



Implementing an Adaptive Management Framework for the Fish and Wildlife Program

August 30, 2006

NPCC Call for Comments

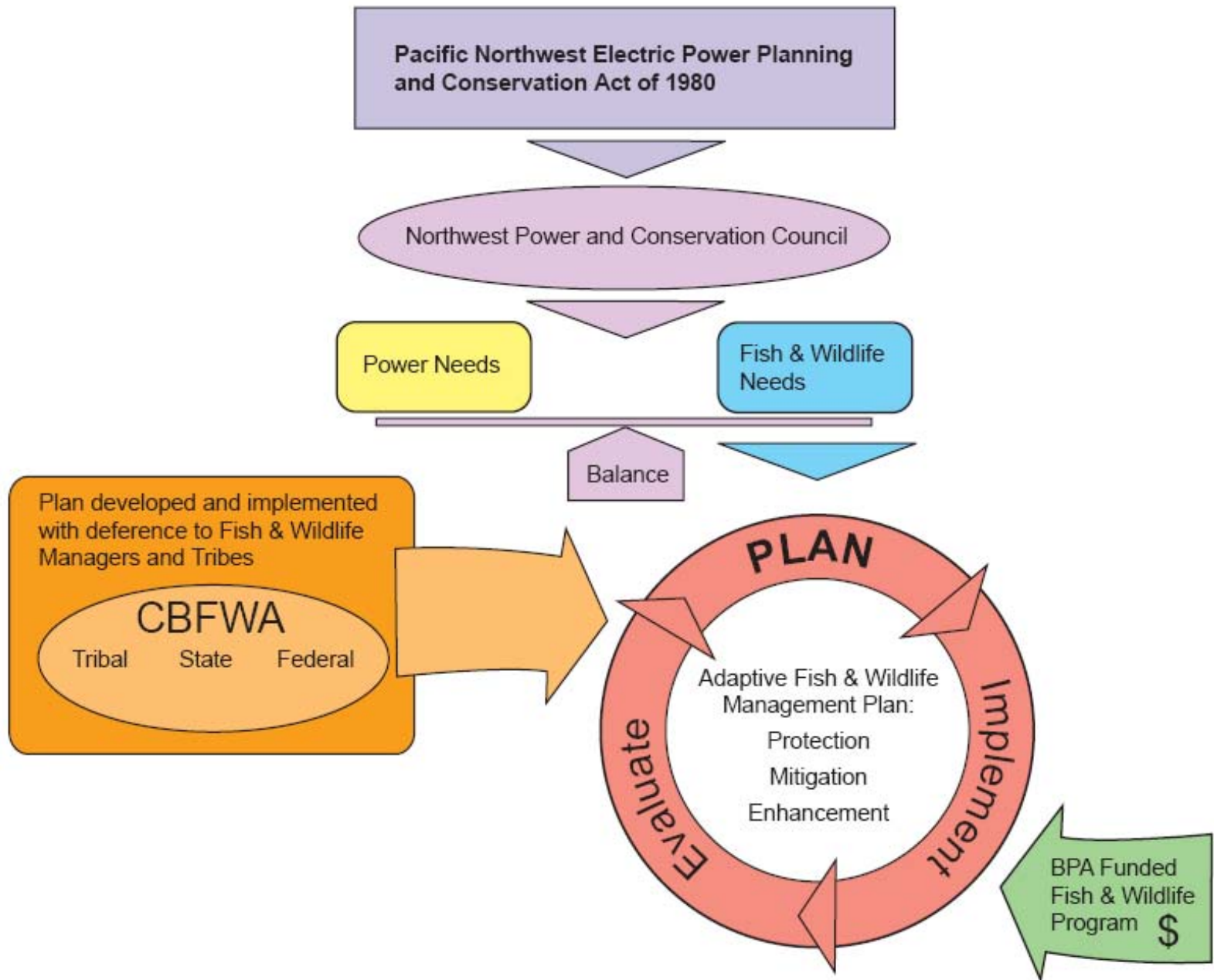
August 22, 2006 call for comments on staff issue paper-

- Is adding biological objectives at the provincial scale valid?**
- Can the technical preparation be completed to support development of biological objectives at this scale?**
- Are the TRT and AHA products the best base for anadromous fish?**
- How should we define resident fish and wildlife biological objectives?**

NPCC Framework for Biological Objectives

- **Population scale (roll up to province?)**
 - **Adult abundance**
 - **Population demographics**
 - **Habitat productivity and capacity**

- **Environmental parameters**
 - **Streamflow acquired**
 - **Miles of stream protected**
 - **Number of barriers removed**



