

## **Update on the Nature and Scope of the FCRPS Proposed Action December 22, 2005**

### **A. Use of the Collaborative Process**

As described in 2004 FCRPS BiOp Remand Collaborative Process, the Action Agencies (the U.S. Army Corps of Engineers [Corps], the U.S. Bureau of Reclamation [Reclamation], and the Bonneville Power Administration) and the National Marine Fisheries Service (NMFS) are collaborating with the Sovereign Parties on the development of a proposed action (PA), and, if there is a jeopardy determination, a reasonable and prudent alternative (RPA). These discussions are also linked to and dependent on the Conceptual Framework for the Jeopardy Analysis, since they are part of the iterative process for identification and selection of recovery actions by the Federal Columbia River Power System (FCRPS) and others.

A goal of the Collaborative Process is to develop a new PA for the forthcoming Biological Opinion (BiOp). The first step is defining the nature and scope of the PA. Thus far, the discussions have focused on hydrosystem operations and configuration and will subsequently take up “offsite” mitigation for the hydrosystem through habitat, hatchery, and harvest actions.

The starting point for the consideration of the hydrosystem portion of the PA in the Collaborative Process is the 2004 Updated Proposed Action (UPA) prepared by the Action Agencies. To jumpstart the collaborative process, the Federal agencies have prepared a matrix comparing the specific hydro operations contained in the 2000 BiOp, the 2004 UPA, the Draft Conceptual Federal/State Agreement, and the four lower river Tribes’ 2006 River Operations Plan. The Sovereign Parties have identified initial areas of agreement and disagreement. In turn, the identified areas of disagreement have been assigned for further discussion and attempted resolution. If, and when appropriate, resolution may utilize the “fact sheet” process described in the 2004 FCRPS BiOp Remand Collaborative Process document.

The Sovereign Parties plan to discuss the hydro, habitat, hatcheries, and harvest actions between now and the completion of the PA, which is planned no later than May 2006. This will be an iterative process of refining actions as analysis of their effects is conducted. A goal of the Sovereign Parties is to identify priority actions through collaboration and as informed by other relevant processes. These priorities will guide the identification of specific actions by the FCRPS (which would be part of the new PA or potentially a RPA) and may be used by other Federal and non-Federal entities.

The collaboration in the months ahead will be informed by new information compiled from NMFS’ recovery planning process, including preliminary analyses from its Technical Recovery Teams (draft TRT reports) showing the biological “gap” between current conditions and recovery for each Evolutionarily Significant Unit (ESU) above Bonneville Dam for which products are available. In addition, NMFS’ analyses identify key limiting factors, including the operation of the FCRPS and 19 Reclamation projects, and the types and locations of beneficial recovery actions for each ESU. These recovery analyses will be publicly available.

The draft TRT reports, supplemented by products from local recovery boards and Federal, Tribal and State scientists, will provide essential information on ESUs. The Sovereign Parties will use the information to develop appropriate actions in hydro and the other Hs. For example, one ESU in the middle Columbia may show a moderate “gap” between current status and reasonable recovery goals. Part of this gap may be filled through hydro actions to improve survival associated with migration through the FCRPS mainstem dams and reservoirs; part of this gap may be filled through FCRPS funded habitat or hatchery actions at appropriate locations where these were identified as key limiting factors; and the remainder of the gap may be filled through hydro actions by non-Federal dam operators, habitat actions undertaken by other Federal and State agencies, and harvest management actions. Discussion of this suite of actions would occur through an iterative approach in the Collaborative Process between now and May.

### **B. Scope of the Proposed Action**

The Action Agencies have initially discussed the geographic scope of the PA in the collaboration to include the following subject to further discussion:

- The mainstem Columbia River, including and downstream of Libby and Hungry Horse Dams and Reservoirs; the Snake River below the head of Lower Granite Reservoir; and the Clearwater River below Dworshak Reservoir and Dam, down to and including the Columbia River estuary and plume.
- The estuary and plume, which includes the area immediately off the mouth of the Columbia River influenced by freshwater discharge, up to the limit of tidal influence at Bonneville Dam (approximately river mile 146).
- Tributaries of the Columbia and Snake Rivers where habitat actions are being proposed.
- Areas associated with the safety-net and other hatchery programs including Redfish, Alturas, and Pettit Lakes and connecting tributaries for Snake River sockeye salmon.
- Areas directly or indirectly affected by the 19 Reclamation projects<sup>1</sup>.

New information on the distribution and status of listed species and on opportunities for offsite mitigation since the 2004 UPA may result in adjustments to the geographic scope of the 2006 PA.

