

# WHY ARE SOME FOREST FIRES SO INTENSE ?

Fire is a natural element of change in Oregon's forest ecosystems. Historically, fires in the pine and dry mixed-conifer forests of eastern and southwestern Oregon occurred every 5 to 40 years. Fires in the wetter, Douglas-fir regions of western Oregon burned every 100 to 450 years. But a century of fire suppression without a matching level of fuels reduction has resulted in missed fire intervals, increasing the amount of fuel and fire risk, particularly in dryer forests.

## AT RISK: MORE THAN 8 IN 10 TREES

Nearly 40 percent of Oregon's forestland is classified as Class 3, or at high risk of uncharacteristically intense fire because of dense, unnaturally overcrowded and dying trees. Another 45 percent is in Class 2, or at moderate risk. These "at-risk" forests burn more intensely and may destroy wildlife habitat, threaten homes and watersheds, and emit large amounts of carbon dioxide and other pollutants.

## 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 use three common tools to limit the severity of wildfire and to manage forests for improved fire resiliency:

- Thinning
- Prescribed burning after thinning
- Mechanical treatments



## CONDITION CLASS 2

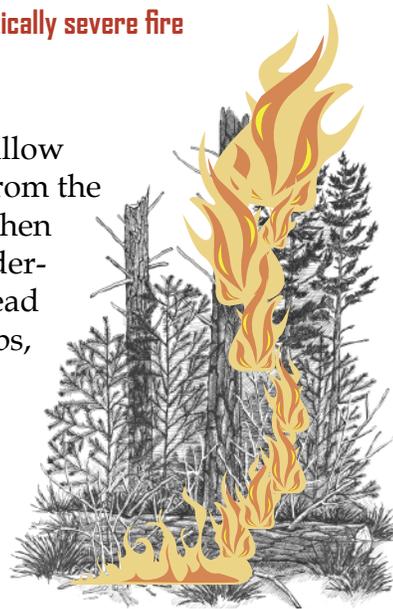
At moderate risk of uncharacteristically severe fire

## CONDITION CLASS 3

At high risk of uncharacteristically severe fire

## FUEL LADDERS

Overcrowded forests allow fires to jump quickly from the ground to tree tops. When ground fires ignite understory trees, flames spread to tree canopies. Shrubs, small trees, snags and downed logs, low branches and harvest debris can all act as a fuel ladder during a forest fire.



**OVERCROWDED FORESTS CONTAIN UNNATURALLY HIGH LEVELS OF FUEL, LEADING TO HOTTER AND LARGER FIRES.**



OREGON FOREST  
RESOURCES INSTITUTE

Oregon's Legislature created the Oregon Forest Resources Institute to improve public understanding of Oregon's forest resources and to encourage sound forest practices

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