



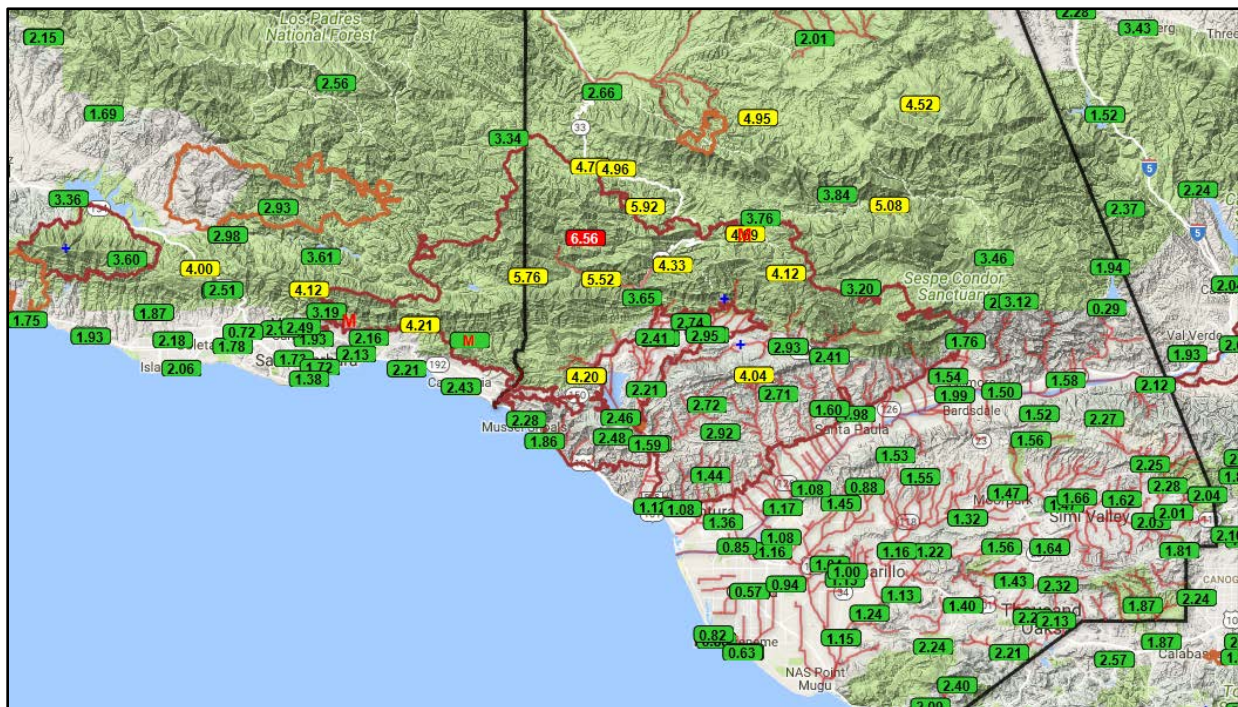
Water and Climate Update

January 11, 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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Heavy rainfall impacts severely burned areas in southern California



Very heavy rainfall over the last few days inundated the fire-ravaged areas in Santa Barbara and Ventura counties in California. The four-day rainfall total map from [Ventura County Public Works](#) shows storm totals ranged from 1.08 inches along the coast to 6.56 inches in the region where soils were stripped of cover by the Thomas Fire. The USGS recently completed a [preliminary post-fire debris flow map](#) of the region, identifying areas based on the probability of landslides. Flooding and mudslides caused deaths, injuries, ongoing rescues, building losses, road closures, and 7,000 evacuations.

Related:

[Death toll rises to 17 in Montecito; 100 homes destroyed by mudslides](#) - LA Times

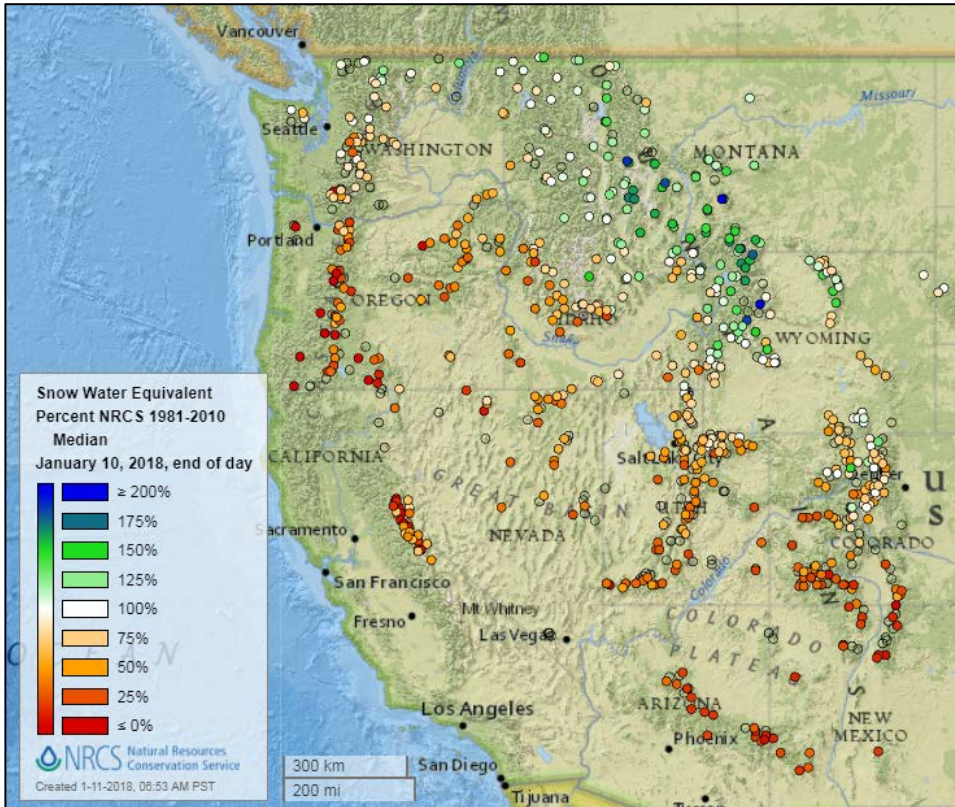
[Death toll rises to 17 in California mudslides, 17 missing](#) - Reuters

[Desperate search for survivors of killer California mudslides](#) – USA Today

[Rivers of mud sweep through wildfire burn areas in California](#) – NBC News

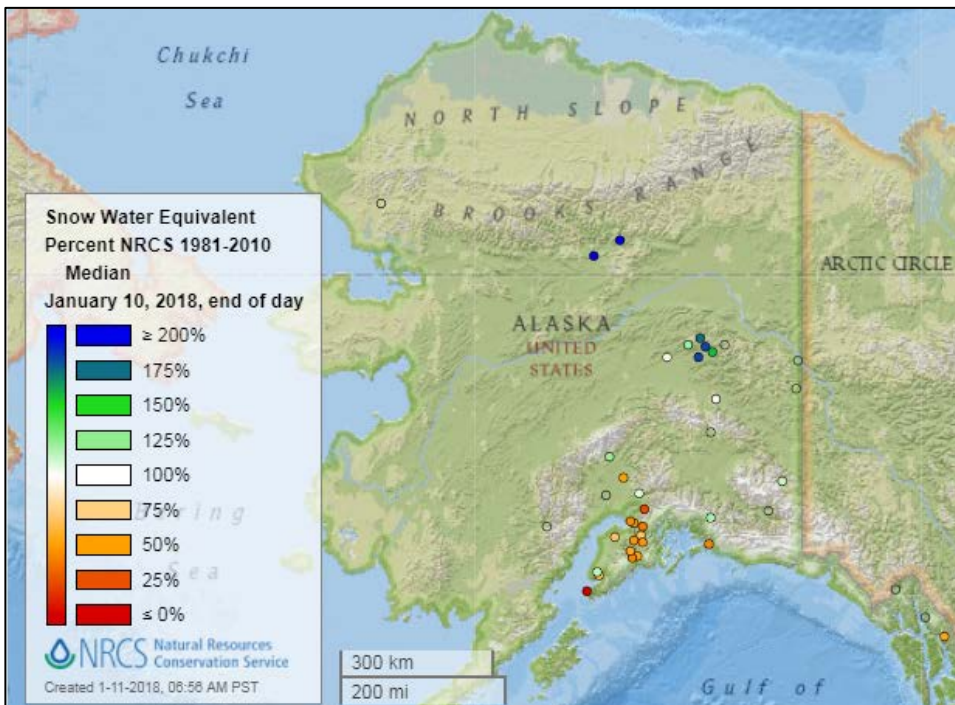
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

