



Drought Update Monday, December 12, 2016

KEY ACTION ITEMS FROM THIS MONTH

- **Statewide Water Savings Exceed 19 Percent in October; Most of State Still Experiencing Drought Conditions:** On December 6, the State Water Resources Control Board [announced](#) that urban Californians' monthly water conservation was 19.5 percent in October, up from 18.3 percent in September but below the 22.3 percent savings in October 2015, when state-mandated conservation targets were in place. The cumulative average savings from June 2015 through October 2016 was 22.8 percent, compared with the same months in 2013.

Since June 2015, 2.26 million acre-feet of water has been saved which is enough water to supply more than 11 million people, more than one-quarter the state's 38 million population, for a year. The State Water Board will continue to monitor conservation levels and water supply conditions, and will consider a proposal to [extended emergency conservation regulations](#) in January 2017. For additional information, visit the State Water Board [Water Conservation Portal](#).

- **Initial 2017 State Water Project Allocation Set at 20%:** On November 29, the Department of Water Resources (DWR) [announced](#) that the initial 2017 State Water Project (SWP) allocation will be 20 percent. Allocations are stated as a percentage of the total water requests from 29 public water agencies served by the SWP. As the wet season progresses, DWR adjusts the allocation based on precipitation, water storage, and water content of the snowpack.

The department expressed hope that winter storms will bring enough rain and snow for the allocation to increase but warned that drought conditions still exist. For more information, visit DWR's California Data Exchange Center websites, which provides current water conditions at the state's largest [reservoir](#) and weather stations [precipitation](#).

- **State Releases Draft Plan for Long-Term Conservation:** On November 30, the California Department of Water Resources (DWR), in collaboration with the State Water Resources Control Board, the Public Utilities Commission, Department of Food and Agriculture, and the Energy Commission, [released](#) a [draft plan](#) that seeks to make conservation a way of life by providing standards for achieving long-term efficient water use. The plan represents a shift from statewide mandates to a set of conservation standards applied based on local circumstances, including population, temperature, leaks, and types of commercial and industrial use.

The draft plan implements Governor Brown's Executive Order B-37-16, which is an order to move the state towards using water more wisely, eliminating water waste, strengthening local drought resilience, and improving agricultural water use efficiency and drought planning. For more information, visit DWR's [Water Use Efficiency](#) webpage.

- **New Aerial Survey Identifies More Than 100 Million Dead Trees in California:** On November 18, the U.S. Department of Agriculture (USDA) [announced](#) that the U.S. Forest Service has identified an additional 36 million dead trees across California since its last aerial survey in May 2016. This brings the total number of dead trees since 2010 to over 102 million on 7.7 million acres of California's drought stricken forests. In 2016 alone, 62 million trees have died, representing more than a 100 percent increase in dead trees across the state from 2015. Millions of additional trees are weakened and expected to die in the coming months and years.

In response to the massive tree die off across California, the Department of Forestry and Fire Protection continues to coordinate with federal, local, and utility partners to remove dead and dying trees that pose the greatest risk to public safety. For more details on efforts, visit the Tree Mortality Task Force webpage.

- **CDFA's State Water Efficiency and Enhancement Program Awards \$22 Million in Funding:** On November 28, the California Department of Food and Agriculture (CDFA) has [announced](#) 167 projects that will receive grants, totaling \$22 million, from the State Water Efficiency and Enhancement Program (SWEEP). The selected SWEEP projects will support a wide variety of projects including the installation of drip and micro-sprinkler systems, energy-efficient water pumps and renewable energy, and soil moisture sensors and irrigation scheduling programs that can assist farmers in applying water based on crop needs.

The State Water Efficiency and Enhancement Program (SWEEP) provides financial assistance in the form of grants to implement irrigation systems that reduce greenhouse gases and save water on California agricultural operations. Since SWEEP was established in 2014, 360 grants have been provided to California agricultural operations. For more information on the SWEEP program and a list of current grant awardees visit CDFA's [Office of Environmental Farming and Innovation](#).

