

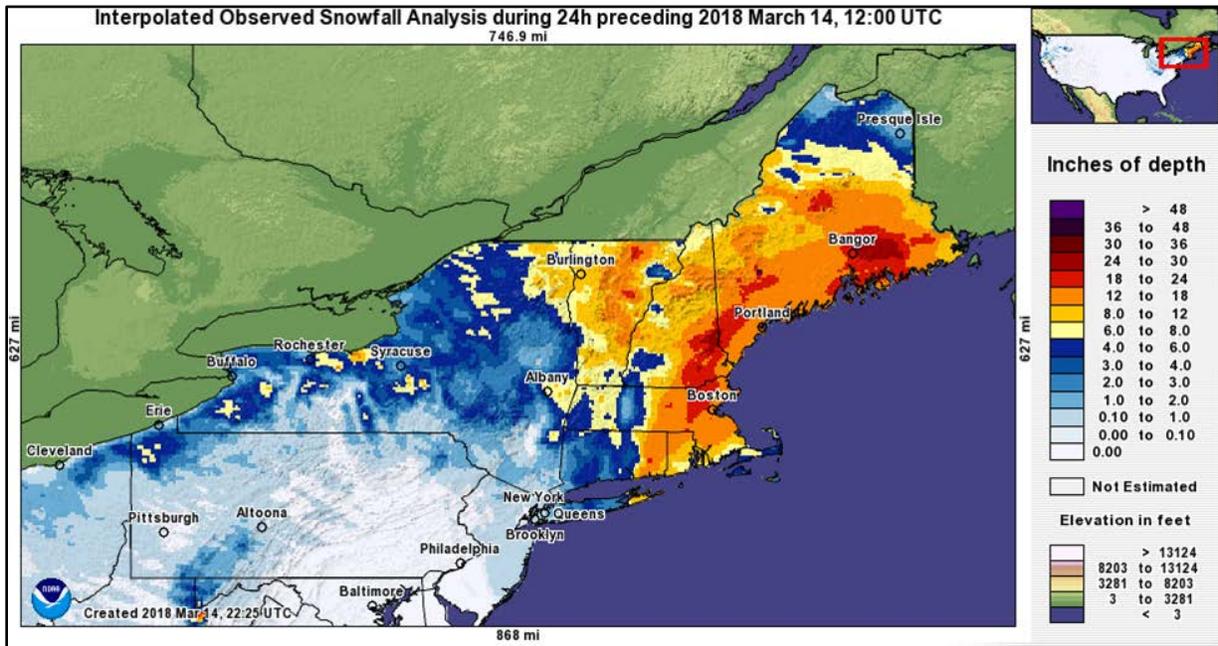
# Water and Climate Update

March 15, 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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## Latest heavy snowfall from a series of Nor'easters



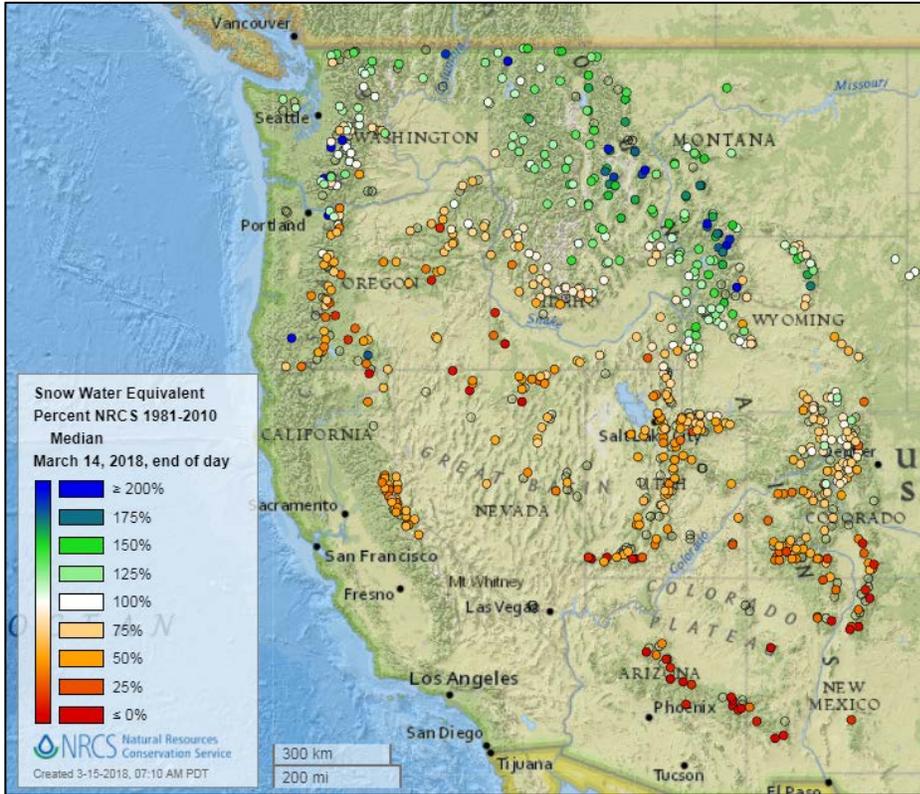
The latest Nor'easter is the third severe winter storm in two weeks to strike the northeast U.S. Massachusetts, New Hampshire, Maine, and the Canadian Maritime Provinces received the brunt of the latest storm with totals of two to three feet in some locations, according to local reports and the NOAA [NOHRSC](#) map. Heavy snow and high winds created dangerous blizzard conditions for much of the region, disrupting transportation, power, schools, and businesses. Recently, scientists have found evidence for a link between warm Arctic temperatures and the persistent, extreme cold winter weather conditions in the northeast U.S.

### Related:

- [Snow Totals – Who Has the Most From March 13 Blizzard](#) – CBS Boston
- [More than 150000 still without power, mostly on the Cape](#) – The Boston Globe
- [March 13 blizzard dumped as much as 2 feet of snow in eastern Massachusetts](#) – Washington Post
- [Cleanup, power restoration begin after 3rd nor'easter](#) – ABC News
- [Extreme winter weather becoming more common as Arctic warms, study finds](#) – The Guardian
- [Warm Arctic episodes linked with increased frequency of extreme winter weather in the United States](#) – Nature.com

