



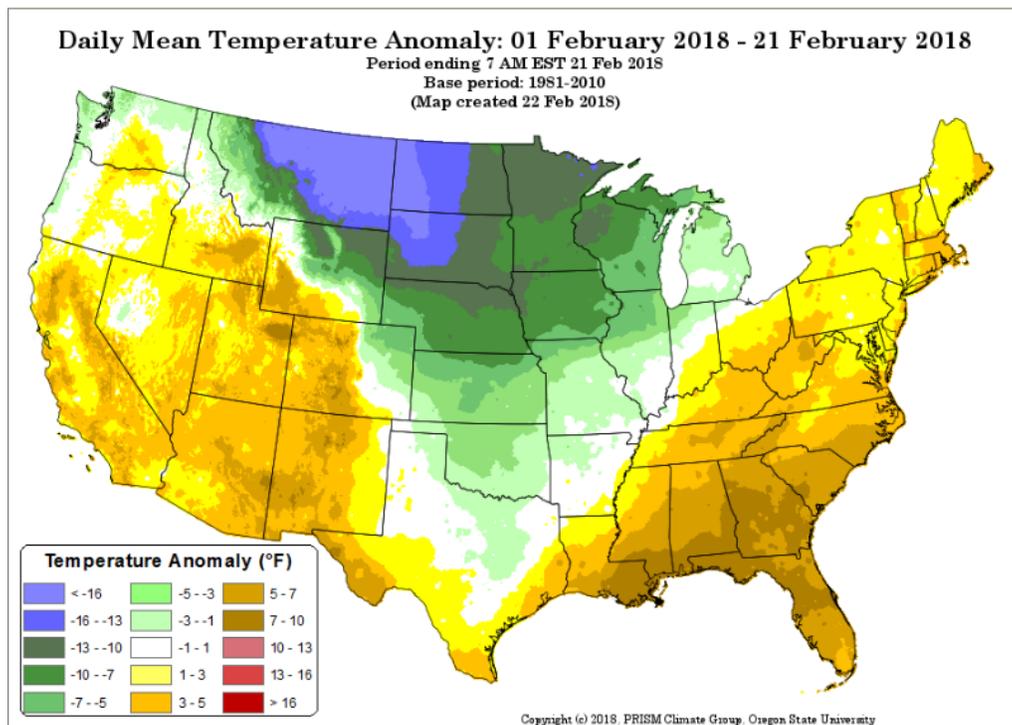
# Water and Climate Update

February 22, 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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Precipitation .....	3	Short- and Long-Range Outlooks.....	15
Temperature.....	7	More Information .....	18
Drought .....	9		

## Cold temperatures entrenched in the northern Plains



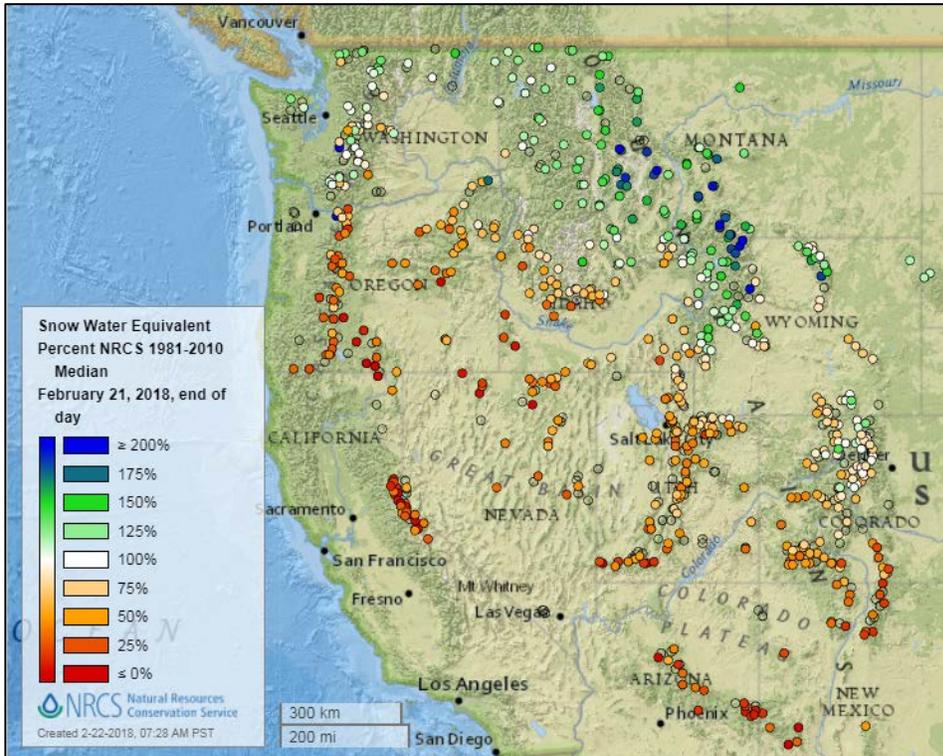
Cold temperatures have gripped the northern Plains in February with temperatures more than 16 degrees Fahrenheit colder than normal in parts of Montana, and western North and South Dakota. Daily records indicate that temperatures in Montana dipped to 30 degrees below zero in some locations, breaking records.

