

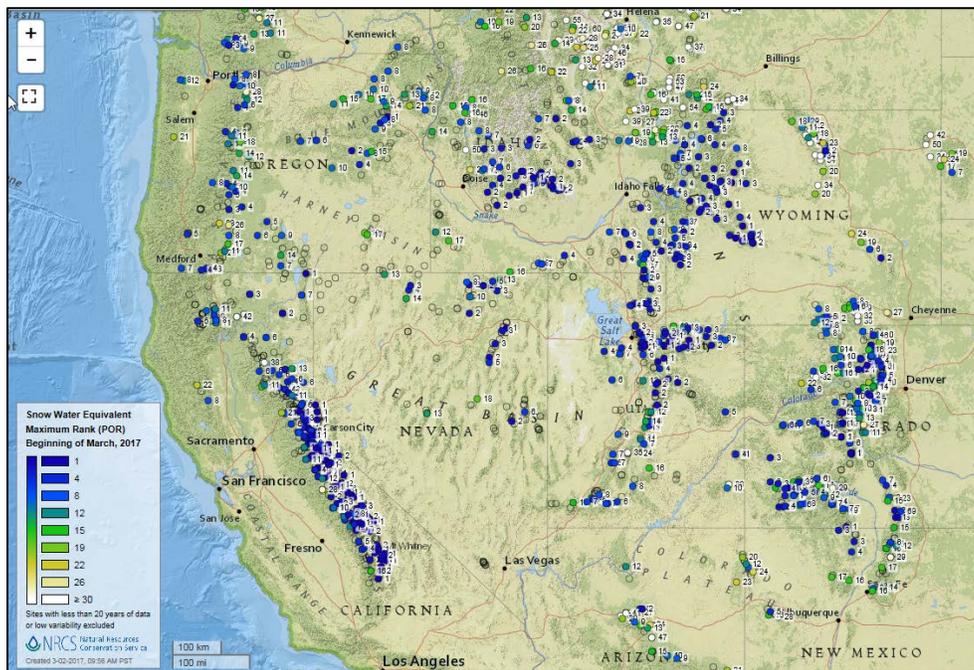
Water and Climate Update

March 2, 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.

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March 1 snowpack at record levels across the West



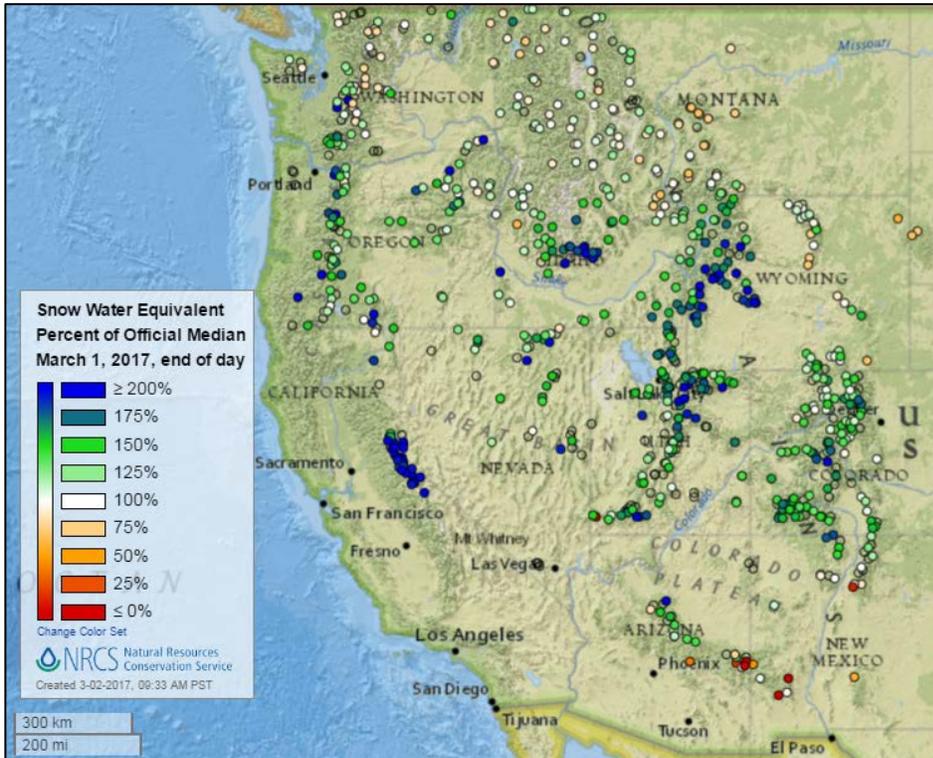
NRCS SNOTEL and long-term snow courses at many stations across the contiguous West are reporting the deepest snowpack in their history. This is also true of snow measuring stations of the California Cooperative Snow Surveys Program. Deep snowpacks should provide ample snowmelt runoff in the spring and summer for water needs related to agriculture, municipal water supplies, hydropower generation, and other needs. Snow survey personnel and water managers alike are providing ongoing analysis and critical information about the snow and water supply outlooks.

More News:

- [Snow survey reveals CA water content at 185% of average](#)
- [Out West, the snow is so deep that scientists don't have any tools to measure it](#)
- [Snowpack tells strange story of area's winter](#)
- [Heavy winter fall will likely prevent Lake Mead shortage for 2018](#)
- [Flooding impacts Cache Valley homes, roads](#)
- [Box Elder County floods damage estimates rising, officials bracing for more](#)
- [Flooding in Cache County expected to cost up to \\$2 million](#)

