

June 12, 2006

Chairman Tom Karier Northwest Power and Conservation Council 851 SW 6th Ave., Suite 1100 Portland, OR 97204-1348

Dear Chairman Karier:

The Columbia Basin Fish and Wildlife Authority (CBFWA) has been working closely in partnership with the Northwest Power and Conservation Council (Council) and Bonneville Power Administration (BPA) to address deficiencies identified by the Independent Science Review Panel (ISRP) in their review of databases (ISRP 2000-3) and in database management called for in the 2000 Fish and Wildlife Program (Program) and the 2003 Mainstem Amendment. The CBFWA Members reviewed your "Proposal for a Columbia Basin Data Center" and are encouraged by the Council's desire for transparent, uniform, comprehensive, and accessible fish and wildlife data for the Columbia River Basin. The CBFWA members are providing the following comments and attachment for consideration as guidance in the development of a comprehensive data management strategy to support basinwide monitoring and evaluation for the Fish and Wildlife Program.

In your draft proposal, you suggest the creation of an entity that would provide internet access to available data, identify and fill data gaps, ensure data integrity and provide data standards to address deficiencies in the current Program. The ISRP (ISRP 2000-3) suggested that "there is no need to centralize the entire data storage and access system." Additionally, they suggested that "internet technology allows for a very effective distributed access system to be developed by web links between modular sites." We believe that many of these needs are currently addressed through existing projects within the Program, and those elements that are missing could be accomplished by modifying existing proposals in the current project selection process (see attachment). We believe that within the context of the current Program budget, the creation of another layer of data management is not the most efficient or cost effective solution.

In summary, CBFWA Members believe that the critical needs identified in your proposal are being met or will be met following the FY 2007-2009 project selection process. We encourage the Council to consider the outcome of their funding recommendations before deciding how to proceed with the development of an RFP to create a Columbia Basin Data Center to avoid possible duplication.

Sincerely,

Ron Trahan, Chair

Columbia Basin Fish & Wildlife Authority

Enclosure: Data Management to Support Basinwide

Monitoring and Evaluation in the F&W Program

cc: G. Delwiche, BPA

B. Maslen, BPA NPCC Members CBFWA Members

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Data Management to Support Basinwide Monitoring and Evaluation In the Fish and Wildlife Program

Background

The recent completion of the Northwest Power and Conservation Council's (NPCC) subbasin planning effort highlighted the need for consistency and uniformity in fish, wildlife, and habitat data management for use in monitoring and evaluation at the Columbia Basin scale. Several independent efforts to accumulate information from the subbasin assessments have been incorporated into coordinated efforts to develop standardized protocols for collection and management of data for larger regional efforts. Although the subbasin plans were useful for planning purposes at the local subbasin scale, they do not guide basinwide decision making (budget allocation and species prioritization) or provide opportunities for the "roll-up" of population specific information (comprehensive benefits). In addition there are frequent reports, for example by StreamNet, of challenges inherent in more consistent use of standards and protocols by states, tribes, and others.

Projects currently exist in the Columbia River Basin, funded by Bonneville Power Administration (BPA), which provide data collection, data management, and information dissemination services (Figure 1). These projects address the data management issue from two perspectives and address the concerns identified in the NPCC's Proposal for a Columbia Basin Data Center from a fish and wildlife status, trends, and goals standpoint. First, a series of projects have been recently initiated to provide guidance and develop protocols for data collection to support broader monitoring and evaluation efforts within the Columbia River basin and across the Pacific Northwest. These projects were initiated, partially, in response to reviews by the Independent Science Review Panel (ISRP) and the NPCC's 2000 Fish and Wildlife Program and the 2003 Mainstem Amendment. The BPA is currently funding portions of three projects that are well coordinated and addressing the issue of common data collection and data sharing protocols. A second group of projects, funded by BPA, focus on collecting and accumulating fish and wildlife monitoring data. These projects range from on-theground data collection projects, to data management projects, up to basinwide reporting efforts. Through the development of FY 2007-2009 NPCC funding recommendations, the NPCC has the opportunity, with the assistance of the Mainstern Systemwide Review Team (MSRT), to build a sound suite of projects to insure that data management is well coordinated and addresses key management questions identified in the NPCC's Draft Guidance for Developing Monitoring and Evaluation as a Program Element of the Fish and Wildlife Program.

The Council's draft monitoring and evaluation plan was guided by draft high level indicators developed by the Pacific Northwest Aquatic Monitoring Partnership (PNAMP), and identified key management questions that regional reporting should begin to address in the future. These key management questions are being used to guide the FY 2007-2009 project selection process to ensure that BPA funded fish and wildlife

monitoring is coordinated and targeted on key data for regional reporting. As a monitoring and evaluation work plan is developed by the Mainstem and Systemwide Review Team (MSRT), protocols for data collection and sharing will be provided to BPA funded project sponsors to ensure data integrity and uniformity.

