**Agenda:** 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:** Washington State Department of Ecology is implementing headwater research led by the Washington State Forest Practices Cooperative Monitoring Evaluation and Research (CMER) Committee of the Adaptive Management Program. This CMER-funded research, known as the Type N Experimental Buffer Treatment for Soft Rock Lithology Study, is a basin level evaluation of buffer effectiveness that will provide valuable information for the adaptive management of headwater streams (See Attachment A).

**Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies:** The study has a peer-reviewed study design, involves the cooperation of multiple landowners (state and private), and has been highly supported by CMER and the Forests and Fish Policy Committee. The study is being supported in large part by a five year grant of $695,000 awarded by the Environmental Protection Agency. This study is a companion to a similar study conducted on hard rock (less erosive) lithology. There is consensus among the CMER Committee and Forests and Fish Policy Committee that conducting this experiment (with its associated harvest treatments) will inform the adaptive management for riparian buffers along non-fish bearing streams in western Washington. Both committees include representatives of federal and state natural resource agencies including: U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration – Fisheries, Department of Fish and Wildlife, Department of Ecology, Department of Natural Resources, and tribes and tribal organizations. Coordination of the project will occur via regularly scheduled CMER meetings, and the Forest Practices Board will be briefed on the progress and results of the study.

**Process for developing new rule (check all that apply):**
- [ ] Negotiated rule making
- [X] Pilot rule making
- [ ] Agency study
- [ ] Other (describe)

**How interested parties can participate in the decision to adopt the new rule and formulation of the proposed rule before publication:**

Mail, fax, or email comments to:
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The Type N Experimental Buffer Treatment Project for Soft Rock Lithology tests the effectiveness of the current riparian management rules in providing protection for water quality and providing riparian functions along non-fish bearing streams in western Washington. The research could result in new rules developed through the adaptive management process. See RCW 76.09.370(7) and WAC 222-12-045. This project is a critically important step in determining whether the rules result in meeting the performance goals along Type N streams. This evaluation will be achieved by identifying the effectiveness of the current forest practices RMZ buffers (50 foot wide buffers on both sides of the stream extending along at least 50 percent of the length of the perennial, non-fish bearing stream) in maintaining important ecological functions provided by riparian forests. The ecological functions evaluated in this study include: large woody debris recruitment, shade, stream temperature, sediment storage, invertebrates, and downstream exports (nutrients and suspended sediment).

Pilot riparian management zone (RMZ) and harvesting rules and are needed on a subset of the experimental sites. A pilot RMZ rule [WAC 222-30-021 (1)] will be used to apply the current 50 foot wide forested buffers at the upper end of one or more Type F (fish-bearing) stream channels. In addition to the pilot RMZ rule, a pilot even-aged green-up rule [WAC 222-30-025 (4)] will be used on one or more sites where timber harvest within the treatment basin(s) will result in an area greater than 240 acres harvested within the last five years by even-aged harvest methods on land owned by one landowner. These pilot rules are needed to allow field data collection this summer (2012). Failure to initiate field monitoring in the 2012 summer field season may result in loss of the $695,000 EPA grant needed to fund this important study.

Screening criteria were established as part of the study design to ensure treatment sites will be similar enough in size, geology, and forest age to serve as replicates in the experimental design. Field work was originally to begin in the summer of 2011; however, a sufficient number (20) of basins needed for consistency with the study design could not be located. By April 2012, only the minimum number of sites was found with landowners willing to harvest at the time and to the extent necessary to be included in the study.

Cooperators have now completed protocol surveys to verify the last fish point for the prospective treatment basins. For three of the treatment basins the last fish point occurs upstream of the modeled point. Using this higher point to define the study basin would result in Type N basin being too small to be allowed to remain in the study; unless as authorized by this pilot rule non-fish bearing buffers can be applied to a small portion of the Type F stream.

Due to the fact that the final step in our process is to layout the harvest areas, and this step could result in some changes needing to be made, the specific streams and an absolute number that would be covered under the pilot rules cannot yet be determined. However, based on the protocol surveys and site reviews that have been done, only 3 basins would require application of the pilot RMZ rule and only one basin would require application of the pilot even-age harvest rule.

All other applicable Forest Practices rules will be adhered to at all treatment sites. Forest practices applications for study sites identified by CMER will only be approved for treatments consistent with the study plan, and this CR-101.

The study has been designed to minimize the potential for damage to public resources while maintaining the quality of design and implementation necessary to address the study objectives. The three study sites identified for application of the pilot RMZ rule do not include riparian areas adjacent to any 303d listed waters. If damage to public resources is detected from the harvest treatments, the project lead will be immediately informed and will consult with the Forest Practices Program, the Adaptive Management Administrator, the Department of Ecology and the cooperating landowner about resource mitigation that supports the research needs while limiting damage. CMER will closely monitor the study sites for at least two years after the application of treatments.