

Water and Climate Update

February 16, 2017

The Natural Resources Conservation Service produces this weekly report using data and products from the [National Water and Climate Center](#) and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

Snow	2	Other Climatic and Water Supply Indicators	10
Precipitation	3	Short- and Long-Range Outlooks.....	14
Temperature	6	More Information	16
Drought	9		

Oroville Dam: Authorities advise residents to remain vigilant

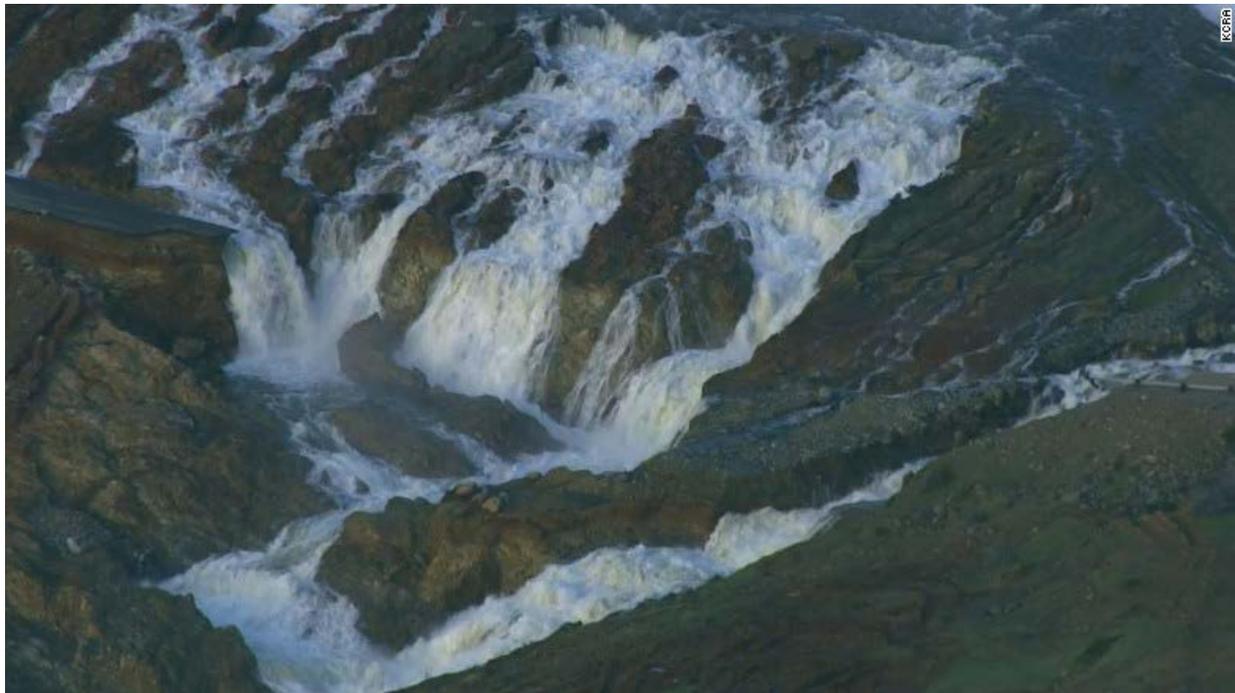


Photo courtesy CNN

Oroville, California (CNN) “Rain is expected Thursday in the Northern California area around Lake Oroville, as crews work to reduce the water level there.

Earlier this week, authorities ordered mandatory evacuations over concerns that an emergency spillway at the Oroville Dam could fail and threaten nearby communities. On Tuesday, officials downgraded the evacuation order to a warning, allowing 188,000 evacuees from Butte, Sutter, and Yuba counties to return home.

A series of storms are heading into the region, but they are smaller than previous ones. These storms are expected to persist through the weekend. A flash flood watch is in effect until Sunday.”

More News:

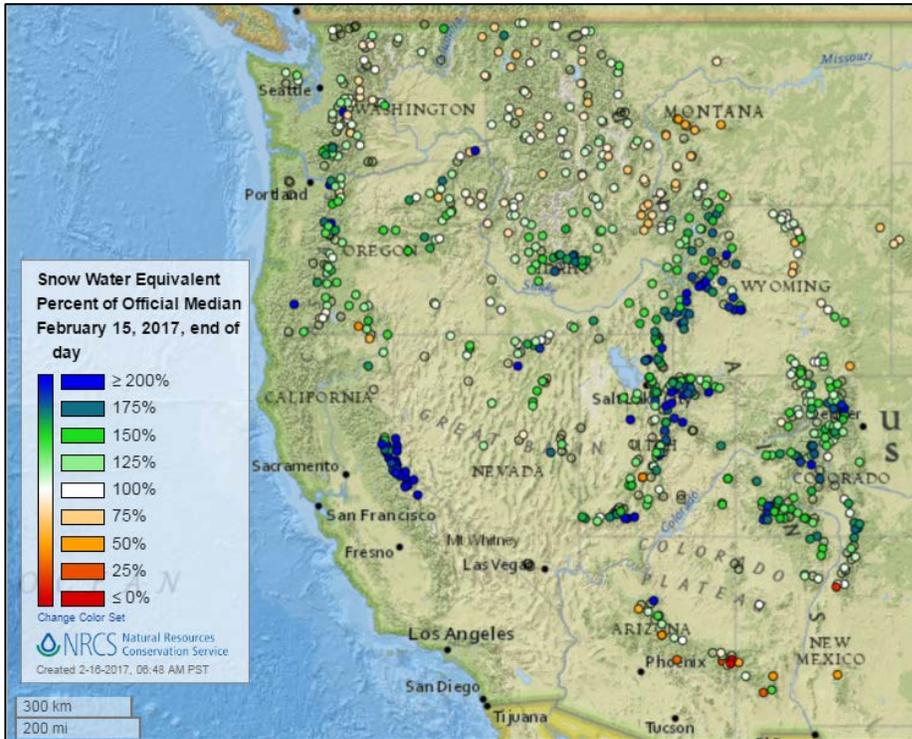
[Oroville Dam operators race to brace spillway for Wednesday storm](#) (Sacramento Bee)

[Oroville Dam repairs continue as Trump approves relief for state](#) (CNBC)

[‘Biggest storm of winter’ expected to unleash flooding in California](#) (MSN)

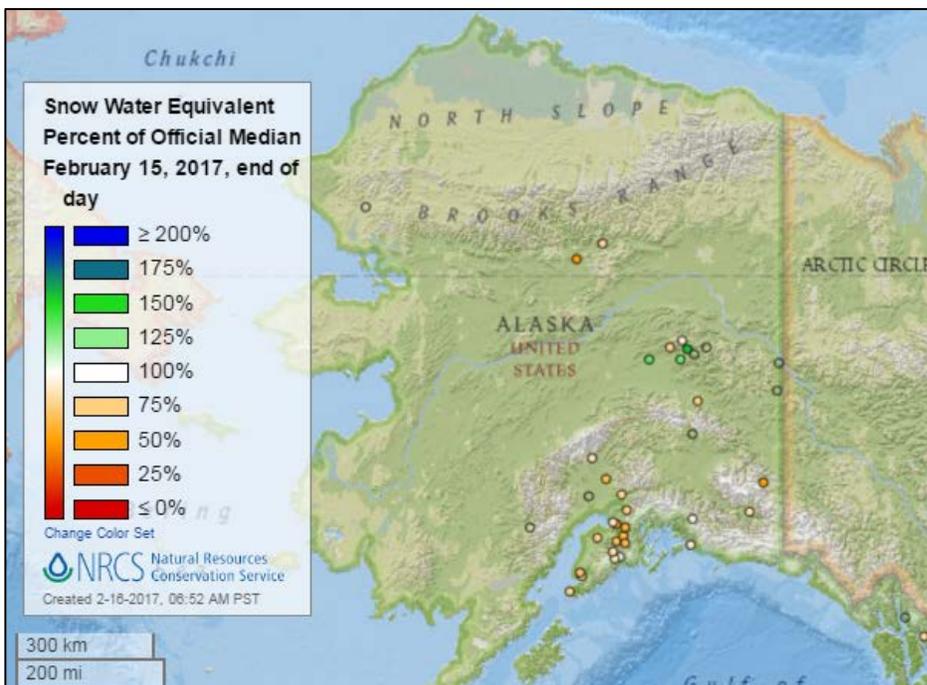
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map](#)

