Council Action Requested: Oregon Board of Forestry in Process of Determining Stream Buffers Needed to Protect Coldwater for Salmon

Issue Summary

Results from long-term research and recent lawsuits have compelled the Oregon Board of Forestry (Board) to contemplate the most significant improvement in private forestland stream protection in over 20 years. Both the Environmental Protection Agency (EPA) and NOAA have stated that stream buffers (streamside protected areas) under the Oregon Forest Practice Act are inadequate to meet state and federal water temperature standards for salmon, steelhead and bull trout. The graphic below illustrates that Oregon's logging rules governing timber harvest on private lands provide significantly less stream protection than those in Washington and California.¹ Oregon's riparian protections are also weaker than protections in Idaho.



The Board's decision will affect the size and extent of riparian buffers for small and medium salmon, steelhead, and bull trout streams on 6.8 million acres of privately-owned timberland in western Oregon. Also at issue is the appropriate distance above these streams to provide riparian protections in order to minimize downstream temperature effects. The amount of land that could be included in the proposed buffers constitutes less than one-half of one percent of the total private forested lands.

The current 20' buffers on Oregon's private forested lands are inadequate to protect cold water for salmon, steelhead and bull trout. An Oregon Department of Forestry (ODF) peer-reviewed

study known as RipStream² shows that Oregon's current forest practices rules allow logging too close to small and medium fish-bearing streams to prevent measurable warming from individual harvest units, in violation of a state and Federal water quality standard that protects cold water stream reaches for salmon, steelhead and bull trout (the "Protecting Coldwater Criterion," known as the PCW]³). Buffers that meet the PCW are feasible and are in line with practices adopted by neighboring states. A subcommittee of the Board will deliberate and select options in late September. The full Board is expected to decide on buffer size at their meeting in November.

This decision represents an important opportunity to affect forestry practices in Oregon and significantly improve habitat conditions for salmon, steelhead and bull trout in western Oregon. According to the Magnuson-Stevens Fishery Conservation and Management Act, the Council "must" comment on issues likely to significantly impact salmon under essential fish habitat (EFH). Streamside buffers are included in the Council's definition of EFH for salmon.

Best Available Science

In 2012, on the basis of the RipStream study, the Board of Forestry determined that current rules allow removal of too many trees in the riparian buffer area, allowing stream warming that violates PCW⁴. Logging down to the minimum buffers under current rules is now understood to cause warming of about 1.45 degrees Celsius, on average. The warming limit for any single land use activity is 0.3 degrees Celsius.

Over the last four years, ODF has developed an analytical model based on RipStream to evaluate how wide a no-harvest riparian buffer strip is needed to meet the PCW standard. While current requirements often result in just 20 feet of trees left next to streams, ODF analysis shows that to prevent stream warming with a high probability (~85%), at least a 100 foot no-cut buffer is needed. (A 90-foot buffer would prevent warming about 50% of the time, and a 120-foot buffer would ensure no temperature impacts virtually 100% of the time). Despite this information, the Board may find it difficult to take the necessary action for political reasons. Because of EFH obligations, the Council represents an important voice for the fishing industry in the Board deliberations, making it critical that the Board hear from the Council.

Action Requested:

The Habitat Committee requests that the Council send a letter supporting at least a 100 foot buffer and calling for extension of this buffer to upstream reaches (beyond salmon distribution) to prevent downstream warming impacts on EFH. (Current rules require no protections on these reaches).

Attachment 1

A Brief Legal Background

The need to increase stream protection from logging on private lands has long been acknowledged by the state's own science team⁵ and a host of Federal agencies in connection with Endangered Species Act salmon listings⁶, water quality standards compliance under the Clean Water Act⁷, and coastal water pollution control under the Coastal Zone Management Act⁸. For example, National Marine Fisheries Service identified private lands logging as a key limiting threat to Southern Oregon/Northern California Coastal coho (SONCC) when it was listed in 1997 as threatened⁹. A 2009 status review later found that "the Oregon Forest Practice Rules represent the least conservative forest practice regulations administered by the state governments within the SONCC coho salmon evolutionarily significant unit," and that "[on] some streams, forestry operations conducted in compliance with this act are likely to reduce stream shade, slow the recruitment of large woody debris, and add fine sediments."¹⁰ In January 2015, NMFS and the Environmental Protection Agency (administrator of the Clean Water Act) disapproved Oregon's coastal water quality program largely due to poor stream protection on private lands. Continued failure to correct these problems will lead to loss of over \$2 million in federal funds annually.¹¹

Meeting the PCW will, on the other hand, positively influence other legal processes including: Coastal Zone Management Act Reauthorization Amendments, NMFS coastal coho review and recovery planning, EPA-NOAA Section 7 Consultation on temperature standards, and the Bureau of Land Management western Oregon Plan revision.

¹ Washington's rules are two to three times more protective of streams than Oregon's rules. See for example "Effect of logging incident on city's drinking water spotlights forest rules," http://tinyurl.com/oywzsph, quoting EPA senior staff D. Powers comparing the two states' logging rules. See also Olsen et al. 2007 at page 92 for a comparison of forest practices policies in the Pacific Northwest ("Biodiversity management approaches for stream–riparian areas: Perspectives for Pacific Northwest headwater forests, microclimates, and amphibians"), and many others.