- **Little Hoover Commission to Study Tree Mortality in 2017:** On November 23, the Little Hoover Commission [announced](#) plans to review the state's forest management in response to the tree mortality crisis that has affected an estimated 102 million trees in the Sierra Nevada. The commission will conduct public hearings in 2017 and assess efforts by state agencies to manage the problem and coordinate with federal partners and public, private and nonprofit organizations. The first hearing is scheduled for January 26, at the State Capitol. Subsequent hearings and public meetings will follow.
- **California's Water Conservation Education Program Campaign:** In December, Save Our Water continues to promote the [#reimagineyourlandscape](#) statewide marketing efforts through weather and traffic sponsorships, radio and gas pump ads, billboards, and social media clips to encourage Californians to conserve water with California-friendly yards. In addition, Save Our Water shared several articles from its' partner, [Plant California](#), including [Waterwise Grasses and Ground Cover](#) and [Convert Your Patio to Drip Irrigation](#) on social media.

Save Our Water also continues to promote the "[Real People, Real Savings](#)" campaign, which showcases California homeowners and their water-wise gardens and yards, as well as easy outdoor tips to reduce water use. To share your reimagined landscape story, visit the Save Our Water [Around the Neighborhood](#) website.

Save Our Water is the state's official water conservation program managed in partnership between the Association of California Water Agencies and the Department of Water Resources. For more [tips](#) and [tools](#) to help conserve water, learn about [rebates](#) on turf and toilet replacement, relevant water and [drought news](#), and keep [trees](#) healthy during the drought, please visit the new [SaveOurWater.com](#), available in both English and [Spanish](#), or connect with the program on [Facebook](#), [Twitter](#), or [Instagram](#).

- **Governor’s Drought Task Force:** The Task Force continues to take actions that conserve water and coordinate state response to the drought. During the November 17 meeting, the Task Force provided updates on water operations and environmental habitat, water conservation, and drought impacts and response efforts. In addition, the Department of Forestry and Fire Protection (CAL FIRE) provided an update to the state tree mortality issue and indicated that federal, state, local, and utility partners continue to coordinate and remove dead and dying trees that pose the greatest risk to public safety.

To date, CAL FIRE and its partners have removed more than 423,000 trees in 10 counties, inspected and cleared dead trees along nearly 52,000 miles of roads and powerlines, created approximately 1,300 acres of fuel breaks, and treated more than 26,000 acres.

CURRENT DROUGHT CONDITIONS

- **Weather Outlook:** A series of storms are forecasted to bring heavy precipitation in parts of Northern and Central California this week. Overall precipitation totals are expected to increase significantly in areas including the North Coast, Klamath Region, and Yuba and American River Basins.

Within the next six-day forecast window, Klamath Region, North Coast, Central Coast, Northern and Central Sierra are forecasted to receive up to 3.5, 3.75, 2.15, 3.5, and 7.5 inches of precipitation, respectively. Similarly, Sacramento and San Joaquin Valley will receive up to 1.5 and 0.75 inches. Most of the southern state will remain dry with the exception of isolated light showers and thunderstorms.

- **Recent Precipitation:** In the past week, widespread precipitation occurred throughout most of California including Klamath Region, North Coast, Central Coast, Sacramento Valley, San Joaquin Valley, Northern, Central as well as Southern Sierra. The North Coast Hydrologic Region received up to 3.5 inches of precipitation. The San Francisco Region obtained up to 1.75 inches and Central Coast was observed up to 1.8 inches with 3 inches in some isolated locations.

Likewise, Northern Sierra received up to 2 inches, Central Sierra and Southern Sierra received up to 1.5 and 1 inch, respectively. Sacramento and San Joaquin Valley received up to 0.8 and 0.3 inch, respectively. Los Angeles, San Diego and Coachella Valley Region including Mojave Desert were mostly dry.

Below are precipitations totals (in inches) from December 2 through December 9, and year-to-date rainfall based on the water year cycle (October 1, 2016 to September 30, 2017).

