



Wading Through Weather Whiplash: Where did all the water go?

A look back at the wild weather and our water supplies in 2023

By Gary Martin, Board President, SCV Water

Looking back, the past few years have been “extreme” to say the least. California experienced an extreme multi-year drought, recording its three driest years from 2020 through 2022, followed by extreme precipitation in 2023 that pushed the Statewide average to 141% for the year.

The shift between these two extreme and opposing conditions caused weather whiplash for the western U.S., and California, including SCV Water.

Sierra Snowpack

The amount of imported water we receive from the State Water Project depends largely on the amount of snow in the Sierras. In 2023 the statewide Sierra snowpack reached 237% of normal on April 1st. For comparison, the snowpack measured on April 1, 2022, was only 4% of normal. The 2023 snowpack was also higher than any other reading since the snow sensor network was established in the mid-1980s and will go down as one of the largest snowpack years on record in California since the 1950s.

Local Precipitation

Locally in the SCV, we’ve received 40.43 inches of precipitation – almost two and a half times our annual average of 17.4 inches! And 2023 was the fourth wettest year on record since precipitation measurements began in the SCV in 1927.

So, the question is – where did all the water go?

What Happened to the Water

Over the course of the year, our team demonstrated unwavering dedication while tackling intricate challenges. The Water Resources Department swiftly transitioned from the quest for water supplies to strategizing optimal storage solutions within a matter of weeks, a response necessitated by the impactful storms that swept through California earlier this year.

This is where all the water went in 2023:

- **Imported water supplies.** In April, the California Department of Water Resources (DWR) increased its State Water Project allocation to 100% as the Sierra snowpack reached its peak and began to melt. This allocation allowed our local operations to shift to maximize the use of imported supplies in 2023 so that we could give our groundwater supplies a break and our aquifer levels a chance to recover.
- **Local groundwater supplies.** The precipitation we received helped recharge our local groundwater aquifers where the water will stay until its extracted for use. Our local groundwater basins provide for about half of our water supply in normal years.

- **Surplus water supplies.** Surplus water went to these dry-year reserve programs:
 - **Water Banking Programs.** During the drought we relied heavily on our banked (stored) water, using up to 45% of those supplies. With the surplus water, our banking programs are now 80% full, with four plus years of supplies stored.
 - **Water Exchange Programs.** We partner with other water agencies to move water where it is needed most to replenish supplies, and we are able to call on those supplies in times of need during dry years. We were able to execute exchange agreements with our partners because we maxed out our water banking programs.

[Click this link for more information about our Water Banking and Exchange Programs.](#)
 - **Saved surplus supplies for a not-so-rainy day.** Once we replenished our supplies used in the last drought, we saved some water for 2024 as a cushion in case it turns out to be another dry year.
 - **Sold surplus supplies.** Finally, for the water we didn't have room to store, we sold it to benefit other agencies. The revenue we made from the sale of those supplies will bolster our operating budget.

Additionally, water supply demands decreased significantly – by 12.63%, from 2022 to 2023. Even as we shifted out of the drought due to wet local conditions, a big part of this reduction came from our customers' water-saving efforts – recognizing the benefits and value of water and taking steps to reduce inefficiency and waste.

From the execution of impactful conservation initiatives during the recent dry years, to the proactive and meticulous management of water supplies in 2023, our team has adapted in the face of evolving circumstances. The challenges we faced were met with collective perseverance and innovation, and our strategic approach ensured the continued resilience of our water supply portfolio, as we remain committed to providing a sustainable water future for our community.

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