Existing Monitoring and Evaluation Protocols/ Guidance Projects

Pacific Northwest Aquatic Monitoring Partnership (PNAMP)

- Formal organization that includes a Charter signed by 19 state, federal, tribal and regional entities in 2004
- Drafted "Considerations for Monitoring in Sub-basin Plans" for the Fish and Wildlife Program and completed a strategic plan (PNAMP Strategy for Coordinating Monitoring of Aquatic Environments in the Pacific Northwest) in 2005
- Implement monitoring protocol comparison projects and served as forum for coordination of monitoring across programs
- Currently conducting aquatic monitoring inventories with BPA funding in Columbia River subbasins
- Will continue to facilitate discussions among technical experts and between scientists, managers, and liaison groups for the collective evaluation and interpretation of current and new knowledge regarding issues in need of management or research attention to insure data standards and integrity among and between various monitoring programs. CSMEP is implementing the Columbia River Basin portion of the fish monitoring strategy for PNAMP

Collaborative Systemwide Monitoring and Evaluation Project (CSMEP)

- Conducted metadata inventories and identified strengths and weaknesses
 of fish population data for 13 Columbia River subbasins by working
 collaboratively with StreamNet and has developed a web accessible
 database for these data (this effort continues in additional subbasins)
- Developed preliminary monitoring and evaluation study designs for status and trends of fish populations and effectiveness of habitat, harvest, hydro and hatchery actions currently being implemented in the Salmon River Pilot Project
- CSMEP plans to continue to collaboratively design improved monitoring and evaluation study designs that will fill information gaps and provide better answers to key management questions in the future through multiagency collaboration and pilot testing of study designs

Northwest Environmental Data Network (NED)

NED is a state, federal, tribal and non-profit consortium of 13 entities with an interest and commitment to developing plans and agreements and where necessary promoting technologies needed to improve the quality, quantity and timeliness of data for monitoring and other environmental

programs. Development of standards for reporting and exchanging information is a part of the NED mission. The NED has initiated its web portal to disseminate metadata describing and locating monitoring data sets, completed a set of Best Practices for Reporting Location and Time Related Data, developed a solution for collecting disparate subbasin planning data and successfully completed a second workshop which helped bring various groups together to discuss how to share data once it is acquired. The CBFWA Status of the Resource Project intends to work closely with NED to establish web access protocols for the data used to generate annual reports.

The PNAMP and CSMEP projects address issues related to what data are needed, how they should be collected, and what data gaps exist that should be filled by additional sampling programs - key aspects of the Columbia Basin Data Center proposal that are most appropriate for biologic specialists. Members of these projects are also well positioned to work with data management specialists to develop and agree on data definitions and formats across the region. The NED project, with collaboration from data collection and reporting projects, will help facilitate the efficient transfer of data between regional programs.

Existing Monitoring and Evaluation Reporting Projects

StreamNet

StreamNet is a data development and dissemination project that provides data related services to the Fish and Wildlife Program and the region's fish and wildlife agencies. StreamNet exists specifically to facilitate transfer of data from multiple agencies for regional use in research, monitoring, management, public education, policy and decision-making. Data are obtained from field agencies and BPA funded projects. The primary data sets are standardized to a consistent format across agencies, quality assessed, and geo-referenced. The data are made available publicly through an on-line data query system and through interactive map interfaces, accessible through the internet and metadata will be available through the NED portal. This makes data available from many agencies that are not able to make data available via the web themselves. The project has also developed an online searchable archive capable of housing data from a wide variety of sources, including BPA funded projects, and making them available over the internet. StreamNet provides indirect support to a variety of management, restoration and monitoring efforts that are designed to protect, enhance, and restore fish populations, and is an active participant in both PNAMP and NED. StreamNet performs the task of posting monitoring data from the management agencies on the internet in regionally consistent format, a function the agencies are currently not structured or tasked to do. Posting data on the internet is a prerequisite for the data to be available through any anticipated distributed database system or portal.

Fish Passage Center Functions

The Fish Passage Center functions continue to be needed, now and into the future. The monitoring and data management functions consist of mainstem fish passage data collection, data management, and internet accessibility. The project also collects and stores data for the Smolt Monitoring Program and the Gas Bubble Trauma project and other historical data sets including resident fish data. The data is available via the internet.

Data Access in Real Time (DART)

The project provides single-point, internet-based access to a subset of Columbia Basin mainstem information to guide and support BPA's independent decisions pertaining to its responsibilities under the Power Act and Endangered Species Act, as well as tools for data analysis. DART is a second tier data management project that acquires data from other data projects for display and analysis through its online tools.

Habitat and Biodiversity Information System For Columbia River Basin (IBIS) This project operates and maintains an internet website to 1) disseminate habitat and biodiversity information for eco-provinces and subbasins, and 2) create performance tools to support subbasin and basinwide decision making. Northwest Habitat Institute staff also attends meetings (including PNAMP and NED), makes presentations, develops and hands out professional material, as well as writes peer reviewed publications about the information and tools developed for this project. This project addresses the wildlife portion of basinwide data needs.

PIT Tag Information System (PITAGIS)

PTAGIS is the central repository for all PIT tag information for the Fish and Wildlife Program. This information is available to all entities through the internet. The PTAGIS project provides computer software that facilitates the standard data collection of mark, release and recovery information for PIT tagged fish. The Columbia Basin PIT Tag Steering Committee establishes the data collection standards and methods employed by the PTAGIS project.

