

# Study Finds Global Warming Has Made California's Drought Worse

Mollie  
Reilly

Deputy Politics Editor, The Huffington Post

Global warming is worsening the effects of California's historic drought, according to a study published in the journal [Geophysical Research Letters](#) this week.



"A lot of people think that the amount of rain that falls out the sky is the only thing that matters," lead author A. Park Williams, a bioclimatologist at Columbia University's [Lamont-Doherty Earth Observatory](#), said in a statement. "But warming changes the baseline amount of water that's available to us, because it sends water back into the sky."

Scientists analyzed data on rainfall, temperature, humidity and other climate factors from 1901 to 2014. The researchers found that while there wasn't a long-term precipitation trend, temperatures rose approximately 2.5 degrees over that time. That increase, combined with the lack of rainfall in California over the last few years, quickened the moisture loss in already dry soil and trees.

Williams said warming trends are likely responsible for 15 percent to 20 percent of the drought.



MARK RALSTON via Getty Images

The new study is the latest scientific report to partially blame California's drought on global warming. A [Stanford University](#) study released in March said man-made climate change has increased the likelihood that above-average temperatures and below-average rainfall and snowfall will occur at the same time, creating the conditions for severe drought.

"It used to be that half the years were warm, and half were cool," Dr. Noah Diffenbaugh, the Stanford study's lead author, told [The New York Times](#). "Now we're in a regime where most of the years are warm."

In April 2014, a Utah State University study also [linked](#) climate change to the drought, pointing to climate conditions that likely were worsened by a buildup of greenhouse gases.

[Nearly all of California](#) is facing abnormally dry conditions, and extreme drought persists in 71 percent of the state. According to economists at the University of California, Davis, those conditions will cost the state's economy approximately [\\$2.74 billion this year](#), with the agricultural sector taking the biggest hit.

The drought also has exacerbated wildfire season, with [dozens of blazes](#) plaguing the state. According to [CalFire](#), this year has seen about 1,500 more fires than the average for the same period over the last five years.

Gov. Jerry Brown (D), an outspoken environmental advocate, said earlier this month the drought has created a "new normal" in the state.

"The fires are changing. The drought over the last several years has made everything drier," Brown [said](#). "People can argue about how much of that is climate change, but we know the annual temperatures are going up over the last 50 years."

À

California Drought

1 of 7

À

À



