia River Basin.
2. In addition BPA should, through direct contracting, find efficiencies in contracted services.
3. PNAMP to report annual priorities to, and seek policy level guidance from, the Council's Fish and Wildlife Committee on an annual basis.

SOTR transition to technical services.

~~CBFWA's memberships and staffing levels have decreased over the past 5 years and no longer represent all the agencies and tribes in the basin. The CBFWA staff continues to provide support to their current members. The CBFWF (Foundation) has managed the Status of the Resource report recently and will continue through April 2013. The technical staff at the Foundation has valuable institutional knowledge and ability to assist the council and the region in collecting and synthesizing information necessary to inform Fish and Wildlife Program reports each year. Council recommends continued use of these individuals for a one year trial as a technical interface, at the request of the Council and BPA, to gather information from all regional managers to support production of needed program reports.~~

~~**Recommendation:**~~

1. ~~Discontinue the Status of the Resources Report.~~
2. ~~Council and BPA develop a staff steering committee to develop a scope of work to provide technical services for the Fish and Wildlife Program reporting needs as determined by a Council and BPA staffed steering committee, initially for one year.~~

3. ~~Council and BPA work with the technical service providers to define a trial one year budget for fiscal year 2013.~~

Other Services Proposed by CBFWF

The Fish Screening Committee has met since the early 1990's to review and learn how to implement the most recent design changes to fish screens.

Recommendation:

1. BPA continue to support the quarterly teleconference meetings and annual training and workshops of the Fish Screening Oversight Committee.

SOTR

CBFWA's memberships and staffing levels have decreased over the past 5 years and no longer represent all the agencies and tribes in the basin. The CBFWA staff continues to provide support to their current members. The CBFWA has managed the Status of the Resource report recently and will continue through April 2013.

Recommendation:

1. *Discontinue the Status of the Resources Report.*
2. *A Council and BPA staff steering committee should develop a one-year (2013) scope of work for technical services to support reporting needs. The scope of work will be based on identified gaps that must be filled resulting from the absence of the SOTR (work, products, technical services, or reports).*
3. *No later than January 2013 Council meeting, the steering committee will recommend the most economic and efficient means to satisfy the scope of work.*

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 data-management 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 **a**nd Sub-Regional Database Project-Specific Data Management and Sharing.

1. General Data Management and Sharing

Council recommendations: 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 laws[1]. 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 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

[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).

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 data-management 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 needs[2], 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 Indicators (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 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

[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).

advance these efforts by providing additional support through policy and organizational structure, as needed.

Council recommendations: 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.

3) 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)

4) 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.

5) 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).

6) 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 data-management 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
    - 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 three-month 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 indicators (FWI) and aggregating related data to support the Council's Program HLIs. 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 entities[3]) 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 web-services. 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.

- 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)

Supplemental Council recommendation (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.

[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)

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.