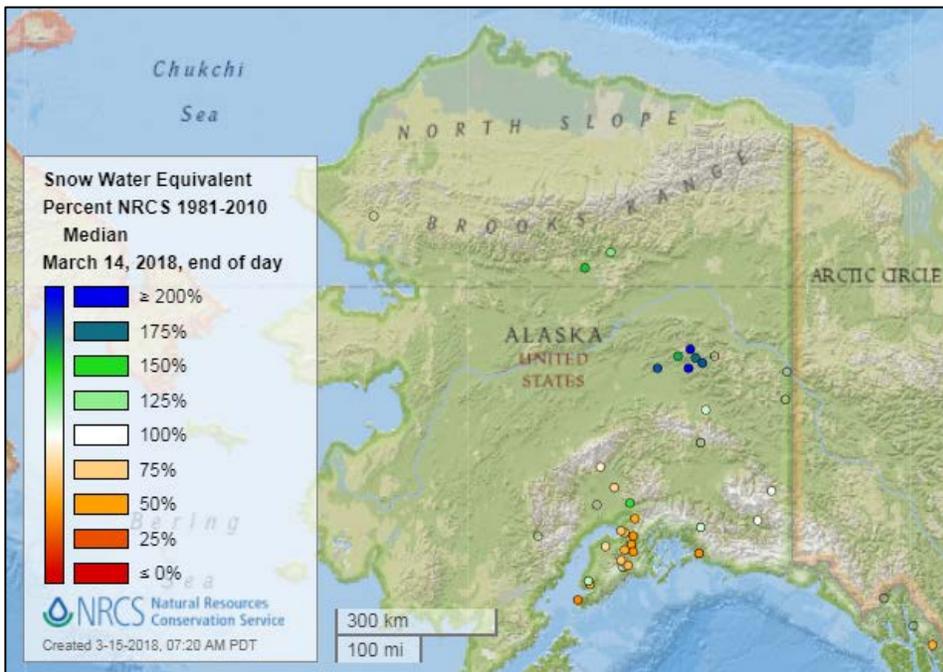
## Snow

### Current Snow Water Equivalent, NRCS SNOTEL Network



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

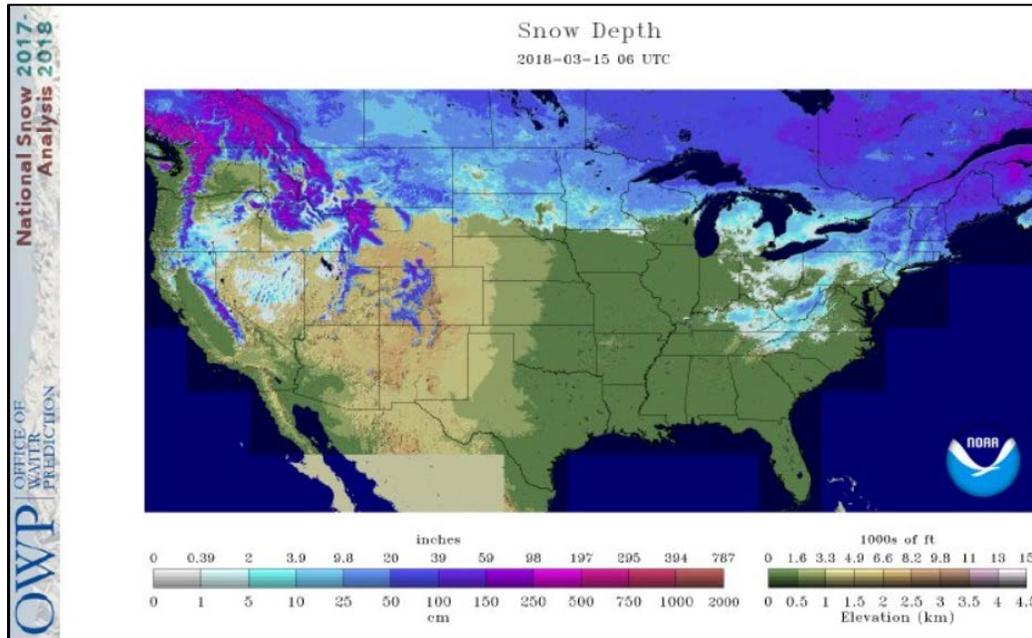
**See also:**  
[Snow water equivalent values \(inches\) map](#)



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

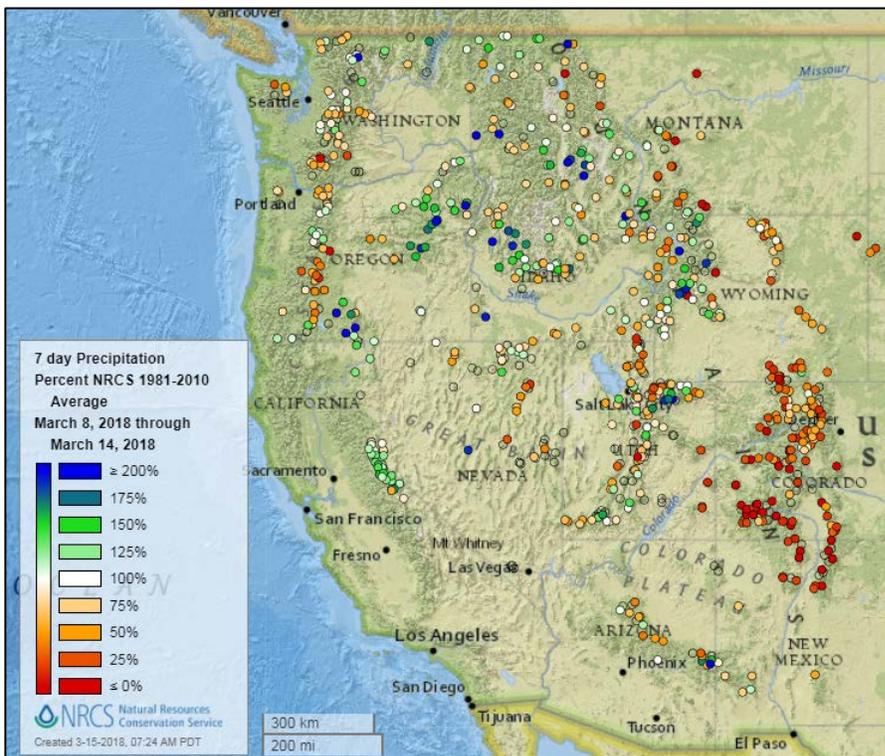
**See also:**  
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



## Precipitation

### Last 7 Days, NRCS SNOTEL Network



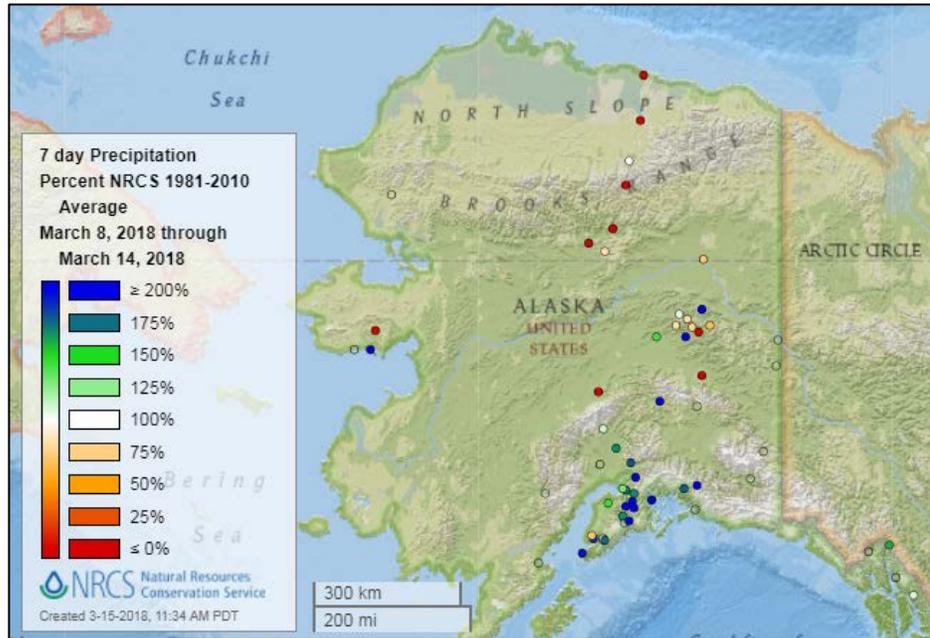
[7-day precipitation percent of average map](#)

**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](#)



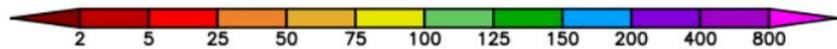
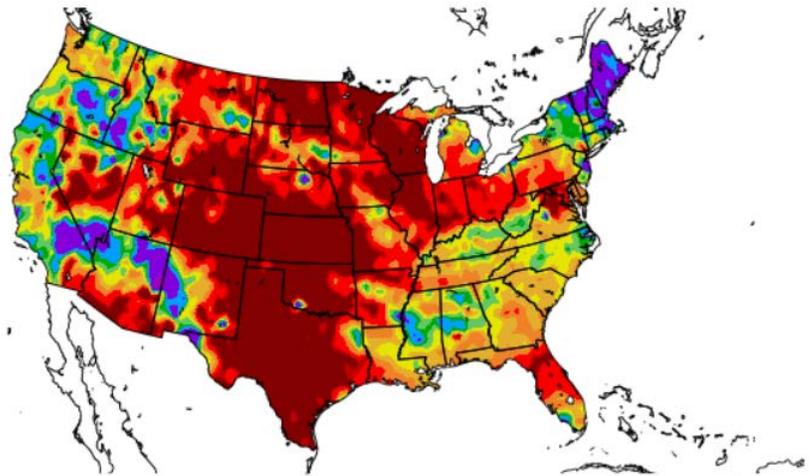
## Last 7 Days, National Weather Service (NWS) Networks