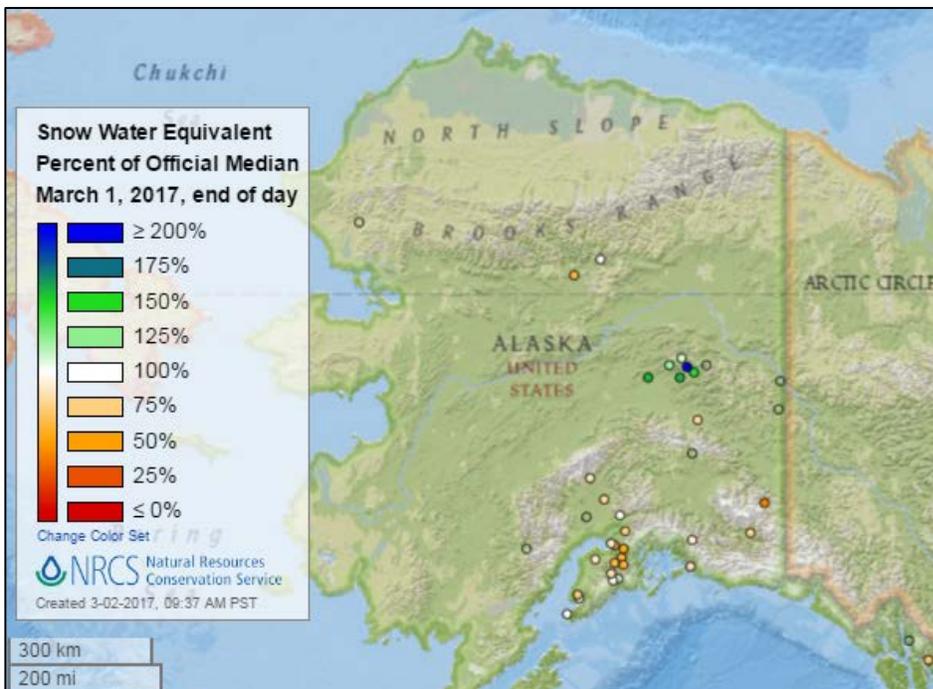
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

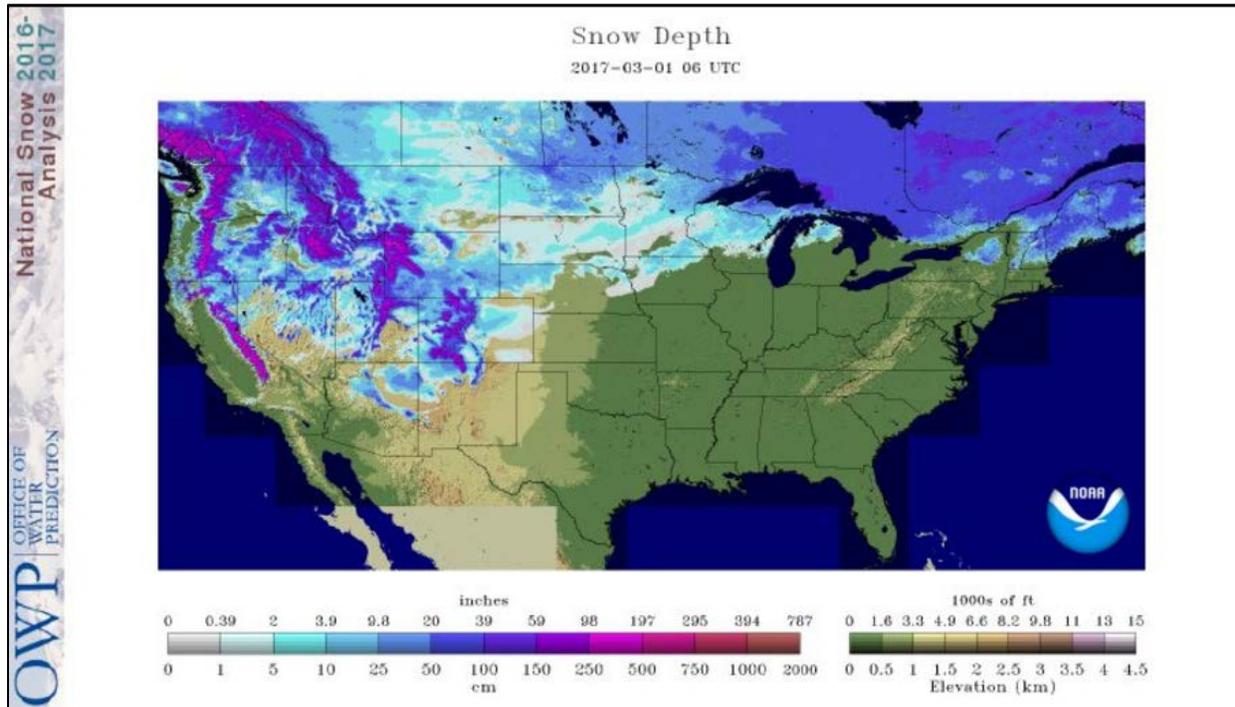
See also:
[Snow water equivalent values \(inches\) map](#)



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

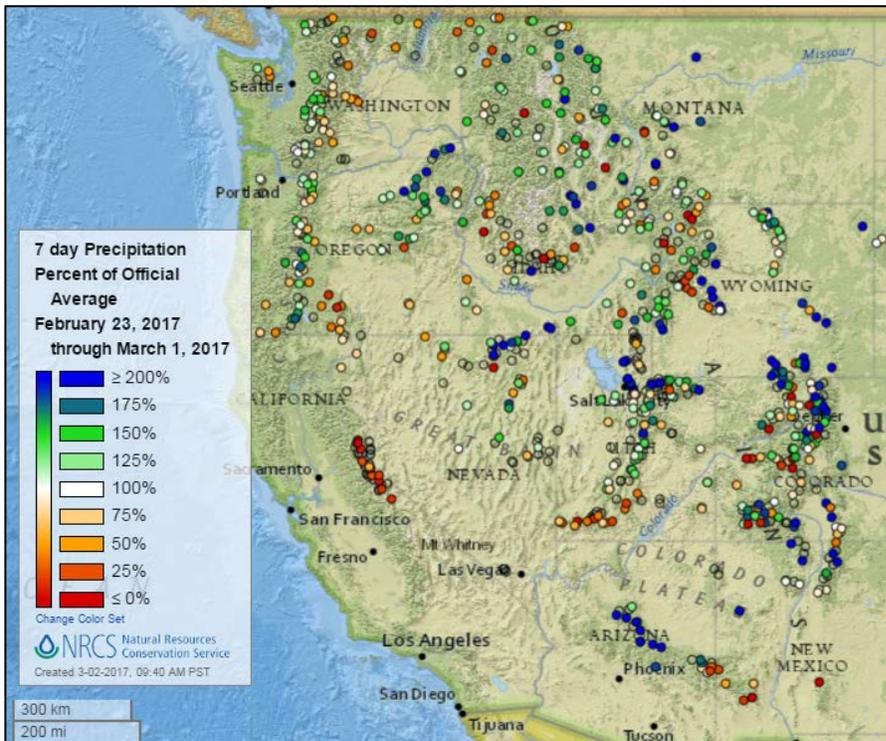
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