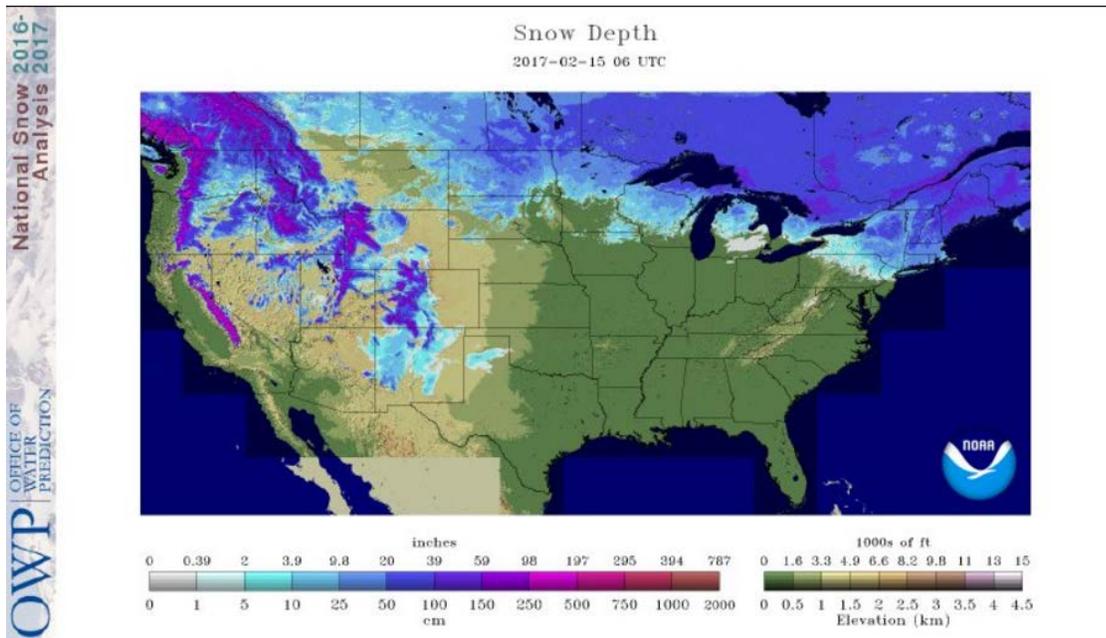
See also:
[Snow water equivalent values \(inches\) map](#)



[Alaska snow water equivalent percent of median map](#)

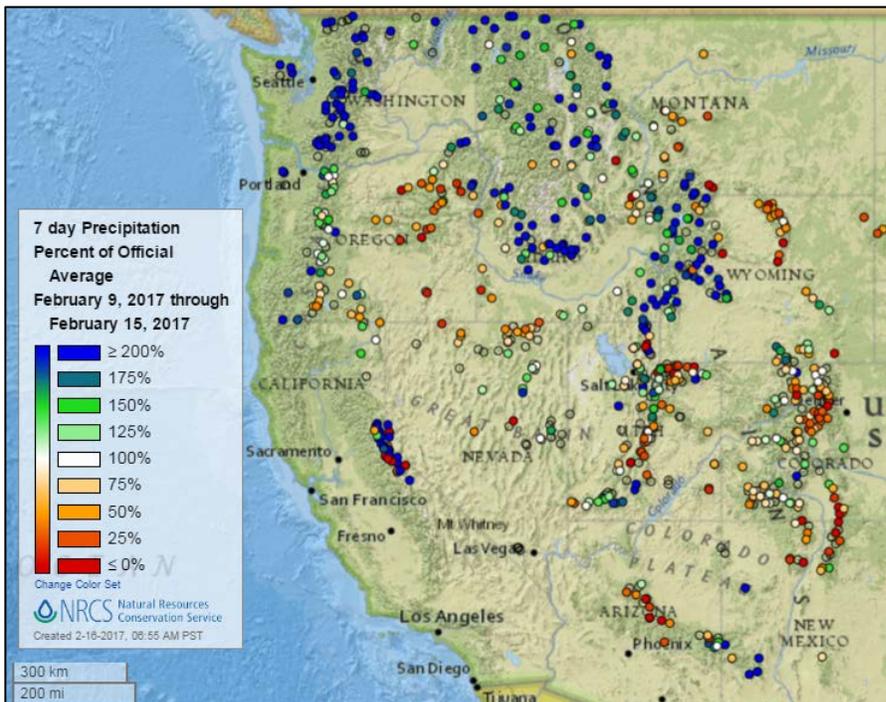
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL Network)



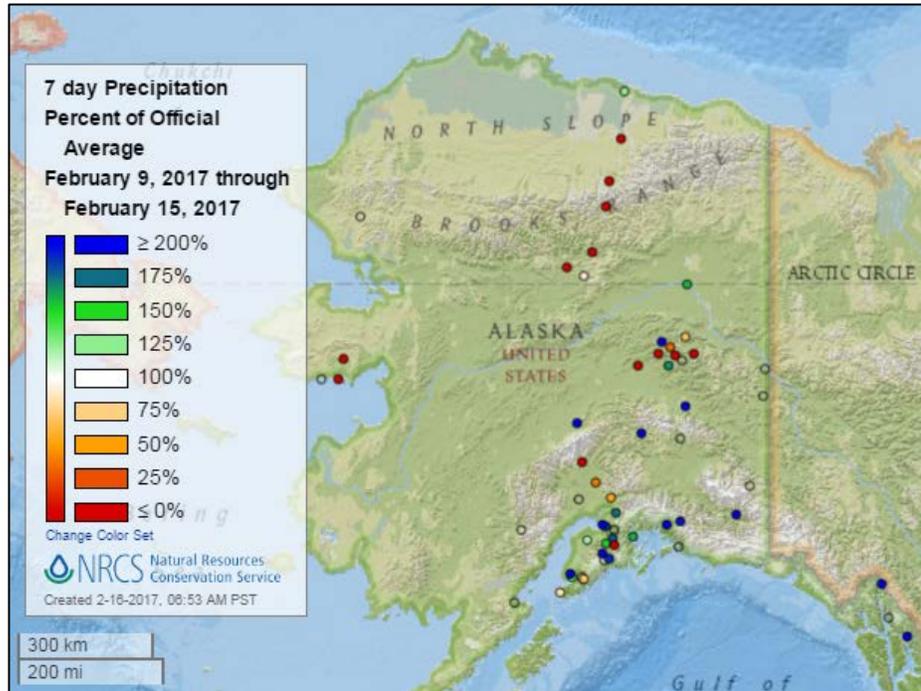
[7-day precipitation percent of average map](#)

See also:
[7-day total precipitation values \(inches\) map](#)

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[Alaska 7-day precipitation percent of average map](#)

See also: [Alaska 7-day total precipitation values \(inches\) map](#)