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 (%) 3/8/2018 – 3/14/2018



Generated 3/15/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

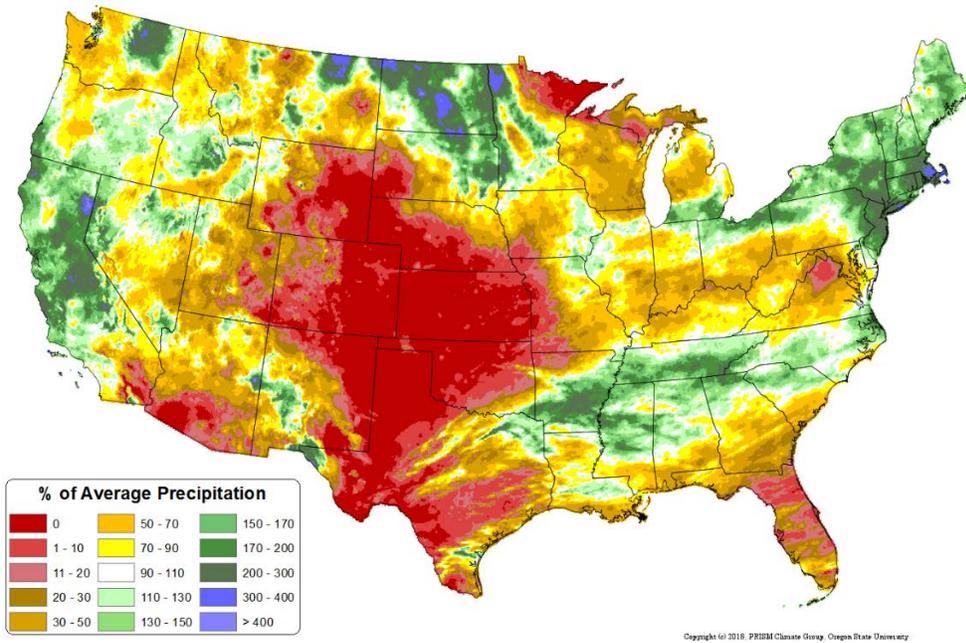
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 March 2018 - 14 March 2018  
Period ending 7 AM EST 14 Mar 2018  
Base period: 1981-2010  
(Map created 15 Mar 2018)

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

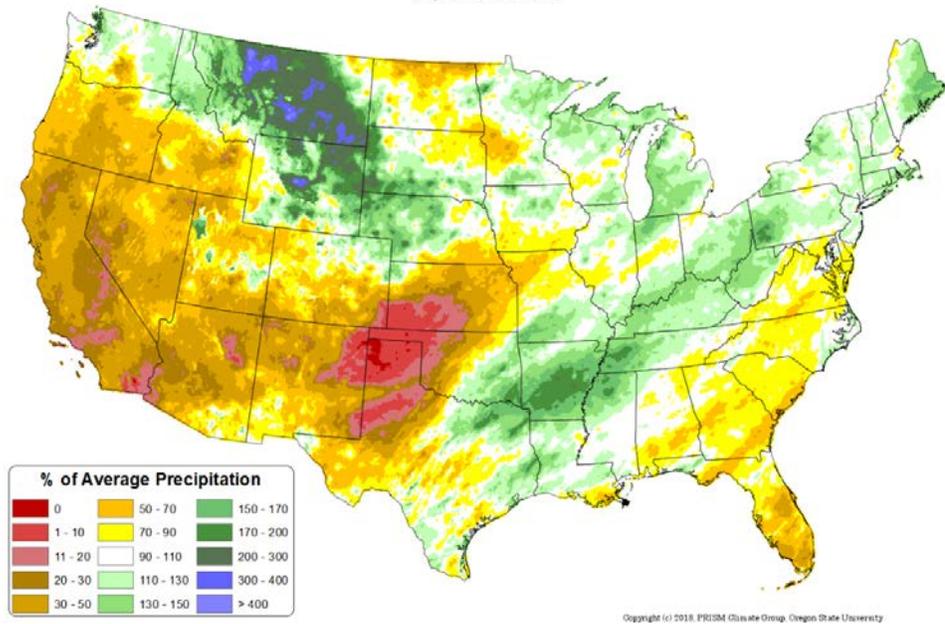


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

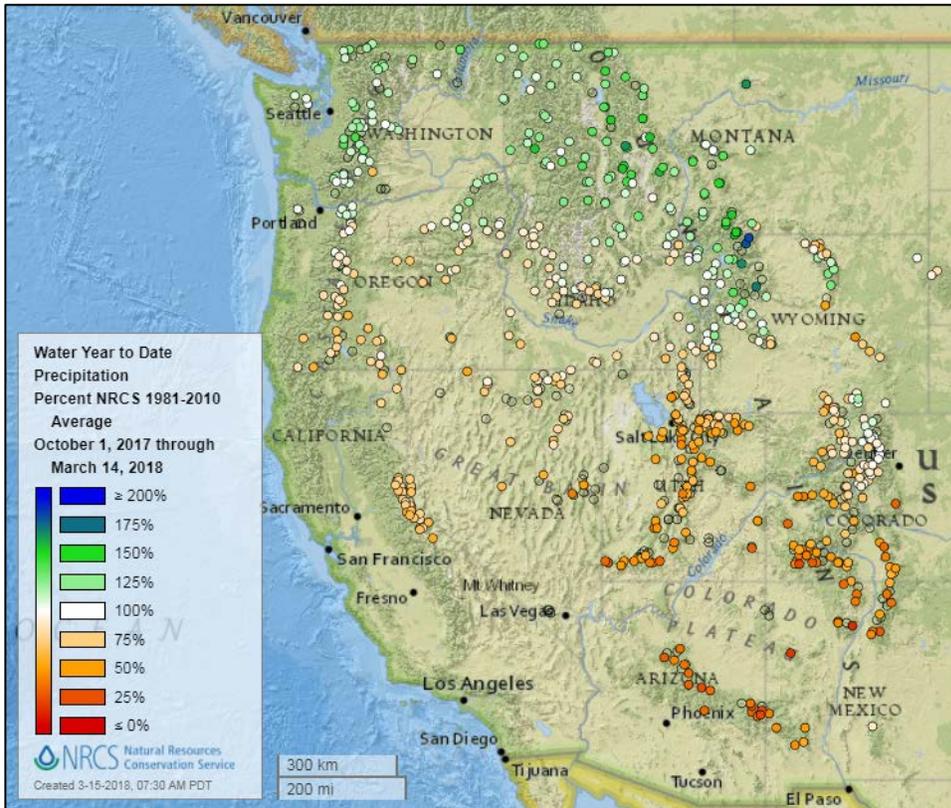
Source: PRISM

[December 2017 through February 2018 total precipitation percent of average map](#)

Total Precipitation Anomaly: December 2017 - February 2018  
Period ending 7 AM EST 28 Feb 2018  
Base period: 1981-2010  
(Map created 02 Mar 2018)

