

This is the first of a three-part series about wildfires. Massive wildfires are a growing problem, posing risks to people and the environment. Considering that my house is located only a few miles from the 1991 Oakland Hills fire, which killed 25 people, destroyed 2800 homes, and caused \$1.8 billion in damage, this is an issue I take very seriously.

Today, I want to focus on the extent of the problem. Here are some examples from the past ten years:

- Last year, fires swept through California's wine country. Fire in Sonoma county killed 23 people, burned 36,000 acres and destroyed more than 5000 homes. The total estimated damage was over \$1 billion, according to the state insurance commissioner. This year's Mendocino Complex fire was the largest in California history.
- Wildfires have plagued other countries. In 2010, fires in Russia destroyed more than 3800 square miles and caused roughly \$15 billion in damages. In 2012, fires destroyed at least 500,000 acres in Siberia. Again, in 2015 fires destroyed another 3800 square miles of Siberia. Far to the West, fires killed at least 79 people in Greece in 2009.
- In the Southern hemisphere, Australia has suffered the most. In 2009, with temperatures of 115°F and 55 mph winds, bushfires raged over a million acres and killed more than 170 people. In 2015, fires scattered across Australia destroyed another half million acres.
- In 2017, wildfires burned 10 million acres in the Western United States, destroying 12,000 homes, killing 66, and resulting in \$18 billion in damages.

[Climate Central](#) has documented an increasing trend in the number of large wildfires (over 1000 acres) in the American West:

"There's been a notable increase in the large wildfires — defined as those 1,000 acres or bigger. A Climate Central analysis of U.S. Forest Service data through 2014 shows that large fires are three-and-a-half times more common now than they were in the '70s. " They also burn seven times more acreage in an average year. "The biggest changes are in the Northern Rockies. Large wildfires are now 10 times more common than they used to be and the area burned is up to 45 times greater in Idaho, Montana and Wyoming."

Earlier, [Union of Concerned Scientists](#) observed that "between 1986 and 2003, wildfires occurred nearly four times as often, burned more than six times the land area, and lasted almost five times as long when compared to the period between 1970 and 1986."

Besides their immediate damage, wildfires also contribute to climate change. According to one [study](#), wildfires in the U.S. release about 290 million tons of CO₂ per year.

Obviously, this is a problem that requires more attention. My next post on this issue will discuss the causes of wildfires, notably the role of climate change. The final post will discuss how we can better manage wildfire risks.

Next up: Wildfires and Climate Change