

SCAQMD Proposed Emergency Drought Management & Water Conservation Plan

Governing Board Retreat
May 15-16, 2014

Mohsen Nazemi, P.E.
Deputy Executive Officer

Cleaning the Air That We Breathe...

- 2013 was the driest year on record
- California is facing severe drought

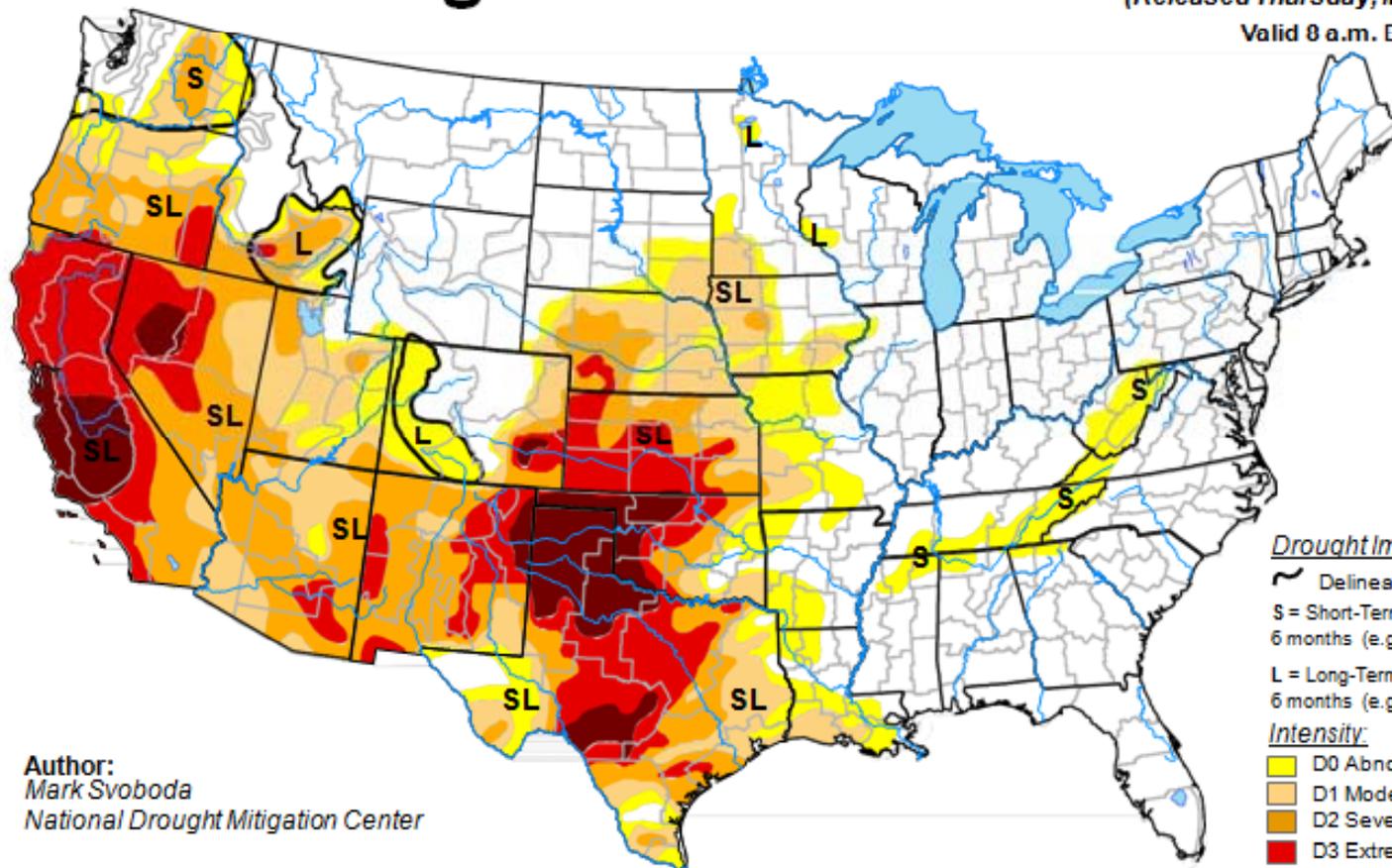


U.S. Drought Monitor

May 6, 2014

(Released Thursday, May 8, 2014)

