

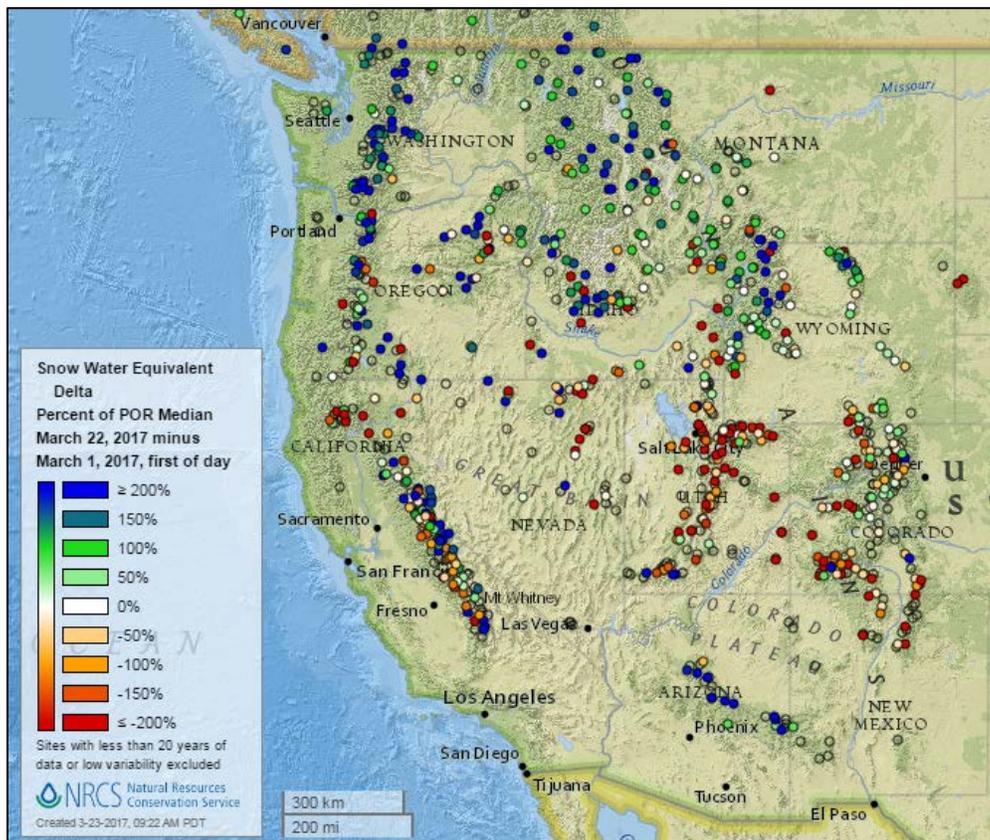
Water and Climate Update

March 23, 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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Western snowpack primed for runoff season



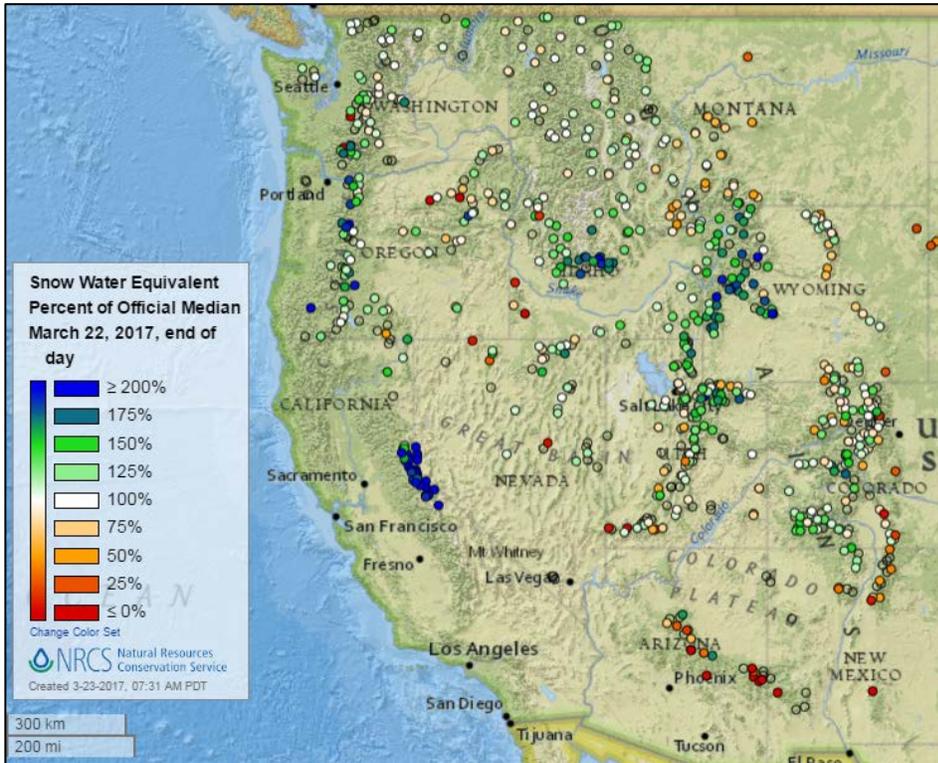
The map of snowpack change during March shows widespread melting in the mountains of Utah, New Mexico, and Colorado. Record changes at SNOTEL sites are depicted [here](#). In contrast, the snowpack at most stations in the northern states and some stations at high elevations in all states has increased.

More News:

- [Large Snow Pack Triggers Concern for Upcoming Flood Season](#)
- [Winter brought most snow to Helena in 25 years](#)
- [VIDEO: 7 inches of new snow at Tahoe-area ski resorts](#)
- [Utah forecast: Rain, snow, sunshine — repeat](#)

