

15 December 2006



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Oregon Fish and Wildlife Commission
c/o Kevin Goodson
Oregon Department of Fish and Wildlife
3406 Cherry Avenue, NE
Salem, OR 97303

Re: PRC Comments on Oregon Coastal Coho Recovery Plan

Dear ODFW and Members of the Fish and Wildlife Commission:

Please accept this letter in comment on Oregon's Coastal Coho Recovery Plan, now under consideration pursuant to the Native Fish Conservation Policy. These comments review science-based issues raised in a separate submission that we urge the Commission to consider seriously. We further address policy-related aspects of the recovery plan.

I. SUMMARY OF SCIENCE-RELATED ISSUES

With respect to the critical underlying scientific issues, we bring your attention to comments submitted under separate cover by expert aquatic ecologists Dr. Chris Frissell, Gary Carnefix, Jack Williams and Peter Moyle, "Comments on the Science Underlying Oregon's Proposed Coho Restoration Plan," 15 December 2006 (19 pp).

We encourage you to consider the key messages from these comments:

- > The likely success of Oregon's Coastal Coho Recovery Plan is seriously jeopardized by the state's continued failure to recognize and address weaknesses in the Coastal Coho Status Assessment upon which the recovery plan is based.
- > The flaws in the underlying Status Assessment have translated into the Recovery Plan's faulty assumptions that: (1) existing freshwater habitat conditions are good enough to keep coho from going extinct, (2) existing regulatory standards are adequate, and (3) the restoration and improvement of freshwater habitat conditions is not a matter of great urgency.
- > A key unsupported scientific assumption concerns the ability of coho to survive and rebound from adverse conditions at low population numbers through rapid dispersal and recolonization. In fact, the population model that Oregon relies on ignores and is inconsistent with available, real-world observations about the true extent and persistence of local coho extinctions.
- > Oregon's recovery plan fails to recognize the importance of conserving local breeding populations (e.g. the small stream or reach level), a problem that also pervades the current

federal approach to salmon conservation, which emphasizes larger aggregations of populations, or “ESUs.”

- > Oregon’s recovery plan is also colored by the unsupported and unrealistic assumption that future environmental conditions never will get any worse than those seen in recent decades. Given global climate change trends and new information about ocean conditions, such as evidence of “dead zones,” this assumption is unjustified. A full examination of likely future conditions may indicate that Oregon coastal coho will need more high-quality habitat than is available to them in order to get through future bad episodes.
- > The Recovery Plan fails to recognize the critical need for an assessment of freshwater habitat condition and trend. Instead, the plan relies on the unfounded premise that because present-day land use practices improve over historical ones, habitat must be improving. This premise fails to account for the persistent legacy of past practices, of which roads are a prime example.
- > The Recovery Plan sets unrealistic expectations that the proposed monitoring will provide information adequate for managers to detect changes in coho population status and trend, and to adjust policies accordingly. There is no basis to find that the benefits of Oregon’s proposed incremental management changes will be discernible from biological monitoring without long periods of potentially irreversible harm, with progressive loss of habitat, population diversity, and productive capacity. The scientific literature supports a more cautious approach.
- > The quantitative targets in the Plan, including the poor ocean condition “doubling” goal and the spatial resolution of the Plan’s spatial distribution criterion, may be inadequate and/or in conflict with what we know about the functioning and scale of local population and habitat dynamics.

II. POLICY COMMENTS

A. The Recovery Plan is not Sufficiently Specific about how Proposed Recovery Actions will Achieve Plan Goals, and about how Progress Towards Meeting Goals will be Assessed.

The recovery plan in its current form does not clearly describe a road map to recovery. We note that the NFCP requires this recovery plan to identify and describe strategies and actions that address limiting factors. *See e.g.* OAR 635-007-0502 and -0505(5)(e). Although the plan references current regulatory programs, proposes more focused targeting of resources, and proposes voluntary programs and initiatives to secure increased and/or new funding, the plan is short on details about how certain key measures actually will address limiting factors.