### **C. The Nature of the Proposed Action**

The nature of the PA will include both hydro actions and other actions funded by the FCRPS as “offsite mitigation” for hydro effects. For purposes of this report to the Court, we include proposed operations under discussion in the Collaborative Process with the understanding that they are subject to change.

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<sup>1</sup>In addition to the FCRPS action, this consultation will address the mainstem effects of the operation and maintenance of 18 Reclamation projects, the operation and maintenance of the Columbia Basin Project, and other Reclamation actions regarding future new uses of Columbia Basin Project water supplies. For those 18 Reclamation projects which are located on tributaries occupied by the listed ESUs, the tributary effects of the operation of these projects are covered or will be covered in separate consultations.

The operation of the hydrosystem and 19 Reclamation projects provides for the multiple authorized purposes of the FCRPS dams, including flood control, navigation, irrigation, power generation, fish and wildlife, water quality, water supply, and recreation.

The new PA will build on the performance-based and life-cycle approach that began with the 2000 BiOp. It will set and provide for monitoring of performance measures (such as survival levels at dams and miles of stream protected) for the critical elements of the PA. It will also reflect overall performance measures necessary for ESU recovery (such as improving trends in abundance for an ESU).

#### **D. The Nature of the Hydro Action**

The core of the new PA will be actions to improve survival of listed fish associated with their migration through the hydro system. The “building blocks” include the following hydro actions:

##### **1. Performance Measures and Adaptive Management to Ensure Progress**

The Action Agencies will examine, discuss, and evaluate with the other Sovereign Parties the performance measures necessary to gauge implementation and success of the PA. This may include review of performance measures in the 2004 BiOp and additional considerations to measure the effects of the hydrosystem experience on listed fish. This may also include considering the performance measures at other mainstem hydro dams operated under Federal Energy Regulatory Commission (FERC) license and assessing the value of alternative performance measures. Research, monitoring, and evaluation (RM&E) will be used to assess performance measures relative to performance standards and support adaptive management decisions.

The Sovereign Parties will discuss progress reporting and check-in criteria, including criteria and a process for implementing minor or major modifications to FCRPS operations.

##### **2. Adult Passage through the FCRPS.**

These actions include measures to assure adequate adult passage through the hydro system and avoidance of delayed effects resulting in excessive passage delay, excessive straying, or prespawning mortality. The strategy is to provide operations that optimize survivals and resolve specific problems that are identified.

##### **3. Operation of storage projects to provide for juvenile fish migration through the Columbia and Snake Rivers.**

The Water Management portion of the PA is the subject of the annual and 5-year Water Management Plan. The Sovereign Parties agree on the following overall water management actions as a beginning point for development of a new PA.<sup>2</sup>:

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<sup>2</sup>The nature of the PA provides for Policy Working Group (PWG) recognition that operation of storage reservoirs to provide for juvenile fish migration through the Columbia and Snake Rivers may impact other rights, purposes, and

- Manage operation of storage reservoirs (i.e., Grand Coulee, Libby, Hungry Horse, Dworshak) with the objective of achieving the Upper Rule Curve elevation in the spring (April 10) to provide flow conditions for migrating salmon and steelhead, while providing for other project uses and other fish operations.
- Manage operation of these same storage reservoirs to ensure a high probability of refill (on or about June 30) for summer fish flow augmentation and other project uses.
- Shape the available “water budget” from storage in any given year for optimal fish benefits.
- Operate to control summer temperature in the Snake River to assist fish survival using available Snake River flow augmentation in conjunction with Dworshak releases later.

In addition to the above hydro actions, there are other hydro actions that are not part of the PA that will factor into the BiOp analyses as part of the environmental baseline or cumulative effects. These include the operation of Columbia River Treaty projects in Canada, FERC-licensed projects in the basin, and Reclamation’s upper Snake River projects that provide up to 487,000 acre feet of water annually per the Nez Perce water-rights settlement in the Snake River Basin Adjudication.

Issues identified for discussion are described below.

#### **4. Actions to Increase Juvenile Fish Survival Associated with Dam Passage**

These actions address the operation and maintenance of juvenile bypass systems and spill at dams, including the installation, testing, and operation of “surface passage systems,” such as removable spillway weirs (RSW). Specific operations are developed for individual dams and are adjusted through adaptive management.

Subject to further discussion, the Sovereign Parties intend that the new PA would include RSWs or other improvements in surface passage systems. Improvements would be implemented according to the attached schedule, which is subject to change.

The Action Agencies will examine and discuss the levels and duration of spill that should be provided at each dam to meet improved survival standards; through the Collaborative Process, modifications may be made.

