



Monthly Drought Update
May 19, 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 May 7, 2015, indicates San Luis Obispo County remains at the **D4 – Exceptional Drought intensity rating**. Approximately 94% 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	7.13	45%
Inland	Paso Robles (County Site #10.0)	14.1	9.46	67%
	NE Atascadero (ALERT #711)	17.0	6.85 *	40% *
	Atascadero MWC (County Site #34.0)	17.5	10.56	60%
	Santa Margarita (ALERT #723)	24.0	10.39	43%
	Salinas Dam (County Site #94)	20.9	10.52	50%
South Coast	SLO Reservoir (ALERT #749)	24.0	10.35	43%
	Lopez Recreation Area (ALERT #707)	23.0	6.35 *	28% *
	West of Nipomo (CIMIS #202)	14.8	5.61 *	38% *
	Nipomo East (ALERT #728)	18.0	8.54	47%

Notes: This table contains provisional data from automated gauges and has not been verified. All units reported in inches. Report generated at 8:00am on 4/29/2015.

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

Near-term Outlook for Precipitation:

The National Weather Service's Climate Prediction Center has increased the El Niño Advisory to a 70% chance of weak strength event through summer. Due to the expected weak strength, widespread or significant impacts are not anticipated. The U.S. Seasonal Drought Outlook is calling for the drought to persist or intensify throughout California.

Reservoir Levels (% of capacity):

Note: Historical averages calculated using data from the following time frame:

Nacimiento: 1959 – 2013; Lopez: 1994-2013; Salinas: 1987-2013; and Whale Rock: 1985-2013.

Reservoir	% of Capacity	Current Acre Feet Storage
Nacimiento	28%	106,075
Whale Rock	43%	16,599
Lopez	38%	18,868
Salinas	16%	3,906

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

VULNERABLE WATER SYSTEMS

There have been no new updates regarding vulnerable water systems throughout the county since the April 21, 2014 report.

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: CSD voluntarily dropped out of emergency grant project for recycled water project.

- **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.

- **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:

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. Impacts to both produce quality and quantity remain to be seen.

Dr. Royce Larsen is nearing completion of yearly forage production sampling across the county. Preliminary results indicate that forage production for the County was generally higher than last year; however, it was still significantly low, more than 50% below average. Due to last year's herd reductions, most cattlemen will have adequate forage available for the cattle they have remaining. However, species composition of available forage could lead to problems later in the summer. Measurements of available forage show that the majority is filaree (about 75%). Filaree is a good feed while green but once dried, it crumples and is dispersed by trampling and wind. Forage along the coast from Cambria north, and through the coast range mountains from Adelaida down to Santa Margarita and out through Pozo has the best forage production within the county. The coast from Cayucos south through Morro Bay and on to Huasna was very low this year. All sites in the eastern portion of the County were also low. The continued drought will also have severe consequences for livestock water supply. Livestock ponds are already dry, flow from springs is significantly reduced, or they have simply dried up. This year, water for livestock will depend on a developed water system, e.g. wells that are still producing and are able to pump water through pipes to troughs spread across a ranch, or by hauling water to livestock.

Agricultural Assistance

According to staff at the USDA Farm Service Agency, as of May 4, 2015, 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 our county continues in the D4 drought category, current eligibility is for 5 months of payments. There is no end date for sign-ups for 2015 payments.

ELAP – Emergency Assistance for Livestock, Honeybees and Farm-Raised Fish Program: can provide relief to producers who are hauling water for livestock. No deadline for sign-ups.

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 non-insurable 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. Payments would occur in 2016.

For information about the assistance programs, contact the USDA Farm Service Agency at 805-434-0398.

Fire Danger:

Fire Danger

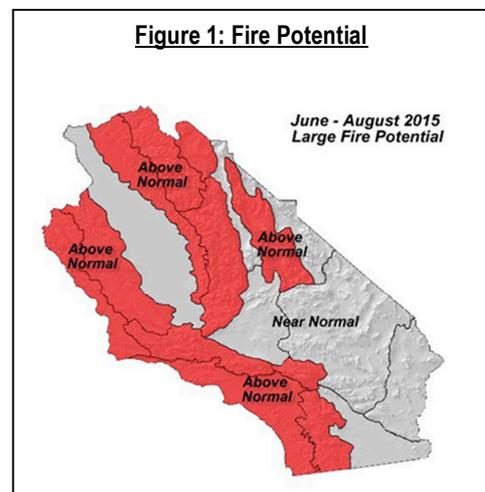
In 2015, CAL FIRE has responded to over 1,065 fires across the State, burning 4,129 acres in State Responsibility Area. This level of fire activity is above the five-year average of 612 fires and 2,055 acres burned.

