

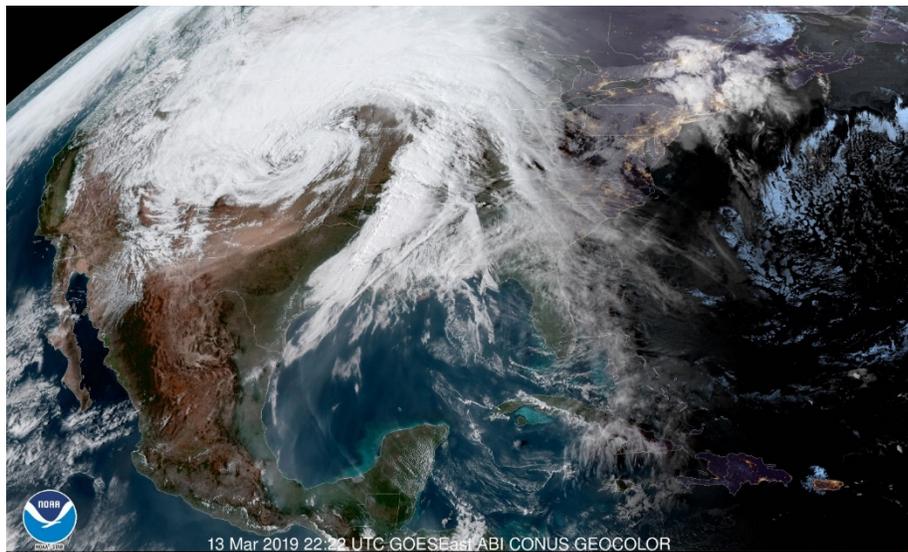
Water and Climate Update

March 14, 2019

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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Bomb Cyclone creates severe weather through Plains and Midwest



An enormous storm is covering the middle of the U.S. this week. Winds of up to 80 mph will blow across the region as a rapidly developing “Bomb Cyclone” takes shape over the Plains and Midwest. Blizzard and high wind warnings cover a wide area including Colorado, Wyoming, Montana, Nebraska, South Dakota, and North Dakota. Strong winds were also recorded as far south as Texas, near the border with Mexico. On the eastern edge of the storm, the risk of flooding covers a wide region from the Great Lakes to Mississippi.

Related:

[Historic ‘bomb cyclone’ sets off severe storms, flooding, and a ‘dangerous’ blizzard in Plains and Midwest – The Washington Post](#)

[Historic March Blizzard in Plains – NWS](#)

[DIA runways closed only 4th time in history, nearly 1,400 flights canceled ... – The Denver Post](#)

[70 million are in the path of ‘bomb cyclone’ set to strike the central US, bringing snow, hail and rain – Fox6.com \(WI\)](#)

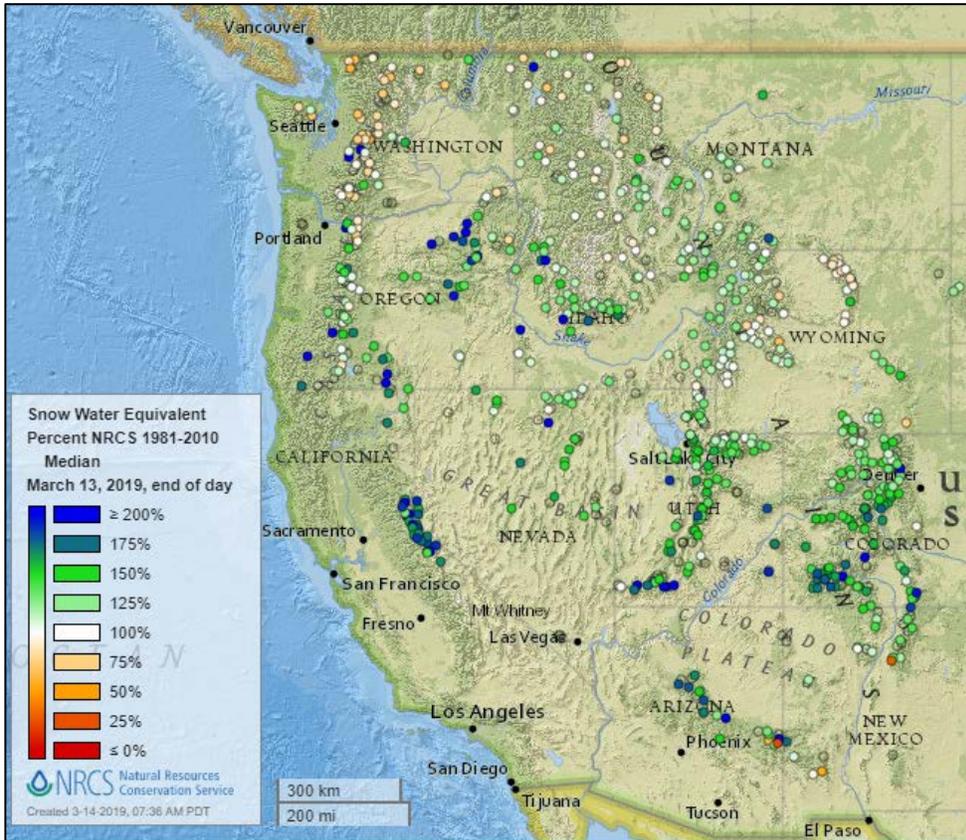
[Millions in path of potential bomb cyclone as major winter storm to slam central U.S. – NBC News](#)

["Bomb cyclone" bearing down on central U.S.; winter storm expected to bring blizzard conditions – CBS News](#)

[A rare 'bomb cyclone' is hitting Nebraska. Here's what to expect – Omaha \(NE\)](#)

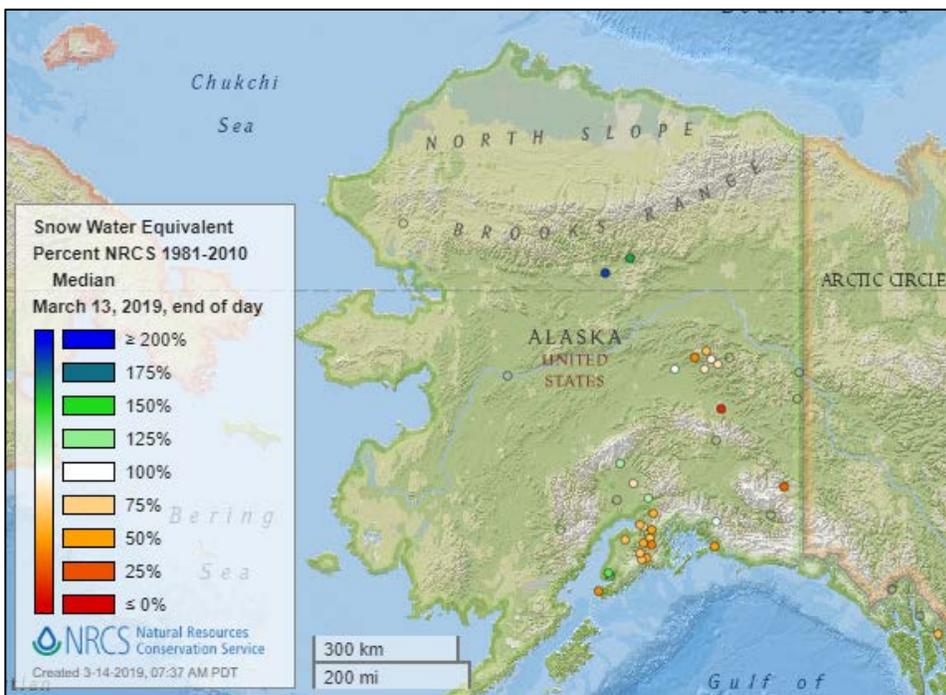
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

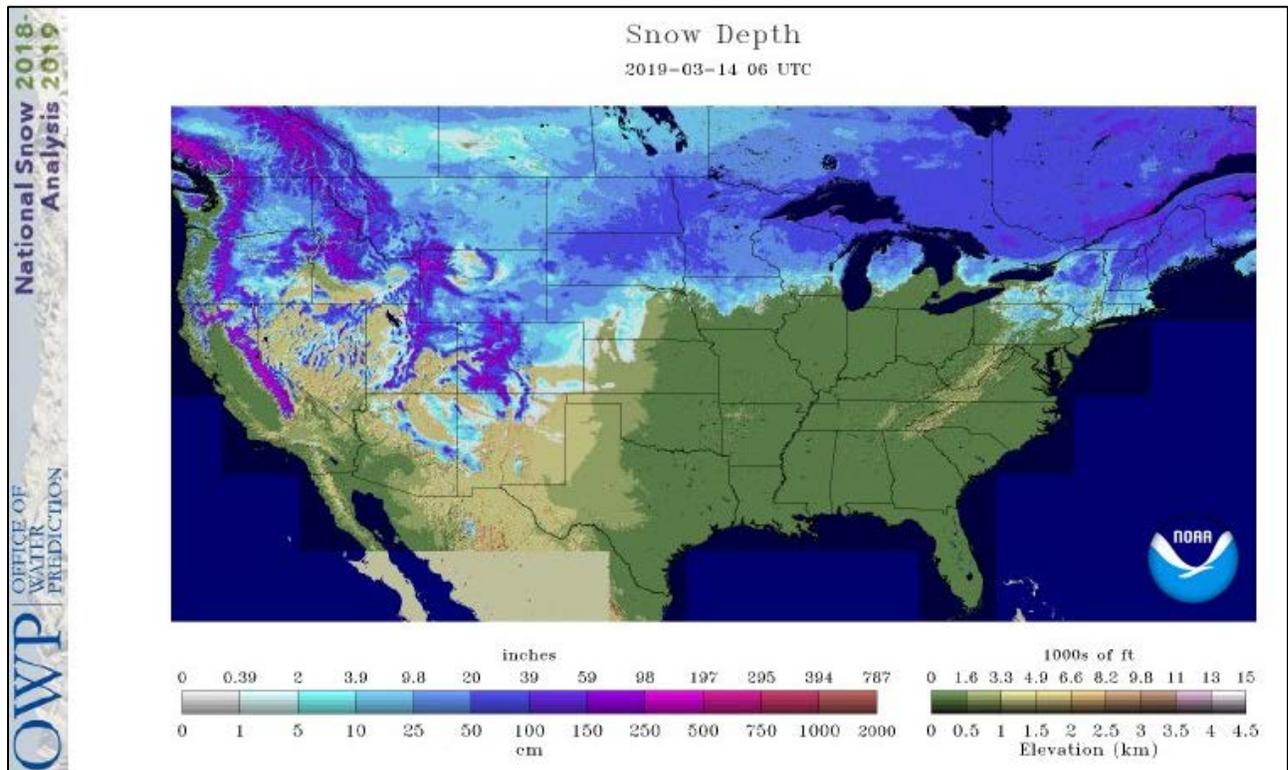
See also:
[Snow water equivalent values \(inches\) map](#)



