



Sierra Snowpack is Declining

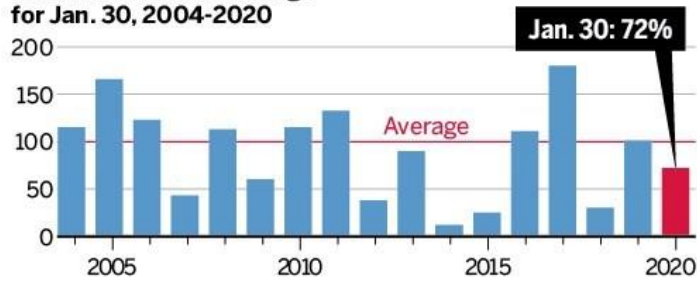
Sean de Guzman (right), chief of the California Department of Water Resources' Snow Surveys and Water Supply Forecasting Section, conducts the second media snow survey of the 2020 season on January 30, 2020 at Phillips Station in the Sierra Nevada Mountains in El Dorado County. Andy Reising (left), water resources engineer for DWR's Snow Surveys and Water Supply Forecasting Section, and Jeremy Hill (center), chief of DWR's Operations Support Branch, help with the survey. (Photo: Ken James / California Department of Water Resources)

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SNOWPACK BELOW NORMAL

Following a dry January, the statewide Sierra Nevada snowpack, the source of one-third of California's water supply, was at 72% of its historic average on Thursday.

Percent of historic average
for Jan. 30, 2004-2020



Source: California Department of Water Resources

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All that sunny, dry weather in January is beginning to take a toll on California's water supply.

As of Thursday, the statewide Sierra Nevada snowpack — a major source of water for cities and farms across the state — stood at 72% of its historical average for that date, down from 90% a month ago.

While concerning, experts say it's no time to panic and not a sign that the state is necessarily headed toward a drought. California still has two more months of winter weather ahead. And many of the state's biggest reservoirs are currently at or near their historic averages due to wet conditions last year.

"It's decent. It's still slightly below average," said Sean de Guzman, chief of snow surveys and water forecasting for the state Department of Water Resources. "But we have a couple more months to see what will happen."

By comparison, on Jan. 31, 2019, the statewide Sierra snowpack was at exactly 100% of normal. But by April 1, it jumped to 161% of normal thanks to multiple storms hitting the West Coast in February and March that brought heavy rain and snow.

"It just shows how unpredictable snow and precipitation are in California," de Guzman said. "A few atmospheric rivers can dramatically change the water year."

Forecasts for the next 10 days show mostly dry, sunny conditions across Northern and Southern California, meaning the snow pack will almost certainly get smaller in the coming weeks.

Driving the dry weather has been a ridge of high-pressure air parked off the West Coast that has blocked storms from hitting California.

“The storm track over the Pacific as it approaches has been shifted north to the Pacific Northwest and Canada,” said Warren Blier, a meteorologist with the National Weather Service in Monterey. “We’ve had a little bit of light rain, but those have been the tail-ends of these systems dragging through our area. The problem is that the heart of the rainfall with these systems has remained well to our north.”

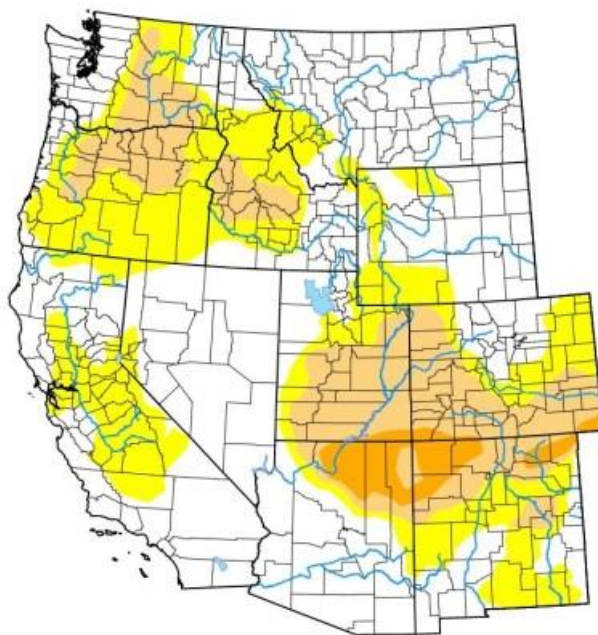
Most Bay Area cities have received about half their average rainfall for January, and only one day, Jan. 16, brought more than 1 inch to San Francisco, Oakland and San Jose.

“There’s a possibility of a few showers on Sunday, but no significant rainfall,” Blier said.

On Thursday, officials from the state Department of Water Resources conducted their second monthly Sierra Nevada snowpack survey of the season at Phillips Station along Highway 50 near Sierra-at-Tahoe ski resort in El Dorado County.

At that location, the snow was 40.5 inches deep. It held an estimated 14 inches of water. That’s 79% of the historic average for that location for the beginning of February, officials said.

The department tracks snow levels at 260 locations every month. It also runs a network of 130 electronic snow sensors that provide daily updates.



Map released: Thurs. January 30, 2020

Data valid: January 28, 2020 at 7 a.m. EST

Intensity:

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Author(s):

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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying [text summary](#) for forecast statements.

The U.S. Drought Monitor on Thursday showed none of California in a drought,

but 34% of its landscape was 'abnormally dry' due to below-normal rain and snow in January.

Asked when state water officials might begin worrying about a new drought emerging, de Guzman said that usually takes at least two dry years in a row. He noted that the snow where he stood was more than three feet deep Thursday. During the depths of California's recent drought, on April 1, 2015, the ground was bare.

"Honestly, this is actually decent conditions," he said. "We're still below average. But we're nowhere near where we were from 2012 to 2015."

How much snow falls every winter is critical to California's water picture. The snow, which forms a vast "frozen reservoir" over California's 400-mile long Sierra mountain range, provides nearly one-third of the state's water supply for cities and farms as it slowly melts in the spring and summer months and fills rivers and reservoirs.

After a dry start to this winter season, several big storms around Thanksgiving and in December boosted rain and snowfall totals across the state back to near normal by New Year's Day.

Those storms also came as a relief to the state's ski industry, which suffered significantly during the 2012-16 drought.

That drought was broken by the drenching winter of 2016-17. At the beginning of February in 2017, the Sierra snowpack was 180% of normal — more than double where it is now.

The recent wet years provided California water managers some "money in the bank."

Shasta Lake, the state's largest reservoir, near Redding, on Thursday was 76% full, or 113% of normal. Lake Oroville, in Butte County, is 62% full, or 95% of normal. And San Luis Reservoir, near Los Banos, is 74% full, or 95% of its historical average.

None of California's landscape is currently classified as being in a drought, according to Thursday's U.S. Drought Monitor, a weekly report put out by the U.S. Department of Agriculture, the University of Nebraska and the National Oceanic and Atmospheric Administration.

Still, Thursday's report did classify 34% of the state as being "abnormally dry," up from just 3.6% a week ago. That "abnormally dry" area was mostly in the Sierra foothills and Central Valley but also includes parts of the Bay Area.

Rainfall totals have varied widely around the state so far this winter.

In the Bay Area, San Francisco has received 9.09 inches of rain, or 70% of its historic average for this date. San Jose is at 50% and Oakland is at 52%.

Southern California is faring better, due to some big storms in December, with rainfall in Los Angeles at 100% of normal on Thursday and San Diego at 146%.