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



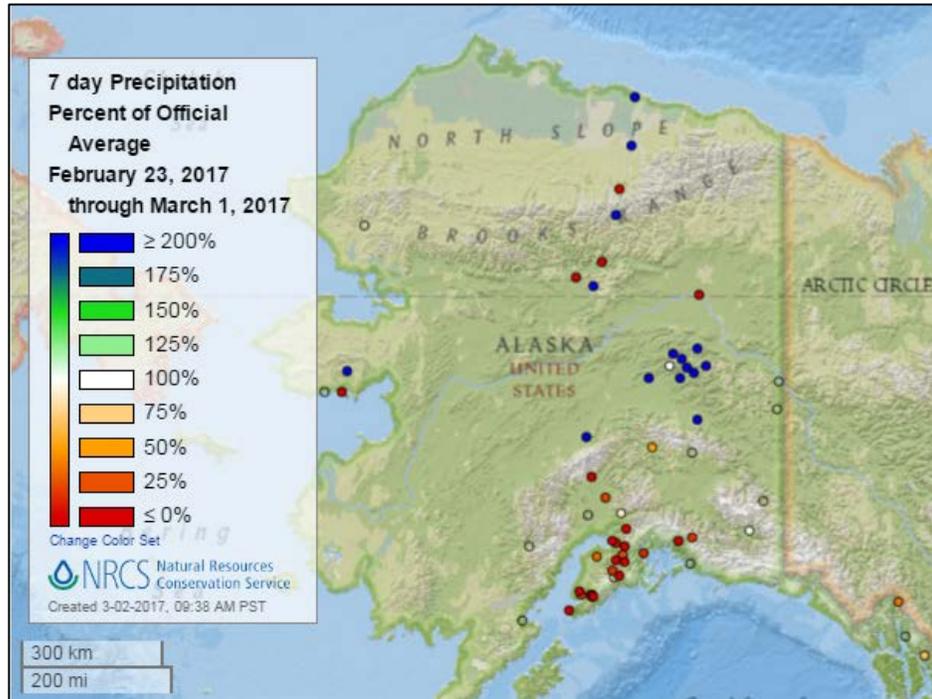
[7-day precipitation percent of average map](#)

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

Water and Climate Update

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

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



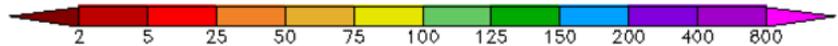
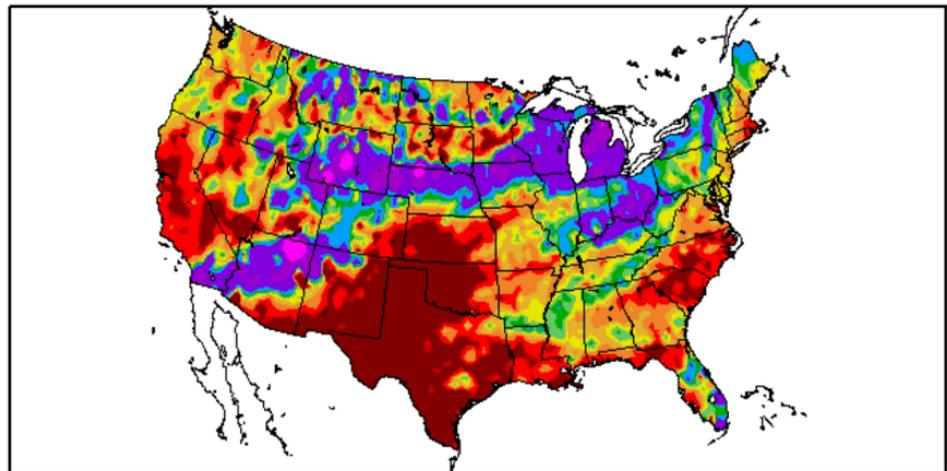
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)
2/23/2017 - 3/1/2017

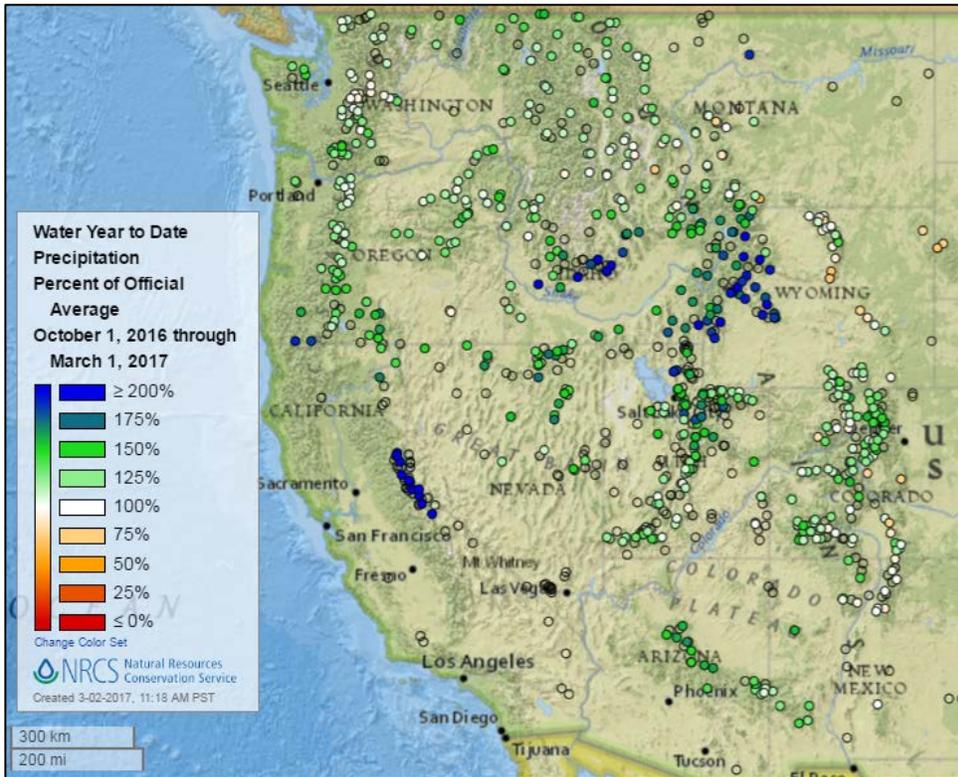
See also: [7-day total precipitation values \(inches\) map](#)



Generated 3/2/2017 at HPRCC using provisional data.

