

Agenda Item No.:	7
Work Plan:	State Forests Work Plan
Topic:	Trask Paired Watershed Study Update
Presentation Title:	Trask Paired Watershed Study: Background and Preliminary Findings
Date of Presentation:	January 3, 2018
Contact Information:	Dr. Bob Bilby, Senior Science Advisor, Weyerhaeuser Company <a href="mailto:Bob.Bilby@Weyerhaeuser.com">Bob.Bilby@Weyerhaeuser.com</a> Dr. Sherri Johnson, Supervisory Research Ecologist, US Forest Service Pacific Northwest Research Station <a href="mailto:Sherri.Johnson@Oregonstate.edu">Sherri.Johnson@Oregonstate.edu</a>

### **CONTEXT<sup>1</sup>**

The Trask Study takes a long term and multi-disciplinary approach to quantifying the effects of forest harvest on the physical, chemical and biological characteristics of small non-fish bearing headwater streams. The extent to which harvest on these small streams influences downstream fish reaches is also under exploration. Studies like this connect forestry management decisions to their actual responses instead of assuming a response from other related parameters.

The Trask Study design uses a nested paired watershed approach with both treatment and control basins. The reference watershed is left unharvested. Three treatment watersheds are harvested using contemporary best management practices (BMP). Although both fish-bearing and non-fish-bearing streams are being studied, harvest will only occur around the non-fish-bearing streams.

The Trask study relies on extensive pre- and post-harvest data collection and monitoring. This includes at least four years before treatment, the harvest, and four years post-treatment. The ecosystem's response to the harvest is monitored through its effects on fish, birds, stream temperature, suspended sediment, hydrology, and invertebrates.

### **SUMMARY**

Co-Principal Investigators Dr. Bob Bilby and Dr. Sherri Johnson will present information related to the Trask Paired Watershed study. Dr. Bilby will present on the background and context for the study of instream responses to forest harvest on state and private lands. Dr. Johnson will present preliminary findings of instream responses to forest harvest.

### **RECOMMENDATION**

Information only.

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<sup>1</sup> From <http://watershedsresearch.org/trask-study>