Northwest Power and Conservation Council

February 5, 2013

MEMORANDUM

TO: Council Members

FROM: Nancy Leonard, Fish, Wildlife, Ecosystem Monitoring and Evaluation Manager
Tony Grover, Fish and Wildlife Division Director
John Harrison, Information Officer

SUBJECT: Council decision on the Work Plan for Fish Data Products

Proposed Action
Council decision recommending that the technical services work plan for fish data products be funded by Bonneville.

Background
Consistent with the July 2012 Council's Regional Coordination recommendation number three, and the Council's November 2012 recommendation for the Status of the Resource (SOTR; included below), the Steering Committee (SC) met to discuss Council and Bonneville reporting needs to inform a technical services work plan. Specifically, the SC considered the below recommendation in drafting the work plan:

- *A Council and Bonneville 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).*
- *No later than the January 2013 Council meeting, the SC will recommend the most economic and efficient means to satisfy the scope of work.*

The SC discussed current reliance on the SOTR information and services and to assess whether a gap would arise with the termination of the SOTR that would negatively impact Council and Bonneville reporting needs. The SC identified gaps that would result from the absence of the

SOTR that would create hardships on the Council's and Bonneville's reporting needs. These gaps include, but are not limited to, access to resident fish data and non-ESA anadromous fish data that are synthesized to match the Program's structure of subbasin, province, and basin scales.

The main function of the technical services work plan is to compile, filter, extract, organize and format the information needed for Council and Bonneville reporting needs (figure 1). The accessibility of these data vary depending on whether these are currently accessible as raw field data (e.g., redd counts) or as calculated estimates (e.g., population abundance), and whether this information is in a computer readable format (e.g., StreamNet) that is easily accessed to produce graphics, or a non-computer readable format (e.g., reports) that requires conversion to a computer readable format (e.g., excel spreadsheet).

Figure 1: The role of the technical services is to ensure that the information needed for Council's and Bonneville's reporting needs are identified, located, organized, and available in the required reporting format.

The SC has drafted the following technical services work plan to address the Council's and Bonneville's reporting needs. These reporting needs include graphics for the Council's reports to

Congress, to Governors, HLI, dashboards, and Fish and Wildlife Program, and graphics for Bonneville's biological opinion reports and reporting tools such as CBFish.org website. The SC anticipates some objectives will terminate at the end of the one-year contract on 31 March 2014. However, select technical services will be required in out-years to ensure the integrity of information for Bonneville and Council reports.

To ensure continuity, integrity, and the high quality of work produced thus far that have and continue to inform the data needs described below, the SC recommend that the current providers of this support continue providing this service to the Council and Bonneville. These providers have experience providing these services, established relationships with data providers, an understanding of the Program's information needs and structure, as well as having valuable institutional knowledge that make them the most efficient and effective in gathering, managing, and synthesizing this type of information.

All tasks undertaken as part of this technical services work plan will be completed per guidance provided by the SC. Implementation of these tasks will require the technical services providers to work closely with the SC to ensure a seamless transition and maintenance of information from the SOTR website and data files to address these Council and Bonneville information needs.

The technical services providers should strive to improve the flow of data between information sources and reports as regional processes (e.g., Coordinated Assessment process) and other changes (e.g., improved data management) improve the ability to access data and derived indicators in the requested format for Council and Bonneville reporting needs. This may involve relying on web-services to access data or other methods to ensure automated data synchronization for these reporting needs. Council and Bonneville should encourage that data and derived indicators be in machine readable format, not static documents such as PDF or Word, to assure accessibility for informing reporting needs.

Bonneville should initiate this technical services work plan contract on April 1, 2013. Bonneville will determine how best to address the other technical services that have been performed by this project sponsor, specifically services related to the Coordinated Assessment of Anadromous Salmonids and Fish Screen Oversight Committee.

Prioritization Guidelines
The SC will meet to discuss task prioritization if the cost exceeds the expected budget for the work plan. Prioritization will be based on:
1. Common needs to both Council and Bonneville being addressed first.
2. Council reporting needs will represent at least 50-percent of the tasks assigned.
3. Not allowing individual needs of the Council or the individual needs of Bonneville to dominate allocation of funds to the detriment of the others' individual needs.
4. Keeping in mind that the Program addresses all anadromous fish (ESA and non-ESA listed), resident fish, wildlife and their habitat, and thus the reporting needs related to all of these subjects will be met. The actual amount of efforts directed to these three subject matters will vary depending on current needs, but the SC needs to keep in mind that reports produced for the Council must have a balanced representation of these topics.

Proposed Work Plan to Support Council and Bonneville Reporting April 2013-March 2014

Objective 1: Identify and migrate the pertinent content of the SOTR website for Council and Bonneville reporting needs. Rebrand graphics and data portals to merge content seamlessly for Council and Bonneville use.