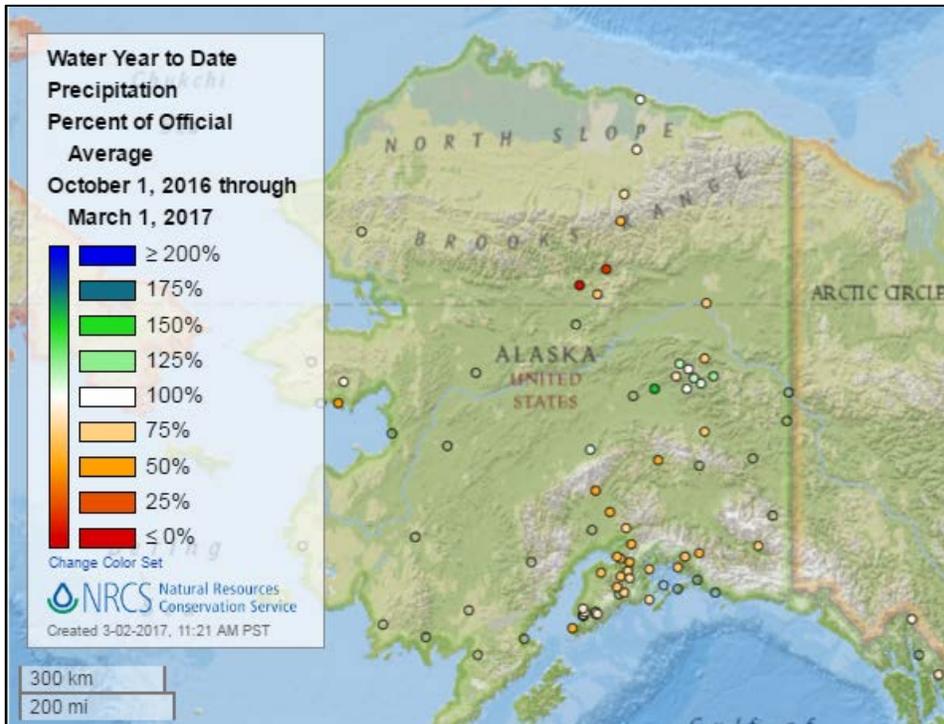
Regional Climate Centers

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 \(inches\)](#)



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

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

Temperature

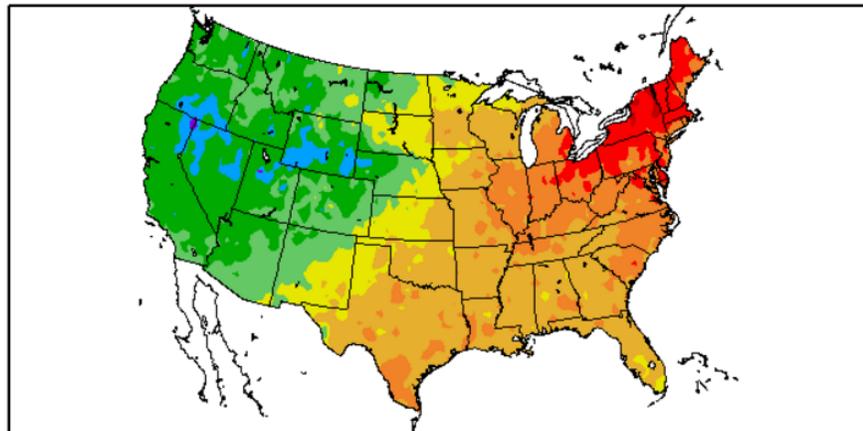
Last 7 Days, National Weather Service (NWS) Networks

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)
2/23/2017 – 3/1/2017



Generated 3/2/2017 at HPRCC using provisional data.

Regional Climate Centers

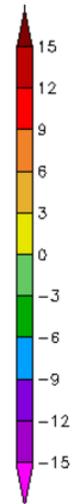
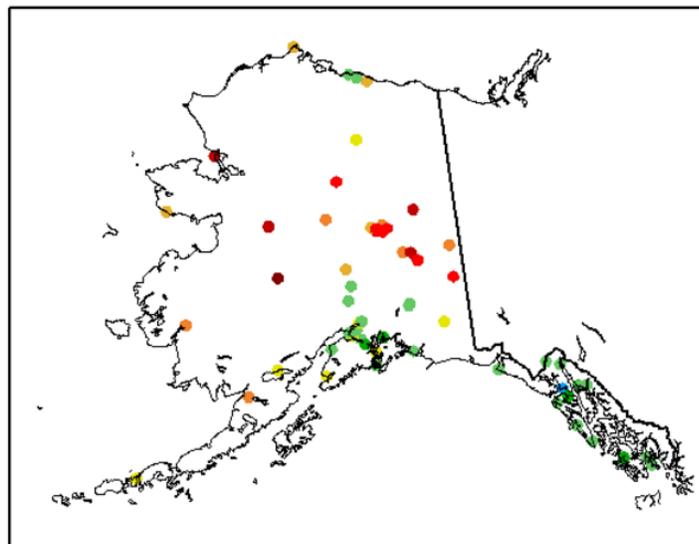
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

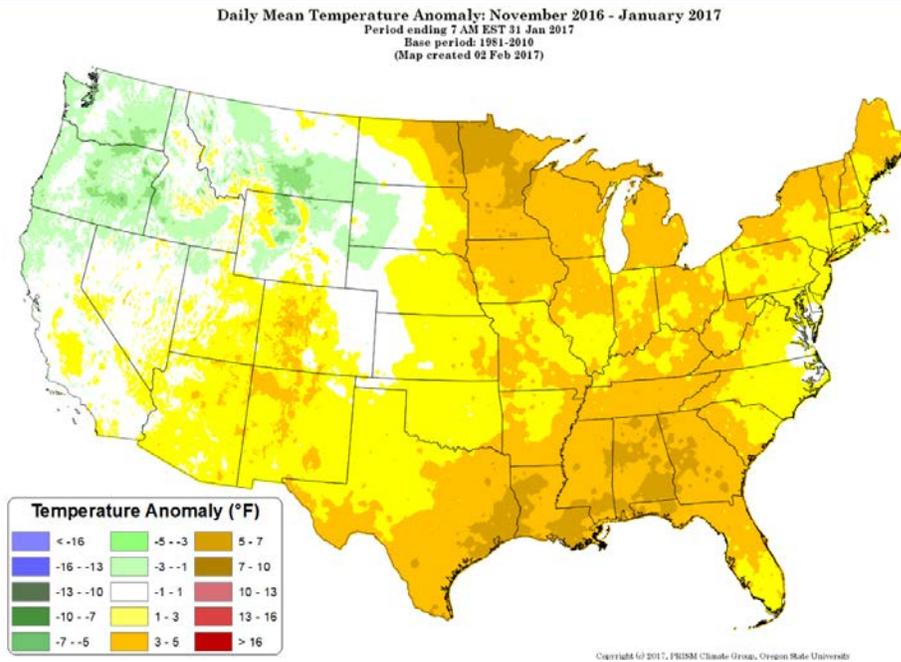
See also: [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F)
2/23/2017 – 3/1/2017



Generated 3/2/2017 at HPRCC using provisional data.