Valid 8 a.m. EDT



Author:
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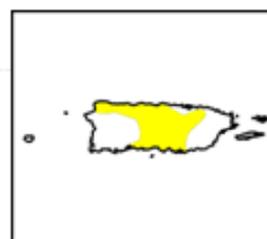
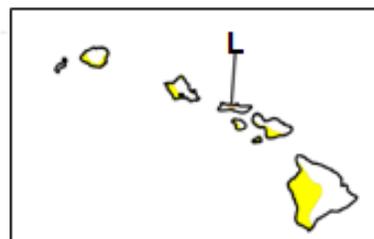
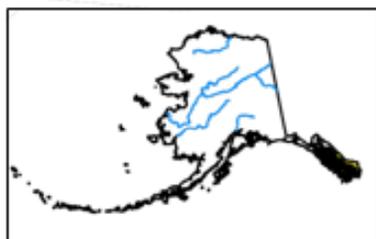
Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

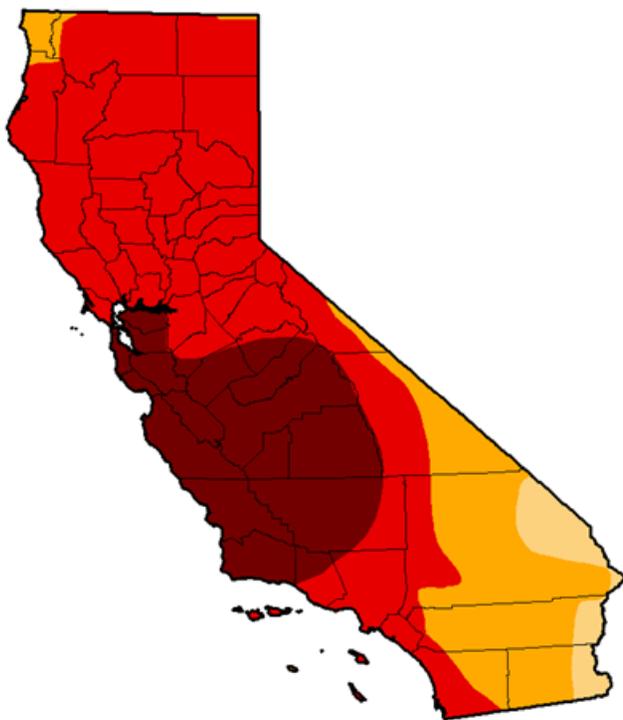
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor

California



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Statistics type: Traditional (D0-D4, D1-D4, etc.) Categorical (D0, D1, etc.)

Drought Condition (Percent Area):

Week	Date	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5/6/2014	0.00	100.00	100.00	95.93	76.68	24.77
Last Week	4/29/2014	0.00	100.00	100.00	96.01	76.68	24.77
3 Months Ago	2/4/2014	1.43	98.57	94.18	89.91	67.13	9.81
Start of Calendar Year	12/31/2013	2.61	97.39	94.25	87.53	27.59	0.00
Start of Water Year	10/1/2013	2.63	97.37	95.95	84.12	11.36	0.00
One Year Ago	5/7/2013	0.00	100.00	98.16	46.25	0.00	0.00

[View More Statistics](#)