In San Luis Obispo County in 2015, CAL FIRE has responded to 31 wildfires, which burned 33 acres. Since 2007, the average for this period is 45 wildfires burning 80 acres.

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

Equipment/Staffing:

Locally, on April 13, CAL FIRE increased staffing to transition



levels including 10 wildland engines, and 24/7 staffing of hand crews and dozers. The Paso Robles Air Attack Base also opened and is staffed with 2 air tankers. Defensible Space Inspectors (DSI) are conducting focused inspections in Cambria including handing out fire prevention education materials door-to-door.

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 average or at historical lows at most stations.

Overall, frequent dry weather patterns and the presence of low live and dead fuel moistures has produced fuel conditions that are considered available for burning. The daily decrease in LFM causes a corresponding increase in the fire danger. Compared to 2014, grass throughout the county is much denser 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. This factor reduces the benefit of seasonal increases in LFM and will increase the fire hazard significantly through the early periods of this fire season. Due to the dry weather in March and minimal rain in April, dead fuel moisture values declined throughout the month and are below average approaching record low values.

Temperatures/Relative Humidity (RH)

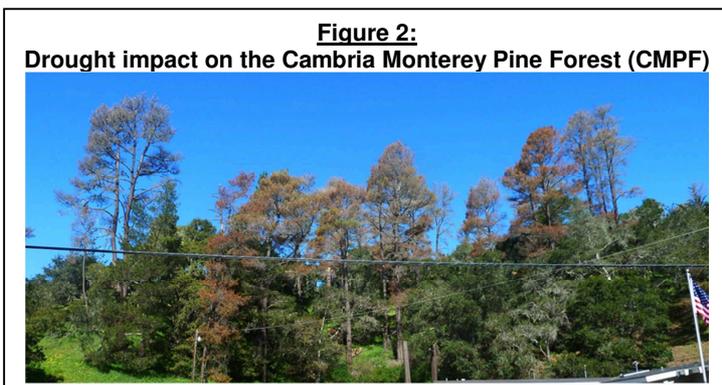
(When combined with other factors influencing the fire environment such as wind, steep topography, and low fuel moisture levels, hot temperatures and low RH can significantly increase the fire danger by increasing fire initiation, spread rates, burning intensity, and difficulty of control.)

Longer days and warm and dry weather has steadily increase the fire danger and moved up the start of the 2015 fire season.

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 recent dry weather has decreased the dead fuel moistures and increased ERC values to record high levels, increasing relative fire danger.



Forest and Range Impacts:

Widespread tree mortality is plainly evident throughout the County (see Figure 2). 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

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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 will require a community based effort involving multi-agency cooperation. Efforts are currently underway to secure grant funding to begin this process.

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.

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.

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

The County Drought Task Force created a supplemental anonymous survey. The survey does not ask for any identifying information and is intended to support our request for federal disaster assistance for individuals. Individuals who wish to remain anonymous are encouraged to complete the supplemental survey online www.slocounty.ca.gov/admin/Drought_Update or by phone by calling (805) 781-5011.

To date, the County has received 91 responses to the supplemental survey. Of the 91 respondents, 29 (35%) report that one or more wells have gone dry, 12 (14%) are trucking in water, and 66 (79%) have heard of other wells running dry in their area. It is important to note that the survey is voluntary and as a result, responses are not representative of the county population.

