



Water and Climate Update

March 1, 2018

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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Recent storms increase Pacific Northwest snowpack



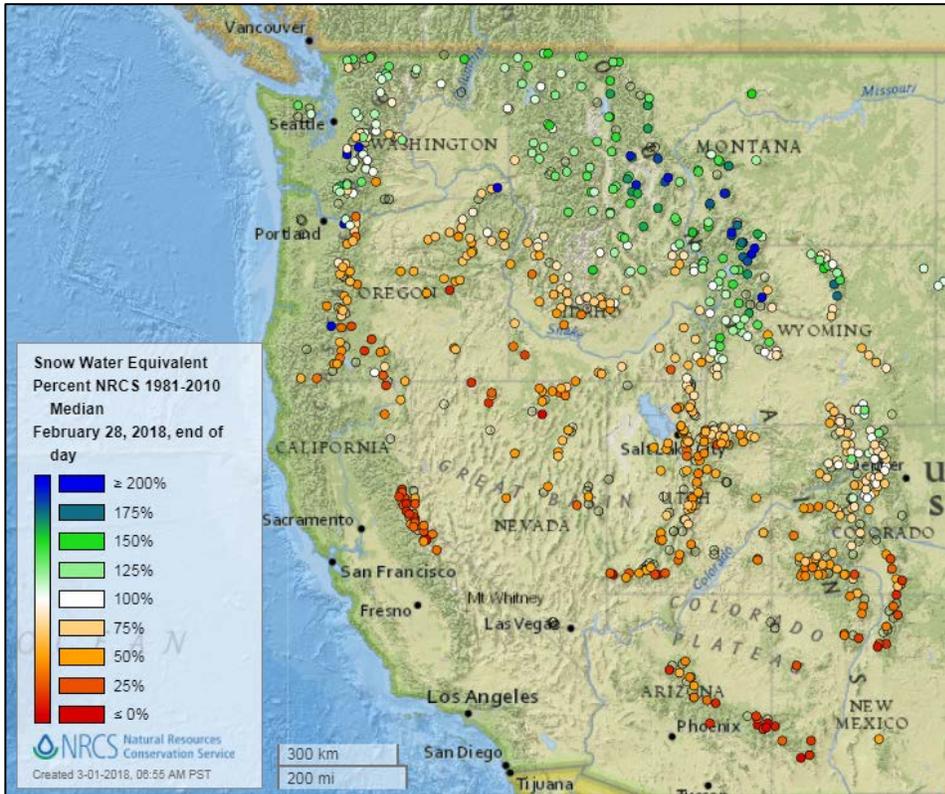
Three to four feet of snow fell in the Cascade Mountains of the Pacific Northwest this week, boosting the already healthy snowpack in the north and adding to the low snowpack in the southern part of the range. The percent of normal increase for the week ranged from near normal to well over 500% of normal at SNOTEL sites, and cold temperatures increased snow accumulation at the lower elevations and valleys. The Water Year 2018 snowpack jumped nearly 20% in the region, with increases also seen in the northern Rockies of Idaho and Montana. Photo courtesy: Jolyne Lea, NRCS/NWCC.

Related:

- [Mountain snow: avalanche danger, snowpack help](#) KOIN, OR
- [After storms, Oregon's snowpack improves, more snow forecast for mountains](#) KATU, OR
- [UPDATE: Avalanches kill two teen snowshoers and a snowmobiler, blocks Highway 20](#) KPQ, WA
- [North Cascades Highway won't open until Wednesday due to avalanche, WSDOT says](#) KING5, WA
- [Rough winter weather closes roads, more snow expected](#) Rexburg Standard Journal, ID

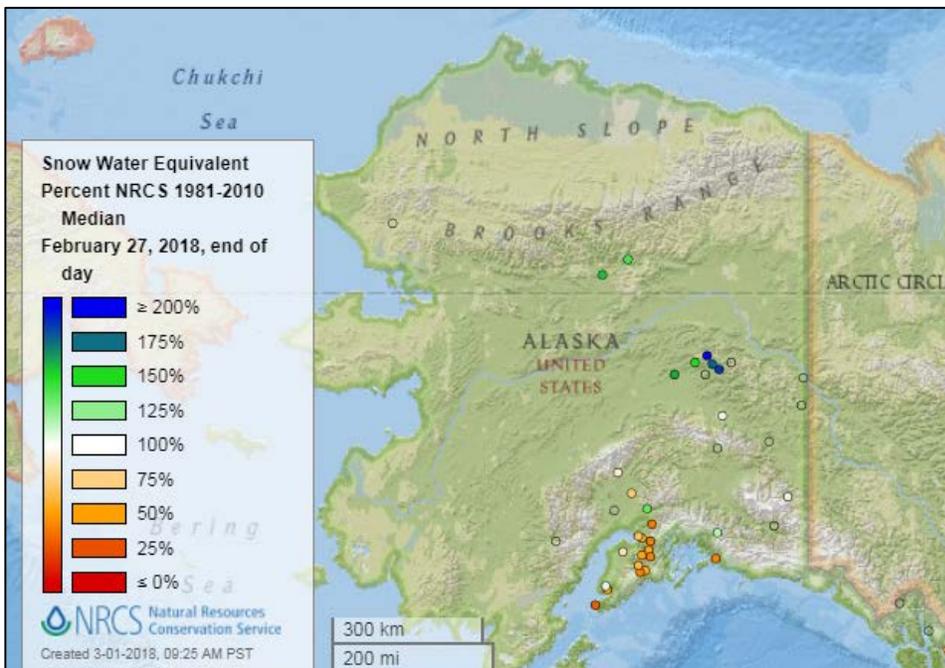
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

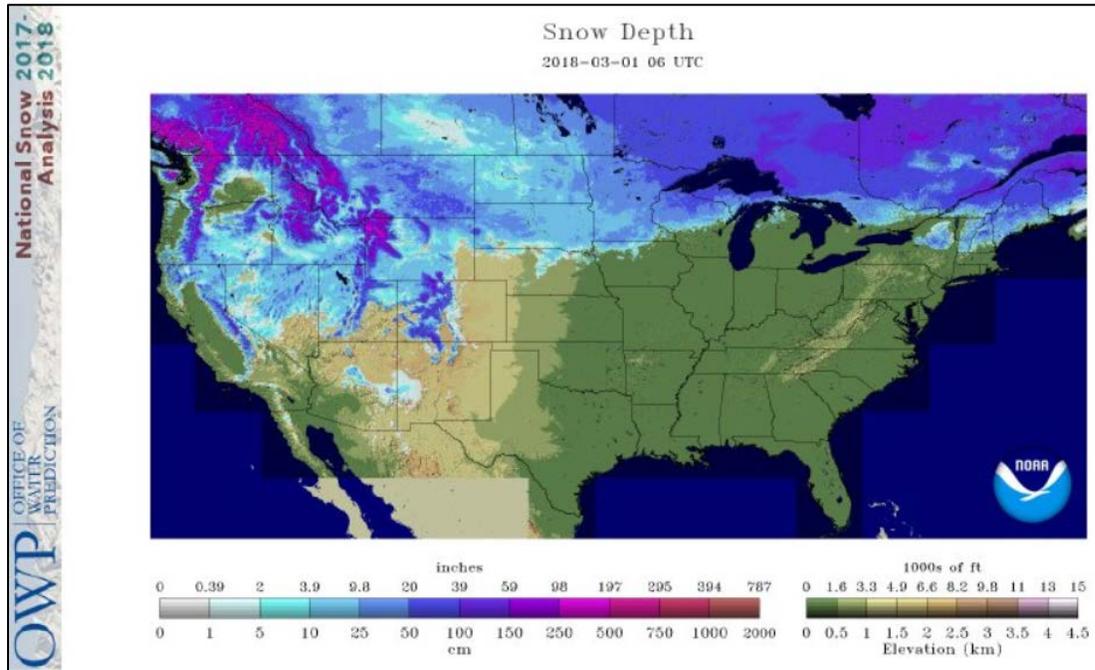
See also:
[Snow water equivalent values \(inches\) map](#)