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

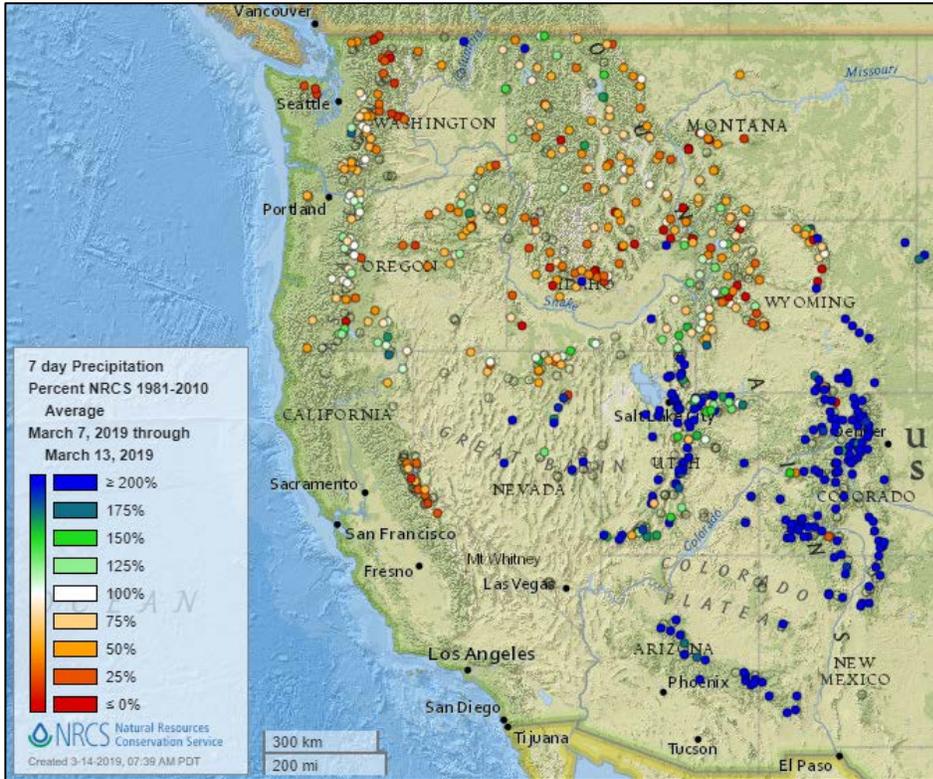
See also:
[Alaska snow water equivalent values \(inches\) map](#)

[Current Snow Depth](#), National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network

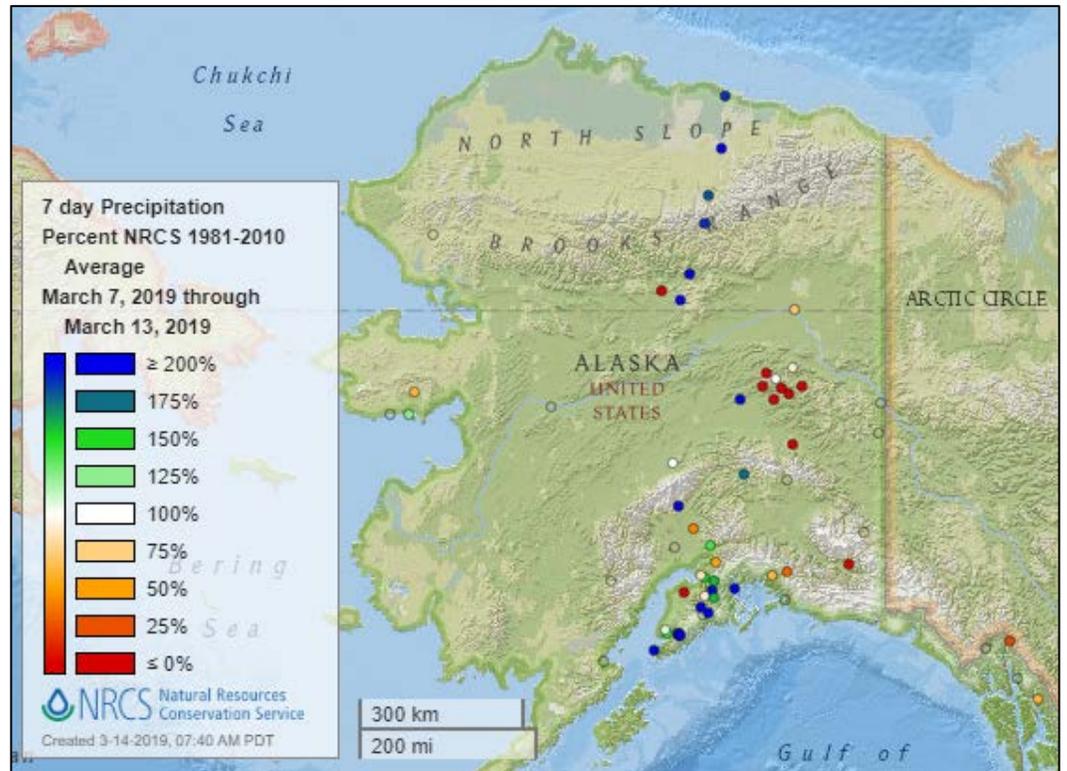


[7-day precipitation percent of average map](#)

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

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

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



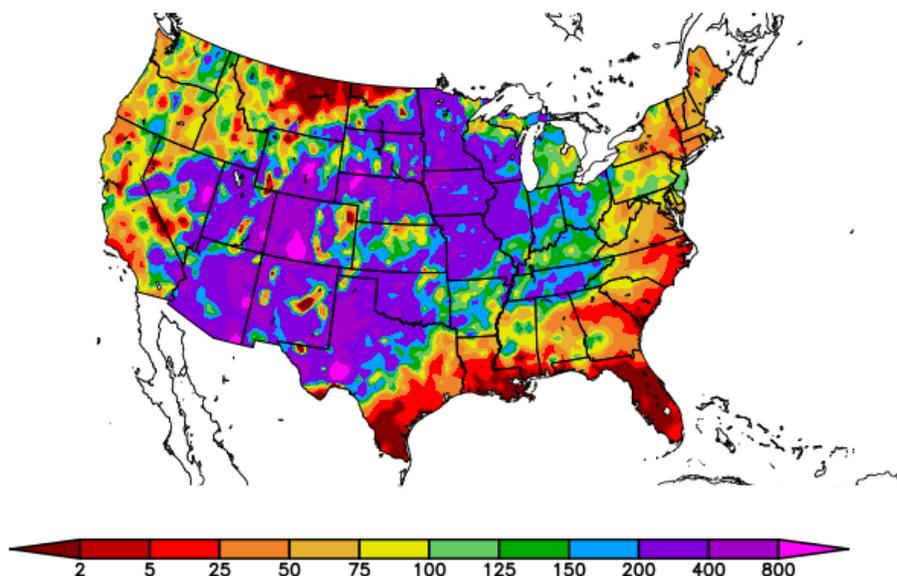
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
3/7/2019 – 3/13/2019



Generated 3/14/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

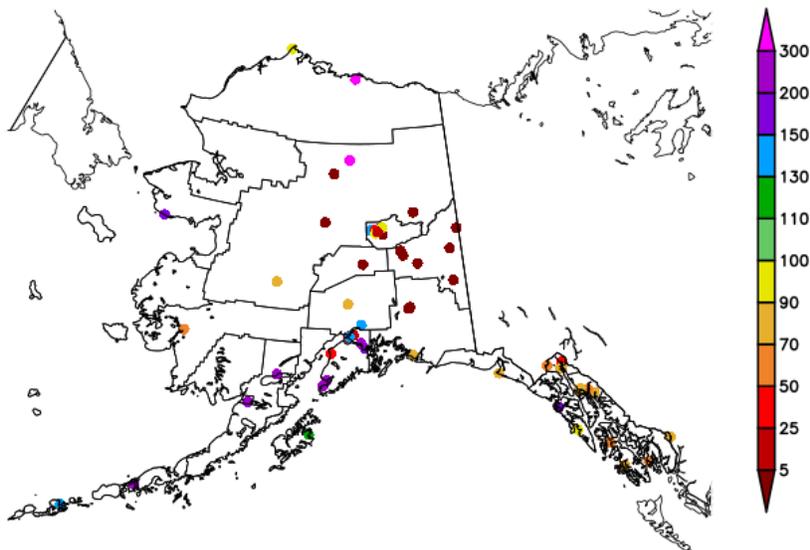
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
3/7/2019 – 3/13/2019