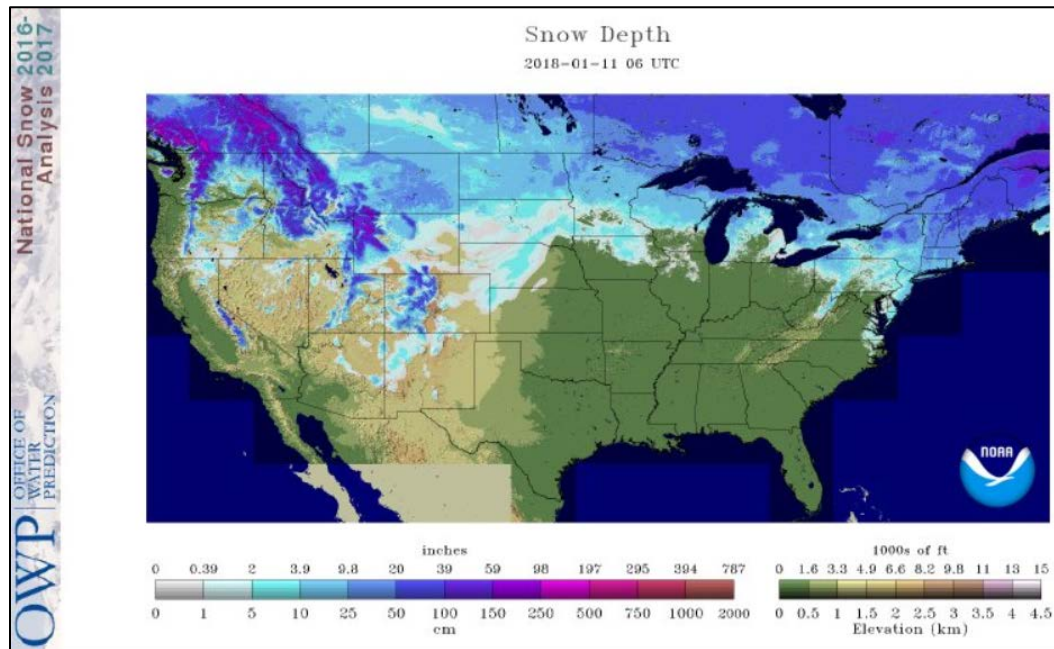
See also:
[Snow water equivalent values \(inches\) map](#)



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

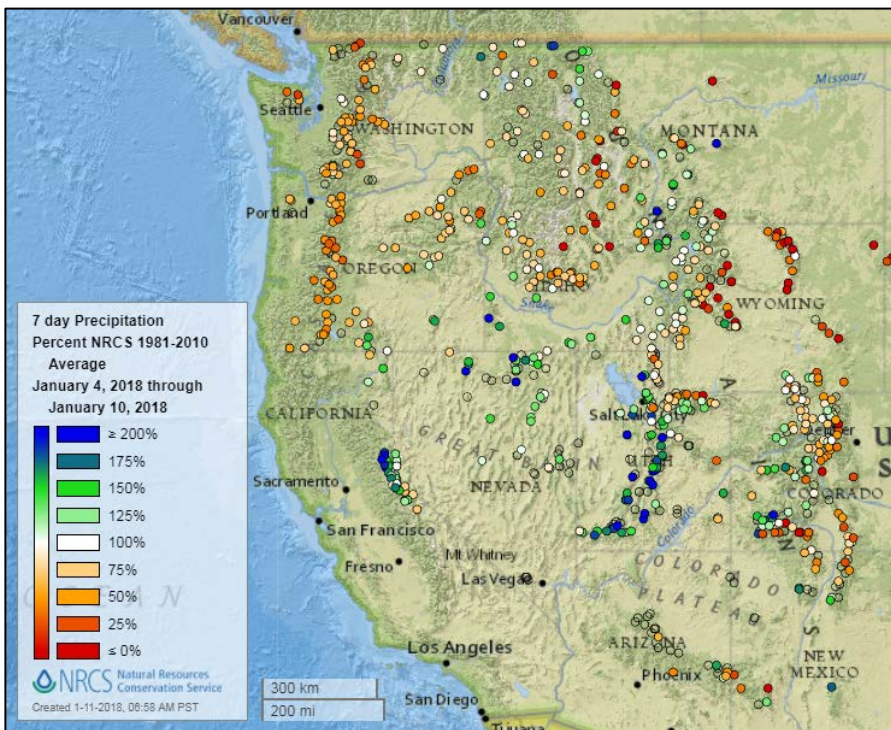
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network



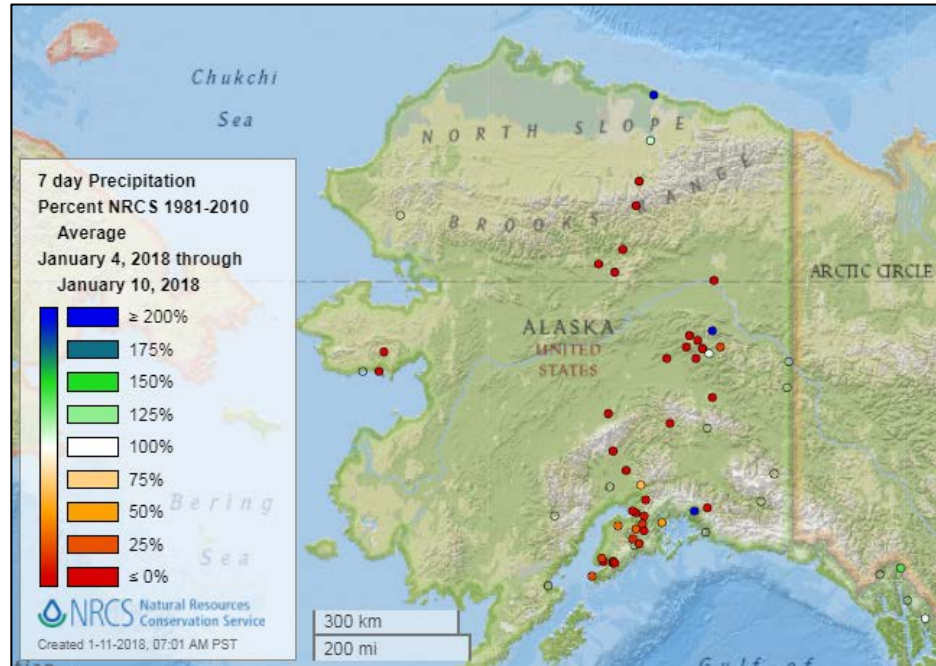
[7-day precipitation percent of average map](#)

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

Water and Climate Update

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

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



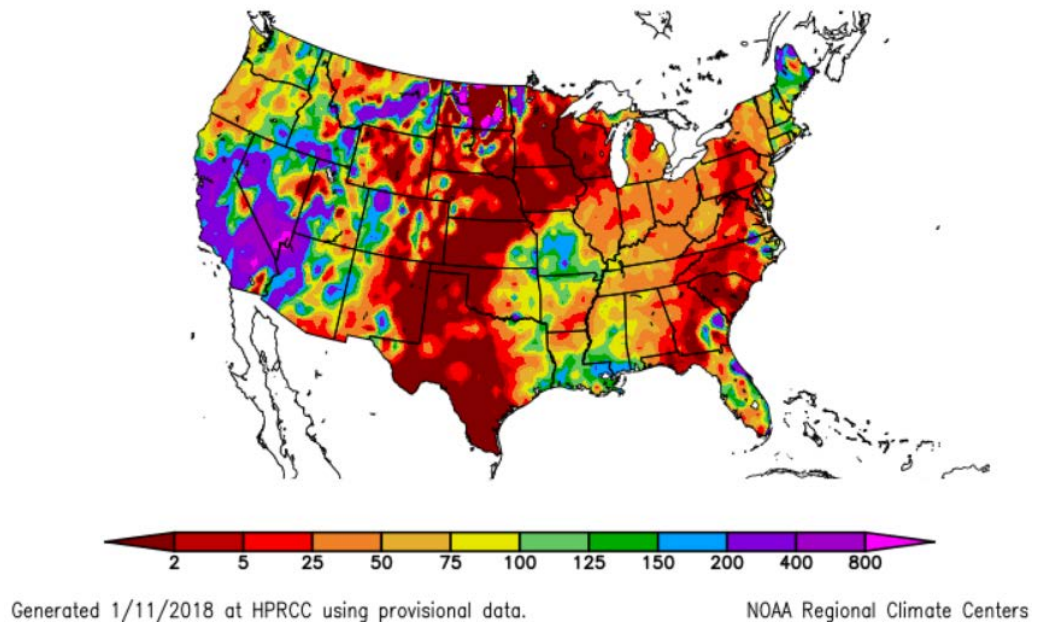
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