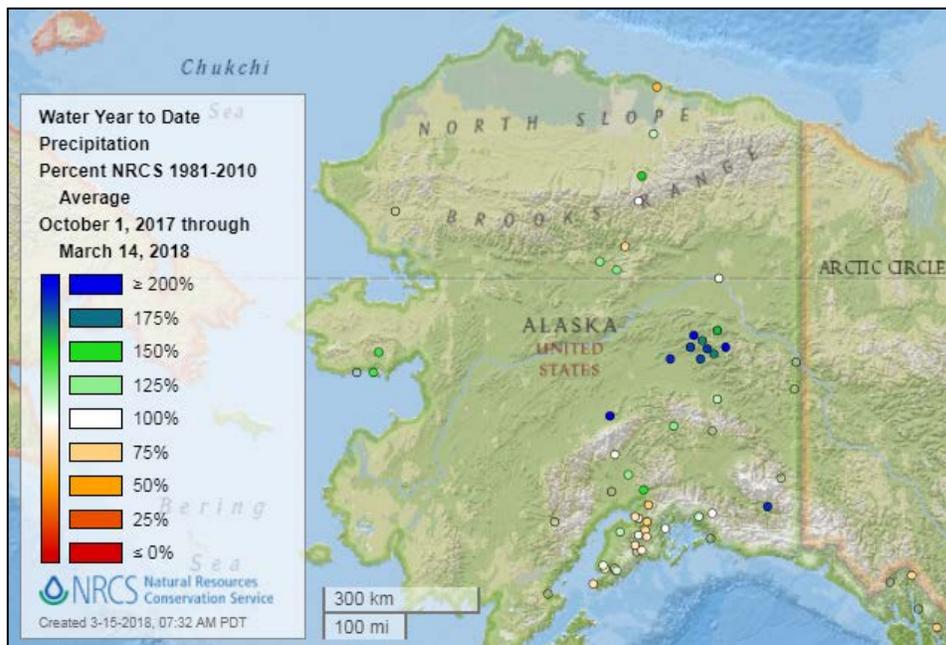


Water Year-to-Date, NRCS SNOTEL Network



[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

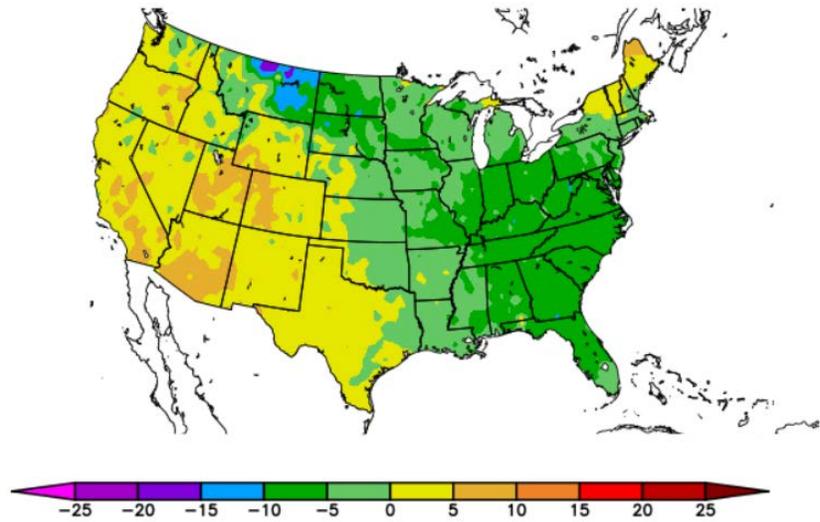
Last 7 Days, National Weather Service (NWS) Networks

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)  
3/8/2018 – 3/14/2018



Generated 3/15/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

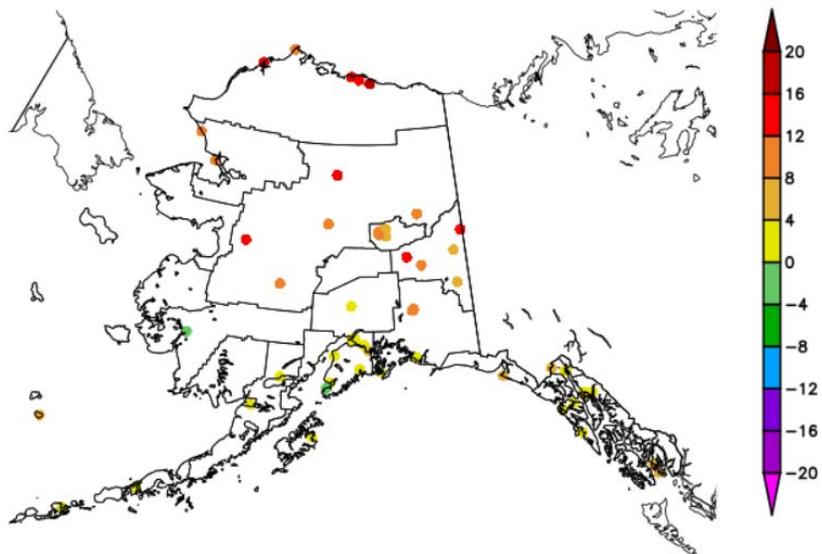
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
3/8/2018 – 3/14/2018



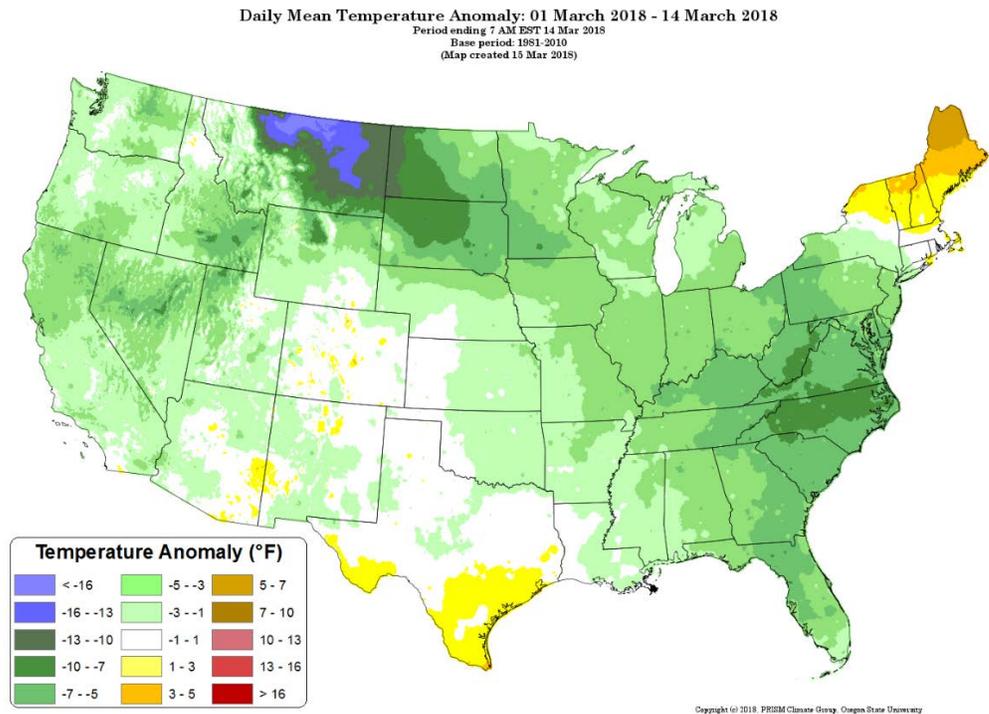
Generated 3/15/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

