

Business

As Santa Ana Winds Arrive, California Braces for Wildfire Danger

By [Brian K Sullivan](#)

September 14, 2019, 4:30 AM PDT

-
- ▶ Hot, fast, dry winds can turn state's chaparral into a fuel
 - ▶ 'One football field a minute' speed makes them deadly
-



A helicopter makes a water drop on a wildfire in Glendale near Los Angeles, California. *Photographer: Ronen Tivony/NurPhoto via Getty Images*

The Santa Ana winds have returned to California, a signal to the state's residents that the wildfire season has begun in earnest.

The winds are created by high pressure over Nevada's Great Basin as cool weather starts to arrive in the Fall. Low pressure systems in warmer California pull them along, and as they flow through the Sierra Nevadas and other ranges, twisting their way through narrow passes and canyons, they heat up, lose moisture and gain speed.

Once they hit California, their low humidity and high heat can quickly turn the bushy chaparral into an explosive fuel source. It's part of the reason that California accounted for 92% of all insured wildfire losses in the U.S. from 2008 to 2018, according to insurer Munich Re. Colorado was second with 3%.

"The high winds cause the fires to spread incredibly rapidly," according to Mark Bove, a natural catastrophe solutions manager at Munich Re. In some cases, he said, they have burned at the equivalent of "one football field per minute," driven by the wind.

They also "cause more severe types of fire behavior," Bove said, spurring "fire tornadoes or whirls" where the blazes move speedily from the ground to the tree tops.



Firefighters battle the Camp Fire in Magalia, Calif. in 2018. *Photographer: Karl Mondon/Digital First Media/The Mercury News via Getty Images*

In 2018, this behavior helped feed 6,284 fires that destroyed 876,147 acres in the state, while the so-called Camp Fire alone killed 86 people, making it the deadliest wildfire in state history. In

response, California has set aside \$1 billion for fire-prevention, and set up a \$21 billion insurance fund to pay for future blazes sparked by utility company equipment.

Long known as Santa Anna winds in Southern California, similar winds are called "diablos" in northern California. Whatever the name, the winds have haven't been a good combination with California's local utilities.

A series of wind-driven fires sparked by PG&E Corp. equipment forced the utility to seek bankruptcy protection in January. The company said it faced liabilities of \$30 billion or more from claims tied to the fires that destroyed tens of thousands of structures and killed more than 100 people.

So far this year, wildfires haven't done the level of damage seen in previous years. Through Sept. 8, 3,993 fires have burned about 36,683 in the state, substantially below the 271,740 five-year average, according to the California Department of Forestry & Fire Protection.

But much is at stake: Across California, 240,580 homes remain at extreme risk from fires, according to a new study from CoreLogic, a property data company in Irvine, California.

"During the Santa Anas, the hottest temperatures can be right at the ocean," said Eric Boldt, warning coordination meteorologist for the National Weather Service in Los Angeles. "That is why these fires can burn all the way to the ocean."

In this article

1575626D

ARRIVE

Private Company

0781107D

DIGITAL

Private Company

PCG

PG&E CORP

11.18 USD ▲ +1.08 +10.69%