        End-date: completed at the end of this one-year contract, 31 March 2014

Objective 2: Finalize identification of information to populate the FWI supporting the Council's HLIs, Council's reports to Congress and to the Governors, indicator graphics for the CBFish.org website, and Bonneville's reports. Assist Council and Bonneville staff in setting up more efficient data sharing with regional data portal (e.g., CBFish.org) and data delivery systems (e.g. StreamNet) to reduce effort in accessing and updating this information.

        End-date: substantially completed at the end of this one-year contract, 31 March 2014

Objective 3: Continue to incorporate automated access to information (data, indicators, etc.) from regional databases and other data sources to enhance the efficiency of informing Council and Bonneville reporting needs and to ensure the information included in reports is current and relevant. Incorporate modifications/enhancements in information portrayed (what data, indicators, graphic type, etc) as requested for addressing Council and Bonneville reporting needs. Produce graphics and maps as requested for Council and Bonneville reporting needs.

        End-date: maintained in out-years to ensure integrity of the Council and Bonneville
        reports

See Attachment 1 for description of potential tasks that would be needed during the 2013-2014 contract to meet the above three objectives.

Approximate Budget

The SC estimates that the funds required to complete these technical services would not exceed $250,000 for the 1 April 2013 to 31 March 2014 contract period (Figure 2; Attachment 1). For post-March 2014, we anticipate a reduction in funds in response to the completion of objective 1, and with substantial completion of objective 2. Advancements in accessibility of computer-readable, calculated estimates that would decrease the work load needed to create Council and Bonneville reports will also contribute to this decrease.
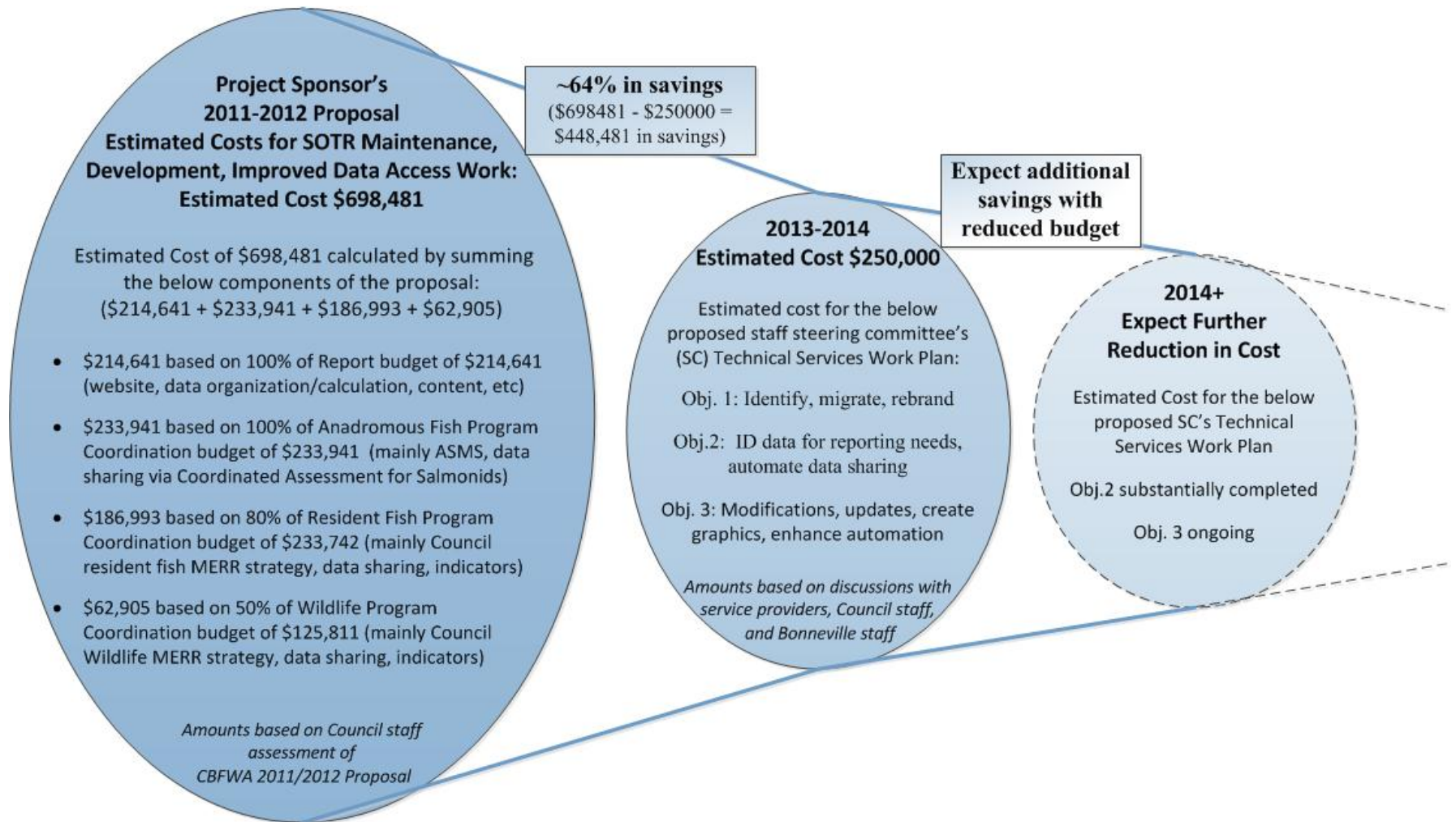
Project Sponsor's 2011-2012 Proposal Estimated Costs for SOTR Maintenance, Development, Improved Data Access Work: Estimated Cost $698,481

