2005-2007 FCRPS Implementation Plan



U.S. Army Corps of Engineers

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Bureau of Reclamation



Bonneville Power Administration

Outline of Today's Briefing

- Overview of BiOp/Updated Proposed Action
- Overview of Implementation Plans and Progress Reporting
- Implementation Plan Structure and Performance Elements

UPA/BiOp/IP Overview

2004 FCRPS BiOp/Updated Proposed Action

- Finalized 11/30/04
- Strategies designed to fill survival gap to ensure hydro-system operations avoid jeopardy to ESA-listed salmon
- Prioritized strategies
- Certainty and accountability through Hspecific performance metrics to be met in specific timeframe

2005-2007 Implementation Plan

- Structured to meet specific performance metrics/ standards for each H in specific timeframe
- Performance metrics to address limiting factors for salmon from BiOp and subbasin plans
- 3 yr. planning horizon
- Annual reporting on progress
- Cumulative Reporting 2008 and 2011

Schedule and Process

- 3-year Implementation Plans
- Annual Progress Reports
- Comprehensive Evaluations 2008 and 2011

Annual Progress Reporting

- Based on ESU and H-Specific performance metrics in BiOp & UPA
- Performance metric examples include:
 - **Hydro:** adult abundance and trends, adult survival, total system and in-river juvenile survival
 - Predator Control: annual predation rates (pikeminnow and Caspian Terns)
 - Habitat:
 - Tributary: cfs water protected, miles of complexity restored and riparian habitat protected, # irrigation diversion screens addressed
 - Estuary: acres of shallow water habitat protected, restored or enhanced
 - Hatcheries: operation of safety-net programs, construction of Oxbow Hatchery for Sockeye production, Lower Granite trap expansion

Comprehensive Evaluation Reports

- In 2008 for 2005-2007 implementation
- In 2011 for 2008-2010 implementation
- Evaluates progress towards achieving UPA 3- and 6-year performance metrics/standards

What's in the Draft Implementation Plan?

- Near- and long-term priorities for the implementation strategies
- Specific implementation details for 2005 to 2007 to achieve the ESU-specific life-stage targets
- Addresses implementation of the 2004 BiOp Incidental Take Statement

What's in the Draft Implementation Plan?

- Prioritized actions address needs of the greatest number of ESUs first, such as:
 - 1. Hydro-system operations, structural dam modifications, juvenile fish transportation, and predator management, prior to utilizing other offsetting actions.
 - 2. Habitat and/or hatchery actions with potential to improve survival for targeted ESUs commensurate with survival needs not being met through other actions.
- Comprehensive monitoring program to determine effectiveness of actions implemented under the UPA

Conservation Actions

- Action Agencies agreed in the UPA to continue existing programs to support additional habitat improvements, initiatives, and measures
- Not included in draft IP: although these programs are intended to provide a survival benefit, they were not considered in BiOp jeopardy analysis
- Conservation actions may be included in annual progress reports as contributing to recovery

<u>Strategies Guiding</u> <u>Implementation</u>

Hydro-system Strategies

- Configure dam facilities to improve juvenile and adult fish passage survival
- Manage water to improve juvenile and adult fish survival
- Reservoir operations, system flow management and spill operations to improve fish survival
- Operate and maintain fish passage facilities to improve fish survival
- RM&E Program

<u>2005-2007</u>

Hydro-system Highlights

- Ice Harbor Dam removable spillway weir for juvenile fish 2005
- Developing surface bypass at McNary, Little Goose, John Day and Lower Monumental dams
- The Dalles Dam Behavior Guidance System (forebay) 2007
- Juvenile fish bypass system and monitoring improvements at several dams
- Snake River fall chinook study 2005
- Flow augmentation and spill continue
- Juvenile fish transport program adjusted based on research

Predator Control Strategies

- Redistribute Avian Predators
- Reduce Predation by Northern pikeminnows
- RM&E

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Predator Control Highlights

- Redistribute Caspian Terns Nesting on East Sand Island to habitats located outside of the Columbia River Basin, pending EIS process
- Analyze double-crested cormorant population in the Columbia River; evaluate management alternatives
- Analyze Caspian tern population of the Mid-Columbia River; evaluate management alternatives
- Expand Northern Pikeminnow Management Program

Habitat Strategies

- Tributary Habitat Protection and Improvement
- Habitat Protection and Improvement in the Estuary

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Tributary Habitat Highlights

- Implement stream-flow, entrainment, channel morphology, and riparian protection and enhancement actions in the Wenatchee, Entiat, and Methow sub-basins
- Provide technical assistance for stream-flow, entrainment, and channel morphology projects in the Little Salmon, Lemhi, Upper Salmon River, and John Day sub-basins
- Consider implementing proposals for stream-flow and riparian protection and enhancement projects in the Okanogan sub-basin

<u>2005-2007</u>

Estuary Habitat Highlights

- Crims Island complete by 2006
- Sandy River complete by 2007
- Germany Creek complete by 2006
- Columbia Wetland complete by 2007
- Grays River Project complete by 2007
- Chinook River Restoration complete by 2010

Hatcheries Strategies

- Implement a Safety-Net Program as an Interim Measure to Avoid Extinction
- Reduce Potentially Harmful Effects of Artificial Production to Aid Recovery

<u>2005-2007</u> Hatcheries Highlights

- Design and construct improvements to the Lower Granite Dam adult salmon/steelhead trapping and holding facilities
- Continue the Snake River fall Chinook supplementation program in the upper Clearwater River subbasin
- Develop a proposal for design, construction, and O&M for Oxbow Hatchery to allow for additional production of Snake River sockeye smolts
- Continue artificial production safety net hatchery programs determined by NOAA to effectively reduce the risk of extinction
- Complete Phase III Hatchery Genetic Management Plans

RM&E Strategies

- Status Monitoring
- Action Effectiveness Monitoring and Research
- Critical Uncertainties Research
- Project Implementation Monitoring
- Data Management System
- Regional Coordination

RM&E Highlights

- Continue smolt monitoring program and PIT tag information system
- Monitor adult returns with PIT tag detection system
- Evaluate the effectiveness of spill, transportation, and system configuration changes
- Continue evaluations of delayed mortality
- Develop a comprehensive estuary and ocean strategy
- Address the relationships of estuary habitat to salmon production and survival
- Continue to implement tributary habitat monitoring projects

Summary

- IP is the follow-up to November 30, 2004, final UPA that included collaboration and public input
- Regional discussions will continue over the longterm, on how best to adjust actions based on performance results
- The Action Agencies are interested in continued input through regional forums