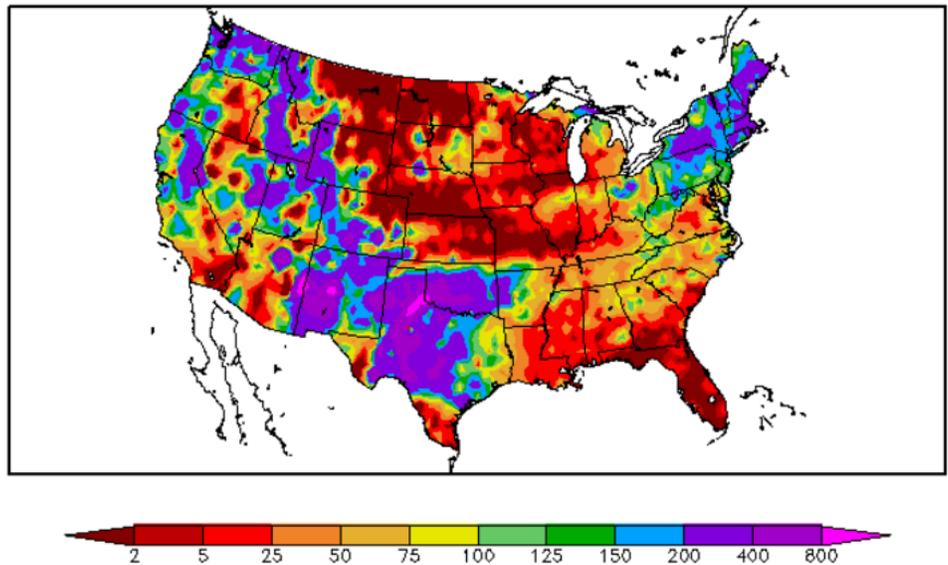
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for the continental U.S.

Percent of Normal Precipitation (%)
2/9/2017 – 2/15/2017

See also: [7-day total precipitation values \(inches\) map](#)



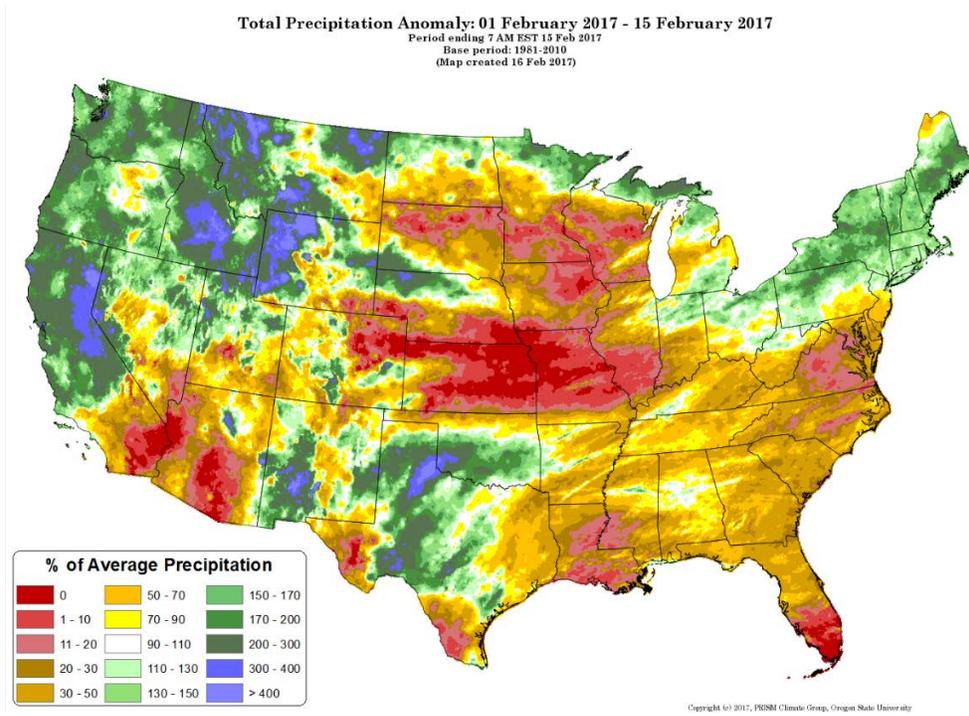
Generated 2/16/2017 at HPRCC using provisional data.

Regional Climate Centers

Water and Climate Update

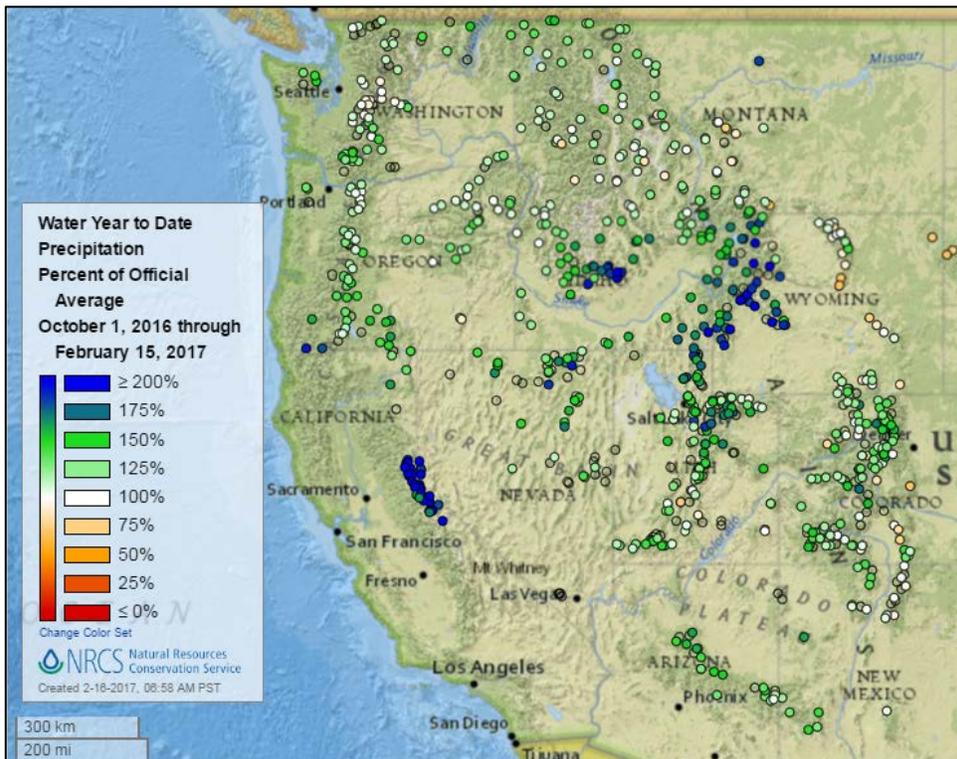
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM



[Month-to-date national precipitation percent of average map](#)

