



October 31, 2022

The California Hydrology Update is a regular summary of current weather conditions in the State of California and serves as a supplement to the data on the [California Water Watch](#) website. It is produced by the California State Climatologist, Mike Anderson, and the hydrology and forecasting team at the California Department of Water Resources. For the latest on drought conditions, visit [drought.ca.gov](#). For tips and resources for conserving water, please visit [saveourwater.com](#).

Precipitation

As water year 2023 (October 1, 2022 to September 30, 2023) ends, statewide precipitation was only 10% of average for October. That will rank as the 6th driest October in a period of record that dates back to water year 1896. November started with some precipitation and more is forecast through the first half of the month. Fall precipitation is needed to help wet the landscape to help streamflow in the winter and spring months

Temperature

The statewide average temperature for October 2022 is 64.1 degrees Fahrenheit which is 4.7 degrees above the period of record average based on Western Region Climate Center's California Climate Tracker (WRCC - California Climate Tracker ([dri.edu](#))). This ranks as the 6th warmest October in the 128-year period of record. Expectations are for temperatures to be above average as fall progresses. Historically La Nina years are some of the State's colder years. However, recent La Nina years including 2008, 2009, 2018, 2021 and 2022 have had warmer than average outcomes. This is consistent with the warming trends that we have seen over the past decade due to California's changing climate.

Reservoirs

Storage can vary significantly based on size of reservoir and purpose. Reservoir levels will continue to fall until precipitation is sufficient to increase streamflow which typically happens in November or December.

Snowpack

At the end of October, all the automated snow sensors reported no snow. The seasonal snowpack typically begins to form in November or December and on average grows until around April 1 when the snowmelt season typically begins. The timing, pace, and scale of storms and their temperature characteristics will determine how big the snowpack gets and when it peaks.

Streamflow and Groundwater

Streamflow and groundwater are also both well below average across much of the state. For the groundwater wells that are reporting, 65% are below average. While many areas in California are reporting streamflow in the bottom 10% of the historical distribution, the rains in September did improve surface flows in some areas of the State. It is expected that the landscape will continue to dry with decreasing streamflow and groundwater levels until the first rains at the start of Water Year 2022 generate new flow.