



**DEPARTMENT OF  
NATURAL  
RESOURCES**

**OFFICE OF THE  
COMMISSIONER OF  
PUBLIC LANDS**  
1111 WASHINGTON  
STREET SE  
OLYMPIA WA 98504

**360-902-1000**  
WWW.DNR.WA.GOV

## MEMORANDUM

January 26, 2025

**TO:** Forest Practices Board (Board)

**FROM:** Lori Clark, Adaptive Management Program Administrator (AMPA) *LC*  
[lori.clark@dnr.wa.gov](mailto:lori.clark@dnr.wa.gov) | 360-819-3712

**SUBJECT:** Riparian Characteristics and Shade (RCS) Pilot Rule Request (CR-101)

A pilot rule request for RCS is necessary to authorize the implementation of experimental harvest treatments on two sites in western Washington in excess of what is currently permitted in the forest practice rules (WAC 222-30-021, -040(2), and -050) as part of the RCS experimental research study. The purpose of this study is to evaluate how stream shade responds to a range of riparian harvest treatments of varying intensity within multiple environments common to commercial forestlands covered under the Forest Practices Habitat Conservation Plan (FPHCP 2005). The pilot rule application (CR-101) is submitted with this memo for your consideration of approval.

The Timber Fish and Wildlife (TFW) Policy Committee and the Cooperative Monitoring, Evaluation, and Research (CMER) Committee are supportive of the RCS study and the Board has approved inclusion of the RCS study implementation in the 25-27 Master Project Schedule. In February 2024, the Board approved pilot rulemaking for the RCS study for the summer 2024. This resulted in the successful implementation at 2 sites. The current CR-101 request is being submitted for the 3 harvest unit sites in western Washington planned for RCS implementation in summer 2025.

Please let me know if you have any questions or need more information.

### Attachments:

- 1- Riparian Characteristics and Shade (RCS) CR-101 Pilot Rule Application



# PREPROPOSAL STATEMENT OF INQUIRY

**CR-101 (October 2017)**  
**(Implements RCW 34.05.310)**

Do **NOT** use for expedited rule making

**Agency:** Forest Practices Board

**Subject of possible rule making:** Experimental Research Treatments

**Statutes authorizing the agency to adopt rules on this subject:** The Forest Practices Board's authority to adopt forest practices rules is granted under RCW 76.09.040, .050, and .370. The pilot project process is authorized by RCW 34.05.313.

**Reasons why rules on this subject may be needed and what they might accomplish:** This rule is required to authorize the implementation of experimental harvest treatments that exceed the limits currently allowed under the Forest Practice Rules (WAC 222-30-021) as part of the Riparian Characteristics and Shade Response (RCS) Experimental Research Study. The study evaluates how stream shade responds to a range of riparian harvest treatments of varying intensity on commercial forestlands covered under the Forest Practices Habitat Conservation Plan (FPHCP 2005). **This proposal statement of inquiry pertains to three harvest units in western Washington that are scheduled to be harvested between July and August 2025 (Fig 1).**

Washington's Forest Practices regulations include riparian prescriptions that establish no-harvest buffers of varying widths along streams. These rules allow for no-harvest riparian buffers to be applied independently or in combination with selective harvest (thinning) within the adjacent riparian management zone (RMZ). However, field research is limited regarding the combined effects of no-harvest zones and varying thinning intensities on stream shade within RMZs. This study will address a key question about how shade could be affected by using forest thinning as a riparian management tool (e.g., to promote old growth forest characteristics).

The three type F (fish bearing) streams under consideration for the RCS study are located within the Longview-St Helens Tree Farm and are owned by Weyerhaeuser Company. Site #1, Jordan Creek is a tributary to Jordan Creek and is in the Southfork Toutle WAU (Watershed Administrative Unit). This site is marked for "DFC" harvest (Option 2), with a 94-foot RMZ width. A site visit was conducted in December 2024 to verify that it met basal area requirements and that three, 325 foot research plots could be situated along the stream segment. Site #2, Tradedollar Creek is a tributary to the green river (Upper Green River WAU) and Site #3, Hoffstadt Creek is a primary tributary to Hoffstadt Creek (Northfork Toutle WAU). Sites 2 and 3 have not yet been scouted in the field.