Adaptive Management Framework

- Identify a clear set of objectives with defined metrics
- Design a data management framework for getting data from field to analysts
- Provide a reporting mechanism to get information from analysts to decision makers

Concurrent Processes

Regional processes that require biological objectives and metrics:

- NPCC Amendment Process**
- Implementation of FCRPS biological opinions**
- NOAA Fisheries Hatchery Reform and Mitchell Act EIS**
- US v. Or?**

Ongoing Regional Fish and Wildlife Processes

	August	September	October	November	December	January	February	March	April
NOAA Fisheries FCRPS Biological Opinion Development (Remand)		DRAFT Proposed Action					Final Biological Opinion (list of habitat actions?)		
2007-2009 Project Selection Process	Aug 31 Main/Sys	Sept 14-15 Province	Council Recommendations						
FY 2006 Program Implementation (monthly Budget Oversight Group meetings)	Quarterly Review		Fiscal Year End Budget Tracking Report						
CBFWA Status of the Resource Project	Staff work with Members to gather information	Staff compile 1st Draft report	1st Draft CBFWA Annual Status of the Resource Report for Member Review	Continue to maintain and update website with 2006 information (adult counts, project accomplishments, etc.)					
Program Amendment- Provincial Rollup for Biological Objectives		NPCC call for comments on a potential amendment process		Begin to define biological objectives for each province for anadromous and resident fish and wildlife			Call for Program Amendments - Province level biological objectives		
NOAA Fisheries Hatchery Reform Project (AHA process)	Lower river hatchery reviews						Upper river hatchery reviews		
Mitchell Act EIS	Data validation for entire Columbia Basin anadromous fish stocks			Analysis of alternatives for Mitchell Act hatcheries		NOAA Review and completion of Mitchell Act DEIS			

Opportunities to Coordinate the Adaptive Management Framework with other processes

Data management and reporting efforts:

- **CBFWA Status of the Resource Project (website)**
- **StreamNet Workshop**
- **NED portal pilot study**
- **CSMEP final report and next stages**
- **National Fish Habitat Initiative**
- **State of the Salmon Report**
- **Recovery Plan Monitoring**

Common Data Framework

- **Population scale**
- **Adult Abundance and demographics**
- **Habitat – population related productivity and capacity**
- **Environmental – physical environmental parameters**

CBFWA Data Framework for SORP

Phased implementation

First year

- Population scale**
- Adult abundance**

Second Year

- Population demographics**
- Habitat – population level productivity/capacity**
- Environmental parameters (limiting factors and accomplishments linked)**

FCRPS Biological Opinion proposed data framework

VSP Parameters (Agency/Tribe Data)

- Population**
- Abundance**
- Habitat – productivity and capacity**

Implementation Metrics (BPA)

- Environmental parameters (miles of stream repaired, number of blockages corrected, etc.)**

Council Amendment Process

- **Provide an opportunity for the co-managers to describe an adaptive management process for the region**
- **Provide an opportunity for the co-managers to set biological objectives for the fish and wildlife program consistent with Subbasin Planning and Recovery Planning**
- **Several existing efforts have positioned CBFWA to respond with organized, informed input**

Adaptive Management

Existing Program Elements

Planning

- Subbasin Planning (Habitat)**
- Hatchery Reform Process**
- Recovery Planning**

Implement (Data collection and mgmt)

- StreamNet**
- Monitoring Programs**
- CSMEP/NED/PNAMP**

Evaluate

- Status of the Resource Report**

NOAA Hatchery Reform

- **All-H Analyzer tool**
- **Facilitated meetings with co-managers**
- **Document current conditions**
- **Establish desired future conditions**
- **Document consensus biological objectives**

*Comprehensive population analysis can help
co-managers set biological objectives*

StreamNet Priorities

- What is the core data we need to support an adaptive management framework?
- Can we re-prioritize StreamNet to meet these needs?
- Send representatives to the September 20-21 workshop to express these priorities.

