



**Monthly Drought Update
November 4, 2014
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 October 23, 2014, indicates San Luis Obispo County remains at the **D4 – Exceptional Drought intensity rating**. Approximately 95% of the state remains at a level D-2 Severe Drought or worse with more than 58% of the state in a D4 – Exceptional Drought rating.

San Luis Obispo County Precipitation Totals (in inches):

Community	Precipitation Total Received from Last Update (9/22/14 – 10/20/14)	Precipitation Water Year (7/1/14 to present)	Avg. Annual Rainfall
Nipomo South (730)	0.00	0.00	16.00
Lopez Dam (737)	0.00	0.00	21.00
SLO Reservoir (749)	0.00	0.00	25.00
Los Osos Landfill (727)	0.00	0.00	20.00
Cambria (717)	0.00	0.00	22.00
Rocky Butte (703)	0.00	0.00	39.00
Santa Margarita (723)	0.00	0.00	26.00
Salinas Dam (719)	0.00	0.00	23.00
Atascadero (711)	0.00	0.00	18.00
Templeton (762)	0.00	0.00	14.70
Paso Robles (city)	0.00	0.00	14.33
Hog Canyon (709)	0.00	0.00	16.00

Source: www.slocountywater.org County of San Luis Obispo-City of Paso Robles Website

Near-term Outlook for Precipitation:

California, the central coast in particular, remains the driest region in the western half of the U.S. over the past 3 years. This past week, light precipitation occurred following passage of a low pressure system. The 10-day forecast is predicting decent rainfall in Northern California as far south as the Bay Area, but there is no indication of measurable rain in the central coast Area. The National Oceanic and Atmospheric Administration's Climate Prediction Center has issued an El Niño Watch indicating a 67% chance of a weak strength event over the next few months. The Winter Precipitation Outlook favors a greater than 33% chance of above average rainfall for Southern California, while the U.S. Seasonal Drought Outlook calls for the drought to persist or intensify.

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	16%	62,185
Lopez	44%	21,563
Salinas	22%	5,271
Whale Rock	47%	18,425

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

STATE WATER

Status: The Department of Water Resources (DWR) continues to deliver State Water “Carryover” water for 2014 and DWR has increased its allocation for South of Delta Service Contractors from 0% to 5%. The Flood Control District is maximizing State Water deliveries to Zone 3 agencies. A recent notice from Central Coast Water Authority indicates they will not shut down in November for maintenance in order to maximize deliveries. San Luis Reservoir is currently at 20% capacity.

Actions: The Public Works Department has released a 2015 projected delivery schedule and met with sub-contractors to discuss 2015 projected deliveries.

VULNERABLE WATER SYSTEMS

There are only two new updates, outlined in red text, regarding vulnerable water systems throughout the county since the October 7, 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. Deep well No. 3 is available for use if needed to supplement well No. 4.
- An emergency water supply project connecting Santa Margarita to Atascadero Mutual Water Company is being pursued through the Integrated Regional Water Management (IRWM) drought expedited implementation grant process. This project was approved in the suite of projects by the Board on June 17, 2014 and award announcement is anticipated in October.
- 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.
- 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.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community are being installed.

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

- 2014 State water carryover water is available and being provided.
- An interconnection between the existing Nacimiento Water Project pipeline and the existing Salinas pipeline is being pursued through the State’s drought emergency funds. The board approved this project on June 17, 2014 to be included in the IRWM drought grant application.
- The existing distribution system is being evaluated to assure water losses are minimized.
- **CMC is at 90% design of their water treatment plant upgrades in preparation for a potential state water shutdown**

Non-County Operated:

- **City of Morro Bay**
Status: Emergency inter-tie with Chorro Valley and desalination permit.
- **Cambria Community Services District**
Status: Emergency San Simeon Creek Brackish Water Supply Project-Started Construction.
- **San Simeon Community Services District**
Status: Proposed recycled water project part of June 17, 2014 IRWM drought application.
- **Heritage Ranch Community Services District**

Status: The Nacimiento River is the only available water source for the community of Heritage Ranch. The emergency inter-tie agreement between the Flood Control District and the CSD was part of June 17, 2014 IRWM drought application.