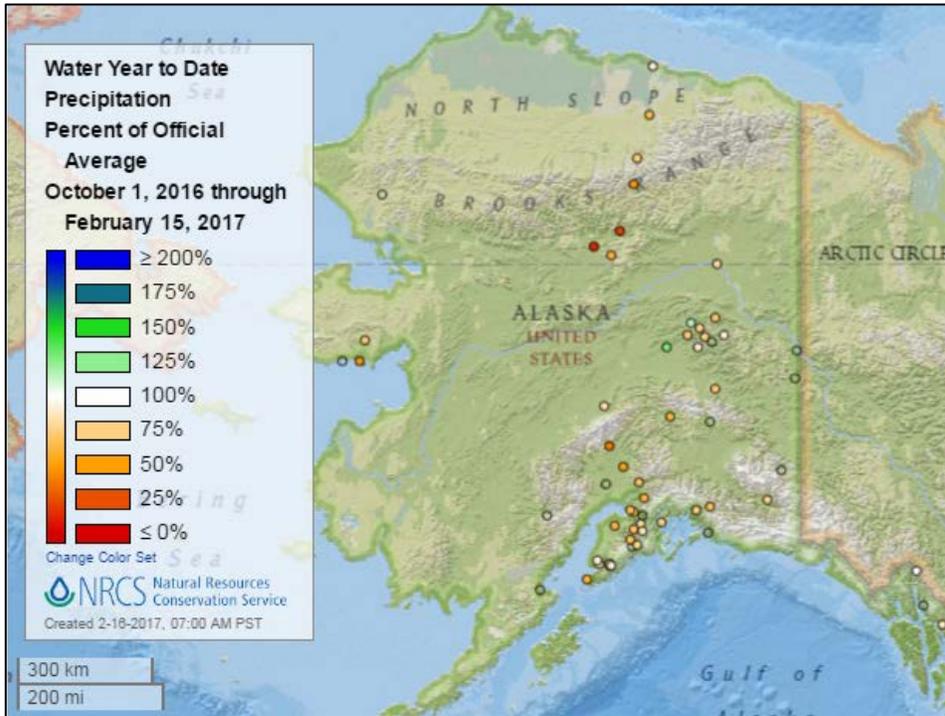
Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[2017 water year-to-date precipitation percent of average map](#)

[See also: 2017 water year-to-date precipitation values \(inches\)](#)

Water and Climate Update



[Alaska 2017 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2017 water year-to-date precipitation values \(inches\) map](#)

Temperature

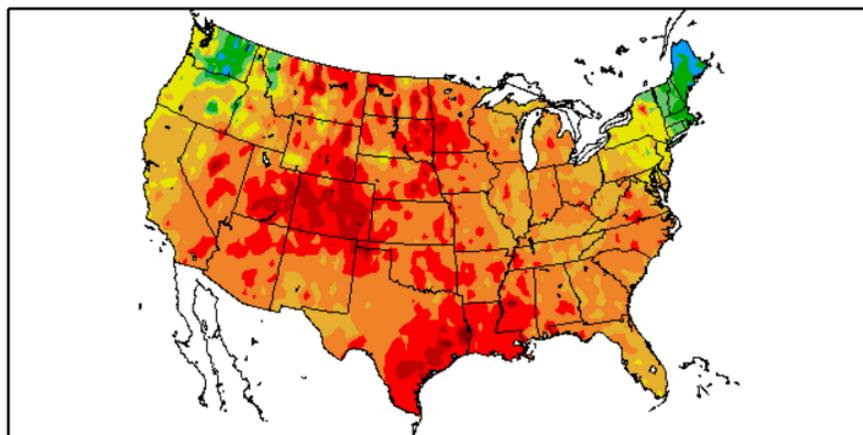
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the continental U.S.

See also: [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F)
2/9/2017 – 2/15/2017



Generated 2/16/2017 at HPRCC using provisional data.

Regional Climate Centers

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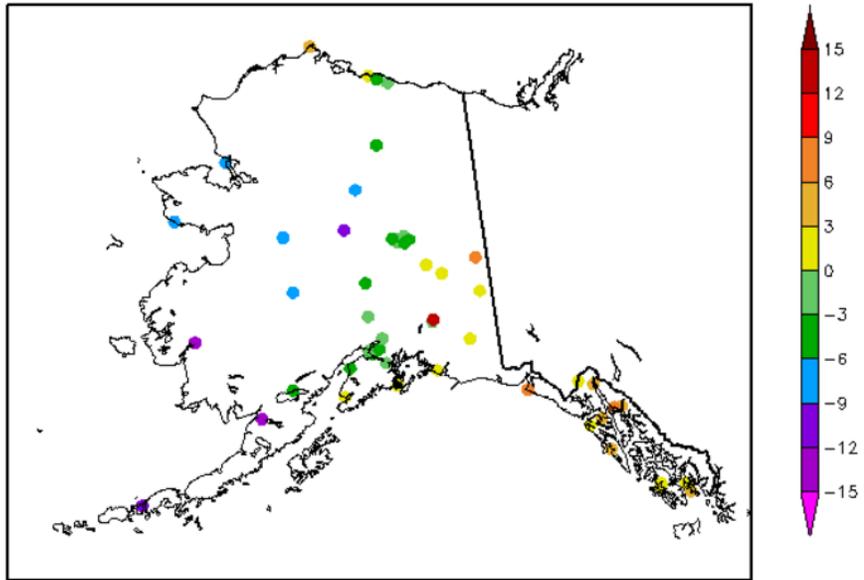
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for Alaska.

See also: [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F) 2/9/2017 - 2/15/2017



Generated 2/16/2017 at HPRCC using provisional data.

