Fish, Aquatic Ecosystem Response

Headwater Coastal Cutthroat Trout Response to Timber Harvest in Western Oregon

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The effects of forest management practices on headwater coastal cutthroat trout can be isolated since the fish are non-migratory and are not affected by ocean conditions and other downstream factors, such as agricultural practices, urbanization, and harvest. We sampled the entire fish-bearing portions of 40 randomly selected headwater catchments upstream of barriers to fish movement. Additionally, we sampled nine catchments annually for 3-12 years. Preliminary results show the percent of young forest within a catchment - a measure of disturbance from timber harvest or fire - was not a good predictor of trout abundance in the randomly selected catchments. In annually sampled catchments, change in trout abundance was relative to reference catchments. However, abundance in the annually sampled catchments was within the observed range of the randomly sampled catchments. Results suggest that factors other than fire or timber harvest may be more important in controlling coastal cutthroat trout abundance in small headwater catchments in western Oregon.