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

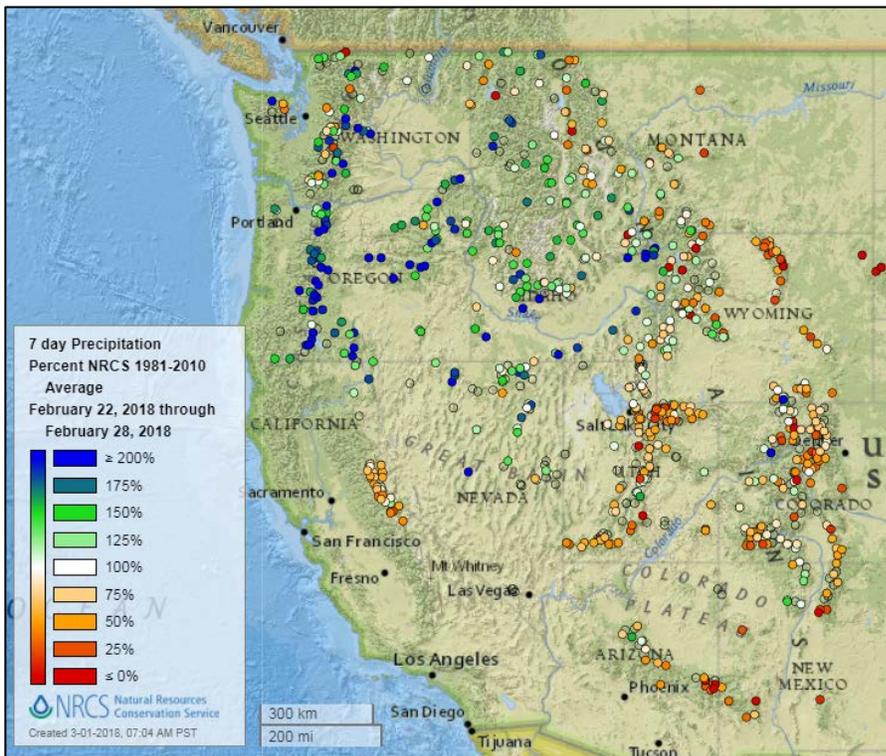
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network

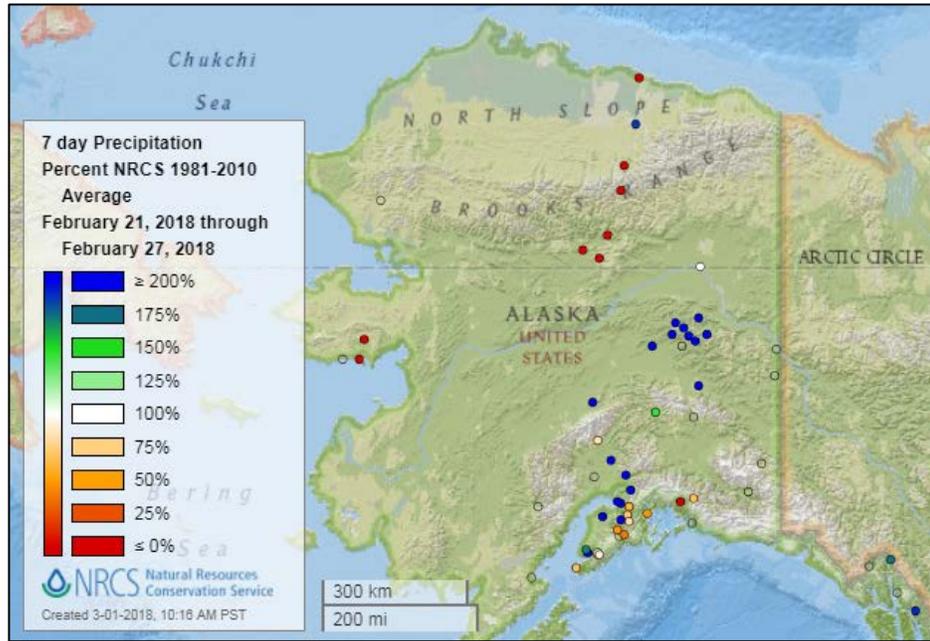


[7-day precipitation percent of average map](#)

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](#)



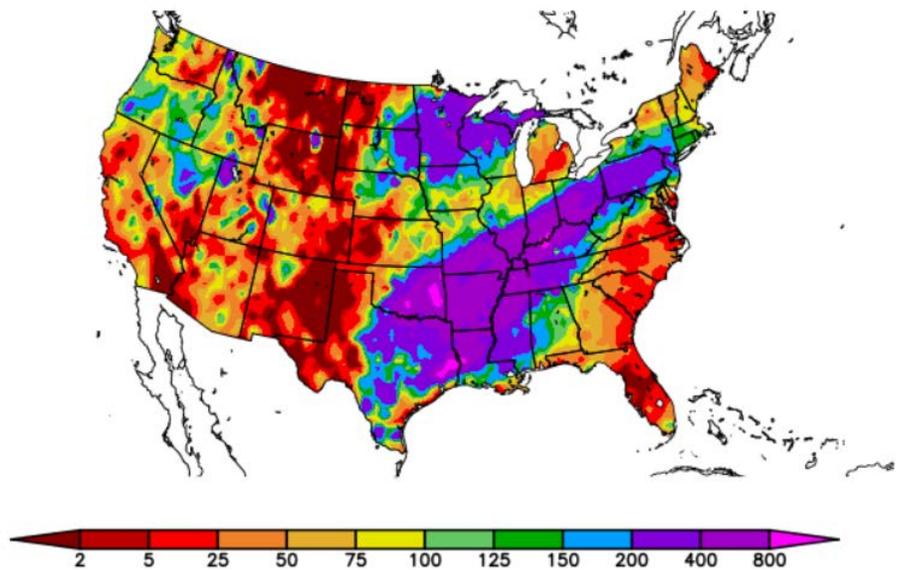
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
2/22/2018 – 2/28/2018