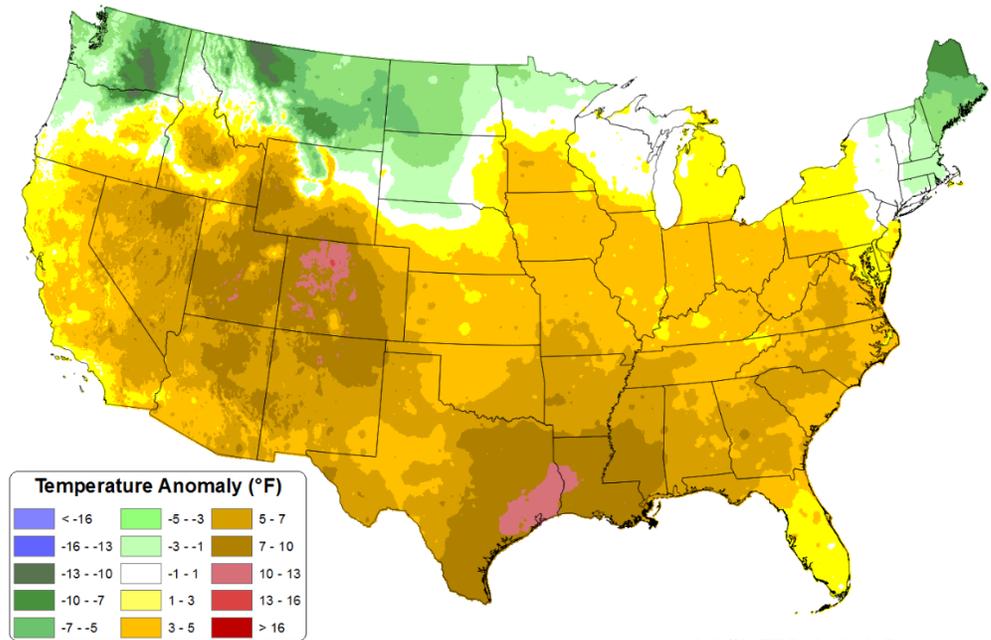
Regional Climate Centers

Month-to-Date, All Available Data Including SNOTEL and NWS Networks

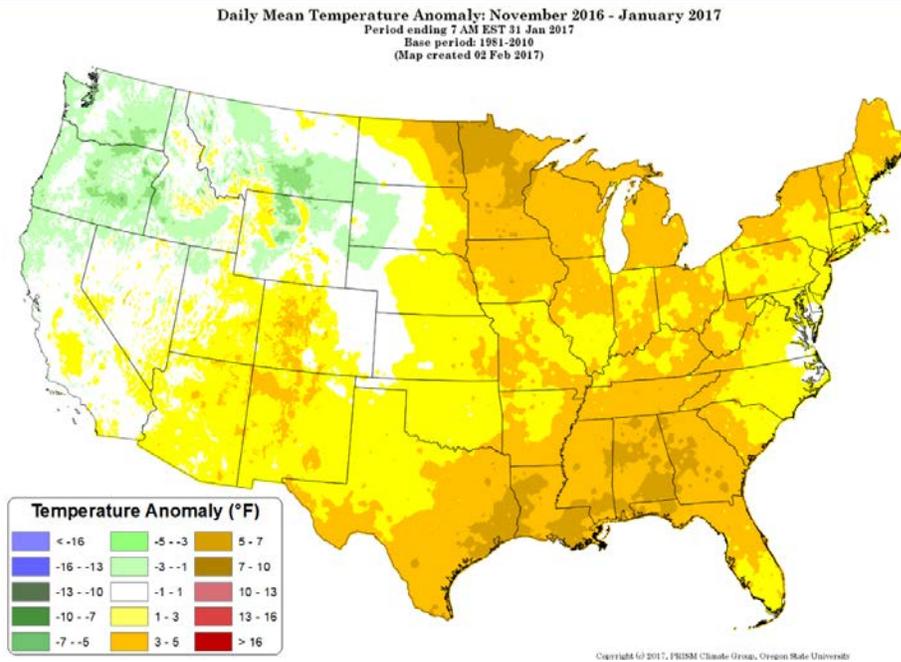
Source: PRISM

[Month-to-date national daily mean temperature anomaly map](#)

Daily Mean Temperature Anomaly: 01 February 2017 - 15 February 2017 Period ending 7 AM EST 15 Feb 2017 Base period: 1981-2010 (Map created 16 Feb 2017)



Copyright © 2017, PRISM Climate Group, Oregon State University

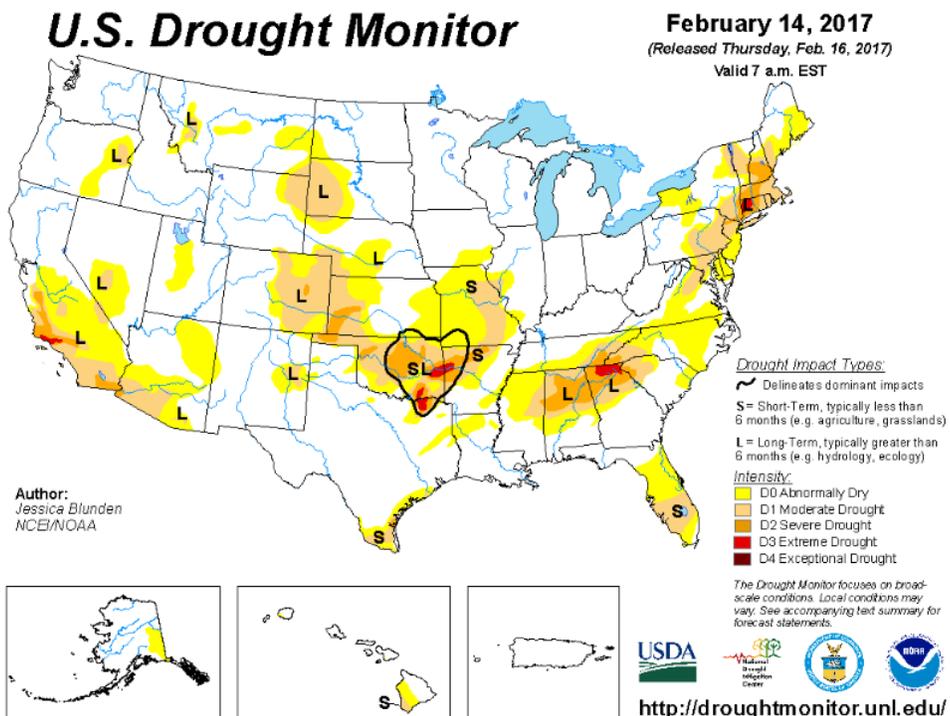


[November 2016 through January 2017 daily mean temperature anomaly map](#)

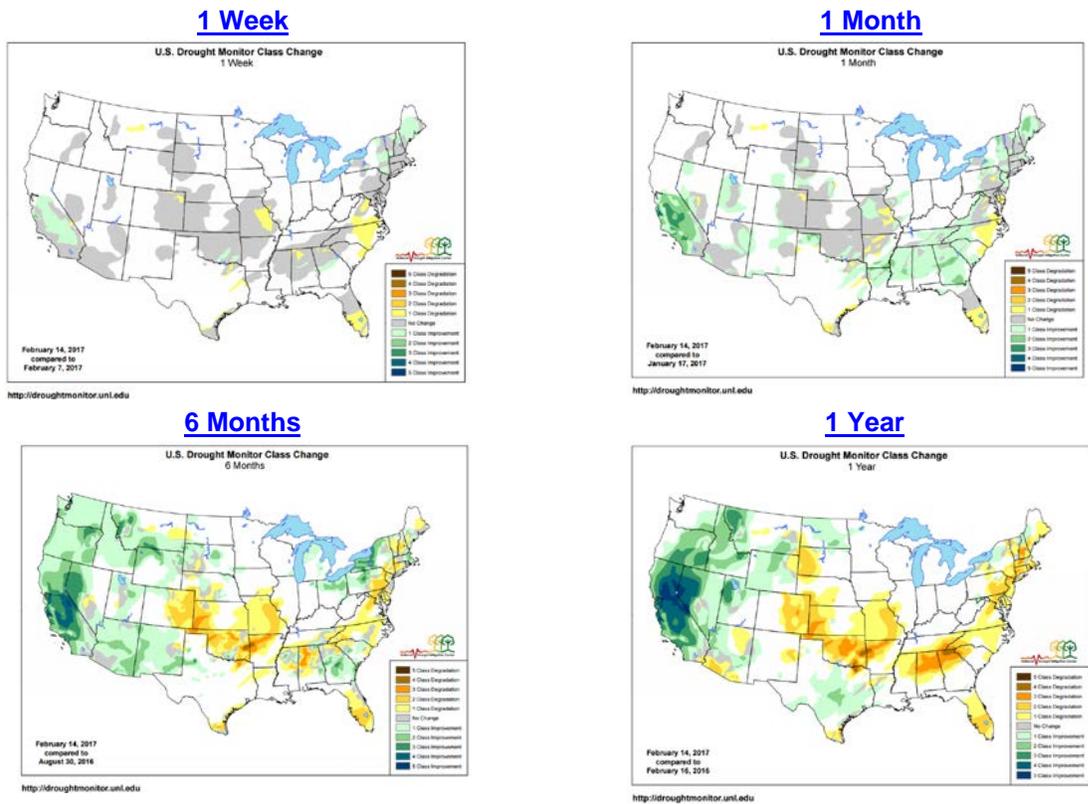
Drought

[U.S. Drought Monitor](#) See map below.

[U.S. Drought Portal](#) Comprehensive drought resource.