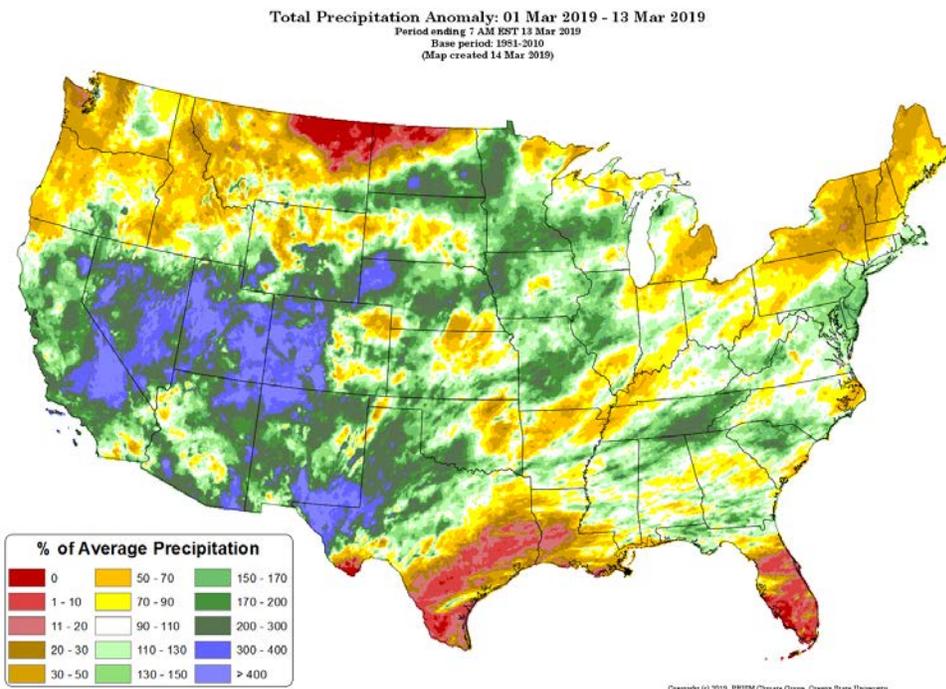


Generated 3/14/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

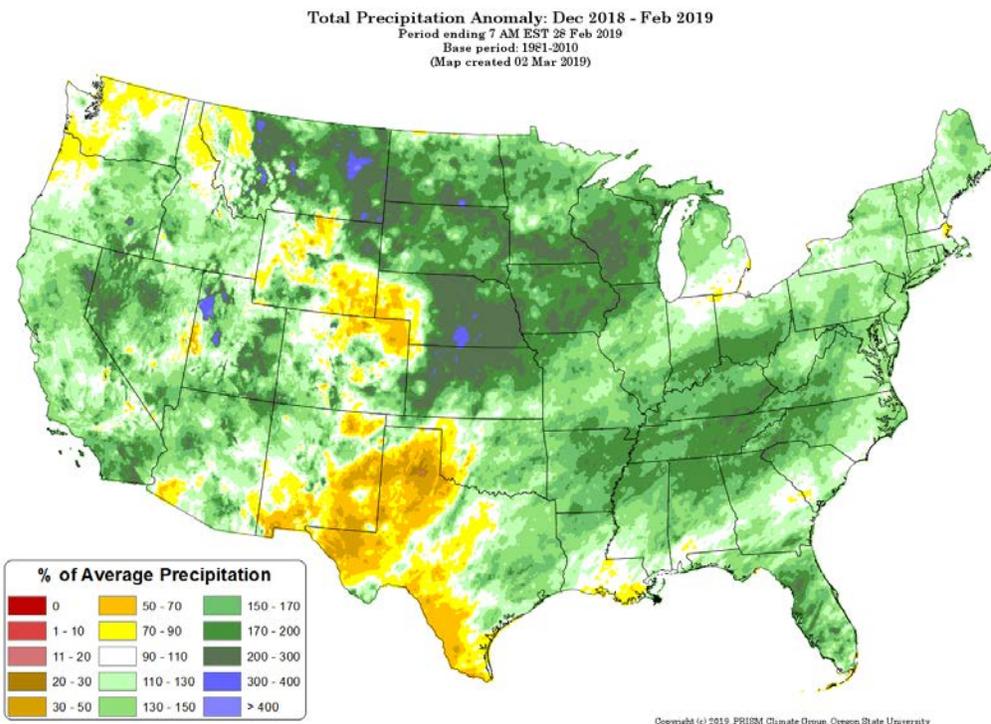


[Month-to-date national total precipitation percent of average map](#)

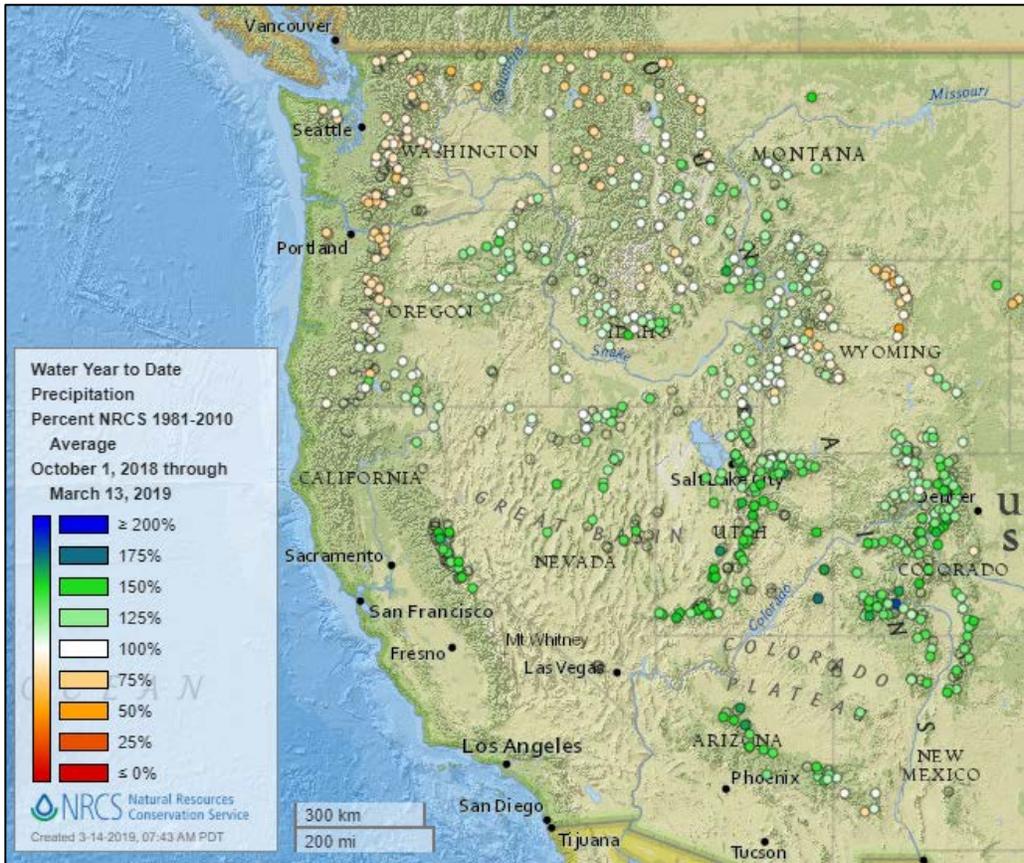
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[December 2018 through February 2019 total precipitation percent of average map](#)



Water Year-to-Date, NRCS SNOTEL Network



[2019 water year-t-date precipitation percent of average map](#)

See also:
[2019 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2019 water year-to-date precipitation percent of average map](#)

See also:
[Alaska 2019 water year-to-date precipitation values \(inches\) map](#)

Temperature

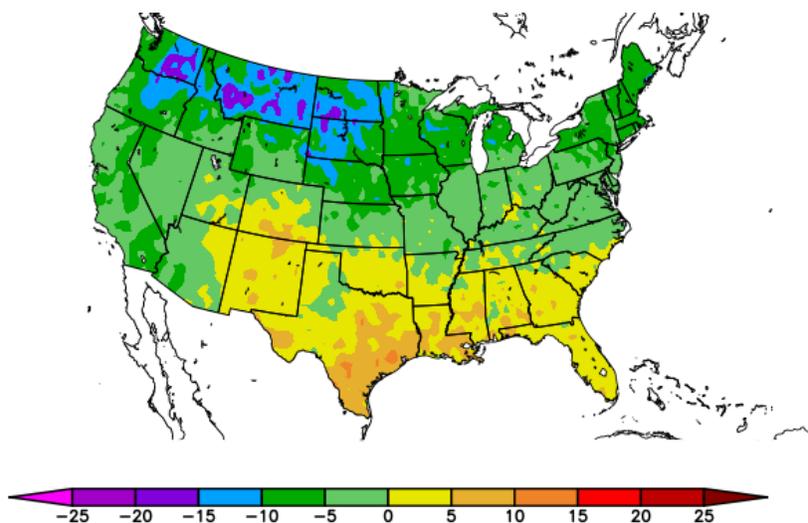
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
3/7/2019 – 3/13/2019



