



Monthly Drought Update
July 14, 2015
San Luis Obispo County

Note: Information provided in this update varies by date.

CURRENT CONDITIONS

U.S. Drought Monitor Status:

The latest U.S. Drought Monitor report released July 2, 2015, indicates San Luis Obispo County remains at the **D4 – Exceptional Drought intensity rating**. Approximately 95% of the state remains at a level D2 – Severe Drought or worse with 47% of the state in a D4 – Exceptional Drought intensity rating.

San Luis Obispo County Precipitation Totals (in inches):

Sub-Region	Area / Rain Station	Average Annual Rainfall	2014-15 Water Year (July 2014-June 2015)	
			Cumulative Total	% of Total Average
North Coast	Cambria (ALERT #717)	22.0	12.68 *	58% *
	Whale Rock Reservoir (County Site #166.1)	16.0	7.62	48%
Inland	Paso Robles (County Site #10.0)	14.1	9.51	67%
	NE Atascadero (ALERT #711)	17.0	6.85 *	40% *
	Atascadero MWC (County Site #34.0)	17.5	10.59	61%
	Santa Margarita (ALERT #723)	24.0	10.39	43%
	Salinas Dam (County Site #94)	20.9	10.67	51%
South Coast	SLO Reservoir (ALERT #749)	24.0	10.51	44%
	Lopez Recreation Area (ALERT #707)	23.0	6.99 *	30% *
	West of Nipomo (CIMIS #202)	14.8	5.97 *	40% *
	Nipomo East (ALERT #728)	18.0	8.66	48%

Notes: This table contains provisional data from automated gauges and has not been verified. All units reported in inches. Report generated at 11:00am on 6/29/2015.

* Due to an equipment malfunction, not all rain was recorded at this site.

Near-term Outlook for Precipitation:

Although frequent low-pressure systems kept the area cooler than normal, May was one of the driest on record, with less .15" of rain throughout the County. June produced more normal warmer temperatures but no rainfall. The National Weather Service's Climate Prediction Center has increased the El Niño Advisory to a 90% chance of a weak strength event through summer and an 85% chance through the end of the year. Forecasts are beginning to predict higher chances of a stronger event, which could lead to an increase in precipitation in California next winter. The U.S. Seasonal Drought Outlook is calling for the drought to persist or intensify throughout California and most of the far western U.S.

Reservoir Levels (% of capacity):

Reservoir	% of Capacity	Current Acre Feet Storage
Nacimiento	25%	95,820
Whale Rock	41%	15,922
Lopez	36%	17,798
Salinas	15%	3,597

Source: www.slocountywater.org County of San Luis Obispo

STATE WATER

Status: The Department of Water Resources (DWR) announced expected water deliveries in 2015 to most customers of the State Water Project (SWP) to 20% of their requested amounts. San Luis Reservoir is currently at 47% capacity (66% of average).

Actions: The Public Works Department has released a 2015 projected delivery schedule and met with sub-contractors to discuss 2015 projected deliveries. Staff has distributed information to subcontractors showing the 20% delivery scenario and will continue to coordinate with sub-contractors as more information arises.

VULNERABLE WATER SYSTEMS**County Service Areas (CSA's):****Santa Margarita (CSA 23)**

- Drought response level remains at ALERT status.
- Primary pumping is from shallow well No. 4; water is also being pumped from deep well No. 3 to reduce needs from well No. 4. State officials have also authorized the use of shallow wells 1 & 2 should the need arise.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.
- Staff is monitoring conditions for a potential status change to CRITICAL.

Shandon (CSA 16)

- Two wells currently provide all water to the Shandon community and continued to be monitored.
- Work to make the connection to State Water is progressing through the required reviews by the State and the Central Coast Water Authority.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

Cayucos (CSA 10A)

- Supply is available from Whale Rock and one on-site well. Staff has given a presentation to the Advisory Committee and business groups regarding conserving this supply.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

Avila Valley (CSA 12)

- Adequate supply is available from Lopez and State water "carryover" water sources for this year and next.

Chorro Valley Institutions (CMC, Animal Services, Sheriff, County Operations, Camp San Luis, Cuesta College, County Office of Education):

- 2015 State water carryover water is available and being provided.
- The existing distribution system is being evaluated to assure water losses are minimized.
- CMC is at 100% design of their water treatment plant upgrade project and will soon go out to bid.
- Discussions with City of San Luis Obispo to exchange Nacimiento for Whale Rock are being initiated if State Water is insufficient in 2016.

Non-County Operated:

- **Cambria Community Services District**

Status: Emergency San Simeon Creek Brackish Water Supply Project went online on January 20, 2015. The district is now seeking a permit to operate it permanently.