- **Rural Paso Robles residents**

Status: Continue to identify water trucking options and outreach efforts. See County Drought Conditions and Water Conservation Website for drought relief update information.

IMPACTS

Agricultural Impacts:

San Luis Obispo County Farm Bureau Survey

Staff from the Department of Agriculture/Weights and Measures and the University of California Cooperative Extension collaborated to review responses to portions of a survey recently sent by the San Luis Obispo County Farm Bureau. The survey compiled information about irrigation practices and agricultural wastewater prevention strategies used by agricultural producers. As of October 14, 2014, thirteen respondents provided information. The input below is paraphrased from comments collected by the survey.

Respondents reported a major reduction in the amount of water applied to many crops and producers have made changes to irrigation practices in response to current drought conditions. Producers are more closely monitoring weather data, soil moisture and evapotranspiration rates to make informed irrigation decisions. Tensiometers and other soil moisture monitoring devices are being used to determine when to irrigate. One respondent mentioned the irrigation equipment has not changed in the last twenty years. What has changed is the monitoring of soil moisture and soil types to maximize irrigation cycles. Respondents also reported they are already doing all they can to conserve water (most commodities, including grapes, vegetables and strawberries, for example, already utilize drip irrigation systems which minimizes the amount of water used and allows growers to pinpoint delivery of water to individual plants). Flow meters, sensors and conversion to lower flow drip emitters or micro-sprinklers were also mentioned as water conservation practices. Several respondents reported converting, at some point, from flood irrigation to drip systems. Implementation of practices to avoid water runoff is underway.

Respondents reported the timing of irrigation has become a critical component when making irrigation decisions. Some reported changing irrigation schedules to late evening and during nighttime hours and avoiding windy weather, if possible, to minimize evaporation. Implementation of deficit irrigation practices due to lack of water to avocados and grapes were also reported.

Survey respondents reported the reduction in the amount of water applied to many crops and changes to irrigation practices have produced both negative and positive impacts. For example, grape growers reported less leaf growth resulting in better quality fruit and better fruit flavor due to water stress. Reduction in energy costs, less stress on wells and overall more direct and efficient water usage was reported. However, olive growers reported low fruit yield and loss of crop. Hay crops were also lost due to drought conditions and cattle herds were reduced due to availability of water. Additional expense to convert from flood irrigation to drip systems was reported. Conversion to a crop that needs less annual rainfall was also mentioned as a response to current drought conditions.

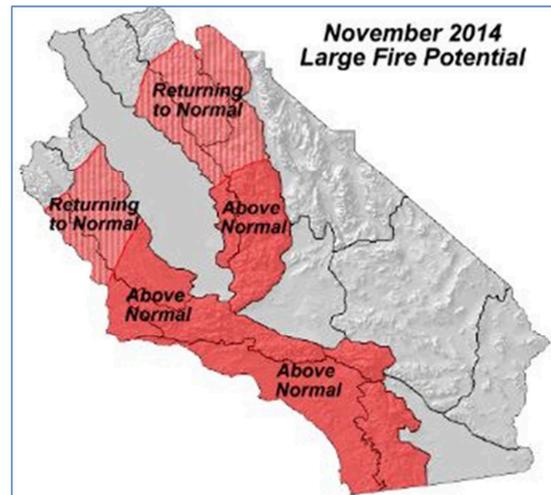
“Ranching and California’s Drought”: live webcast and discussion forum coming to San Luis Obispo November 7, 2014:

On November 7 from 9:15am to 2:30pm, the University of California Cooperative Extension’s “Ranching and California’s Drought Conditions” webcast from the UC Davis campus will be shown locally at the UCCE Auditorium, 2156 Sierra Way in San Luis Obispo. The cost is free and lunch will be provided. Topics to be presented include: drought monitor – what this means to ranchers; how California’s ranchers are coping with drought; new feeding strategies for livestock and NOAA’s weather forecast for the coming forage growing season. To reserve your seat register at: <http://ucanr.edu/droughtwebcast2014> or contact Royce Larsen, UCCE Farm Advisor at 805-434-4106.

