

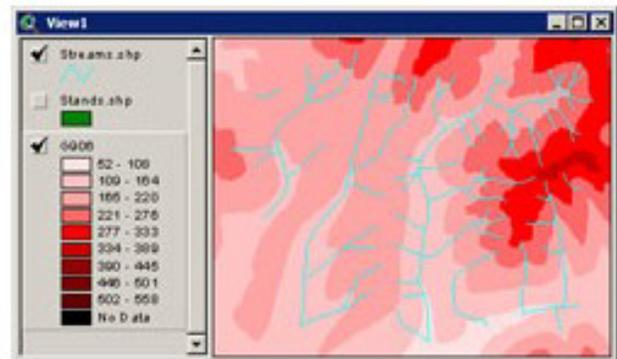
State Trust Lands Habitat Conservation Plan RIPARIAN SILVICULTURAL SYSTEM DESIGN AND ASSESSMENT IN THE OLYMPIC EXPERIMENTAL STATE FOREST

This project was intended to increase our capabilities to model alternative riparian forest management and understand potential impacts and benefits at both the stand and landscape scale. A version of the Landscape Management System was developed specific to the Olympic Experimental State Forest (OESF). It included the capability to project the possible outcomes of different riparian silvicultural systems on the OESF and, with modification, on other state lands.

This research was consistent with the underlying goals of the OESF: the integration of production and conservation. Through silvicultural management to achieve desired structural characteristics, it is possible to produce quality commercial timber and provide and protect ecological values in harmony with natural forest growth patterns.

Silvicultural management of riparian forests and streams, using techniques that direct and accelerate vegetative changes, can provide for a diverse range of habitat structures within and adjacent to the riparian corridor.

This project relied on the unique goals of the unzoned management approach of the OESF. The integrated approach to production and conservation uses silvicultural methods to direct forest development in order to ensure the production of trust revenue, the availability of quality timber for harvest, and sufficient habitat for native and threatened species. Management within the unzoned riparian management zones in the OESF is tailored to the unique characteristics of each stream in the landscape. This management approach allows for research and experimentation into the type and degree of resource use appropriate within these areas.



The Landscape Shade Analysis (LSA) model calculates impacts at the reach level, but provides the capacity to extrapolate impacts at a basin scale.

Relation to HCP: Riparian restoration, while practiced on a stand sale, can impact habitat quality at the basin or landscape scale. This project is a step in building the capability to assess alternative riparian management approaches independent of upland management. Combined with additional tools (such as the Ecosystem Diagnosis Tool, which provides an understanding of fish use and productivity), this modeling can guide management decisions regarding restoration and monitoring priorities.

Project Status: Initiated in 2000. Completed in 2003.

Investigators: Chadwick D. Oliver and Jason Cross, University of Washington, Dr. Richard Bigley, WA Department of Natural Resources

More Information: External link to [Landscape Shade Analysis](#) website, maintained by the University of Washington