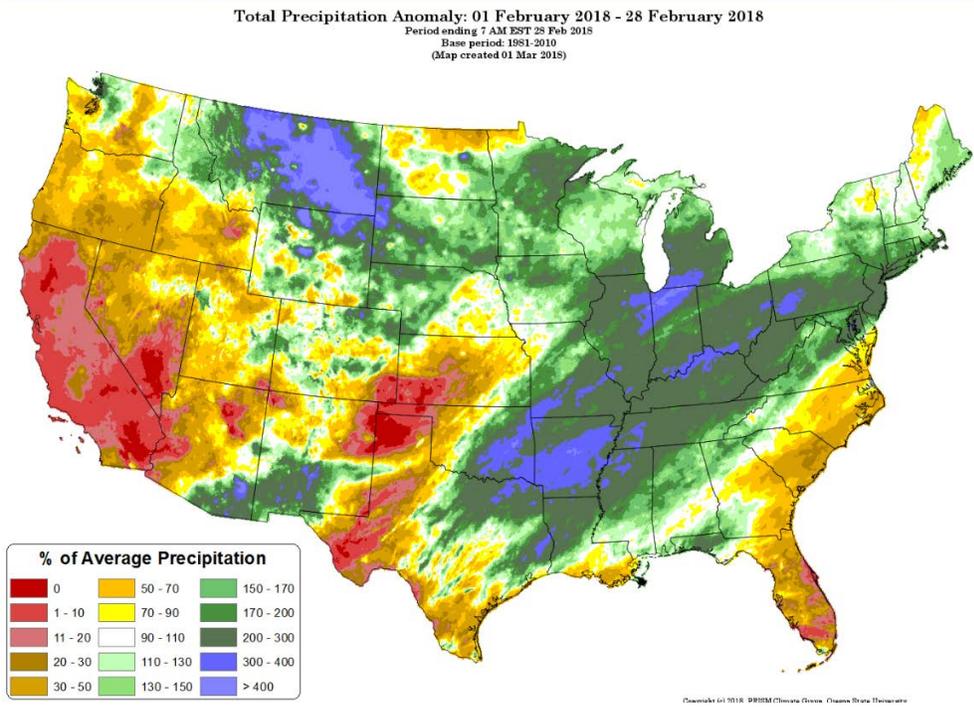


Generated 3/1/2018 at HPRCC using provisional data

NOAA Regional Climate Centers

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

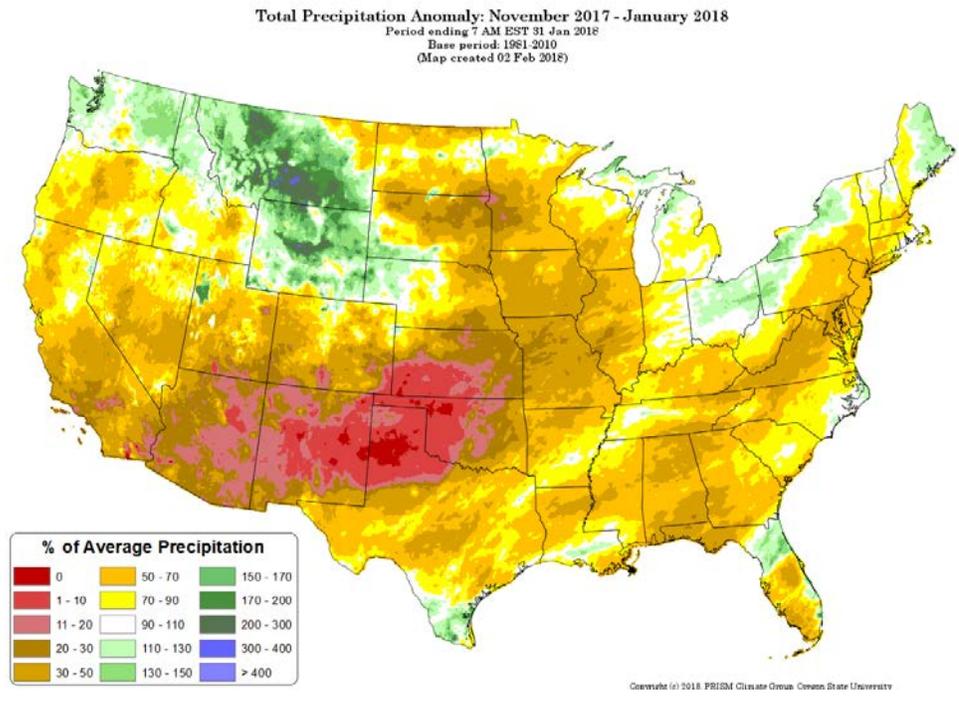


[Previous month national total precipitation percent of average map](#)

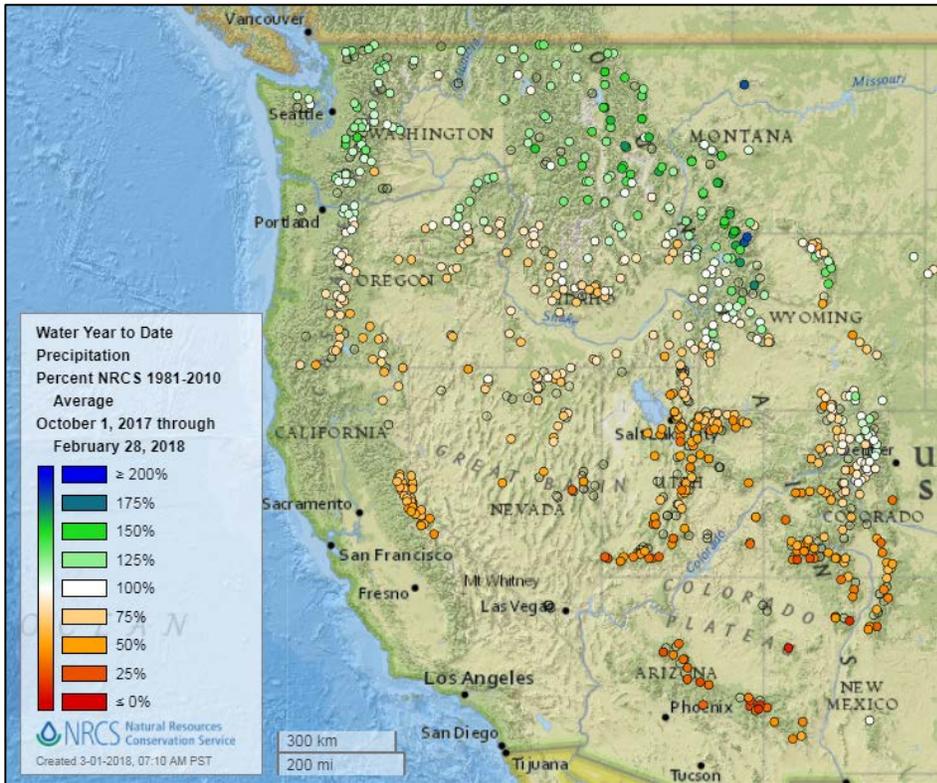
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[November 2017 through January 2018 total precipitation percent of average map](#)

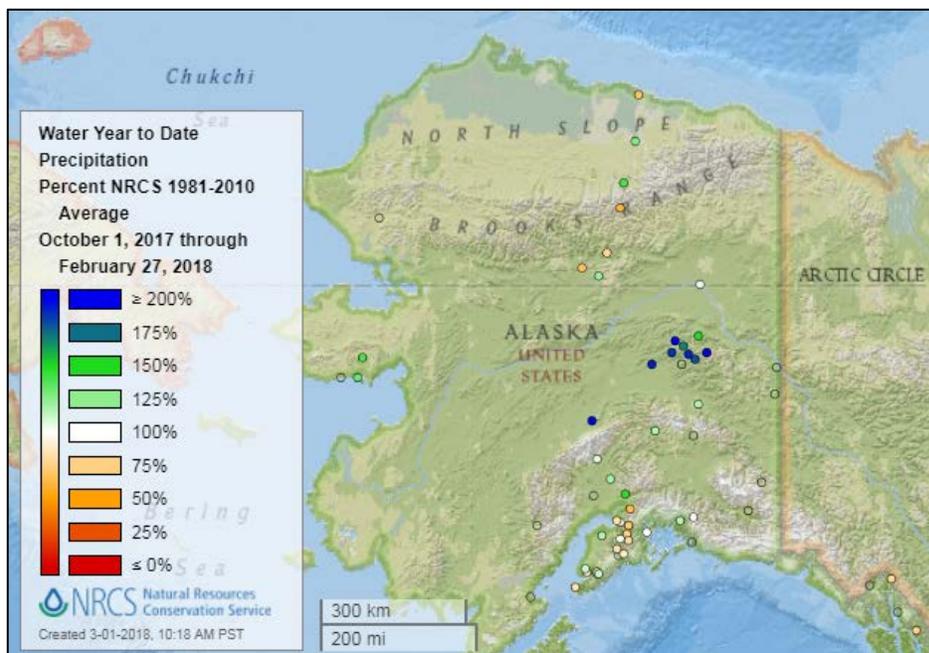


Water Year-to-Date, NRCS SNOTEL Network



[2018 water year-to-date precipitation percent of average map](#)

See also: [2018 water year-to-date precipitation values \(inches\)](#)



[Alaska 2018 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2018 water year-to-date precipitation values \(inches\) map](#)

