

WHY ARE SOME FOREST FIRES MORE INTENSE?

Fire is a natural part of forest ecosystems in Oregon. Historically, fires in any given part of the dry pine and mixed-conifer forests of eastern and southwestern Oregon occurred frequently and tended to be less intense. Fires in the wetter, Douglas-fir regions of western Oregon burned less often, and when they did burn, those fires were more intense, killing most of the trees in their path. As humans have actively fought fire over the past century, the “housekeeping” that fire provides hasn’t happened at these natural intervals. With no matching level of fuel removal, many of these forests have become unnaturally dense, particularly in Oregon’s drier forests.

Overcrowded forests have unnaturally high amounts of fuel, leading to hotter and larger fires.

FUEL LADDERS

In overcrowded forests, flames can climb quickly from the ground vegetation to the treetops. In eastern Oregon pine forests, such fires are not historically common and can kill even large trees. Shrubs, small trees, dead trees, downed logs, low branches and logging debris can all act as a “fuel ladder” during a forest fire.



WORSENING FIRE SEASONS

Because too much fuel has built up in many of Oregon’s forests, they are at risk of burning far hotter and more intensely if they do catch fire. This has been made worse by the effects of climate change, including hotter summers and less rainfall. Such “uncharacteristic” fires threaten severe damage to wildlife habitat, human development and watersheds, and emit large amounts of carbon dioxide and other pollutants. And, these types of fires are becoming more common and more destructive. The total amount of forestland that burns in Oregon each year has increased dramatically, including recent fire seasons where more than 1 million acres have burned.



MANAGING FOR FIRE RESILIENCY

Today, forest managers are using our understanding of the historic role of fire to manage our forests sustainably for the future. Forest managers commonly use three tools to make a forest more fire-resilient and limit the severity of fires when they do happen:

- thinning trees by cutting some down
- prescribed burning after thinning
- mechanical treatments to remove shrubs and small-diameter trees



About the Oregon Forest Resources Institute

The Oregon Forest Resources Institute supports the forest sector and the stewardship of natural resources by advancing Oregonians’ understanding of the social, environmental and economic benefits of our forests.

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