This pilot rule permits additional timber harvest within RMZs as defined by forest practices rules, under three treatment scenarios detailed in the RCS study design (Fig 2):

- **Most Intensive Treatment:** Clearcut within the RMZ to a riparian buffer width of 25 feet from the stream's edge.
- **Mid-Level Treatment:** Heavy thinning to a Curtis Relative Density (RD) of 20, to a riparian buffer width of 25 feet.
- **Least Intensive Treatment:** Light thinning to a Curtis RD of 40, to a riparian buffer width of 25 feet.

Within each site, the three treatments will be randomly assigned to three research plots. Outside these plot locations, existing rules in WAC 222-30-021, including default RMZ widths specified by the DFC model (e.g., 94 feet for Jordan Creek), will still apply. The 30-foot equipment limitation zone will be maintained both inside and outside the plots, and outer zone leave tree requirements will remain unchanged.

Thinning will follow a "from below" approach, where the largest trees in the plot are designated as leave trees first, followed sequentially by the next largest, until the target Curtis Relative Density (RD) is achieved. Curtis RD is a comprehensive measure that integrates stand basal area and average tree size (quadratic mean diameter). Using Curtis RD rather than trees per acre or total basal area, offers a more nuanced understanding of tree competition across various forest types in Washington, accommodating the diverse range of tree species encountered in the region.

**Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies:** The state Forest Practices Board is the oversight agency with the authority to approve this pilot activity. The pilot rule is being requested as part of the formal state Forest Practices Board's Adaptive Management Program, which includes representatives from state agencies, including the Departments of Fish and Wildlife, Ecology, and Natural Resources; federal agencies, including National Marine Fisheries Service, US Fish and Wildlife Service, and the Environmental Protection Agency; forest landowners; the environmental community; county governments; and tribal governments.

**Process for developing new rule (check all that apply):**

- Negotiated rule making
- Pilot rule making
- Agency study
- Other (describe)

**Interested parties can participate in the decision to adopt the new rule and formulation of the proposed rule before publication by contacting:**

(If necessary)

Name: Patricia Anderson,  
Forest Practices Board Rules Coordinator  
Address: Department of Natural Resources  
Forest Practices Division  
1111 Washington Street E, 4<sup>th</sup> floor  
PO Box 47012  
Olympia, WA 98504-7012

Name:

Address:

Phone: 360-902-1413

Phone:

Fax: 360-902-1428

Fax:

TTY:

TTY:

Email: forest.practicesboard@dnr.wa.gov

Email:

