

March 1, 2007

MEMORANDUM

TO: Oregon Watershed Enhancement Board

FROM: Ken Bierly, Deputy Director
Miriam Hulst, Oregon Plan Implementation Specialist

**SUBJECT: Agenda Item J: State of Oregon Conservation Plan for the Oregon Coast Coho Evolutionarily Significant Unit
March 14-15, 2007 OWEB Board Meeting**

I. Introduction

In a January 9, 2007, letter to natural resource agency directors (Attachment A), Governor Kulongoski asserts that successful implementation of the State of Oregon Conservation Plan for the Oregon Coast Coho Evolutionarily Significant Unit (coastal coho conservation plan) will depend on commitments made by state natural resource agencies to fulfill statutory authorities and responsibilities for protecting coho habitat and conserving fish. The Governor requests that each agency familiarize its board or commission with the plan and the commitments and obligations made by the agency.

This report requests that the Oregon Watershed Enhancement Board support the proposed role and commitments for OWEB to help implement the coastal coho conservation plan.

II. Background

The October 6, 2006, draft coastal coho conservation plan was developed primarily by staff at the Oregon Department of Fish and Wildlife (ODFW), with assistance and input from many interests, including OWEB. ODFW staff presented the draft plan to the OWEB Board at its meeting on January 25, 2007. ODFW will seek final approval of the coastal coho conservation plan from the Oregon Fish and Wildlife Commission at its March 16, 2007, meeting.

The purpose of the proposed coastal coho conservation plan is to ensure continued viability of the coast coho ESU and to achieve a desired status that provides substantial ecological and societal benefits. The plan maintains and enhances support for the Oregon Plan and meets the requirements of Oregon's Native Fish Conservation Policy. It does not propose new land-use regulations; instead the plan maintains existing regulatory programs and enhances support for non-regulatory cooperative conservation. A key element of the plan is to provide a more effective level of support to local conservation groups and private landowners.

The process to develop this Conservation Plan began in June of 2004. The Conservation Plan was developed during an interactive process by considering substantial review, discussion, critique, and recommendations from three primary groups: a diverse public Stakeholder Team, the Oregon Plan Core Team, and a National Oceanic and Atmospheric Administration (NOAA) Technical Recovery Team (TRT).

A 21-member Stakeholder Team was recruited to serve as advisors in the development of the Conservation Plan. Team members represented a wide range of interests including: watershed councils, soil and water conservation districts (SWCDs), local government, recreational fishing, commercial fishing, land-based industries (forestry, agriculture, aggregate), private landowners, fish advocacy groups, and Salmon and Trout Enhancement Program (STEP) volunteers. The Stakeholder Team met 20 times over the course of over two-and-one-half years.

A public draft of the Conservation Plan was released on October 6, 2006, for public review. Public comments on the draft Conservation Plan were accepted through December 8, 2006. Public meetings were held in Coquille, Florence, Newport, and Tillamook in November 2006 to describe the Conservation Plan and accept public comment.

The Executive Summary from the public draft is Attachment B. The plan public draft can be found at www.oregon.gov/OPSW/cohoproject/coho_proj.shtml. Additional information about the Stakeholder Team and comments are found in Appendix 1.

Sue Knapp, Natural Resources Policy Advisor for Governor Kulongoski, and Kevin Goodson of the Oregon Department of Fish and Wildlife, will be available at the Board meeting to update Board members on the latest information relating to the plan and to respond to questions.

III. OWEB and the State of Oregon Conservation Plan for the Oregon Coast Coho Evolutionarily Significant Unit

The Pacific Coastal Salmon Recovery Fund (PCSRF) has been an important resource in the development of the coastal coho conservation plan. Through OWEB, PCSRF funds have been used to pay for staff time devoted to coho conservation plan development. PCSRF funds have also enabled stakeholder facilitation, watershed council involvement, and soil and water conservation district participation in the development of the plan as stakeholders.

OWEB has also provided funding for completion of watershed assessments throughout the Oregon coast. The assessments are independent of the current coho conservation planning efforts, but serve as an important building block for the draft plan. They have been used by local conservation groups to develop priorities for habitat restoration and protection. The Oregon Coastal Coho Assessment, conducted in 2004-2005, and funded in large part by OWEB, helped to identify population level limiting factors for coho salmon. This information has been useful for both local priority setting and the watershed assessment work.