Status of the Resource Project – CBFWA

The Council recently approved a within year budget modification request to support CBFWA's Status of the Resource Project. The CBFWA Status of the Resource Project will be the interactive web based interface to fish and wildlife status, trends, and goals data as contemplated by your proposal, and it will address the specific responsibilities identified in your proposal such as identifying data gaps, coordinating data reporting, and making data available via the internet. The state, Tribal, and federal fish and wildlife managers will, through CBFWA, be responsible for ensuring that the important data are available, reliable and adequately documented. The project will develop, produce, and distribute an annual resource status and trends report of focal species (fish and wildlife) relative to biological objectives in subbasin plans. In addition, the project will develop (i.e., summarize existing data and analyses from existing reports and

personal interviews), produce, and distribute a project implementation report that tracks and assesses the implementation and success of fish and wildlife projects funded through Fish and Wildlife Program. The primary responsibility that CBFWA brings to the data management realm is the commitment by its Members to assist in developing a regional level report of fish and wildlife data in a consistent and transparent manner through a web site and annual report. A significant portion of the fish and wildlife status and trends data necessary to provide a comprehensive data package for the basin is not funded through BPA but is the responsibility of the Tribes, and state and federal fish and wildlife management entities. The Status of the Resource website may provide the value added feature of accessing data from projects and processes outside of the Fish and Wildlife Program if managers find this to be a useful tool

Recommendations

The Mainstem Systemwide Review Team (MSRT) is currently performing project reviews for basinwide research, monitoring and evaluation proposals that will culminate in a set of recommendations that will be submitted to the Northwest Power and Conservation Council (NPCC). As those recommendations are developed, relationships among regional data management efforts will be identified, consistent with Figure 1.

Using data protocols developed by the Collaborative Systemwide Monitoring and Evaluation Project (CSMEP) and the Pacific Northwest Aquatic Monitoring Partnership (PNAMP), data collection projects will be asked to collect data that is consistent with regional needs. The BPA will be asked to enforce, through project contracting, the implementation of regionally developed data collection and reporting protocols. The data management projects should then be provided clear guidance on which data are most important to have in a uniform format, and tasked to work with NED to insure that data are accessible and available. With CBFWA Members' support, these requirements can be met and maintained to feed into the regional reporting required to support the CBFWA Status of the Resource Project and other regional data portals available on the web.

The MSRT will provide guidance to focus projects on development, quality assurance and maintenance of priority data bases and insure that data continues to be readily accessible via the internet. We support the recommendations from the recent ISRP review that called for clear direction to StreamNet on their data management activities. There is a particular interest in improving both the quality and timeliness of data from StreamNet. The NPCC should also urge BPA to require all fish and wildlife monitoring projects to make their data accessible electronically through the internet, StreamNet or other web based portals. Metadata should be available from all BPA funded projects on the NED portal. CBFWA's Status of the Resource Project has initiated the process of developing regionally consistent data reporting for the Fish and Wildlife Program, consistent with your Columbia Basin Data Center proposal. CBFWA's effort is one piece of an integrated system that supports regional data sharing within the Program and between regional programs. Data gaps will be identified as reports are produced and used for management decision making.

Figure 1. Data Management to Support Monitoring and Evaluation in the Fish and Wildlife Program

Protocols/Guidance

A,B,C,D,E - PNAMP

Identify high level indicators, develop monitoring protocols

A,B,C,D,E - Fish and Wildlife Managers

Commitment through CBFWA, CSMEP, and PNAMP to support development of regionally consistent monitoring protocols and data access

B,C,D,E - NED

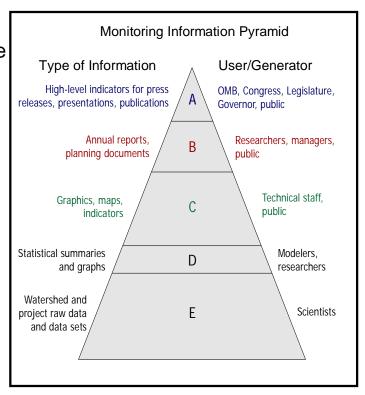
Develop data sharing protocols and web accessible data sharing portal (including monitoring data)

D,E - CSMEP

Developing standardized fish sampling protocols to insure regional significance of local data

E - BPA

Insure BPA funded monitoring projects provide electronic data access and standardized data formats



E - Monitoring Projects

Collect and report data consistent with standard formats and make data available vie StreamNet or other node on web portal

Reporting

A,B,C - CBFWA SORP

Real time web site providing data summaries for focal species and annual report on abundance status and trends for all focal populations in Columbia River Basin

B.C-IBIS

Web accessible subbasin scale terrestrial/aquatic habitat maps

C,D,E - StreamNet

Provide web access to local derived data on focal population abundance and trends with links to raw data

D - DART

Provide web access to local raw and derived fish data on focal population abundance and trends with interactive analysis tools

D,E - FPC Functions

Provide web access to local raw and derived fish data and provide peer reviewed analysis