Estimated Cost of $698,481 calculated by summing the below components of the proposal: ($214,641 + $233,941 + $186,993 + $62,905)

- $214,641 based on 100% of Report budget of $214,641 (website, data organization/calculation, content, etc)

- $233,941 based on 100% of Anadromous Fish Program Coordination budget of $233,941 (mainly ASMS, data sharing via Coordinated Assessment for Salmonids)

- $186,993 based on 80% of Resident Fish Program Coordination budget of $233,742 (mainly Council resident fish MERR strategy, data sharing, indicators)

- $62,905 based on 50% of Wildlife Program Coordination budget of $125,811 (mainly Council Wildlife MERR strategy, data sharing, indicators)

Amounts based on Council staff assessment of CBFWA 2011/2012 Proposal

~64% in savings
($698481 - $250000 = $448,481 in savings)

Expect additional savings with reduced budget

2013-2014 Estimated Cost $250,000

Estimated cost for the below proposed staff steering committee's (SC) Technical Services Work Plan:

Obj. 1: Identify, migrate, rebrand

Obj.2: ID data for reporting needs, automate data sharing

Obj. 3: Modifications, updates, create graphics, enhance automation

Amounts based on discussions with service providers, Council staff, and Bonneville staff

2014+ Expect Further Reduction in Cost

Estimated Cost for the below proposed SC's Technical Services Work Plan

Obj.2 substantially completed

Obj. 3 ongoing

Figure 2: Estimated budget for the proposed staff steering committee's technical services work plan. The largest bubble on the left shows the estimated cost as proposed by the project sponsors in their 2011-2012 proposal form. The second bubble from the left is the staff steering committee's estimated cost for the proposed technical service 2013-2014 work plan that is reduced and more focused than originally proposed by the project sponsors (resulting in about 64 percent in savings). The third bubble from the left shows a further reduced work plan, which combined with more efficient data sharing over-time, would result in further reductions in costs in 2014 and out-years.

Attachment 1: 2013-2014 Suggested Tasks for Bonneville to Consider when Writing the 2013-2014 Contract to Address the Technical Services Work Plan Objectives 1, 2, and 3.

1.1 Evaluate the SOTR website/databases to identify information to preserve and integrate for Council and Bonneville reporting needs.

1.2 Write code to transfer and load the information needed for reporting needs.

1.3 Revise existing graphics to align with Council and Bonneville standards / desires. This would include removing CBFWA and SOTR references and updating images as needed.

1.4 Determine best locations to "house" the information that informs the Council's and Bonneville's graphics.

1.5 Assist with the install and/or configuration of software, set-up of backups, and assist with URL modifications to inform Council and Bonneville reporting needs.

1.6 Assist with the maintenance of the "backend" data administration site that allows non-technical personnel to load information that informs graphics for Council and Bonneville reporting needs.

2.1 Work with Council and Bonneville staff to develop FWI that support Council's HLI and other indicators needed by Bonneville. This will include assisting Council and Bonneville staffs in identifying and compiling the information needed to inform these graphics.

2.2 Work with fish and wildlife managers and other data providers to ensure data are used and interpreted correctly in Council and Bonneville reports (e.g. Council HLI, Council report to Congress, Bonneville's reports for FCRPS BiOp).

2.3 Work with StreamNet and CBFish.org to ensure relevant data are available and improve automated access through web-services or other tools to minimize work required to modify the information that supports Council and Bonneville reporting needs.

3.1 Work with Council and Bonneville staff to identify information not currently accessed that is needed for other Council and Bonneville reporting needs.

3.2 Provide the information and synthesized data in the structure required by Council (program reporting scales) and Bonneville (e.g. ESU scale).

3.3 Work with Council and Bonneville staff to determine the illustrations needed, synthesize the information, and develop graphics as requested.

3.4 Work with fish and wildlife managers and other data providers to ensure data are used and interpreted correctly in Council and Bonneville reports.

3.5 Perform monthly updates of biological information (e.g., populations, harvest, hatchery etc.)

3.6 Provide expertise with graphics (maps, graphs, charts, figures, flash, etc.), website, database development, Microsoft windows server, networking, PC support, project management, and coordination.

3.7 Continue working with information providers to indicate how (level of synthesis, grouping, electronic format) the information needed for Council and Bonneville reporting needs could be more easily provided. For example, as the technical services staff contact entities for information, they should discuss how access to this information could be improved, such as through web-services and regional databases. To achieve this improvement, Council and Bonneville will need to encourage that data and derived indicators be increasingly made available in a machine-readable format, and not in static documents.