For example, the Private Lands Initiative will be a GRNRO-led multi-agency program described as a, “powerful means of increasing the level of investment in effective voluntary habitat-improvement work on private lands in areas where the greatest benefit to coho salmon is likely to be achieved.” Plan at 6. But it is unknown 1) whether the HIP/HAP/CWHIP areas are valid, as work has yet do be done on validation, and 2) when needed actions can be accomplished by voluntary means and on what timeline.

B. Existing and Proposed Policies Applicable to Management of Nonfederal Forestlands do not Provide Adequate Certainty for Recovery of Oregon Coastal Coho and Freshwater Habitat

Pacific Rivers Council has been consistently critical of Oregon's Forest Practices Rules over the last eight years. We continue to believe it is a mistake for Oregon to set regulatory standards that are not demonstrably adequate to protect aquatic species and water quality at levels that prevent violations of the federal Endangered Species Act and the Clean Water Act. In our view, the ODF and industry desire for "regulatory certainty" (e.g. Plan Appendix 3, last page of ODF Private Forests Section) cannot be met unless federal sufficiency is squarely on the table.

We have opined on the deficiencies in Oregon's forest practices rules numerous times in various state and federal forums for nearly a decade. (A partial list of testimony and documents appears as Attachment A to this letter). PRC finds that the patent inadequacy of Oregon's Forest Practices Rules undermines the state's unfounded assumption that current habitat levels and trajectories are consistent with avoidance of coho extinction. A comprehensive review of issues of concern are included in July 2005, comments on Oregon's Final Coho Assessment, which comments are appended in their entirety as Attachment B.

In sum, PRC contends that:

- > Riparian protection is inadequate with respect to buffer size and vegetation removal limitations, particularly on small fishbearing streams where 20-foot no cut buffers meet basal area minimums, and on nonfishbearing streams where buffers are not required. These shortcomings are particularly important for coho salmon. We bring to your attention the recent publication based on Oregon coastal streams:

Wigington, P.J. Jr., JL Ebersole, ME Colvin, SG Leibowitz, B. Miller, B Hansas, HR Lavigne, D. White, JP Baker, MR Church, MA Cairns, and JE Compton.
Coho Salmon Dependence on Intermittent Streams, Fron Ecol Environ 2006 ; 4(10):513-518.
- > High risk sites that have the potential to deliver to streams should be targeted for vegetation retention.
- > The actual magnitude of regulatory improvements to forest practices over the last decade has been minimal, and there is no rational basis to conclude that they are adequate to remove actual on-the-ground and in-the-stream threats to coho.
- > Significant changes to the regulatory structure have actually weakened state oversight of private logging. State Forester approval of harvest plans has been eliminated via HB3264 in the state's attempt to evade federal ESA Section 9 take enforcement, gutting the state's ability to exercise effective oversight of logging through the approval and conditioning of written plans.
- > Wet-weather hauling rules have been implemented, but the extent to which these will reduce sedimentation to streams is unknown.

- > State Forester authority to direct minimal tree-retention in debris flow tracks is not likely to provide significant conservation benefit.¹
- > Over the last decade, although EPA and NOAA Fisheries have attempted to resolve technical issues and advise proposed changes to forest practices, both agencies have repeatedly declined to sign off on the sufficiency of the current program to meet either water quality standards or to prevent unacceptable take of coho salmon.

The effectiveness of current practices to control sediment-related water quality impacts is further called into question by a recent publication based on research in Washington State.

Rashin, Edward B., Casey J. Clishe, Andrew T. Loch, and Johanna M. Bell. *Effectiveness of Timber Harvest Practices for Controlling Sediment Related Water Quality Impacts*, Journal of the American Water Resources Association, pp. 1307-1327 (October 2006).

This research finds that the sediment and geomorphic effects of clearcut logging on unbuffered nonfishbearing streams were significant and inconsistent with water quality standards. Both ground-based and cable yarding on clearcut units without stream buffers leads to chronic sediment delivery, extensive streambed siltation, and direct physical disturbance of the streambed and banks, and clearcutting leads to longer-term sediment effects. *Id.* at 1315. The paper also indicates that BMPs which allow logging within steep inner valley slopes, selective logging of buffers in areas with a high density of unbuffered tributaries, and yarding in buffers do not protect water quality. *Id.* at 1314. The paper validates the ability of stream buffers that exclude most ground disturbance to prevent 95% of sediment delivery to streams from erosion that occurs outside a 10 meter (33 foot) buffer, and validates the need for buffers on nonfishbearing streams – which Washington has partially accomplished. *Id.* at 1324.

