

This US wildfire season is among the worst: Here's why

September 8 2017, by Dan Elliott



In this Sept. 5, 2017, file photo, the Eagle Creek wildfire burns on the Oregon side of the Columbia River Gorge near Cascade Locks, Ore. An Oregon lawmaker has lashed out at restrictions on logging, blaming them for the intensity of wildfires plaguing much of the U.S. West. (Genna Martin /seattlepi.com via AP)

Acrid yellow smoke clogs the skies of major Western U.S. cities, a human-caused fire in the Columbia River Gorge rains ash on Portland,



Oregon, and a century-old backcountry chalet burns to the ground in Montana's Glacier National Park.

Wildfires are chewing across dried-out Western forests and grassland, putting 2017 on track to be among the worst <u>fire</u> seasons in a decade.

A snowy winter across much of the West raised hopes that 2017 wouldn't be a dried-out, fire-prone year, but a hot, dry summer spoiled that.

Here's what happened, and how bad things are:

HOW DID WE GET HERE?

Heavy snows last winter brought relief from a long, brutal drought across much of the West and produced a lush growth of natural grasses—thicker and taller than many vegetation experts had ever seen. But the weather turned very hot very fast in the spring, and the snow melted much faster than expected.

All the grass that grew high dried out, and so did forests at higher elevations, leaving plenty of fuel for wildfires, said Bryan Henry, a manager at the National Interagency Fire Center, which coordinates wildfire-fighting.

Summer lightning storms then dumped less rain than usual and weather conditions kept the humidity low, creating a natural tinderbox in many states.





Smoke clouds from the Eagle Creek Fire obscure the sun above Multnomah Falls, Wednesday, Sept 6, 2017, near Troutdale, Ore (Genna Martin/seattlepi.com via AP)

"It was kind of a bad combination of things," Henry said.

HOW BIG ARE THE FIRES?

By Thursday, more than 76 large fires were burning in nine Western states—including 21 in Montana and 18 in Oregon, according to the interagency fire center.

So far this year, wildfires have burned more than 12,500 square miles (32,000 square kilometers) nationwide. In the past decade, only two



years were worse at this point in the wildfire season: 2015 and 2012.

For all of 2015, a record 15,800 square miles (41,000 square kilometers) burned. In 2012, 14,600 square miles (38,000 square kilometers) were scorched.



A sign board at the McKenzie River Ranger Station makes clear the fire danger level in the Willamette National Forest, Wednesday, Sept. 6, 2017 in Blue River, Ore. Several fires are burning in the area.(Andy Nelson/The Register-Guard via AP)

WHAT ABOUT CLIMATE CHANGE?

It's making things worse for fires, said Jonathan Overpeck, dean of the



School for Environment and Sustainability at the University of Michigan.

Hotter and drier weather is a symptom of human-caused climate change, and that's making fires worse by leaving forests and other vegetation more flammable.

"It's not of course playing the only role," he said. "There's natural variability at work."

"Humans are contributing to an ever-increasing degree to wildfires in the West as they emit greenhouse gases and warm the planet and warm the West," Overpeck said.

TREE-EATING BEETLES





Evacuation level notices are displayed for motorists traveling Highway 126 near Rainbow, Ore. Wednesday, Sept. 6, 2017. Rainbow was under a level 1 evacuation notice while nearby McKenzie Bridgte was under a level 2 notice. (Andy Nelson/The Register-Guard via AP)

Two dozen species of beetles have killed trees on nearly 85,000 square miles (220,000 square kilometers) in the Western U.S. since 2000. They're responsible for about 20 percent of the 6.3 billion standing dead trees across the West, according to the U.S. Forest Service.

Researchers disagree on whether forests with beetle-killed trees are more likely to burn, or if they burn differently, than healthier forests.

Any standing dead tree—whether killed by beetles, drought, lightning or other causes—can crash down, posing hazards for firefighters who must adjust their tactics to avoid them.

WHO'S FIGHTING THE FIRES?

More than 26,000 people are fighting the fires, backed by more than 200 helicopters, 1,800 trucks and 28 air tankers dropping water and fire-retardant slurry. Three of those tankers are military C-130 planes.

The military has also assigned surveillance aircraft and at least 200 active-duty soldiers to fight fires and the National Guard has been called out in at least four states—California Montana, Oregon and Washington.





In this Tuesday, Sept. 5, 2017, photo, a wildfire burns through residential areas near the mouth of Weber Canyon near Ogden, Utah. (Benjamin Zack/Standard-Examiner via AP)

"We're stretched thin," said Jennifer Jones, a spokeswoman for the interagency fire center.

Sometimes the center gets requests for more crews and equipment than it has, so "fire managers on the ground are adjusting their tactics and strategies to accommodate the resources they can get," Jones said.

"We don't pack up our tents and go home."

HOW BAD ARE THE LOSSES?



Nine firefighters have died and 35 have been injured this year, according to the national Wildland Fire Lessons Learned Center. Two of the deaths came during training.

Fires have destroyed an estimated 500 single-family homes and 32 commercial buildings this year, the interagency fire center said.