- **San Simeon Community Services District**
Status: The CSD has a new well head salinity project to increase supplies in the current prop 84 grant round.
- **Heritage Ranch Community Services District**
Status: The Nacimiento River is the only available water source for the community of Heritage Ranch. An emergency inter-tie will be funded with emergency grant funds and construction on the inter-tie is underway.
- **Rural Paso Robles residents**
Status: Continuing to identify water-trucking options and examine outreach efforts. See County Drought Conditions and Water Conservation Website for drought relief update information.

IMPACTS

Agricultural Impacts:

There has been little change in agricultural conditions in the past month. Water quantity and water quality, as well as accumulated salts in the root-zone continue to drive decisions by agricultural producers. Limited winter rainfall has resulted in higher root-zone salinity levels than are tolerated by some crops. As irrigation water salinity rises, it becomes more difficult to leach problem salts from the rootzone. Impacts to both produce quality and quantity remain to be seen.

Drought stress can also lead to greater susceptibility to disease, including canker diseases and stem and leaf blights. These fungi are common in landscapes and wildlands and infestations can be particularly serious on drought stressed plants. Drought induced stem and leaf blight is present in local avocado orchards and often confused with leaf burn caused by salt injury. Branch wilt continues to be a serious issue for local dryland walnut producers with no treatment available.

Mandatory landscape irrigation restrictions have also impacted the California nursery industry. Consumer concerns regarding plant maintenance and doing the right thing have resulted in impacts to retail sales. California natives, drought tolerant plants, and succulents are reported to be in higher demand. Strategies for managing drought in landscapes are available through the UC Cooperative Extension website for San Luis Obispo County.

In addition to the drought, warm winter temperatures and a lack of adequate chill hours for many fruit trees have led to many local fruit and nut trees that appear never to have emerged from dormancy. In some cases, buds may have swollen but then died back. There are no actions to take at this time except to white-wash trees with limited leaf cover to prevent sunburn of the branches and trunks. Special whitewash products are available, or white interior latex paint diluted 50% with water can be applied.

Agricultural Assistance - Update from the USDA Farm Service Agency

According to staff at the USDA Farm Service Agency, the following programs are active in providing assistance. The programs are briefly summarized as follows:

LFP – Livestock Forage Disaster Program: provides payments for grazing losses. Because San Luis Obispo County continues in the D4 drought category, current eligibility is for 5 months of payments. Deadline to file is January 30, 2016 for 2015 payments.

ELAP – Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program: provides relief to producers who haul water to livestock. Deadline to file is September 1, 2015.

EQIP – Environmental Quality Incentives Program (NRCS): provides funds for land conservation planning and implementation of conservation practices. This program provides cost-share funding through USDA – NRCS. Applications and approvals are ongoing.

NAP – Non-insured Crop Disaster Assistance Program: provides cash payments to producers of noninsurable crops when low yields, loss of inventory, or planting did not occur due to natural disasters. Producers who are insured through this program should file a notice of loss as soon as possible and are required to file within 15 days of the loss being apparent to be eligible for benefits.

For information about the assistance programs, contact the USDA Farm Service Agency:
Templeton: (805) 434-0398 Ext 2.
Santa Maria: (805) 928-9269

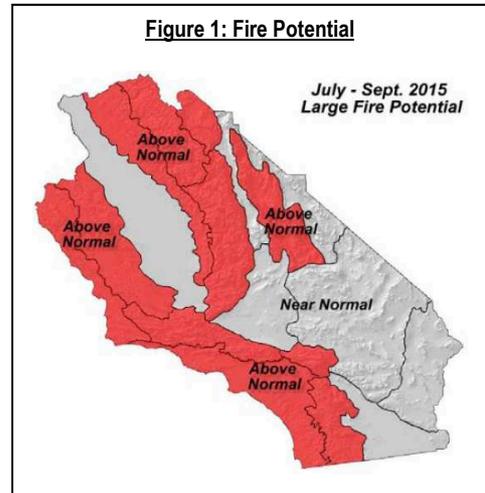
Fire Danger:

Fire Danger

In 2015, CAL FIRE has responded to over **2,392** fires across the State, burning **8,417** acres in State Responsibility Area. This level of fire activity is comparable to the five year average of 1,601 fires and 13,907 acres burned. The reduction in acres can be attributed to additional staffing and cool, damp weather patterns through spring that allowed the high number of starts to be contained quickly. These statistics do not include fires on Federal jurisdiction.

