Seven States Running Out of Water

By Alexander E.M. Hess and Thomas C. Frohlich May 23, 2014 6:35 am EDT

The United States is currently engulfed in one of the worst droughts in recent memory. More than 30% of the country experienced at least moderate drought as of last week's data.

In seven states drought conditions were so severe that each had more than half of its land area in severe drought. Severe drought is characterized by <u>crop loss</u>, frequent water shortages, and mandatory water use restrictions. Based on data from the <u>U.S. Drought Monitor</u>, 24/7 Wall St. reviewed the states with the highest levels of severe drought.

In an interview, U.S. Department of Agriculture (USDA) meteorologist Brad Rippey, told 24/7 Wall St. that drought has been a long-running issue in parts of the country. "This drought has dragged on for three and a half years in some areas, particularly [in] North Texas," Rippey said.

While large portions of the seven states suffer from severe drought, in some parts of these states drought conditions are even worse. In six of the seven states with the highest levels of drought, more than 30% of each state was in extreme drought as of last week, a more severe level of drought characterized by major crop and pasture losses, as well as widespread <u>water shortages</u>. Additionally, in California and Oklahoma, 25% and 30% of the states, respectively, suffered from exceptional drought, the highest severity classification. Under exceptional drought, crop and pasture loss is widespread, and shortages of well and reservoir water can lead to water emergencies.

Drought has had a major impact on important crops such as winter wheat. "So much of the winter wheat is grown across the southern half of the Great Plains," Rippey said, an area that includes Texas, Oklahoma, and Kansas, three of the hardest-hit states. Texas alone had nearly a quarter of a million farms in 2012, the most out of any state, while neighboring Oklahoma had more than 80,000 farms, trailing only three other states.

In the Southwest, concerns are less-focused on <u>agriculture</u> and more on reservoir levels, explained Rippey. In Arizona, reservoir levels were just two-thirds of their usual average. Worse still, in New Mexico, reservoir stores were only slightly more than half of their normal levels. "And Nevada is the worst of all. We see storage there at about a third of what you would expect," Rippey said.

The situation in California may well be the most problematic of any state. The entire state was suffering from severe drought as of last week, and 75% of all land area was under extreme drought. "Reservoirs which are generally fed by the Sierra Nevada's and the southern Cascades [are] where we see the real problems," Rippey said. Restrictions on agricultural water use has forced many California farmers to leave fields fallow, he added. "At [the current] usage rate, California has less than two years of water remaining."

The U.S. Drought Monitor is produced by the U.S. Department of Agriculture (USDA), the National Oceanic Atmospheric Administration (NOAA), and the National Drought Mitigation Center at the University of Nebraska-Lincoln. 24/7 Wall St. reviewed the seven states with the highest proportions of total area classified in at least a state of severe drought as of May 13, 2014. We also reviewed figures recently published by the USDA's National Agricultural Statistics Service as part of its 2012 Census of Agriculture.

These are the seven states running out of water.

7. Texas

> Pct. severe drought: 56.1%

> Pct. extreme drought: 39.9% (4th highest) > Pct. exceptional drought: 20.7% (3rd highest)

Much of north and central Texas, including all of the Texas Panhandle, was covered in exceptional drought as of last week. In all, almost 40% of land area in the state experienced extreme <u>drought conditions</u>. Recently, some have said the heavy use of water in natural gas fracking processes in North Texas is problematic during the area's drought. Additionally, the drought could have a large impact on the state's agriculture industry. Texas had nearly a quarter of a million farms, the most out of any state in the nation, as of 2012.