The October 6, 2006, draft coastal coho conservation plan places emphasis on the restoration of low-gradient, unconfined channels that provide refuge for young coho during high winter flows. Restoration of these historically degraded stream reaches is expected to increase coho freshwater productivity. OWEB's coastal regional review teams consistently evaluate how proposed projects will contribute to coho restoration needs. Although the review teams have not ceased funding other priorities, coho restoration needs factor largely in coastal funding decisions.

During the summer of 2006, OWEB allotted more than \$1 million to the employment of displaced fishers who conduct projects that improve high priority coastal coho habitat. This effort is a direct link between OWEB funding and the implementation of priorities identified in the coastal coho conservation plan.

IV. OWEB's Continuing Commitment to the Coastal Coho Conservation Plan

The draft coastal coho conservation plan includes the following commitments of OWEB:

- A. OWEB will continue to provide funding for projects that restore and protect coastal coho habitat. Staff will soon issue a Request for Proposals (RFP) for the compilation of limiting factors in the range of coastal coho. The compilation will be conducted at the 5th field hydrological unit code (HUC) spatial scale. The results will be used to review and prioritize restoration activities and guide future funding decisions. OWEB will also continue to fund technical assistance, education, and outreach efforts that facilitate implementation of coastal coho projects.
- B. OWEB will support research that addresses objectives relevant to the coastal coho conservation plan, particularly those concerning watershed function and process issues that are relevant to local protection and restoration issues. OWEB recently received research proposals totaling approximately \$9.5 million for projects that address effectiveness monitoring, interactions between hatchery fish and wild fish, life history evaluations, water quality, fisheries genetics, population modeling, and habitat mapping. Many of these projects are expected to produce valuable information pertaining to coastal coho management and conservation.
- C. OWEB will continue to encourage the use of the Oregon Conservation Reserve Enhancement Program (CREP) in coastal counties. The goal of Oregon CREP is to enhance riparian habitat on agricultural lands along streams that provide habitat for ESA-listed salmonids and water quality benefits.
- D. OWEB will continue to work with other agencies to improve monitoring protocols for OWEB-funded projects. OWEB will also continue working with partnering agencies to develop large-scale, high-level indicators of ecosystem function and determine how to track changes through time.
- E. OWEB will increase staff capacity specifically to provide outreach to sectors and individuals that can assist with coastal coho conservation projects. Staff will facilitate interagency cooperation to accomplish outreach activities and develop restoration projects that strategically advance the habitat goals of the coastal coho conservation plan.

V. Recommendation

Staff recommend the Board endorse the OWEB commitments referenced in Section IV of this report to assist in the implementation of the coastal coho conservation plan.

Attachments

- A. January 9, 2007, Letter from Governor Kulongoski
- B. Executive Summary

Conservation Plan for the Oregon Coast Coho ESU

October 6, 2006 Public Draft

Executive Summary

Introduction

The purpose of this Conservation Plan is to ensure the continued viability of the Oregon Coast Coho Evolutionary Significant Unit (ESU) and to achieve a desired status that provides substantial ecological and societal benefits. The Oregon Coast Coho ESU is viable (*see* Table 2; State of Oregon, May 6, 2005; Federal Register/ Vol. 71, No. 12/Thursday, January 19, 2006) and does not currently require protection under the federal Endangered Species Act (ESA). The current status of this ESU reflects a reduction in fishery harvest, improved hatchery management, and extensive habitat restoration work initiated or maintained under the Oregon Plan for Salmon and Watersheds (Oregon Plan). This Conservation Plan maintains and enhances support of the Oregon Plan and meets the requirements of Oregon's Native Fish Conservation Policy (NFCP). This Conservation Plan does not propose new land-use regulations, maintains existing regulatory programs, and enhances support for non-regulatory cooperative conservation. A key element of this Plan is to provide a higher and more effective level of support to local conservation groups and private landowners (e.g., Soil and Water Conservation Districts, watershed councils, industrial forestland owners, Salmon and Trout Enhancement Program volunteers, and other individuals and groups). These community-based organizations have demonstrated an impressive record of planning, prioritizing, and implementing habitat improvement projects through their participation in the Oregon Plan.