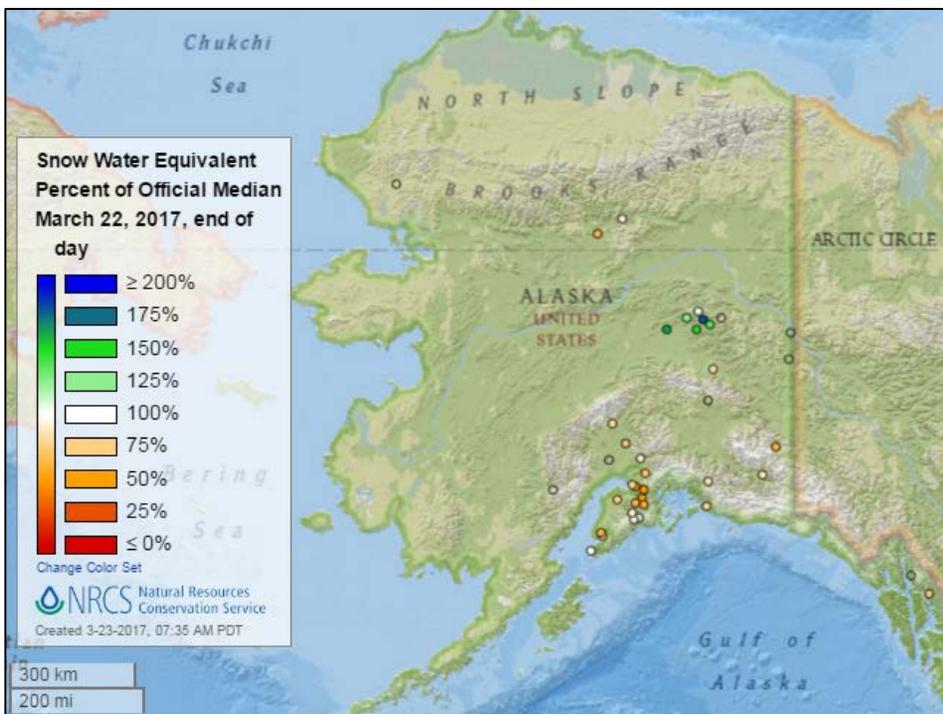
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

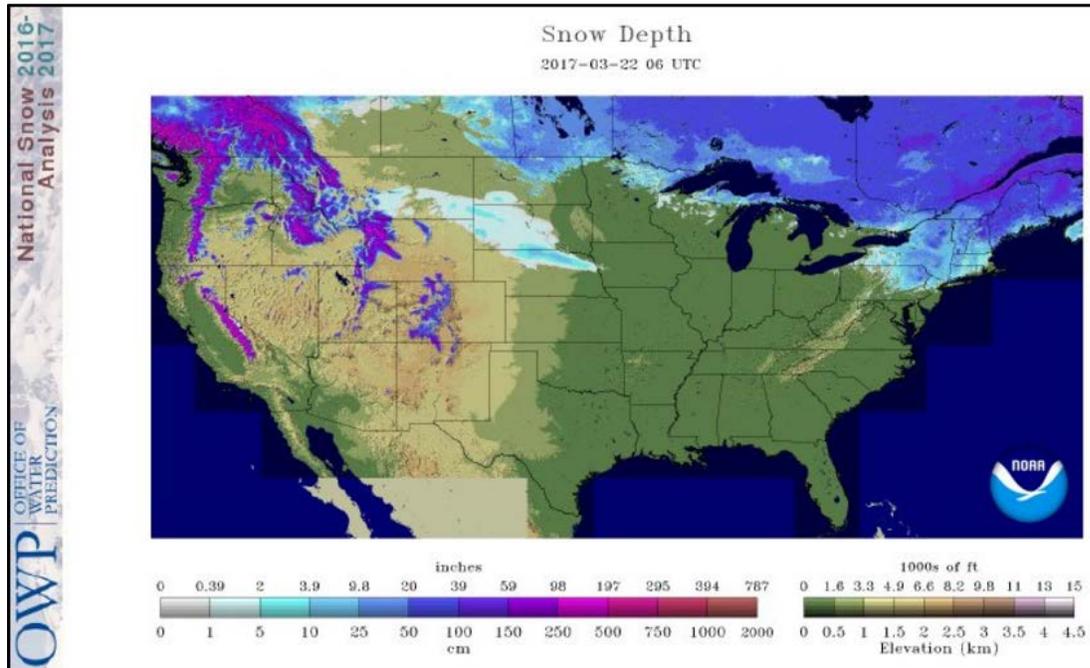
See also:
[Snow water equivalent values \(inches\) map](#)



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

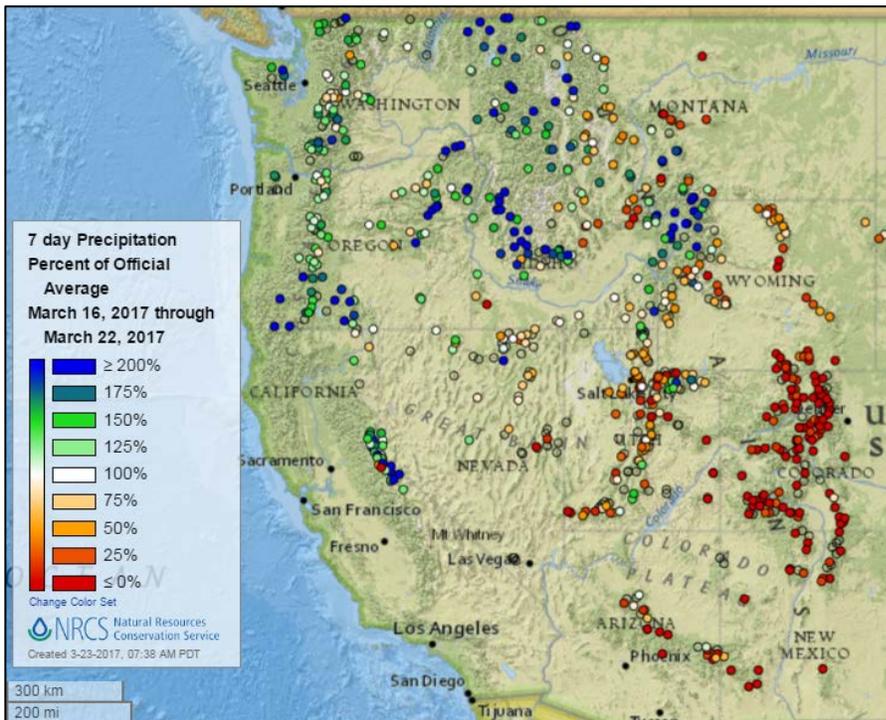
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

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



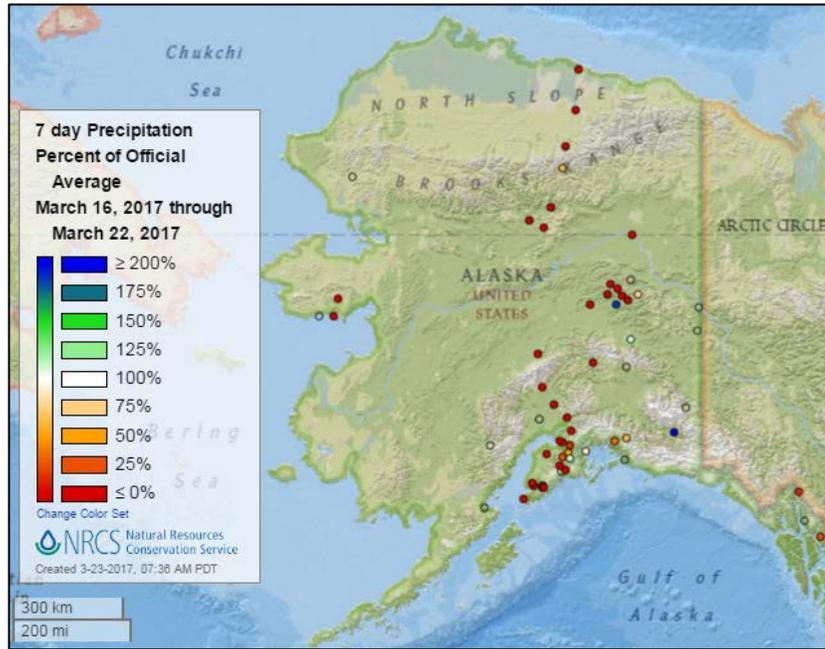
[7-day precipitation percent of average map](#)

