With forests making up nearly half of all land in Oregon, wildfire is a frequent occurrence across the state, particularly in southern and eastern Oregon. But a comprehensive picture of the wildfire landscape is clouded by the mix of public agencies and private interests that, together, control more than 30 million acres.

Federal dominance

At the center of that landscape is the federal government. At a total of 18 million forested acres, there is more contiguous public land in federal hands, and thus more potential for fire.

In addition, federal lands such as national forests are more accessible to the public. The probability of a wildfire increases as more people visit, recreate, and work in a given area. Humans are the leading cause of wildfires, both in Oregon and across the nation. Fires can result when people leave campfires unattended, negligently discard cigarettes, or commit intentional acts of arson.

Lightning is another major cause of fires, and federal lands make up much of Oregon’s “lightning belt”—a diagonal strip of the state from southwestern to northeastern Oregon where lightning strikes are more common.

Fire frequency and size

The question of forest ownership factors into both the number of fires and the size to which they grow.

Although the wildfire season is about 4–5 weeks longer than it was historically, the total number of individual wildfires in the last 15 years (2003–2017) trends slightly downward in Oregon, and across the United States. The number of wildfires on federal lands in Oregon is typically greater than the number of wildfires on state or private lands. Nationally, however, the reverse is true—the number of wildfires on private lands is greater than the number of wildfires on federal lands.

Fire has consumed an increasing amount of acreage across all lands—federal, state, and private—in Oregon over the last 15 years. In fact, the 2017 wildfire season was one of the worst on record for both Oregon and the nation in terms of total acres burned.
Differences in firefighting strategies between ownerships may play a role in the total number of acres burned. However, the priority for every wildland fire management activity by all local, state, and federal agencies is firefighter and public safety. The Oregon Department of Forestry actively suppresses fires on its own lands, on private lands, and by contract on western Oregon Bureau of Land Management lands.

The US Forest Service (USFS) also actively suppresses wildfires and makes use of backburning and burnouts to suppress fire, which increases the area of acreage burned. The USFS also recognizes the natural role of fire in the landscape, and, under strict circumstances, allows fire to burn without full suppression to benefit resources (another factor that increases acreage burned). However, this tactic takes a lot of preplanning and is rarely used because of its inherent risk and statutory constraints.

Some possible reasons for the increase in total acreage burned include:

- An increase in the number of fires caused by humans
- A history of fire suppression that has led to an increase in the amount of fuels that are connected across the landscape
- A warmer and drier climate that is causing available dead fuels to dry out earlier in the year
- A warmer and drier climate that reduces the moisture content of live vegetation. This increases plants' potential to combust and adds to the available fuels on the landscape.

Strategic differences

No two forests are alike, nor are they managed the same way. Typically, federal, state, and non-industrial and industrial private lands are managed with different objectives in mind. Topography and weather aside, different management strategies have different effects on the amount and arrangement of fuels. Those differences affect fire behavior and, ultimately, how many acres burn.

Forest management that considers fire risk and applies the appropriate management strategies may reduce the area burned by fires and the intensity at which they burn.

Resources


Keep Oregon Green. https://keeporegongreen.org/. Accessed August 1, 2018


Oregon Department of Forestry. Oregon Forests: Some Facts and Figures, September 2009

Oregon Forest Resources Institute. https://oregonforests.org/content/forest-ownership-interactive-map. Accessed May 2, 2018

Oregon State University Forestry & Natural Resources Extension fire program, http://extensionweb.forestry.oregonstate.edu/fireprogram