6. Oklahoma

> Pct. severe drought: 64.5%

> Pct. extreme drought: 50.1% (2nd highest) > Pct. exceptional drought: 30.4% (the highest)

Severe drought covered over 50% of Oklahoma as of last week, up from roughly 33% one year ago. The state's drought worsened from the middle of April, when just 27% of the state experienced severe drought. The state's 80,000-plus farms and nearly 310,000 hired farm workers have been struggling with the drought conditions. The situation is all the more difficult because the state is supposed to be in the midst of its rainy season. An open burn ban is in effect for the western part of the state due to fire hazards resulting from the drought. In March, the Oklahoma Emergency Drought Relief Commission awarded more than \$1 million to several drought-ridden communities in the state.

5. Arizona

> Pct. severe drought: 76.3%

> Pct. extreme drought: 7.7% (9th highest)

> Pct. exceptional drought: 0.0%

Unlike other states suffering the most from drought, none of Arizona experienced exceptional drought. Severe drought conditions, however, engulfed more than three-quarters of the state as of last week. While dry conditions are not particularly unusual in Arizona at this time of year, the U.S. <u>Drought Monitor</u> accounts for local seasonal patterns in assessing drought conditions. Moreover, the extreme heat and lighter-than-average snowfall from the winter have reduced the soil moisture to such a degree that fire hazards are significantly higher.

4. Kansas

> Pct. severe drought: 80.8%

> Pct. extreme drought: 48.1% (3rd highest) > Pct. exceptional drought: 2.8% (6th highest)

Like several states running out of water, 80% of Kansas was engulfed in at least severe drought, an increase from one year ago when roughly 70% was covered by severe drought. Compared to last May, however, when exceptional drought covered nearly one fifth of the state, just 2.8% of Kansas was considered exceptionally dry as of last week. In announcing the severity of the state's drought problem, Kansas Governor Sam Brownback lifted restrictions on taking water from state-owned fishing lakes.

3. New Mexico

> Pct. severe drought: 86.2%

> Pct. extreme drought: 33.3% (6th highest) > Pct. exceptional drought: 4.5% (5th highest)

More than 86% of New Mexico was covered in severe drought as of last week, more than any state except for Nevada and California. Additionally, one-third of the state was in extreme drought, worse than just a month earlier, when only one-quarter of the state was covered in extreme drought. However, conditions were better than they were one year ago, when virtually the entire state was in at least severe drought, with more than 80% in extreme drought conditions. NOAA forecasts conditions may improve in much of the state this summer.

2. Nevada

> Pct. severe drought: 87.0%

> Pct. extreme drought: 38.7% (5th highest) > Pct. exceptional drought: 8.2% (4th highest)

Nearly 40% of Nevada was covered in extreme drought last week, among the highest rates in the country. The drought in the state has worsened since the week of April 15, when 33.5% of the state was covered in extreme drought. According to the Las Vegas Valley Water District (LVVWD), the main cause of the drought this year has been below average snowfall in the Rocky Mountains. Melting snow from the Rocky Mountains eventually flows into Lake Mead, which provides most of the Las Vegas Valley with water. John Entsminger, head of both the LVVWD and the Southern Nevada Water Authority, said that the effects of the drought on the state has been "every bit as serious as a Hurricane Katrina or a Superstorm Sandy."

1. California

> Pct. severe drought: 100.0%

> Pct. extreme drought: 76.7% (the highest) > Pct. exceptional drought: 24.8% (2nd highest)

California had the nation's worst drought problem with more than 76% of the state experiencing extreme drought as of last week. Drought in California has worsened considerably in recent years. Severe drought conditions covered the entire state, as of last week. Governor Jerry Brown declared a state of emergency earlier this year as the drought worsened. California had 465,422 hired farm workers in 2012, more than any other state. Farm workers would likely suffer further if conditions persist. The shortage of potable water has been so severe that California is now investing in long-term solutions, such as desalination plants. A facility that is expected to be the largest in the Western hemisphere is currently under construction in Southern California, and another desalination facility is under consideration in Orange County.

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Read more: <u>Seven States Running Out of Water - 24/7 Wall St.</u> <u>http://247wallst.com/special-report/2014/05/23/seven-states-running-out-of-water/#ixzz3bs46xoJN</u>