Regional Climate Centers

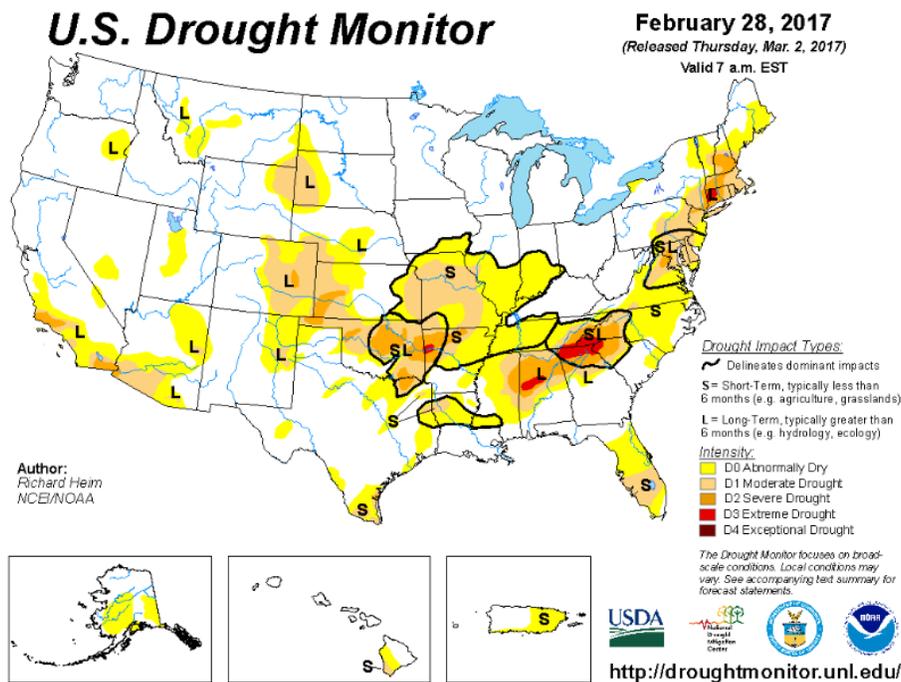


[November 2016 through January 2017 daily mean temperature anomaly map](#)

