Coordinated Assessments for Salmon and Steelhead

Collaborative Information Management to Support Ongoing Assessments for Columbia River Basin Anadromous Salmon

Through the Columbia River Basin Anadromous Salmonid Monitoring Strategy (ASMS), the Federal Columbia River Power System (FCRPS) Action Agencies and Fishery Co-Managers have agreed to the necessary monitoring to provide data to answer key management questions related to VSP Parameters and began the discussion for key habitat and hatchery effectiveness assessments. Performing these assessments and reporting answers to these management questions on an ongoing basis is needed to assure 1) effective evaluation of the Federal Power System Biological Opinion (BiOp), 2) progress toward the recovery of anadromous salmonids listed under the Endangered Species Act (ESA), and 3) effective implementation of the anadromous salmonid elements of the Columbia River Basin Fish and Wildlife Program. This document describes a series of workshops and collaborative efforts that will gather co-managers and other key agencies within the sub-regions of the ASMS to develop assessment and data sharing strategies for meeting regional reporting requirements. This effort will also identify gaps in data management and sharing capacities currently limiting the automation of data reporting, and establish strategies to close these gaps and address any limiting capacities.

To support these assessment and data sharing needs, it is critical to have a comprehensive data sharing strategy that provides a regional data structure design capable of moving information from data collection, sharing, and evaluation to reporting for informed decision making. A successful data sharing strategy will require: (i) adopting compatible information system standards and protocols to allow access to data across disparate systems from the local level to the regional level; and, (ii) ensuring that data from different sources can be translated to support a common analytical framework, thereby allowing independent databases to be combined to facilitate assessment at the regional scale.

This effort will begin with a focus on assessments for VSP parameters and ultimately address habitat and hatchery effectiveness assessments as guidance for those efforts is developed. In an attempt to improve regional habitat-action effectiveness monitoring, the Pacific Northwest Aquatic Monitoring Partnership and WA Forum on Monitoring are hosting a series of work sessions over the course of the next several months to 1) integrate and align existing and new habitat monitoring efforts, 2) provide better, more scientifically robust data for use in management decisions, and 3) improve cost efficiency in the implementation of habitat monitoring programs. Also, NOAA Fisheries intends to develop guidance for monitoring habitat action effectiveness and reporting on hatchery effectiveness in the Columbia River Basin. The guidance and recommendations from all these efforts will be incorporated into the regional data sharing strategy as they become available.

To accomplish this, the ASMS sub-regional groups with key data management staff will be gathered and asked to identify the following (see work plan schedule in Appendix A):

- Data priorities for sharing to support coordinated regional assessments (Appendix B Data Matrix, tab 1);
- 2. Data dictionary describing metrics, definitions, value ranges, units, etc. (Appendix B Data Matrix, tab 2);
- 3. Projects or monitoring efforts that will generate the data and identify a schedule that indicates the anticipated reporting of that data on a regular, ongoing basis to support comprehensive assessments (Appendix B Data Matrix, tab 3);
- 4. Data flow diagrams and/or metadata guidance (protocols, methods, and assumptions) that describes how data is currently collected and shared and how data will be collected and shared to support coordinated assessments and reporting of VSP Parameters on an ongoing basis (see example data flow diagrams);
- 5. Gaps that are limiting the development of a data sharing network that will allow for automation of the data flows necessary to support coordinated ongoing assessments and reporting and strategies to fill these gaps; and,
- 6. Proposals and/or adjustments to current Northwest Power and Conservation Council's (NPCC) Fish and Wildlife Program data management projects and business practices to meet the above data needs.

Steps towards developing coordinated basinwide assessments:

While the immediate need to report population assessments for the BiOp will require an ad hoc approach based on existing data sharing capabilities in the participating agencies, the long term goal is to develop a consistent regional approach that will allow automated flow of data. To meet this goal a data exchange network will be explored, allowing participating agencies to publish their relevant data in a standardized format as 'web services' on the Internet. This will allow those conducting assessments and assembling the various reports to directly access the needed data.

Mid-June CBFWA Anadromous Fish Managers Meeting

- 1. Work with regional stakeholders to identify priority data types to support regional assessments (approve Data Matrix)
- 2. Agree on a work plan to develop data sharing strategies to support regional assessments
- 3. Commit appropriate staff to support internal coordination and development of proposals

Mid-August Sub-regional 1-Day Technical Workshops

- 1. Agree on priority data sharing activities for the sub-region
- 2. Develop sub-regional collaborative data sharing strategies
- 3. Identify who will provide priority data types and when
- 4. Initiate development of proposals to support the collaborate strategies

Mid-September CBFWA Anadromous Fish Managers Meeting

- 1. Review sub-regional data management strategies
- 2. Discuss regional implications and integration of sub-regional strategies
- 3. Identify priority data sharing needs

Submit Data Management Proposals to BPA by September 30, 2010

- 1. Submit data sharing proposals as a comprehensive integrated package
- 2. Maintain project list of unfunded data sharing needs for future funding
- 3. Continue improvement and expansion of collaborative data sharing

Appendix A – Work Plan Schedule for Developing Data Sharing Strategies