STATE & FEDERAL KEY ACTION ITEMS FROM LAST MONTH

State Water Board Adopts 25 Percent Mandatory Water Conservation Regulation

On April 1, with April snow measured at its lowest level on record, Governor Edmund G. Brown Jr. issued an Executive Order directing the State Water Resources Control Board to implement mandatory water reductions in cities and towns across California to reduce water usage by 25 percent through February 2016. To achieve these savings, the State Water Resources Control Board adopted an emergency

regulation requiring an immediate 25 percent reduction in overall potable urban water use statewide on Tuesday May 5. The emergency regulation identifies how much water communities must conserve based on their average residential water use, per person per day, last summer. Following Board adoption, the regulation will be submitted to the Office of Administrative Law, which has 10 days to approve or deny the regulation. If approved by the Office of Administrative Law, the regulation will take effect immediately and remain in effect for 270 days from that date.

Summary of the new requirements:

- The conservation savings for all urban water suppliers (serving more than 3,000 connections) are allocated across nine tiers of increasing levels of residential gallons per capita per day (R-GPCD) water use to reduce water use by 25 percent statewide and will take effect June 1st.
- Smaller water suppliers (serving fewer than 3,000 connections) must either reduce water use by 25 percent, or restrict outdoor irrigation to no more than two days per week. These smaller urban suppliers, that collectively serve less than 10 percent of Californians, must submit a report on December 15, 2015 to demonstrate compliance.
- Commercial, Industrial and Institutional properties that are not served by a water supplier (or are self-supplied, such as by a groundwater well) also must either reduce water use by 25 percent or restrict outdoor irrigation to no more than two days per week. No reporting is required but these properties must maintain documentation of their water use and practices.
- The new prohibitions in the Executive Order apply to all Californians and will take effect immediately upon approval of the regulation by the Office of Administrative Law. These include:
 - Irrigation with potable water of ornamental turf on public street medians; and
 - Irrigation with potable water outside of newly constructed homes and buildings not in accordance with emergency regulations or other requirements established by the Building Standards Commission and the Department of Housing and Community Development

Investing in Innovative Water & Energy Saving Technologies:

In response to California's drought, the California Energy Commission (CEC) is taking steps outlined in Governor Brown's Executive Order B-29-15 to save water and invest in new water energy technologies. CEC, jointly with the Department of Water Resources, and the State Water Board, will implement a Water Energy Technology (WET) program to provide funding for innovative technologies to accelerate the deployment of innovative water and energy saving technologies and reduce greenhouse gas emissions.

In addition, CEC will provide monetary incentives for the replacement of inefficient water consuming appliances and devices in homes including single- and multi-family. The Drought Rebate Program will help residents capture water savings while reducing greenhouse gas emissions.

Fact sheets for both programs are available on the CEC website <http://www.energy.ca.gov/>.

Governor Brown Announces Efforts to Help Cities Bolster Water Waste Enforcement, and Streamline Water Projects:

On April 28, Governor Brown held a meeting with mayors from across the state and discussed how to help cities and water districts meet new state mandated water reductions and build new local water supply projects. Specifically, Governor Brown announced that he would propose state law changes to help local officials better enforce conservation requirements and will direct state agencies to help local governments streamline local water supply projects.

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 well a high

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priority issue shared with state agencies. County OES will be participating in a May 9, 2015 open house at the Cambria Fire station that will also be a preparedness event for the community and area of Cambria.

Water Sale Agreement with Diablo Canyon

A Water Sale Agreement has been worked out with PG&E to use non-potable water as available from Diablo Canyon's desalination plant for emergency use within the county. County OES is requesting the Board of Supervisors' to approve the agreement as part of its May 19, 2015 agenda. Detailed information and the agreement itself can be found as part of that agenda item today.

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.
- Water Conservation/Leak Repair: Staff continues to identify and repair leaks to minimize water loss. Staff repaired the following leaks over the last month:
 - A 2" water line leak was repaired on March 30, 2015 at the Santa Margarita Swimming Pool located at 4695 B Santa Margarita Lake Road in Santa Margarita. The roughly estimated water loss from the leak was approximately 500 gallons per day for 3 days for a total of 1500 gallons.
 - A water line leak was reported at the Health Agency Campus on April 29, 2015. Facilities Services investigating.
- Energy and Water Manager Professional Services Contract: 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. County staff has requested a water audit at the County Jail (top water using facility).
- County Parks: Staff has continued to minimize watering on landscape and sports fields.
- 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.

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/)

