

CALIFORNIA DROUGHT UPDATE

MARCH 1, 2023

Current Conditions

- Record-breaking atmospheric rivers that pounded the state in January gave way to a mostly dry February that saw less than an inch of precipitation statewide.
- A new storm system that began earlier this week broke the month-long dry spell, bringing additional rain and snow that has impacted parts of California differently.
- State water managers continue to monitor conditions across California. It will take more than a single wet year for California to fully recover from the last three years – the driest ever recorded in state history.
- Water managers typically wait until later in the precipitation season to assess the statewide water supply outlook. Past years have shown that conditions can change rapidly, and what looks like a healthy snowpack can disappear quickly. The precipitation California has received in recent days combined with the nine atmospheric rivers in early January has helped ease drought impacts in parts of California.
- Those storms continue to build the Sierra Nevada snowpack to above-average levels, which should also improve water storage levels when the snow melts this spring. The Sierra statewide snowpack is at 189 percent of average for this time of year, and 166 percent of the April 1 average as of February 28. DWR will conduct the next snowpack survey on March 3. The most important measurement of the year will be around April 1 when the snowpack is typically at its highest.
- Statewide reservoir levels are now 95 percent of average and our statewide precipitation is at 132 percent of average for this time of year as of February 28.
 - Lake Shasta – 84 percent
 - Lake Oroville – 116 percent
 - San Luis – 95 percent

The California Drought Update is a weekly roundup of conditions, state actions and upcoming developments. It is produced by an interagency team that includes the California Natural Resources Agency, the California Environmental Protection Agency, the Governor's Office of Emergency Services, the California Department of Food and Agriculture, the Department of Water Resources, the Department of Fish and Wildlife, the State Water Resources Control Board and the Department of Public Health. For the latest on drought, please visit <https://drought.ca.gov>. For tips and resources for conserving water, please visit www.saveourwater.com. The update will be provided every two weeks.

Current Conditions (cont.)

- While winter storms have helped the snowpack and reservoirs, groundwater basins are much slower to recover. Many rural areas are still experiencing water supply challenges, especially communities that rely on groundwater supplies which have been depleted due to prolonged drought.
- It is also important to note that drought impacts vary by location as California is a large state. Drought recovery will need to be evaluated on a regional scale and will depend on local water supply conditions.
- “California’s Water Supply Strategy, Adapting to a Hotter, Drier Future” aims to expand supplies by 1.6 million acre-feet by 2030, in addition to creating more than 3 million acre-feet of new storage. The strategy intensifies state focus on supply actions in the 2020 Water Resilience Portfolio and also invites the Legislature to help modernize regulatory processes to deliver projects faster.

Recent Events and State Actions

California Irrigation Institute Conference (Feb. 27-28): DWR Director Karla Nemeth was the keynote speaker at the [California Irrigation Institute Conference](#) in Sacramento. DWR’s Water Use Efficiency team also hosted an exhibit table at the event to showcase its California Irrigation Management Information System (CIMIS) program. CIMIS manages a statewide network of over 145 automated weather stations that assists irrigators and other water managers in managing their water resources more efficiently.

6 ways California is capturing and storing water from storms (Feb. 24): California continues to leverage recent actions and a [historic \\$8.6 billion investment](#) to ensure that water from storms is captured and conserved to help preserve supplies for communities, wildlife and the environment if dry conditions return – actions aligned with [California’s Water Supply Strategy](#).

State and local officials highlight \$15 million in investments for local water resilience projects in the Central Valley (Feb. 24): DWR joined California Natural Resources Secretary Wade Crowfoot and local officials from across the Central Valley to highlight [\\$15 million in grant funding](#) recently awarded to support local water projects. The funding was provided via DWR’s [Integrated Regional Water Management \(IRWM\) Program](#), which is one component of the state’s emerging “Go Golden” initiative to invest funding towards projects designed to build California’s long-term water resilience.