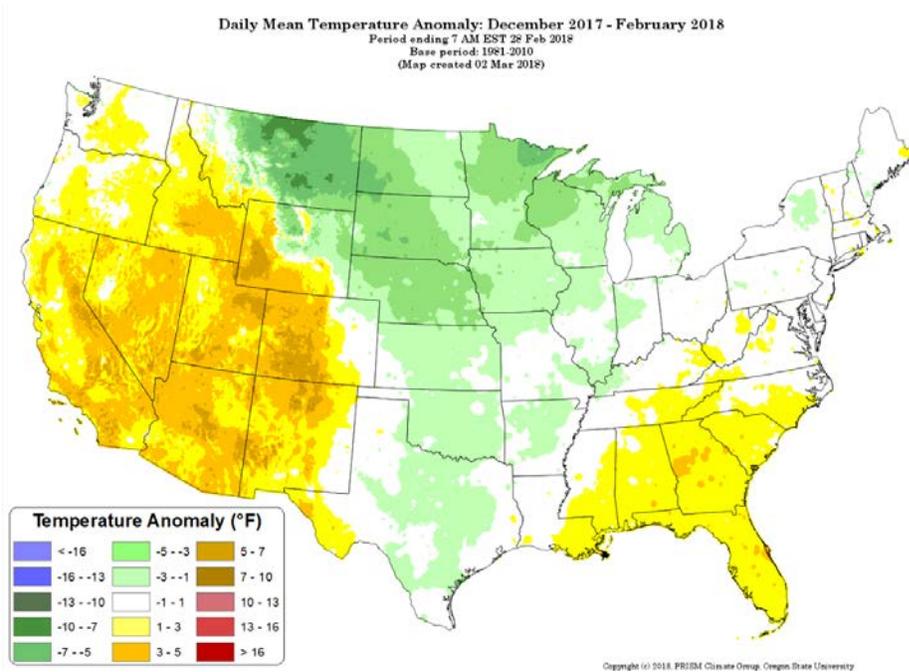
# Water and Climate Update

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

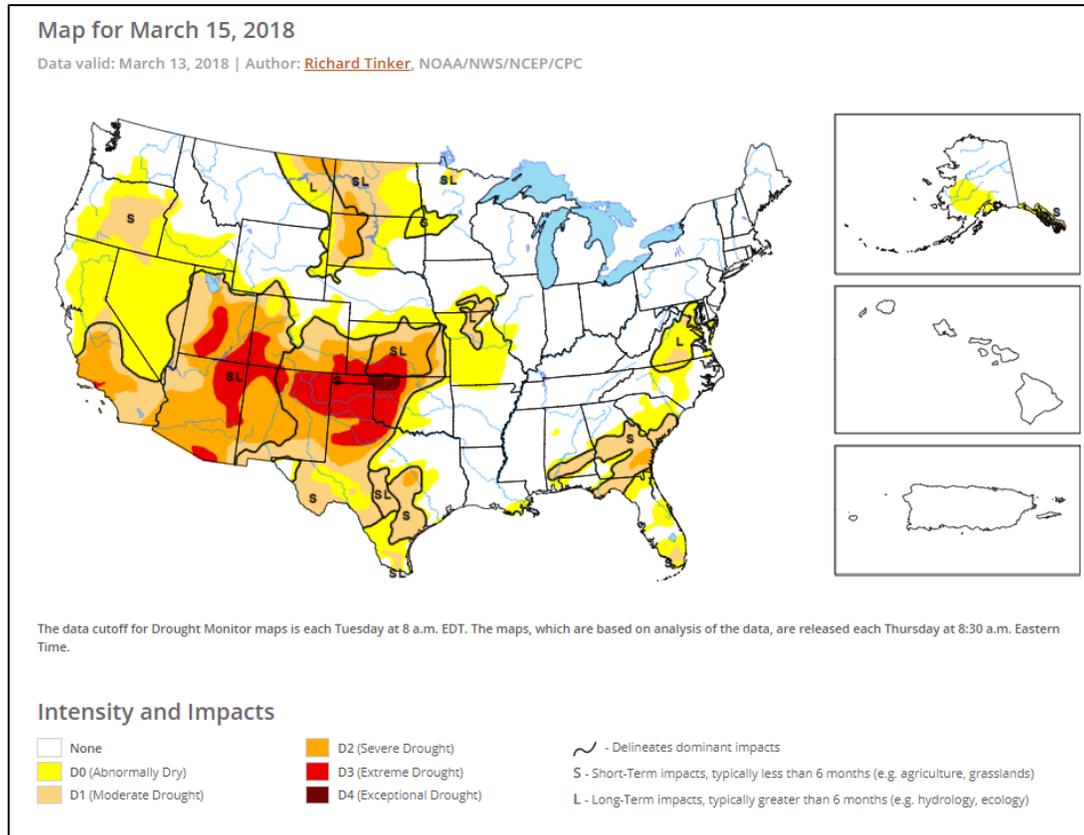


[December 2017 through February 2018 daily mean temperature anomaly map](#)

## Drought

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

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



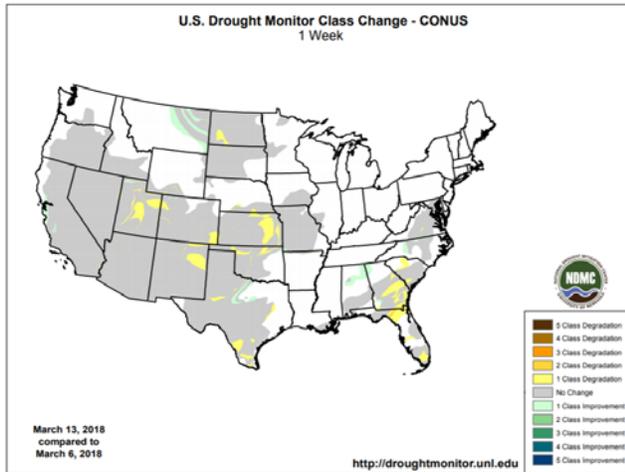
### Current [National Drought Summary](#), March 15, 2018

Author: Richard Tinker, NOAA/NWS/NCEP/CPC

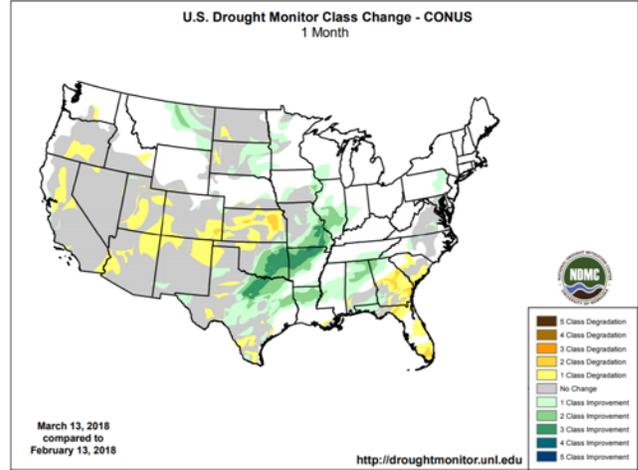
“Generally moderate precipitation (up to 3 inches) fell on most of the Southeast, Lower Mississippi Valley, portions of the California and Oregon Coasts, and the higher elevations of northern California. Lesser amounts (0.6 to 1.0 inch) dampened the central Appalachians, the Tennessee Valley, portions of the northern Intermountain West and southern Rockies, and most other sections of California outside the interior valleys and arid southeastern areas. Meanwhile, little or no precipitation fell on a large swath encompassing most of the Plains, and negligible amounts were also recorded in parts of the Ohio and Mississippi Valleys north of the confluence, the central Rockies, the Great Basin, and the desert Southwest. This includes some of the nation’s most intensely impacted drought areas from the Four Corners states eastward into the south-central Great Plains.”