Changes in Drought Monitor Categories over Time



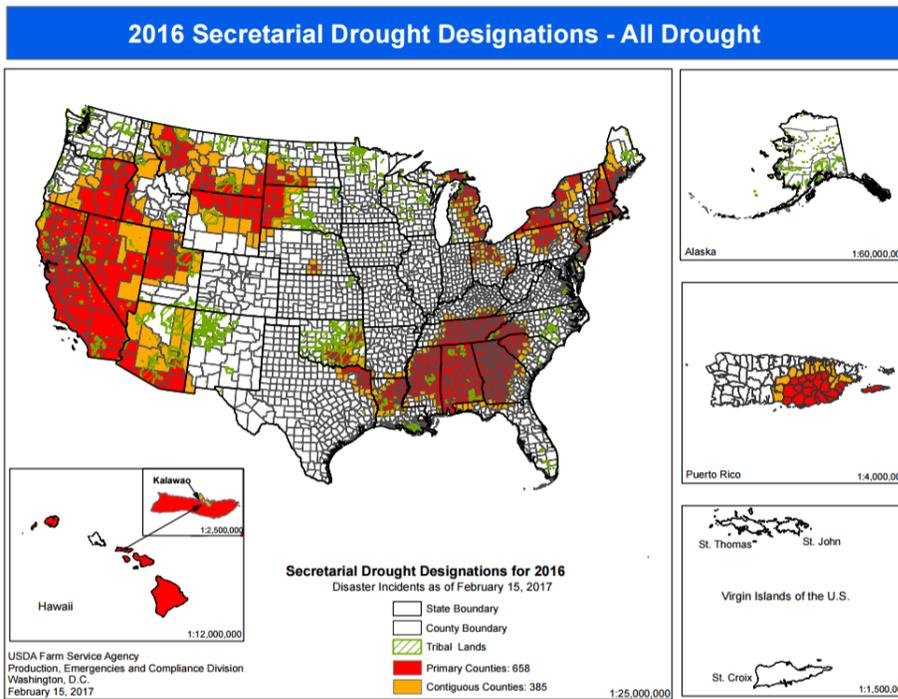
[Changes in drought conditions over the last 12 months](#)

Current National [Drought Summary](#), February 14, 2017

Author: Jessica Blunden, NOAA/NCEI

“During this U.S. Drought Monitor week, storms continued to impact the west, including parts of California, bringing more heavy precipitation to much of the region, as snow packs continued to increase and reservoirs continued to fill. Fortunately a respite from the storms came toward the latter half of the week. On the other side of the country, a strong low pressure system impacted much of the eastern United States, bringing heavy snowfall to central and northern New England on the 9th. Another nor’easter impacted the area on the 12th-13th. Meanwhile, an upper-level low over northern Mexico, along with a surface frontal boundary, resulted in rain and mountain snow from Arizona to western Texas. Precipitation spread across Texas to Oklahoma on the 12th-13th. Not all regions received rainfall. Much of the southeast continued to receive below-normal precipitation while record high temperatures spread across the south during the 11th-12th.”

USDA 2016 Secretarial [Drought Designations](#)

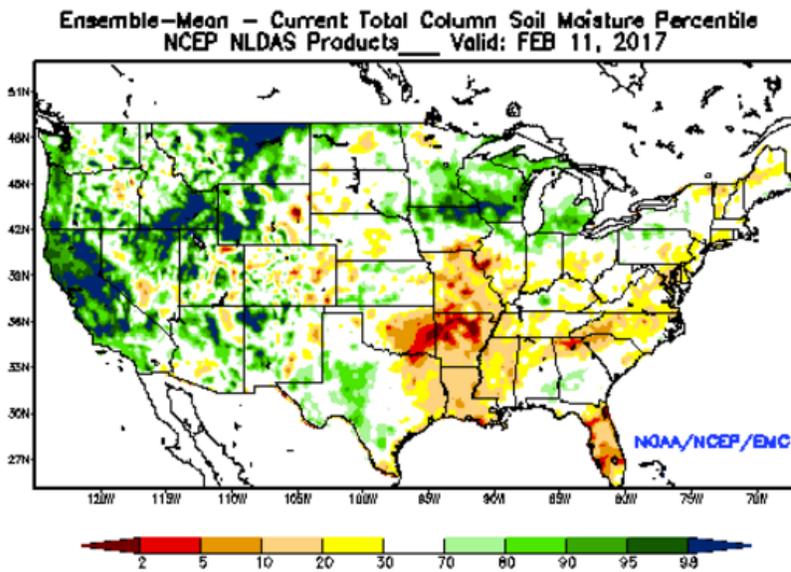


Highlighted Drought Resources

- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

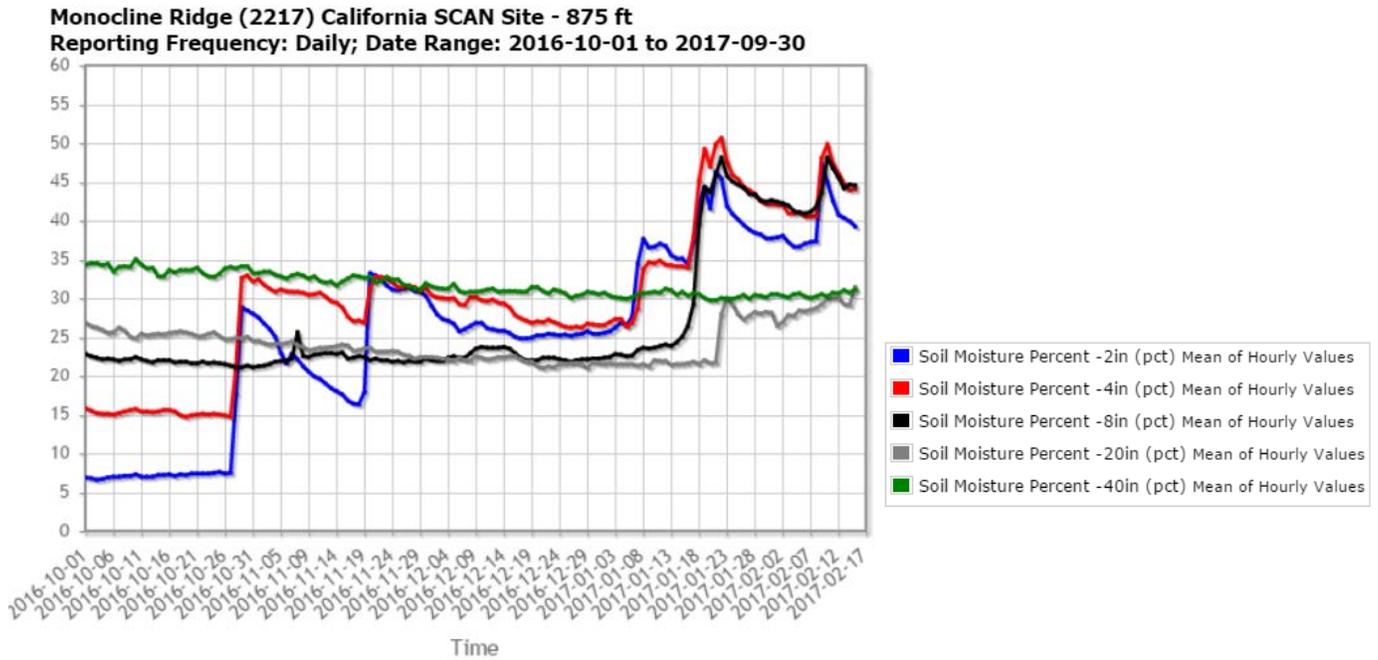
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of February 11, 2017.

