

Current Monterey County Drought Status

Precipitation: According to the National Weather Service's Climate Prediction Center, the precipitation outlook for February through April points to increased chances for above average totals compared to historical data for Monterey County. Temperatures are forecasted to continue to remain above normal. Approximately 11 trillion gallons of water (72" of rain) is needed statewide to end the drought conditions which is not anticipated in 2015.

Fire Danger: CalFire reports that in 2014, there were 5,620 fires (an increase of nearly 20% against the 5 year average) across the state, burning 90,606 acres. County fuel conditions are at dangerous levels and continue to worsen with warmer and drier conditions. Governor Brown's 2015-16 budget for CalFire includes an additional \$60 million dollars to address heightened fire conditions brought on by the drought and they are currently staffed up for fire season, well ahead of normal staffing for this time of year.

Reservoir Levels: The Monterey County Water Resources Agency (WRA) owns and operates Nacimiento and San Antonio reservoirs, which provide flood control and water conservation benefits to the Salinas Valley, as well as recreational opportunities. The Nacimiento Reservoir is currently at 23% and San Antonio is at 4% of capacity. WRA has been working with state and federal agencies in an effort to reduce the minimum fisheries release requirements from the reservoirs in order to conserve our limited water supplies.

Agricultural and Ranching Impacts: The Agricultural Commission reports that current ground water resources continue to appear sufficient to support relatively normal planting schedules. Current groundwater data shows that Monterey County is near historic record lows but there is still a great deal of water stored in the ground. The Farm Bureau reports that water withdrawn from the Salinas River Groundwater basin has declined 12% over the last 16 years, with a 45% increase in crop production, due to advances in water use efficiency techniques and drip irrigation becoming the predominant method for irrigation in the Salinas Valley.

Parks and Recreation Impacts: The County Parks Department reports that the drought has had a devastating financial effect on the Parks Department, particularly at the lake resorts. At Lake San Antonio, all boat launch ramps are closed and it is anticipated that the lake will continue to remain closed for the 2015 summer and remain closed until the lake levels recover. Drinking water for the park staff was impacted as a result of the low water levels in San Antonio Reservoir. New pumps were purchased for the residential area to improve water delivery.

Drinking Water Impacts: The Department of Health is continuing to monitor the possible relationship between the drought conditions and water quality and quantity in Monterey County. Water systems with levels of nitrates or arsenic above or approaching the Maximum Contaminant Levels (MCLs) currently exist, and although the relationship is not exclusive, a drought has the potential to possibly cause increases in these contaminants, which would require systems to be placed on bottled water orders until treatment systems can be put in place. As of now, no systems meet this criteria.

In 2014, two water systems, Cachagua #4 and Arroyo Center reports the well systems were at risk for failing. Cachagua #4 had previously indicated concerns with declining well production. The state offered grant money for hauled water and/or drilling a new well. However, they are currently indicating they have enough water to get by and declined offers of assistance from the

state. Arroyo Center also reports that their wells are currently producing enough water for the needs of the system.

Current County Conservation Measures

Irrigation: RMA has turned automatic irrigation systems off and watering is now done by hand and monitored to avoid excessive run-off and ensure maximum efficiency. Crews also applied mulch to all areas where possible to conserve moisture. As a result, watering was reduced by 50%. Monterey County Parks Department has also reduced water usage on irrigated park lands.

Facilities: Baseline water usage data has been compiled by the Resources Management Agency/Facilities and is being used to track conservation efforts. Half of County restrooms have low flow devices and employee outreach materials have been provided to encourage conservation in all County facilities and at home. Retrofit of bathroom, kitchen and break room facilities that are currently not low flow will be included in capital improvement strategies.

Public Outreach: Numerous efforts have been made to engage the public in water conservation efforts. A drought website, “Dealing with Drought: Making water conservation a Monterey County way of life” (www.co.monterey.ca.us/drought), has been created and linked to the County homepage providing water conservation tips, links to helpful sites, and information on the current drought status. Both an internal County work group and a “Community Inter-Agency Drought Task Force” were created to facilitate information sharing and collaborative problem solving among important stakeholders. These groups have met approximately every two months since April 2014 and will continue.

In addition, the Governor’s Office of Planning and Research partnered with The Home Depot, The Safeway Foundation, and California Conservation Corps to create and distribute 30,000 “Water Conservation Toolkits” throughout the state. The County Office of Emergency Services requested and coordinated delivery of 500 of these toolkits, which contain a multitude of devices aimed at reducing excess water consumption, to various water systems throughout the County, including some in the cities of Salinas, Soledad, and Greenfield, along with other rural unincorporated areas.

Agriculture/Farming Conservation Practices

Agricultural conservation practices have improved over the last several years. Drip irrigation has become the predominant method of irrigation in the Salinas Valley, reducing furrow irrigation to less than 1% of total acreage. Depending on cropping patterns, drip irrigation is used on 48% - 60% of crops each year. Drip irrigation eliminates tail water run-off by delivering water only to the root zone of the plant. The use of transplants, rather than seed germination in field, reduces water use for stand establishment. Commodity changes have shifted to vegetables, strawberries, and wine grapes; most of these crops are grown using drip irrigation

Farm operators are utilizing soil moisture sensors and climate information to predict when irrigation patterns are needed, optimizing scheduling. Farm operations are beginning to use computer-controlled irrigation valves to manage timing and durations of irrigation applications

Due to improvements in varieties and crop production techniques, yields of crops have increased even with less water used: lettuce yields have increased to 1000 cartons/acre using 1.2 acre feet of water/acre, an increase in efficiency of 25% in the past 40 years. Some crops cannot be grown using drip irrigation, yet; research continues on these crops to improve water efficiencies,

including varieties that require less water for the same yield including the investing in training of employees who manage irrigation responsibilities in water conservation practices.

Legislative Efforts: The CAO-Intergovernmental and Legislative Affairs Division is closely monitoring legislative and possible funding opportunities. The drought brought about some historic California legislation; the Sustainable Groundwater Management Act, which majorly changes the groundwater management paradigm for the entire state. The Water Resource Agency is working through the next steps of this process. The Governor's proposed Budget provides \$115 million on a one-time basis to continue critical drought response efforts started in 2014. The Administration will continue to monitor and evaluate statewide drought condition through the winter months, and will reevaluate these budget year needs in the May Revision.

Congressional bills have been introduced in both the House and the Senate aimed at increasing water conservation, efficiency, and recycling by boosting funding for the U.S. EPA's WaterSense program and creating both grant and loan programs for local water systems to make upgrades. It also includes funding to improve data collection, establish drought-resilience guidelines for state and local agencies, and direct the Army Corps of Engineers to review its reservoir operations.