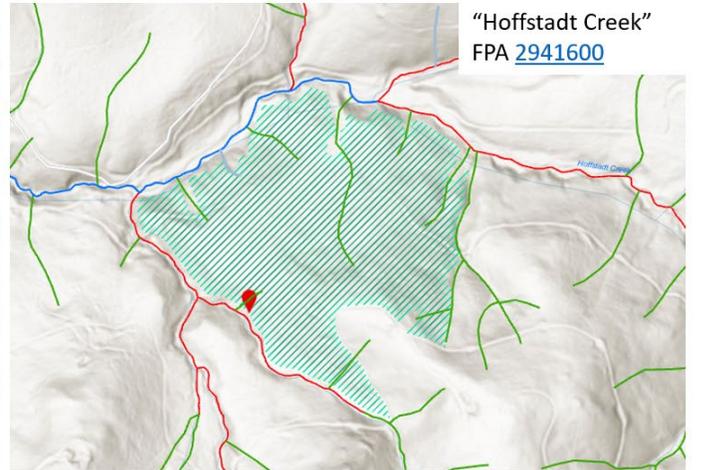
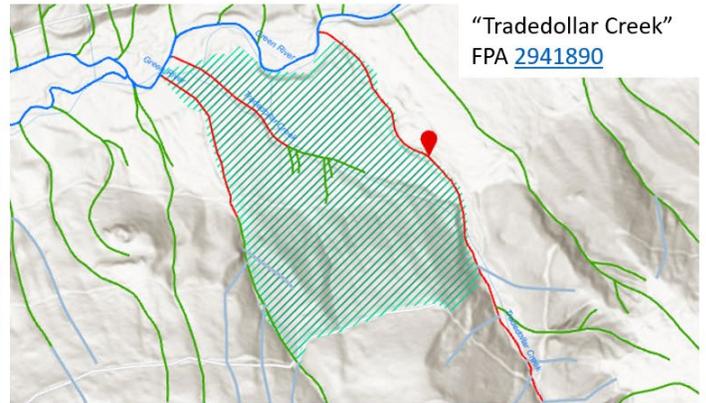
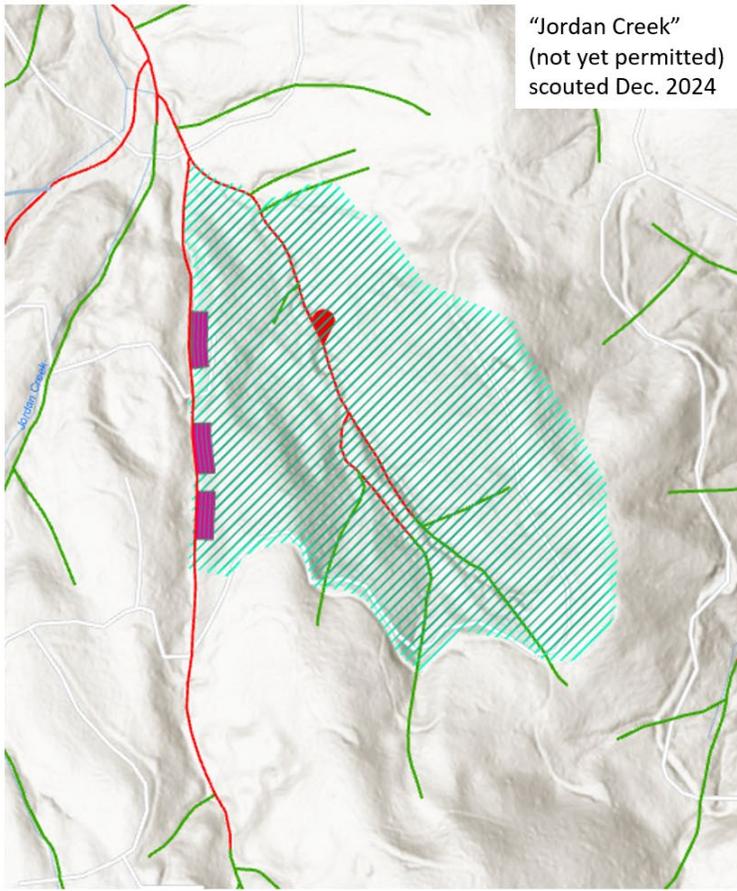
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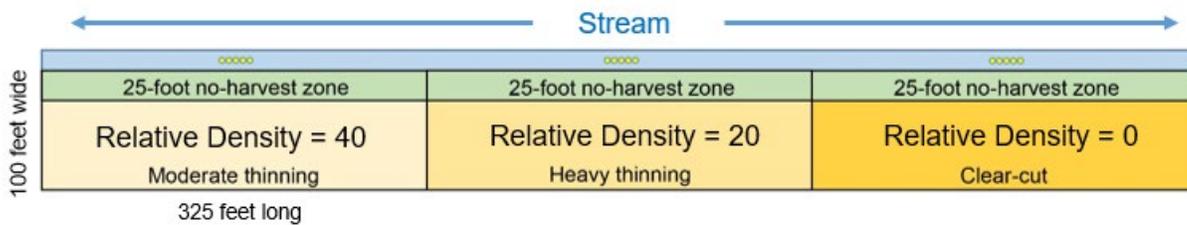
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Additional comments: The Forest Practices Board has approved inclusion of the RCS study in the Master Project Schedule. The RCS Study has a peer-reviewed Study Design and is supported by the Forest Practices Adaptive Management Program. The Timber Fish and Wildlife Policy Committee and the Cooperative Monitoring, Evaluation, and Research (CMER) Committee are supportive of this study. Previously, the Forest Practices Board approved pilot rulemaking for the RCS study (February 2023 and February 2024).



**Fig 1** Maps of “Jordan Creek”, “Tradedollar Creek”, and “Hoffstadt Creek”. We are applying for permission to implement the RCS study on all three potential sites, with the understanding that not all three sites will be used for project implementation. FPA’s were screened using site selection criteria outlined in the approved study design. Since we have already completed an assessment at Jordan Creek, tentative plot locations are shown.



**Fig 2** Experimental design for the RCS study. A study site consists of three plots with a revised 25 foot no harvest core zone, measured from the stream edge (outer edge of bankfull width), which deviates from WAC 222-30-021 (Western WA; 50 ft. core zone). Riparian forest thinning from 100 ft to 25 ft from the stream edge will be performed to a relative density of 0, 20, and 40, for each of the plots, irrespective of basal area requirements detailed in the WAC.

<b>Date:</b>	<b>Signature:</b>  Place signature here
<b>Name:</b>	
<b>Title:</b>	