

## 17 The Economic Dimension of Wildland Fires

*Armando González-Cabán<sup>1</sup>*

### Abstract

The economic relevance of wildland fire management and protection programs is ever growing, particularly considering mounting wildfire costs and losses globally, and the justifications required for budget allocations to management and protection of forest ecosystems. However, there are major difficulties in grappling with the problem of rapidly increasing wildland fire management costs. For example, in the U.S., the U.S. Department of Agriculture Forest Service from 1997-2008 has spent more than \$US11.5 billion on fire suppression alone, on wildfires affecting more than 26 million ha of land. It is important to keep in mind that inclusion of the expenditures for the other four federal agencies with fire protection responsibilities and the expenditures of all other states with wildland fires could possibly put the figure in the realm of hundreds of billions. Canada spends an average of between \$US531 million annually on fire suppression, prevention, and prescribed burning alone. Mexico and the Central America region are also suffering tremendous losses to forest fires. For example, during 1998 more than 7.7 million ha of forest and agricultural were affected. In the South American continent, during the 1990s Brazil, Argentina, and Bolivia had wildfires that burned annually an average of 1.03, 1.5 and 0.92 million hectares respectively of forest lands. Suppression expenditures and financial losses due to wildfires in the South American region are difficult to obtain. However, some estimates of the financial losses of forest fires in South America go as high as \$US1.6 billion annually in the 1990s. The five most southern countries of the European Union during the period from 2000 to 2007 suffered on average 60,000 fires affecting 476,000 ha of forest lands. Unfortunately, there is not yet an estimate of the suppression expenditures or the economic impact of those fires in the individual countries and the Mediterranean basin region. In 2009 Australia experienced large wildfires affecting more than 430,000 ha, wiping out complete towns, killing 173 persons, destroying over 2000 homes, leaving more than 7,500 people homeless and creating havoc in the local economies. Recent estimates place the cost of bushfires to Australia at \$US6,625 million.

**Keywords:** Wildland fire management costs, wildland fire fatalities, fire suppression expenditures, wildfire disasters

1 USDA Forest Service, Pacific Southwest Research Station, Forest Fire Laboratory, Riverside, California, U.S.A.

Address for correspondence: agonalezcaban@fs.fed.us