Soil Moisture Data: NRCS [Soil Climate Analysis Network \(SCAN\)](#) (SCAN)



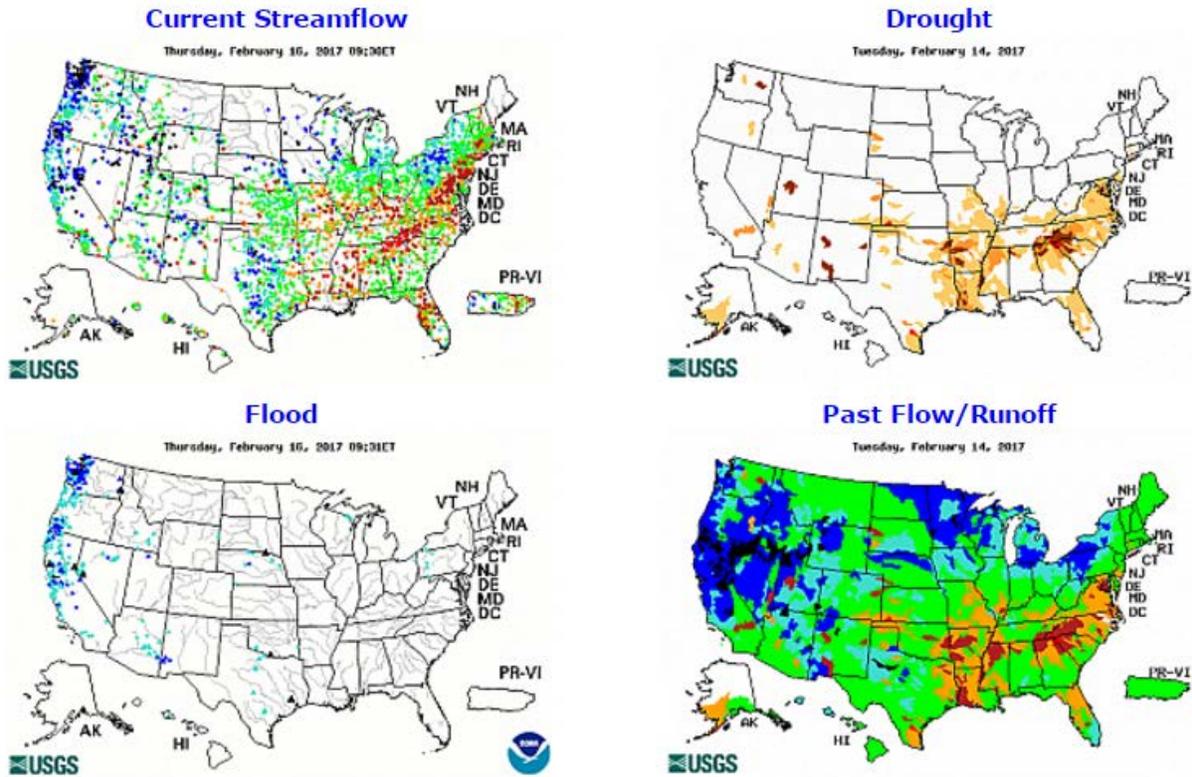
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) for the 2017 water year-to-date at the [Monocline Ridge SCAN site 2217](#) in southern California (Fresno County). Rain events beginning at the end of October, 2016 and particularly during January and February, 2017 have resulted in a rise in soil moisture at all depths but the 40-inch sensor.

Soil Moisture Data Portals

- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow

Source: USGS



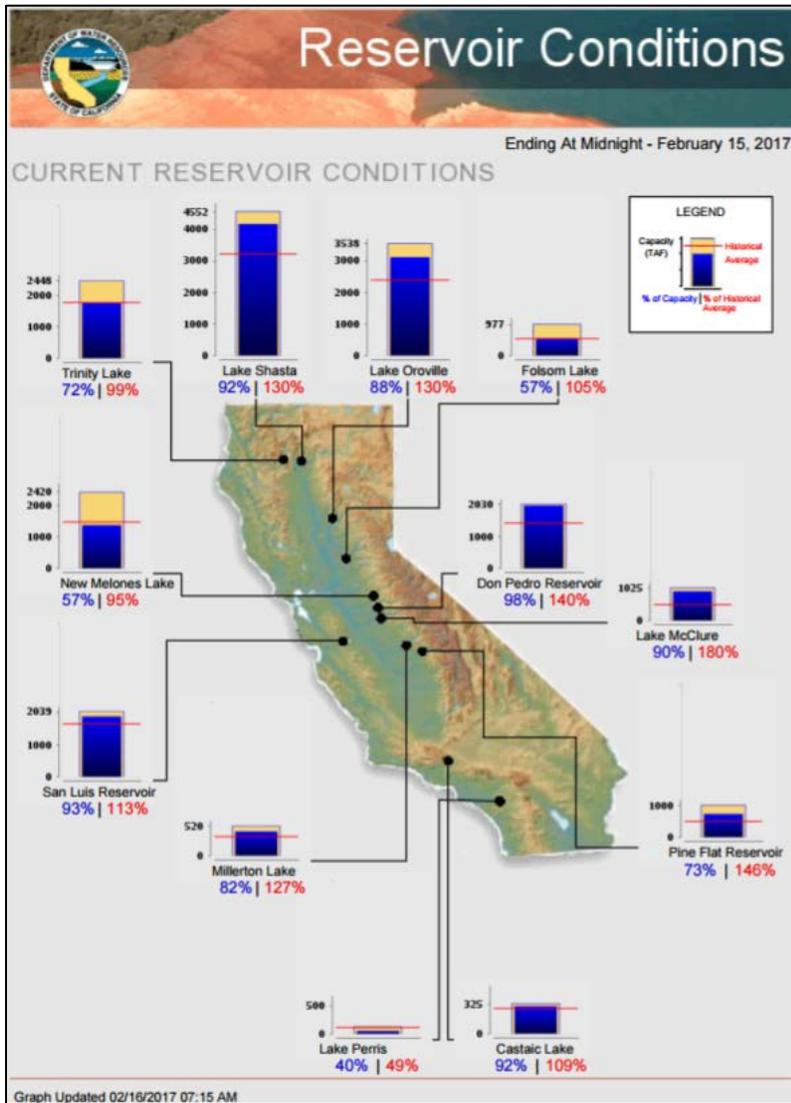
Click graphic to enlarge and display legends

[Current streamflow maps](#)

Current Reservoir Storage

[National Water and Climate Center Reservoir Data](#)

[California Reservoir Conditions](#)



U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions:

- [Upper Colorado](#)
- [Pacific Northwest/Snake/Columbia](#)
- [Sevier River Water, Utah](#)
- [Upper Missouri, Kansas, Oklahoma, Texas](#)