This document is Oregon's Conservation Plan for the Oregon Coast coho Evolutionary Significant Unit (ESU), prepared by the Oregon Department of Fish and Wildlife (ODFW). The Conservation Plan incorporates findings presented in the Oregon Coastal Coho Assessment (State of Oregon, May 6, 2005; *hereafter referred to as the 2005 OCCA*) and extensive experience implementing the Oregon Plan since 1997. Oregonians have demonstrated extensive and diverse support for non-regulatory, community-based, habitat improvement work under the Oregon Plan. Participants in this effort include watershed councils, Soil and Water Conservation Districts, Salmon-Trout Enhancement Program volunteers, industrial and private landowners and a variety of non-governmental organizations and individuals. Implementation of the Oregon Plan across this ESU from 1997 to 2003 included significant investments (\$107 million) in restoration work by private landowners and state and federal agencies; private landowners voluntarily contributed about one-third of these funds; Oregon Watershed Enhancement Board restoration grants supported roughly \$13 million during this timeframe.

The Conservation Plan was developed during an iterative process by considering substantial review, discussion, critique, and recommendations from three primary groups: a diverse public Stakeholder Team (see Appendix 1), an Oregon Plan Core Team, and a Technical Recovery Team (TRT). The Conservation Plan describes commitments by the State of Oregon that will conserve the sustainability of this ESU and restore biological attributes necessary to achieve a science-based, socially established desired status goal. Achievement of the desired status goal

will provide significant ecological, economic and cultural benefits for all Oregonians. Hereafter, the Oregon Coast coho Conservation Plan will be referred to as the Conservation Plan or simply the Plan.

This Conservation Plan, in supporting the Oregon Plan, is a dynamic strategy that will adapt and be modified over time in response to learning from monitoring data and implementation experience. The intent of this Plan, like the Oregon Plan, is to support efforts to improve habitat for coho salmon and other native fish and wildlife species through on-the-ground, non-regulatory work by community-based entities and individuals

As defined in Oregon Administrative Rule, the term *conservation* means managing for sustainability of native fish so present and future generations may enjoy their ecological, economic, recreational and aesthetic benefits (OAR 635-007-0501-10). *Native fish* are defined as indigenous to Oregon and include both naturally and hatchery produced fish (OAR 635-007-0501-36).

This Plan meets the requirements for conservation plans described in Oregon's Native Fish Conservation Policy (NFCP). The NFCP (OAR 635-007-0502 to 0509) was adopted by the OFWC in 2002 to support and increase the effectiveness of the 1997 Oregon Plan. The Conservation Plan does not replace or supersede the Oregon Plan. Fundamentally, the Conservation Plan is designed to improve the status of the ESU and virtually all of its constituent populations by increasing the productive capacity of the coho and their habitat to levels significantly higher than where the ESU could be considered a potential candidate for listing under federal ESA. Significantly, Oregon notes that all of the actions in this Conservation Plan are expected to benefit co-existing native species and water quality across the ESU.

The NFCP employs conservation plans to identify and implement appropriate strategies and actions necessary to restore native fish in Oregon to levels that provide benefits to the citizens of the state. This is achieved through a sequential process:

1. Define the management unit, or ESU.
2. Determine its current status.
3. Define a desired status.
4. Determine any gap between the two and the factors causing the gap (limiting factors).
5. Identify strategies and actions that address the limiting factors.
6. Monitor and evaluate the ESU status and actions implemented and use adaptive management to make adjustments.

The Conservation Plan contains the elements identified above and is also intended to be consistent with and contain most of the elements required by a federal ESA Recovery Plan. The primary required elements of a federal Recovery Plan include 1) objective and measurable criteria for delisting, 2) site-specific actions required for recovery, and 3) estimates of the time and cost of implementing the plan. A key distinction exists between this Conservation Plan and a federal Recovery Plan. Specifically, whereas ESA Recovery Plans focus on criteria actions needed to achieve delisting of species, this Conservation Plan is developed for a species that is not listed under federal ESA and therefore addresses actions needed to achieve a socially established desired status goal that could be described as one scenario of broad sense recovery.

The Conservation Plan would need to be modified somewhat, e.g., to include delisting criteria and actions in order to serve as a federal Recovery Plan.

Structure and Biology of the Oregon Coast coho ESU

The Oregon Coast coho ESU includes naturally produced coho salmon in 56 populations – as defined by the National Oceanic and Atmospheric Administration (NOAA) TRT (Lawson, et al, 2005) – from the Necanicum River near Seaside to the Sixes River near Port Orford. Twenty one of these populations are classified as potentially or functionally independent because they occur in basins with sufficient historical habitat to have persisted through several hundred years of normal variations in marine and freshwater conditions. These anadromous salmon spawn in rather small low-gradient streams from November through March, the offspring spend the next summer and one winter in freshwater, and then migrate through estuaries to the ocean in the spring of their second year of life. The vast majority of coho salmon then spend two years (summer growth seasons) in the ocean, remaining principally off the Northern California and Oregon coast, before returning to their home streams to spawn.