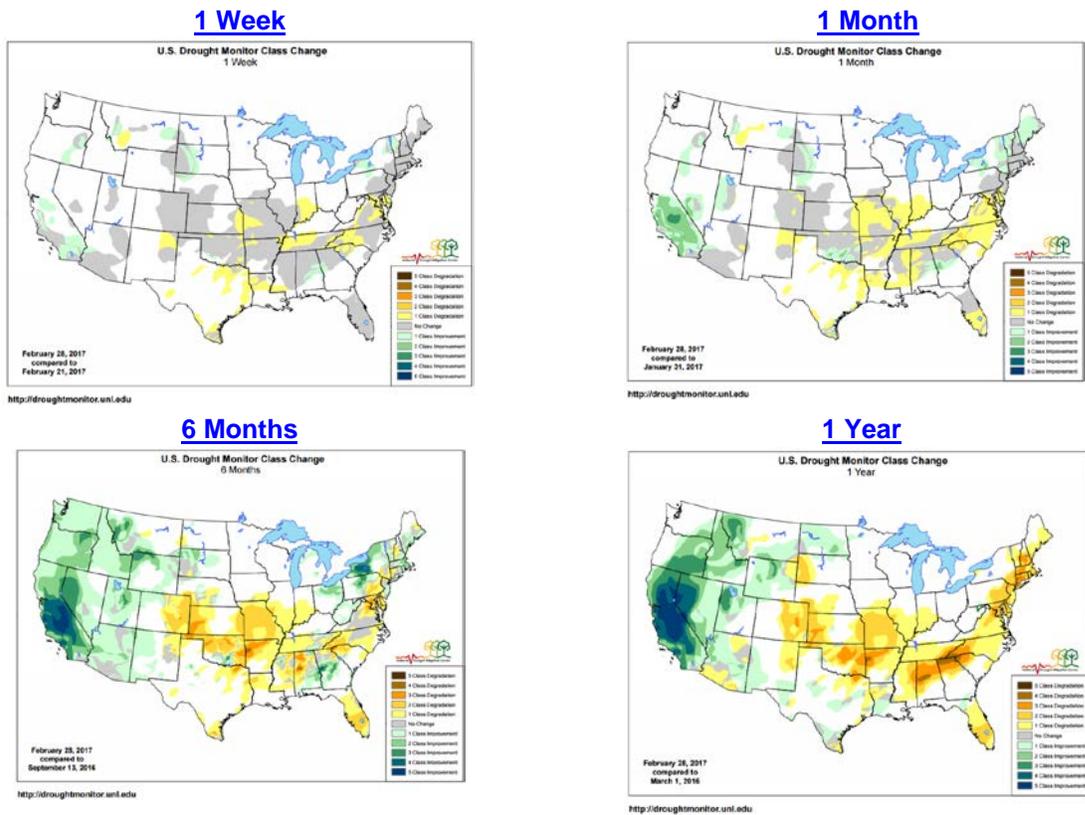
Drought

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

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



Changes in Drought Monitor Categories over Time



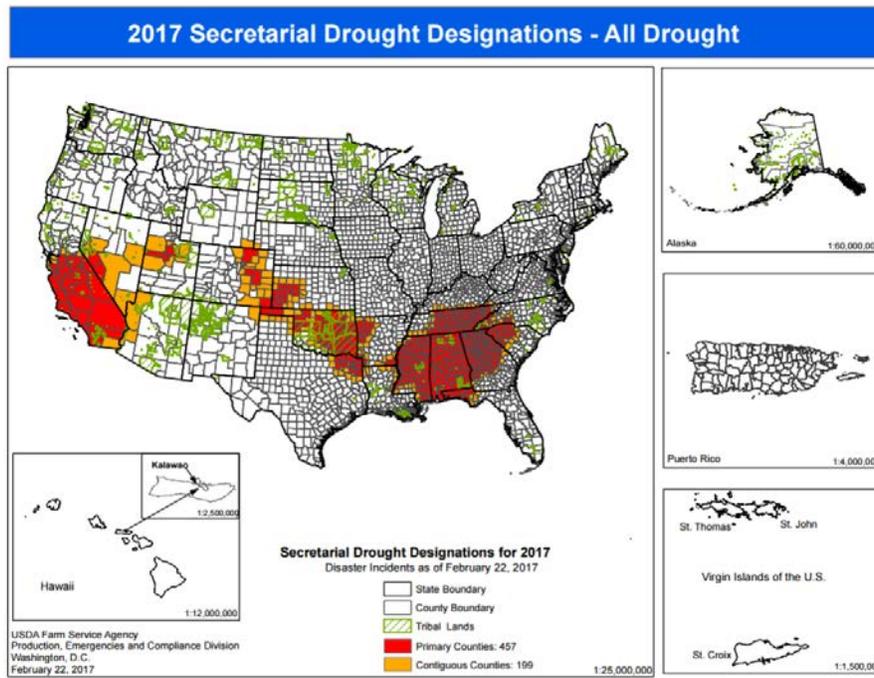
[Changes in drought conditions over the last 12 months](#)

Current National [Drought Summary](#), February 28, 2017

Author: Richard Heim, NOAA/NCEI

“Several weather systems traversed the contiguous U.S. (CONUS) in the fast-moving upper-level flow during this U.S. Drought Monitor (USDM) week. Upper-level troughs, surface fronts, and surface low pressure systems brought above-normal precipitation to parts of the Southwest, parts of the Pacific Northwest to Great Lakes, and parts of the Southeast, Upper Ohio Valley, and Northeast. But the speed and tracks of the weather systems left much of California and other parts of the West, most of the Central to Southern Plains, parts of the Southeast and Northeast, much of the Mid-Mississippi Valley, and Mid-Atlantic coast drier than normal. Temperatures averaged cooler than normal in the West under the influence of the troughs, while the dominance of ridging east of the Rockies resulted in above-normal temperatures. As noted by the U.S. Department of Agriculture (USDA), the persistence of the unseasonably warm weather east of the Rockies has ushered winter wheat out of dormancy up to a month ahead of normal. The warm temperatures and unusually early green up have increased evapotranspiration and heightened the need for soil moisture in areas wrestling with winter-time drought, at a time when crop-water demands are typically minimal. As reported by the National Weather Service, vegetation has responded rapidly to the unusually warm temperatures, with flowers and trees blooming or in full bloom across east-central Georgia and central South Carolina. Drought conditions continued to improve in California, as the hydrologic systems responded to the precipitation of recent weeks and months, and in the Northeast. Drought and abnormally dry conditions expanded from the Southern Plains and Midwest to the Southeast and Mid-Atlantic coast, reflecting precipitation shortages that have developed over the last one to three months as well as, in the Southeast, worsening hydrological conditions and long-term dryness.

NEW! USDA 2017 Secretarial [Drought Designations](#)

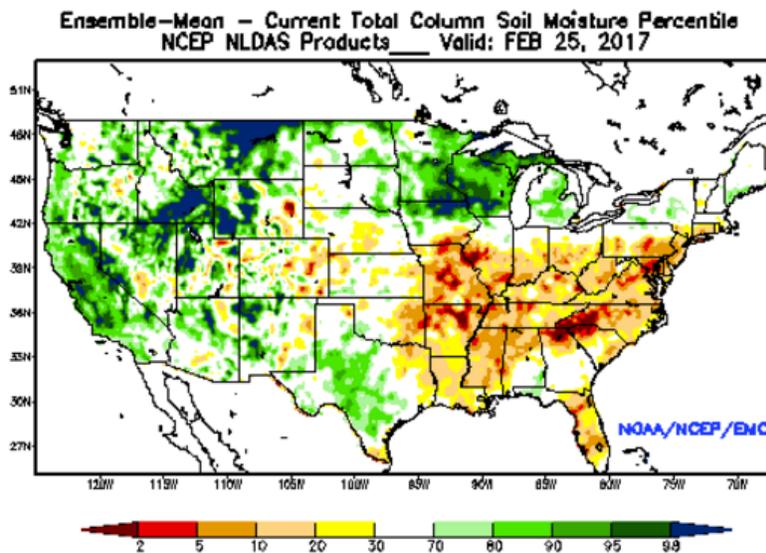


Highlighted Drought Resources

- [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](#)

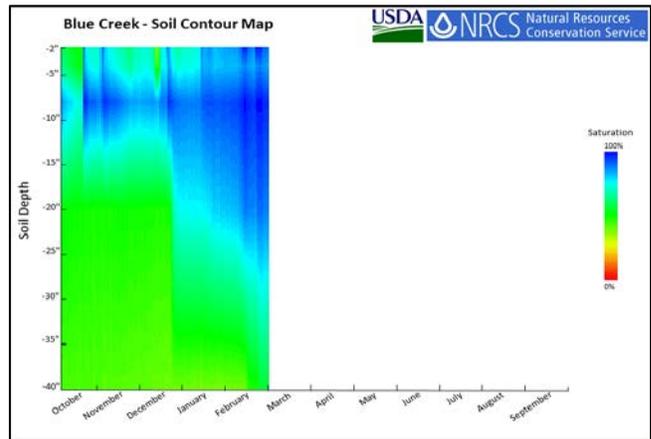
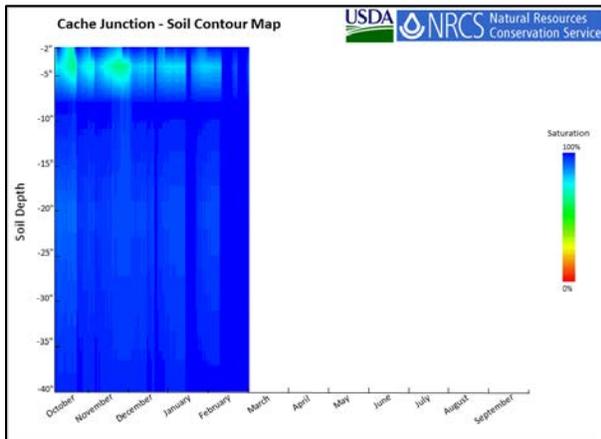
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of February 25, 2017.

