

Groundwater disappearing in southwest, prompting fears it may become depleted

By Reuters

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Underground stores of water in the southwestern United States have receded dramatically amid ongoing drought that has parched states from Oklahoma to the Pacific Coast and is costing California billions in lost crops and jobs, a new study shows.

The study released Thursday by the University of California, Irvine, shows that groundwater in the Colorado River basin has dropped by 40 million acre-feet over the past five years, the equivalent of two of the nation's largest reservoirs.

“If drought conditions like this continue, there is a possibility we will entirely deplete our groundwater storage,” said researcher Stephanie Castle, the report's author.

The data comes as policymakers are wrestling over how to manage the use of groundwater, accessed via wells and often the last resort for farmers unable to buy water from reservoirs in dry years.

Using satellite data, Castle tracked the ebbing water in the Colorado River basin, which stretches through seven states.

Underground water is an important backup during times of drought, relied on by farmers and others with access to wells when streams and reservoirs become depleted.

As drought conditions have continued, the underground water in the basin – not to be confused with the water in the river itself or the huge reservoirs it feeds – receded at a far faster rate than expected, Castle said.

Most of the reduction was in the Lower Colorado River Basin, she said.

In bone-dry California, the reservoirs that millions rely on for their water have also become depleted in the drought, new data from state water officials showed Thursday.

The newly released data show that each of the state's 12 major reservoirs are below historical averages, while 10 of them are below 50 percent capacity and the five largest below 40 percent capacity.

Northern California's Lake Shasta, the state's largest reservoir, is holding 1.6 million acre-feet of water, just 36 percent of its total capacity and nearly half the amount it held last year. Neighboring Lake Oroville and Trinity Lake, the second- and third-largest reservoirs, are at 37 percent capacity, also nearly half that of last year.

“The reservoirs are clearly holding less water this year than they did a year ago today and that is a concern that we all share,” said Doug Carlson, a spokesman for the California Department of Water Resources.