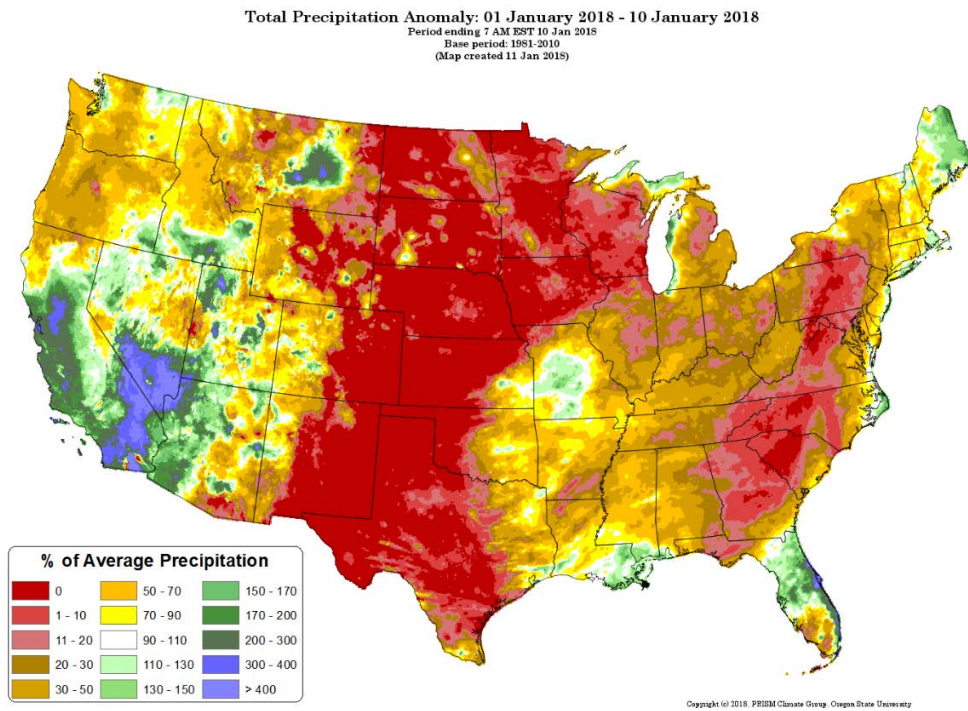
Percent of Normal Precipitation (%)
1/4/2018 – 1/10/2018



Water and Climate Update

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

Source: PRISM

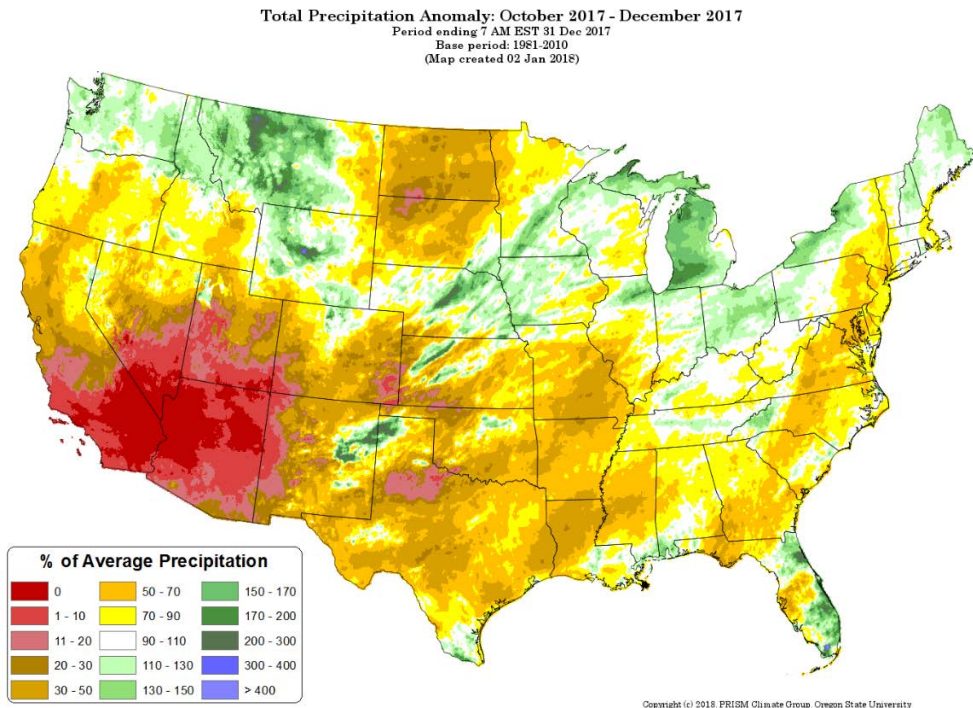


[Month-to-date national total precipitation percent of average map](#)

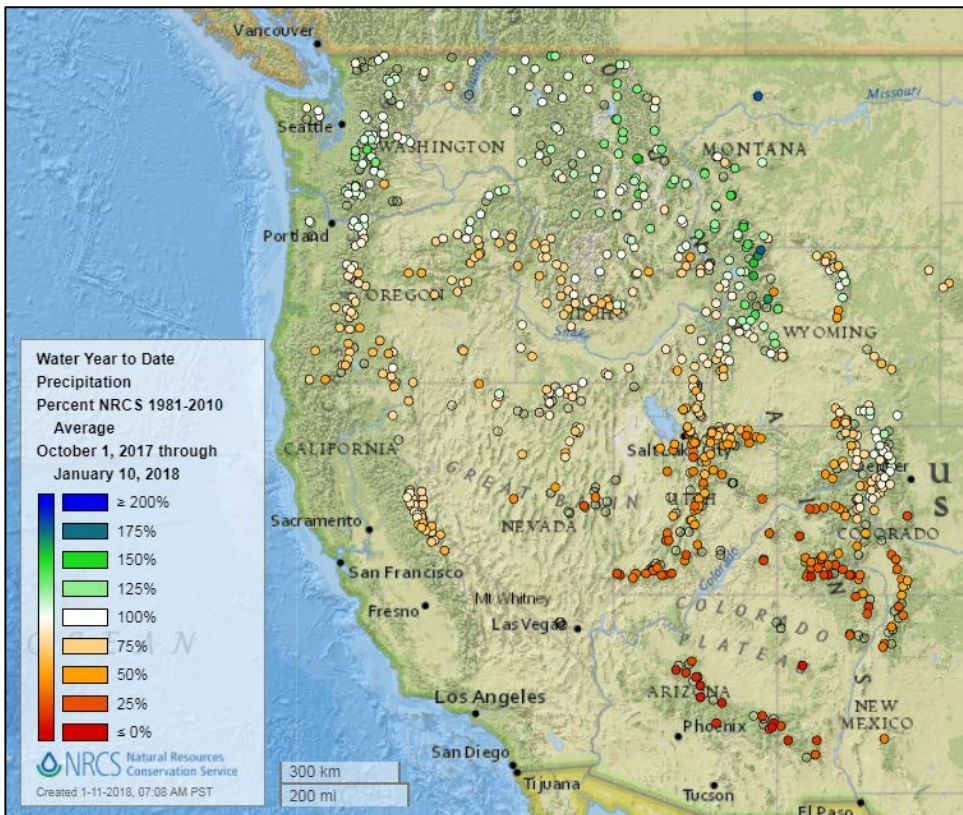
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[October through December 2017 total precipitation percent of average map](#)