Generated 3/14/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

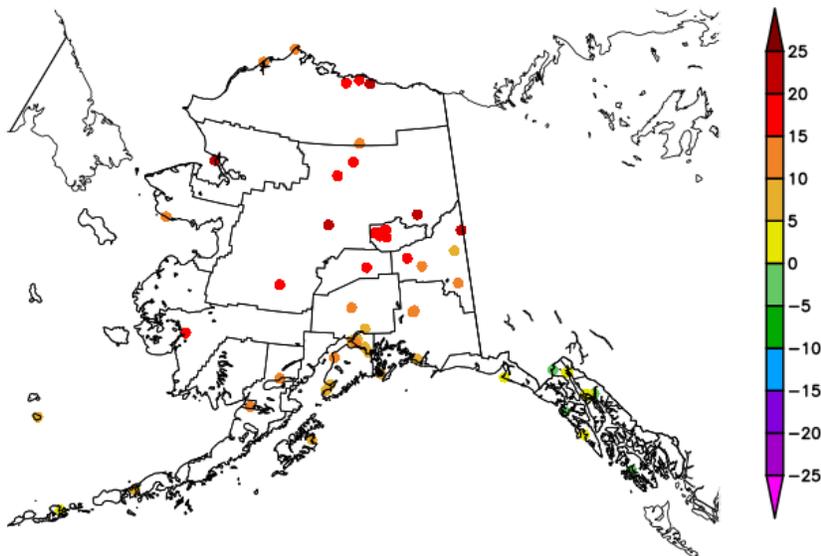
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
3/7/2019 – 3/13/2019



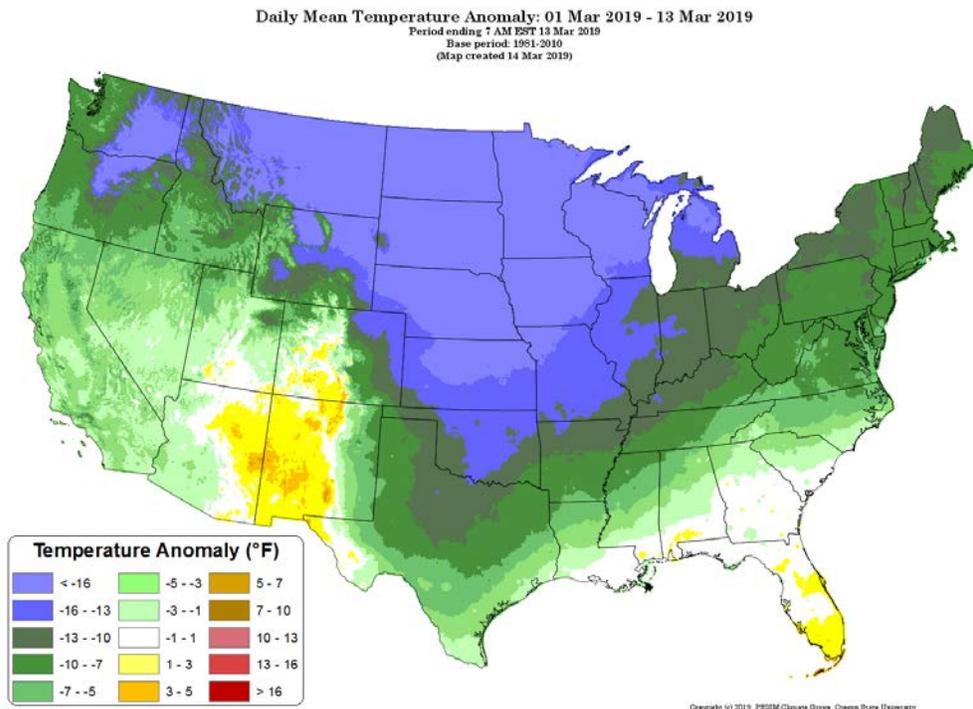
Generated 3/14/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

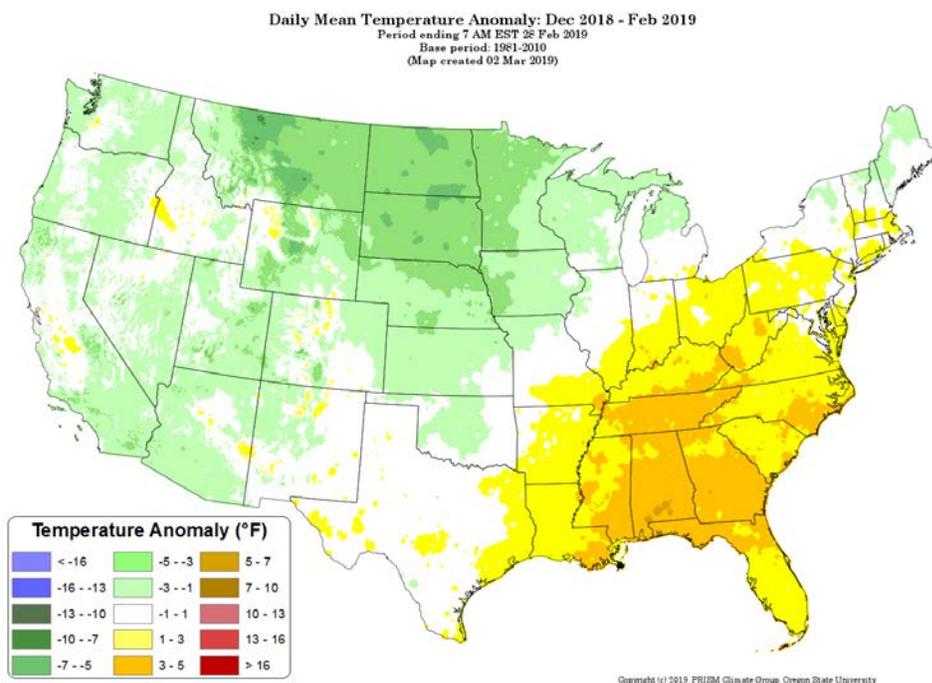
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[December 2018 through February 2019 daily mean temperature anomaly map](#)



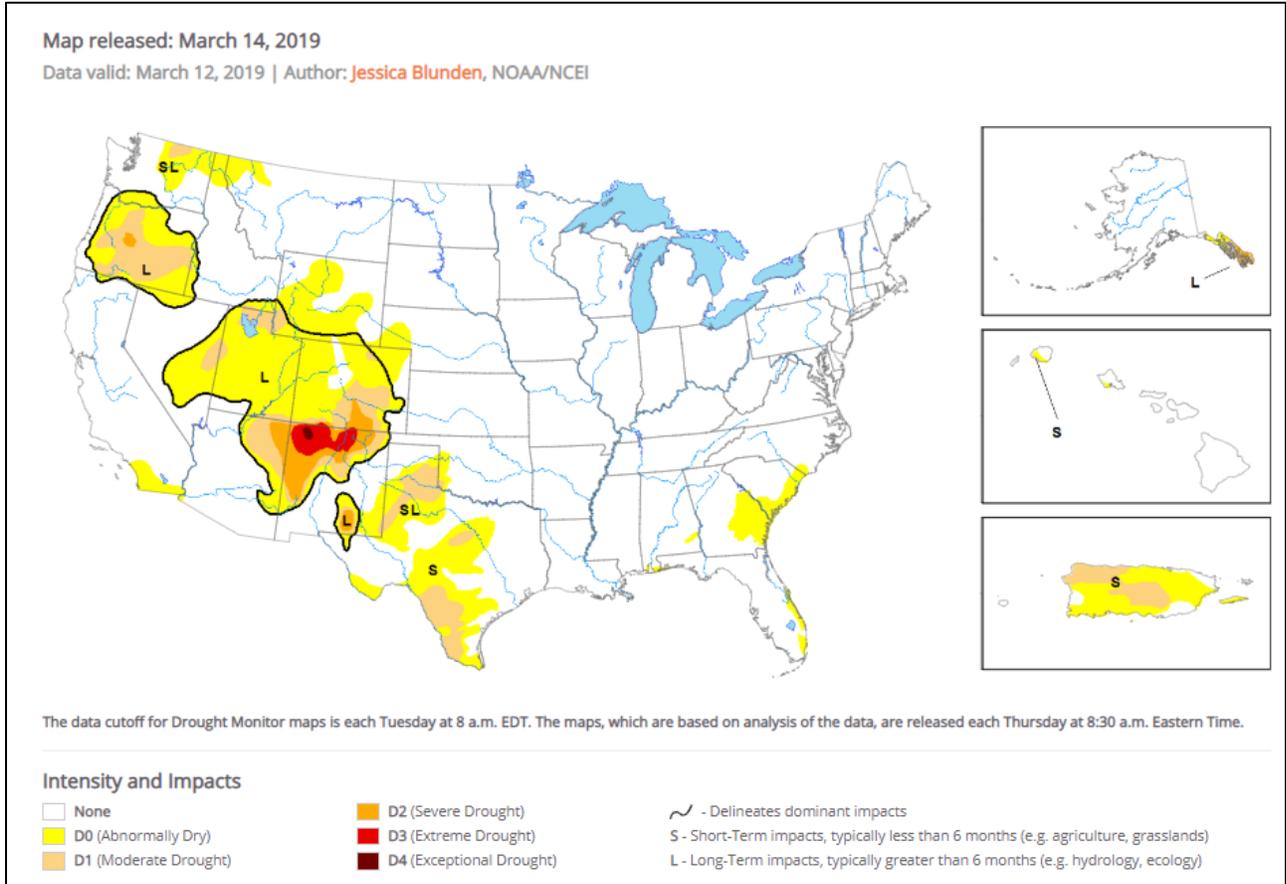
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



