

## WILDFIRES

## Warming climate requires new approach to blazes — study

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Firefighters keep watch on a managed burn in Oregon in 2013. Photo by Lance Cheung, courtesy of U.S. Department of Agriculture.

Land managers across the West must fundamentally change the way they address wildfires as the climate warms and the risk of blazes increases, according to a new study that argues against the Trump administration's calls for more logging to reduce fuel loads.

The peer-reviewed [study](#), published in this month's *Proceedings of the National Academy of Sciences*, says the current system of wildfire management, which has "focused primarily on resisting wildfire through fire suppression and on protecting forests through fuels reduction on federal lands," is inadequate "to address a new era of heightened wildfire activity."

The academic team, led by researchers at the University of Colorado, Boulder, concludes that wildfires are only going to increase in number and intensity, due primarily to climate warming and the droughts and other problems this creates.

"Our key message is that wildfire policy and management require a new paradigm that hinges on the critical need to adapt to inevitably more fire in the West in the coming decades," says the nine-page study.

Tania Schoennagel, a research scientist at the University of Colorado, Boulder, and the study's lead author, said that means acknowledging the real threat of climate change — something the Trump administration has declined to do.

"While this administration is unwilling to recognize the human causes of climate change, it will have to deal squarely with the human consequences of climate change, which are occurring now," Schoennagel said in an email to E&E News. "So preparing for and adapting to increasing wildfire must be a priority to keep people safe and ecosystems healthy as climate changes."

Policymakers need to embrace "new strategies to help human communities live with fire," rather than focus on fuels reduction, the study says.

That means addressing the so-called wildland-urban interface (WUI) — residential areas that abut undeveloped "wildland vegetation," such as national forestland.

The WUI "has expanded tremendously in the past few decades, augmenting wildfire threats to people, homes, and infrastructure," the study says.

Indeed, the study notes that almost 2 million homes were built in the 11 Western states between 1990 and 2010, increasing the WUI area by 24 percent.

Most of the homes built in the WUI are in California (4.5 million), followed by Arizona (1.4 million) and Washington state (1 million), the study says.

Roughly 40 percent of the areas currently in the WUI in the West are "predicted to experience moderate to large increases in the probability of wildfire in the next 20 years," the study says.

The question, then, becomes what to do about this increased risk.

"We really are at a pivot point with wildfire in the West," Schoennagel said.

The study calls for establishing a system that imposes "negative financial consequences" on development within the WUI, "and positive financial rewards for decisions that reduce risk," such as building homes in these areas with fire-resistant materials.

The financial burden for protecting homes built in the WUI near forests and other federal lands falls primarily on federal agencies, and ultimately on taxpayers.

"Therefore, getting incentives right is essential," said Ray Rasker, a study co-author and the executive director of Headwaters Economics, a nonpartisan research group.

The bottom line: If counties and municipalities are going to permit development in the WUI, they need to take steps to make those developments more fire-resistant. For example, the study suggests using development codes to "encourage developers to set aside open space and recreational trails as fuel breaks and require ignition-resistant construction materials in fire-prone settings."

That idea isn't new. Rasker was part of a group of scientists, including Schoennagel, who last year wrote a [joint paper](#) calling for directing more money and effort toward funding federal programs that help homeowners protect their properties by using fire-resistant landscaping and yard materials ([Greenwire](#), Jan. 18, 2016).

"Providing incentives for counties, communities, and homeowners to plan fire-safe residential development for both existing and new homes and discouraging new development on fire-prone lands will make communities safer," Rasker said on the latest study.

But logging forests in an effort to reduce hazardous fuel loads is not the answer, the study says.

Between 2001 and 2015, these so-called mechanical fuels treatments have been applied across millions of acres of forestlands and rangelands, the study notes. And yet "the annual area burned [in the West] has continued to set records."

The effort to reduce fuel loads on federal lands by "thinning" trees has value, but is expensive and does not do enough to reduce wildfire risks.

The study suggests using more prescribed fires as a way to reduce fuel loads, but also to help dry forests adapt to the warmer climate.

"We need adaptive approaches to wildfire now that will yield tremendous benefits later," Schoennagel said. "Preparing now for adaptation to wildfire and climate change is a valuable investment in America's residential communities and natural ecosystems."

But some lawmakers and groups believe thinned-out woods will ease pressure on the Forest Service's fire suppression budget without doing environmental harm. Sportsmen's and industry groups recently backed a push on Capitol Hill to ease environmental reviews for some forest-thinning projects ([E&E Daily](#), March 17).