



October 11, 2021

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 www.drought.ca.gov.

Current Conditions

- California and the West are in severe drought, with impacts accelerated by climate change. The water year that ended Sept. 30 was the second driest on record, and storage in key reservoirs is low.
- The latest models suggest that 140 percent of average annual statewide precipitation would be needed in the next water year to achieve average statewide runoff, reflecting the moisture deficit in the climate system.
- Fifty of California's 58 counties are under a drought emergency proclamation.
- Californians are being asked to reduce their water use by 15 percent over 2020 levels to protect water reserves and help maintain critical flows for fish and wildlife wherever possible.
- In the last 30 days, 212 dry wells were reported through the state's [voluntary household dry well reporting system](#). That is a 54 percent increase in dry wells reported compared to the previous month. Eight or more dry wells were reported in the last 30 days in Lake, Butte, Fresno, Madera, Merced, Tehama, and Tulare counties.
- The state is providing hauled or bottled water to eight separate small water providers experiencing supply outages in Monterey, Santa Barbara, Santa Clara, Tulare, Shasta, and El Dorado counties. The providers together serve a population of a little under 3,000 people.
- The State Water Resources Control Board is monitoring 27 water systems that could experience water supply outages during this drought.

Recent State Actions

San Jose event encourages water conservation (Oct. 6) – Natural Resources Secretary Wade Crowfoot joined San Jose Mayor Sam Liccardo and other city officials and California Volunteers Chief Service Officer Josh Fryday to call on Californians to redouble their water conservation efforts. State and city leaders joined San Jose's Resilience Corps, volunteers, and city staff at Overfelt Park to plant native, drought-resistant flora.



Federal grants announced for farm research (Oct. 6) – The U.S. Department of Agriculture announced \$146 million for sustainable agriculture research projects including two based in California:

- \$10 million to UC Merced on securing a climate-resilient future for agriculture and ecosystems through innovation in measurement, management, and markets
- \$10 million to UC Davis on sustaining groundwater and irrigated agriculture in the southwestern U.S. under a changing climate.

Joint effort launched to support salmon populations (Oct. 4) – CDFW and DWR announced a joint effort at the Feather River Fish Hatchery in Butte County to support Feather River salmon populations in the face of extreme drought and disease related to a nutrient deficiency. The agencies will try to improve spring-run Chinook salmon spawning success by returning back to the river healthy adults that have been injected with a supplement to guard against thiamine deficiency complex, which is likely tied to ocean conditions and results in early egg and fry mortality. In anticipation of decreased recruitment to the ocean fishery, fall-run Chinook salmon production at the hatchery will be increased from 6 million to 7.75 million smolts.

Delta program supports shorebirds and waterfowl (Oct. 4) – The Sacramento-San Joaquin Delta Conservancy is partnering with The Nature Conservancy, Point Blue, and Audubon to stand up a Bird Returns program that will pay Delta farmers to flood acreage to support shorebirds and waterfowl this fall and winter. With funding from CDFW, the bid process opened on Oct. 4 and will run for two weeks. The Conservancy intends to have contracts executed and acres flooded by early December.

Airborne snow surveys to improve runoff forecasts (Sept. 30 – Oct. 4) – DWR has funded Airborne Snow Observatory Inc. to survey the Feather River watershed in an effort to improve annual runoff forecasts and transition from mid-20th century forecasting methodologies to physically-based watershed models using snow data.

Save Our Water campaign airing (ongoing) – The statewide [Save Our Water](#) program managed by DWR is live with a general market campaign to bring water conservation messaging to Californians. Radio and social media ads are running in key markets, with additional assets coming online and launching in other languages soon. The campaign, developed in partnership with local water agencies, emphasizes the need for Californians to take steps now to reduce water use, including taking care to water trees even as they cut back on landscape irrigation.



Current Water Right Curtailments

The following watersheds have water right curtailments in place. Also shown are the current number of curtailed rights or right holders (counts will change as hydrology changes) as of Oct. 8:

- **Russian River (Upper):** Approximately 1,500 rights curtailed. State Water Board staff are preparing to transition to wet-season curtailments as soon as precipitation events warrant and will move from complete curtailments to a methodology used in the lower Russian River that accounts for flows, precipitation, and the location of the diversion (Drought Water Rights Allocation Tool, or DW RAT). Staff presented the DW RAT to Russian River stakeholders Oct. 6.

- **Russian River (Lower):** Approximately 300 rights curtailed. Some curtailments lifted in October due to decreased demand as growing season ends. Curtailments updated monthly.
- **Delta:** Approximately 10,300 rights curtailed in August. Approximately 4,500 curtailments lifted in September in the Sacramento watershed due to decreased demand and rice field drainage making additional water available. An update to curtailments was provided on Oct. 1, and a subsequent update provided on Oct. 6 in advance of a forecast precipitation event. Monitoring of expected and actual precipitation and runoff conditions will continue weekly, or more frequently based on precipitation. Curtailments will be updated weekly or more often in response to conditions. Because the forecast precipitation event is only expected to provide light precipitation (generally less than 0.5 inches in the Sierra Nevada), relatively few curtailments were lifted in advance of the event. Staff will hold a workshop on Oct. 20 to solicit information and feedback on wet season issues related to curtailments.
- **Scott and Shasta:** Curtailments issued Sept. 9, with approximately 2,650 curtailments estimated between both watersheds. A compliance assistance webinar was held Sept. 23. Approximately 500 Information Orders will be issued to parcels on Julian, Willow, and Yreka creeks (tributaries to the Shasta) during the week of Oct. 11. Information for more than 200 adjudicated rights has not been updated in decades and the creeks are not covered by the existing Watermaster. Very few adjudicated diversions have been reported to the Water Board. As a result, there is no information on water use in these three tributary systems.
- **Mill and Deer:** Draft regulations were adopted by the Water Board on Sept. 22 and submitted to the Office of Administrative Law on Sept. 24. The Office of Administrative Law approved the regulations Oct. The regulations could affect approximately 65 diverters.

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, Yurok Tribe, Wiyot Tribe.
- **Local government:** Local emergency drought proclamations as reported by Cal OES to date: Butte, Colusa, Fresno, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Napa, Nevada, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Siskiyou, Sonoma, Tulare, Tuolumne, Yolo.

Upcoming Decisions / Milestones

Workshop on Delta drought curtailments: On **Oct. 20**, Water Board staff will hold a technical workshop to describe and receive public input on potential changes to the methodology for determining water unavailability in the Delta watershed. Currently, the methodology is focused on evaluating water unavailability during the dry season, but modifications to the methodology are being considered to address water unavailability during the wet season.

Health and safety needs for 2022: DWR is gathering projections of health and safety needs of State Water Project customers in event of zero allocation next year and planning for contingency.

Initial State Water Project allocation for next year: Lake Oroville is entering Water Year 2022 with record-low storage, and San Luis Reservoir is expected to be at its second-lowest level of record. Low

storage means that the SWP's initial allocation to project contractors on **December 1** will be very low, and the subsequent low probability of getting an exceptionally wet winter means that the project's final allocation is also likely to be low.

Fishery closures: CDFW is preparing an emergency regulation request to the Fish and Game Commission to extend the current low-flow closure criteria dates through **April 30** in the Eel River, Mad River, Mattole River, Redwood Creek, Smith River and Van Duzen River and Mendocino, Sonoma, and Marin county coastal streams. CDFW has developed a core team for this effort and is coordinating with Commission staff on presenting at the **December** meeting.

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
- Information on state drought actions and assistance: <https://www.drought.ca.gov>
- Conservation tips and resources for consumers: <https://saveourwater.com/>