Consensus guidance can help co-managers establish a regional data framework

CSMEP Report

- **Metadata inventories for 20 subbasins**
- **Assessed strengths and weaknesses of data for addressing key monitoring questions**
- **Developed a web database for housing data inventory metadata**
- **Developed pilot study designs for addressing key monitoring questions**

Implementation of recommendations can help co-managers obtain consistency in reporting

CBFWA Status of the Resource Project

- Real time maintenance of data on website according to established data framework
- Annual reporting of biological condition, environmental parameters, and project implementation

Commitment to reporting can help co-managers determine direction of Program and Recovery

COLUMBIA GORGE

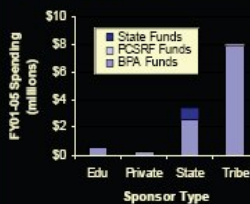
Total FY01-05 Spending

\$12,252,719

FY01-05 Spending by BPA, PCSRF & the States



Combined FY01-05 Spending by Type of Project Sponsor



Limiting Factors

Water Quality — Alteration by sediment inputs from roads (forest service roads) and irrigation networks (Neal Creek), pesticide (Neal, Indian, Trout, Lenz creeks and Hood River) and nutrient contamination from agriculture and other non-point sources (Odell, Lenz, and Baldwin creeks and Laurence Lake), temperature increases from flow modification (East Fork Hood River below the East Fork Irrigation Diversion and Hood River from Powderdale Dam to the powerhouse), reservoir discharge (Clear Branch below Laurence Lake Reservoir), or riparian vegetation removal (Neal Creek). Exceed Oregon 303-d standards for temperatures, pH, chemicals, and dissolved gas.

Passage Impediments — Dams (Powderdale and Clear Branch), diversions (East Fork Hood River, mainstem Hood River, Coe, Elliott, and Clear branches, and West Fork Hood River) and road crossings. Downstream entrainment at Clear Branch and Powderdale dams.

Flows—Altered flows due to irrigation (Baldwin, Odell, Tieman, and West Fork Neal creeks), hydropower (Powderdale Dam), and municipal water diversions (upper Dog River).

In-stream Habitat — Loss of large woody debris recruitment caused by historic timber practices and clearing of streams (East Fork Hood River between Robinhood and Sherwood campgrounds).

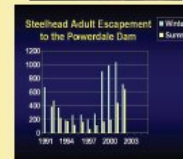
Riparian Habitat — Confined and disrupted by roads and other land uses.

www.cbfgwa.org/sotr

Subbasin: Hood



Steelhead



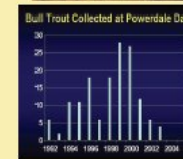
Summer

Federal Designation: Threatened
ESU: Lower Columbia
Biological Objective: 600 adults¹
Status: 650 adults collected at Powderdale Dam (2002)²

Winter

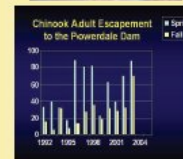
Federal Designation: Threatened
ESU: Lower Columbia
Biological Objective: 1,100 adults¹
Status: 717 adults collected at Powderdale Dam (2002)²

Bull Trout



Federal Designation: Threatened
Core Population: Hood (Within Hood River Recovery Unit)
Biological Objective: ≥ 500 adults¹
Status: < 300 adults³

Chinook



Spring

Federal Designation: Threatened
ESU: Lower Columbia
Biological Objectives: 125 natural adults¹
Status: 88 adults collected at Powderdale Dam (2003)²

Fall

Federal Designation: Threatened
ESU: Lower Columbia
Biological Objective: 1,400 natural adults (TRT)
Status: 70 adults collected at Powderdale Dam (2003)²

Coastal Cutthroat Trout



Resident

Federal Designation: Species of Concern
Biological Objective: No numeric objective for adult escapement described in the sub-basin plan
Status: Too little data exist to assess population trend¹

Pacific Lamprey



Federal Designation: Species of Concern
Biological Objective: No numeric objective for adult escapement described in the subbasin plan
Status: Current abundance and carrying capacity unknown¹