In San Luis Obispo County in 2015, through May, CAL FIRE responded to **49** wildfires, which burned **39** acres. Since 2007, the average for this period is 62 wildfires burning 131 acres. These numbers do not include the Parkhill Fire, which ignited on Saturday, June 20 and burned 1,791 acres in brush and oak woodland. The fire originated on Las Pilitas Road from carbon expelled from an unknown vehicle.

Figure 1 to the right indicates above normal fire potential in the county for the coming months.



Equipment/Staffing:

Locally, CAL FIRE is fully staffed, including 12 wildland engines, and 24/7 staffing of hand crews and dozers. Paso Robles Air Attack Base has increased staffing to include three tankers and one air attack. Defensible Space Inspectors (DSI) are conducting focused inspections in Cambria including handing out fire prevention education materials door-to-door.

The annual backyard burn season ended on April 13. A Countywide Burn Ban was proclaimed on June 19, 2015. The burn ban eliminates all burning within CAL FIRE jurisdiction except for campfires at approved campgrounds.

Live Fuel Moisture (LFM)

(LFM is the moisture content of live vegetation expressed as a percentage of the oven-dry weight.)

LFM values in the County peaked much earlier than usual in 2015 and are continuing to trend downward with values below historic lows and approaching the critical level of 60. LFM values area-wide will likely reach critical (60%) levels 2 -3 months earlier than normal.

Overall, frequent dry weather patterns and the presence of low live and dead fuel moistures have produced fuel conditions that are considered available for burning. The daily decrease in LFM causes a corresponding increase in the fire danger. This has been moderated some by the cool weather patterns, but it is likely that hot weather will produce explosive burning conditions into fall. The grass is now fully cured and compared to 2014 is much more dense due to good growth resulting from timely rain events in February and April. This abundant grass crop throughout much of the County could result in greater fire spread, particularly from roadside starts.

Dead Fuel Moisture

(The moisture content of dead organic fuels is another important component of the relative fire danger. As with LFM above, dead fuel moisture levels are a good indicator of how likely fuels are to ignite and how intensely they will burn. 100-hr fuel refers to vegetation between 1 and 3 inches in diameter and 1000-hr fuel is 3-6 inches. When the fuel moisture content is low, fires start easily and will spread rapidly.)

Many fuel beds in the County, particularly coastal sage scrub, have seen a dramatic increase in the percentage of dead fuel. In many areas, the volume of dead vegetation exceeds the volume of live vegetation. Due to the cool weather in May, despite minimal rain, dead fuel moisture values rose to above normal in early May and are now below average.

Temperatures/Relative Humidity (RH)

(When combined with other factors influencing the fire environment such as wind, steep topography, and low fuel moisture levels, hot temperatures and low RH can significantly increase the fire danger by increasing fire initiation, spread rates, burning intensity, and difficulty of control.)

Longer days and warm and dry weather has steadily increased the fire danger and prompted an early start to the 2015 fire season. Hot weather will be normal through the summer months.

Energy Release Component (ERC)

(ERC is an index related to how hot a fire could burn. It is directly related to the 24-hour, potential worst case, total available energy (BTUs) at the head of a fire. The ERC can serve as a good characterization of fire season as it tracks seasonal fire danger trends well. ERC has low variability, and is the best fire danger component for indicating the effects of intermediate to long-term drying on fire behavior.)

The cool weather patterns in May and normal weather in June have kept ERC values to just above average.

Forest and Range Impacts

Widespread tree mortality is plainly evident throughout the County. All tree species have been adversely affected by the drought. Thousands of coast live oaks of all sizes in all areas and at all elevations have died.

The area most severely impacted is the Cambria Monterey Pine Forest (CMPF). Already one of the most endangered native forests in the world, the CMPF has been further devastated by the drought. The poor condition of the CMPF resulting from the decades-long problems including senescence, over-crowding, fire exclusion, pitch canker, bark beetles, and many other fungal and parasitic pathogens has been severely amplified by the drought. These cumulative impacts have created the current situation where approximately 40-50% of the overstory trees are dead or dying. In certain areas, mortality exceeds 90%. In addition to the major impacts to forest health, the resulting fire hazard has increased to the point where catastrophic stand-replacing fire is very likely. Hundreds of large dead hazard trees are poised to fall on homes, vehicles, and vital infrastructure. Solutions are available including dead tree removal, biomass removal, cogeneration, thinning, prescribed burning, tree planting, and invasive weed control. Implementing worthwhile solutions is extraordinarily challenging and requires a community based effort involving multi-agency cooperation.

