

# Trees Damaged and Destroyed in the Bastrop Fire

## Texas Forest Service

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More than 16,200 acres of pine and mixed pine-deciduous forests burned within the Bastrop Fire area. These forests contained large, mature trees that were valued by thousands of people for their beauty and the sense of place that people derived from living among them.

In recognition of the hazards that many large standing dead trees present to people and structures, Texas Forest Service completed an assessment of the amount of damaged and destroyed timber for the purpose of facilitating their removal and utilization.

Prior to the wildfire these forests contained more than 31 million cubic feet of live trees.

- Trees **killed outright** by the fire account for almost 12 million cubic feet, or about 38 percent of the total volume in trees alive immediately before the fire.
- Trees still alive but **likely to die soon** because of damage sustained from the fire account for nearly 13 million cubic feet, or about 40 percent of the total volume of trees alive immediately before the fire.
- Trees **likely to survive** the fire account for less than 7 million cubic feet, or about 22 percent of the total volume of trees alive immediately before the fire.

Combining the volume of trees killed outright and trees presently alive but likely to die, the estimate of timber damaged and destroyed surpasses 24 million cubic feet, an amount equivalent to about 850,000 green tons of timber.

Stumpage value is what a landowner would receive from a timber buyer for selling trees as they stand in the woods and is one measure of the economic value of trees. The stumpage value of 24 million cubic feet of damaged and destroyed timber is more than \$14 million given East Texas market conditions observed immediately before the outbreak of fires this summer.

Nearly 1.5 million trees (5 inches in diameter and larger) were killed outright or are likely to die soon. This number of trees represents a whole-tree volume in terms of debris removal of between 3.3 and 6.9 million cubic yards, according to USDA Forest Service Centers for Urban and Interface Forestry.

These figures are based on an analysis of several sources of data collected by Texas Forest Service, including tree measurements taken September 22-23 in sampled areas of Bastrop State Park, satellite imagery interpretation of vegetation types in the burn area, Forest Inventory and Analysis data, and Texas Timber Price Trends.