Temperature

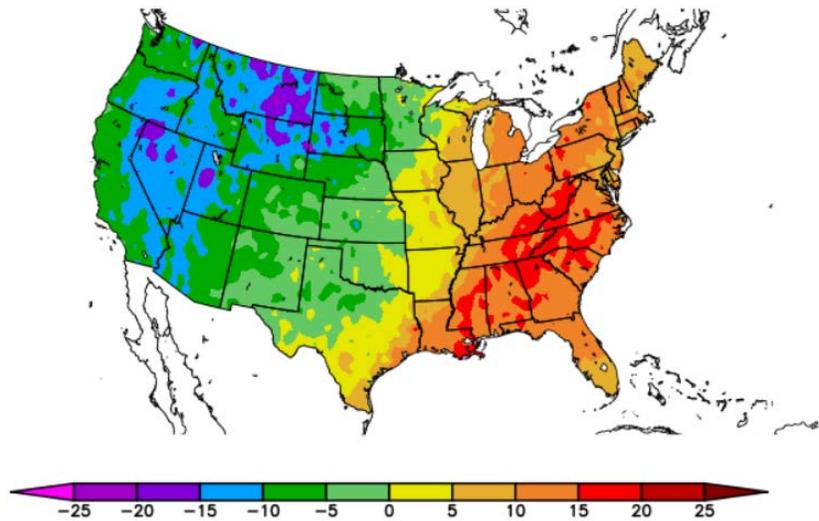
Last 7 Days, National Weather Service (NWS) Networks

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)
2/22/2018 – 2/28/2018



Generated 3/1/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

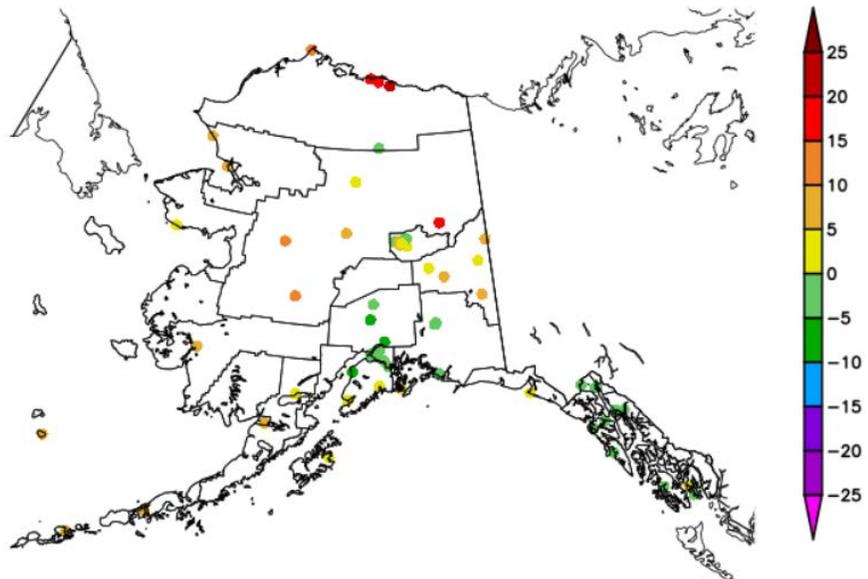
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
2/22/2018 – 2/28/2018



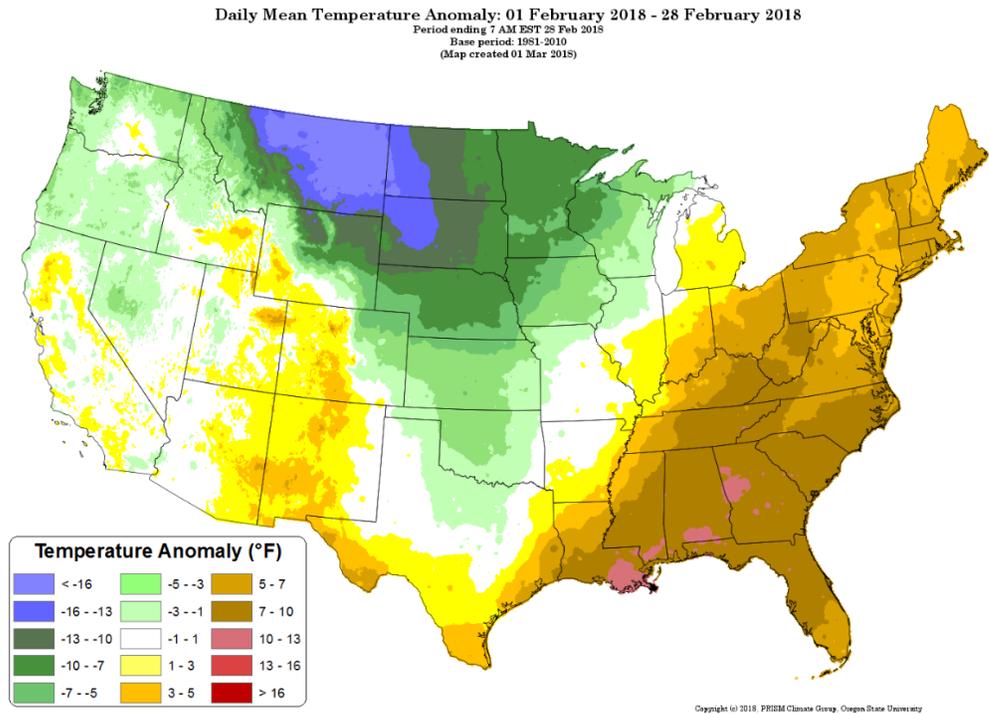
Generated 3/1/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

Water and Climate Update

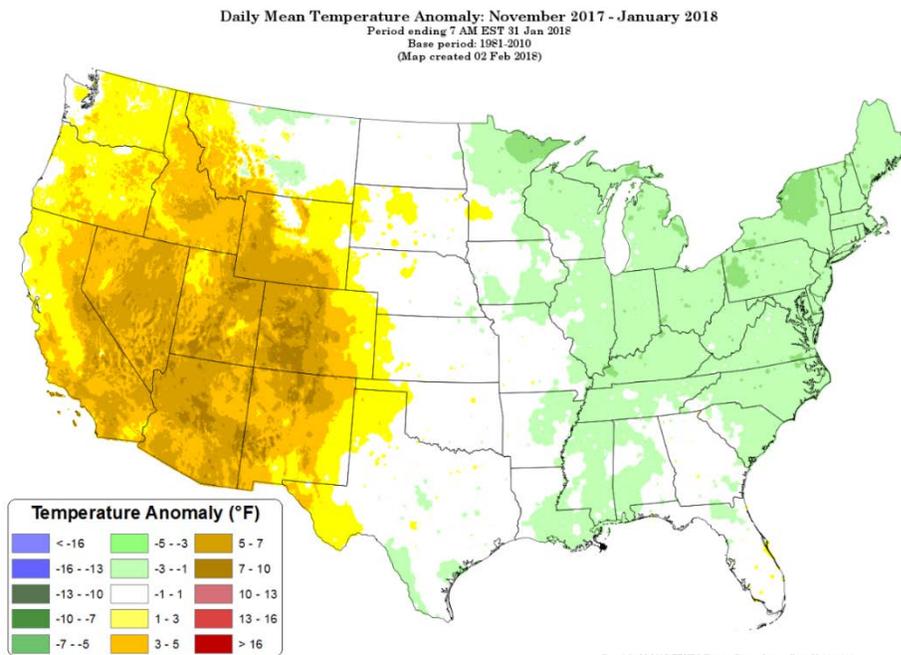
Previous Month, All Available Data Including SNOTEL and NWS Networks Source: PRISM

[Previous month national daily mean temperature anomaly map](#)



