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To: Dept of Ecology
August 11, 2025

re: Proposed rule change Tier 2 review.
of the proposed rule to increase buffer widths by 25 feet to 75 feet. The Tier 2 review was published online July 2025. Publication 25-10-041

What does the rule say?

The proposed rule language says that if the harvest is larger than 30 acres and 85% of the basin is cut, then a 2 sided no harvest buffer of 75 feet is required.

Where do I learn more?

See Ecology's draft analysis at: <https://ecology.wa.gov/blog/july-2025/how-can-we-protect-cool-water-in-western-washington-s-forest-streams> and comment online there.

Also see" <https://ecology.wa.gov/water-shorelines/water-quality/nonpoint-pollution/forestry-runoff>

R W 76.09.040(1)(b)

What is ia Tier 2 review supposed to do?

Public interest includes environmental impacts, with emphasis on the protection, restoration, and recovery of threatened and endangered species; environmental justice; implications for public health and safety; aesthetic, recreational, and economic effects; and impacts on publicly owned resources and facilities. The public interest can also be presumed to be reflected in watershed plans, ground water area management programs, related water supply plans, water conservation plans, Ecology administrative rules, and local land use plans and development regulations¹.

I thank you for doing the Tier 2 review. I understand that Tier 2 is done because logging in riparian zones lowers water quality. And the lowering of water quality won't be 100% prevented by just a 75 foot buffer. (page 52 of Pub 25-10-041). On a related note, according to page 81 of Pub 25 -10-041, 100-foot buffer would reduce the likelihood of degradation. Thjis buffer was used as a 'less degrading alternative' for the purposes of necessary and overriding public interest.

What is one organism that occupied a log in a buffer (35 meters on one side, 60 meters on other side) of a steam?

Salamanders, like the Van Dyke salamander. Beautiful golden salamander of the Olympics, cascades and southwest Washington. Lived in a log that had cool moist microclimate. Very pretty things. Nice to know rare species are yet alive.



Figure 1. Van Dyke's Salamander incubates eggs at ~ 11 C for > 144 days in Olympics!

What other organisms may benefit from watershed protections?

Steelhead, which is proposed for listing https://wildfishconservancy.org/wp-content/uploads/2022/09/TCA-WFC_OP_Steelhead_Petition_FAQs_Final.pdf. A full list of aquatic dependent organisms. Humans.

¹ (Ecology publication 24-11-101, 90.48.020, 90.54.020)

A 75 foot buffer may not cool soils in the riparian zone. harvesting even 180 meters away from a stream affect soil temperatures?

Yes. Activity in the watershed even 180 meters from a stream may affect microclimate even if the buffer is left intact. There is a strong relationship between soil temperatures and water temperatures². Red-legged frogs in summer need cool moist soil.

What is in the public interest for views or aesthetics?

People really prefer dispersed trees instead of aggregated geometric shapes. In fact, its pretty devastating for people to see the change from a forest or woodland to a clearcut with retention called aggregated geometric shape. The 'aggregated straight lines of a riparian buffer are not aesthetic. See figure 3 of Ribe 2005 for how significant the effects of dispersed v. aggregate are. And, Jay Appleton's The Experience of Landscape. More references are here³

I ask Ecology to leave some trees outside that 75 foot buffer to protect views and water.

Requiring some retention outside a 75 foot buffer would improve on an Executive Order on July 3, 2025 to 'Make America Beautiful Again.. This order said to develop a commission to policies to expand access to nature, develop policies to recover fish and wildlife populations through collaboration rather than regulation including policies involving coordination with State wildlife agencies and restoring of aquatic ecosystems to improve water quality and availability. To meet aesthetic criteria, retain trees out in the clearcut beyond the 75 foot buffer in a dispersed pattern. It would be nice to be able to recover fish and wildlife populations by collaboration. It was beautiful to see large bald cypress save lives on July 4, 2025.

Is it all that hard to protect more than 75 feet?

Many large and small private timberland owners protect 'more' than 75 feet. Some protect to the valley wall. Others have Habitat Conservation Plans which are 'Incidental Take Permits.

Would the 75 foot buffer and harvest of 85% of a watershed protect downstream fish?

The rule change allows 85% harvest and a 75 foot buffer. There is some evidence that we need to leave more than 85%:

A measurable increase in peak flow is detected if as little as 29% of a watershed is cut⁴ (Grant et al 2008 <https://research.fs.usda.gov/treesearch/30179>). And excessively high winter flows displace coho juveniles⁵, Research on Kennedy Creek showed there can be scour and fill (and chum egg mortality) during a peak flow

² Harvesting effects on microclimate gradients from small streams to uplands in Western Washington. Brosnoks, Chen and Franklin. 2010.

