## 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 every five to 40 years. Fires in the wetter, Douglas-fir regions of western Oregon burned every 100 to 450 years. 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 dryer 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, snags, downed logs, low branches and harvest debris can all act as a "fuel ladder" during a forest fire.

## 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:

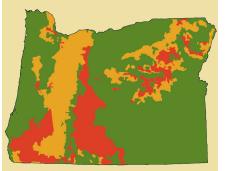
- Thinning
- Prescribed burning after thinning
- Mechanical treatments





## AT RISK: MORE THAN 8 IN 10 TREES

Because too much fuel has built up in many Oregon forests, they are at risk of burning far hotter and more intensely if they do catch fire. Such "uncharacteristic" fires threaten severe damage to wildlife habitat, human development and watersheds, and emit large amounts of carbon dioxide and other pollutants. Nearly 40 percent of Oregon's forestland is classified as being at high risk of uncharacteristic fire. An additional 45 percent is at moderate risk.



Condition Class 2: At moderate risk of uncharacteristically severe fire.

Condition Class 3: At high risk of uncharacteristically severe fire.

