

ADAPTING WESTERN FORESTS TO CLIMATE CHANGE AND WILDFIRES: 8 KEY POINTS



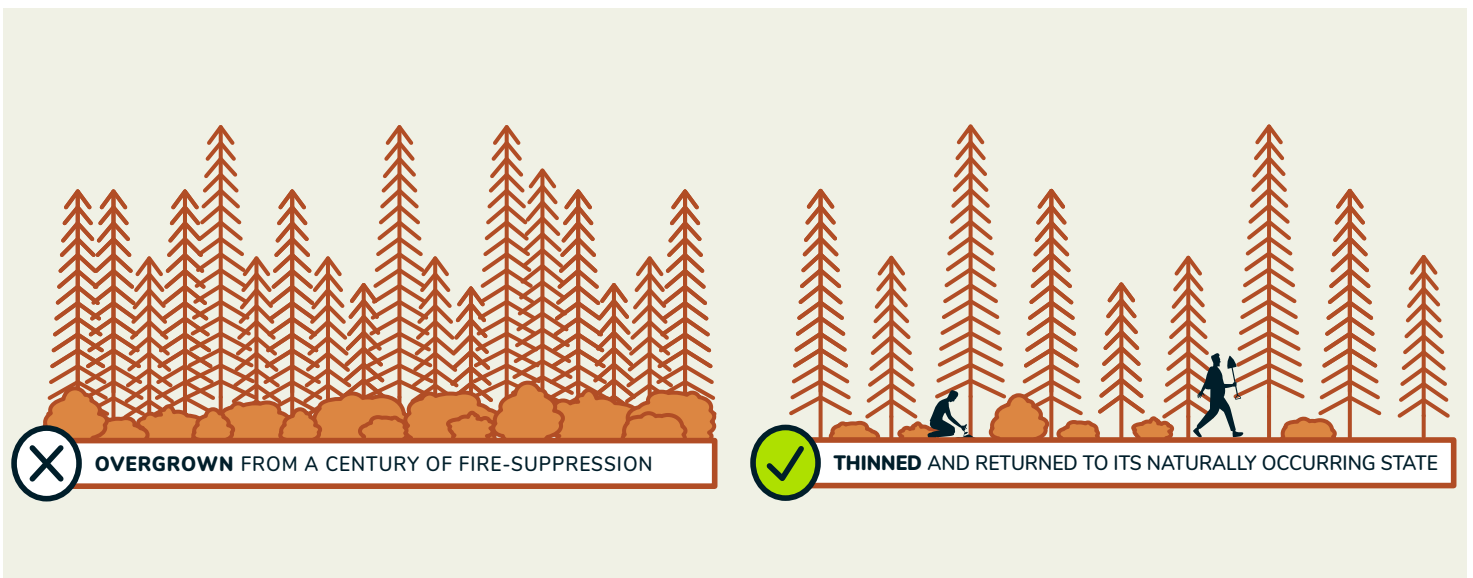
1 Thinning and prescribed burns help restore essential wildfire cycles.

The goal of fuel treatments is not to prevent or stop fires—scientists tell us that stopping all fires is neither possible nor good for the forest. Instead, fuel treatments like thinning and prescribed burns seek to moderate wildfires when they do occur. The resulting wildfires cost less to manage, result in ecological benefits to the forest, and decrease future wildfire risk to communities. Forests that are resilient to wildfire are also better adapted to seasonal droughts and a warming climate.



2 Thinning and prescribed burns help reduce fire intensity, even in extreme weather conditions.

The overwhelming weight of scientific evidence shows fuel treatments can help reduce wildfire intensity and increase management options. Large fires of mixed severities are natural in many forests, and are often beneficial. Fuel treatments like thinning and prescribed burning can limit the severity of fires supercharged by accumulated fuels.