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](#)



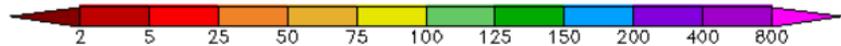
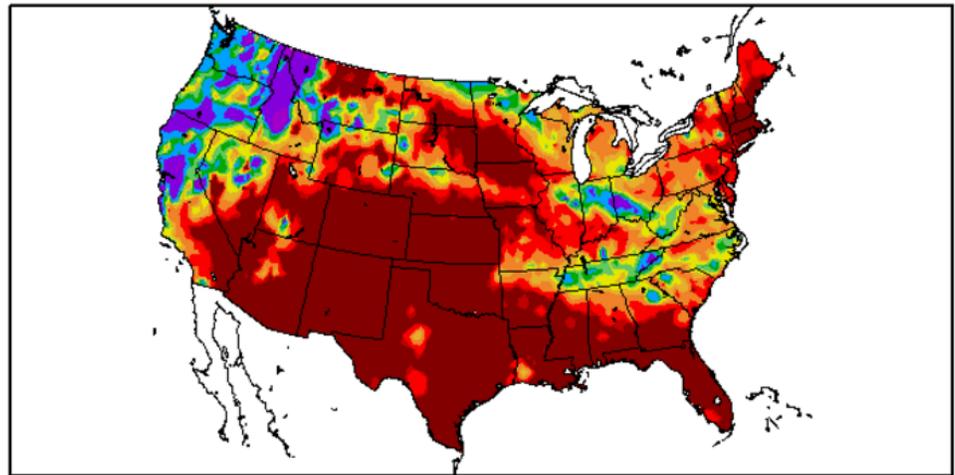
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)
3/16/2017 – 3/22/2017

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



Generated 3/23/2017 at HPRCC using provisional data.

Regional Climate Centers

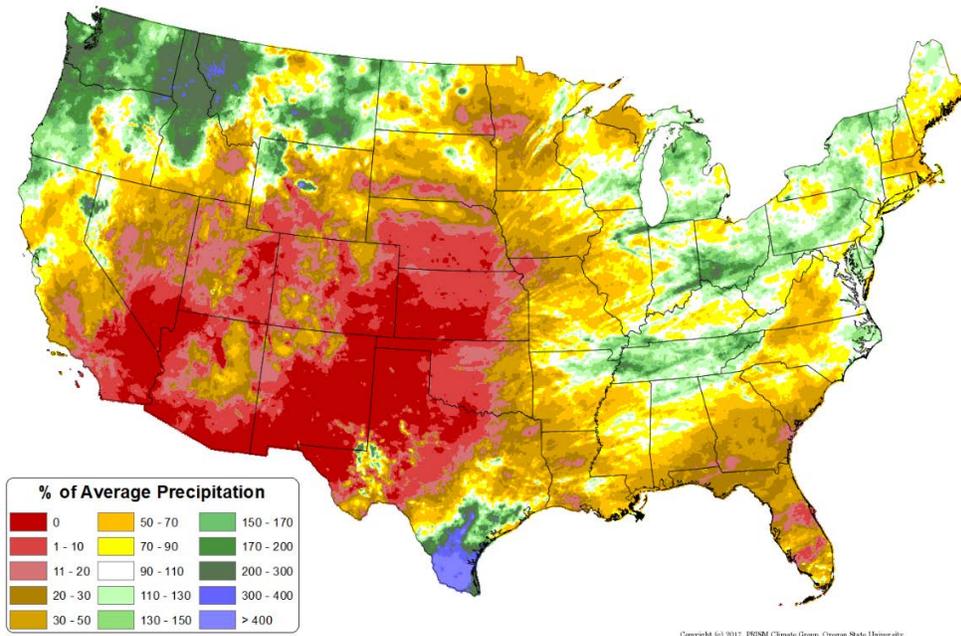
Water and Climate Update

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

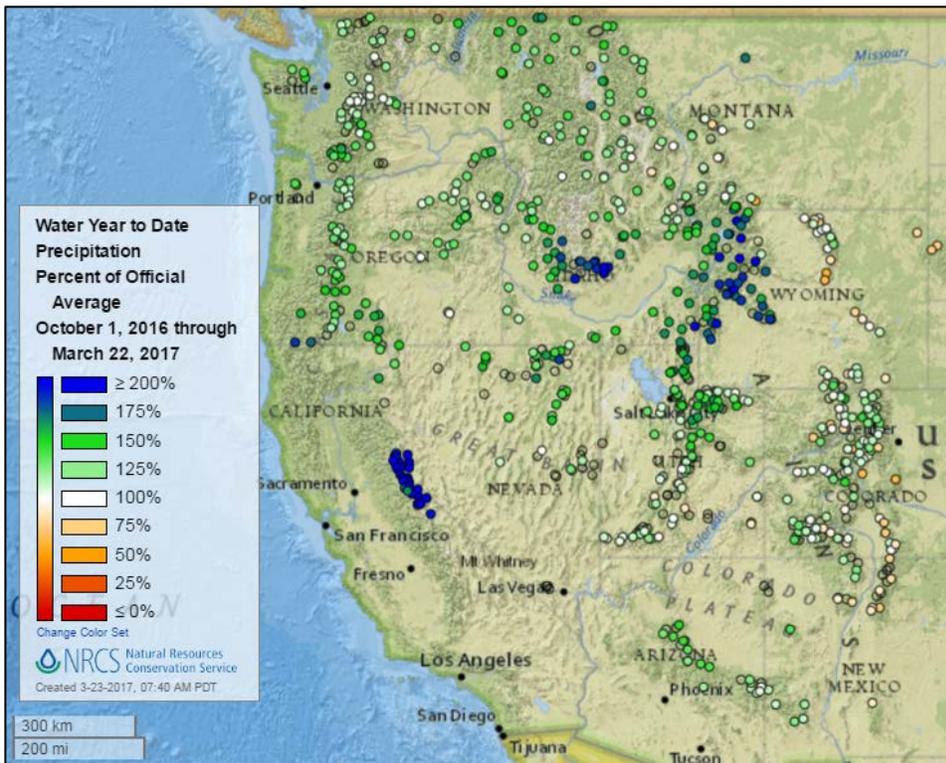
Source: PRISM

Total Precipitation Anomaly: 01 March 2017 - 22 March 2017
Period ending 7 AM EST 22 Mar 2017
Base period: 1981-2010
(Map created 23 Mar 2017)

