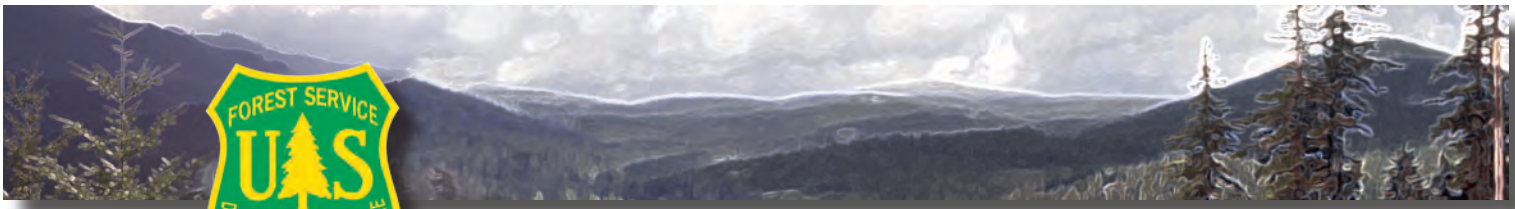

Recent Work from The Sustainable Wood Production Initiative

# Alternatives for Riparian Forest Management

Kevin Zobrist

**…regulations that inhibit the affordability of small family woodlands can lead to conversion of forest lands into higher-density residential areas.**

## Achieving Desired Future Conditions

Regulations that limit harvest activities in Oregon and Washington riparian areas are designed to protect endangered salmon and other aquatic resources that people in the Pacific Northwest hold in high regard. The current strategy of both states is to partially or fully restrict harvest in buffer zones along rivers and streams. The goal is to allow older, more complex forest structures to develop that are characterized by larger trees and other features that provide functions that are beneficial to aquatic resources. Ironically, the states' regulations may not necessarily translate into the most effective way to achieve the intended conditions on some sites. What's lost in translation is the biological reality of densely stocked stands and the social reality of forest land conversion. Biologically, the state regulations can actually inhibit the growth of larger trees under some circumstances—specifically young, managed forests that are densely stocked with small-diameter trees. From a socioeconomic perspective, regulations that inhibit the affordability of small family woodlands can lead to conversion of forest lands into higher-density residential areas. Kevin Zobrist, a research scientist for the Rural Technology Initiative (RTI), University of Washington, is working on these issues by examining the impact of current regulations and alternative strategies on riparian forests.

Photo by Bob Deal, USFS.

Densely stocked stands like this one can lead to slower growing trees.

## Management Effects on Stand Structure and Economics

Zobrist and others at RTI have modeled the effect of Oregon and Washington regulations, and are simultaneously examining the impacts of alternative strategies on riparian forest structure and

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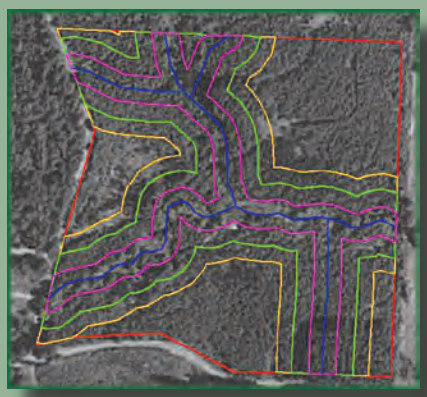

Although they differ in many ways, regulations for riparian management in both Oregon and Washington involve setting aside buffer zones for restricted harvest.

economics. Ten case studies of west-side ownerships ranging in size from 33 to 318 acres were used in the analysis. For each ownership, scenarios under Oregon's Forest Practices Act of 1994, Washington's Forests and Fish Rules, and alternative templates allowed under the regulations were examined for their impact on both habitat and economic value. In a nutshell, alternative templates cost less to implement and resulted in greater progress toward desired future conditions. According to Zobrist and his collaborators, these alternatives are easy to implement and more effective to achieve the goal of older forest structure in riparian areas. For more indepth information about the modeling results and to learn more about the Rural Technology Initiative, see their Web site (http://www.ruraltech.org) and collection of online fact sheets (RTI 2005).

Photo—Tom Iraci, USFS

## The Value of Alternative Strategies for Riparian Management

The work of Zobrist and others at the Rural Technology Initiative essentially points toward alternative riparian management strategies as being more sustainable from both a biological and economic perspective. When forests are densely stocked and when economics dissuade forest owners from managing for timber, desired conditions are compromised through slower-growing trees and the increased likelihood that forest lands will be converted to other uses such as residential areas. According to Zobrist, riparian forest management is an important component of sustainable forestry in the Pacific Northwest, and the following findings are important to consider:

- Riparian templates contribute to the economic sustainability of forest management by meeting environmental objectives at a relatively low cost.
- Unlike a broad regulatory approach, riparian templates can achieve environmental objectives by allowing site-specific flexibility.
- An integrated approach to template development achieves multiple objectives and serves as a model for the region.

## Reference

**Rural Technology Initiative. 2005.** College of Forest Resources, University of Washington. http://www.ruraltech.org. (22 October).

**…riparian forest management is an important component of sustainable forestry in the Pacific Northwest…**

Photo—Courtesy of Erik Ackerson

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