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

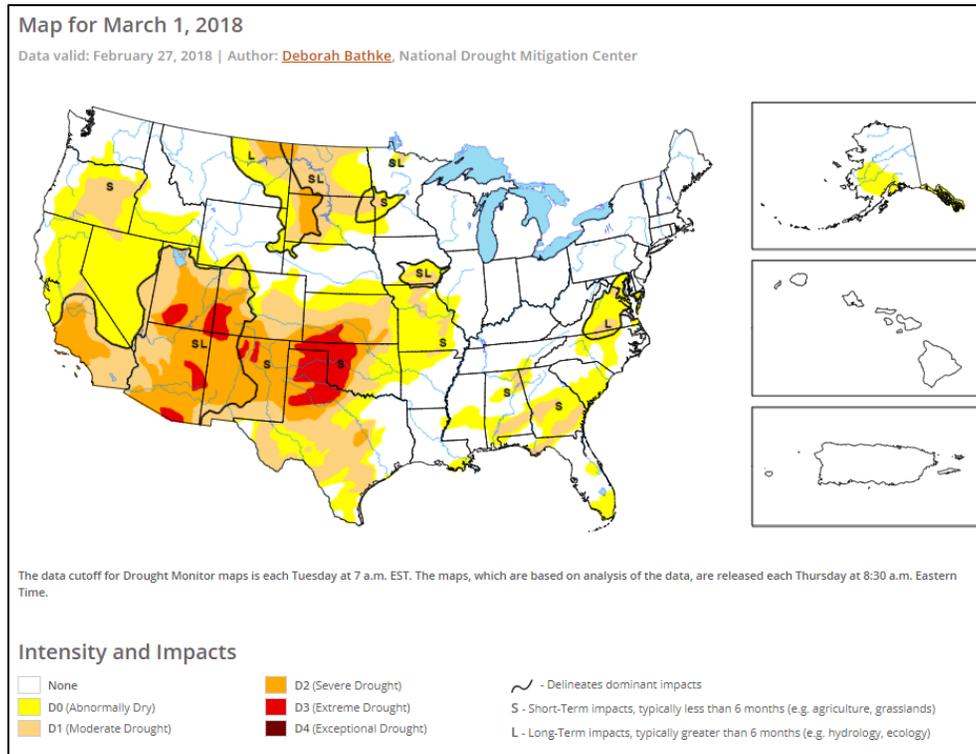
[November 2017 through January 2018 daily mean temperature anomaly map](#)



Drought

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

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



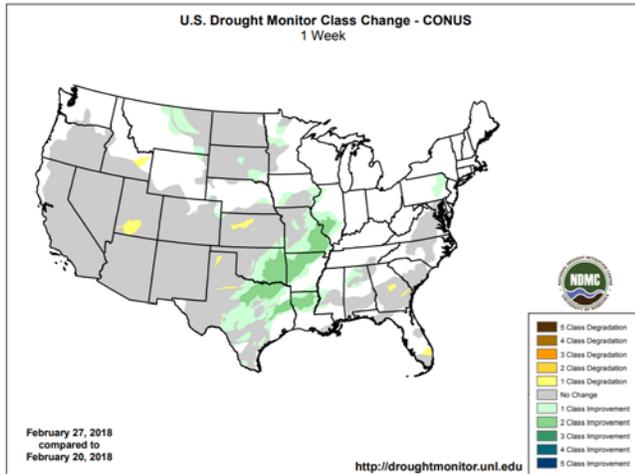
Current [National Drought Summary](#), March 1, 2018

Author: Deborah Bathke, National Drought Mitigation Center

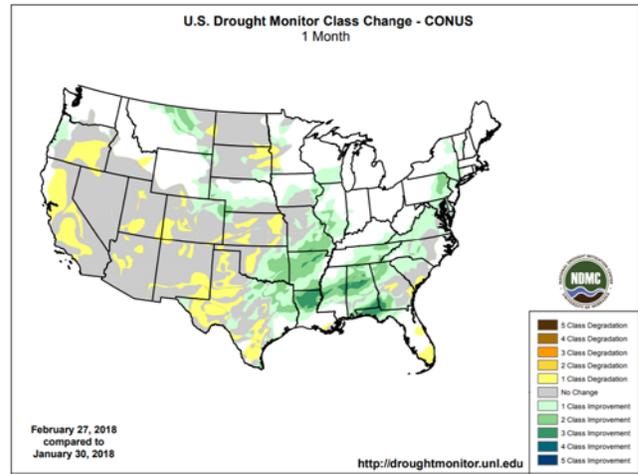
“This past week was marked by heavy rain across the mid-South and lower Midwest. The excessive rain broke daily precipitation records, caused flooding in many locations, and led to significant improvements to drought. The upper Midwest received significant snowfall as colder than normal temperatures dominated the area. Precipitation also fell in other parts of the country including the northern Plains, Northeast, and much of the West. Dry weather was confined to southern California, the Desert Southwest, and lower Southeast. A stark temperature contrast existed between the western and eastern halves of the country. While the West saw record-breaking cold, the East saw record-breaking warmth. Temperatures in the West were typically between 8 and 12 degrees below normal, though the northern Rockies and High Plains saw departures of more than 20 degrees below normal. In the eastern half of the country, departures ranged from 2 to more than 20 degrees above normal.”