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

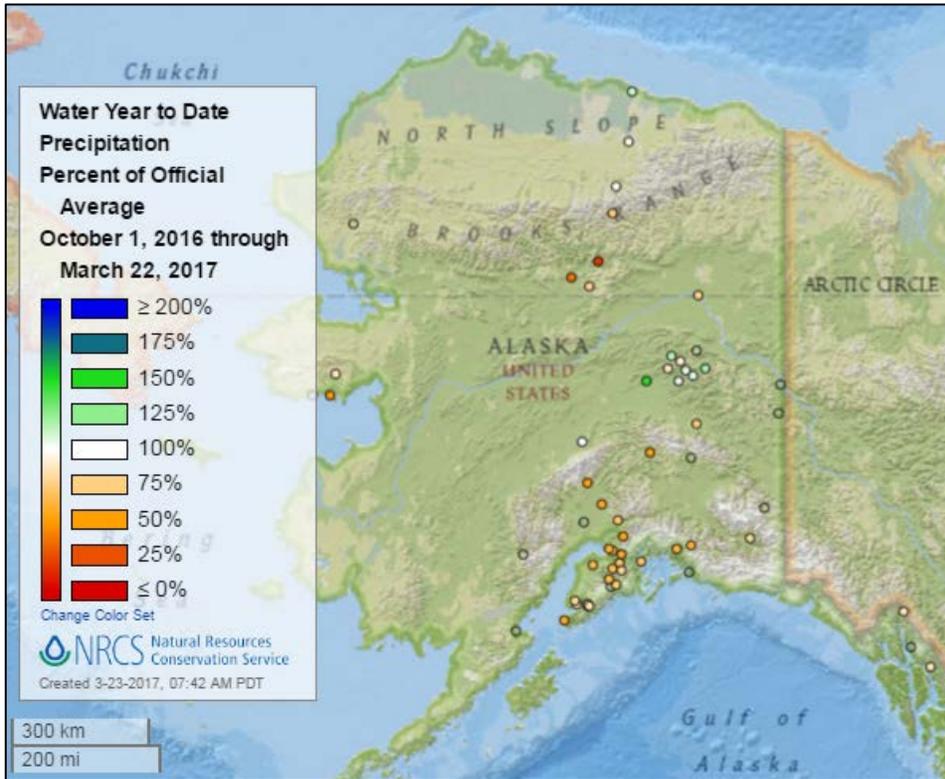


Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



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

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



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

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

Temperature

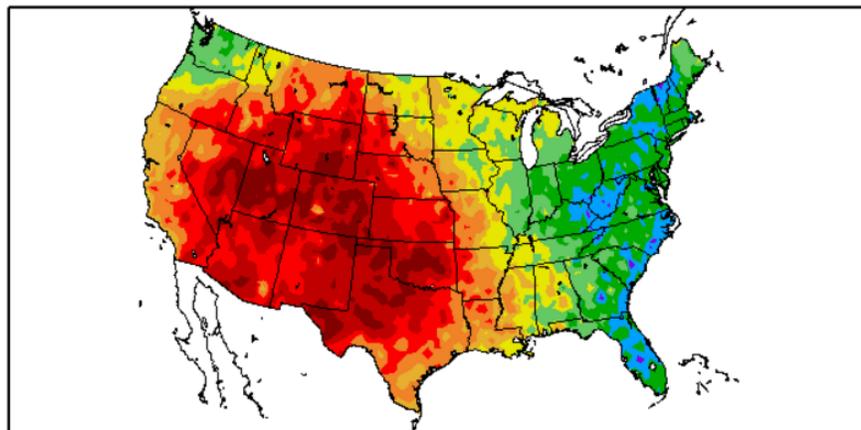
Last 7 Days, National Weather Service (NWS) Networks

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)
3/16/2017 - 3/22/2017



Generated 3/23/2017 at HPRCC using provisional data.

Regional Climate Centers

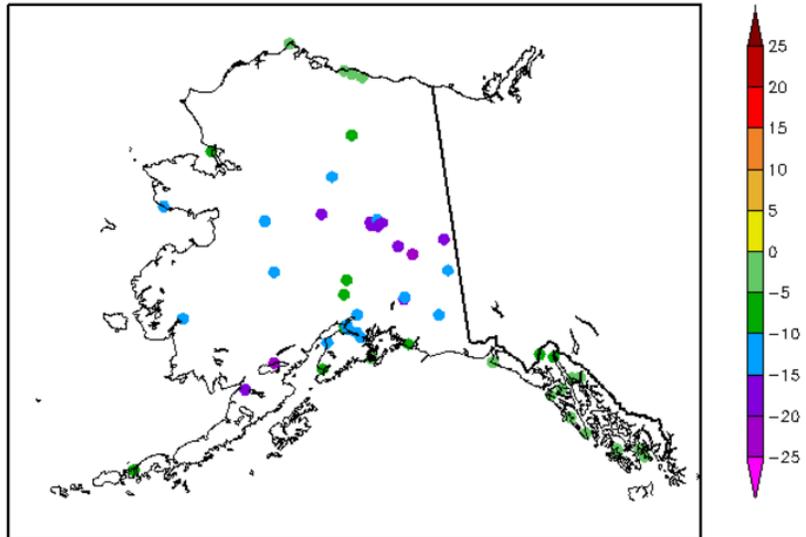
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
3/16/2017 – 3/22/2017



