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“Nutrient Retention and Productivity in Rocky Mountain Streams Under Alternative Stable States”

### **Abstract**

Legacy effects of clearing high elevation streams of jam forming large woody debris (LWD) are still being felt ~100 years after the end of intensive logging in the Southern Rocky Mountains. Through direct and indirect pathways, LWD recruitment into streams has been greatly reduced. As part of a larger project examining ecosystem level effects caused by the loss of LWD, my project focuses on examining how trout populations in high elevation streams are affected by the loss of LWD. I will accomplish this by comparing streams with high amounts of in-stream LWD to streams with low amounts of LWD. Specifically, I will compare individual growth rates, population growth rates, biomass, individual lipid content, length-weight regressions, and diet. My goals are to use these results to create specific endpoints for stream restoration projects in high-elevation streams.