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| • Bakersfield: 0.00" (0.62") | • Redding: 0.61" (12.04") |
| • Paso Robles: 0.02" (2.60") | • Riverside: 0.00" (1.72") |
| • Fresno: 0.38" (2.43") | • Sacramento: 0.64" (6.30") |
| • Yosemite: 0.00" (8.78") | • San Diego: 0.00" (0.63") |
| • Los Angeles: 0.00" (1.39") | • Mount Shasta: 0.35" (16.18") |
| • Stockton: 0.27" (4.22") | • South Lake Tahoe: 0.12" (8.35") |
| • San Francisco: 1.08" (5.65") | • Monterey: 0.76" (4.29") |

- **Reservoir Management:** Since the last report on December 2, Central Valley reservoirs from Shasta and Trinity in the North to Isabella in the South had a net gain in storage of 191,221 acre-feet (AF). Shasta Reservoir increased by 17,122 AF, while San Luis Reservoir, an off-stream reservoir for the Central Valley Project and State Water Project, increased its storage by 104,735 acre-feet.

As of midnight on December 8, Shasta, Oroville, and Folsom Reservoirs recorded 2.9 million AF, 1.4 million AF, and 468,973 AF, storage respectively. The 10-day average changes were 2,598; -2,943; and 3,096 AF per day, respectively.

- [Reservoir Levels](#) as of December 11 have remained steady, including: Castaic Lake 58% of capacity (75% of year to date average); Don Pedro 68% of capacity (104% of average); Folsom Lake 61% of capacity (127% of average); Lake McClure 38% of capacity (87% of average); Lake Oroville 45% of capacity (73% of average); Lake Perris 38% (48% of average); Millerton Lake 62% of capacity (135% of average); New Melones 22% of capacity (39% of average); Pine Flat 21% of capacity (56% of average); San Luis 50% of capacity (80% of average); Shasta 66% of capacity (109% of average); and Trinity Lake 46% of capacity (70% of average). An update of water levels at other [smaller reservoirs](#) is available.
- **Dry Well Reports:** California's Water Year 2015-16 ended on September 30 with lower-than-expected rainfall and a "snow drought" as the state's snowpack measured well-below average. As the state enters a new water year, the Governor's Drought Task Force continues to monitor and identify communities and local water systems in danger of running out of water. The cross-agency team, led by the Department of Water Resources (DWR), continues to improve and streamline data collection and reporting for household water shortages for California water systems with fewer than 15 household connections.

As of December 12, approximately 2,357 wells statewide have been identified as critical or dry, affecting over 11,785 residents. Cal OES reported that 2,169 of the 2,357 dry wells are concentrated in the inland regions within the Central Valley. For Californians experiencing a water supply shortage, residents can [submit a report](#) on DWR's Household Water Supply Shortage Reporting System website.

- **Vulnerable Water Systems:** The State Water Board continues to provide technical and funding assistance to several communities facing drinking water shortages, and is monitoring water systems across the state. The Budget Act of 2016, SB 826, appropriated \$15 million from the Cleanup and Abatement Account Interim Emergency Drinking Water Program (CAA) for addressing drought-related drinking water emergencies or threatened emergencies. Since July 2016, 7 projects have been approved to receive CAA SB 826: 0 of 5 approved funding agreements have been executed, and 2 oral agreements have been issued. To date, the State Water Board has received requests for \$1.4 million of those funds.

On July 19, 2016, the State Water Board approved the allocation of up to \$4 million from the CAA SB 826 funding program to provide interim emergency drinking water to disadvantaged communities with a contaminated water supply. Since July 2016, 17 projects have been approved to receiving emergency funding for interim drinking water, 1 of 10 funding agreements have been executed, and 7 oral agreements have been issued. To date, the State Water Board has received requests for \$1.3 million of those funds.