Importantly, the paper concludes, “to be consistent with the beneficial use provisions of water quality standards, forestry BMPs should recognize the intrinsic aquatic resource values of headwater streams, in addition to their influence on downstream waters.” *Id.* at 1327.

PRC urges the state to include as part of its recovery plan new regulatory measures that attach increased riparian vegetation retention requirements to high intrinsic potential areas and other priority areas for coho salmon, perhaps as part of the resource site protection program already included in the Forest Practices Act. We further urge the ODFW to consult closely with ODF and DEQ on the development of nonregulatory measures, such as wood placement, that are being designed to link to tradeoffs with regulatory requirements, and in the design of “restoration thinning” projects in the near stream area.

¹ Discretionary retention of 2 trees per acre at some tributary junctions will not significantly change the ecological impacts of debris flows to the benefit of fish and will allow continued resource degradation that cannot be adequately mitigated by making small debris-flow streams a monitoring priority. See e.g. NMFS and AFS Testimony on HB2163, April, 2001 Before the Senate Committee on Natural Resources, Agriculture, Salmon, and Water.

C. Water Quality and Private Agricultural Lands: Current Rules Are Inadequate and Lack Specificity

The state concluded in its assessment that modest improvement in riparian vegetation is likely to accrue on agricultural lands under current rules, acknowledging that considerable uncertainty exists regarding specificity of improvement. We find that the Agricultural Water Quality Management Program in Oregon in conjunction with DEQ technical assistance and incentives for voluntary action does not comprise an adequate salmon conservation program for agricultural lands.

Over the last decade, Oregon has made significant progress in recognizing and addressing the water quality and salmon habitat impacts of agricultural land use, and all 39 major Oregon watersheds now have Agricultural Water Quality Management Area Plans and implementing rules. PRC recognizes that these plans and rules represent hours of community involvement, and a major advance in public understanding and commitment to bringing agricultural practices in line with the needs of aquatic ecosystems. However, we also have significant concerns about the extent to which the program is capable of preventing continued harm to coho salmon and maintenance of degraded habitat conditions.

1. Rules are Difficult or Impossible to Enforce due to Excessively Vague and/or Subjective Compliance Criteria.

A cursory review of a few of the basin rules for agricultural water quality management reveals that despite the intent of these rules to be “enforceable,” the basin rules’ descriptions of how compliant and noncompliant conditions shall be determined are extremely vague and overly dependent on subjective judgments, and are undermined by open-ended exemptions.

For example, subjective judgment is required to interpret vague criteria such as those in the Umpqua, where “[m]inimal breaks in shade vegetation for essential management activities are considered appropriate.” What is a “minimal” break? What is an “essential” management activity? On the Mid-Coast, agricultural activities “must allow for the establishment and development of riparian vegetation consistent with site capability” and to “provide” riparian functions. However it is not clear what “consistent with site capability” means, or what level of shade, streambank stability, or sediment/nutrient filtration is expected. OAR 603-095-2240(2)(a).

Another example of standardless standards is provided by the North Coast rule on road-related erosion. While we support the intent of the rule in addressing sediment delivery from roads, the rule is not adequate to prevent harmful impacts because it merely requires road design and maintenance to “limit contributing sediment to waters of the state.” OAR 603-095-0840 (5)(b). Without further specificity on the “limit” intended, this rule appears virtually meaningless. We note that the Mid-Coast rules are far more informative about erosion in general, and that they describe relatively specific conditions representing unacceptable erosion, including the appearance of sheet erosion and visible active gullies. See OAR 603-095-22640(5).

Some exemptions are too open-ended. For example, livestock watering and crossing at streams is limited “to the amount of time necessary” in the North Coast, and all “accepted water dependent agricultural uses” are allowed so long as they “minimize impacts on stream stability” in the Coos/Coquille. In the Mid-Coast, the basin rule adds no guidance at all: all access for livestock is allowed, unless it violates the rule requiring compliance with the provisions of the operative statute. But the statute simply states a general prohibition on “pollution” and “discharges” that reduce quality below standards.