**Related:**

- [Record breaking cold grips Montana – Great Falls Tribune](#)
- [Snow and cold grip Montana causing hazardous travel conditions across state - Billings Gazette](#)
- [Wild, weird weather on the way: Record cold West, record warm East, flooding in the center USA Today](#)
- [Snow and cold grip Montana – NBC Montana](#)

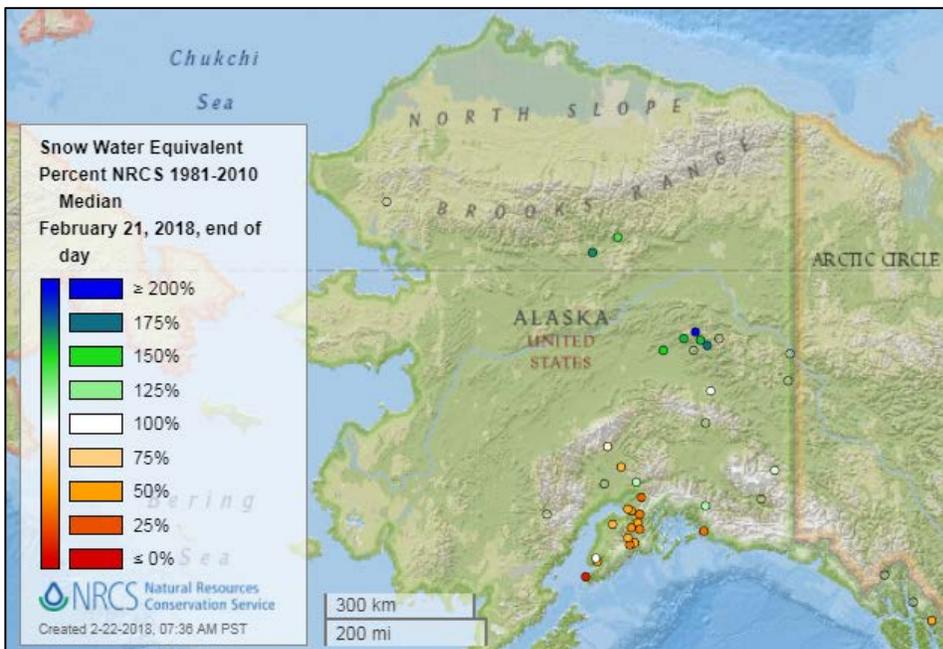
## Snow

### Current Snow Water Equivalent, NRCS SNOTEL Network



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

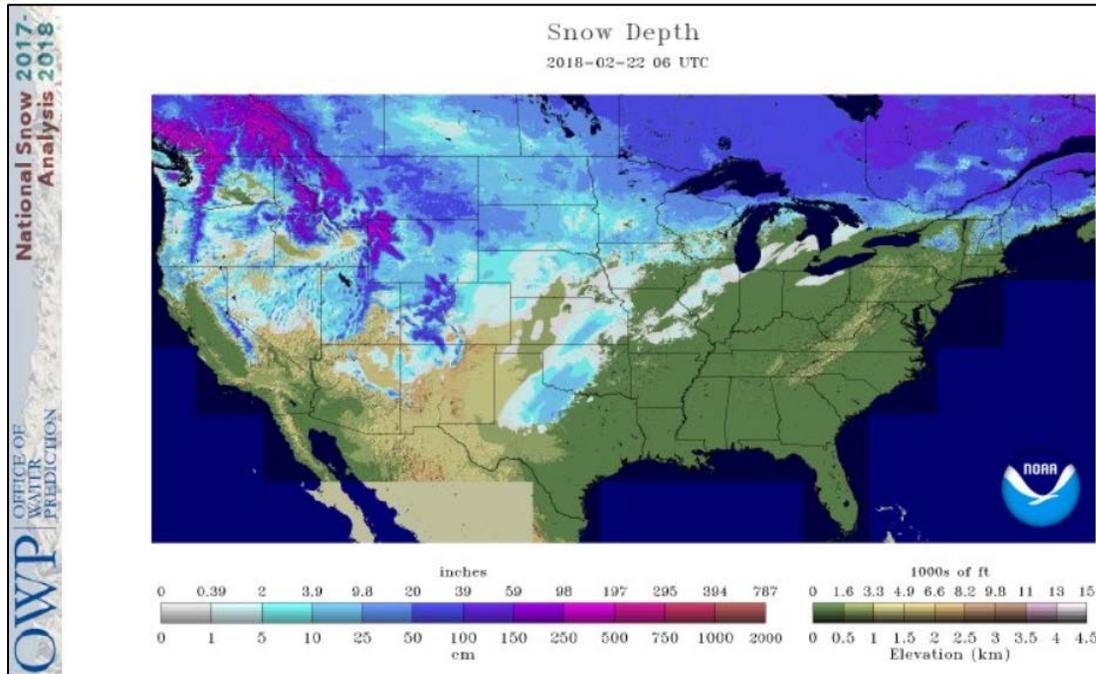
**See also:**  
[Snow water equivalent values \(inches\) map](#)