Changes in Drought Monitor Categories over Time

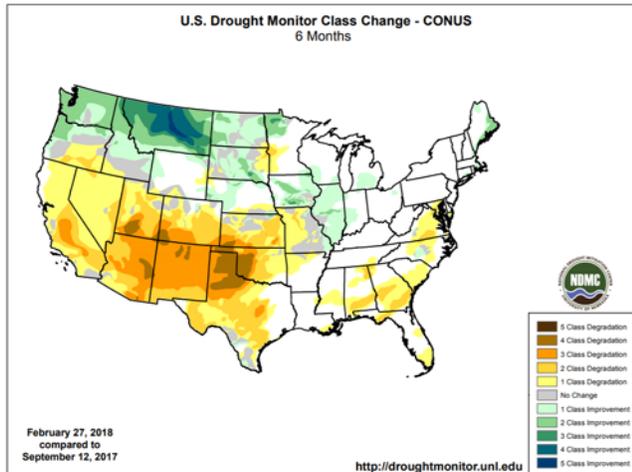
1 Week



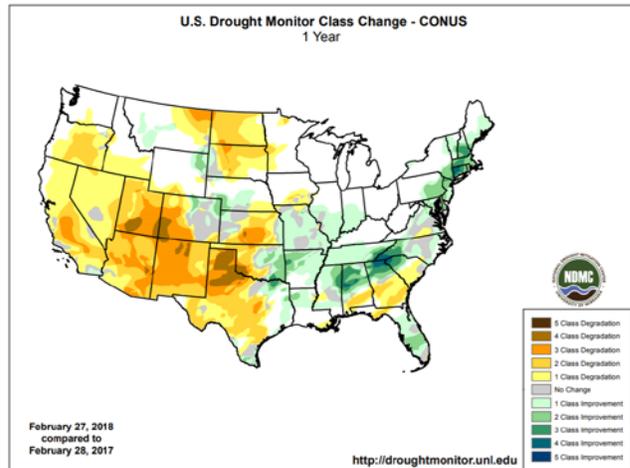
1 Month



6 Months



1 Year

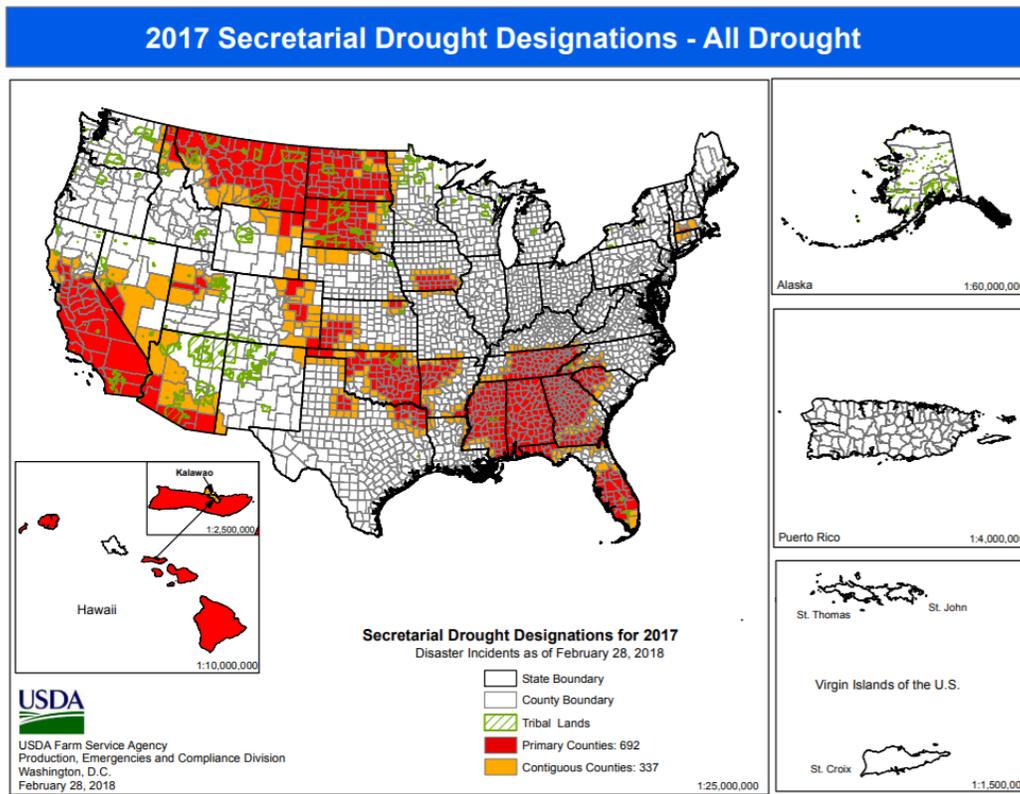


Changes in drought conditions over the last 12 months

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](#)

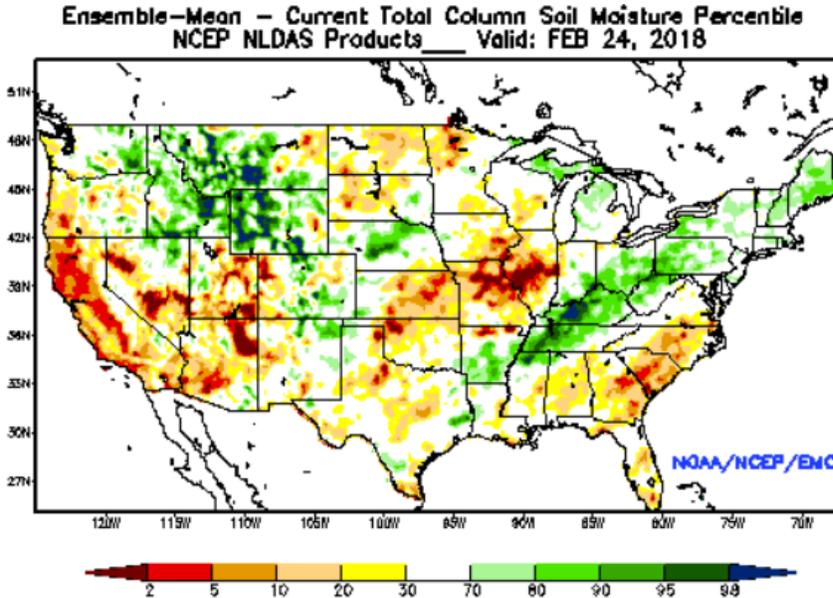
USDA 2017 Secretarial Drought Designations



Other Climatic and Water Supply Indicators

Soil Moisture

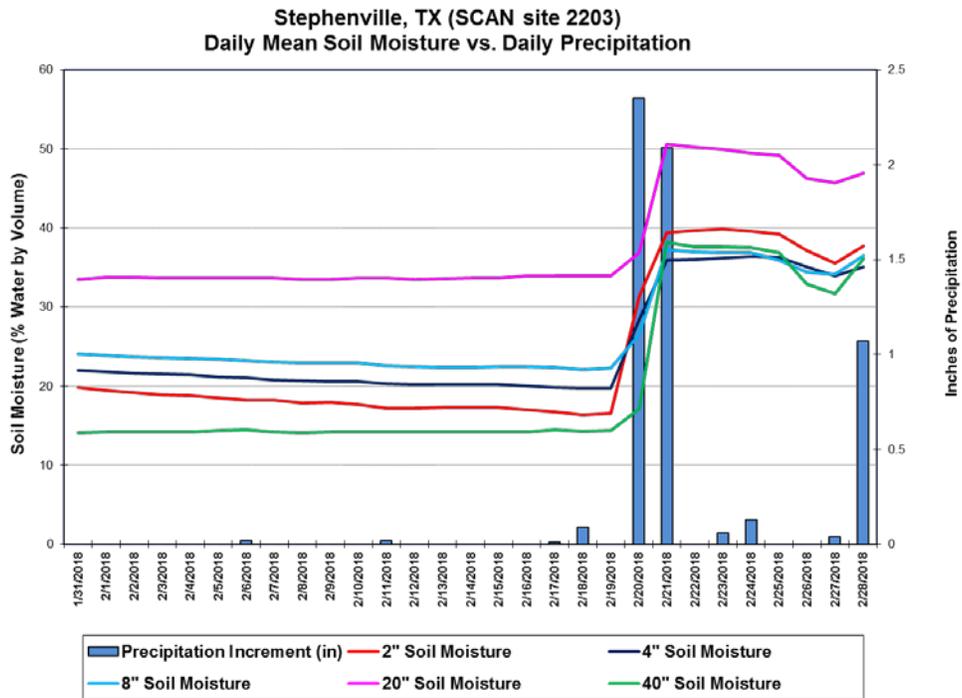
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of February 24, 2018.

Soil Moisture Data

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



The chart shows precipitation and soil moisture for the last 30 days at the [Stephenville SCAN site 2203](#) in Texas. The past 30 days show very dry conditions with little or no precipitation until heavy rain fell on February 20 and 21. This increased soil moisture dramatically at all depth sensors.

