



August 5, 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

Statewide for the current water year (October 1, 2021- September 30, 2022) precipitation is 74% of average, as of August 5, 2022, and unchanged since the May update. On average, only 10% of the water year total precipitation shows up from May through September. While conditions have largely been dry, monsoon moisture has resulted in some thunderstorms in parts of the state.

### Temperature

The statewide average temperature for October through July is 56.3 degrees Fahrenheit, which is 1.9 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 14<sup>th</sup> warmest October through July in the 128-year period of record.

Expectations are for temperatures to be above average through the rest of summer and into the fall. La Nina years, which is what we are in this year, are historically some of the state's colder years. However, recent La Nina years including 2008, 2009, 2018, and 2021 have been warmer than average. This year is likely to follow that pattern and is consistent with the warming trends that we have seen over the past decade due to California's changing climate.

### Reservoirs

Statewide reservoir storage began to decrease in June. Storage was at 69% of average for the end of July. Storage can vary significantly based on size of reservoir and its purpose. The statewide storage at this time of year is better than last year at this time when it was 59% of average.

### Snowpack

At the end of July, all the automated snow sensors reported no snow. The peak of the statewide snowpack as measured by the automated sensors appears to be March 8 with about 57% of a seasonal snowpack, which equates to 16.1 inches of snow water equivalent or SWE.

The April 1 snowpack ended up being one of the 10 worst on record due to the amount of snow melting in March from a lack of storms, clear skies, and warmer-than-average temperatures. No snow is expected until late November to begin building the seasonal snowpack for water year 2023.

### Streamflow and Groundwater

Streamflow and groundwater are also both well below average across much of the state. Rainfall along the North Coast and in the southern Sierra from thunderstorms have elevated streamflow in that region. Other areas in California are reporting streamflow and groundwater in the bottom 10% of the historical distribution. It is expected that the landscape will continue to dry decreasing streamflow and groundwater levels until the first rains fall for the start of Water Year 2023.