## Changes in Drought Monitor Categories over Time

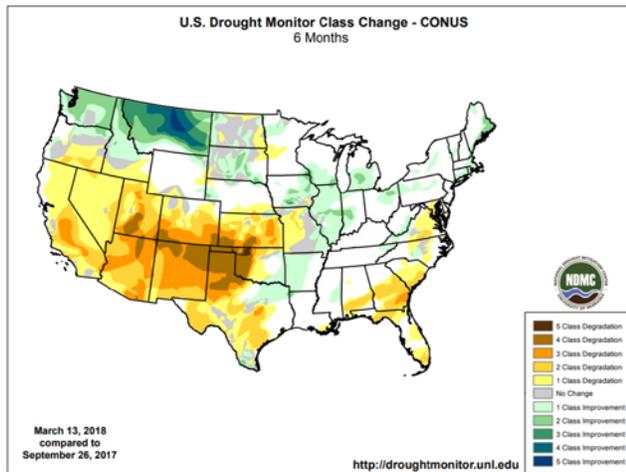
### 1 Week



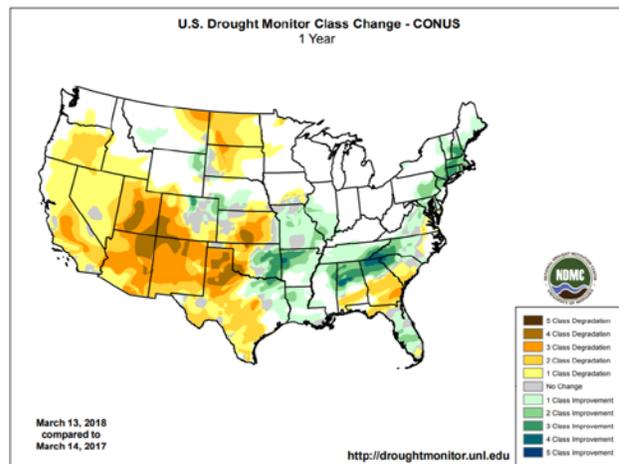
### 1 Month



### 6 Months



### 1 Year

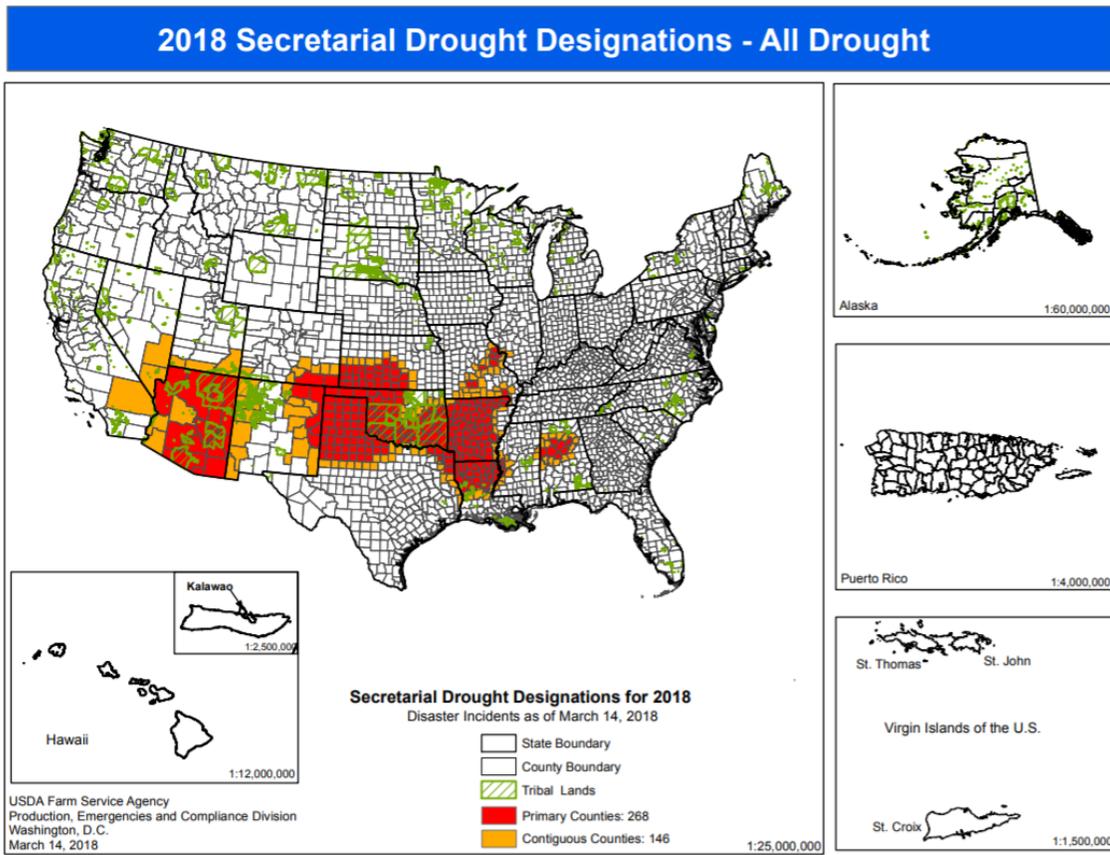


### Changes in drought conditions over the last 12 months

#### 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](#)

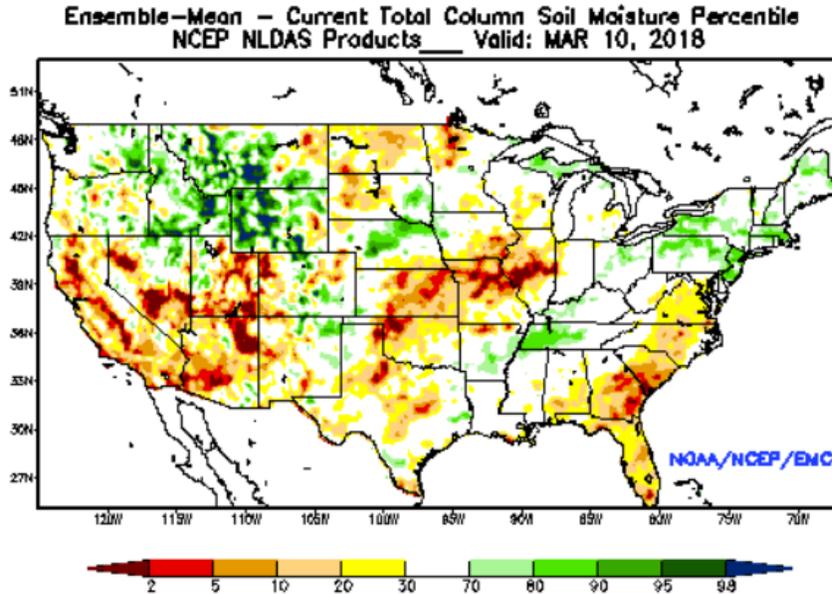
USDA 2018 Secretarial Drought Designations



## Other Climatic and Water Supply Indicators

### Soil Moisture

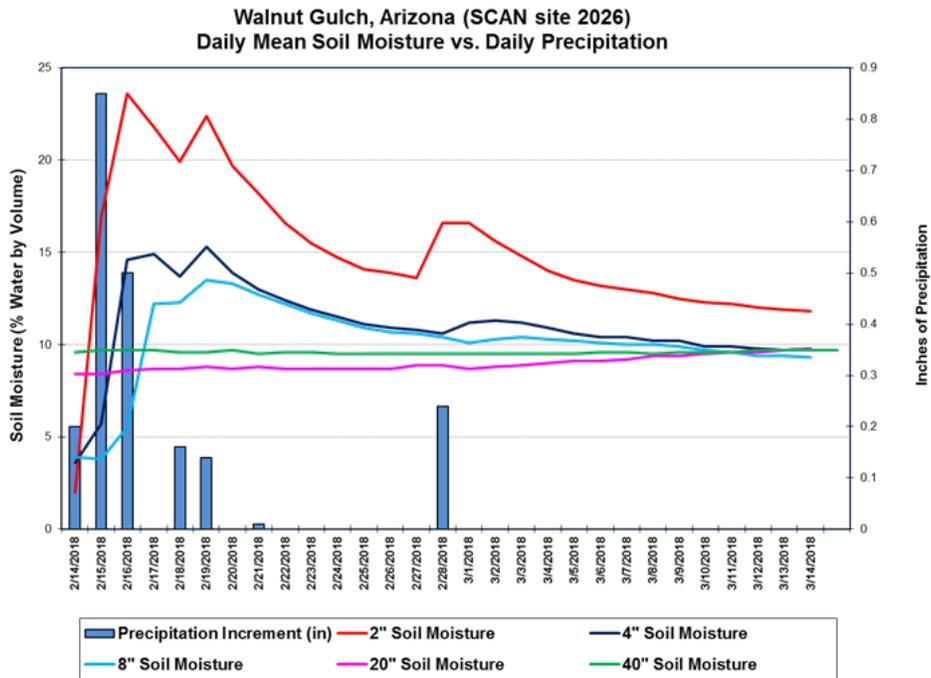
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of March 10, 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 [Walnut Gulch SCAN site](#) in Arizona. The past 30 days had several days with precipitation near the beginning of the period with soil moisture increases at the 2-, 4-, and 8-inch depth sensors. These sensors have shown decreases since then, whereas the 20- and 40-inch sensors show a slow and slight increase of 1-2%.