² Groom et al. 2011, Response of Western Oregon (USA) stream temperatures to contemporary forest management, Forest Ecology and Management, 262: 1618-1629.

³ The PCW prohibits a 0.3° C or greater increase in stream temperature from logging on certain fish-bearing streams. *See* Subsections (a) and (c) of OAR 340-041-0028 (11). See also ODEQ, 2011. Internal Management Directive: Nonpoint Source Compliance with the Protecting Coldwater Criterion of the Temperature Standard (http://tinyurl.com/pkm46jh)

⁴ The Forest Practices Act makes it very difficult to change the water protection rules that govern logging near streams on private land: there must be an affirmative finding of resource degradation for the Board to increase logging restrictions to protect environmental values. A finding that a water quality standard is not met by the rules is legally adequate to serve as a resource degradation finding. (6/23/14 statement of counsel at Board Riparian Rules Workshop).

⁵ Independent Multidisciplinary Science Team. 1999. Recovery of Wild Salmonids in Western Oregon Forests: Oregon Forest Practices Act Rules and the Measures in the Oregon Plan for Salmon and Watersheds. Technical Report 1999-1 to the Oregon Plan for Salmon and Watersheds, Governor's Natural Resources Office, Salem, Oregon. http://www.fsl.orst.edu/imst/reports/1999-1.pdf (including recommendations to increase tree retention in riparian buffers, and to apply buffers to medium and small non-fishbearing streams).

⁶ See for example NOAA-NMFS, 2010. 75 Federal Register 29489-29506 Listing Endangered and Threatened Species: Completion of a Review of the Status of the Oregon Coast Evolutionarily Significant Unit of Coho Salmon; Proposal to Promulgate Rule Classifying Species as Threatened (May 26, 2010). http://www.gpo.gov/fdsys/pkg/FR-2010-05-26/html/2010-12635.htm. Based on the science team's review of the status of Oregon Coast coho salmon, NOAA made findings in this proposed rule (final as of June 20, 2011) regarding the adequacy of the Oregon Forest Practices Act's administrative framework to protect coho salmon, specifically identifying uncertainty over whether the widths of riparian management areas are sufficient to fully protect riparian functions and stream habitats; whether operations allowed in riparian areas degrade stream habitats; what operations are appropriate on high-risk landslide sites; and whether watershed-scale effects, including those from roads, are adequately controlled. NOAA's conclusion was that "[b]ased on the available information, we are unable to conclude that the Oregon Forest Practices Act adequately protects [Oregon Coast] coho habitat in all circumstances. On some streams, forestry operations conducted in compliance with this act are likely to reduce stream shade, slow the recruitment of large woody debris, and add fine sediments. Since there are no limitations on cumulative watershed effects, road density on private forest lands, which is high throughout the range of this ESU, is unlikely to decrease." (FR at 29499-500). See also Stout et al. 2011. Scientific conclusions of the status review for Oregon Coast coho salmon (Oncorhynchus kisutch). Draft revised report of the Oregon Coast Coho Salmon Biological Review Team. NOAA/NMFS/NWFSC, Seattle, WA.

⁷ EPA and NOAA-NMFS. June 12, 2008. NOAA and EPA Preliminary Decisions on Information Submitted by Oregon to Meet Coastal Nonpoint Program Conditions of Approval (12 pp) ("Oregon lacks adequate management measures under the Oregon Forest Practices Act rules for protecting water quality;" "Oregon still lacks adequate measures for protecting riparian areas of medium, small and non-fish bearing streams, high risk landslide areas, and for addressing the impacts of legacy roads. A broad body of science continues to demonstrate that the FPA rules do not adequately protect water quality;" "While we acknowledge Oregon's extensive voluntary efforts, and its incremental progress on the regulatory front, NOAA and EPA do not believe the progress made is adequate... additional revisions to Oregon's Forest Practices Act rules are needed to fully protect water quality and beneficial uses." (pp. 10-12).

⁸ See for example 2010 Oregonian Article on Coastal Zone Lawsuit (http://tinyurl.com/onwfmvu); also see Frissell Declaration supporting Coastal Zone Act Reauthorization Amendments disapproval (http://tinyurl.com/nwy2h7v)

⁹ National Marine Fisheries Service. 2014. Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (*Oncorhynchus kisutch*). Arcata, CA. http://www.nmfs.noaa.gov/pr/recovery/plans/cohosalmon_soncc.pdf

¹⁰ NMFS 2009; NMFS 2014 (SONCC Recovery Plan, Chapter 3).

¹¹ NOAA Press Statement on Oregon Coastal Disapproval (http://tinyurl.com/ncljdg9); Federal Determination January 2015 (http://oregon-stream-protection-coalition.com/resources/federal-determinations/); 2010 Oregonian Article on Expected Federal Disapproval (http://tinyurl.com/onwfmvu)