#### **5. Juvenile Fish Transportation**

Transportation of juvenile fish will be discussed by the Sovereign Parties. The focal point for the Action Agencies is adult fish returns. Through the Collaborative Process, modifications to the fish transportation program may be made.

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uses related to the FCRPS. Consequently, the identification of such hydro actions will be consistent with the intent of the Collaborative Process to take such impacts into account.

## **6. Fish, Avian and Other Predation on Fish Migrating Through the Hydro Reservoirs and Estuary**

The Sovereign Parties will support predator control actions as appropriate to reduce mortality and improve survival of juvenile and adult fish.

## **7. Rigorous Research, Monitoring, and Evaluation Program to Support Adaptive Management Based on Performance**

The RM&E program will synchronize existing programs, including but not limited to the Federal Agencies RM&E Plan, the Corps' Anadromous Fish Evaluation Program (AFEP), the Collaborative Systemwide Monitoring and Evaluation Program (CSMEP), and the Comparative Survival Study (CSS). Independent science review will also be a component of the RM&E program.

## **8. Periodic Reporting, Assessment, and Identification of Contingencies**

Periodic reporting on implementation and performance metrics will be provided by the Action Agencies and reported to NMFS, the Sovereign Parties, and others in the region. If shortcomings are identified after implementation has begun, the Action Agencies will identify and evaluate potential changes and alternative measures to achieve the biological objectives for future implementation.

## **9. Hydro Issues Identified for the Collaborative Process**

The Sovereign Parties have identified the following initial list of hydro operations issues for discussion in the Collaborative Process. The discussion of these issues began on December 8, and is expected to continue through the weekly collaboration meetings in January.

- 1) Upper Rule Curve probabilities and implementation
- 2) Flood control management – forecasting and risk
- 3) Opportunities/implications of Canadian operations
- 4) Timing and probability of summer refill – what are the factors that drive tradeoffs?
- 5) Shape of normative hydrograph (filling holes, flat, etc.) for optimal fish benefits and status
- 6) Role of flow targets in normative hydrograph (managing the “buckets”)
- 7) Short-term flow fluctuations (hourly, daily, weekly)
- 8) Multiple fish priorities – chum salmon, Hanford Reach fall Chinook salmon, sturgeon, bull trout, lamprey
- 9) Tradeoffs and resolution of conflicting demands – MT tailrace and reservoir drafts, reshaping of MT outflows, water retention time in Lake Roosevelt, Lake Roosevelt/Banks Lake drafts/refill
- 10) Temperature management at/with Dworshak to balance wild and hatchery benefits
- 11) Compensating draft at GCL for VARQ (consult EIS)
- 12) Power and fish emergencies

- 13) Schedule and priorities of RSWs or surface passage system improvements
- 14) Dissolved gas management

## **E. Nature and Scope of the Proposed Offsite Mitigation (Habitat, Hatchery, and Harvest) Actions**

Hydro operations and dam modifications alone may not provide sufficient mitigation for the effects of the FCRPS on listed fish. The Sovereign Parties agree that offsite mitigation through habitat, hatchery, and harvest actions may be appropriate. Actions for offsite mitigation should be biologically targeted to address ESU-limiting factors and should be cost-effective means to achieving the biological objectives. The nature and scope of the new PA elements for offsite mitigation has been noted and scheduled but not discussed among the Sovereign Parties. Likely strategies for offsite mitigation include the following:

### **1. Hatchery Actions**

The PWG will review all of the hatchery mitigation being provided by the Action Agencies for the FCRPS dam construction and operation impacts. The PWG will also review the Northwest Power and Conservation Council's Artificial Production Review and the 2000 BiOp's Hatchery Genetic Management Plans, as well as the 2004 UPA actions. The Action Agencies may propose a plan to modify Action Agency-funded FCRPS mitigation hatcheries if necessary to minimize detrimental effects on ESA-listed fish and, where appropriate, to provide conservation measures to assist in recovery, while also meeting mitigation responsibilities. Consideration of non-FCRPS hatchery actions may also occur. Specific details would be developed through the collaborative process.

### **2. Habitat Actions**

The PWG will identify the ESUs where gaps remain and examine key limiting factors and locations for improvements and compare them to the 2004 UPA actions and performance metrics. Both tributary river and estuary habitat would be examined. Potential actions might include water acquisition, habitat acquisition and restoration, screening or removal of diversions, acquisition of conservation easements, etc.

### **3. Harvest Actions**

Under this potential suite of actions, the PWG will consider potential opportunities to improve survival.

## **F. Schedule**

As noted previously, the current schedule calls for discussion of hydro issues continuing through January and early February 2006. Discussion of habitat, hatchery, and harvest issues will follow. It is anticipated that the PA will be completed in May 2006.