- **Fire Activity:** Since the beginning of the year, firefighters from CAL FIRE, U.S. Forest Service and other federal fire agencies have responded to over 6,938 wildfires across the state, burning 565,070 acres. Fire activity across California is high resulting in 17 new wildfires over the past week.
- **CAL FIRE Burn Suspension Status:** The recent rains and lowered fire threat has allowed CAL FIRE to lift the outdoor open residential burn restriction across much of the State. Currently, the following counties are required to obtain burn permits including: Alpine, Amador, Eastern Trinity, El Dorado, Fresno, Inyo, Imperial, Kings, Mono, Monterey, Nevada, Placer, Riverside, San Benito, Sacramento, San Bernardino, San Diego, San Luis Obispo, Sierra, Tulare, and Yuba counties.

Homeowners should always check with their local CAL FIRE station and local air quality management agency before burning. CAL FIRE Burn Permits are required in most Counties until further notice. Agriculture burns must be inspected by CAL FIRE prior to burning. For additional information on preparing for and preventing wildfires visit www.ReadyForWildfire.org.

ONGOING DROUGHT SUPPORT

- **Emergency Food Aid, Utility and Employment Assistance:** The Department of Social Services (CDSS) Drought Food Assistance Program (DFAP) provides food assistance to affected communities that suffer high levels of unemployment from the drought. To date, over 1,828,226 boxes have been provided to community food banks in drought-impacted counties. Approximately 1,651,848 boxes of food have been picked up by 852,422 households.

Food boxes distributions vary by county and occur 1-4 times per month. This past week, nearly 44% of the food distributions have occurred in the Tulare Basin (Fresno, Kern, Kings and Tulare). An estimated 14,700 boxes are scheduled for delivery to Fresno, Kern, Merced, Riverside, San Joaquin, Stanislaus, and Tulare the week ending December 16.

The Labor Workforce Development Agency reported that the federally funded Drought Temporary Jobs program has enrolled 1,224 participants at 200 worksite projects in 24 counties. The program is funded through the U.S. Department of Labor's National Dislocated Worker Grant program, which offers 2,080 hours of employment on drought-related public works projects to workers affected by the drought.

The Department of Community Services and Development (CSD), in partnership with the Department of Water Resources, continues to implement the Toilet Retrofit Program, which administers Proposition 1 funds to install high-efficiency toilets (HETs) in disadvantaged communities throughout the state. The program has administered \$5.3 million to over 30 energy service providers and entities. To date, approximately 5,911 HETs have been installed, which have saved over 16 million gallons of water. It is expected that approximately 12,000 HETs will be installed during this program.

In response to California's historic drought, CSD has received an additional \$7.5 million in 2016-17 General Funds to implement the Drought Emergency Assistance Program. This program provides emergency relief and support services to drought-impacted individuals including low-income migrant and seasonal farmworkers and their families and households. As of November 17, \$873,673 has been issued to 579 households.

- **Drought Response Funding:** The \$3.7 billion in state drought funding appropriated in the 2014 and 2015 Budget Acts, as well as in March 2015 through emergency legislation, continues to advance toward meeting critical near-term needs and long-term drought resiliency and water supply needs.

In June 2016, Governor Brown [approved](#) an additional \$254.7 million for the 2016-17 budget to continue the state's response to the drought. These additional funds will be available to aid in emergency drinking water for communities, emergency food assistance, enhanced fire protection, environmental and wildlife assistance, assistance to communities to help dispose of the dead and dying trees in high hazard zones for public safety issues, and the continued statewide awareness campaign.