Current Status of the ESU

Oregon's conclusion was that the ESU is currently viable and sustainable (2005 OCCA). In other words, Oregon Coast coho populations generally demonstrate sufficient abundance, productivity, distribution, and diversity to be sustained under the current and foreseeable future range of environmental conditions, even including conditions somewhat more adverse than were observed during the 1990s, a period characterized by adverse ocean survival conditions, drought, and flood across the ESU. NOAA's Federal Register Notice (Vol. 71, No.12: Proposed Rules) contained the following statement:

After considering the best available scientific and commercial information available, we have concluded that the ESU is not in danger of extinction throughout all or a significant portion of its range, nor is it likely to become so within the foreseeable future. (page 3033)

Desired Status and Measurable Criteria

This Conservation Plan describes a desired status for future condition and performance of the Coast coho ESU. The desired status goal was discussed over more than twelve months with the Stakeholder Team and others and represents a science-based, social consensus. The goal targets a return of spawners to the ESU (at 1.1% marine survival) that is about twice the spawners observed during 1993-1996. Oregon has described a set of measurable criteria that will be monitored and evaluated to determine if and when the desired status goal has been achieved (see Appendix 2). These measurable criteria include parameters such as abundance, productivity, distribution, persistence, diversity, and habitat.

Desired Status Vision

A conceptual statement of the desired status goal for this ESU is consistent with the Mission of the Oregon Plan for Salmon and Watersheds: Populations of naturally produced coho salmon are sufficiently abundant, productive, and diverse (in terms of life histories and geographic distribution) that the ESU as a whole 1) will be self-sustaining into the foreseeable future, and 2) will provide significant ecological, cultural, and economic benefits.

Oregon's Coho Conservation Strategy

Oregon is relying on a combination of existing regulatory programs plus effective long-term participation in non-regulatory conservation work to achieve the desired status goal for the Coast coho ESU. Policies and actions in this Plan will address the potential effects of human activities across the full life-cycle of the Coast coho ESU including management activities upstream from the distribution of coho salmon, downstream through tributaries, mainstems, estuaries where coho reside and/or migrate, and the ocean. Principal activities that could potentially limit or support achievement of the desired status goal for the ESU include fishery harvest, hatchery operation, land use management, and on-the-ground work to increase the productive capacity of coho habitat. These policies and actions are framed to 1) conserve the existing productivity, distribution, diversity of coho salmon and habitat across the ESU and 2) improve the productive capacity of coho populations and habitat. Both elements are considered essential to achieve Oregon's desired status goal.

The long-term effectiveness of this Conservation Plan requires development of conservation and restoration strategies at scales within populations. Oregon will continue to support local watershed entities as they implement population-specific actions at scales appropriate for conservation. These finer resolution strategies will include prioritized and time sequenced action plans across all land ownerships.

Key Conservation Commitments

Key commitments in this Plan include the following.

Oversight

- *Desired status goal.* This Conservation Plan establishes policy regarding the desired status for the ESU and constituent populations within the ESU. The desired status goal (and measurable criteria) in this Conservation Plan is significant because it provides a quantitative target for the ESU that can be used to evaluate the Plan's effectiveness over time.
- *Regulatory programs.* State and federal agencies will implement, monitor compliance with, and enforce their legislatively mandated regulatory programs.
- *Accountability.* The Oregon Plan Core Team is responsible for implementation of conservation efforts statewide (i.e., the Oregon Plan) including this Conservation Plan. An Oregon Plan Regional Implementation Team will be responsible for tracking implementation and preparation of reports described as part of Oregon's adaptive management commitment in this Plan.

Implementation

- *Modified hatchery programs.* Two coho hatchery programs are being altered in a manner that is designed to achieve viability for the affected populations.
- *Conservation priorities.* The plan provides information intended to guide funding and action investments in watershed conservation by diverse management entities.
- *Oregon Plan Habitat Strategy.* The strategy is to provide more effective financial and technical support to private landowners to maintain and increase participation in

cooperative conservation actions. Implementing the strategy will support the viability of the ESU and will help achieve the desired status for habitat – roughly a doubling in the amount of high quality habitat across the ESU. The habitat strategy enhances the Oregon Plan approach for developing cooperative conservation partnerships and conducting effective habitat restoration projects.

