

Learning to live with Western wildfires

By Philip E. Higuera, Andrew J. Larson and Elizabeth Covelli Metcalf Guest columnists Oct 28, 2017

The 2017 fire season in the Western U.S. has been one of the most extensive and expensive on record, with over 8.8 million acres burned (NIFC.gov) and a price tag exceeding \$2 billion in federal firefighting costs alone (USDA.gov). In Montana, two firefighter fatalities came on top of countless other human impacts including lost structures, lost tourism revenue, health impacts from smoke, and a record-setting \$60+ million price tag for state residents (balancedbudget.mt.gov). It is natural to ask why there was such extensive burning this summer. The answer is clear: drought.

After a fire season like 2017 it's tempting to search for an accountable party on which to place blame. Recent claims that large and severe fires have been caused by litigious environmental groups ("Trumps Western Firefighters," Wall Street Journal, Sept. 18) and declining harvest rates on public lands managed by the U.S. Forest Service ("The American West is Burning," Washington Post, Sept. 20) are not consistent with the current scientific understanding of wildfires. The widespread burning during the summer of 2017 was primarily due to the intense drought in the Northern Rockies and Pacific Northwest. This pattern is consistent with numerous scientific studies documenting drought as a cause of widespread burning across Western forests, over the past several decades, over the past century, and over the past several centuries.

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The well-documented links between summer drought and widespread burning beg the question of what we can expect under a future climate projected to be warmer and drier. In the near term, increased drought is expected to lead to increased burning. Western wildfires also increasingly have the fingerprint of human-caused climate change: Nearly 50 percent of the area affected by wildfires over the past three decades has been attributed to human-caused climate change (pnas.org/content/113/42/11770). Climate change is thus a critical part of the conversation about what causes fire seasons like 2017.

So is there any point in trying to reduce burnable fuels with thinning and prescribed fire? Yes. Forest restoration and climate-change adaptation treatments, including thinning and especially prescribed fire, can moderate fire behavior and severity. Such treatments are critical tools that can help us live with wildfire today, and in a warmer, drier future. When wildfires burn recently treated forests, conditions are safer for fire managers, protection of homes and infrastructure is more likely, and the impacts on ecosystems can be moderated. But the public should understand that forest management, including timber harvesting and fuel treatments, cannot prevent or eliminate large fires or smoky skies during hot, dry summers like 2017. Indeed, preventing wildfires is counterproductive—fire prevention means even more fuel accumulation. And fire prevention is inconsistent with the ecology of most Western forests: Many plant species require fire to regenerate, and many wildlife species prefer, and even require, recently burned habitats.

We must recognize the inevitability of fire, and plan accordingly. Western forests and rangelands are flammable landscapes, and they have been for thousands of years. Trying to prevent wildfires in the West is like trying to prevent hurricanes in Florida—it is simply not feasible. But we can learn to live with the inevitability of wildfire.

Learning to live with wildfire is not a radical idea: it is a recognized necessity and part of the vision of the Wildland Fire Leadership Council, authors of the congressionally mandated National Cohesive Wildland Fire Management Strategy (forestsandrangelands.gov/strategy). Learning to live with wildfire is complex, because it requires integrating scientific understanding of wildfires with human values, beliefs, and political ideology. While there are no silver bullets, communities are becoming more resilient to longer and more severe fire seasons, through learning about fire risks, preparing for fire, and improving communication networks. Programs like Firewise (firewise.org) have been successful at providing best practices and toolkits that landowners can use to make their spaces more defensible.

Learning to live with wildfire means that government agencies, and especially individual homeowners, need to expect and plan for wildfires, and it means managing forests, rangelands and development in ways consistent with our best scientific understanding of what causes extensive fire seasons.

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