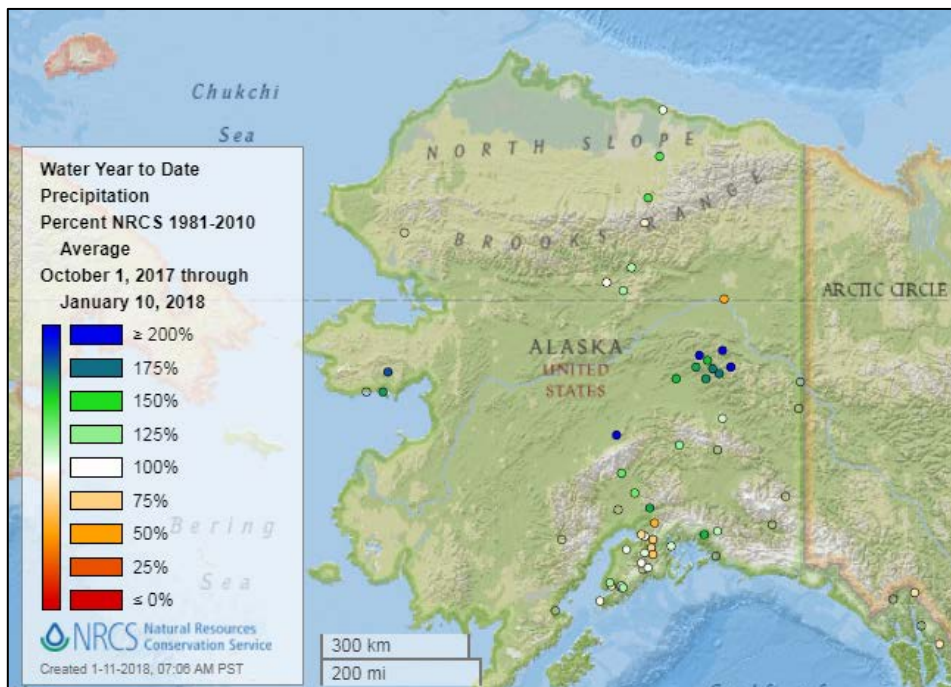


Water Year-to-Date, NRCS SNOTEL Network



[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

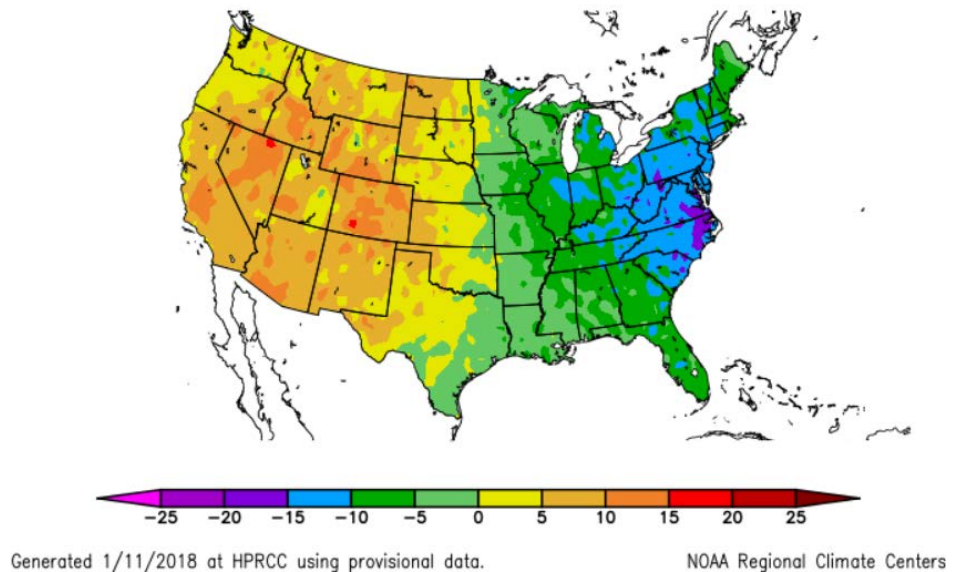
Last 7 Days, National Weather Service (NWS) Networks

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)
1/4/2018 – 1/10/2018



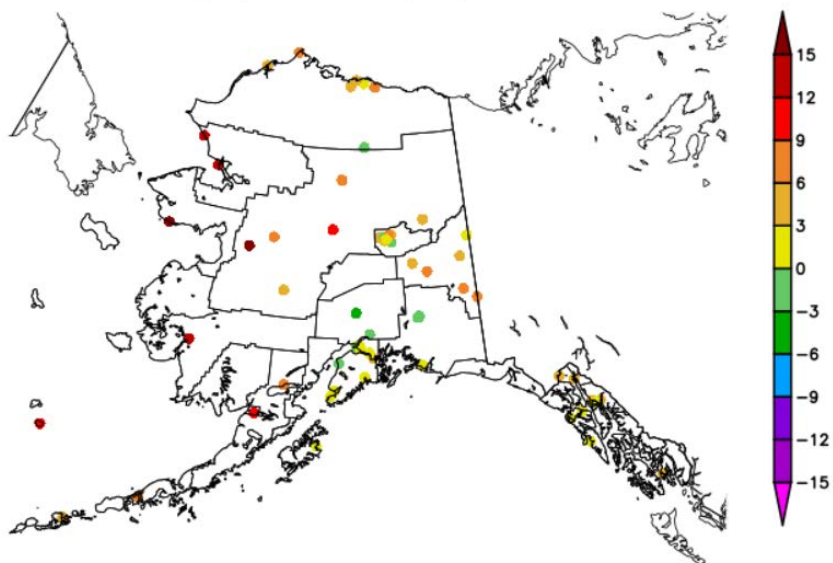
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
1/4/2018 – 1/10/2018

