

*Gallo et al.*

## **WATERSHED CONDITION UNDER THE NORTHWEST FOREST PLAN: CHANGES BY LAND-USE ALLOCATION**

Kirsten Gallo<sup>1</sup>, Steve Lanigan<sup>2</sup>, Peter Eldred<sup>3</sup>, Sean Gordon<sup>4</sup>, and Chris Moyer<sup>5</sup>

The goal of the aquatic conservation strategy is to maintain or improve the condition of watersheds. The strategy does not, however, identify a specific goal such as a desired percentage of the watersheds that are in good condition or a desired range of conditions. Thus, we infer that if the strategy is effective, then watershed condition scores should increase over time. We examined road and vegetation conditions in 250 randomly selected watersheds in the Northwest Forest Plan area. These watersheds were post-stratified into the land-use allocations, based on the land-use class in which the majority of the watershed area (> 50 percent) was allocated. A decision support model was used to evaluate all of the road, vegetation, and in-channel attributes and provide an overall estimate of watershed condition in each land-use class.

Currently, congressional reserves have the highest proportion of watersheds with high condition scores, followed by late-successional reserves, adaptive management areas, and matrix lands. Watersheds that contain more than 50 percent of nonfederal land tend to have low condition scores overall.

The greatest improvement in condition overall was detected in the late-successional reserves. Road conditions improved the most in late-successional reserves and the least in congressional reserves. Vegetation condition scores increased the most in late-successional reserves and congressional reserves. These results are consistent with timber management practices applied to these watersheds.

### **STATUS & TREND REPORTS**

---

<sup>1</sup> Bureau of Land Management, Oregon State Office- 4077 Research Way, Corvallis, OR

<sup>2</sup> USDA Forest Service, Region 6- 333 SW 1st Ave, Portland, OR

<sup>3</sup> USDA Forest Service, Region 6- 4077 Research Way, Corvallis, OR

<sup>4</sup> Oregon State University- Corvallis, OR

<sup>5</sup> Bureau of Land Management, Oregon State Office - 4077 Research Way, Corvallis, OR