LOCAL GOVERNMENT

- **Local Emergency Proclamations:** A total of 58 local Emergency Proclamations have been received to date from city, county, and tribal governments, as well as special districts:
 - **25 Counties:** Calaveras, Colusa, El Dorado, Fresno, Glenn, Inyo, Kern, Kings, Madera, Mariposa, Merced, Modoc, Plumas, San Bernardino, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Siskiyou, Stanislaus, Sutter, Trinity, Tulare, Tuolumne, and Yuba.
 - **10 Cities:** Fort Bragg (Mendocino County), Live Oak (Sutter County), Lodi (San Joaquin County), Manteca (San Joaquin County), Montague (Siskiyou County), Porterville (Tulare County), Portola (Plumas County), Rancho Cucamonga (San Bernardino County), Ripon (San Joaquin County), and West Sacramento (Yolo County).
 - **11 Tribes:** Cortina Indian Rancheria (Colusa County), Hoopa Valley Tribe (Humboldt County), Karuk Tribe (Siskiyou/Humboldt Counties), Kashia Band of Pomo Indians of the Stewarts Point Rancheria (Sonoma County), Picayune Rancheria of Chukchansi Indians (Madera County) Sherwood Valley Pomo Indian Tribe (Mendocino County), Tolowa Dee-ni' Nation (Del Norte County), Tule River Indian Tribe (Tulare County), Tuolumne Band of Me-Wuk Indians (Tuolumne County), Yocha Dehe Wintun Nation (Yolo County), and Yurok Tribe (Humboldt County).
 - **12 Special Districts:** Carpinteria Valley Water District (Santa Barbara County), Goleta Water District (Santa Barbara County), Groveland Community Services District (Tuolumne County), Lake Don Pedro Community Services District (Mariposa Stanislaus County), Mariposa Public Utility District (Mariposa County), Meiners Oaks Water District (Ventura County), Montecito Water District (Santa Barbara County), Mountain House Community Service District (San Joaquin County), Nevada Irrigation District (Nevada County), Placer County Water Agency (Placer County), Tuolumne Utilities District (Tuolumne County), and Twain Harte Community Services District (Tuolumne County).
- **Water Agency Conservation Efforts:** Last year, the Association of California Water Agencies ([AWCA](#)) launched an interactive gallery to showcase the local drought response activities by ACWA members statewide. As the drought stretches into its fifth year in 2016, the [Drought Response Gallery](#) continues to highlight conservation and efficiency projects and program actions in five categories.

In June 2016, ACWA [released](#) a Water Conservation Communications Toolkit to assist water agencies in messaging to customers the transition to a new emergency conservation regulation and the importance of ongoing water conservation.

- **County and Tribal Drought Task Forces:** A total of 19 county and tribal drought task forces continue to coordinate local drought response in 2016. Inland regions counties include: Butte, Colusa, Madera, Merced, Modoc, San Joaquin, Siskiyou, Tehama, Tulare, and Tuolumne. Coastal regions counties include: Hoopa Valley Tribe (Humboldt County), Humboldt, Karuk Tribe (Siskiyou County), San Mateo, Trinidad Tribe (Humboldt County), and Yurok Tribe (Humboldt and Del Norte County). Southern regions counties include: Orange, San Luis Obispo, and Santa Barbara.

DROUGHT RELATED WEBSITES FOR MORE INFORMATION

[Drought.CA.Gov](#): California's Drought Information Clearinghouse

State's Water Conservation Campaign, [Save Our Water](#)
California Natural Resources Agency, [California WaterFix](#)
Local Government, [Drought Clearinghouse and Toolkit](#)
California Department of Food and Agriculture, [Drought Information](#)
California Department of Water Resources, [Current Water Conditions](#)
Department of Fish and Wildlife, [Drought Web Portal](#)
California Data Exchange Center, [Snow Pack/Water Levels](#)
State Water Resources Control Board, Water Rights, [Drought Info and Actions](#)
State Water Resources Control Board, [SWRCB Drinking Water Program](#)
California State Water Project, [Information](#)
Department of General Services, [Water Conservation Efforts](#)
State of California Sustainable Buildings, [Water Usage from 2010 to 2015](#)

[U.S. Drought Monitor](#) for Current Conditions throughout the Region
[U.S. Drought Portal](#), National Integrated Drought Information System (NIDIS)
National Weather Service, [Climate Predictor Center](#)
USDA Drought Designations by County, [CA County Designations](#)
USDA Disaster and Drought Assistance Information, [USDA Programs](#)
U.S. Small Business Administration Disaster Assistance, [Disaster Loans](#)