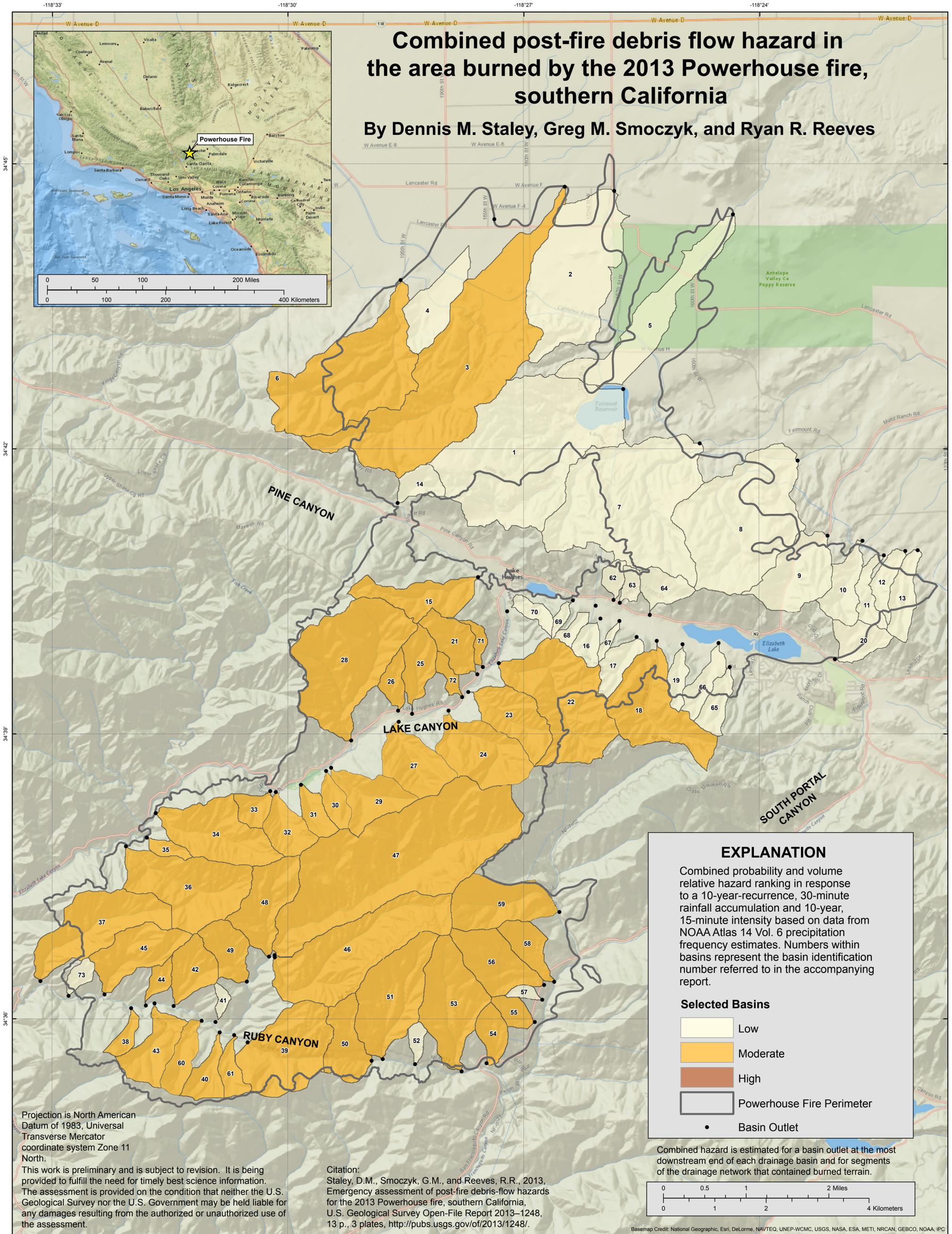


U.S. Department of the Interior  
U.S. Geological Survey

# Combined post-fire debris flow hazard in the area burned by the 2013 Powerhouse fire, southern California

By Dennis M. Staley, Greg M. Smoczyk, and Ryan R. Reeves



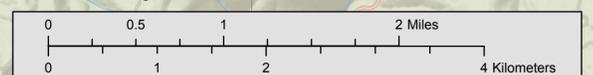
### EXPLANATION

Combined probability and volume relative hazard ranking in response to a 10-year-recurrence, 30-minute rainfall accumulation and 10-year, 15-minute intensity based on data from NOAA Atlas 14 Vol. 6 precipitation frequency estimates. Numbers within basins represent the basin identification number referred to in the accompanying report.

#### Selected Basins

- Low
- Moderate
- High
- Powerhouse Fire Perimeter
- Basin Outlet

Combined hazard is estimated for a basin outlet at the most downstream end of each drainage basin and for segments of the drainage network that contained burned terrain.



Projection is North American Datum of 1983, Universal Transverse Mercator coordinate system Zone 11 North.

This work is preliminary and is subject to revision. It is being provided to fulfill the need for timely best science information. The assessment is provided on the condition that neither the U.S. Geological Survey nor the U.S. Government may be held liable for any damages resulting from the authorized or unauthorized use of the assessment.

Citation:  
Staley, D.M., Smoczyk, G.M., and Reeves, R.R., 2013, Emergency assessment of post-fire debris-flow hazards for the 2013 Powerhouse fire, southern California, U.S. Geological Survey Open-File Report 2013-1248, 13 p., 3 plates, <http://pubs.usgs.gov/of/2013/1248/>.