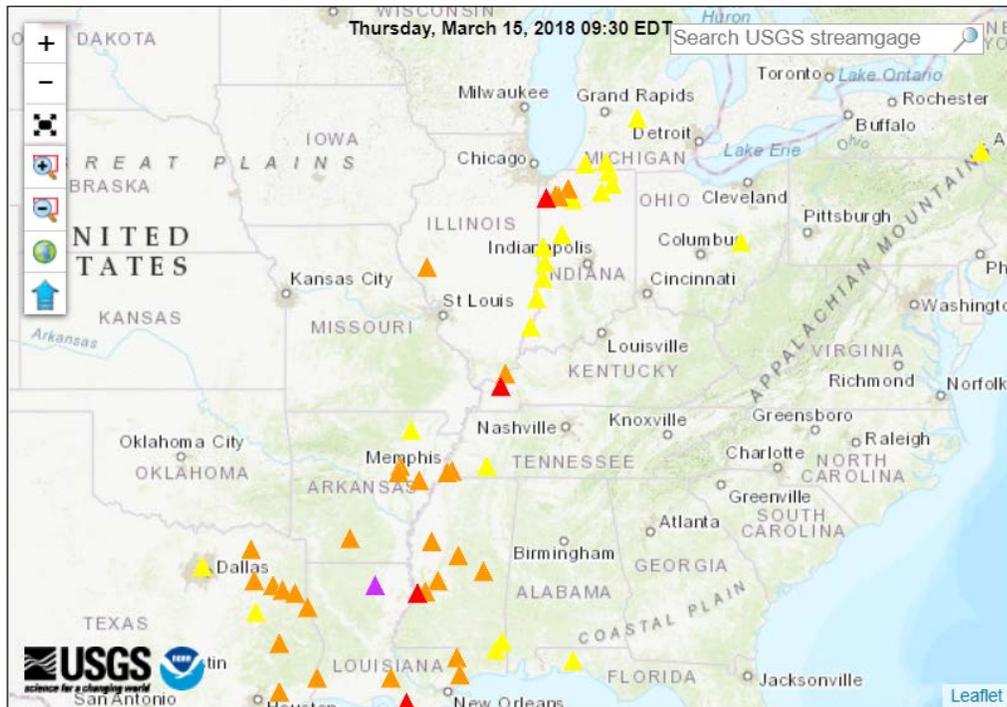
Soil Moisture Data Portals

- [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



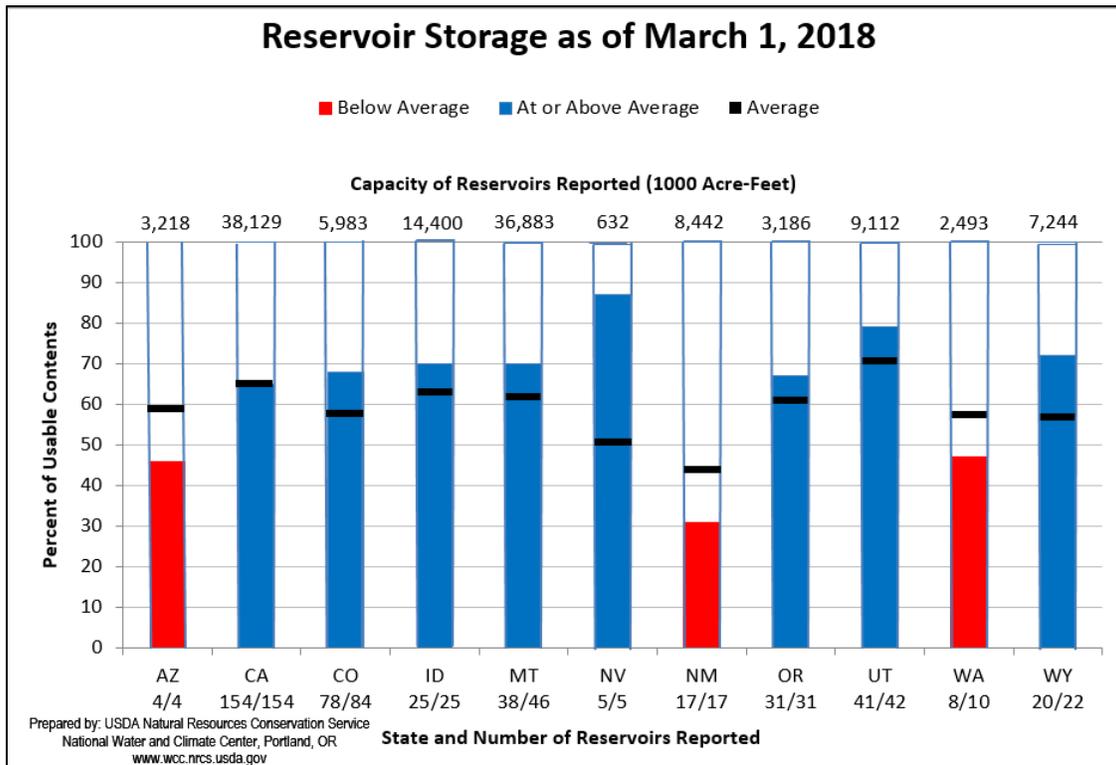
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			▲ Streamgage with flood stage	○ Streamgage without flood stage		

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

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



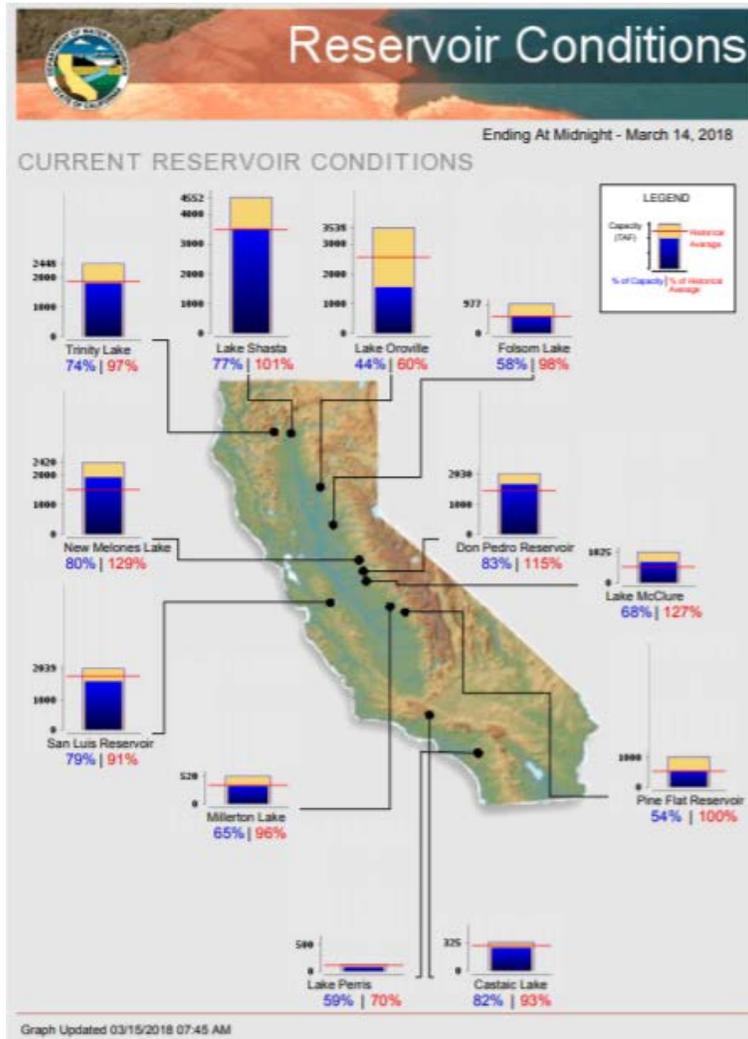
March 1 Reservoir Storage: [Chart](#) | [Dataset](#)

### 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

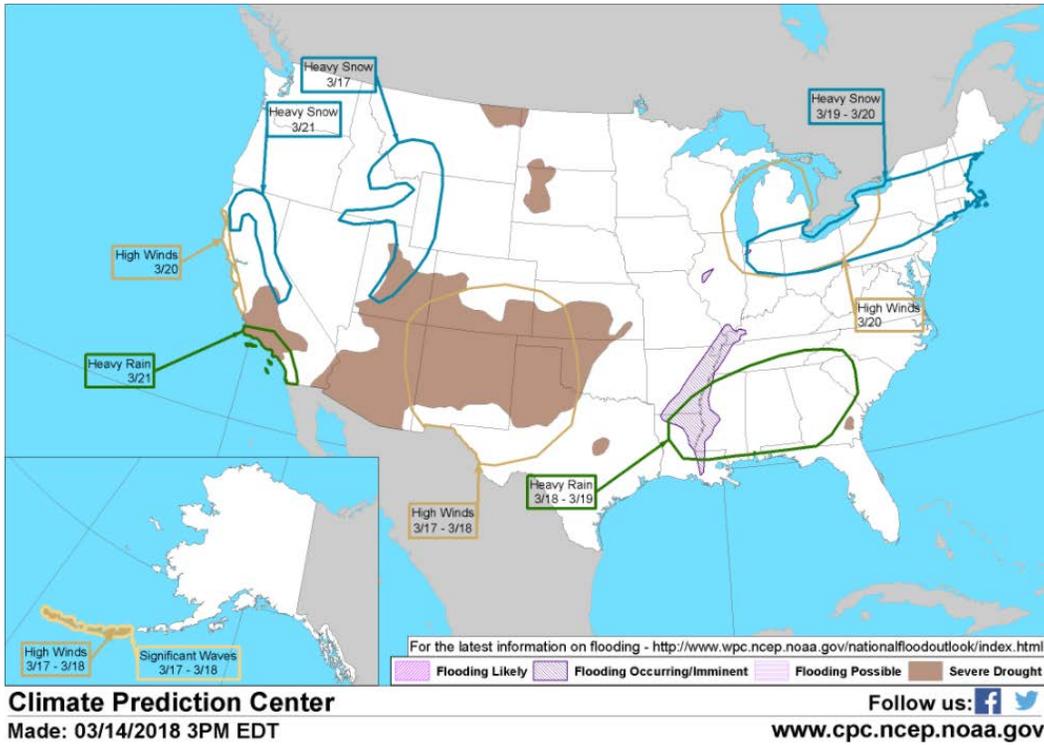
### Agricultural Weather Highlights

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

[National Outlook, Thursday, March 15](#): “During the next few days, a pair of Western storms will maintain unsettled conditions. Aside from the southern High Plains, southern Rockies, and Desert Southwest, nearly all areas in the western and central U.S. will receive some rain and/or snow. Five-day precipitation totals could reach 2 to 4 inches or more in the Sierra Nevada. Meanwhile, significant, late-season snow can be expected on the Plains as far south as Nebraska. In contrast, warm, dry, windy weather will lead to a substantial, multi-day wildfire threat on the southern High Plains. Elsewhere, periods of rain across the southern Corn Belt and the Southeast could result in 5-day rainfall totals of 1 to 2 inches. The NWS 6- to 10-day outlook for March 20 – 24 calls for the likelihood of below-normal temperatures and above normal precipitation across most of the country. Warmer- and drier-than-normal weather will be confined to southern Florida and portions of the south-central U.S., including the southern High Plains.”