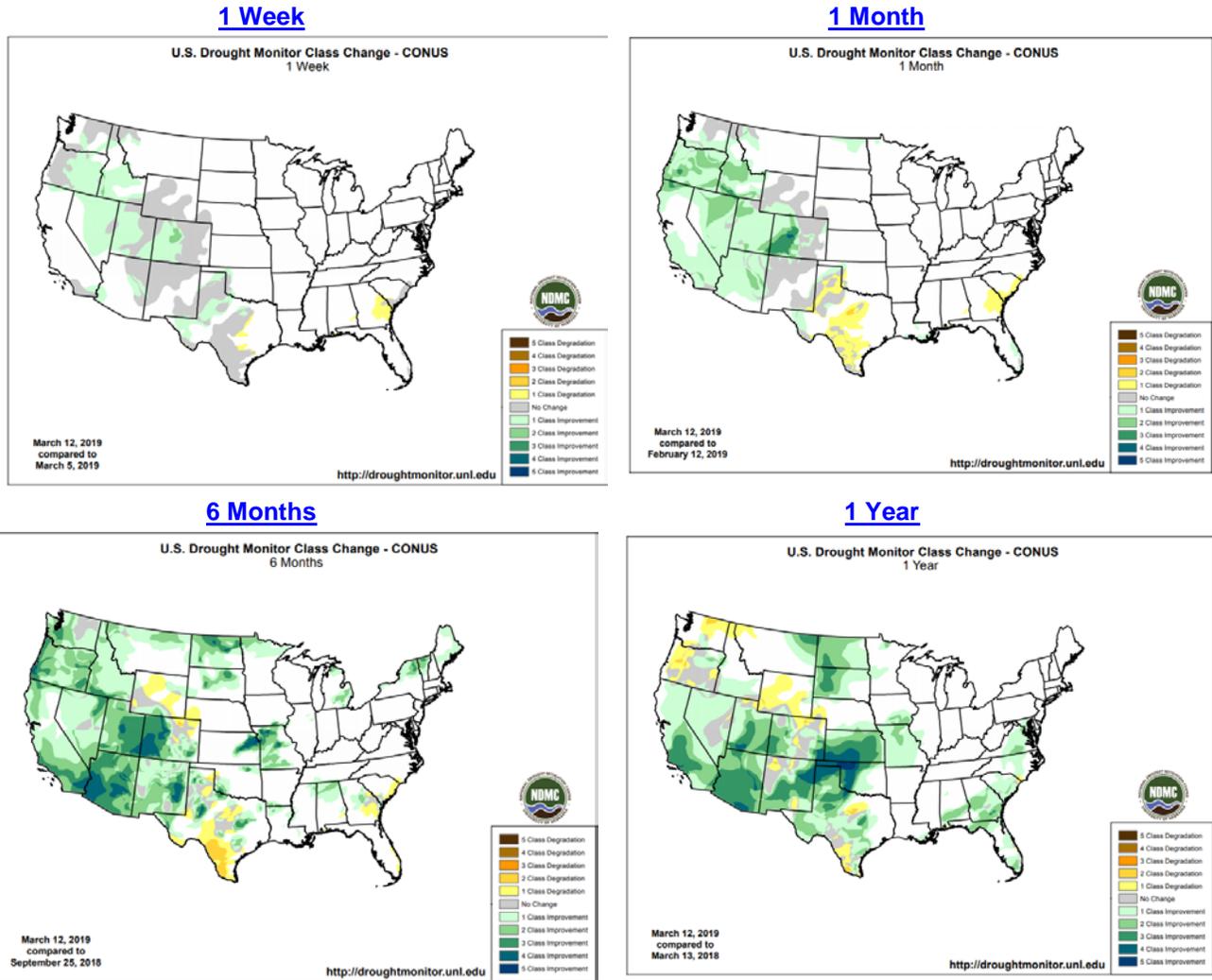
Current [National Drought Summary](#), March 14, 2019

Author: Jessica Blunden, NOAA/NCEI

“As spring nears, winter has kept its grip over much of the country. Temperatures were below average across the contiguous U.S., up to 25 degrees below normal for the week in the North. Following the wettest winter (December-February) on record for the contiguous U.S. as a whole, storms continued to bring heavy rain and snow, piling on snowpack and filling reservoirs in the West, but also causing avalanches in Colorado. Generally, heavy snow fell across high elevations in California, the Rockies into the Upper Great Lakes and Mid-Mississippi Valley, with heavy rain across parts of Southern California and the Tennessee Valley. The abundant precipitation in the West led to more widespread drought improvement. Little to no precipitation fell across the southern tier of the U.S., continuing a pattern of below-average rainfall seen over the last 2-3 months in parts of the Southeast, as dry conditions begin to emerge.”

Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center



[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

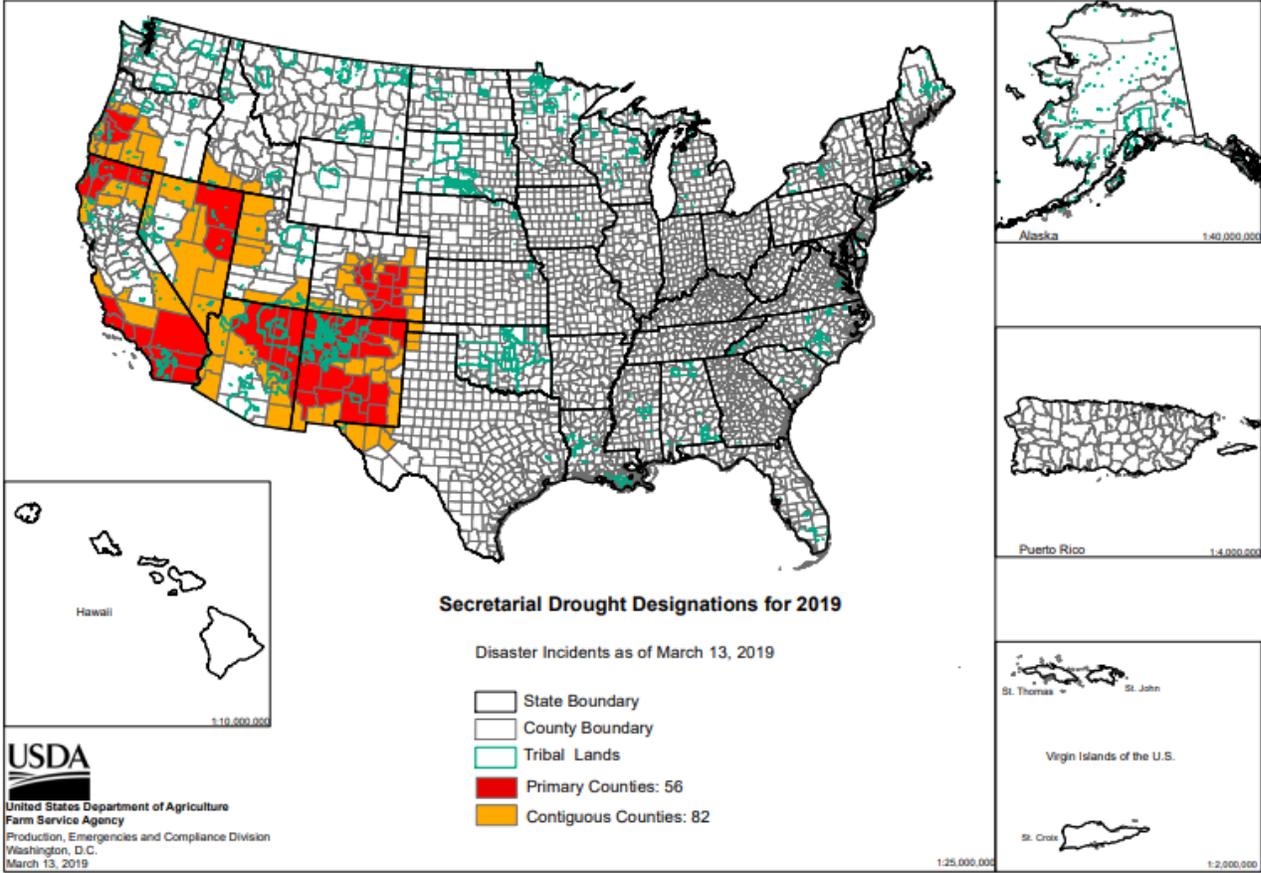
Highlighted Drought Resources

- [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](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency