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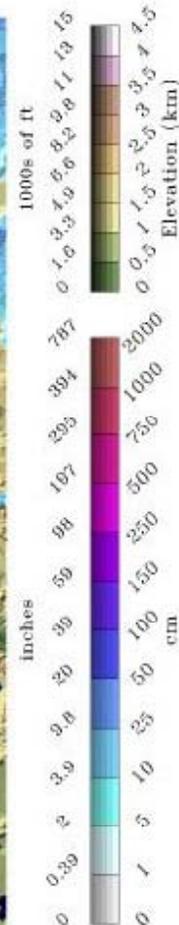
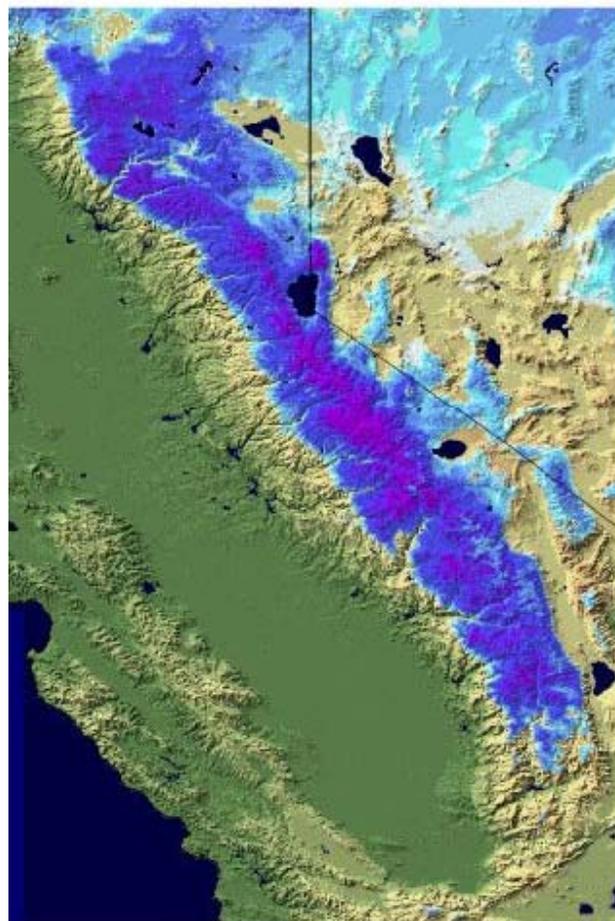
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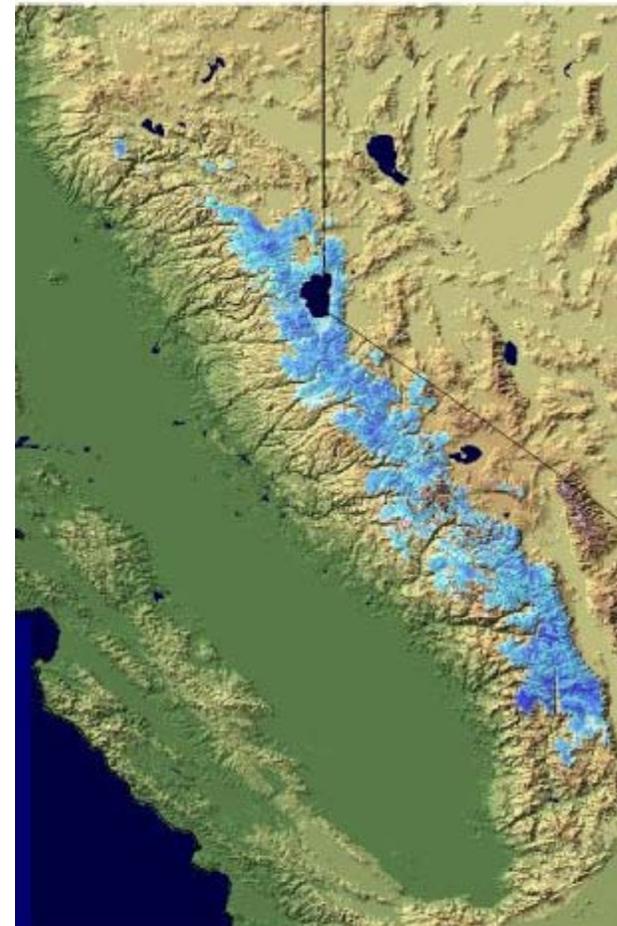
Mark Svoboda, National Drought Mitigation Center

