

# Ashland Forest Resiliency Stewardship Project



**Pacific Fisher**

## Monitoring Update – Fall 2011

Implementation monitoring has been an important component of multiparty monitoring. The City of Ashland, The Nature Conservancy, and the Implementation Review Team have evaluated the completion of 324 acres of surface and ladder fuel treatment, and 560 acres of commercial-sized trees marked for harvest in 2012. The work has been conducted by Lomakatsi Restoration Project, and quality has been high with a careful eye to meeting project objectives.

Real-time water quality monitoring was initiated with a turbidity sensor installed in the West fork of Ashland Creek by Southern Oregon University (SOU), the US Forest Service (USFS), the National Park Service and the US Geological Survey (USGS) – data is available at the USGS [website](#). This work builds on five permanent transects measured annually to assess sediment levels and biology in tributaries to Ashland Creek. Aquatic macroinvertebrates (water bugs), which are good indicators of stream health, will be collected by the entomology class from SOU at all five transect locations.

Volunteers from the community have been working with USFS scientists to monitor population and home range sizes and habitat use of the Northern Spotted Owl, Pacific Fisher, and arboreal rodents-including the Northern Flying Squirrel. Eleven Pacific Fishers have been captured and tagged; six females with a home range of 4-6 square miles and five wider ranging males. Of the male Fishers, GPS data downloaded from one tracking collar indicated he traveled over 100 square miles during the breeding season (March-May). The Fisher home ranges overlap with treatment areas and the monitoring will provide an important perspective on how forest treatments impact this elusive mammal.

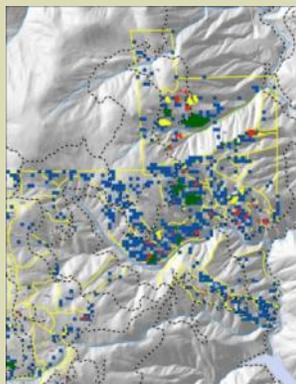
Klamath Bird Observatory (KBO) continued annual songbird monitoring between May and October. Mist nets were used to capture, band, and release birds to learn about bird population trends, breeding success, health, and longevity. This work provides a baseline from which to evaluate future trends.

Forest Service remote sensing specialists along with scientists from The Nature Conservancy have refined LiDAR mapping data collected in 2007. Analyses provide the partnership with detailed maps of the ground and canopy surfaces over the entire watershed allowing partners to detect large trees and their heights. On-the-ground mapping of legacy tree stands is informing remote sensing of legacy patches to guide project development and monitoring of restoration treatments to promote legacy trees.

The Nature Conservancy installed 50 plots and gathered field data to reveal fire histories and historical stand structures across a range of forest settings. Historical conditions will be inferred from fire scars on stumps and snags, and the presence of old trees, snags, downed logs, and stumps. Trees were mapped on three 7.4-acre plots to learn more about openings and groups in the forest. Perspective gained from fire history and the historical composition and patterns among trees will help refine prescriptions for the range of forest settings, and allow evaluation of the treatments.



**Sampling fire scars**



**Remote sensing for project development**

