



**Pacific Southwest Region-The Nature Conservancy Ecology Costshare  
Forest Service Pacific Southwest Region  
2007**

**Project Description:** The Forest Service and The Nature Conservancy (TNC) share responsibilities and interests in the preservation, conservation, and management of biological diversity and the maintenance and promotion of the ecological integrity of the landscapes they manage. Nationally, the TNC and the Forest Service have a long history of collaboration, for example in the *Restoration of Fire-Adapted Ecosystems* program, which includes such interagency projects as *The Fire Learning Network* and *LANDFIRE*, but the relationship has not been particularly robust in California. In 2005, the Forest Service Pacific Southwest Region and TNC-California Chapter entered into discussions regarding ventures that might expand their collaboration in California land and resource management. As a first step in this developing partnership, an agreement was reached to hire and jointly fund and supervise a fire/vegetation ecologist in a cost-share arrangement similar to other successful joint positions already in existence in Utah, New Mexico and Oregon. The principle purpose of the position was to increase Forest Service-TNC collaboration in implementation of National Fire Plan goals in California, and to assist both organizations in achieving their aims in restoration and management of critical California ecosystems.

**Implementation Plan and Accomplishment to Date:** In January, 2006, a fire ecologist (David Schmidt) was hired, and work began immediately on a wide variety of collaborative projects. Working under the joint supervision of Louis Blumberg, Director of California Forest and Climate Policy, The Nature Conservancy, and Hugh Safford, Forest Service Pacific SW Region Regional Ecologist, Schmidt has:

1. Acted as a principal reviewer of *LANDFIRE* data layers and outputs
2. Developed a study plan to assess smoke emissions for different land management and wildfire scenarios on the Sequoia National Monument and Sequoia National Forest
3. Worked in close collaboration with the Region 5 Stewardship and Fireshed Assessment Team in fuels treatment planning efforts, especially on the Tahoe, Klamath, and Sequoia National Forests
4. Sampled fire severity plots on the Klamath National Forest and the Lake Tahoe Basin Management Unit
5. Begun an analysis of factors driving fire severity in large wildfires in the Sierra Nevada
6. Mapped fire regime departure for the four Southern California National Forests

7. Completed historic fire regime reference condition mapping on six Region 5 National Forests (Sequoia, Sierra, Stanislaus, Eldorado, Tahoe, LTBMU)
8. Modeled vegetation dynamics in Sierra Nevada forests and woodlands and applied the modeling results to restoration planning
9. Published three scientific papers<sup>1</sup>

The Forest Service-TNC California fire ecology costshare position has been very successful and we plan to continue this collaboration as long as possible. We have also discussed potential expansion of the program to include more focus on Southern California.

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<sup>1</sup> Safford, H. D., and Schmidt, D. A. 2006. Assessment of landscape scale wildfire impacts and fuels treatments: methods for ecological restoration based on state-and-transition modeling. 4 pp., in: *Proceedings of the 2006 International Fire Ecology and Management Congress*. November 13-17, 2006, San Diego, CA, USA. Washington State University Extension, Pullman, WA, USA.

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