2. Agricultural Water Quality Management Rules Don’t Protect All Streams Affecting Coho Salmon, or all Streams to Which the Clean Water Act Applies

It is not clear that these rules protect all streams to which water quality standards technically apply, making them an inadequate compliance mechanism for water quality standards. For example, the Umpqua rules describe “unacceptable condition” of riparian vegetation as a problem only “along a perennial stream.” In Curry County, riparian vegetation conditions that provide bank stability and shade are not required on “[s]treams that do not support native trout and are inaccessible to anadromous fish because of barriers at their junction with the Pacific Ocean.”

We again refer to the conclusion of the recent paper by Rashin et. al. which notes that the Clean Water Act recognizes the intrinsic aquatic resource values of headwater streams. (Rashin et. al. 2006 at 1326). So should Oregon’s BMPs for all land uses.

3. Management Standards Focus on too Narrow a Definition of the Riparian or “Near Stream Management Area”

The agricultural rules pertain only to vegetative conditions within the “near stream management area,” which is defined as 25 feet from a perennial stream (e.g. OAR 603-095-0010(27)) -- an area which does not come close to capturing the area within which land use practices influence stream systems. This definition further excludes the nonperennial stream network from vegetation standards completely, despite the close ecological connection between upstream and downstream reaches. This narrow buffer is reduced further by defining the stream channel as ending at the “streambank” or ordinary high-water mark, rather than at the end of the channel migration zone which would be ecologically appropriate.

A wealth of literature validates our concern over this narrow definition of the near-stream management area and its inherent inadequacy to mitigate for the adverse impacts from large-scale agricultural management on aquatic ecosystems. A 25-foot buffer is potentially capable of significant benefit for bank stability and partial benefit for sediment/nutrient filtration and shade, but it is wholly inadequate to mitigate for changes in the hydrologic regimes and to provide adequate riparian large wood sources.

4. Some Standards Simply Set Too Low a Bar.

For example, numerous basin rules imply that stream systems on agricultural lands can’t be expected to meet condition targets after large storm events, which are more intense than a 25-

year storm event. We believe that Oregon's expectations for resilience from natural disturbances on managed agricultural lands are too low to be consistent with healthy conditions for coho and other aquatic species.

The agricultural rules do not make land managers responsible for adverse conditions that are revealed after large storms, i.e. greater than a 25-year event. This approach does not recognize that watershed resilience is an excellent indicator of successful watershed restoration. It is possible to recognize the pulses of sediment and the potentially extreme geomorphic changes that naturally accompany storms without laying undue blame or pointing fingers at managers, but it is also possible to assess the extent to which conservation strategies are inadequate to protect ecosystems functions by assessing the impacts of large storm events.

We suggest that management measures applicable to agricultural lands should be designed such that it is possible to describe some reasonable expectations that would apply even after larger storm events, e.g. 100-year storms.

D. Changes in Federal Land Management Could Undermine Effectiveness of Aquatic Conservation Strategy on BLM and Forest Service Lands; Funding and Leadership for Roads Restoration a Key Concern

The most recent draft of the recovery plan correctly recognizes that federal lands management is a cornerstone of coho recovery, despite the fact that federally managed lands are only 20% of currently occupied habitat. This is true both because of the extent to which federal lands currently serve as refugia for salmon displaced from otherwise more attractive lowland habitats, and because of the influence of headwater streams on downstream reaches, specifically the important role headwater streams play for coho. (Wigington et. al. 2006).

The good news is that initial monitoring demonstrates that watershed conditions are improving overall within the range of the NWFP; the bad news is that the signal is weak or nonexistent at the watershed level. PRC suggests that the extent to which the watershed restoration goals of the plan are being met through adequate federal leadership and funding should be addressed in Oregon's recovery planning effort. (See e.g. Reeves, G.H., J.E. Williams, K.M. Burnett, and K. Gallo. 2006. The Aquatic Conservation Strategy of the Northwest Forest Plan. Conservation Biology 20:319-329.).

