Northwest Power and Conservation Council

May 17, 2006

Dear Interested Party:

In May 2000 the Independent Scientific Review Panel reported on the inadequacies of the data system for Columbia River Basin fish and wildlife. The panel noted significant data gaps and significant inconsistencies in the way data were collected and reported. The panel recommended a systematic approach to address a wide variety of tasks including an inventory of existing data, a survey of unmet data needs, proposals for filling data gaps, and development of standardized data collection and reporting protocols.

Following this report the Council undertook several initiatives to respond to these recommendations. The Council signed a Memorandum of Understanding with NOAA Fisheries to work collaboratively in developing a regional data system, supported a contract with Science Applications International Corporation, and helped establish the Northwest Environmental Data Network (NED). The attached paper (Council document 2006-07), which is intended to build on these initiatives, offers a proposed method to implement an integrated, regional data management system.

The Council asked the Independent Scientific Advisory Board to review the proposal. The Council also invites your comments. The paper is posted on the Council's website, www.nwcouncil.org. Comments should be submitted by mail to Mark Walker, Director of Public Affairs, Northwest Power and Conservation Council, 851 S.W. Sixth Avenue, Suite 1100, Portland, OR, 97204, by the close of business Friday, June 23, 2006. Comments also may be submitted by e-mail to comments@nwcouncil.org. Please reference Council document 2006-07 in your comments.

Thank you for you interest in the Council and its work.

Sincerely,

Tom Karier
Chair

enclosure

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Proposal for a Columbia Basin Data Center

May 2006

Northwest Power and Conservation Council
851 SW Sixth Avenue, Suite 1100
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Council Document 2006-07

Columbia Basin Data Center
4/24/06

The Vision

The development of a Columbia Basin Data Center will provide extensive benefits for the entire region. It will provide a much needed outlet for comprehensive, high quality data that can be used by policy makers, technical experts and the general public. It will also work with the Council and Bonneville to ensure that data gaps are filled, standard data protocols are followed, and data quality is maintained.

Problem Statement

In May 2000 the Independent Science Review Panel wrote a report on the inadequacies of the data system for Columbia Basin fish and wildlife. They noted that there were significant data gaps and significant inconsistencies in the way that data were collected and reported. They recommended a systematic approach to address a wide variety of tasks including an inventory of existing data, a survey of unmet data needs, proposals for filling data gaps, and development of standardized data collection and reporting protocols.

The Council's 2000 Fish and Wildlife Program addressed many of these same issues. The Program promoted the new vision that necessary data would be collected in a standardized fashion and made available through the Internet. First, the Program called for, "The Council to initiate a process for identifying data needs in the basin, surveying available data, and filling any data gaps." It was anticipated that the Council would adopt a set of standards that would then guide data collection. To this end the Program stated "The Council will initiate a process involving all interested parties in the region to establish guidelines appropriate for the collection and reporting of data in the Columbia River Basin." Pursuing this concept, the Program stated, "The methods and protocols used in data collection must be consistent with guidelines approved by the Council." Finally, all of this information needed some place to go, so the Program also stated, "The Council will initiate a process for establishing an Internet-based system for the efficient dissemination of data for the Columbia Basin." [p. 33]

Many of the same problems first identified by the ISRP in 2000 persist today. There is no comprehensive data inventory available for the Columbia Basin that identifies data gaps and no projects have been approved or even proposed to close those gaps. The Council has yet to approve guidelines for collecting or reporting data and there is still no Internet access for broad categories of Columbia Basin Data.

Through voluntary, collaborative efforts we have reaffirmed the problems identified in 2000 and verified a broad-based interest in resolving these problems. In particular the Northwest Environmental Data network has coordinated a broad variety of parties to

work on these issues. The following proposal builds on those initiatives and moves us forward in resolving them.

The Proposal

The current effort to resolve these issues has benefited from the broad representation of numerous agencies and tribes. It has, however, suffered from the absence of a single entity with the responsibility and resources to move forward. This entity, with the working title of the Columbia Basin Data Center would be charged with ensuring that important data necessary to understand the status of fish and wildlife in the Council's program are adequate and available. The Data Center would not be responsible for collecting and compiling data. That function would remain the responsibilities of project sponsors and fish and wildlife managers. No analysis would take place at this Center. The Data Center would, however, be responsible for ensuring that the full array of important data--for hatcheries, harvest, hydro passage, and habit--are available, reliable and adequately documented. The Data Center would work with the Council and Bonneville staff to identify and remedy shortcomings in the current system.

The Data Center will have the following primary responsibilities:

1. Internet Access. It will be responsible for maintaining a high level web site that would serve as a portal for existing data. This site would be user friendly for policy leaders, technical experts and the general public. It would rely on standard protocols as necessary to ensure that data from different regions and from different sources are compatible. And it would offer sophisticated web based tools for graphing, mapping, and consolidating data.

2. Data Gaps. It will be responsible for conducting inventories of existing data and determining the existence of data gaps. It would be their responsibility, in consultation with various entities in the region, to facilitate approaches that would resolve gaps. Unresolved data gaps and proposals to resolve them would be reported to the Council and BPA.

3. Data Integrity. It will provide oversight over data quality, ensuring the integrity of the data. It will do this by periodically reviewing the procedures used by different entities to assure data quality.

4. Data Standards. It will propose standard protocols for data collection, data reporting, and data quality to be considered for adoption by the Council. These protocols would be applied to BPA funded projects as stated in the Program

In order to achieve these results the Data Center must establish and maintain a reputation for neutrality and objectivity. At the same time it must continue to work closely with the many entities in the region that are users or purveyors of data. One approach for consideration would be to establish an advisory committee modeled on the Northwest Environmental Data Network.

It should be emphasized that the Data Center would by itself have no responsibility for actually collecting data in the field, a task often associated with monitoring activities. Instead, the Data Center would either be the recipient of this data or it would access it after it has been posted by others.

Implementation

In order to achieve this vision there are several important steps that need to be taken. Bonneville, in coordination with the Council, will need to convert the vision outlined in this paper into a more precise statement of work that support a request-for-proposals. This is the type of work that lends itself to a competitive, RFP process. In selecting a contractor for this work, Bonneville should ensure that it:

1. Can implement the tasks on schedule.
2. Can maintain a high level of integrity and neutrality.
3. Identify where data are collected but not publicly available.
4. Remains independent from the data collection process.

If Bonneville finds that the proposals are inadequate or too expensive they could consider developing the Data Center in-house. Bonneville developed a sophisticated project tracking system, Pisces, that promises to provide considerable value to the regional fish and wildlife effort. This new Data Center is more than information technology, however, and will require a somewhat broader set of skills.

Bonneville will also need to develop a budget proposal for this initiative. As it does this they are encouraged to develop a more comprehensive data management budget that includes all of the existing data management efforts in the region. The comprehensive budget should ensure that there are no duplications of functions and should identify efficiencies that can be gained by concentrating these data management functions in one single entity.