

Science and Oregon Forest Practices Rules

or

The Tale of the Frightened Tortoise and the Hare in Manacles.

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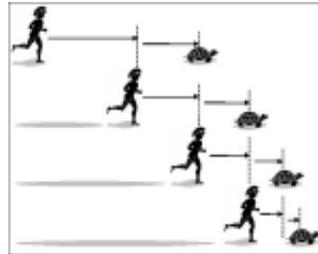
My experience with science and Oregon Forest Practices policy dates to *ca.*1990

- PhD Research SW Oregon 1987-92
- 1990 OPB OR Field Guide: South Coast Streams
<http://www.opb.org/television/programs/ofg/>
- OR legislative testimony on forest practices adequacy 1991-2
- Oregon DEQ, 1992-96: Temperature Standards Triennial Review (birth of PCW standard)
- Oregon Dept. of Forestry, 1990-96: Technical Advisory Group for the Forest Practices Monitoring Program; Wetlands Technical Group; Slope Stability Technical Committee.

Review of Scientific Adequacy of Oregon Forest Practices Rules

- Google "Frissell 2014 CZARA"
- Or go to link:

<http://northwestenvironmentaladvocates.org/blog/wp-content/uploads/2014/03/Declaration-of-Christopher-Frissell-3-14-14.pdf>



CZARA Report on Oregon Forest Practices: summary

- OAR 629-635-0310, current Oregon Forest Practices Rules medium size fish-bearing streams Riparian Management Area width of 70 feet, 50 feet for "small" fish-bearing streams, with thinning allowed.
- CONCLUSION: Rules inadequate to: protect stream temperature, large woody debris sources, sediment and nutrient retention, soil erosion and landside prevention, and buffering from aerially applied chemicals.

POLICY FAILURE: Standard tactics to delay action responsive to new scientific information

- Discredit sources (geographical, professional, personal).
- Seek out all seemingly conflicting information from other studies, regardless of appropriateness, e.g., paired watershed studies.
- Raise bar and reject all data not peer-reviewed.
- 'Improve' science because it's 'too important' to act on.
- Focus on direct foregone costs to one interest and ignore costs and benefits to other parties & resources.
- Fragment and incrementalize rulemaking, ensuring no rule change ever solves multiple problems.
- RESULT: SCIENCE POLICY GAP = Litigation Opportunity

'Ripstream' Research TimeLine:

- Brazier & Brown report 1973
- OSU Fleuret M.S. Thesis May 2006
- ODF staff report covering results 2007
- ODF collaborates to "improve" research 2007-2014
- Groom et al. peer-reviewed journal articles: 2011
- Groom-ODF staff report to Board of Forestry Sept 2014
- ODF Staff Proposed Action to Board pending, maybe *ca.* June 2015.

ODF staff Monitoring Report 2007: 'Ripstream' results re. shade loss

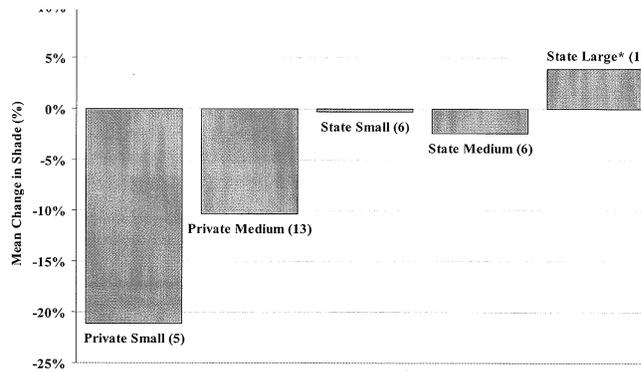
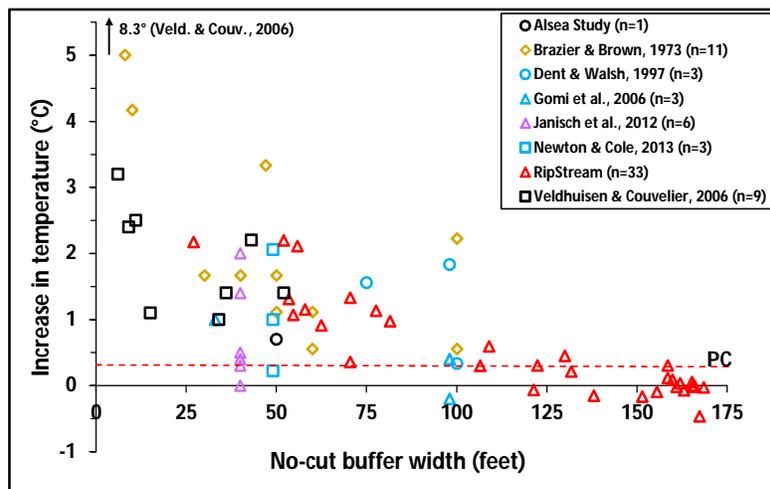


Figure 1. Mean percent change in shade between control and treatment reaches pre- to post-harvest ($(\Delta_{Pre-Post} Control) - (\Delta_{Pre-Post} Treatment)$) by ownership and stream class (sample size in parenthesis). *Stream class transitioned from a Medium to a Large through the harvest unit. The applied riparian management prescription was

Ripstream results presented in 2014 Post-logging change in temperature v. riparian buffer width



Multiple Resource Solution?

- 'Ripstream' results: significant percentage of streams violate Oregon's Protecting Cold Water Standard even with 100-foot no-cut buffers (*data showed this by 1973*).
- 125-150 ft no-cut buffers necessary to ensure >90% PCW temperature compliance.
- 150 ft would approach 90% retention of nutrient pollutants and surface-erosion-derived sediment at issue in TMDLs, & greatly reduce toxic chemical penetration to surface waters.

150-foot headwater Riparian Forest Buffers:

- 150–no cut buffers on all stream types, including headwater seasonal streams, are necessary to achieve all intended functions of streamside buffers (=the BMP)
- Note this exceeds even NW Forest Plan FEMAT protection for headwater streams, but comports with fish species viability ratings from FEMAT expert panels (i.e., <150ft headwater stream protection for federal lands in 1996 was a political decision, not a scientific one).