Pedestrians walk off the Bridge of the Gods, which spans the Columbia River between Washington and Oregon states, as smoke from the Eagle Creek wildfire obscures the Oregon hills in the background near Stevenson, Wash., Wednesday, Sept. 6, 2017. The Eagle Creek fire continues to burn on the Oregon side of the river near the town of Cascade Locks, Ore. Officials closed the bridge to pedestrians and onlookers after this photo was taken. (AP Photo/Randy L. Rasmussen)

Janet Ruiz of the Insurance Information Institute sees a hopeful trend in fewer houses lost to wildfires in recent years. Ruiz credits better-



equipped firefighters and homeowners who take steps to minimize the danger such as clearing trees away from buildings and installing screens over dwelling openings to keep embers out.

"It's a better-informed public and fire services better able to fight fire," she said.

WHAT ABOUT ALL THE SMOKE?

"It's unusually bad," said Henry, of the National Interagency Fire Center.

Smoke is lingering from northern California and central Nevada to Montana. The air over parts of northern California, Idaho, Montana, Oregon and Washington is rated very unhealthy on the U.S. Environmental Protection Agency's AirNow website. It was not clear whether sources other than fires were contributing.

The air over the towns of Cottonwood and Porthill, Idaho, were listed as hazardous, the worst of six categories.





The sun is barely visible over downtown Portland, Ore., Wednesday, Sept. 6, 2017, as seen through smoke from wildfires burning in the Columbia River Gorge east of Portland. The growing blaze east of Portland, Oregon, in the scenic Columbia River Gorge, was one of dozens of wildfires burning in western U.S. states that sent smoke into cities from Seattle to Denver. (AP Photo/Don Ryan)

Fires spew particulates into the air, which are linked to premature death and cancer and can make asthma and <u>chronic lung disease</u> worse, said Dr. Norman H. Edelman, a senior science adviser to the American Lung Association.

"It certainly is bad enough to cause symptoms in people with chronic lung disease but also normal people," he said.

A volcanic eruption is probably the only thing that pumps more particulates into the atmosphere at once than a fire, he said.



HOW MUCH HAS FIREFIGHTING COST?

Federal spending to fight fires appears to be headed for a record.

The two main firefighting agencies, the U.S. Forest Service and the U.S. Department of Interior, report spending of more than \$2.1 billion so far. That's about the same as they spent in all of 2015, the most expensive wildfire season on record.



This Monday Sept. 4, 2017, photo provided by KATU-TV shows the Eagle Creek wildfire as seen from Stevenson Wash., across the Columbia River, burning in the Columbia River Gorge above Cascade Locks, Ore. A lengthy stretch of highway Interstate 84 remains closed Tuesday, Sept. 5, as crews battle the wildfire that has also caused evacuations and sparked blazes across the Columbia River in Washington state. (Tristan Fortsch/KATU-TV via AP)



Those figures do not include individual state spending, which no single agency compiles. Montana has spent \$50 million, exhausting its firefighting reserve fund in just over a month. Oregon has spent \$28 million, but the state expects to be reimbursed for part of that by the federal government and others.

WHEN IS IT GOING TO GET BETTER?

The outlook is bleak for Montana, most of the Northwest and much of California through September, according to the interagency fire center. The fire risk is expected to remain very high in Montana and the Southern California coast through October.

Montana is gripped by a long, severe drought. Nearly a quarter of the state, near the northeast corner, is rated as in a state of exceptional drought, the worst of five categories on the federal government's U.S. Drought Monitor.

DON'T SOME FIRES HELP THE ENVIRONMENT?





This Monday, Sept. 4, 2017, photo provided by KATU-TV shows a wildfire as seen from near Stevenson Wash., across the Columbia River, burning in the Columbia River Gorge above Cascade Locks, Ore. A lengthy stretch of highway Interstate 84 remains closed Tuesday, Sept. 5, as crews battle the growing wildfire that has also caused evacuations and sparked blazes across the Columbia River in Washington state. (Tristan Fortsch/KATU-TV via AP)

Yes. Fires can burn away undergrowth, preventing buildups of flammable vegetation that can make big fires even worse. They can also help some forests and grassland rejuvenate.

But very hot fires can damage the soil and make it water-resistant, which produces heavy runoff during rainstorms and snowmelt, which in turn can cause severe erosion, mud slides and floods.

Silt from fire-damaged valleys can clog streams, which kills fish.



The silt can also settle to the bottom of reservoirs, taking up space needed to store drinking water and forcing utilities to spend heavily to dredge it out.



A heavy tanker drops retardant on a wildfire in Weber Canyon, Tuesday, Sept. 5, 2017, near Ogden, Utah. At least one home went up in smoke and more than 1,000 people were evacuated as high winds fed the flames that started in a canyon north of Salt Lake City. (AP Photo/Rick Bowmer)





A fire engine drives past a burned area from a wildfire Monday, Sept. 4, 2017, in the Sunland-Tujunga section of Los Angeles. (AP Photo/Ringo H.W. Chiu)

© 2017 The Associated Press. All rights reserved.

Citation: This US wildfire season is among the worst: Here's why (2017, September 8) retrieved 27 April 2024 from https://phys.org/news/2017-09-wildfire-season-worst.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.