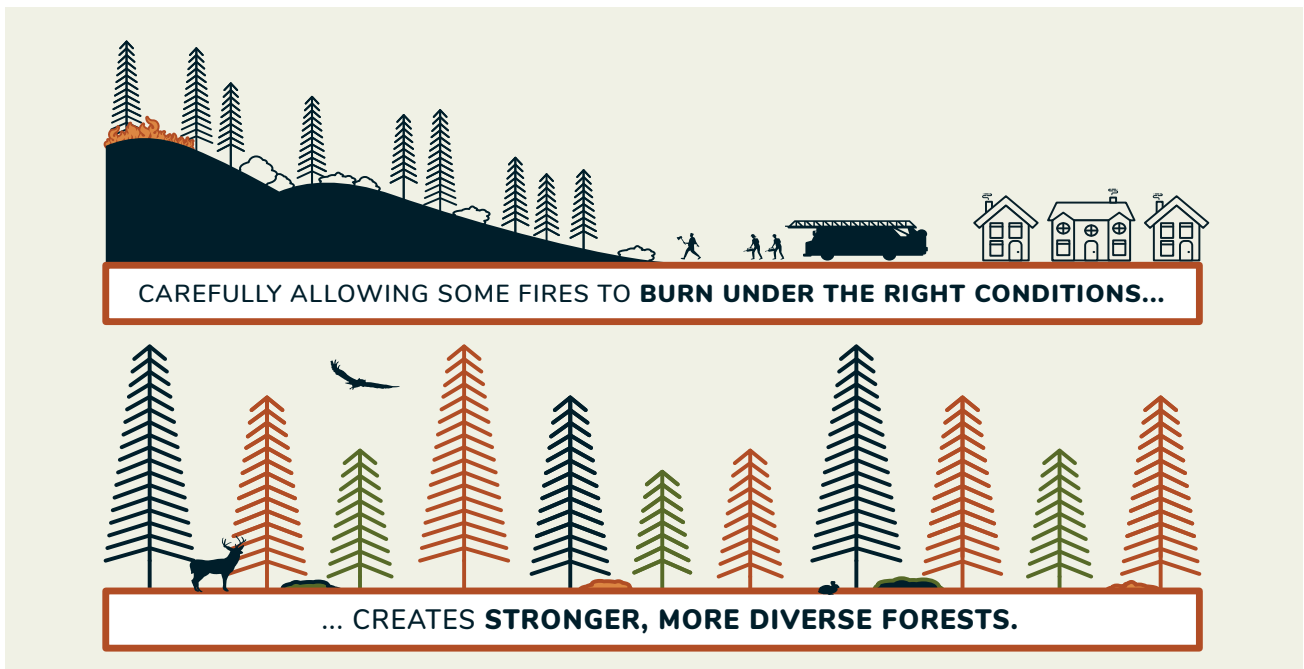
3 Fire suppression has put many forests at risk of larger, more severe wildfires.

The best available science shows fire suppression, aka “exclusion,” has changed the composition and structure of forests in the western U.S. Many forests are now more homogenous and vulnerable to megafires. Historic droughts brought on by a warming climate worsen this risk.



4 Is forest thinning alone sufficient to mitigate wildfire hazard?

In historically dry, frequent-fire forests, thinning can reduce ladder fuels and make it safer to reintroduce fire. However, forest thinning is not appropriate in all forests and often isn’t effective on its own. Without associated reduction in surface fuels, many thinning projects effectively reduce crown fire hazard but still support high-intensity surface fires that contribute to high tree mortality in the event of a wildfire.



5 Prescribed burning is a good way to reduce fuels on the ground.

Thinning and prescribed burning are often—but not always—appropriate management options. Where it is appropriate, this approach increases forest resilience not just to fire, but also to drought, disease, and insects. To date, the scale of these treatments has been far too small and more work is needed to restore forests. Partnering with Indigenous land managers can help recover the beneficial roles of fire in maintaining fire- and climate-adapted forest landscapes and communities.



6 Thinning just the “edges” does not restore forest health.

Often, forest managers prioritize the “wildland-urban interface” (WUI) for wildfire abatement to protect people and infrastructure. This practice may be effective in protecting communities, but to restore forest health, we must also reduce fuels strategically across larger areas. Expanding treatments in this way increases firefighting effectiveness, reduces wildfire spread, and helps reduce the toxicity of smoke that has plagued communities in areas with frequent wildfire.



7 Undoing 100 years of wildfire suppression will take a lot of time and work.

Forest fuel treatments work. But they work better if they are applied across large areas. Right now, fuel treatments account for only about 1% of areas burned by wildfires. Increasing investments into climate-smart thinning and prescribed burning will not just improve forest health—it will also boost the many side benefits healthier forests provide.



8 For carbon sequestration, protect large old trees. Don’t plant a dense grid of young trees.

Dense tree plantations, often considered a boon for carbon sequestration, are risky business when it comes to wildfire: Research shows plantations burn hotter and spread fire better than native, older forests. A better approach is to retain larger, more fire resistant trees when thinning. That boosts these trees’ carbon-capturing productivity and increases forest resilience to wildfires, disease, insects, and drought.