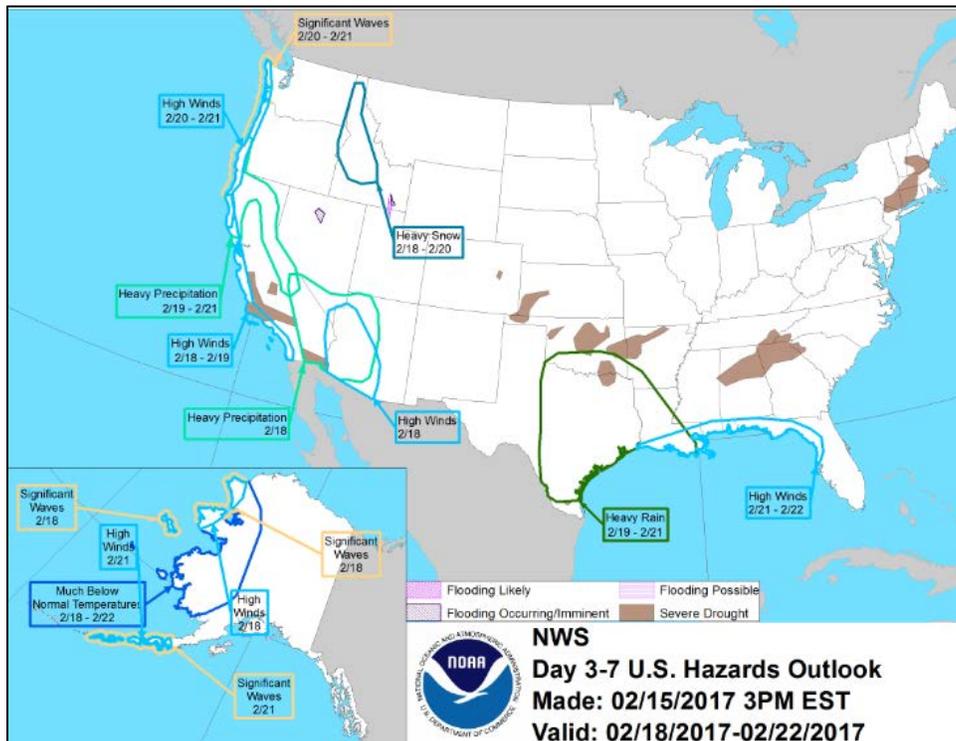
Short- and Long-Range Outlooks

Agricultural Weather Highlights

Author: Eric Luebehusen, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, February 16, 2017](#): “Snow will end later today across New England. Meanwhile, multiple storms crossing the Pacific Coast during the next several days will result in high winds, heavy rain, and high-elevation snow. Five-day totals could reach 2 to 8 inches, with locally higher amounts, in the Pacific Northwest and much of California. Some of the Pacific energy will cross the Deep South, where rainfall could total 1 to 2 inches from Texas to the southern Atlantic Coast. In contrast, dry weather will prevail across the Midwest, mid-South, and northern half of the Plains. Significantly above-normal temperatures will dominate much of the country, especially across the nation’s mid-section. The NWS 6- to 10-day outlook for February 21 – 25 calls for the likelihood of warmer- and wetter than-normal weather nationwide, except for below-normal temperatures in the Pacific Coast States and below normal precipitation from Arizona to Texas.”

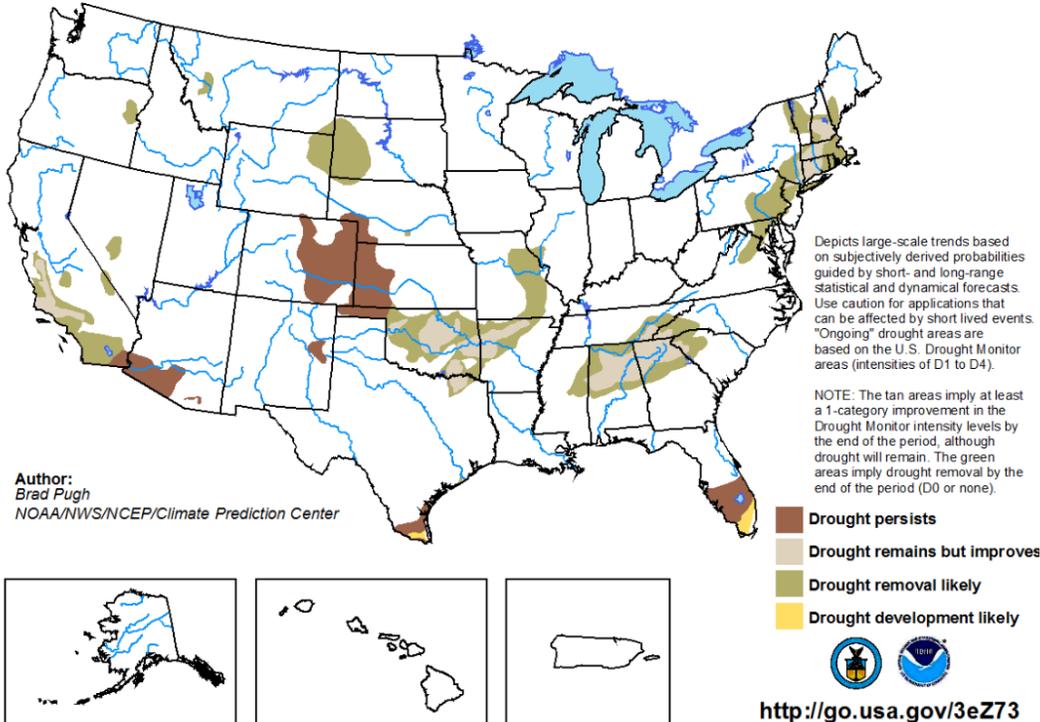
NWS Climate Prediction Center Weather Hazard Outlook: [February 18 – 22, 2017](#)



NWS Seasonal Drought Outlook: [February 16 – May 31, 2017](#)

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

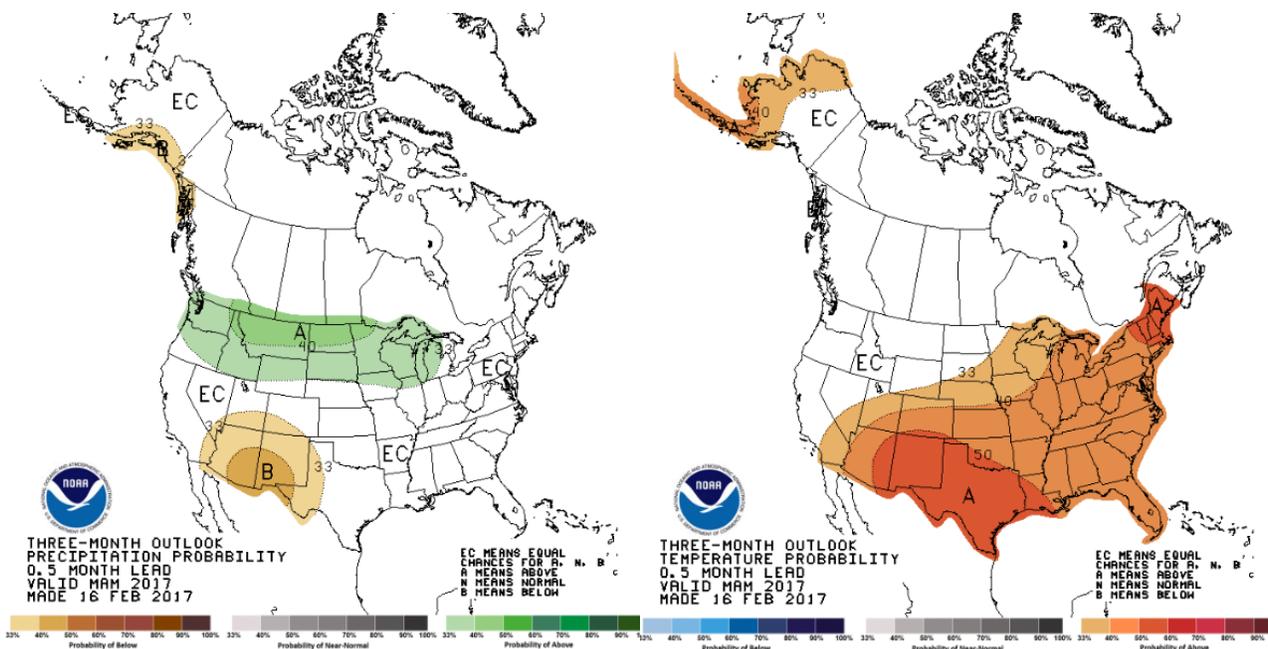
Valid for February 16 - May 31, 2017
Released February 16, 2017



NWS Climate Prediction Center 3-Month Outlook

[Precipitation](#)

[Temperature](#)



[March-April-May \(MAM\) 2017 precipitation outlook summary](#)

[March-April-May \(MAM\) 2017 temperature outlook summary](#)

More Information

The NRCS [National Water and Climate Center](#) publishes this weekly report. We welcome your feedback. If you have questions or comments, please [contact us](#).