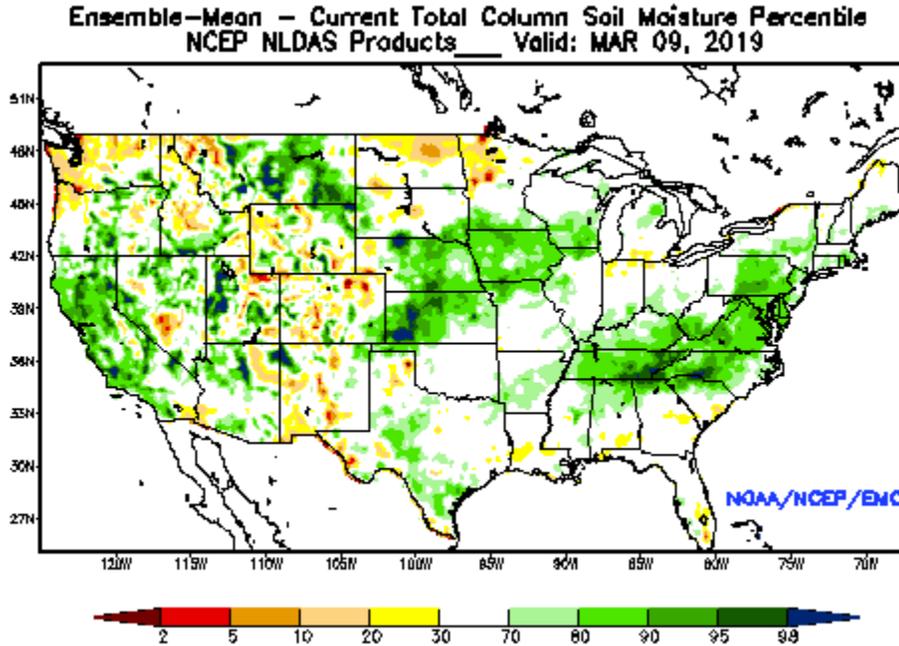
2019 Secretarial Drought Designations - All Drought



Other Climatic and Water Supply Indicators

Soil Moisture

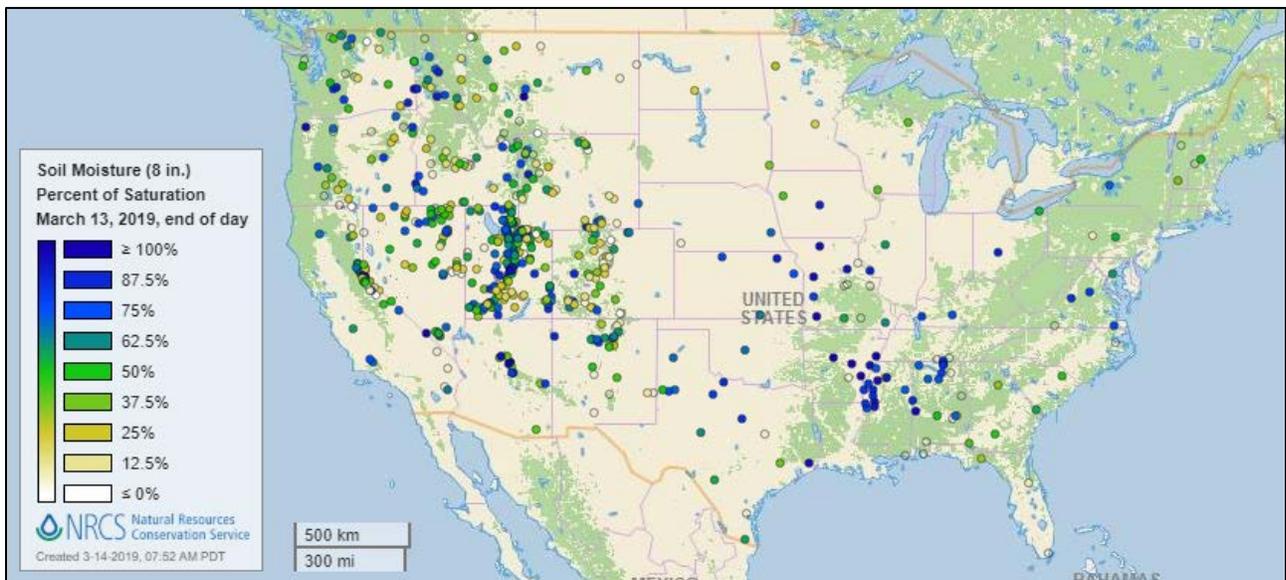
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of March 9, 2019

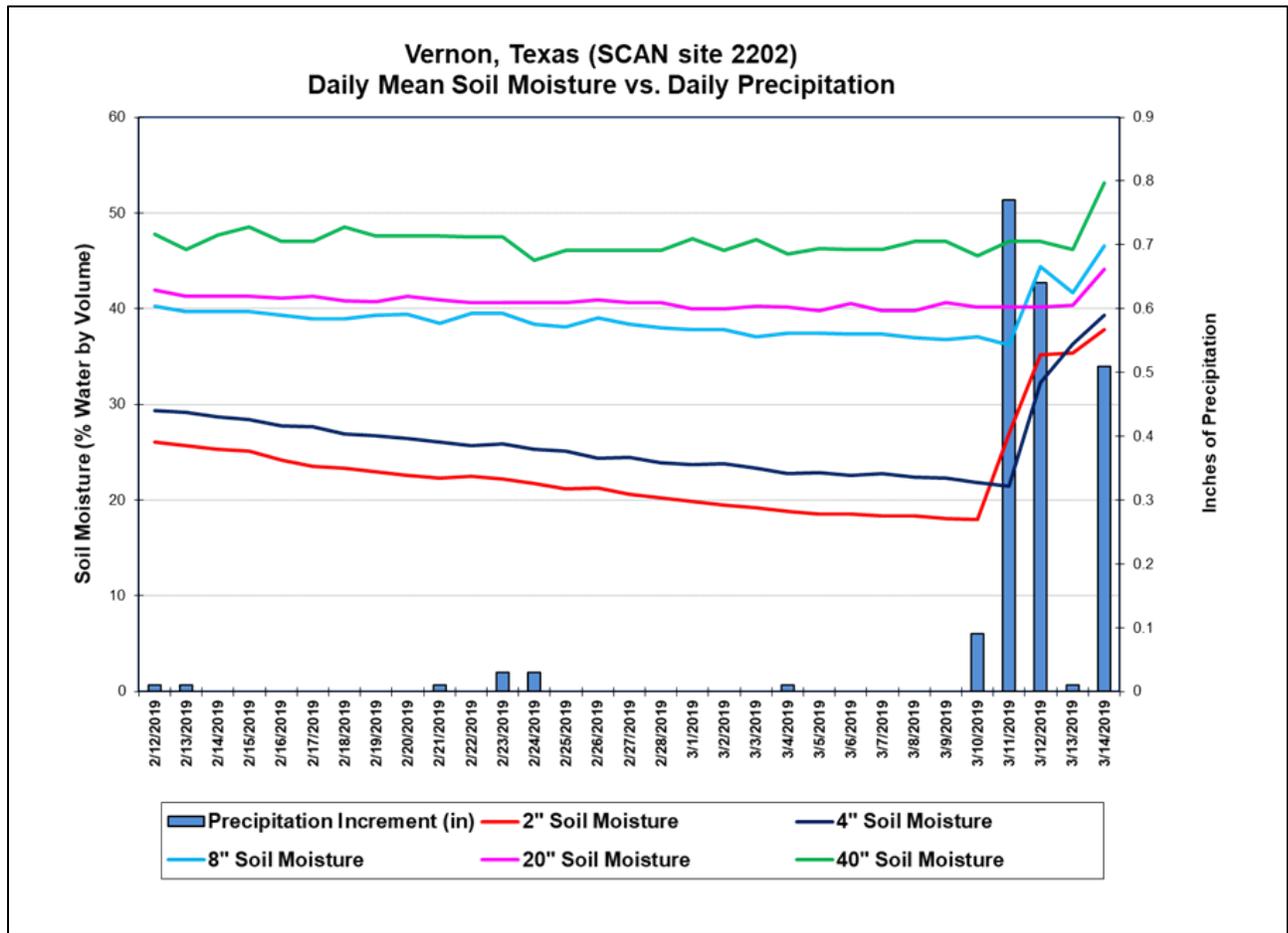
Soil Moisture Percent of Saturation

Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)



Soil Moisture Data

Source: NRCS [Soil Climate Analysis Network](#) (SCAN)



This graph shows the precipitation and soil moisture for the last 30 days at the [Vernon SCAN site 2202](#) in Texas. From March 10-14 the accumulated precipitation at the site totaled 2.02 inches followed by an increase in soil moisture at all sensor levels.