Fire Danger:

Fire Danger

To date, CAL FIRE has responded to **5,224 fires** across the State since January 1, burning **91,792 acres**. This year's fire activity is well above the year-to-date average of 4,263 wildfires and 88,470 acres burned. These statistics do not include fires on Federal jurisdiction. Current fire information indicates there are currently no uncontained State fires.



In San Luis Obispo County, from January through September, CAL FIRE has responded to **125 wildfires** which burned **118 acres**. Since 2007, averages for this same period of time are 145 wildfires burning 944 acres.

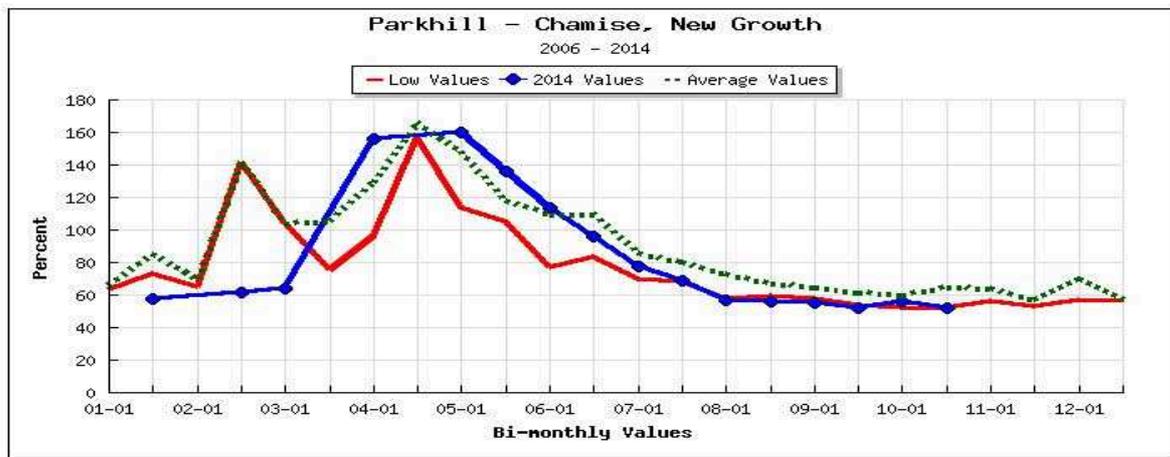
Equipment/Staffing:

Despite minimal fire activity in recent weeks, CAL FIRE remains at peak staffing levels throughout the State. In this County, CAL FIRE now has 6 large "pillow tanks" which are portable, non-potable 20,000 gallon water tanks. These will be used in strategic locations to supplement and minimize impacts to limited local water supplies in the event of an incident. Specific locations for these rapidly deployable tanks and sources of water for filling them will be determined when needed.

Live Fuel Moisture (LFM)

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

The normal downward summer trend has peaked with LFM at or near historical lows and below critical levels (60%). Despite no precipitation, LFM values are expected to follow seasonal trends and level out or increase slightly as plants respond to cooler weather and shorter days.



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.)

Early fall, September/October, is typically when fuel moistures reach the lowest and most dangerous values for the year. Currently, due to recent hot weather, dead fuels are well below average and below historical lows at some locations.

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.)

Hot weather has continued through most of the past month with above normal temperatures most days including a record high of 102° in Paso Robles on October 6.

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 continued hot weather has kept dead fuel moistures low and increased ERC values to near record levels which increase relative fire danger.

Economic:

Drought-related job losses are continuing to increase across the state. Historically, drought-induced economic losses are felt by municipalities, business and industry, agricultural enterprises, households and individuals, and governments. 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 number of dry groundwater wells, small streams, springs, and creeks are increasing as the drought continues. An effective response to this growing public health threat requires two key elements: (1) data collection to better understand the extent of the problem and (2) clear communication to all responding agencies and the public about available resources. As a result, 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.