Generated 3/23/2017 at HPRCC using provisional data

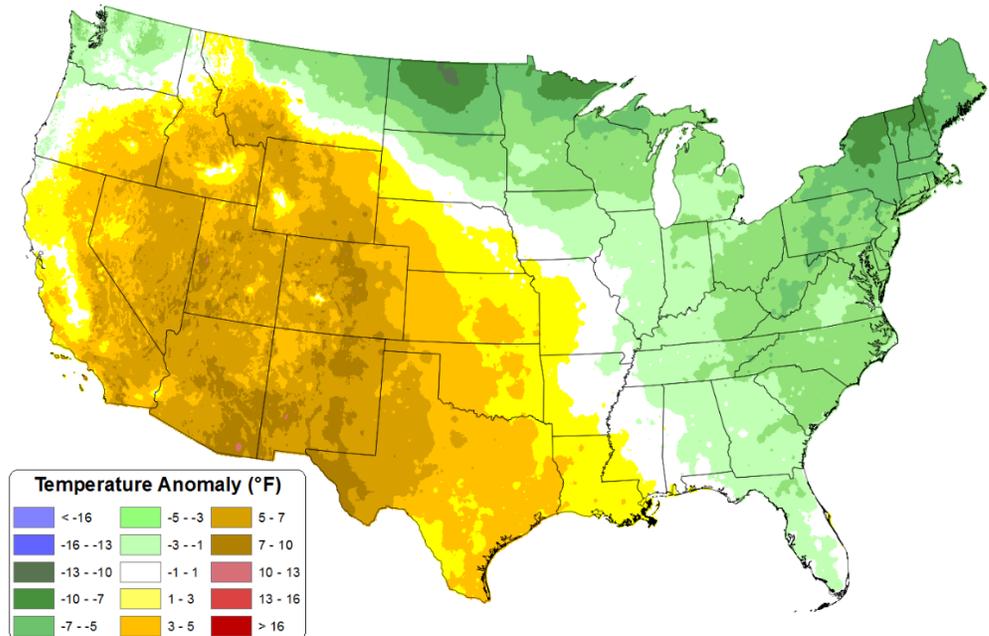
Regional Climate Centers

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

Source: PRISM

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

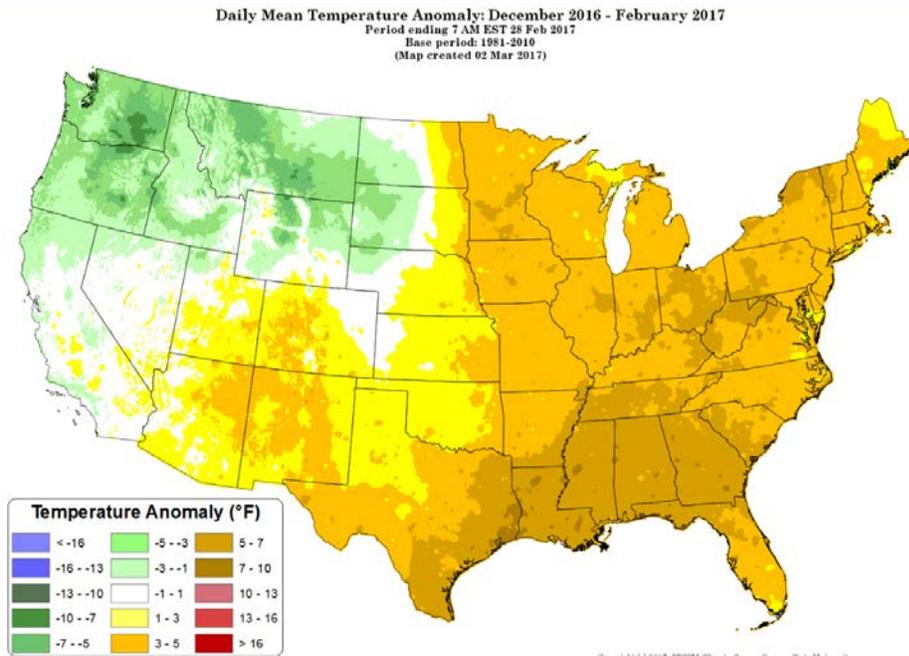
Daily Mean Temperature Anomaly: 01 March 2017 - 22 March 2017
Period ending 7 AM EST 22 Mar 2017
Base period: 1981-2010
(Map created 23 Mar 2017)



Copyright © 2017, PRISM Climate Group, Oregon State University

Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

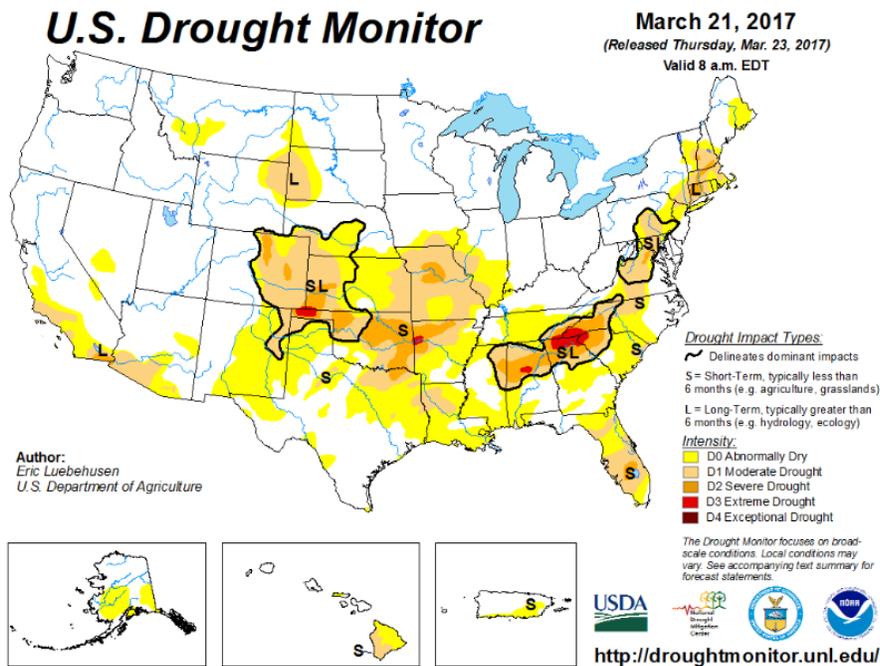


[December 2016 through February 2017 daily mean temperature anomaly map](#)