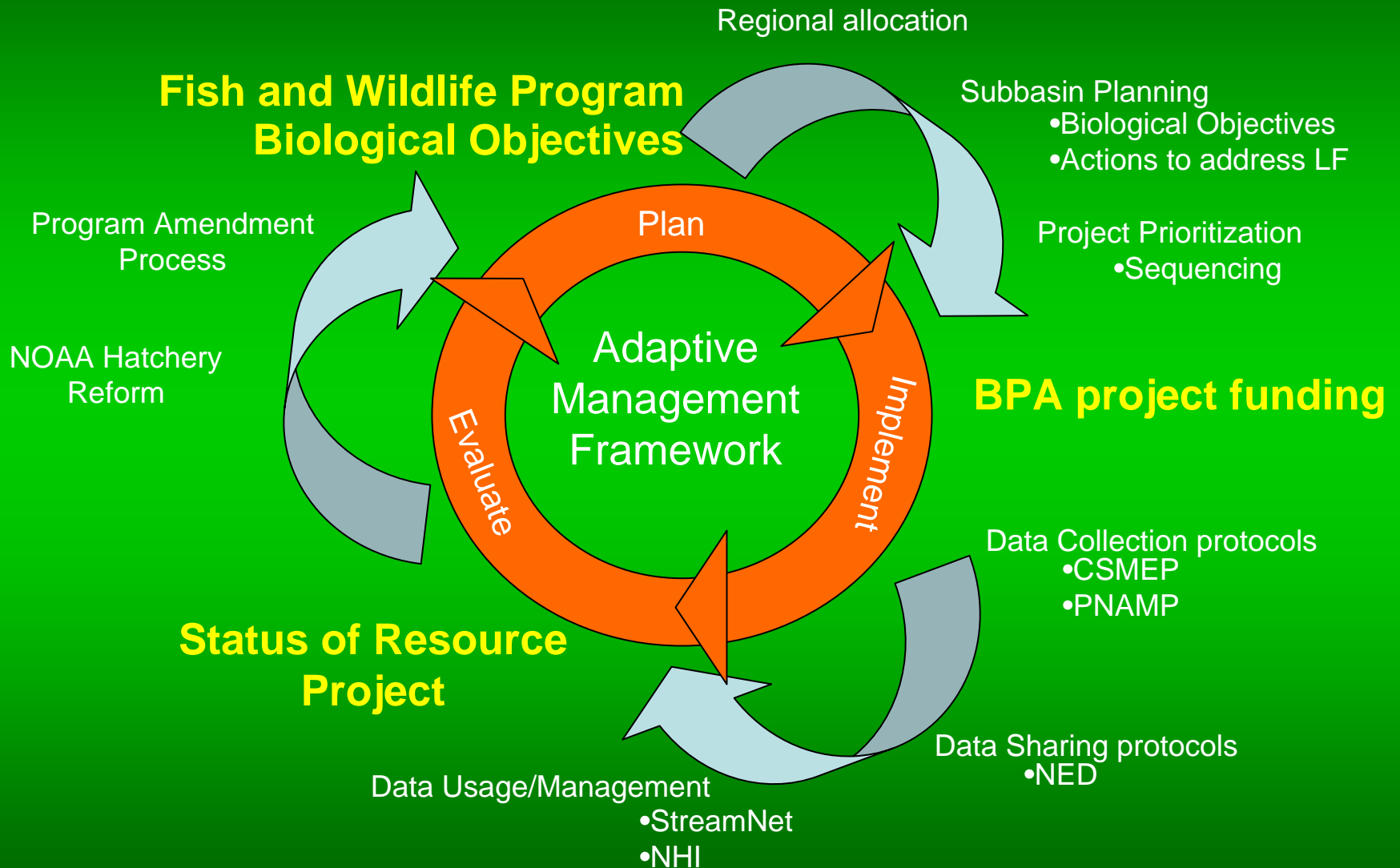
BPA-Funded Projects in the Hood Subbasin: Selected 2001 — 2005 Project Accomplishments⁴

- Completed the Hood River Watershed Action Plan
- Implemented various actions according to the plan (i.e., completed 3.3 miles of riparian fence)
- Replaced two major passage barriers. Irrigation improvement projects including fish screen improvement and replacement, placement of large woody debris, changes to pesticide use best management practices, etc.)
- Conducted Annual spring Chinook Tribal fishery on the Hood River
- Completed the Hood River Program Review with consensus agreement among co-managers on how to adaptively manage the Program
- Operation and Maintenance of Powderdale Dam Fish Trap—Collected life history characteristics, monitored escapements, and collected broodstock
- Operation and Maintenance of Parkdale Fish Facility for Chinook and steelhead supplementation.

For individual project accomplishment visit www.cbfgwa.org/sotr.

¹ Coccoli, H. and 9 coauthors. 2004. Hood River Subbasin Plan including Lower Columbia Gorge tributaries. Northwest Power and Conservation Council, Portland, Oregon.
² Pribyle, S. 2003. Mid-Columbia Fish District Annual Report. Oregon Department of Fish and Wildlife.
³ United States Fish and Wildlife Service. 2003. Chapter 6. Mount Hood Recovery Unit, Oregon. In: U.S. Fish and Wildlife Service. Bull Trout (*Salvelinus confluentus*) Recovery Plan. Portland, Oregon.
⁴ as described in the Northwest Power and Conservation Council's FY2007-09 Columbia River Fish and Wildlife Program Project Solicitation Proposal

Fish and Wildlife Program



CBFWA Action

The CBFWA members direct the Members Advisory Group to develop comments on the NPCC's issue paper describing a proposed amendment process. The comments will establish the need and opportunity to create an adaptive management framework for regional decision making.