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

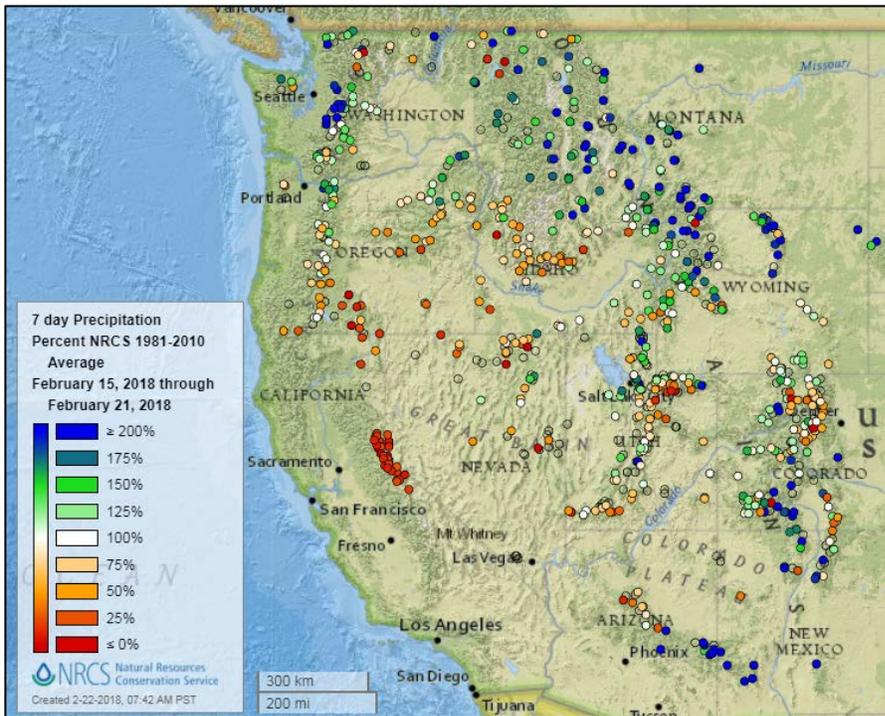
**See also:**  
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



## Precipitation

### Last 7 Days, NRCS SNOTEL Network



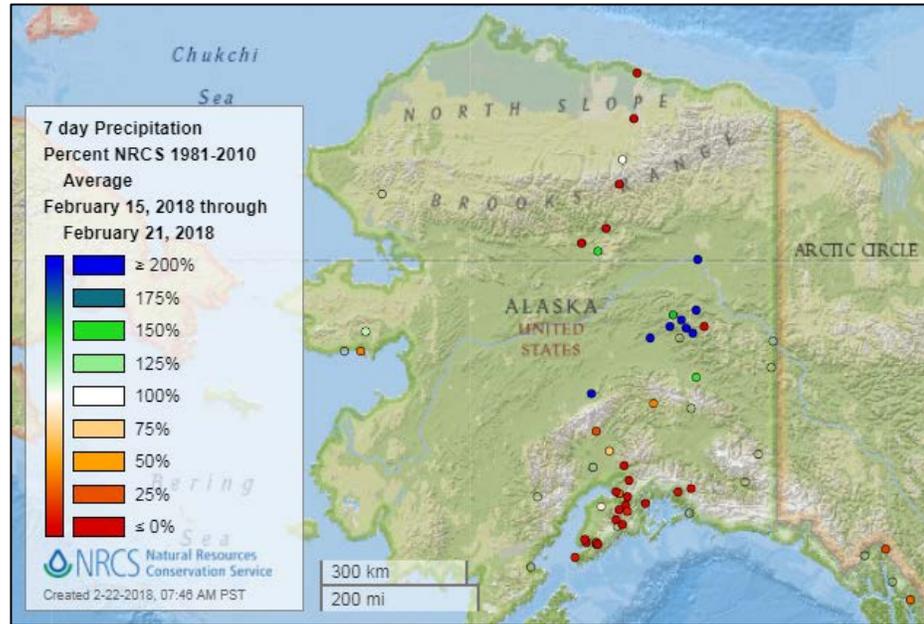
[7-day precipitation percent of average map](#)

**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](#)



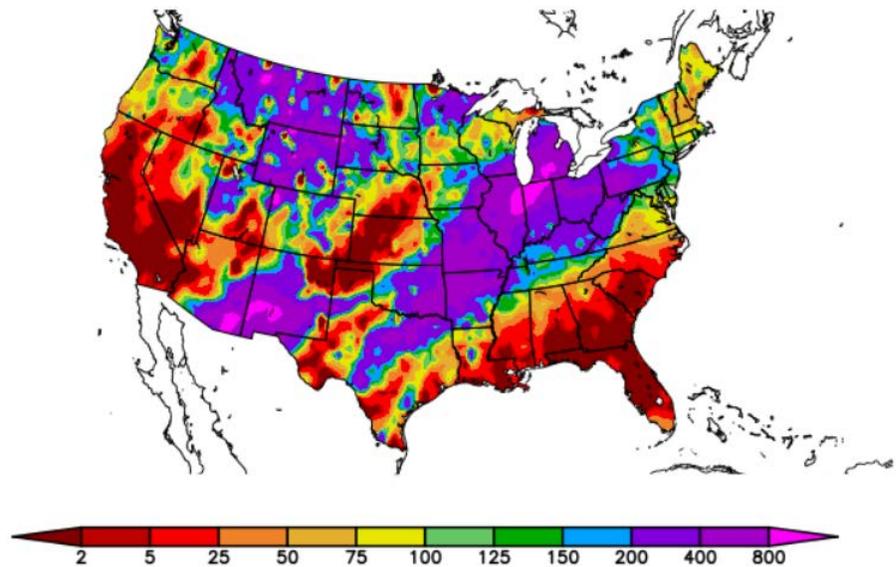
## Last 7 Days, National Weather Service (NWS) Networks