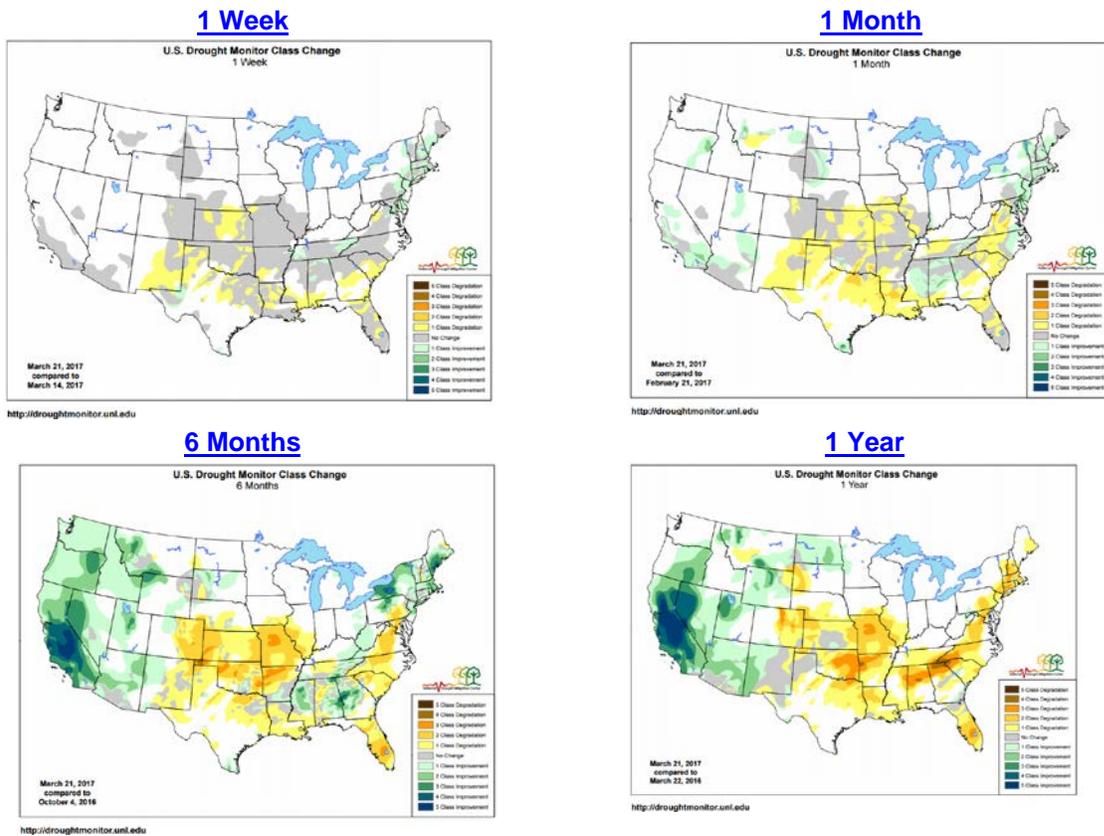
Drought

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

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



Changes in Drought Monitor Categories over Time



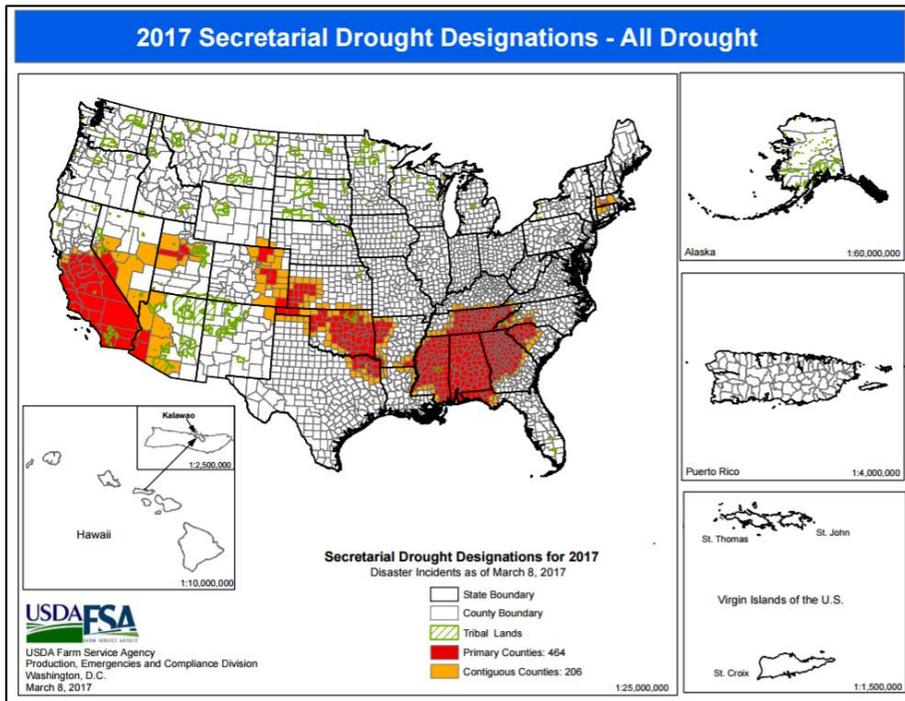
[Changes in drought conditions over the last 12 months](#)

Current National [Drought Summary](#), March 21, 2017

Author: Eric Luebehusen, U.S. Department of Agriculture

“A late-winter cold snap over the eastern half of the nation contrasted with warmer-than-normal conditions from the Plains to the Pacific Coast, save for lingering chilly weather in the Northwest. The eastern cold spell was accompanied by mixed precipitation across the Mid-Atlantic and Northeast, resulting in widespread drought reductions. Much of the south experienced drier-than-normal weather, which coupled with recent dryness led to widespread expansion of drought. Drought conditions across the west remained unchanged, though renewed Pacific storminess was taking aim at the region at the end of the period.”

USDA 2017 Secretarial [Drought Designations](#)

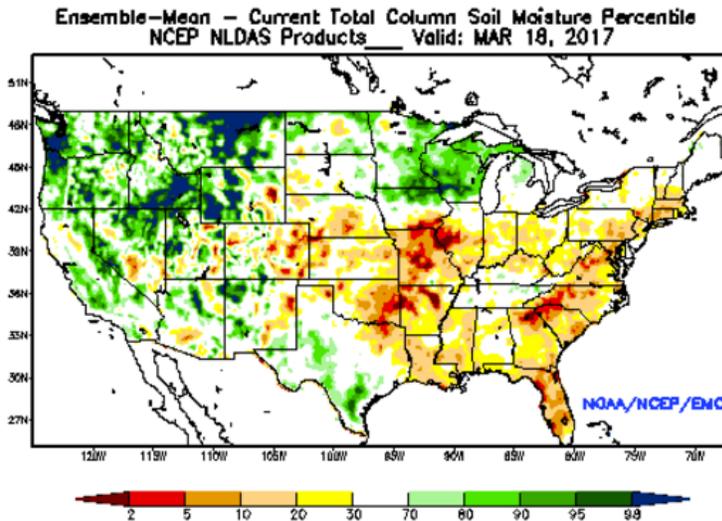


Highlighted Drought Resources

- [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](#)

