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Purpose of the ENREP Study

To determine the extent eastside Type Np stream riparian harvest prescriptions are achieving performance targets, particularly as they apply to sediment and stream temperature and their effects on aquatic life.
Critical Questions

1. What is the magnitude of change in water temperature, canopy closure, and stream cover of Type Np channels in the first two years after harvest?

2. What is the magnitude of change in stream flow and suspended sediment export from the Type Np basin in the first two years after harvest?

3. What is the relationship between observed changes in resource condition and forest management activity?
Research Approach

• Study uses a hierarchical paired-basin design incorporating a blocked Before-After/Control-Impact (BACI) design.

• Using this design, stream reaches are nested within basins.

• This allows examination of reach-scale effects within the drainage basin, as well as cumulative exports to downstream fish-bearing waters.
Example of Paired Basins Blocked by Precipitation/Temperature Bands

Basin pairs at Springdale (top left), Blue Grouse (top right), and Tripps (bottom)
• The BACI design is replicated in space and time to control for natural variability throughout the pre- and post-treatment periods.

• This allows the study to more effectively estimate the likelihood that observed effects are related to anthropogenic activity.
Sampling Scheme and Field measurements

Within each Type N basin, the Np stream channel network will be delineated into variable length (<150 m) reaches based on changes in topographic shade or riparian condition, significant changes in channel morphology, and changes in flow characteristics.
Pilot Rule Request

- CMER and the TFW Policy Committee are requesting the Board approve initiation of a Pilot Rule to support scientific testing within the ENREP study.

- Pilot Rules provides a mechanism to permit a landowner to harvest in a manner that otherwise would not be allowed under the current forest practices regulations. They have been approved by the Board, for other CMER research projects.
Examples of Prior Pilot Rules:

• For the Westside Type Np Hard Rock study, a Pilot Rule enabled the study to examine the effects of clearcutting at the full basin scale.

• For the Type Np Soft Rock study, a Pilot rule approved applying the Np rules below the point it becomes a Type F stream in order to help standardize the size of the test basins.
In their approval of the ENREP study, TFW Policy requested the study test the effect of buffering and not buffering sections of Np streams that go seasonally dry.

- The ENREP Project Team identified a section of stream that runs seasonally dry and is requesting the ability to conduct a clear-cut treatment along it.
- However, the forest practices rules require a continuous 50 ft. wide buffer be retained for the first 500 ft. above the point a Type Np stream enters Type F waters, and the section of stream of interest extends about 200 feet into this 500 ft. continuous buffer.
The Pilot Rule requested would provide authorization needed for the landowner to be able to clear-cut the study reach identified by the Project Team.

Questions before discussing the draft pilot rule?