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 (%) 2/15/2018 – 2/21/2018



Generated 2/22/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

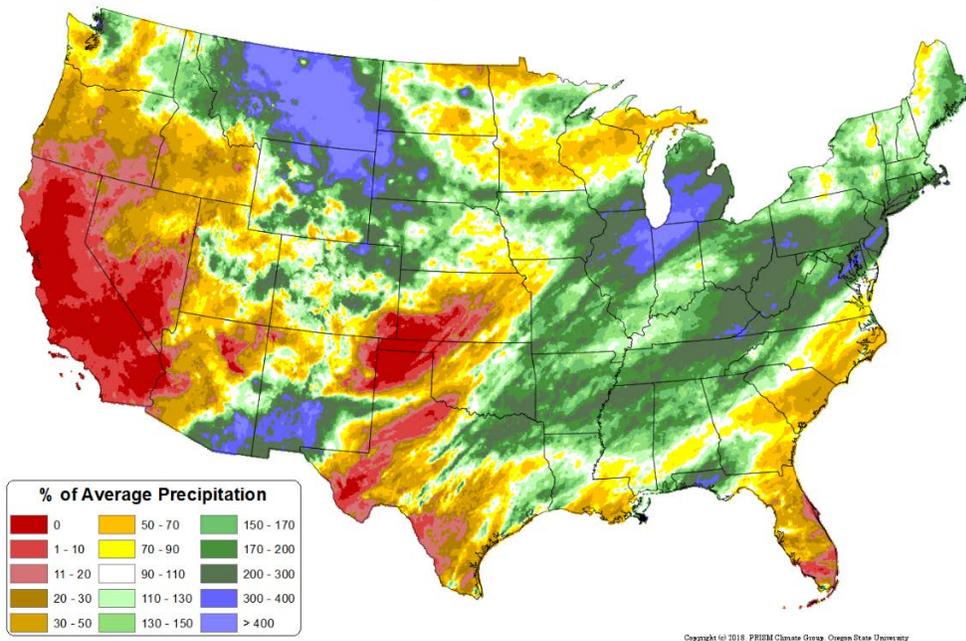
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 February 2018 - 21 February 2018  
Period ending 7 AM EST 21 Feb 2018  
Base period: 1981-2010  
(Map created 22 Feb 2018)

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

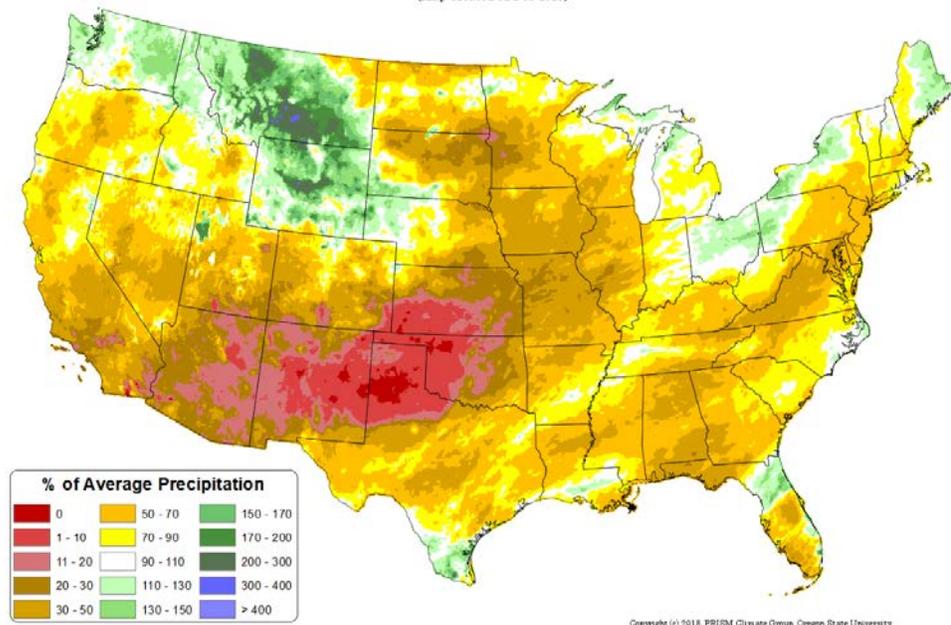


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

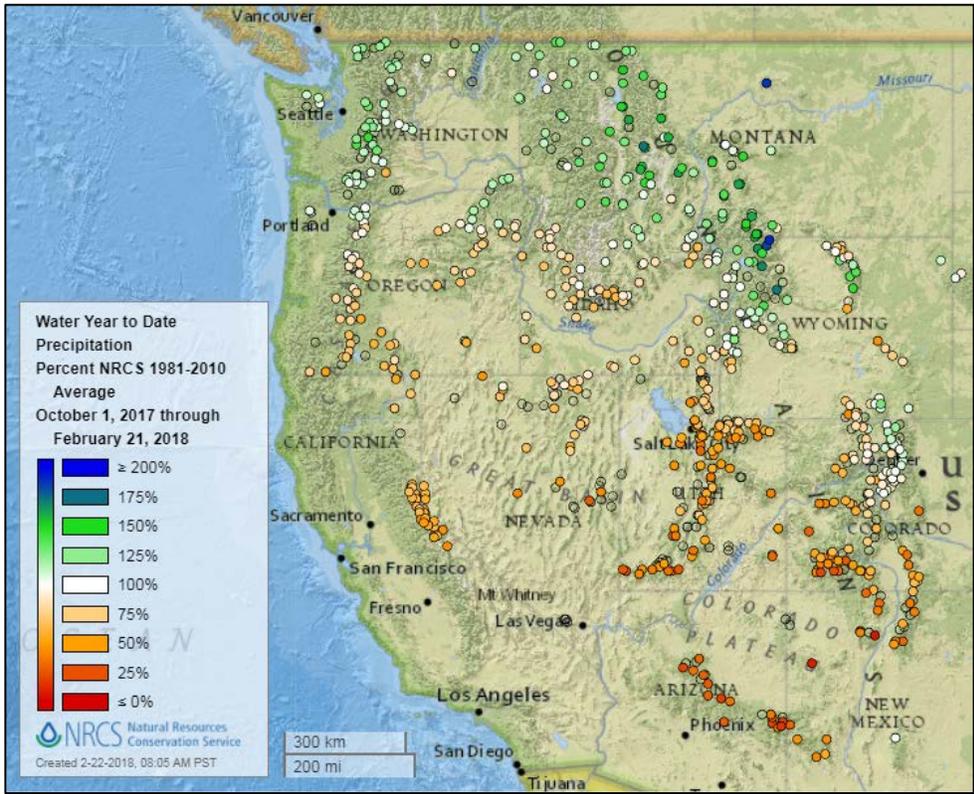
Source: PRISM

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

Total Precipitation Anomaly: November 2017 - January 2018  
Period ending 7 AM EST 31 Jan 2018  
Base period: 1981-2010  
(Map created 02 Feb 2018)

