

## **Quarterly Progress Report July – September 2013**

**Project Name:** Type N Experimental Buffer Treatment in Soft Rock Lithologies  
**Project Status:** Field Implementation – Pre-harvest Sampling  
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**Sponsoring SAG:** Soft Rock Science Advisory Group (SRSAG)

### **Background**

The purpose of the Type N Experimental Buffer Treatment Project in Soft Rock Lithologies is to determine the effectiveness of Type N prescriptions to achieve 1999 Forests and Fish Report performance targets and resource objectives for temperature and sediment in western Washington headwater basins underlain by incompetent or soft rock lithologies. The study examines the effectiveness of the different components of the Type N buffers to maintain water temperature within state standards at the Type Np/F junction and within the perennial portion [buffered and unbuffered] of headwater streams. Similarly, the study will examine the effectiveness of each buffer type to minimize erosion and sediment input to and exports from Type N streams. A grant from the Environmental Protection Agency (EPA) awarded to the Department of Ecology in October 2010 is partially funding the soft rock lithologies project.

### **Description:**

This study is a field experiment analogous to the “hard rock” project but implemented on more erodible (soft rock, largely marine sedimentary) lithologies. A draft report for the hard rock is currently in development. This project:

- employs a Multiple Before-After/Control-Impact (BACI) experimental design,
- tests only the forest practices rule (50%) buffer treatment (no alternative buffers are tested),
- includes benthic macroinvertebrate sampling, but
- does not include amphibian, fish, litterfall, or drift measurements.

### **Current Status**

- DOE anticipates they will be finishing pre-harvest surveys by the end of October 2013, and
- Winter work includes continued water quality sampling, site maintenance, and data management activities.