

1997 Monitoring of Recent Landslides

A landslide inventory was carried out in 1997 to assess the occurrence, terrain settings, impacts, and management activities associated with landslides that occurred as the consequence of widespread storms and flooding in winter, 1995, through spring, 1997.

309 landslides including debris torrents, debris avalanches, slumps, road cut failures and road fill failures were identified from aerial photo reviews and district reports. Aerial assessments were completed on 39 percent of these and field assessments were done on 61 percent. Complete synthesis of these data is not complete, but table XXX, below, summarizes certain results of this inventory.

Management Activities Associated with Landslides				
Roads	Natural	Harvest	Fire	Trails
72%	18%	6%	2%	1%

Slides were inventoried both in areas with an extensive harvest and roading history and in wilderness areas, where natural fire has been allowed to play some role in recent years. Preliminary summaries suggest that 35 percent of slides were 10 to 50 cubic yards, 27 percent were 50 to 100 cubic yards and 38 percent were greater than 100 cubic yards. About 36,000 cubic yards was the maximum measured. Many slides associated with roads were road cut and fill failures of 10 to 50 cubic yards that did not immediately contribute sediment to streams, but sediments from road cut failures could become entrained into the road drainage system if not removed promptly. Most landslides, whether on natural slopes or associated with roads, harvest, or fire, were on steep slopes (50 percent or more) and frequently associated with shallow soils, southerly aspects, and subsurface moisture concentrations or interrupted subsurface drainage. Of the total landslides assessed, 24 percent delivered sediment to streams and 76 percent did not, although they may have moved sediments into dry channels or lower slope positions where the risk of sediment delivery is greater than before the slide occurred.

More complete analysis will be done in 1998.

2001 Forest Monitoring Report

Through out Forest

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