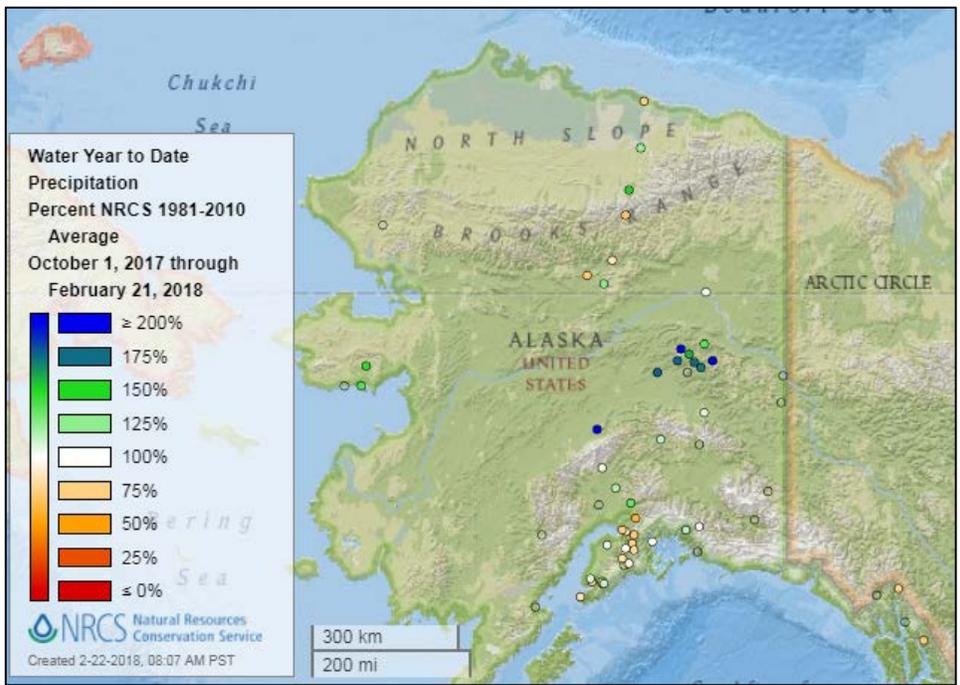


Water Year-to-Date, NRCS SNOTEL Network



[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

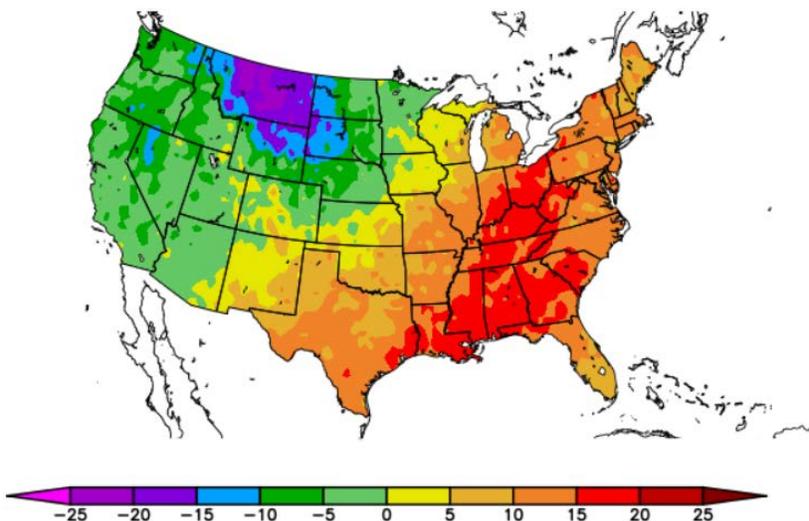
Last 7 Days, National Weather Service (NWS) Networks

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)  
2/15/2018 – 2/21/2018



Generated 2/22/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

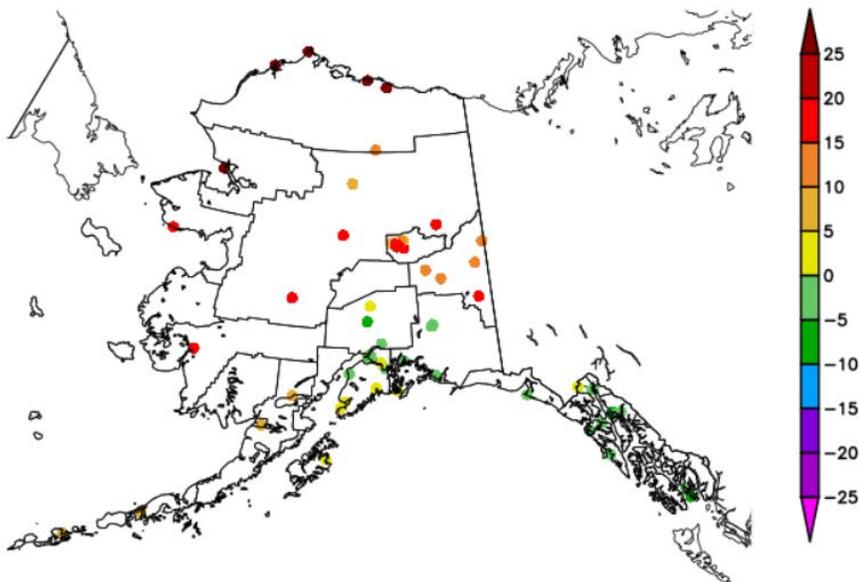
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
2/15/2018 – 2/21/2018