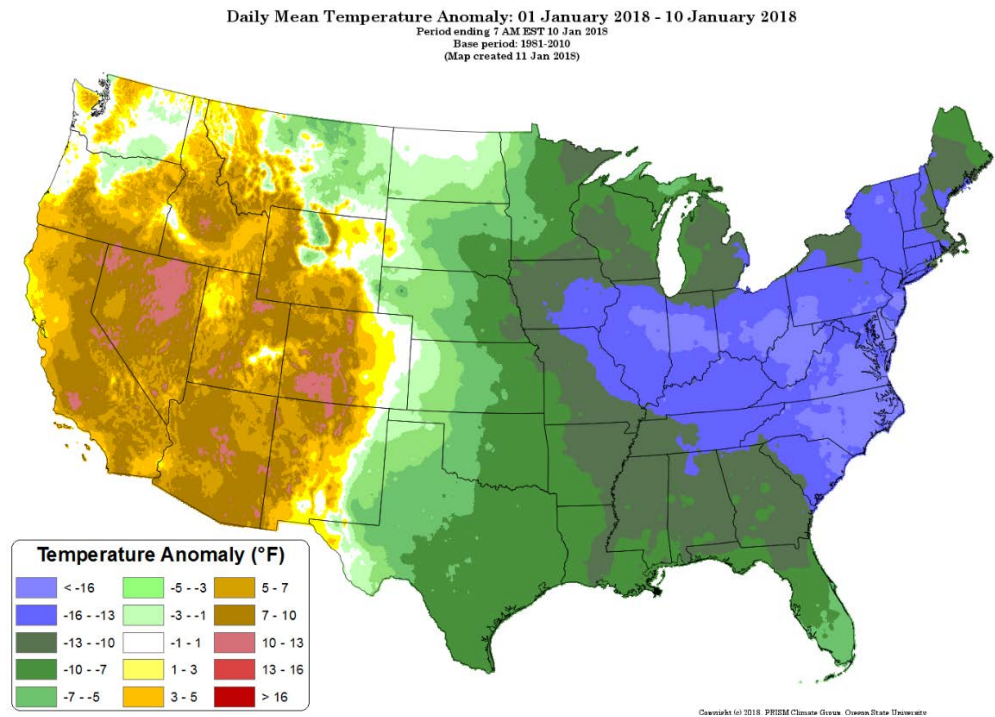


Water and Climate Update

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

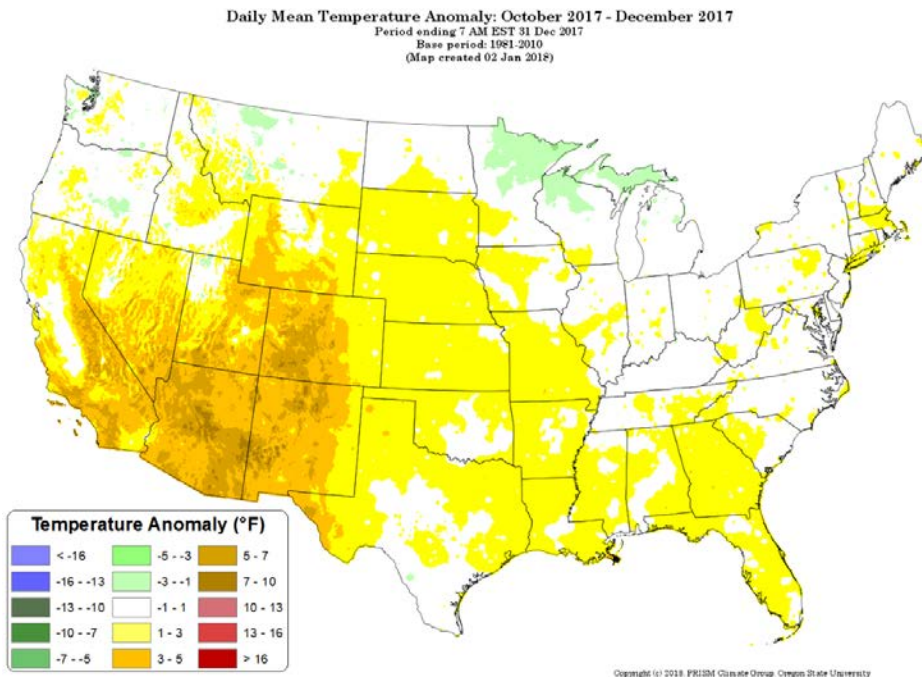
Source: PRISM

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



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

Source: PRISM

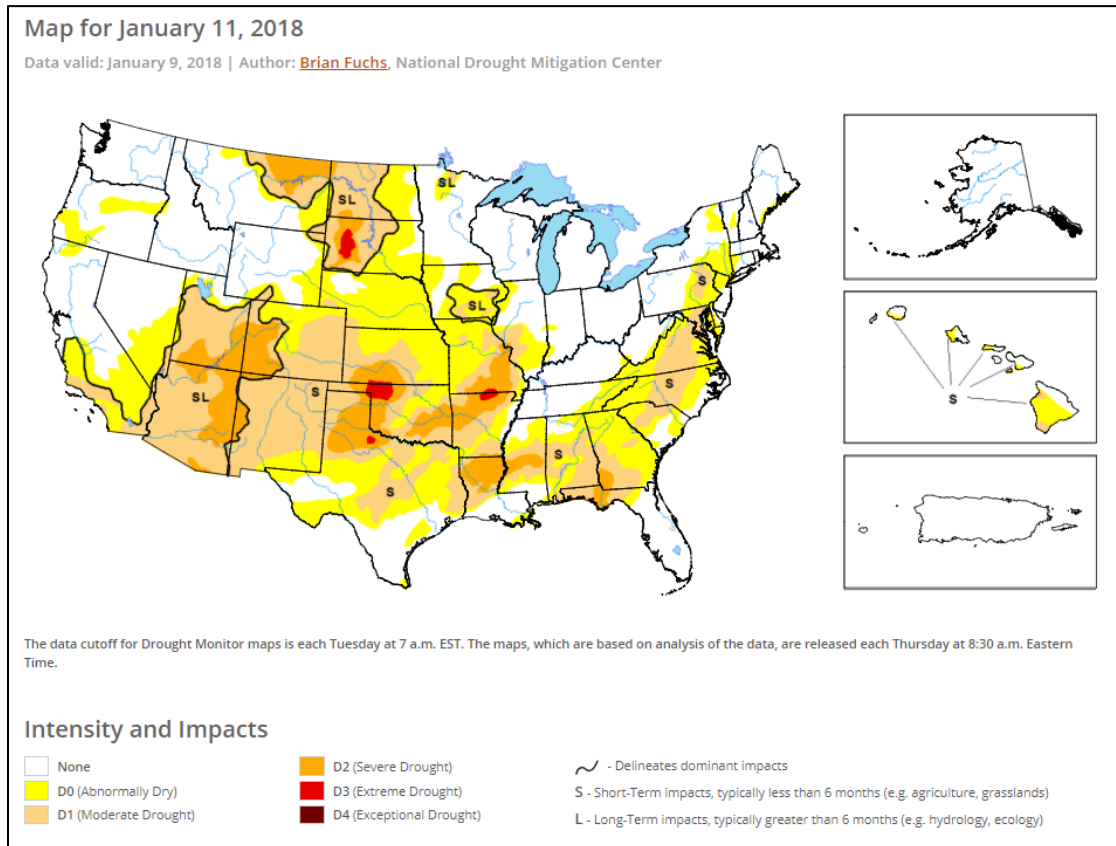


[October through
December 2017 daily
mean temperature
anomaly map](#)

Drought

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

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



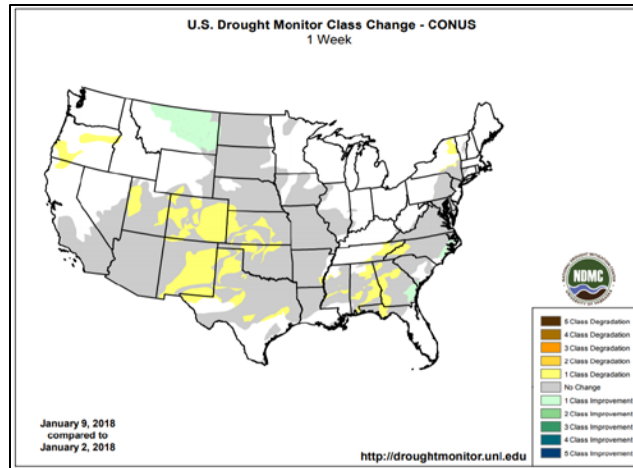
Current [National Drought Summary](#), January 11, 2017

Author: Brian Fuchs, National Drought Mitigation Center

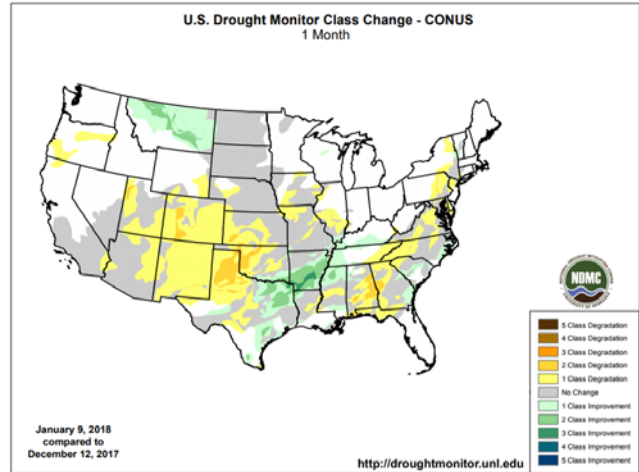
“Dryness continues over most of the country with only isolated areas of above-normal precipitation for this week. The “snow drought” over much of the mountainous western United States is catching more attention, but there is time to make up the poor start to the current water year. Portions of California and coastal Washington did have good precipitation for the week, along with areas of southern Louisiana, east Texas, and southern Mississippi. A significant winter storm brought precipitation to many areas along the east coast from Florida to Maine, but this did not reach too far inland. Over the last 60 days, extensive areas of the country have recorded below 25 percent of normal precipitation, from the Southwest into the central Plains and Midwest as well as in the Southeast and into the Mid-Atlantic. Cold air has also dominated much of the Midwest and eastern United States, with departures from normal temperatures in the Mid-Atlantic 15-20 degrees below normal.”