³ 1 Ribe RG. 2005 Aesthetic perceptions of green-tree retention harvest. The interaction of cut level, retention pattern. 2005

2 <https://www.whitehouse.gov/presidential-actions/2025/07/establishing-the-presidents-make-america-beautiful-again-commission/>

3 https://dnr.wa.gov/sites/default/files/2025-07/em_obe_june2025_forecastreport.pdf

⁴ (Grant et al 2008 <https://research.fs.usda.gov/treesearch/30179>).

⁵ Cederholm and Bisson

(https://www.fs.usda.gov/pnw/lwm/aem/docs/bisson/1997_bisson_response_of_juvenile_to_lwd_in_coastal_streams and <https://apps.ecology.wa.gov/publications/documents/0411007.pdf>

interval of 1.4 years⁶ That seems so very frequent.

One can hear the rocks rolling down the streams. Like at McLane and Beatty Creek in WRIA 13 and wonder if it happens elsewhere. Please see the blog⁷ on 08/15/2015 and visit Beatty Creek that enters. So when a lot of sediment rolls downstream such gravels can make nice spawning areas. They can also force the water to sub out. This compounded with prolonged drought now being recorded should make one consider flow a bit more.

Can a landowner do a watershed analysis to address site-specific situations where coho or steelhead may be right downstream of this?

so much of the watershed processes are site-specific Watershed analysis of smaller basins is allowed (WAC 222-22-020).

Comments on economic analysis

Please

consider how timberland owners make more \$ for stumpage when demand is high. A June 2025 report by DNR says that timberland owners can usually wait to harvest until prices get better⁹

So what is it that makes prices 'get better'? Is it restrictions on harvest or is it demand for lumber?

Some answers are in the 2022 Mason, Bruce and Girard, Inc 2022 which describes the stumpage sales and total jobs in 2021. But, in 2021, we had a global event that changed demand for wood. People stayed home. Home Depot sales of lumber skyrocketed in 2022. Demand went up. As did what timber sellers could sell timber for. Check DNR timber sale prices in 2021, 2022, 2023. In 2022, the demand for timber was high. Timberland owners made more. It does seem appropriate to analyze whether more availability or less availability benefits timberland owners, especially large landowners. I believe that a 75-foot buffer does not jeopardize the economic viability of the timber industry while contributing to measures to meet salmon recovery (RCW 76.09.370).

What did our governor say about fully functioning riparian habitats in 2021?

In 2021 the governor said we'd

all establish state-wide standard for fully functioning riparian habitats where riparian areas are critical to maintaining cool water temperatures and we'd prioritize funding for stream flow and floodplain habitat⁸ Fully functioning may mean more than a stream temperatures?

Does a 75 foot buffer protect game species?

Clearcuts that harvest 85% of

a watershed may not help the huntable wildlife, namely bear and elk. For bear, escape cover should be within less than 100 yard⁹s. For elk, distance to a given edge should be less than 200¹⁰ meters We see bear using small ponded seeps in forest. Given hunting pressure, I can't imagine bear and elk being way out in the open. We see them in or near dense forests on east side of Capital forest. Near cover. It is in the public interest to maintain huntable populations of game.

⁶ Stream-bed scour, egg burial depths and the influence of salmonid spawning on bed surface mobility and embryo survival. Montgomery DR, JM Buffington, NP Peterson, D Schuett-Hames and TP Quinn. 2019

⁷ on 08/15/2015 of last page of <https://watershedevents.typepad.com/watershedevents/beatty-creek>

⁸ (page 5 - 6 of) <https://rco.wa.gov/wp-content/uploads/2021/12/GSRO-GovSalmonStrategy-2021.pdf>).

⁹ page 118 of https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd1204314.pdf

¹⁰ https://www.fs.usda.gov/pnw/pubs/pnw_gtr218.pdf

8) State revenue. Please protect the revenue generated from hunting and fishing and outdoor recreation. In 2022, 9 billion was spent on hunting fishing and wildlife recreation in Washington, generating 630 million dollars in tax revenues to general fund. This 9 billion in sales generated 630 million in tax revenues to the general fund, dwarfing the ~35 million in revenues distributed to counties from timber excise taxes¹¹.

Does leaving more trees reduce turbidity?

I don't know but we do see a lot of turbidity in some streams like Stony Creek, tributary of Dempsey Creek, since the landslide years ago. I think this is from legacy logging practices on decomposing basalt bedrock called saprolite in the crescent basalt islands of Capitol forest.

It just seems there's a lot of reasons to leave a bit more trees in riparian zone and in the watershed.

Thank you for doing a Tier 2 review. These are so important for making decisions.

I support tree farms. Trees may keep soils cooler than farmlands as well as make more \$ than haying, which is extremely labor intensive on an annual basis.

Regards

Bonnie Blessing



Figure 1. DNR and other land managers are dealing with practices done in the past that led to stuff like this:

¹¹ (page 76 of Publication 25-10-041)



Figure 2. Years after a debris torrent, stony creek looks like coffee mocha.