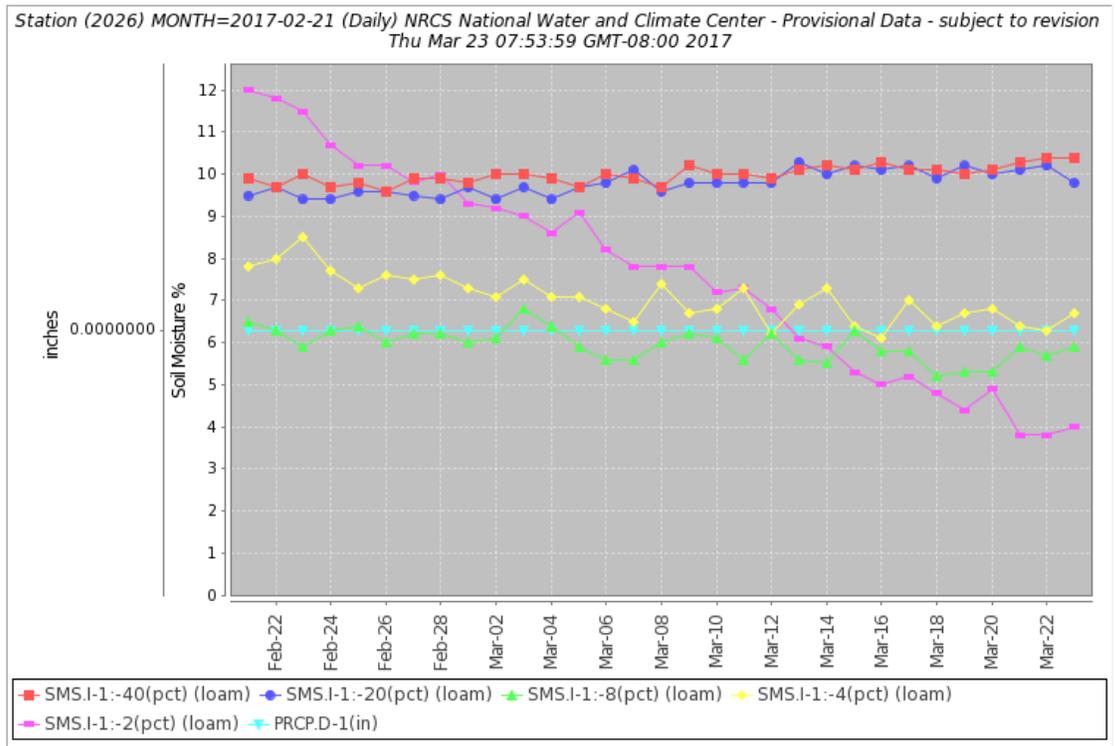
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of March 18, 2017.

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



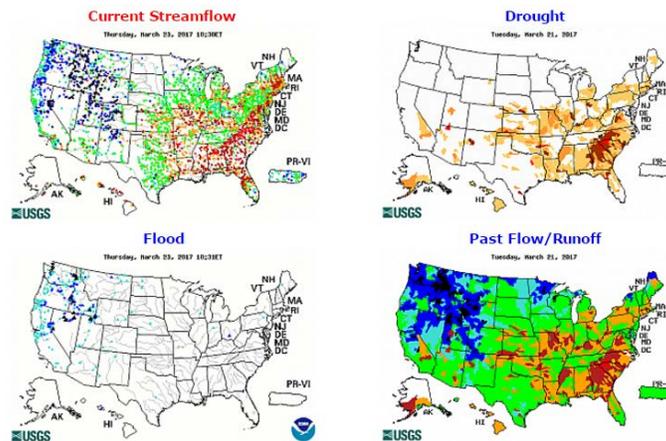
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the last 30 days at the [Walnut Gulch #1 SCAN site 2026](#) in Arizona. No precipitation at this site for the last 30 days contributed to a steady decline at the 2-inch sensor, and a slight decline at the 4- and 8-inch sensors. The 20- and 40-inch sensors showed little change. All soil moisture levels fell below 11% during this period.

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



[Current streamflow maps](#) Click graphic to enlarge and display legends

Reservoir Storage

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

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

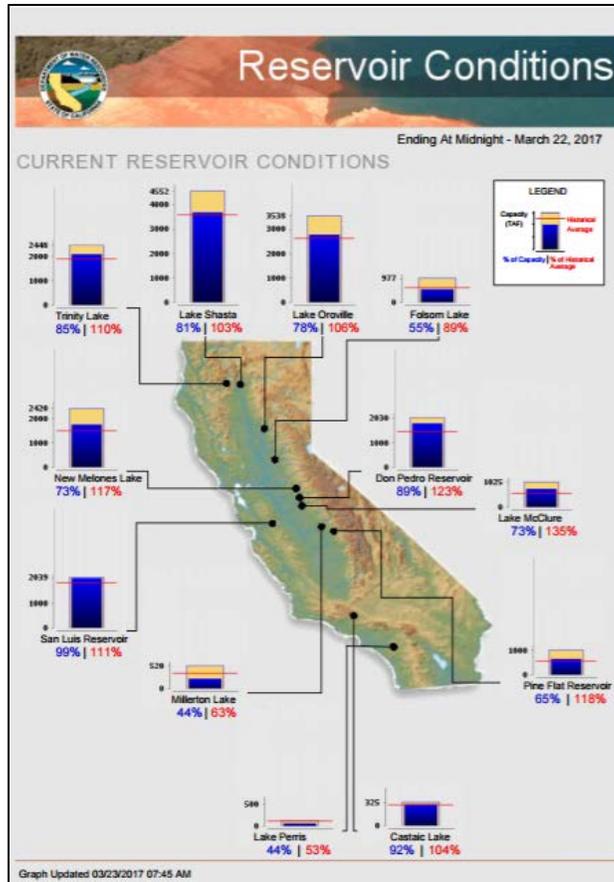
[Upper Colorado](#)

[Pacific Northwest/Snake/Columbia](#)

[Sevier River Water, Utah](#)

[Upper Missouri, Kansas, Oklahoma, Texas](#)

[California Reservoir Conditions](#)



Short- and Long-Range Outlooks

Agricultural Weather Highlights

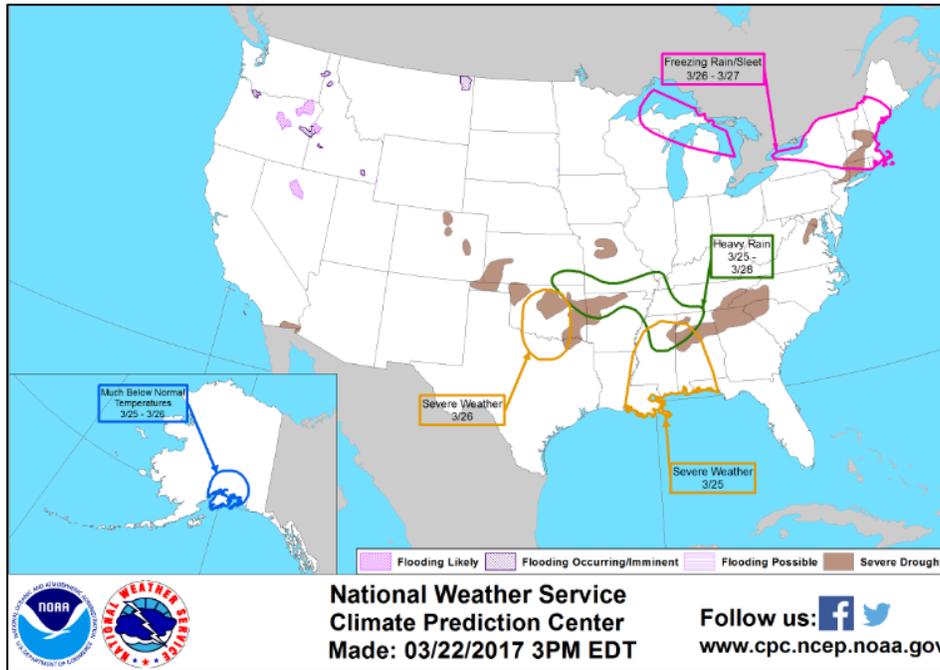
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, March 23, 2017](#): “An active weather pattern across the U.S. will continue for the next several days, with storms generally reaching the West Coast, re-emerging across the central and southern Plains, and lifting toward the Great Lakes region. Parts of the Intermountain West could receive 1 to 2 inches of precipitation, including high-elevation snow, during the next 5 days. Similar precipitation amounts can be expected across the mid-South and from the central Rockies into the Northeast. Each storm will have a trailing cold front capable of producing gusty winds and locally severe thunderstorms from the southern Plains into the mid-South. In addition, the southern High Plains may not receive enough rain to significantly reduce the threat of wildfires. Elsewhere, 5-day precipitation totals could reach 2 to 6 inches in northern California and the Pacific Northwest. Much of the nation will experience