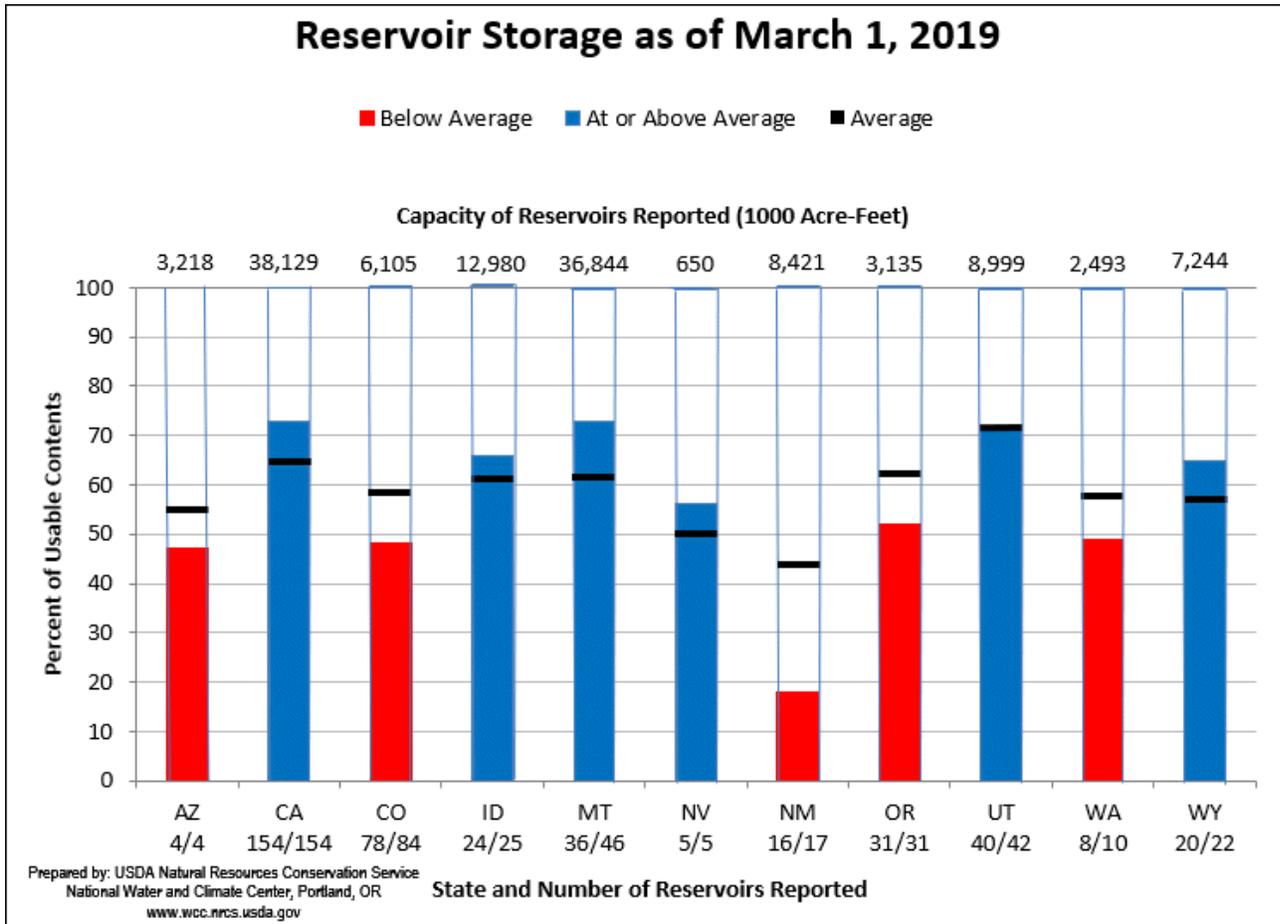
Soil Moisture Data Portals

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

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



March 1, 2019 Reservoir Storage: [Chart](#) | [Dataset](#)