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



Precipitation and snowmelt saturating soils in north central Utah

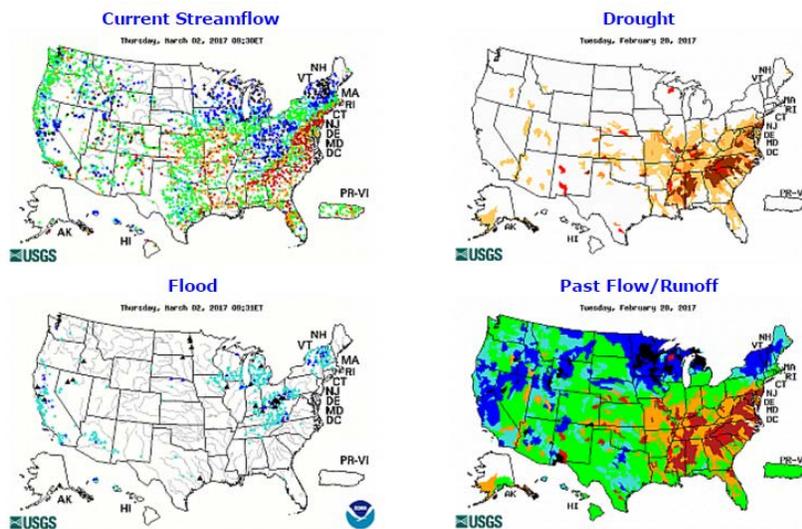
North central Utah near the Idaho border has reported near record precipitation for this water year. The graphics show the soil moisture changes in percent of volume at two SCAN stations during the last several months. The soil moisture displayed in blue is above field capacity. The [Cache Junction site 2136](#) is saturated along the whole soil column. The [Blue Creek site 2135](#) isn't quite as saturated, but nearly so. The surface soil temperature is at the freezing point and will be susceptible to freezing for some time, with a fairly high potential for developing a frozen surface layer. With the amount of snow still on the ground in the Cache Valley the soil should remain saturated for quite some time.

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



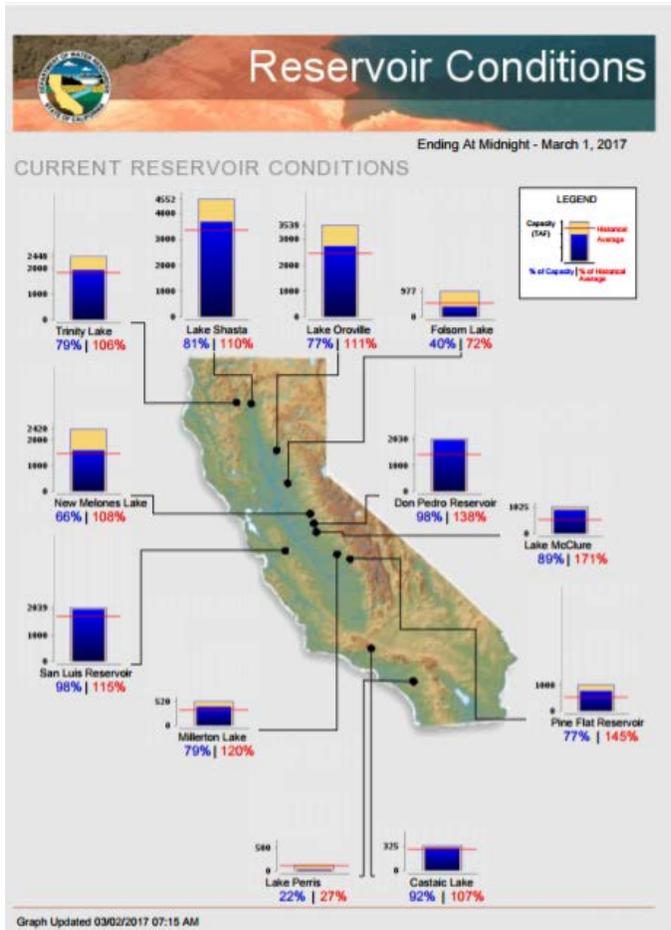
Click graphic to enlarge and display legends

[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](#)

