## Influence of Repeated Thinnings on Young Stand Development Pathways

**Richard E. Bigley** 

Washington State Dept. of Natural Resources, HCP & Scientific Consultation Section, PO Box 47014, Olympia, Washington 98504-7014 <u>richard.bigley@dnr.wa.gov</u>, Phone (360) 902-1717, Fax (360) 902-1789

> Cooperators Daniel Donato, Joshua Halofsky, Peter Gould Washington State Dept. of Natural Resources

## Summary

Biodiversity pathways forest management is a way the Department of Natural Resources uses silvicultural approaches to create and maintain wildlife habitat within a working forest landscape. Carey *et al.* (1999) explored using simulation modeling of stand management alternatives for balancing wood production and conservation of biodiversity. In an independent empirical experiment of biodiversity stand management pathways, a set of pre-commercial thinning treatments were implemented in 1999 to meet a test a range of management objectives covering the spectrum from a focus on wood products to wildlife habitat. The stands initially treated in 1999 are now scheduled for a commercial thinning. This project will measure the influence of the repeated thinning on both vegetation structure and wood production. This proposal describes two alternative commercial thinning approaches for reviewer consideration. Whichever approach is selected, information gained from this project will inform agency decisions about the value of different treatment options in meeting multiple management objectives under the biodiversity pathway approach.



## Young Stand Thinning Treatments

Figure 1. Phase I Young stand thinning treatment design replicated at 5 locations in 1999.