The County Planning and Building Department is working to provide relief from hazard tree permitting requirements in Cambria to facilitate tree removal on the high number of affected parcels. In addition, forest assessments have been initiated to quantify the extent of this issue and the results will be made known as soon as they become available.

Grants

The SLO Fire Safe Council (FSC) was recently awarded a grant by PG&E to assist with hazard tree abatement work in the County. The initial focus of this work will be in Cambria to mitigate hazard trees on Bridge Street and within the Fiscalini Ranch Preserve. This will further the work being completed by PG&E and by County Roads, which removed over 160 hazard trees in May.

Currently, \$42 million is available for Greenhouse Gas Reduction Fund (GGRF) grants. An additional \$90 million has been identified for GRRF grants in the Governor's budget for next fiscal year. On behalf of the community, the FSC is applying for funding through this program for substantial hazard abatement and forest health projects in Cambria.

Economic:

In an effort to coordinate local and state response to drought impacts the following surveys are being utilized by the County:

Drought Business Impact Survey

The San Luis Obispo County Workforce Investment Board (WIB) is gathering information on local drought-related job impacts. This is part of a statewide survey by the California Labor and Workforce

Development Agency (LWDA) as part of an ongoing online survey to inform the Governor's Drought Relief Task Force of the drought's ripple effects. The WIB's Drought Business Impact survey is available at <http://sloworkforce.com/drought-survey/>. Local Workforce Investment Boards, workforce partners, and other local workforce entities are encouraged to complete the survey regularly to keep the Governor's Drought Relief Task Force up to date on the local area. The WIB is conducting outreach to chambers of commerce and other business services agencies for assistance in outreach to businesses and employers regarding the drought survey. Though the WIB is hearing that there are impacts, the county does not have any "reportable" impacts due to the State's requirements for reporting (i.e. specific business name, address, etc.).

Domestic Water Issues-Intake Form

The Governor's Drought Task Force created an online intake form for local, state, or tribal and federal agencies to document domestic water issues. The information is intended to inform and coordinate state response and mitigate drought impacts. Data collected is considered confidential and access is restricted. Individuals with domestic water issues are encouraged to contact County Environmental Health at (805) 781-5544.

Anonymous Supplemental Domestic Water Issues Online Survey

Due to state requirements for reporting, County Office of Emergency Services has decided to direct reports of dry wells to Environmental Health instead of continuing to promote the anonymous supplemental Domestic Water Issues Online Survey.

Responses received to date will still be used to support our request for federal disaster assistance for individuals.

STATE & FEDERAL KEY ACTION ITEMS FROM LAST MONTH

Department of Water Resources Revised Draft Model Landscape Ordinance

On June 12, the Department of Water Resources (DWR) released a revised model landscape ordinance that strengthens water efficiency requirements outside of new California homes by 30 percent. The revised model ordinance also increases water efficiency requirements for landscaping outside of commercial buildings by approximately 40 percent. Local governments are required to adopt the new model ordinance—or adopt an ordinance with equivalent requirements—by the end of this year.

The draft revisions also expand these water efficiency requirements to any outdoor space over 500 square feet for both commercial and residential property. In addition, the updated ordinance limits the amount of grass that can be planted in yards, requires the installation of efficient sprinkler nozzles, ban grass in street medians and parkways, and requires use of compost to improve water-holding capacity in soil. Consideration for approval by the California Water Commission is scheduled for August 19.

Californians Urged To Limit Outdoor Watering This Summer

With California in the grip of the worst drought in a generation, Save Our Water – California's official statewide conservation education program – is launching a new public education campaign urging Californians to step up and make even more cuts in their water use. The campaign's first phase will run through the end of July and encourages Californians to "Turn It Off" and cut back on water use wherever possible inside and out.

COUNTY DROUGHT TASK FORCE KEY ACTION ITEMS FROM LAST MONTH

County Office of Emergency Services:

San Luis Obispo County OES continues to coordinate with the Governor's Office of Emergency Services (Cal OES) to provide updates on the drought situation, respond to specific information requests to Cal OES, and coordinate local emergency needs. In addition, County OES continues to gather local situation status information and drought costs throughout the county in order to send the information to Cal OES.

Cambria

Information specific to the Cambria fire threat has been provided to Cal OES and has been shared with the State Drought Task Force. The status of the Cambria fire threat has and will continue to be a high priority issue shared with state agencies.

Water Sale Agreement with Diablo Canyon

On May 19, 2015, the Board approved a water sale agreement with PG&E to use non-potable water as available from Diablo Canyon's desalination plant for emergency use within the county. Per Board direction, staff is working with PG&E on a logistics report to identify what is needed to pipe surplus water from the PG&E desalination plant to the community. Staff will report to the Board with findings by September.