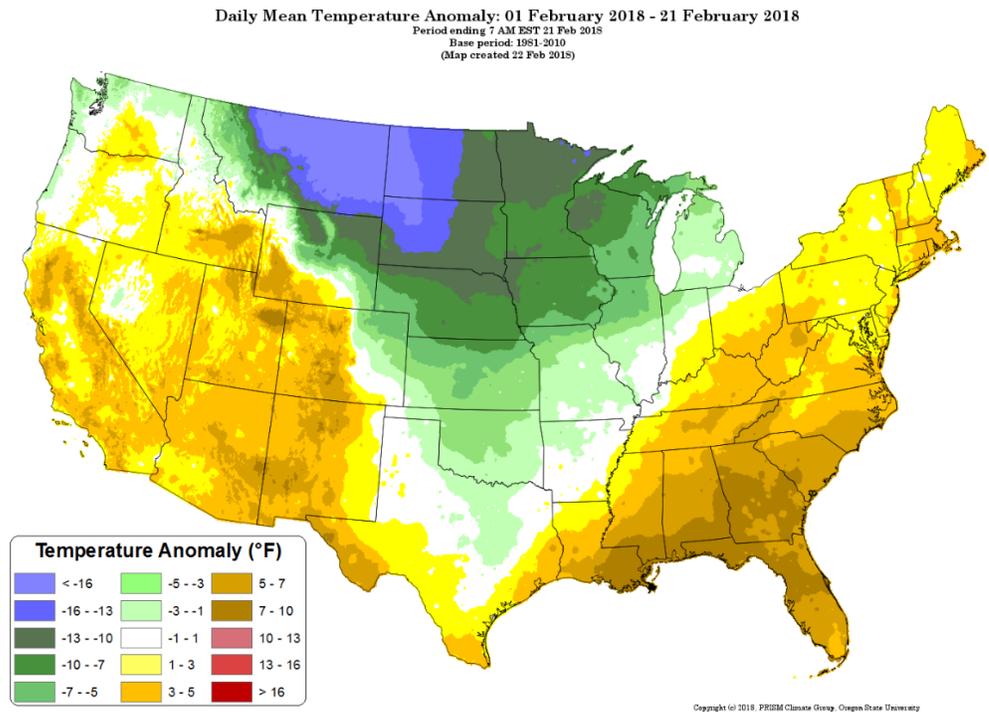
Generated 2/22/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

# Water and Climate Update

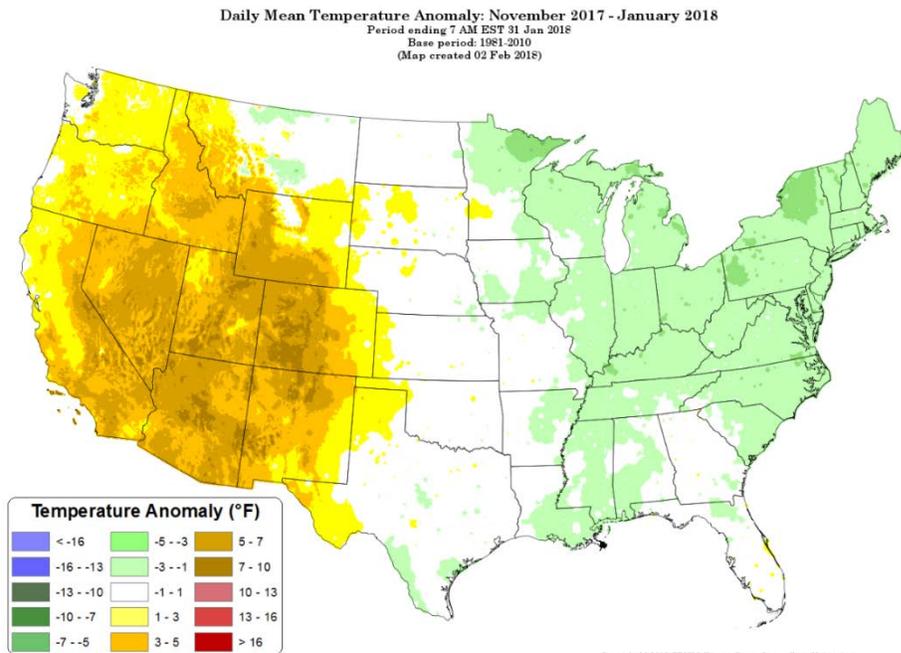
Month-to-Date, All Available Data Including SNOTEL and NWS Networks Source: PRISM