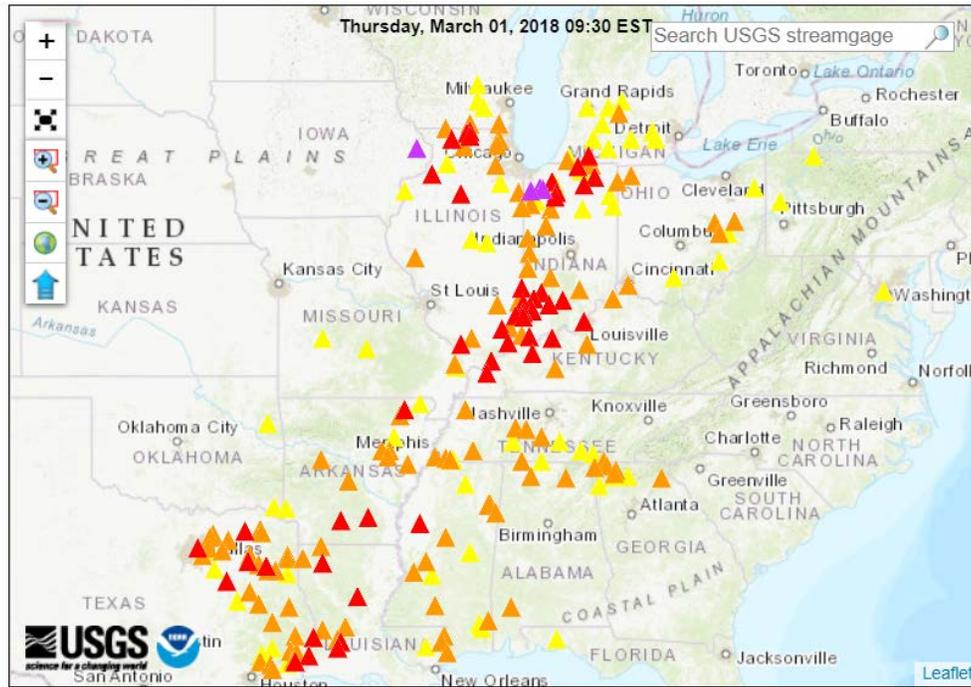
Soil Moisture Data Portals

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

Streamflow

Source: USGS

Map of flood and high flow conditions



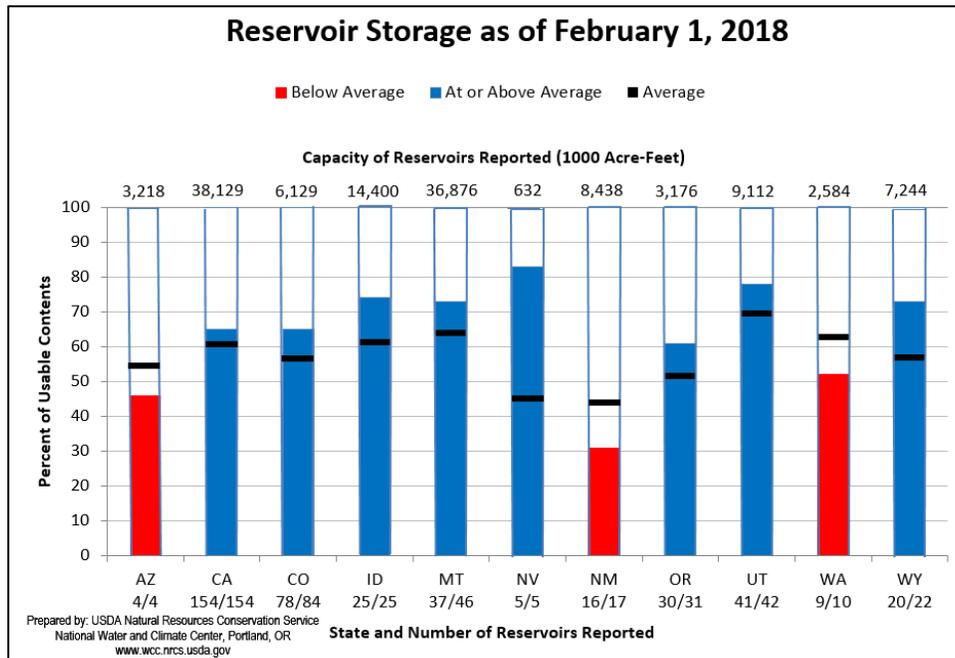
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgauge with flood stage	○ Streamgauge without flood stage		

[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



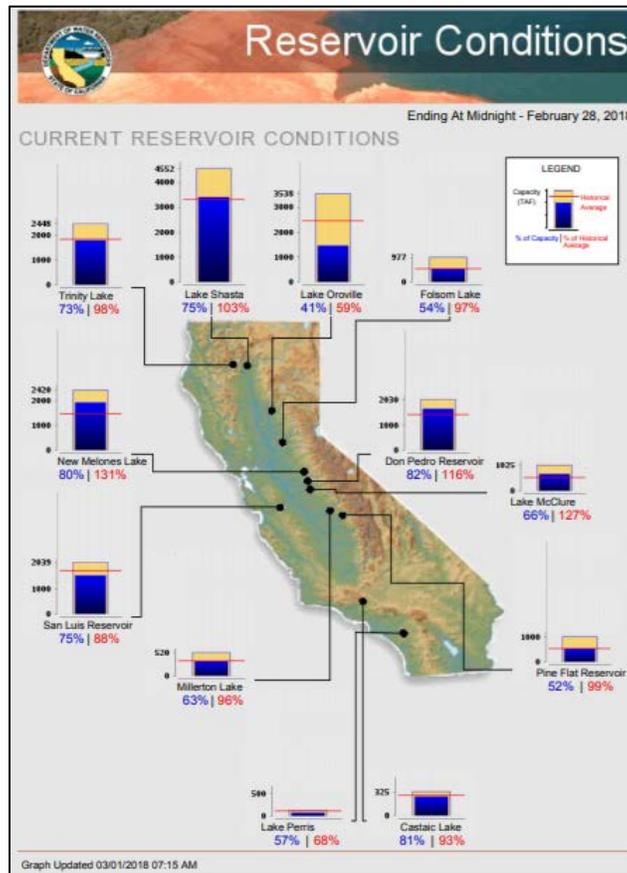
February 1 Reservoir Storage: [Chart](#) | [Dataset](#)

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](#)

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

Short- and Long-Range Outlooks

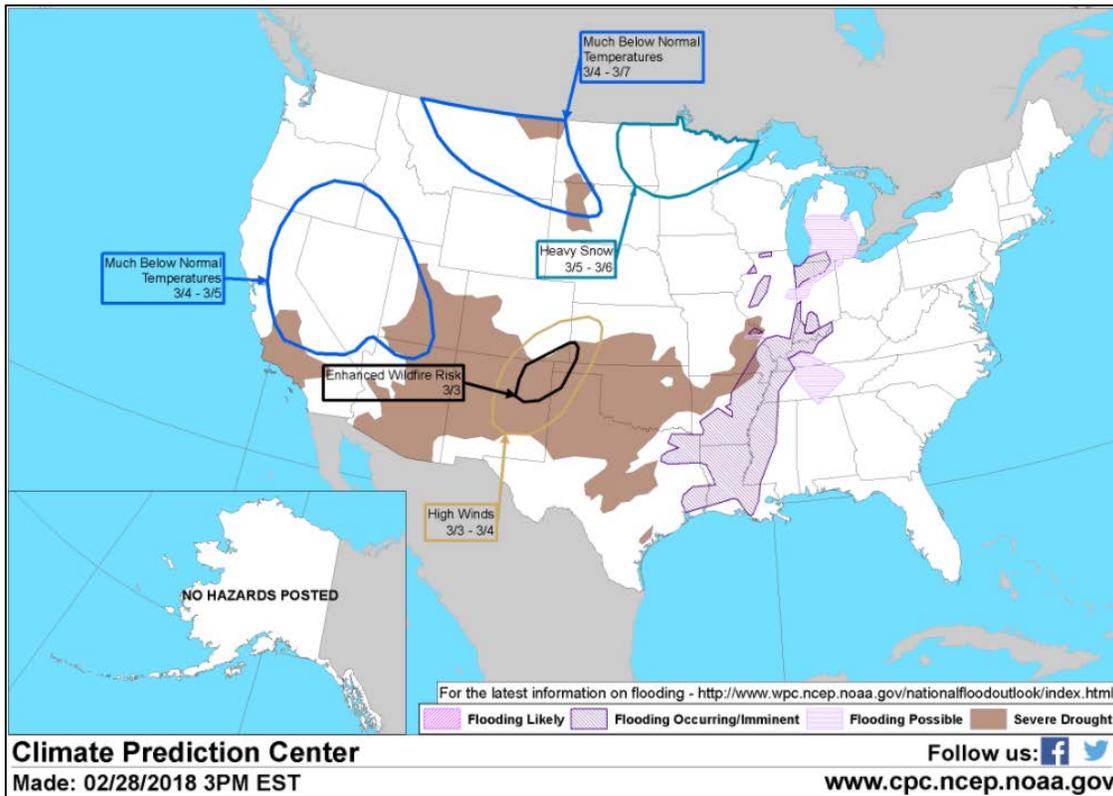
Agricultural Weather Highlights

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

[National Outlook, Thursday, March 1](#): “For the remainder of today, rain will continue to aggravate flooding in the central and eastern Corn Belt and the interior Southeast. Farther north, rain will change to snow later today and on Friday across the lower Great Lakes region and the Northeast, accompanied by increasing winds. In fact, high winds could topple trees and result in power outages in portions of the Mid-Atlantic region. Meanwhile, one of the most impressive storms of the season will continue to affect the West into the weekend. Early next week, the storm will cross the nation’s midsection, potentially producing heavy snow across the northern Plains and upper Midwest. In contrast, dry weather will prevail during the next 5 days across Florida’s peninsula and the southern High Plains. The NWS 6- to 10-day outlook for March 7 – 11 calls for the likelihood of near- to below-normal temperatures nationwide, except for warmer-than-normal weather in parts of the Southwest and Northeast. Meanwhile, near- to above-normal precipitation in the Pacific Coast States and the eastern one-half of the U.S. will contrast with drier-than-normal conditions across the Rockies and High Plains.”