Emergency Food Aid

The California Department of Social Services (CDSS) has provided boxes of food to the Food Bank Coalition of San Luis Obispo for households impacted by the drought. Call the Food Bank for more information and to ensure Drought Food Assistance is still available: (805) 238-4664 or www.slofoodbank.org.

Emergency Actions:

No new emergency actions have been taken specific to the drought in this reporting period.

County Facilities Usage & Conservation Actions:

The county has taken the following actions:

- Fixture Replacement: To date, staff has retrofitted 44 buildings with low-flow fixtures, saving an estimated 4,500 gallons per week.
- Leak Repair: Staff continues to identify and repair leaks to minimize water loss. The May water bill for the Drug and Alcohol Services Center in Grover Beach showed a 20,196 gallon (36.5%) reduction, likely due to the toilets being repaired. The May bill was 35,156 gallons, compared to 55,352 for the previous billing period.
- Water Conservation: The Energy & Water Manager Services consultant contractor is coordinating with water purveyors to understand water reduction requirements for County facilities. Outreach and coordination will start with City of San Luis Obispo and Nipomo CSD, the purveyors with the most water accounts and usage for County Parks.
- Water Audit: The Energy & Water Manager Services consultant contractor provided a report showing high water use facilities. The next step will be to perform a water audit of high use facilities. The County received proposals for a water audit of the County Jail (top water using facility). The next step is to award task order for water audit.
- County Standards for Construction Contracts: Staff is reviewing and updating County standards for plumbing fixtures, to include more specific language for lower water usage fixtures in facility construction contracts and purchase orders.
- County Airport: As previously reported, County Airport fire hydrants must be flushed periodically to maintain safe water for drinking due to chlorine levels. The Airport is making the water from hydrant flushing available for agricultural operations, construction, or other purposes. Please contact the Airport at (805) 781-5205 if interested in using this free water.

Drought Contingency Planning:

The Public Health Department, the Public Works Department, and CAL FIRE/County Fire continue to develop plans to ensure there is adequate supply of water for firefighting and domestic water use in the event that a community does not have enough water. Water availability information from small and large public water systems has been categorized into three categories; Watch, Vulnerable, and Critical. The information has been placed into a GIS mapping layer for contingency planning.

County Public Outreach Actions:

Information regarding current and upcoming drought relief programs for rural homeowners has been placed on the County Drought Conditions and Water Conservation webpage. Rural Development, an agency of the United States Department of Agriculture (USDA), delivers a number of programs to help improve the quality of life in rural communities throughout the nation. These programs may also help rural communities, businesses and individuals impacted by California's ongoing drought conditions. For additional resources and information on applying for any of these programs, please visit <http://www.rurdev.usda.gov/ca> or the County Drought Conditions and Water Conservation webpage at http://www.slocounty.ca.gov/admin/Drought_Update.htm.

Attachment 1

In an effort to raise awareness about water supply issues the County continues to examine multiple channels of communication for water conservation outreach efforts. Check out our water-saving tips, shareable water saving images, and customized Tweets and Facebook posts just for you to share and help us continue the SLO County culture of conservation at the following link: http://www.slocounty.ca.gov/admin/Drought_Update/water-conservation.htm

To report drought-related concerns or for water conservations questions, call the County Water Conservation and Drought Hotline at (805) 781-4466.

DROUGHT RELATED WEBSITES FOR MORE INFORMATION

County of San Luis Obispo Drought Conditions and Water Conservation
(http://www.slocounty.ca.gov/admin/Drought_Update.htm)

State's Water Conservation Campaign; Save our Water
(www.saveourh2o.org)

California's Drought Information Clearinghouse; Dought.CA.Gov
(<http://ca.gov/drought/>)

California Department of Food and Agriculture; Drought information
(www.cdfa.ca.gov/drought/)

California Department of Water Resources; Current Water Conditions
(www.water.ca.gov/waterconditions/drought/)

California State Water Resources Control Board; Water Rights, Drought Info and Actions
(www.swrcb.ca.gov/waterrights/water_issues/programs/drought/index.shtml)

California Department of Public Health; Drinking Water CDPH Drinking Water Program
(www.cdph.ca.gov/programs/pages/dwp.aspx)

USDA Disaster and Drought Assistance Information; USDA Programs
(http://www.usda.gov/wps/portal/usda/usdahome?navid=DISASTER_ASSISTANCE)

UC Cooperative Extension Drought Information Resources; Drought Information Resources
(http://cesanluisobispo.ucanr.edu/Drought_Information/)