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



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

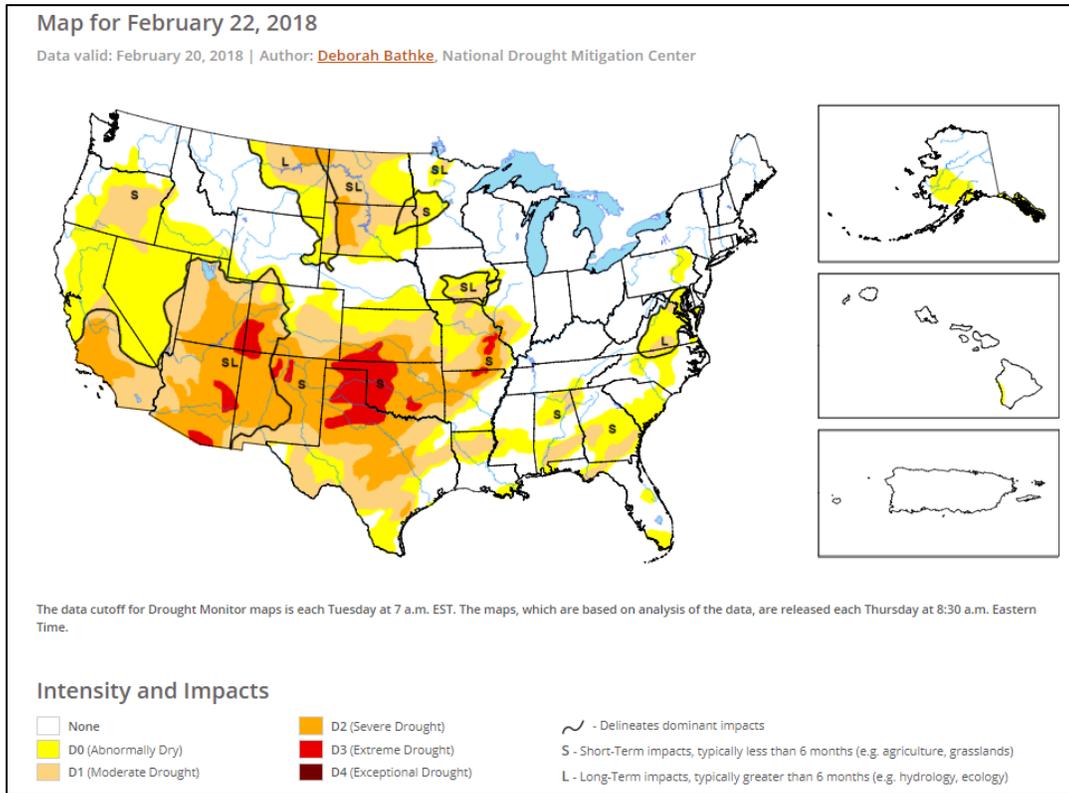
[November 2017 through January 2018 daily mean temperature anomaly map](#)



