

**Logging Allowed by Current Rules Causes Harmful Stream Warming** Larger stream buffers needed to protect salmon and other aquatic species

Governor Brown's leadership is needed to help the Oregon Board of Forestry stand up to the timber lobby and propose adequate logging rules to protect streams on private timberlands covering 10.6 million acres statewide. Conservation and fishing groups are concerned that what promises to be the most significant change to Oregon's forest practices rules in over 20 years will fail to meet its objectives because buffers will be too small and apply on too few streams. Governor Brown can help by conveying that she is serious about bringing Oregon's forest practices rules up to snuff.

### BACKGROUND

Conservation of cold water is a fundamental goal of Oregon's water quality standards that is critical to species conservation and recovery in the face of climate change. Many Oregon streams already are too warm and exceed temperature standards required by the Clean Water Act because of land use impacts. Warm streams can stress or kill native fish and other aquatic species, help spread invasive species, and promote extinctions.

The need to increase stream protection from logging on private lands has long been acknowledged by the state's own science team<sup>i</sup> and a host of federal agencies in connection with Endangered Species Act salmon listings,<sup>ii</sup> water quality standards compliance under the Clean Water Act,<sup>iii</sup> and coastal water pollution control under the Coastal Zone Management Act.<sup>iv</sup>

For example, National Marine Fisheries Service (NMFS, the agency responsible for ocean-going fishes) identified private lands logging as a key limiting threat to Southern Oregon/Northern California Coastal (SONCC) coho when it was listed in 1997 as Threatened. <sup>v</sup> A 2009 status review found that: "... the Oregon Forest Practice Rules represent the least conservative forest practice regulations administered by the state governments within the SONCC coho salmon ESU, " and that "[o]n 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."<sup>vi</sup>

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.<sup>vii</sup>

Nonetheless, since 1994 no changes have been made to the size of riparian buffers the limitations on logging within buffers.



## WHY IS THE BOARD CONTEMPLATING NEW RULES NOW?

On the basis of a study called "RipStream,"<sup>viii</sup> the Board of Forestry determined that current rules allow removal of too many trees in the riparian buffer area, allowing stream warming that violates a water quality standard called the "Protecting Coldwater Criterion" (PCW), <sup>ix</sup> a Department of Environmental Quality (DEQ) standard intended to protect cold streams from heating up.<sup>x</sup> Logging down to the minimum buffers under current rules is now understood to cause warming of – on average – about 1.45 degrees C. The standard is .3 degrees C.

Oregon's Forest Practices Act requires that the Board's logging rules meet water quality standards developed by DEQ.<sup>xi</sup> The presumed adequacy of the rules to protect water quality is why landowners can't be prosecuted by DEQ for water quality standards violations if they comply with the rules. Inadequate rules could leave landowners vulnerable to water quality enforcement.

### WHAT DOES THE SCIENCE TELL US IS NEEDED?

ODF scientists have developed an analytical model to identify how many trees are needed to meet the PCW standard. Whereas current requirements often are limited to just leaving 20 feet of trees in the riparian buffer. ODF analysis shows that in order to prevent stream warming the equivalent of about a 100 foot no-cut buffer is needed.

### HOW CAN WE KEEP THE BOARD ON TRACK?

The Board of Forestry is under extreme pressure from the timber industry to minimize changes to the status quo. Conservation and fishing groups are concerned that the state will elect to enact buffers that are too small (75 feet is not enough) and/or that improved buffers will only apply to a small subset of the streams that need them (if only applied to "salmon, steelhead and bull trout reaches" 25% or less of streams to which warming limitations apply will benefit).

Robust riparian protection is needed now on at least all perennial fish-bearing streams in western Oregon, with a clear plan for improving protection on all perennial nonfish streams and in Eastern Oregon in the near future.



# How do Oregon Stream Protection Rules Stack Up?

Oregon's logging rules governing timber harvest on private lands provide significantly less stream protection than those in Washington and California.<sup>xii</sup>





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Stream buffers on industrial forestlands, Douglas County, Oregon. Oxbow Creek, Section 8, T.20S, R.7W along BLM road 19-7-25.1 These appear to be large post fire salvage units. "Watershed conditions are highly sensitive after wildfire (Beschta et al. 2004) and present stream and soil protection rules are grossly inadequate to prevent logging-related harm to adjacent and downstream waters." Beschta, R.L., J. J. Rhodes, J.B. Kauffman, R.E. Gresswell, G.W. Minshall, J. R. Karr, D.A. Perry, F.R. Hauer, C. A. Frissell. 2004. Postfire Management on Forested Public Lands of the Western United States. *Conservation Biology* 18: 957–967.



<sup>&</sup>lt;sup>i</sup> 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.

<sup>ii</sup> 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 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 (1) whether the widths of riparian management areas are sufficient to fully protect riparian functions and stream habitats; (2) whether operations allowed in riparian t areas degrade stream habitats; (3) what operations are appropriate on high-risk landslide sites; and (4) whether watershed-scale effects, including those from roads, are adequately controlled. Conclusion was that "[b]ased on the available information, we are unable to conclude that the Oregon Forest Practices Act adequately protects OC 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)

<sup>iii</sup> 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 (FPA) 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 FPA rules are needed to fully protect water quality and beneficial uses." (pp. 10-12).

<sup>iv</sup> See e.g. <u>2010 Oregonian Article on Coastal Zone Lawsuit</u>; See e.g. <u>Frissell Declaration supporting CZARA disapproval - OR</u> <u>Logging Rules-3-14-14.pdf</u>

<sup>v</sup> National Marine Fisheries Service. 2014. Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (*Oncorhynchus kisutch*). National Marine Fisheries Service. Arcata, CA. http://www.westcoast.fisheries.noaa.gov/protected\_species/salmon\_steelhead/recovery\_planning

and implementation/southern oregon northern california coast/southern oregon northern california coast salmon recovery domain.html vi NMFS 2009; NMFS 2014 (SONCC Recovery Plan, Chapter 3).

<sup>vii</sup> <u>NOAA Press Statement on Oregon Coastal Disapproval</u>; <u>Federal Determination January 2015; 2010 Oregonian Article on</u> <u>Expected Federal Disapproval</u>

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

<sup>ix</sup> 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. <u>Internal Management Directive: Nonpoint Source</u> <u>Compliance with the Protecting Coldwater Criterion of the Temperature Standard</u>

<sup>x</sup> 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).

<sup>xi</sup> The Oregon Forest Practices Act requires the Board to: "establish best management practices and other rules applying to forest practices as necessary to insure that to the maximum extent practicable nonpoint source discharges of pollutants resulting from forest operations on forestlands do not impair the achievement and maintenance of water quality standards established by the Environmental Quality Commission for the waters of the state." ORS 527.765. It is the purported sufficiency of the rules that justifies exemption of logging operations from direct enforcement by DEQ against landowners and operators for standards violations. ORS 468B.110(2).

x<sup>ii</sup> Washington's rules are two to three times more protective of streams than Oregon's rules. *See for example* <u>http://www.deq.state.or.us/wq/dwp/docs/TurbidityReports/Effect of logging incident Falls City.pdf</u> (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 (article entitled *Biodiversity management approaches for stream–riparian areas: Perspectives for Pacific Northwest headwater forests, microclimates, and amphibians*), and many others.

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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).