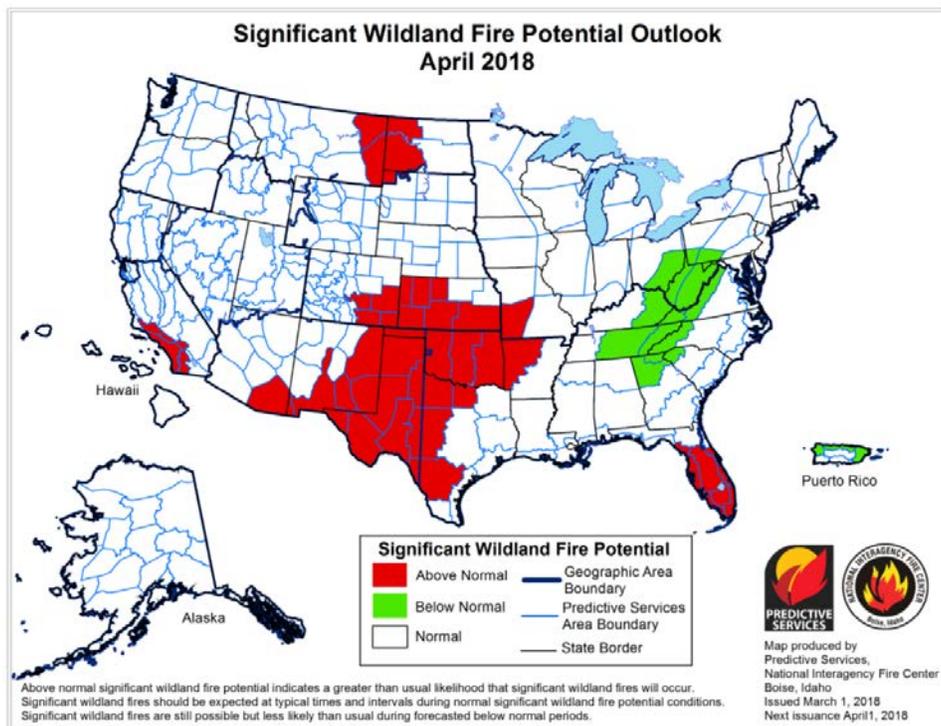
Weather Hazard Outlook [March 17 - 21, 2018](#)

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

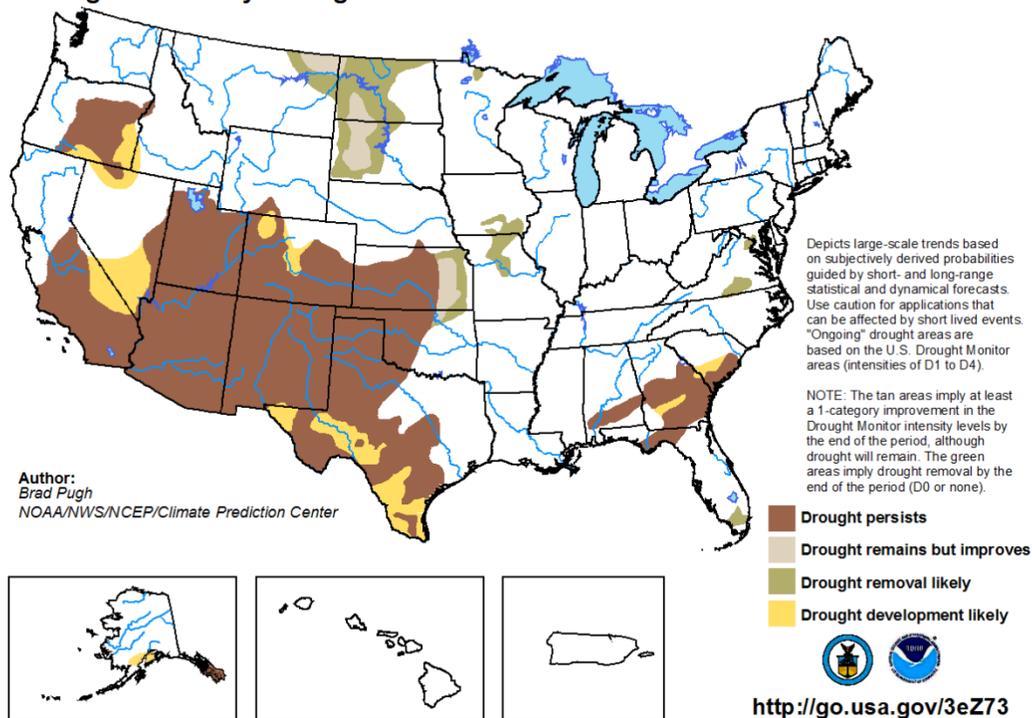


Seasonal Drought Outlook: [March 15 - June 30, 2018](#)

Source: National Weather Service

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

Valid for March 15 - June 30, 2018  
Released March 15, 2018

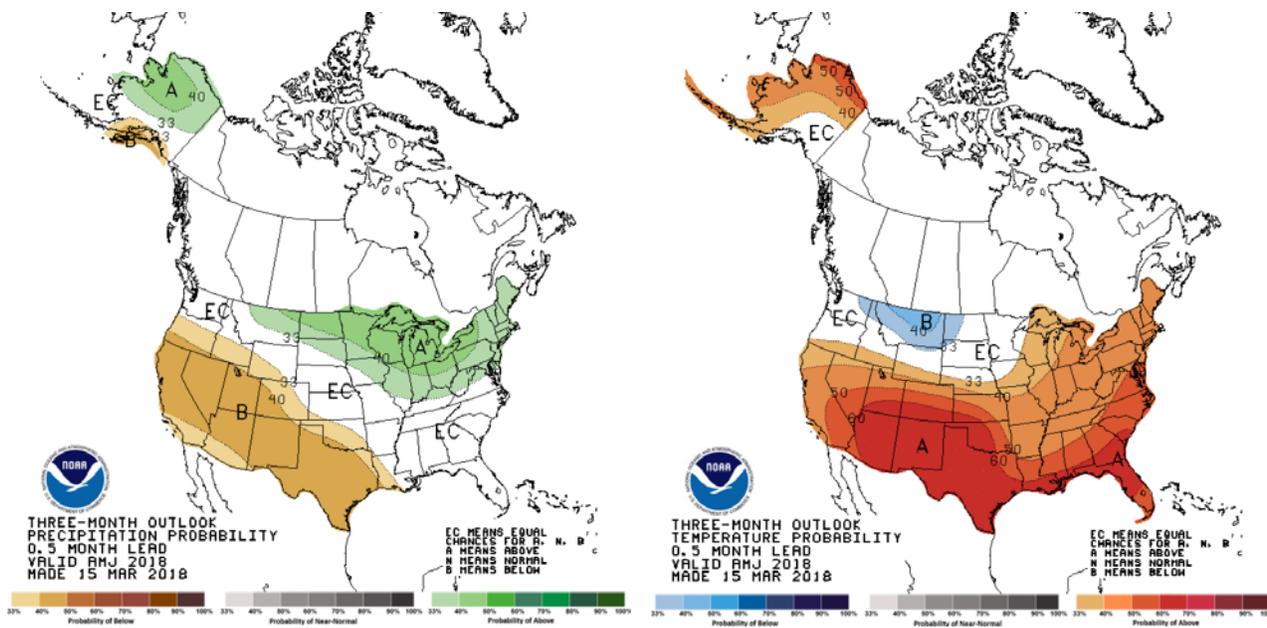


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

[Precipitation](#)

[Temperature](#)



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