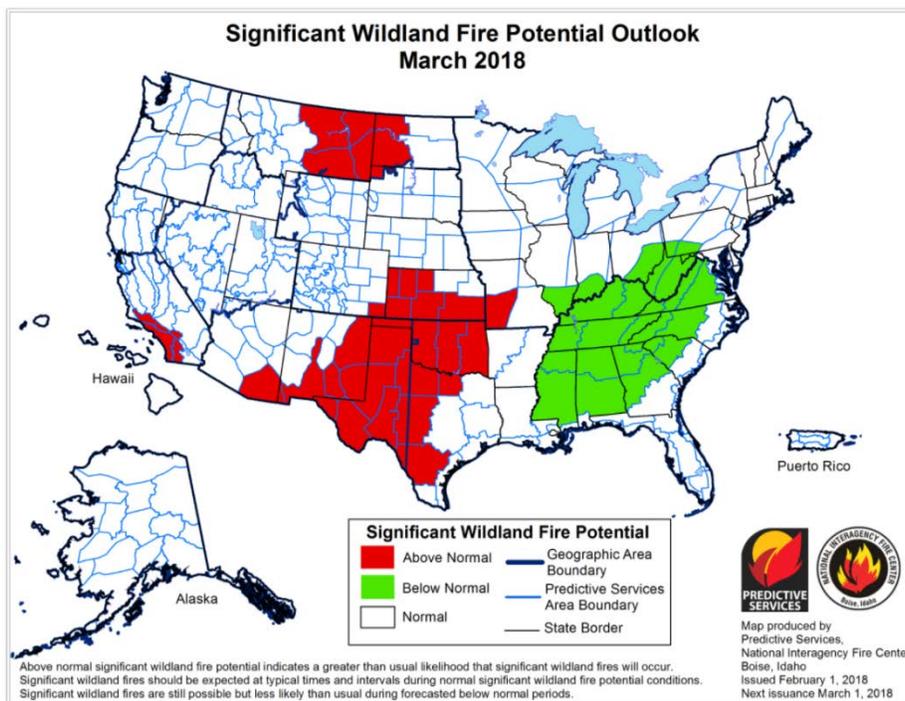
Weather Hazard Outlook [March 3 - 7, 2018](#)

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

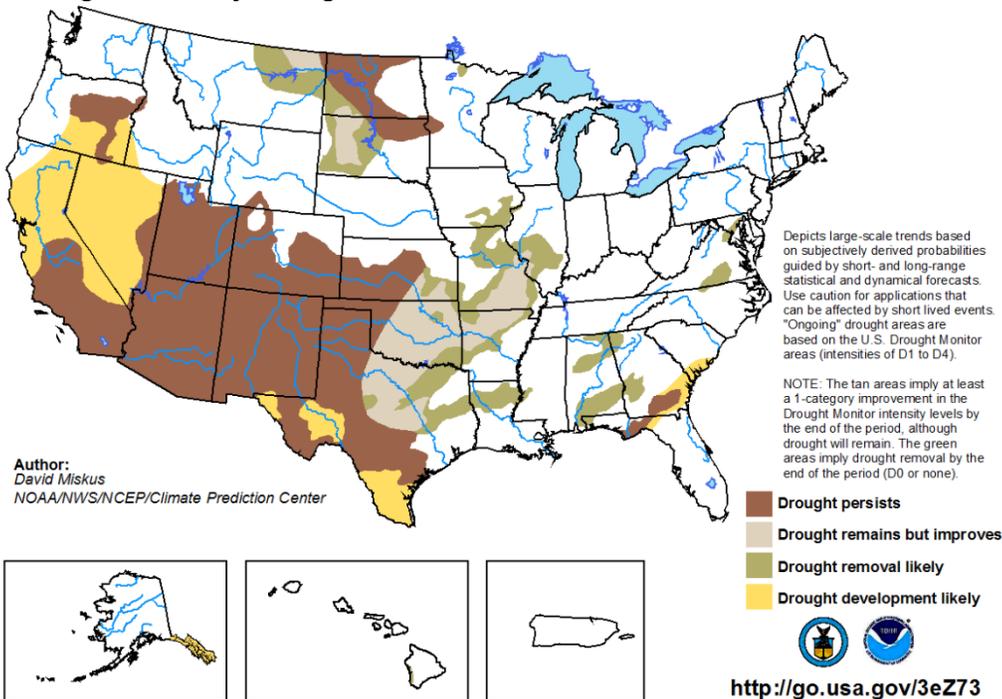
Source: National Interagency Fire Center



Seasonal Drought Outlook: [January 18 – April 30, 2018](#) Source: National Weather Service

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

Valid for February 15 - May 31, 2018
Released February 15, 2018

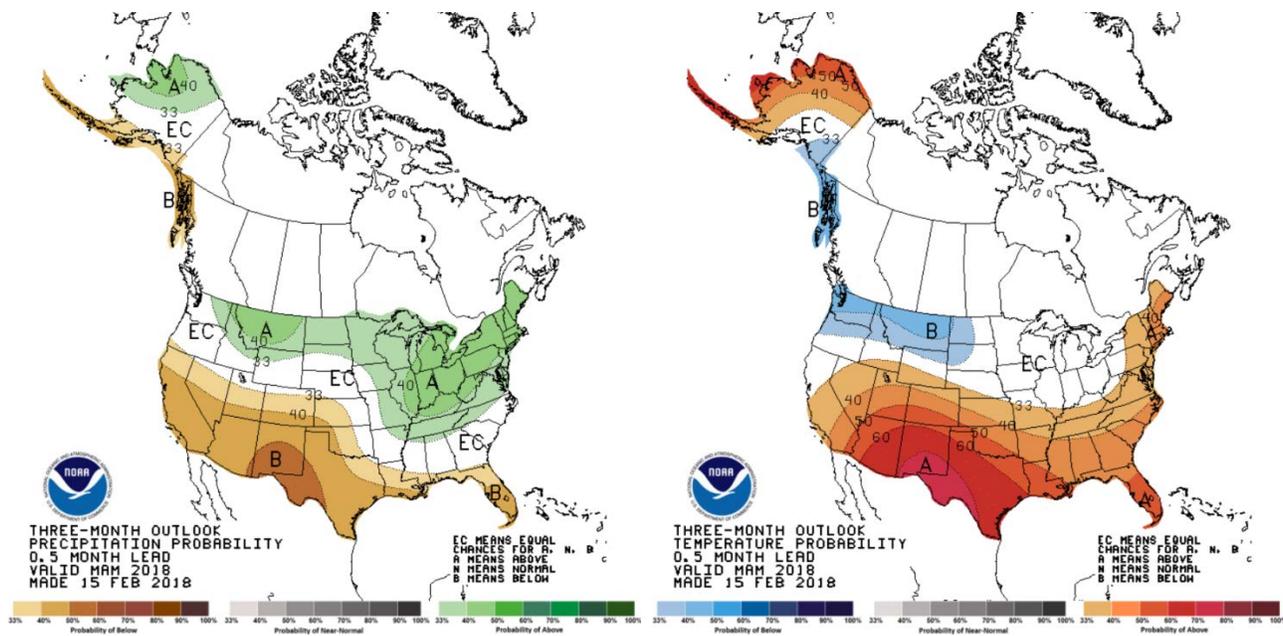


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[Mar-Apr-May \(MAM\) 2018 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](#).