\$25 million in LandFlex grants awarded to protect drinking water wells (Feb. 23): DWR, in coordination with the California Department of Food and Agriculture, [awarded \\$25 million in financial assistance](#) to three groundwater sustainability agencies (GSAs) through the LandFlex Program. The funding will help preserve critical groundwater supplies in Central Valley communities.



Recent Events and State Actions (cont.)

Modest increase in State Water Project allocation (Feb.22): DWR announced a modest increase in forecasted State Water Project (SWP) deliveries this year due to early gains in the Sierra snowpack. DWR expects to deliver 35 percent of requested water supplies, up from 30 percent forecasted in January, to the 29 public water agencies that serve 27 million Californians. That would translate to an additional 210,000 acre-feet of water.



Drought risk explorer tool (Feb. 22): DWR hosted a webinar for counties showing how to use its newly updated Drought Risk Explorer Tool. This is a water shortage vulnerability tool that enables users to perform drought risk assessments for domestic wells and state small water suppliers. In 2021, DWR successfully released an initial version of this tool, developed with the County Drought Advisory Group. DWR will refine additional data for the tool and maintain and periodically update the tool. This webinar will share recent improvements with California counties and other potential users.

Water Resources IMPACT Magazine (Feb. 14): The California Water Commission guest edited an open access, double issue of Water Resources IMPACT magazine on the topic of preparing the American West for prolonged drought. The magazine, which is published by the American Water Resources Association, features articles that delve into how drought impacts people and the environment and how we can respond to droughts, better preparing for the inevitable. The first issue, published on focuses on water scarcity issues confronting California and the ways these issues impact different sectors. The second issue, to be published in **this month**, will focus on drought response, considering the options for adaptation. This two-part series complements the Commission's work on strategies to protect communities and fish and wildlife in the event of a long-term drought.



Curtailment adjustments (ongoing): The State Water Board continues to monitor six critical watersheds where conditions may threaten water supplies. Due to precipitation in late December and early January, curtailments have been suspended in all watersheds. Board staff will continue to adjust curtailment orders as conditions change. Water rights holders should closely monitor their email and watershed drought webpages for curtailment updates.

Tribal / Local Actions

- **Tribal governments:** Tribal emergency drought proclamations as reported by Cal OES to date: Buena Vista Rancheria of Me-Wuk Indians, Karuk Tribe, Resighini Rancheria, Tule River Indian Tribe, Yocha Dehe Wintun Nation, Yurok Tribe, Wiyot Tribe.
- **Local government:** Local emergency drought proclamations as reported by Cal OES to date: Butte, Colusa, Fresno, Glenn, Humboldt, Lake, Madera, Marin, Mendocino, Modoc, Napa, Nevada, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Siskiyou, Sonoma, Tulare, Tuolumne, Yolo.

Upcoming Decisions / Milestones



Snow Survey at Phillips Station: On **Mar. 3**, DWR will conduct the third Phillips Station snow survey of the season. Join Sean de Guzman, DWR Snow Survey and Water Supply Forecast Section Manager, who will conduct the snow survey via [Facebook Live](#) and YouTube as they measure water content in the snowpack, a key indicator for water supply. The Phillips Station snow course is one of more than 260 snow courses across the Sierra Nevada that DWR manually or electronically measures each winter and early spring. Data collected from the Snow Surveys Program is critical to helping forecast the amount of water that will melt and run off to state reservoirs.

Key Data Points and Resources

- Daily Hydrological & Climate Information summary: <http://cdec.water.ca.gov/reportapp/javareports?name=DLYHYDRO>
- Statewide water conditions: http://cdec.water.ca.gov/water_cond.html
- Daily Reservoir Storage Summary: <https://cdec.water.ca.gov/reservoir.html>
- Water Year Forecast and Monthly Distribution: <http://cdec.water.ca.gov/reportapp/javareports?name=B120DIST>
- Monthly water supplier reports on water production and conservation: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.html
- Latest groundwater conditions and information: <https://sgma.water.ca.gov/CalGWLlive/>
- Information on state drought actions and assistance: <https://drought.ca.gov/>
- Conservation tips and resources for consumers: <https://saveourwater.com/>