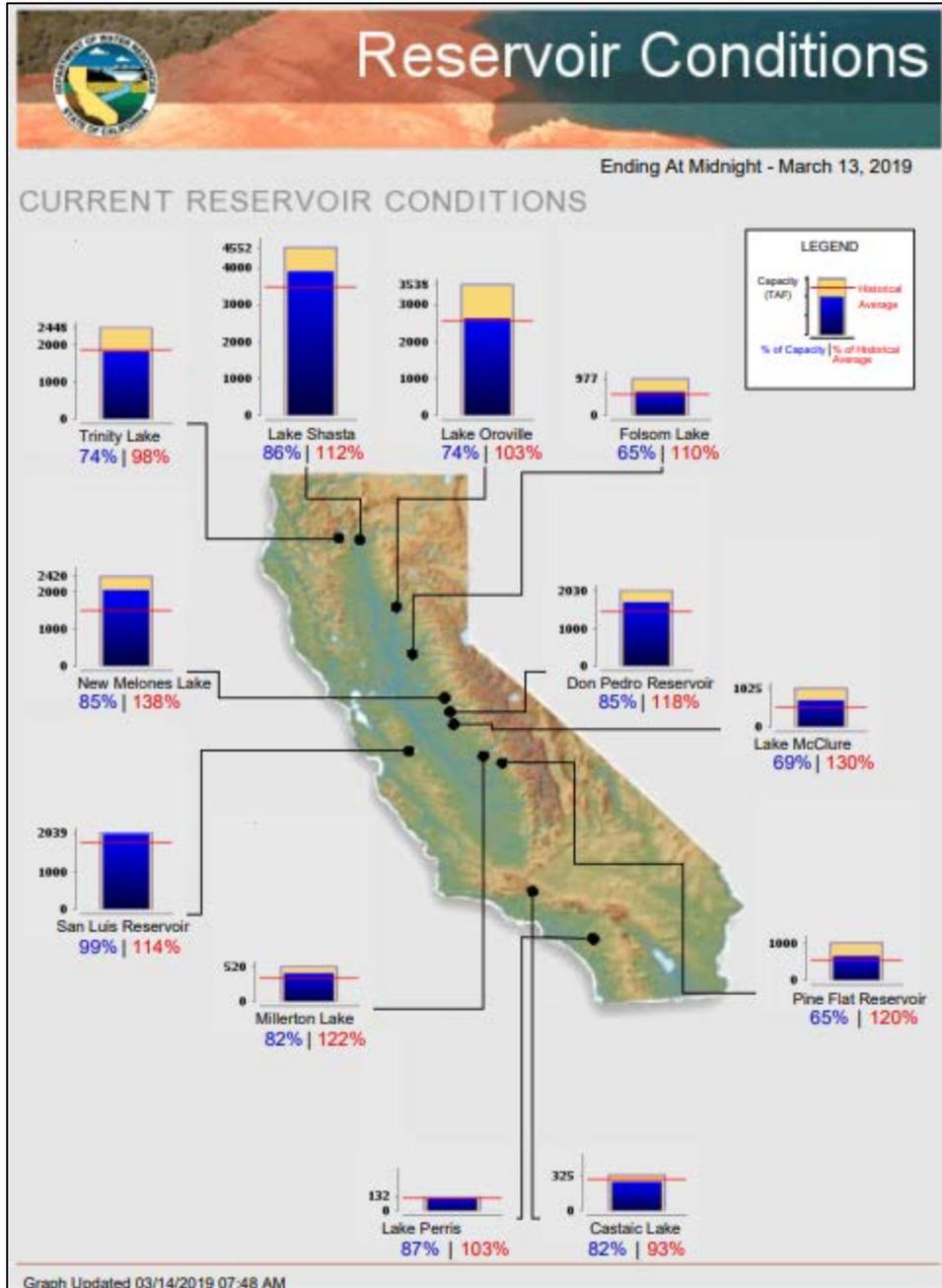
Hydromet Tea Cup Reservoir Depictions

Source: U.S. Bureau of Reclamation

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

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

Short- and Long-Range Outlooks

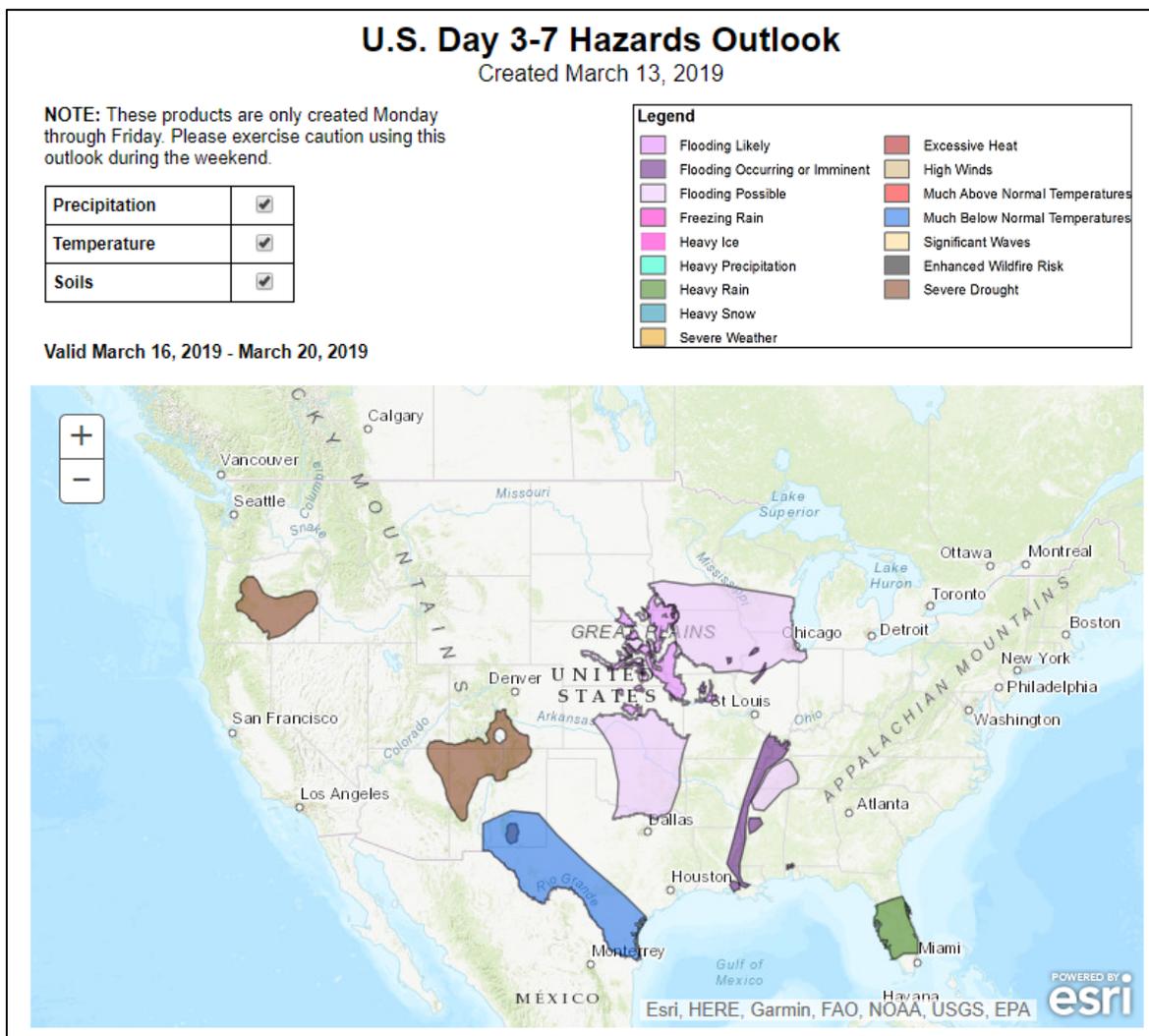
Agricultural Weather Highlights

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

National Outlook, Thursday, March 14, 2019: “A blockbuster storm system currently centered over the western Corn Belt will drift northeastward and slowly weaken. Lingering, late-week impacts will include blizzard recovery efforts from the central High Plains into the Red River Valley (of the North); ongoing flooding in the western Corn Belt and the upper Great Lakes region; and strong to locally severe thunderstorms across the Southeast and lower Midwest. During the weekend, cool, dry weather will cover most of the country, except for a warming trend in the Far West. Mostly dry weather will continue early next week, while cool conditions will persist across the southern and eastern U.S. The NWS 6- to 10-day outlook for March 19 – 23 calls for the likelihood of near- or below-normal temperatures and precipitation across much of the central and eastern U.S. Warmer-than-normal weather will prevail in the upper Midwest and the Far West, while wetter-than-normal conditions should be limited to Florida’s peninsula and from California to the Rio Grande Valley.”

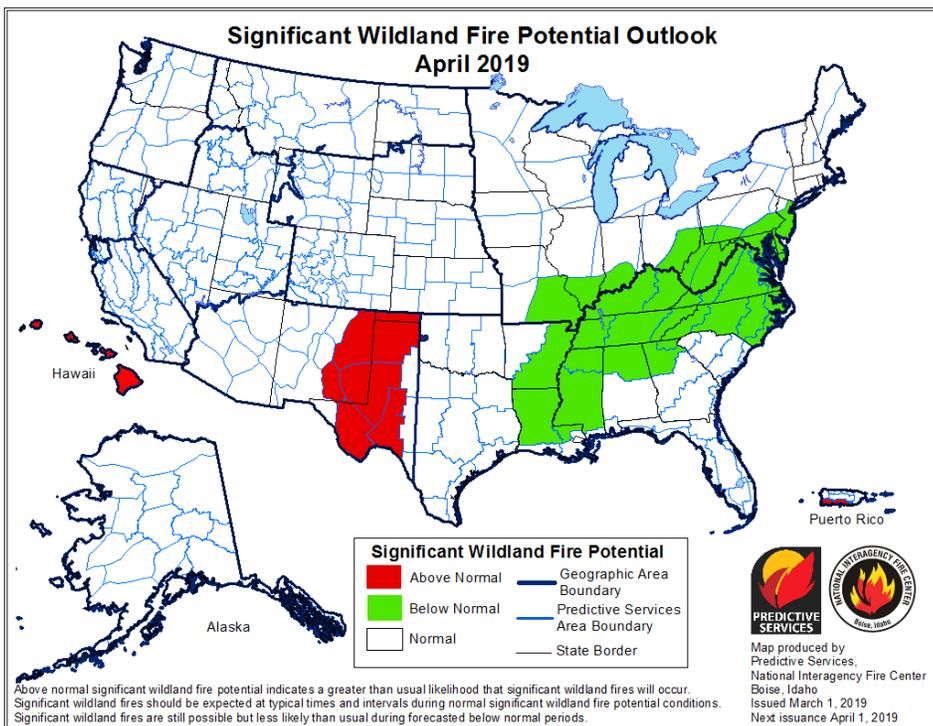
Weather Hazards Outlook: [March 16 – 20, 2019](#)

Source: NOAA Climate Prediction Center



Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center

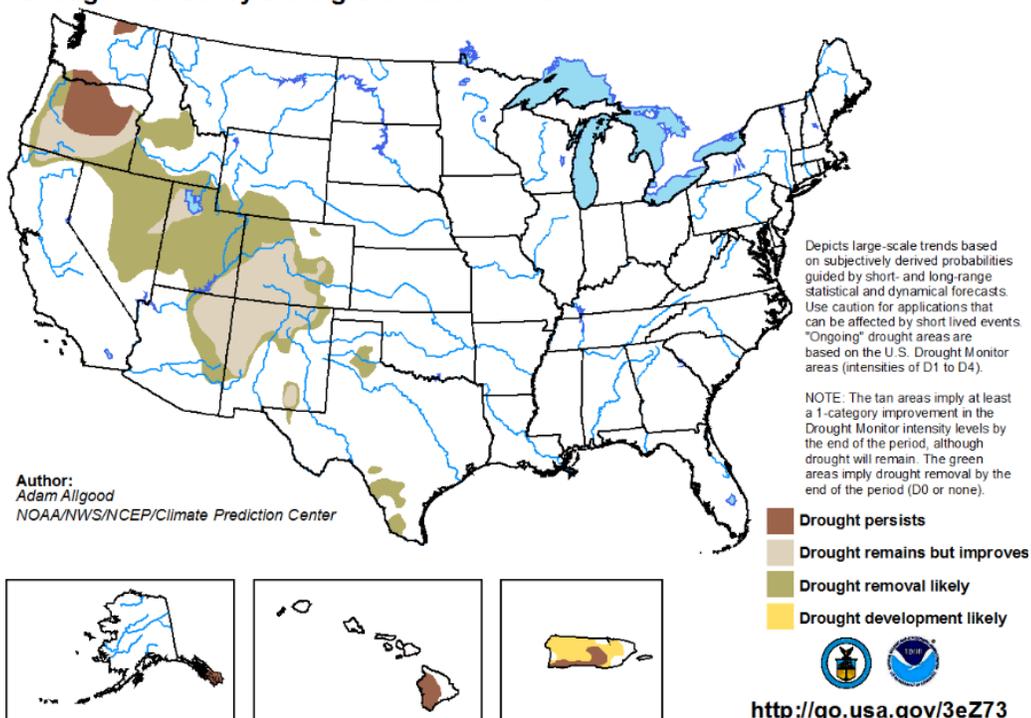


Seasonal Drought Outlook: February 21 – May 31, 2019

Source: National Weather Service

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

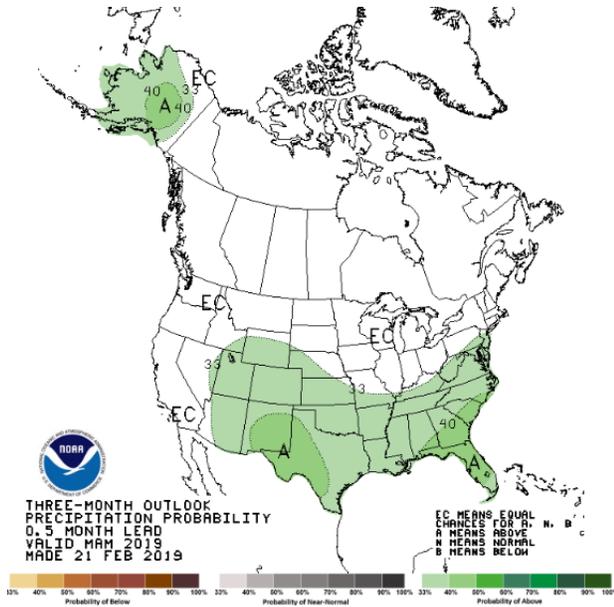
Valid for February 21 - May 31, 2019
Released February 21



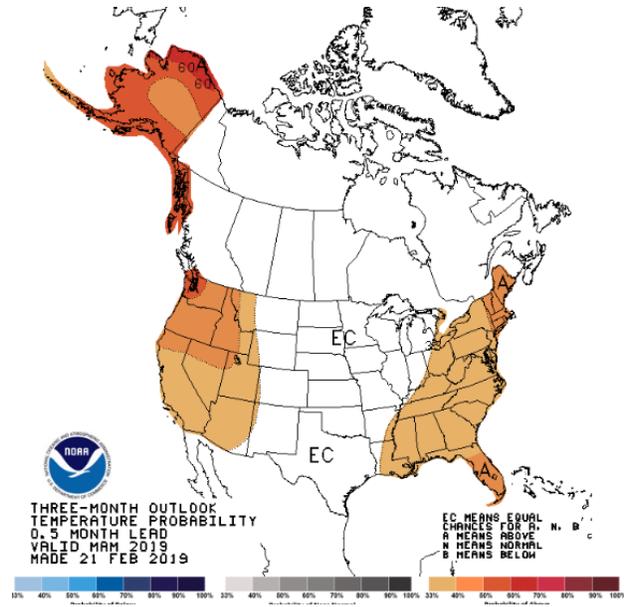
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[March-April-May \(MAM\) 2019 precipitation and temperature outlook summaries](#)

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](#).