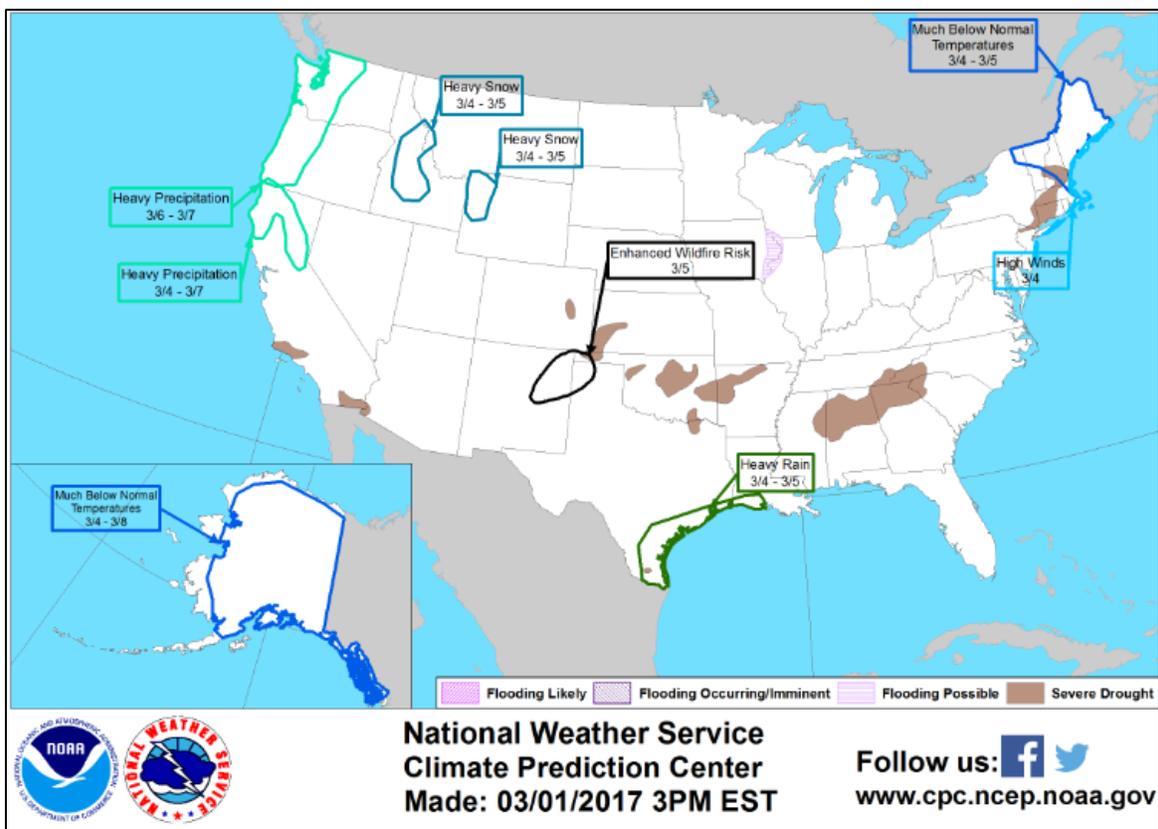
Short- and Long-Range Outlooks

Agricultural Weather Highlights

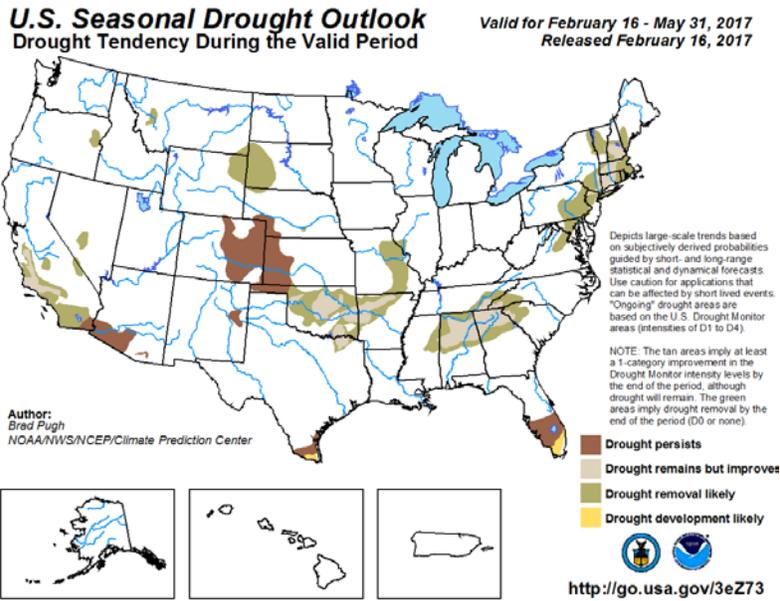
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, March 2, 2017](#): “A sharp weekend cold snap could threaten some fruit, ornamental, and nursery crops across portions of the Mid-Atlantic and Southeastern States. Weekend temperatures could fall below 20°F as far south as the Mid-Atlantic region, and should dip to 32°F or below as far south as northern sections of Mississippi, Alabama, and Georgia. Southeastern fruit crops in full bloom could be particularly vulnerable to freeze injury. Farther north, sub-zero weekend temperatures may occur across portions of the interior Northeast. In contrast, warmth will return during the weekend to the nation’s mid-section. Meanwhile, much of the country will receive little or no precipitation during the next 5 days. Completely dry weather should prevail from southern California to the central and southern Plains. In contrast, rain (locally 1 to 3 inches) will develop during the weekend in the western Gulf Coast region, while 5-day totals could reach 2 to 6 inches or more in northern California and the Pacific Northwest. The NWS 6- to 10-day outlook for March 7 – 11 calls for the likelihood of above-normal temperatures nationwide, except for colder-than-normal conditions in the Northwest. Meanwhile, near- to above-normal precipitation across the majority of the U.S. will contrast with drier-than-normal weather in the southern Atlantic region and from southern California to the central and southern Plains.”

NWS Climate Prediction Center Weather Hazard Outlook: [March 4–8, 2017](#)



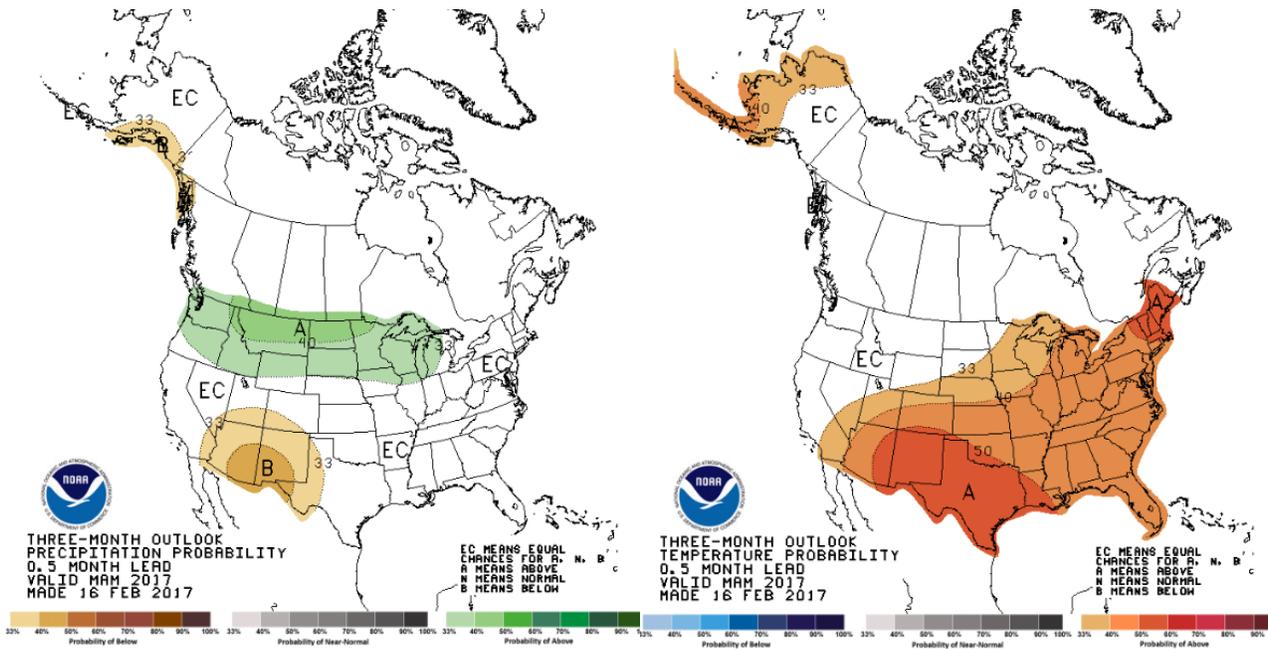
NWS Seasonal Drought Outlook: [February 16 – May 31, 2017](#)



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](#).