Mountain Snow Pack in the Sierras

Snow Depth
2013-01-23 06



Snow Depth
2014-01-23 06 UTC



California Final Snow Surveys

- Annual snowpack provides 1/3 of water for California's cities and farms
- California Department of Water Resources Year's Final Snow Survey found Statewide snowpack's water content at a mere 18% of average (May 1, 2014)

Water Levels: Shasta Lake



January 2014

August 2012



Water Levels: Folsom Lake



January 2014

August 2012



Water Levels: Lake Oroville



January 2014

August 2012



Governor Declares Drought State of Emergency on January 17, 2014



- Expedite processing of water transfers by DWR and SWRCB
- Local agencies to implement local water shortage contingency plans
- Moratorium on new, non essential landscaping projects at State facilities and on State highways and roads
- Californians to voluntarily limit individual water use by 20%

Governor Issues Executive Order on April 25, 2014 to Redouble State Drought Actions



- 76% of State under moderate drought conditions
- 24% of State under exceptional drought conditions
- Streamline contracting for the Governor's Office of Emergency Services and CALFIRE for equipment purchases to clear brush and dead trees.
- Limit lawn watering and car washing, and limit use of potable water for irrigation at schools, parks and golf courses, etc.
- Limited waiver of CEQA for actions that limit harm from the drought, through the end of 2014

Drought Impacts and Consequences

- Disruption in Water Delivery systems
 - Causing water shortages
 - Lack of water for dust control
- Increased risk of wildfire causing
 - Structural & Equipment damages
 - Power lines damage
- Decreased Hydroelectric power supply
- Increased concentrations of airborne particulate matter

Key SCAQMD Rules Requiring Water for Dust Control

RULE	TITLE
403	Fugitive Dust
403.1	Supplemental Fugitive Dust Control Requirements for Coachella Valley
1156	Further Reductions of Particulate Emissions from Cement Manufacturing Facilities
1157	PM10 Emission Reductions from Aggregate and Related Operations

Proposed Recommendations to Address the Drought Impacts

- Expedite processing of permits and waive expedited fees for equipment used in response to emergency drought
- Expand allowable use of state or SCAQMD permitted portable engines and equipment

Proposed Recommendations to Address the Drought Impacts (cont'd.)

- Exercise Executive Officer discretion to surpass certain operating limits set forth in rules and permit conditions or use Executive Orders under SCAQMD Rule 118
- Provide for localized power generation to avoid power loss as set forth in proposed Rule 1304.2

Suggested Alternatives to Meet Dust Control Requirements

- Paving unpaved roadways
- Increasing use of vacuum sweepers to remove dust from paved areas
- Increasing reliance on non-toxic chemical dust suppressants to stabilize soil
- Increasing use of physical/mechanical barriers to contain or limit transport of fugitive dust

Water Conservation for SCAQMD Headquarters

- Already use 100% recycled water for exterior landscape irrigation
- Expand the use of drought tolerant plants/shrubs for landscaping
- Switch to waterless urinals (\$22,880 for 32 units)
- Switch to Flush Urinals (\$18,464 for 32 units)
- Switch to hands free restroom faucets (\$33,150 for 85 units)
- Switch to hands free faucets in kitchen/copy rooms (\$23,250 for 50 units)
- Evaluate other potential water conservations measures
- Examine air conditioning system use of water
- Put up signage for water conservation around the building

Other Proposed Strategies for Water Conservation

- Encourage and facilitate use of recycled water from Sanitation Districts for various applications
- Evaluate alternatives to use of water-intensive equipment (wet cooling towers, water screen spray booths, etc.)