Changes in Drought Monitor Categories over Time

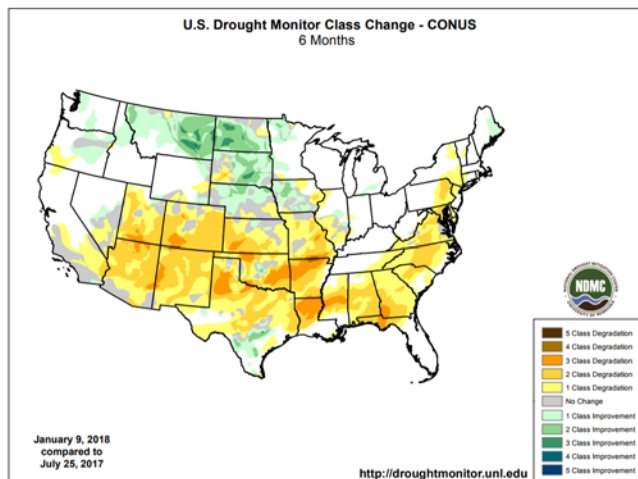
1 Week



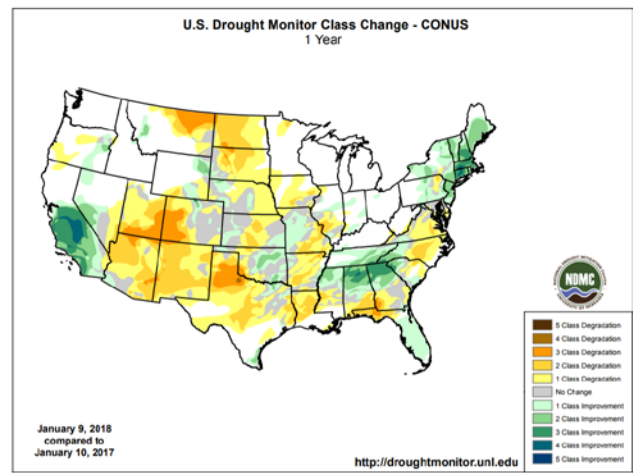
1 Month



6 Months



1 Year

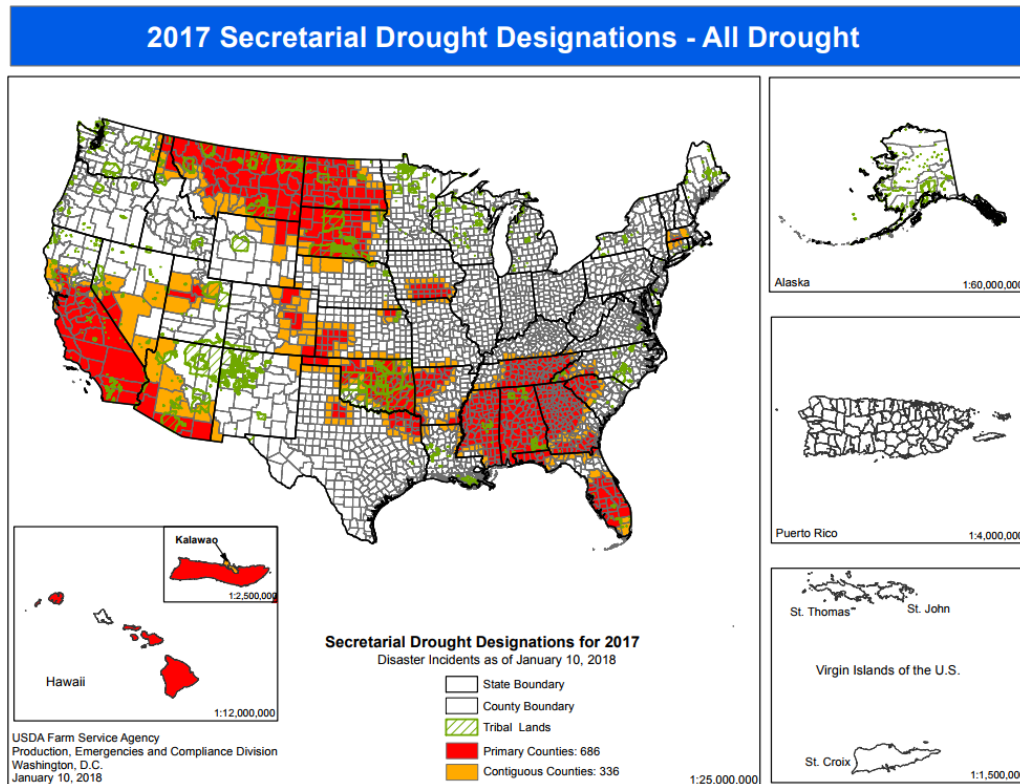


Changes in drought conditions over the last 12 months

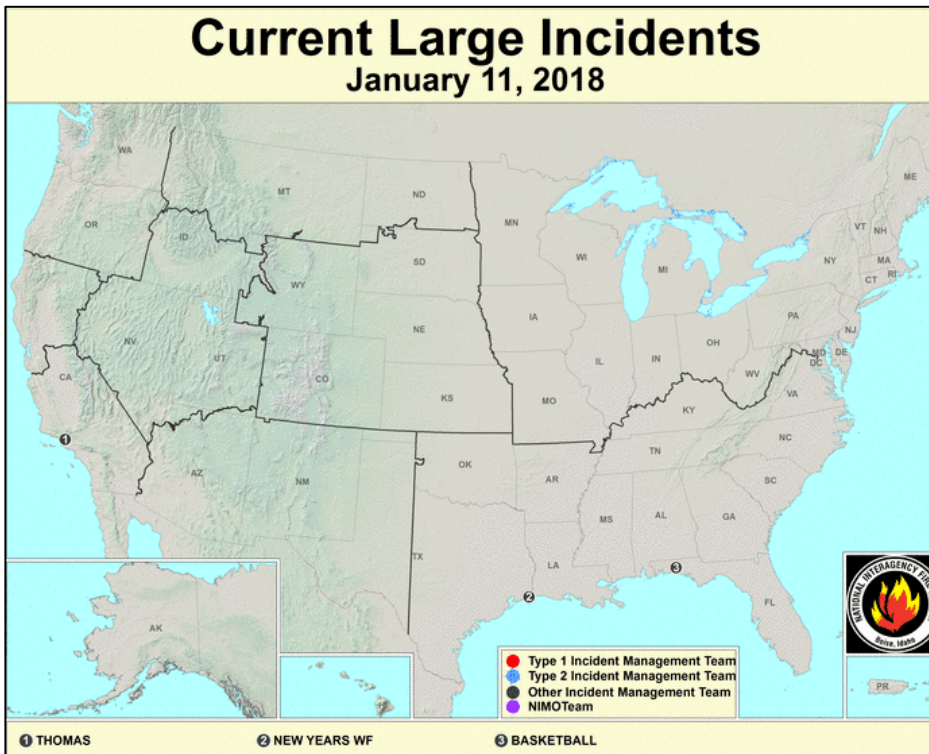
Highlighted Drought Resources

- [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



Wildfires: USDA Forest Service Active Fire Mapping

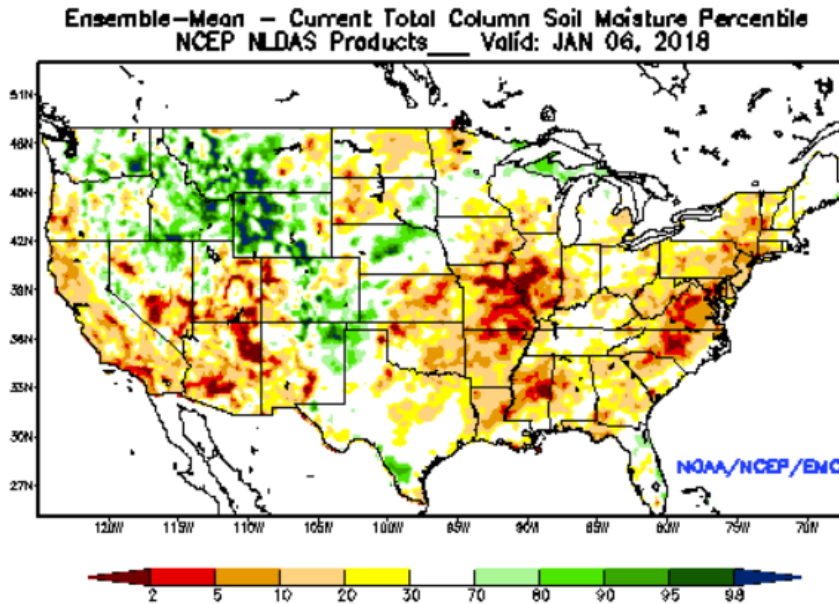


Highlighted Wildfire Resources

- [National Interagency Fire Center](#)
- [InciWeb Incident Information System](#)
- [Significant Wildland Fire Potential Outlook](#)

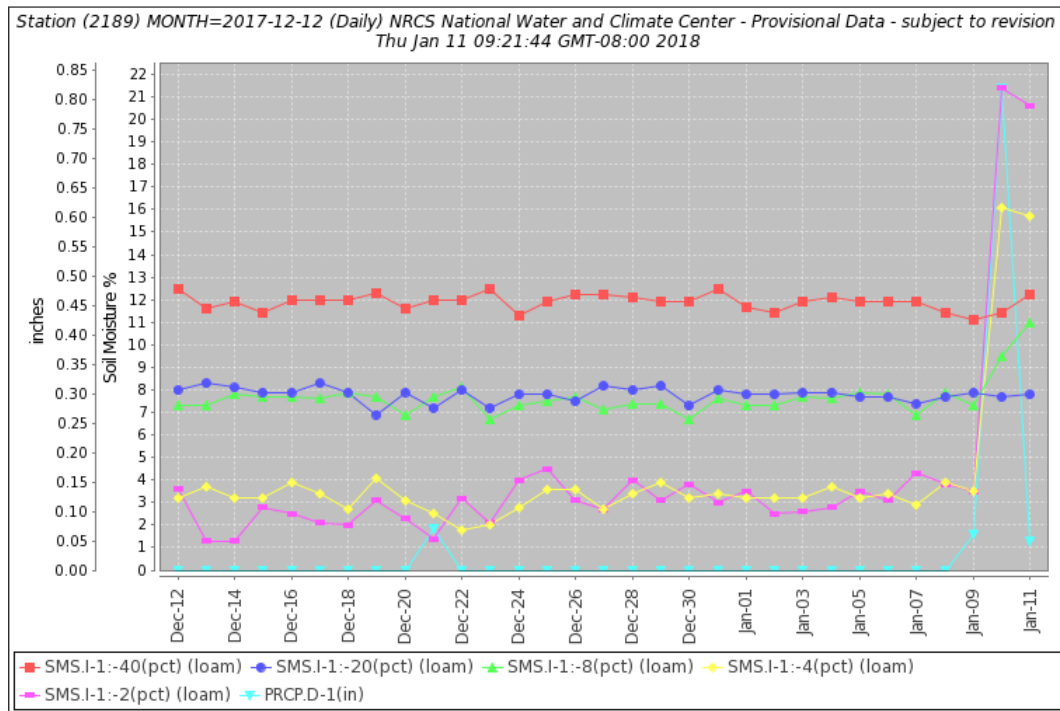
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of January 6, 2018.

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



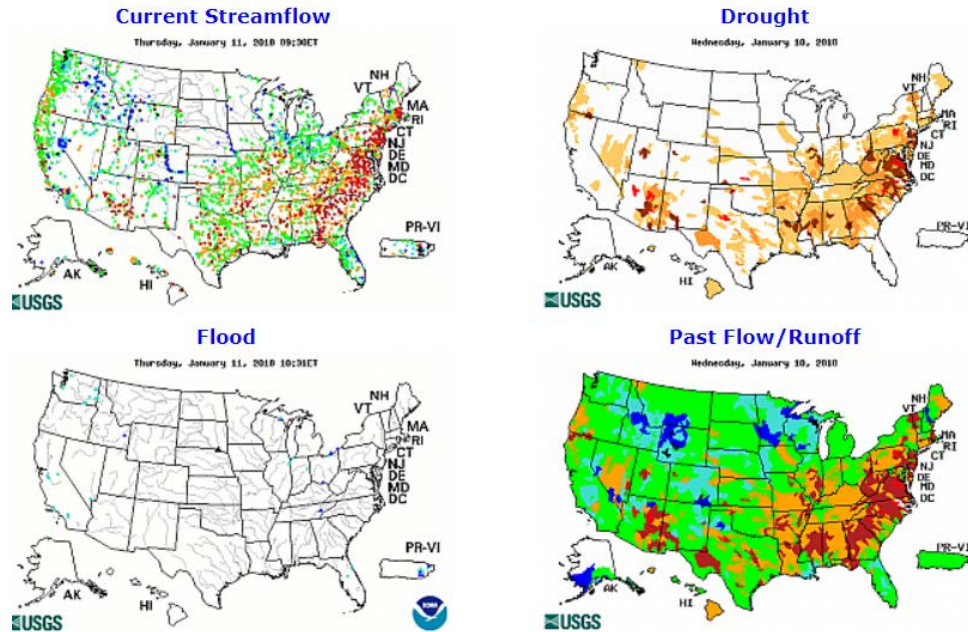
The chart shows precipitation and soil moisture for the last month at the [Cochora Ranch SCAN site 2189](#) in southern California. The past 30 days showed very dry conditions until the storm on January 9-11 when precipitation events totaled nearly one inch. This increased the soil moisture percentage dramatically at the shallow 2- and 4-inch sensors, and also more moderately at the 8-inch sensor. This precipitation event triggered debris flows in burned areas south of this SCAN site.