It has been noted by a number of counties that people continue to hesitate to give out information related to their wells and other water sources having gone dry. In order to alleviate this concern, 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 at www.slocounty.ca.gov/admin/Drought_Update or by phone by calling 805-781-5011.

STATE & FEDERAL KEY ACTION ITEMS FROM LAST MONTH

Urban Water Suppliers Water Conservation Report:

Water conservation in California's urban communities continues to grow. August data collected by the State Water Board shows an 11.5 percent statewide reduction in water use compared to last August. The water usage data submitted by 95% of urban water suppliers indicates that Californians are answering the call to reduce water usage amidst the drought.

Overall, Californians saved 27 billion gallons of water in August. By comparison, residents collectively saved 18 billion gallons in July of this year and 9 billion gallons in June compared to water usage in those months last year. For September, water districts are required to report “residential gallons used per capita per day” in an effort to determine average water consumption per person throughout the state

COUNTY DROUGHT TASK FORCE KEY ACTION ITEMS FROM LAST MONTH

County Office of Emergency Services:

San Luis Obispo County OES continues to coordinate with 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.

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, a total of 35 buildings have been retrofitted with low-flow fixtures, saving an estimated 3,500 gallons per week.
- Water Audit: Water audit site visit was conducted in July with focus on water efficiency opportunities County facilities, parks, and golf. The site visit estimated a rough savings of 15 acre-feet by replacing fixtures and performing retrofits at County Operations Center facilities. Findings from water audit will be developed into future plans for projects.
- Energy and Water Manager Professional Services Contract: Proposals for Energy and Water Manager professional services contract were received, negotiations are in progress, and it is now estimated that a contract will be awarded in November.
- County Airport: A local lavender farmer was able to use approximately 9,000 to 11,000 gallons of water from hydrant flushing at County Airport.
- County Parks: County Parks completed a project at Nipomo Park to install an irrigation control system which will reduce water usage compared to a timer system.

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. A GIS mapping layer has been created showing water availability information from small 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:

The Public Works Department continues to work with agencies affected by the drought and provide educational presentations to interested parties. Conservation mailers have been sent to retail customers along with conservation signs in County Service Areas.

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 and communicate the call for a 20% voluntary reduction in water usage, the County continues to examine multiple channels of communication for water conservation outreach efforts.

FALL WATER CONSERVATION TIPS

Water Year 2014 ended on September 30 as one of California's driest ever with no promise this water year will be any wetter. To help guide us into the cooler fall months, here are some tips and ideas on how to conserve water all season long:

- **Change your sprinkler schedule.** As the weather cools down, lawns and plants don't need as much water and when it's raining, they don't need to be watered at all. Change your sprinkler timer now and then remember to turn it off when it is raining. Another option is to invest in a weather-based sprinkler and never worry about your sprinkler schedule.
- **Get a jump on spring plantings.** Gardeners will tell you that plants set in the fall season require less water and will look better come springtime!
- **Invest in a rain barrel.** Consider using a rain barrel to collect and store rainwater runoff throughout the wet months. Water collected can be used to water indoor or outdoor plants, when needed, instead of turning on your sprinklers.
- **Redirect downspouts to capture water.** Simply redirect downspouts outside your home to capture any rainwater and direct it to garden or plant areas.
- **Check for leaks.** Find and fix leaks now! One way to find out if you have a leak present is to read your water meter before and after a two-hour period when no water is being used. If the meter does not read the same, you most likely have a leak.

For more water saving tips and ideas year-round, visit www.SaveOurWater.com.



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; Drought.CA.Gov (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
(usda.gov/wps/portal/usda/usdahome?navid=DISASTER_ASSISTANCE)

UC Cooperative Extension Drought Information Resources; Drought Information Resources;
cesanluisobispo.ucanr.edu/Drought_Information/