The habitat strategy of this Conservation Plan will provide additional resources to community-based conservation networks (e.g., watershed councils, Soil and Water Conservation Districts, Salmon and Trout Enhancement Program volunteers, and other community groups) and private landowners engaging in voluntary, cooperative conservation projects. Oregon has over ten years of positive experience implementing habitat restoration under the OPSW. Specifically, this strategy will provide 1) a better understanding of coho's ecological needs, 2) a better understanding of where and how habitat restoration can be most effective, 3) improved financial incentives to conduct voluntary habitat restoration, and 4) more technical support for project designs, permits, monitoring and reporting for restoration projects. This is not a new initiative, just better assistance and support for Oregon Plan participants so that their involvement can be most effective.

This strategic approach – recognizing the good work already completed under the Oregon Plan and a growing level of participation in Oregon Plan programs – is supported by the Oregon Forest Industries Council, Oregonian's for Food and Shelter, and the Oregon Farm Bureau. Enhanced partnerships among private forest and agricultural landowners represent a powerful means of increasing the level of investment and participation in effective voluntary habitat-improvement work on private lands. The Oregon Plan Core Team will coordinate this strategy among participating entities.

- State and federal agencies provided detailed descriptions of their respective contributions to the Conservation Plan along with abstract summaries of their actions. Abstracts are in the main body of this Conservation Plan, detailed descriptions are in Appendix 3 to the Conservation Plan. Funding available to support conservation infrastructures (especially SWCDs and watershed councils) will be maintained and most likely, modestly increased during the next biennium (2007-2009).

Research, Monitoring and Evaluation

- *Research.* Seven topics that merit research are identified. These topics include information needs that are particularly relevant to achieving Oregon's desired status goal for this ESU.
- *Monitoring.* Monitoring within the ESU has been modified to improve estimates of coho spawners; juvenile coho density and distribution; and habitat quality.
- *Evaluation to support adaptive management.* First, Oregon commits to assess the ESU and the effectiveness of the Conservation Plan (in 6 years, every 12 years thereafter, or as needed). Second, Oregon will produce a succinct annual report – *an early warning system* – that will alert Oregon to the need to reconsider the status of the Coast coho ESU, monitoring, and management systems in place throughout the ESU.

Reaching Desired Status – Time Frame Expectations

Whereas immediate benefits to coho are expected as the actions identified in the Plan are implemented, the desired status goal for this ESU is ambitious. Achieving the desired status goal will require an institutionalization of the cooperative conservation commitments embedded in the Oregon Plan and this Conservation Plan, sustained leadership, extensive non-regulatory participation by private landowners, funding, reassessment, and adaptive management. With the enhanced level of habitat monitoring proposed in this plan, Oregon will be able to determine the trajectory of habitat condition and the approximate time-frame that the observed trajectory would require to achieve the desired status goal. A 50 year time-frame is probably the most realistic scenario to achieve the desired status goal for the ESU, given likely levels of funding, the time required to resolve scientific uncertainty, and the time required to restore ecological processes.

Assessment of the Conservation Plan

Oregon is relying therefore on a combination of the current regulatory programs plus effective long-term participation in non-regulatory, cooperative conservation work to achieve the desired status goal for the Coast coho ESU. The Oregon Plan habitat strategy is designed to support effective work by the existing cooperative conservation network (including SWCDs, watershed councils, Salmon and Trout Enhancement Program volunteers and others) across the ESU. This effort is expected to increase participation in non-regulatory cooperative conservation work by private landowners, especially landowners in areas with the greatest potential to create high quality coho habitat and support achievement of the desired status goal for the ESU.

Oregon is generally optimistic that the elements of this Conservation Plan will achieve the desired status goal for the ESU, based on the following observations.

- Coho salmon are broadly distributed across all 21 independent populations within the ESU and spawning escapements during recent years of relatively favorable ocean survival have been higher on average than in the last 5 decades.
- The ESU is currently viable and adaptive management has virtually eliminated significant adverse impacts of fishery harvest and hatchery programs on the ESU.
- Practical methodologies exist to materially improve the environmental conditions principally limiting productive capacity of the ESU.
- An extensive and diverse locally-based infrastructure of committed groups and individuals has demonstrated a decades-long track record of restoration commitment and action. The fiscal support for restoration efforts and infrastructure support in the ESU is likely to increase.