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warm weather, with chilly conditions mostly restricted to the Northeast and the Far West. The NWS 6- to 10-day outlook for March 28 – April 1 calls for the likelihood of warmer- and wetter-than-normal weather across the majority of the country. Below-normal temperatures will be limited to northern New England, while below-normal precipitation should be confined to California and southern Florida.”

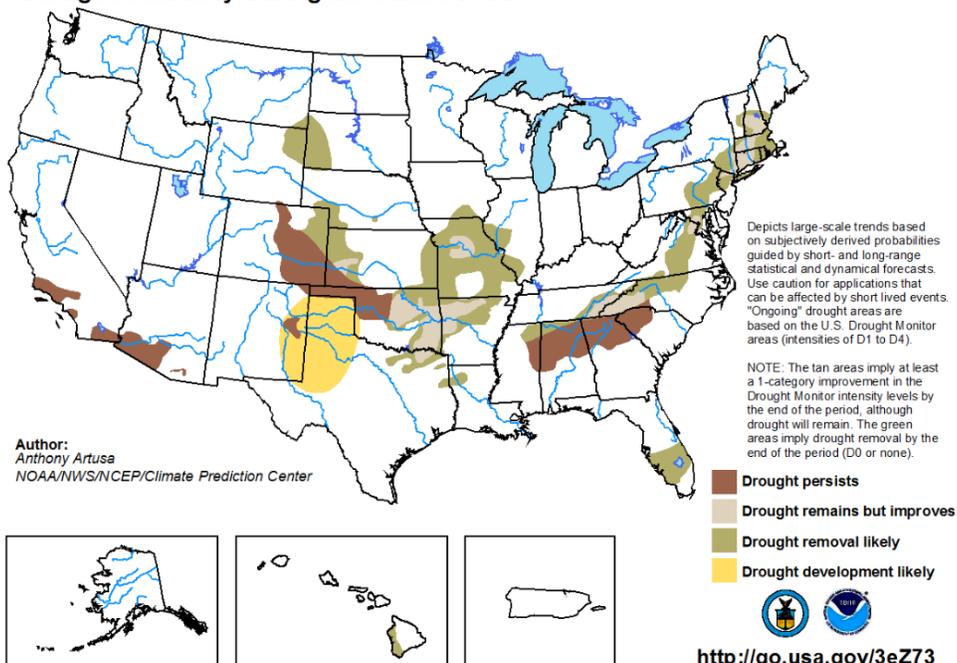
NWS Climate Prediction Center Weather Hazard Outlook: [March 25 – 29, 2017](#)



NWS Seasonal Drought Outlook: [March 16 - June 30, 2017](#)

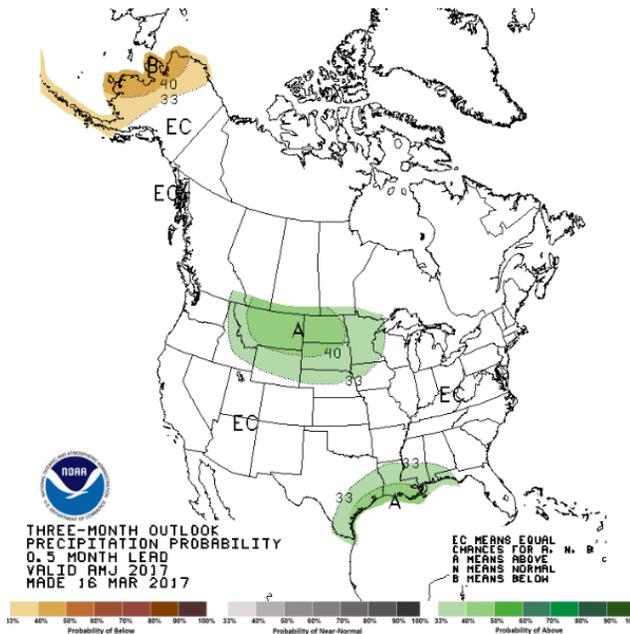
U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

*Valid for March 16 - June 30, 2017
Released March 16, 2017*



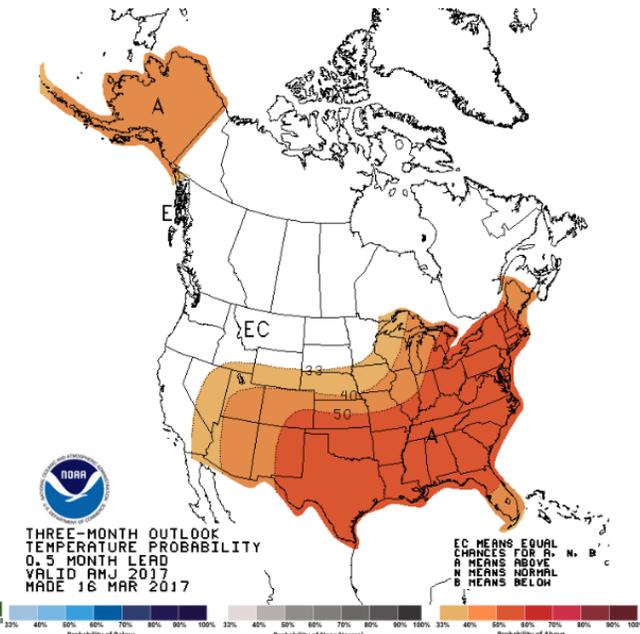
NWS Climate Prediction Center 3-Month Outlook

Precipitation



[April-May-June \(AMJ\) 2017 precipitation outlook summary](#)

Temperature



[April-May-June \(AMJ\) 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](#).