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

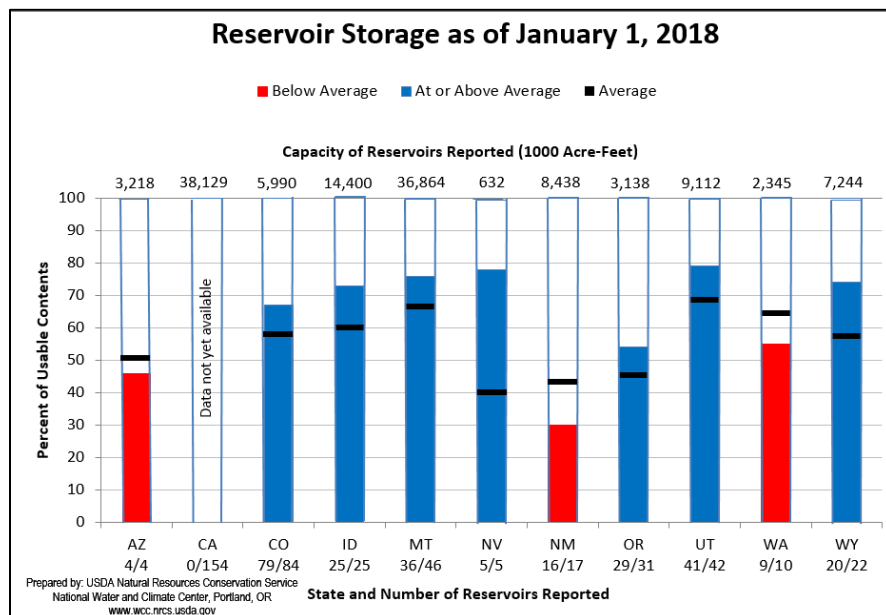


[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



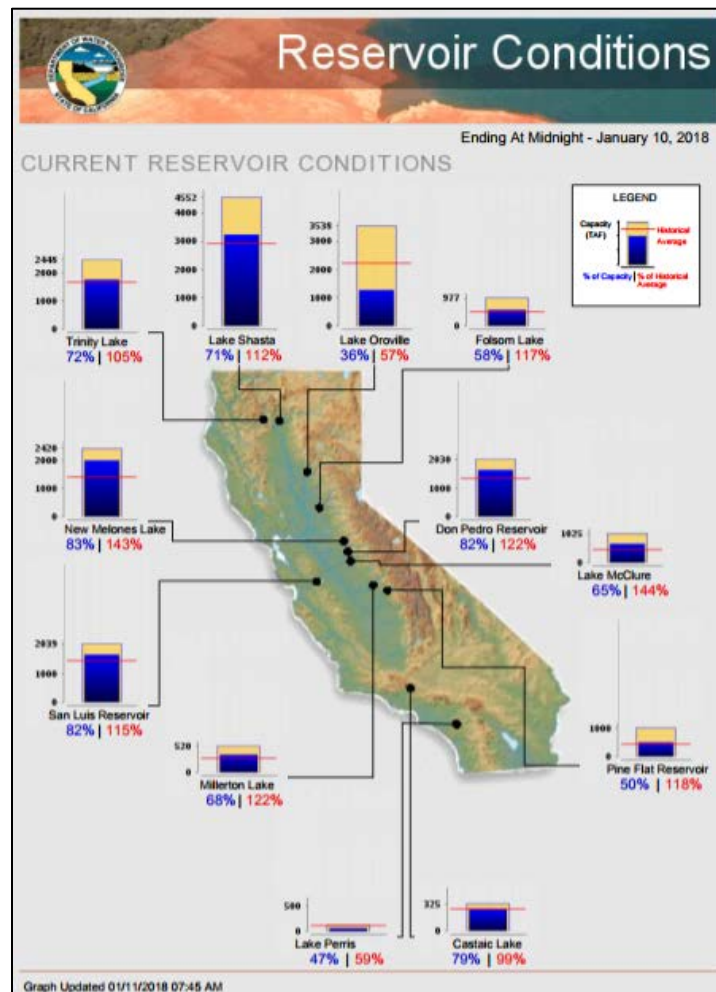
January 1 Reservoir Storage: [Chart](#) | [Dataset](#)

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

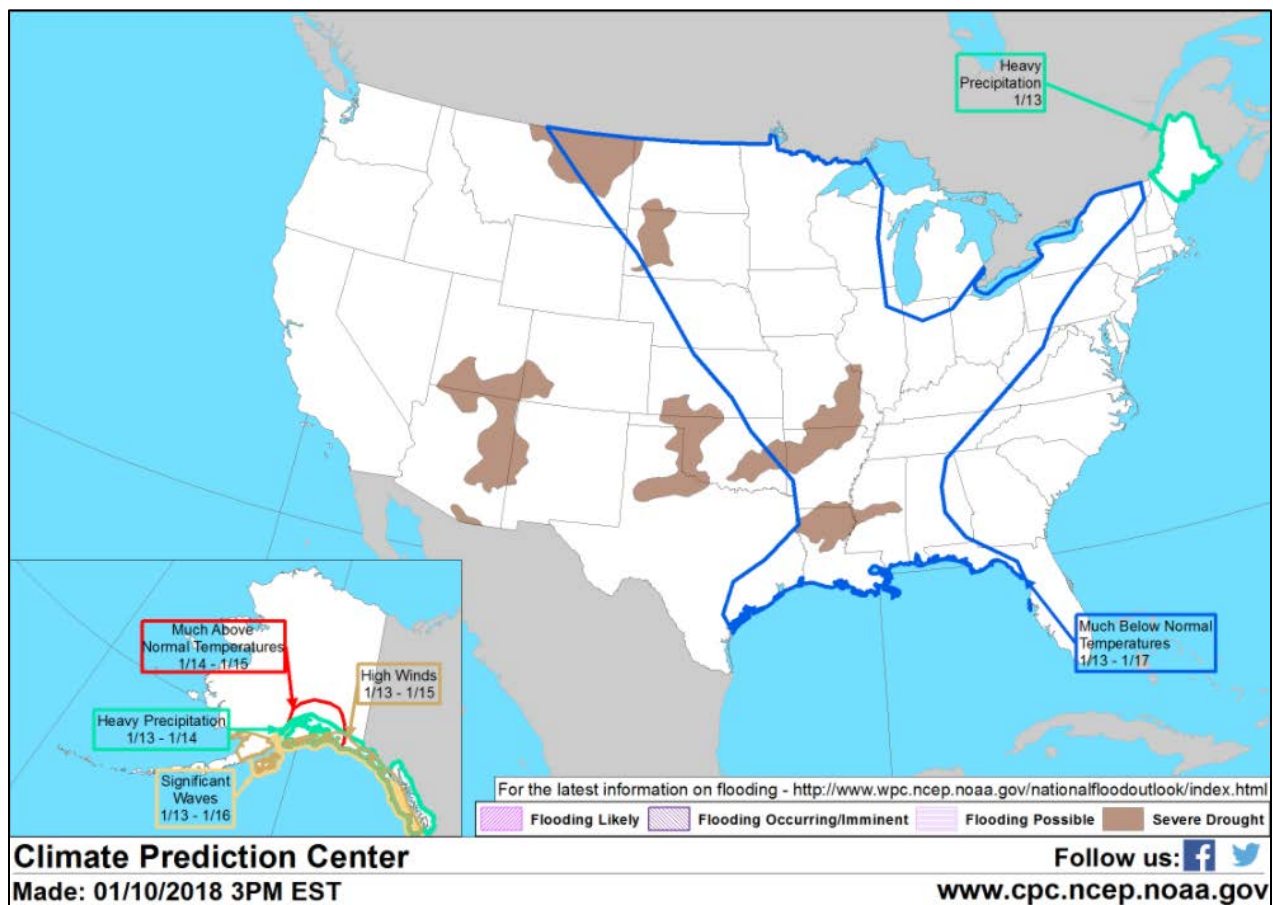
Agricultural Weather Highlights

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

National Outlook, Thursday, January 11: “A storm currently centered over the Great Lakes region will produce blizzard conditions early today in the Red River Valley and result in accumulating snow from the east-central Plains into the upper Great Lakes region. By Friday, precipitation will shift into the eastern one-third of the U.S., with heavy snow possible in the Ohio Valley and the lower Great Lakes region. Storm-total rainfall could reach 1 to 3 inches from the Mississippi Delta into the Appalachians and Northeast. Cold air trailing the storm will engulf areas from the Plains eastward, but unusually warm weather will prevail in the West. Dry weather will prevail during the next 5 days from central and southern California to the central and southern High Plains, but late-week precipitation will occur from the Pacific Northwest to the northern Rockies. The NWS 6- to 10-day outlook for January 16 – 20 calls for the likelihood of near- to below-normal temperatures across the eastern half of the U.S., except for warmer-than-normal weather in northern New England. Above-normal temperatures can also be expected from the Pacific Coast to the High Plains. Meanwhile, near- to above-normal precipitation across most of the country should contrast with drier-than-normal conditions in New England, the Southeast, and southern sections of the Rockies and High Plains.”

