

Reducing Fire Risk on Your Forest Property

Introduction

Is your forested property in a condition that could survive a wildfire? Have you reduced the slash to the point that it's not a hazard? Could firefighters easily get to a wildfire on your property?

If the answer to these questions is *no* or *I don't know*, your property may be at high risk for a wildfire, which would have real financial consequences for you, your family, and your neighbors, as well as for the long-term health of your watershed and the area's ecology. The degree of wildfire risk depends on both the probability of an ignition (for example, from lightning or human activity) and the potential for damage or harm (such as loss of trees, homes, or even lives).

Recognizing that you may have a high wildfire risk is the first step in doing something about it. As a real-world illustration of what's involved, we highlight the story of the Epsteins, who purchased property in southwestern Oregon in 1987. Soon after, they learned their wildfire risk was high; in fact, parts of the property had burned in intense wildfires at least twice in the past century. You'll learn what they did to reduce their risk in their case history on page 20.

Whether you own a few acres or thousands, this publication will help you reduce the potential for wildfire damage on your property while improving overall forest health and wildlife habitat. Although these actions won't prevent a wildfire from coming onto your property, they can make it more fire resistant. In other words, by following the guidelines in this publication you can reduce a *fire's severity* so that most trees survive and firefighters are better able to attack and extinguish the blaze.

While this publication provides suggestions for making your property more fire-resistant, it does not specifically address the area of *defensible space* immediately around your home, cabin, or other structures. For

detailed information about creating and maintaining defensible space, refer to the resources listed on page 28 of this publication.

Fire in Northwest forests

Fire has played an important role in the development and maintenance of forests in the Pacific Northwest.

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Historically, wildfires under-burned some forests, leaving mature trees intact, while in other forests, entire stands and watersheds were consumed. In still other forests, fires burned with a mix of high and low *intensity*. Ecologically, wildfire played numerous important roles such as thinning forests, reducing accumulated fuels such as underbrush, and creating new forests of different ages and patch sizes—all of which have added to the diversity and productivity of Pacific Northwest forests.

Over the past century or so, however, many of our forests have become more vulnerable to intense wildfires, due in large part to an overabundance of hazardous fuels including dead and unhealthy trees. Moreover, as more people live in or near wooded areas—known as the wildland-urban interface—the risk is much greater for wildfire due to human negligence. Intense fires pose significant risks to private forestland, homes and other




structures, and human lives. And collectively, they cost millions in lost future timber revenue and in expenses for fire suppression, reforestation, and rehabilitation of burned lands.

Laws on fire protection and other forest activity

Before you design or carry out any plan to reduce fire risk or to do work on your woodland property, learn about the fire and forest-protection laws specific to your state. They pertain to all private forestland owners, no matter how few forested acres you have.

The Oregon Department of Forestry (ODF), the Idaho Department of Lands (IDL), the Washington Department of Natural Resources, and local forest protection associations are principally responsible for overall wildfire protection on state and private lands. (See Appendix A.)

Table 1. Fire severity effects on trees, organic matter, woody debris, soil erosion potential, and vegetation.

Aspects affected	Degree of fire severity		
	Low	Medium	High
Litter/duff (decomposing needles)	Light char, slight consumption in spots	Moderate ground char; duff is deeply charred or consumed	Completely consumed
Leaves/twigs/branches	Light char	Mostly consumed	Completely consumed
Woody debris (logs)	Charred or lightly consumed	Deeply charred with some consumption	Logs consumed or deeply charred
Mineral soil	Not changed	Not visibly altered; white ash present	Significantly changed with altered soil properties; soil infiltration may be reduced.
Share of trees killed	< 20%	20–70%	> 70%
Erosion potential ¹	None/little	Some	Extensive
Photos			

¹ Erosion potential also depends on slope steepness