We further note, with alarm, that the BLM is in the process of revising their land use plans for all of the public lands in western Oregon. Protection of smaller stream systems was a critical component of the ACS, but the current draft EIS for the BLM's land use changes analyzes three action alternatives, two of which would "apply new criteria for designating the width of riparian management areas" and would likely result in much less riparian zone protection that is required under current BLM plans pursuant to the Northwest Forest Plan. In fact, all 3 action alternatives being considered by the BLM would greatly diminish the protection for these streams. This appears to be new information that is not completely considered in Oregon's draft plan.

The NWFP ACS recognizes that the most important components of watershed restoration include "control and restoration of road-related runoff and sediment production," and that "[w]atershed restoration is designed to address past disturbances by treating roads

(decommissioning, upgrading, modifying drainage, etc.).” One of the ACS’s nine objectives is to “maintain and restore the sediment regime under which aquatic ecosystems evolved,”² an objective that can only be accomplished if federal land managers make road restoration a priority; maintain not only roads used for timber haul, but the entire road system; and monitor roads after work is completed to ensure that adverse effects are fully minimized.

Unfortunately, although this work has progressed in some Oregon forests and BLM districts, only a fraction of the road restoration work identified to date has been accomplished. For example, in the Five Rivers watershed of the Alsea Basin in Oregon, the Forest Service and partners have completed only about one-third of the projects detailed in the landscape management plan for the area, and other watersheds in the Alsea have received far less attention; and a projected \$14.4 M are still needed for high priority work in the Alsea Basin.³

It is encouraging that roads impacts are the focus of much of the watershed restoration work that is being accomplished. During 2003-2005, Congressional Earmark and other funding was available for fish passage restoration at 90 road-stream crossings in Oregon and Washington, restoring 159 miles of habitat.⁴ In the Pacific Northwest Region (6) of the Forest Service, approximately 60% of available funds for restoration is being spent on roads.⁵ However, 60% of a small and shrinking pie is not a big slice.

It is important to footnote this discussion with the observation that PRC staff field assessments of projects completed in recent years indicate that even where substantial investment has been made by federal agencies under various authorities, design and execution of projects are commonly inadequate to mitigate the many important road impacts.⁶ This outcome seems to reflect both limited expertise in design and implementation of projects, and an institutional bias toward investing in practices that improve road surfaces for traffic or improve streams crossing for fish passage, while neglecting obvious opportunities to decouple road drainage from the stream network and reduce failure risk at stream crossings and other hazard sites. Hence from a watershed resource point of view, a large portion of the reported road treatments can be considered ecologically ineffective. Besides problems of professional capacity, implementation failure reflects a lack of clear objectives and performance standards in current policy governing road management.

PRC is currently evaluating Oregon’s roads program and will share our review once it is complete.

III. CONCLUSION

Oregon’s draft plan is a step in the right direction because it calls for restoration of coho populations and sets out specific measurable criteria that must be achieved. However, the actions set forth to meet these goals are inadequate. The coho deserve more. The draft coho plan

² Northwest Forest Plan Record of Decision at B-11.

³ Bahls, Peter. Alsea Basin Case Study, April 2004 (on file with Pacific Rivers Council).

⁴ USDA-FS, “Restoring Fish Passage and Road-Stream Crossings: 2005 Accomplishment Report,” (2005).

⁵ David Heller, Regional 6 Fisheries Director, Personal Communication, 9/10/2006.

⁶ PRC, Photo Reconnaissance of Roads Restoration in the Biscuit Burn Area, Draft Report, 2006.

http://www.pacrivers.org/DRAFT_Biscuit_photo_summary.pdf

suffers from a serious flaw that results in an underestimation of the need for more specific, immediate actions to conserve and restore the coho. The claim that Oregon's current land use regulatory framework will protect coho populations and their habitat from further decline and degradation is not supported by the best available scientific data. This claim is premature and places the risk of error on imperiled coho populations. Certainly, the state and private landowners have engaged in a large number of conservation and restoration actions since the implementation of the Oregon Plan. However, it is critical that the state demonstrate the effectiveness of these measures on the ground. Coho are not out of the woods yet.

Respectfully submitted,

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Senior Policy Analyst

cc: Mike Carrier, Governor's Natural Resources Office