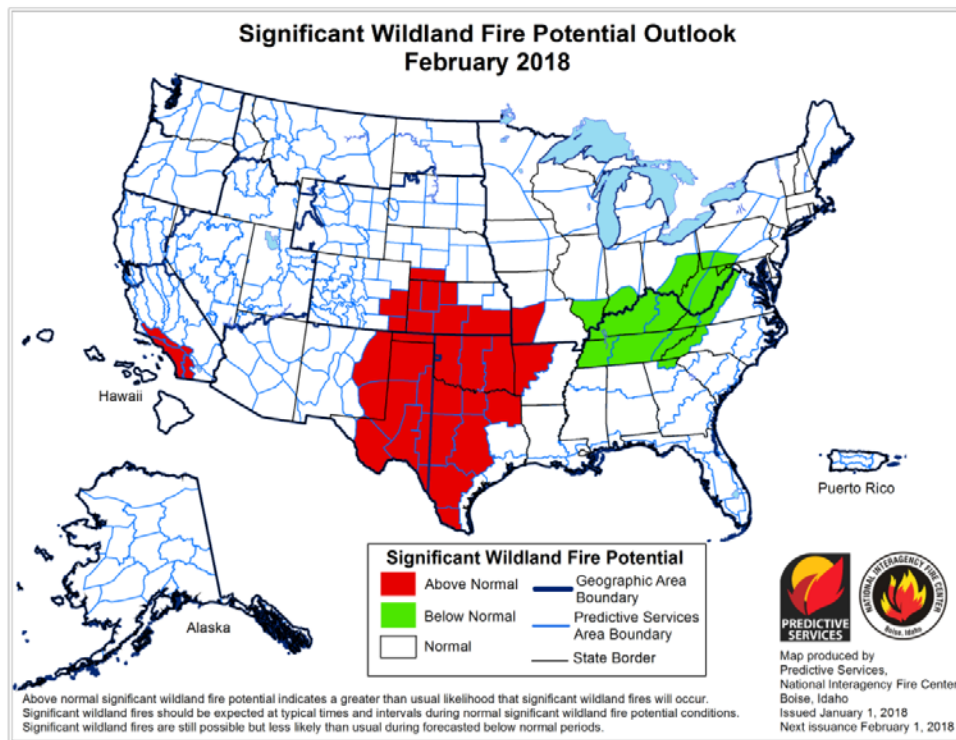
Weather Hazard Outlook January 13 – 17, 2018

Source: Climate Prediction Center

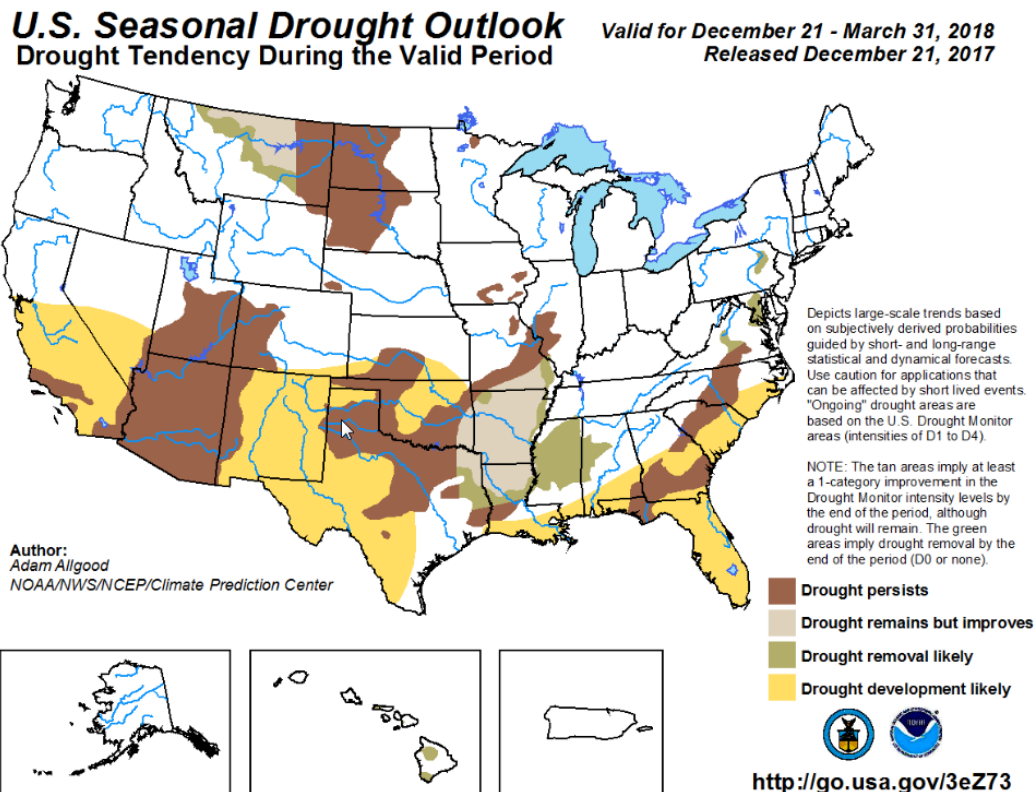


Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

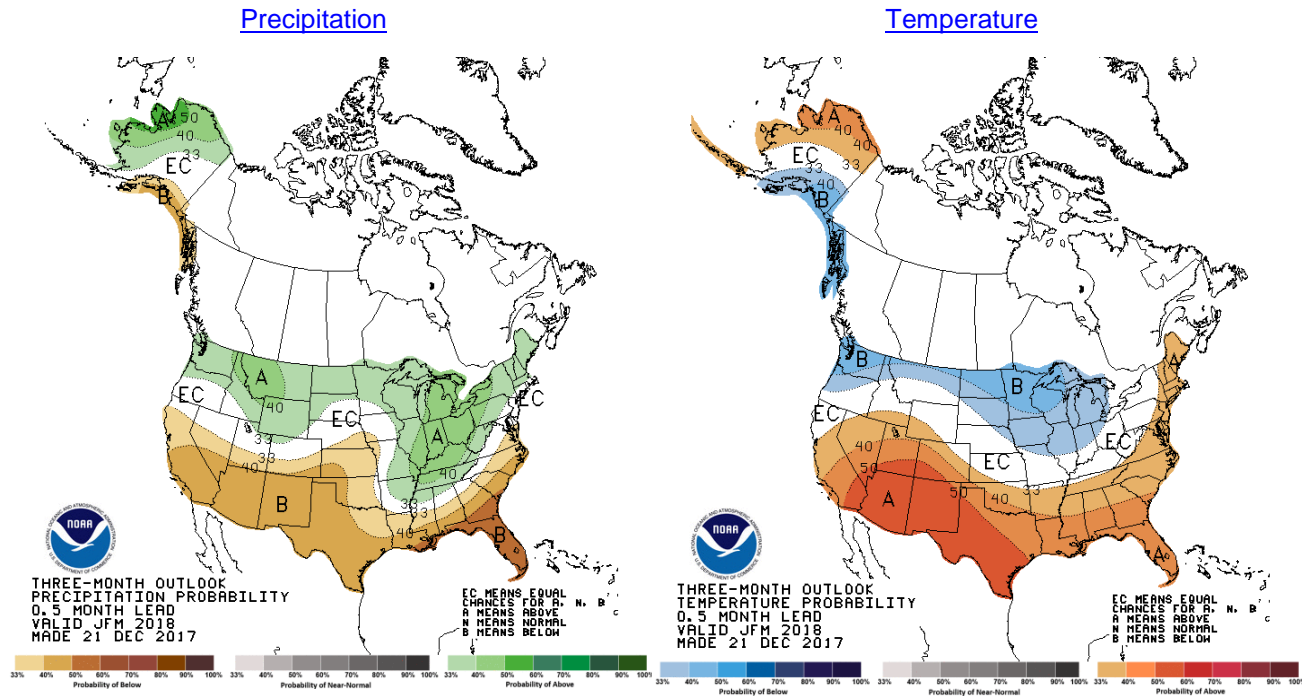


Seasonal Drought Outlook: [December 21, 2017 – March 31, 2018](#) Source: National Weather Service



Climate Prediction Center 3-Month Outlook

Source: National Weather Service



[Jan-Feb-Mar \(JFM\) 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](#).