

Old, Grand Prix, and Padua Wildfire Complex - California, 2003

A series of fires was ignited in late October 2003 in California's San Bernardino Mountains that rise up from a heavily developed valley. Fanned by southern California's extremely dry, down-slope Santa Ana winds, the fires burned 125,000 acres of the headwaters of the Santa Ana River watershed and down the hillsides to threaten the cities of Rancho Cucamonga and San Bernardino. The fires severely disturbed the upper watershed which resulted in degraded water quality and flooding downstream.

The San Bernardino National Forest was heavily burned. The area comprises chaparral, and dry pine/mixed conifer forest ecosystems in steep mountains. The forest includes 71 threatened or endangered wildlife species and more than 85 species of sensitive plants.¹

Approximately 100,000 residents were evacuated. Ultimately 787 total property losses and 3,860 partial losses were recorded.² Many residents were under- or uninsured. Critical electrical utility infrastructure was damaged.

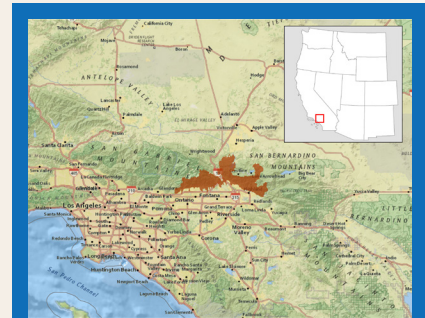
DATA COLLECTION

Preliminary cost data were compiled by the U.S. Forest Service and reported as of April 2005.

EXPENSES AND DAMAGES

This wildfire complex initially cost more than \$1.276 billion. Approximately 92 percent of expenditures were for mitigating soil erosion, providing federal grants to state and local agencies, and providing grants to private citizens and businesses to recover from fire-related damage; serving individuals suffering physical and emotional trauma; and insurance claims for property losses. Expenditures incurred during the fires and in the following 18 months included:

- \$61,335,684 for fire suppression (more than \$43 million paid by federal agencies)
- \$45,380,000 for post-fire flood and water quality costs paid by water districts
- \$45,202,317 for public and private assistance paid by the Federal Emergency Management Agency (FEMA)
- \$21,500,000 for recovery and water quality mitigation paid by federal agencies
- \$9,721,108 for recover and water quality mitigation paid by the state Department of Transportation
- \$576,171,965 in insurance claims
- \$70,000,000 for the power company (S. California Edison)



SUMMARY

Date: October- November 2003

Setting: The rugged San Bernardino National Forest east of Los Angeles, CA.

Burned area: 125,000 acres

Buildings destroyed:

- 787 homes and businesses
- 3,860 damaged

Estimated Watershed Damage:

- \$450 million in mitigation
- \$800 million in cumulative costs
- 6 million people potentially impacted

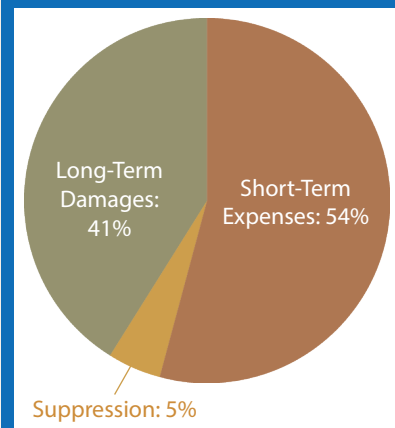
Estimated costs:

More than \$1.2 billion

Most expensive costs:

- Home & property loss
- Landscape rehabilitation

Proportional Costs of Wildfire



- \$3,632,149 for assistance by the American Red Cross and other social service agencies.

Eighteen months later, municipalities, water districts, government agencies and communities were still dealing with “severe negative effects” of fires including erosion, public land closures, and trauma, according to a U.S. Forest Service report.³ The report notes that an additional \$443,990,000 total would be required to repair damages according to projected expenses of water districts, the state Department of Transportation, electric utility, and the American Red Cross.⁴

COSTS NOT EVALUATED

- Local fire department costs for fire suppression and emergency response
- Railroad companies’ and freight trucking industry’s loss of income due to rail and highway closures
- Evacuation of private individuals
- Loss of ecosystem services and wildlife habitat
- Timber value
- Lost recreation value
- Public health including physical and mental injury, stress, and trauma incurred during the fire and in succeeding years
- Longer-term economic damages (decreased tax base, lower property value, reduced sales, increased insurance premiums, etc.)
- Degraded viewshed

WHO PAYS

Sixty-nine percent of the fire’s total costs in the first 18 months were claims received by the top 13 insurance companies.⁵ The federal government (U.S. Forest Service, U.S. Bureau of Land Management, Natural Resources Conservation Service, Federal Emergency Management Agency, and Army Corps of Engineers) paid about 13 percent of the costs including fire suppression, post-fire recovery, public and private assistance (reimbursements), and water quality mitigation. Utilities and water districts paid approximately 14 percent of the costs. The remaining four percent of costs tabulated was covered by the county, state, and nonprofits. Many local and longer-term costs were not evaluated for the report.



Old Fire on October 25, 2003. Photo: H. Paulk

1 Dunn AE, Gonzalez-Caban A, and Solari K. 2005. *The Old, Grand Prix, and Padua Wildfires: How much did these fires really cost?* Riverside, CA: USDA Forest Service Pacific Southwest Research Station. https://www.fs.fed.us/psw/publications/adunn/2003_wildfires_report.pdf.

2 Ibid (Dunn et al.)

3 Ibid (Dunn et al.)

4 Ibid (Dunn et al.)

5 Ibid (Dunn et al.)