## Drought

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

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

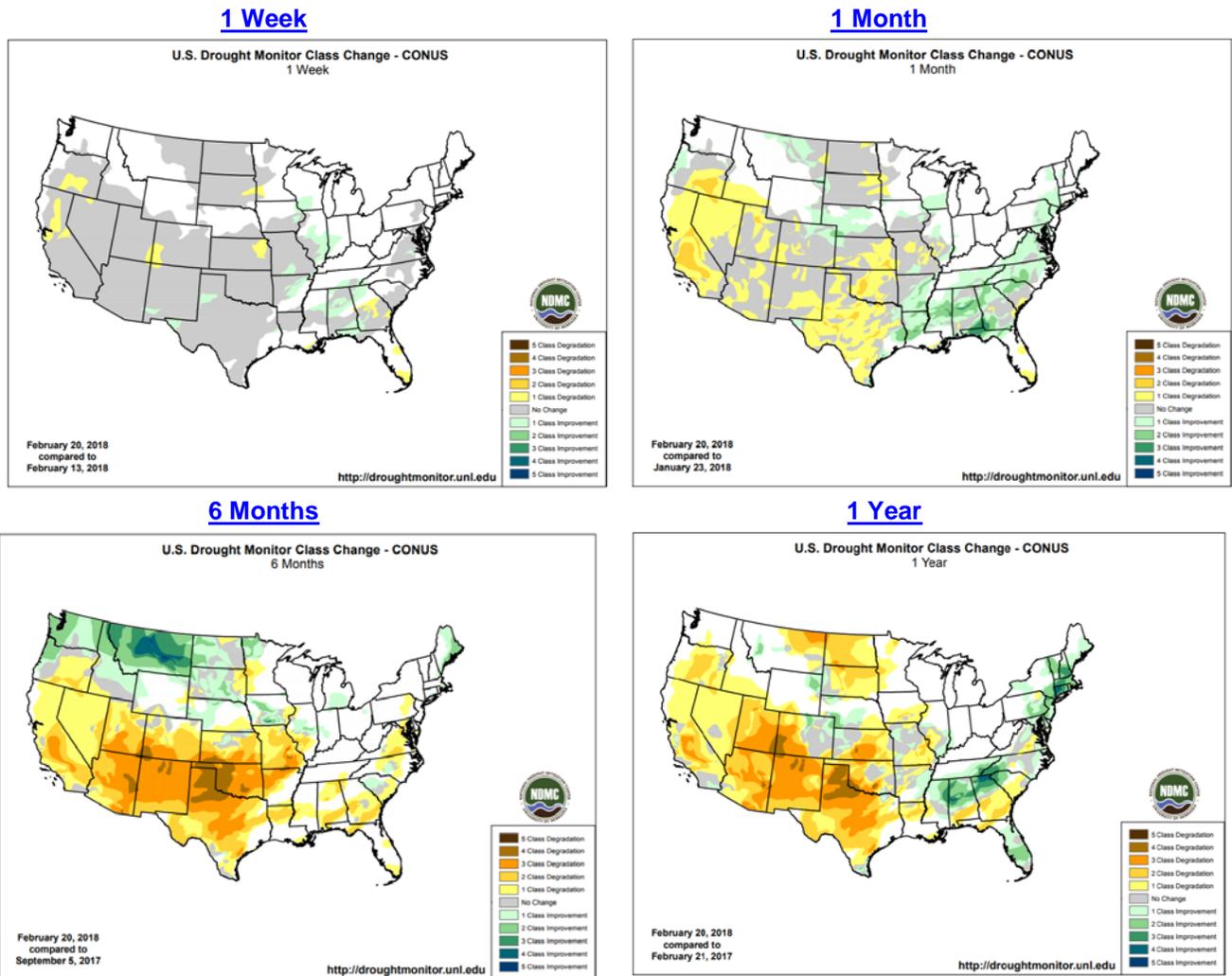


### Current [National Drought Summary](#), February 22, 2018

Author: Deborah Bathke, National Drought Mitigation Center

“During the past week, large precipitation events affected the Pacific Northwest, Southwest, southern Plains, Midwest, Ohio Valley, Tennessee River Valley, and mid-Atlantic, alleviating drought conditions or preventing further degradations in these areas. An active storm track in the coming week is expected to bring additional precipitation in the central and southern United States, which may result in further drought reductions. Conditions degraded in some areas of the Desert Southwest and Intermountain West that missed out on the heavier precipitation, most notably the Sierra Nevada and the Four Corners.”

## Changes in Drought Monitor Categories over Time

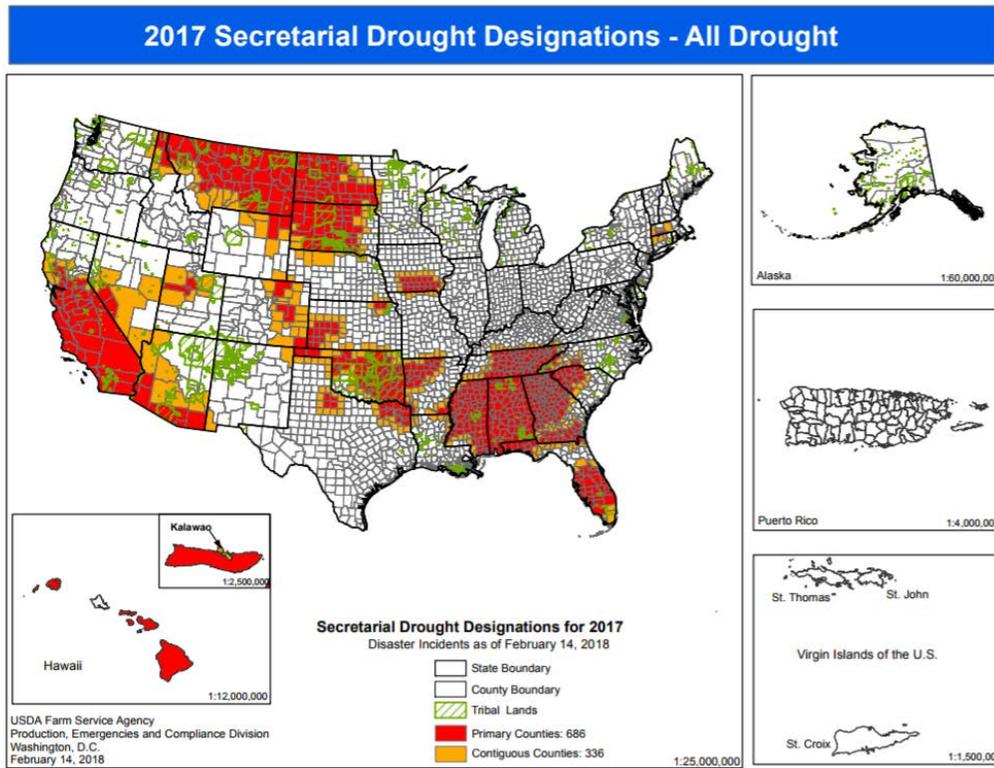


### [Changes in drought conditions over the last 12 months](#)

#### 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](#)

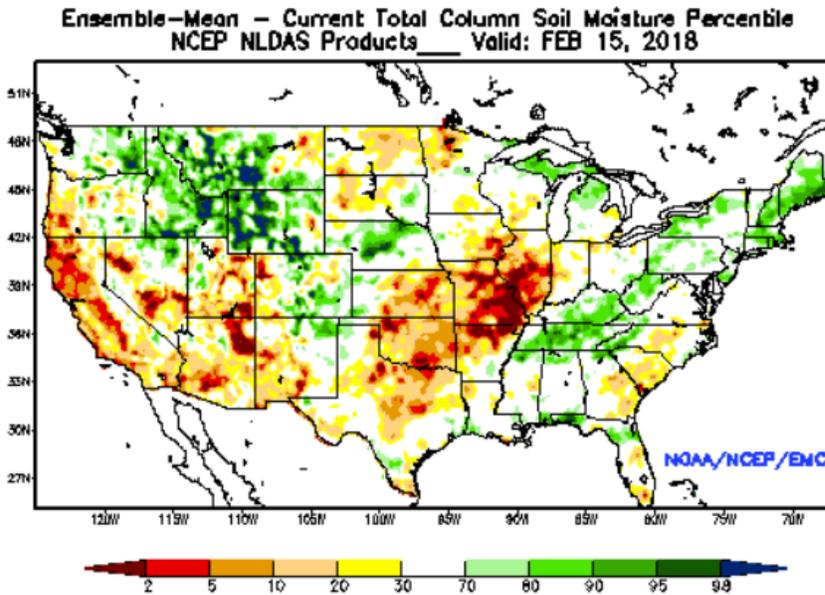
USDA 2017 Secretarial Drought Designations



## Other Climatic and Water Supply Indicators

### Soil Moisture

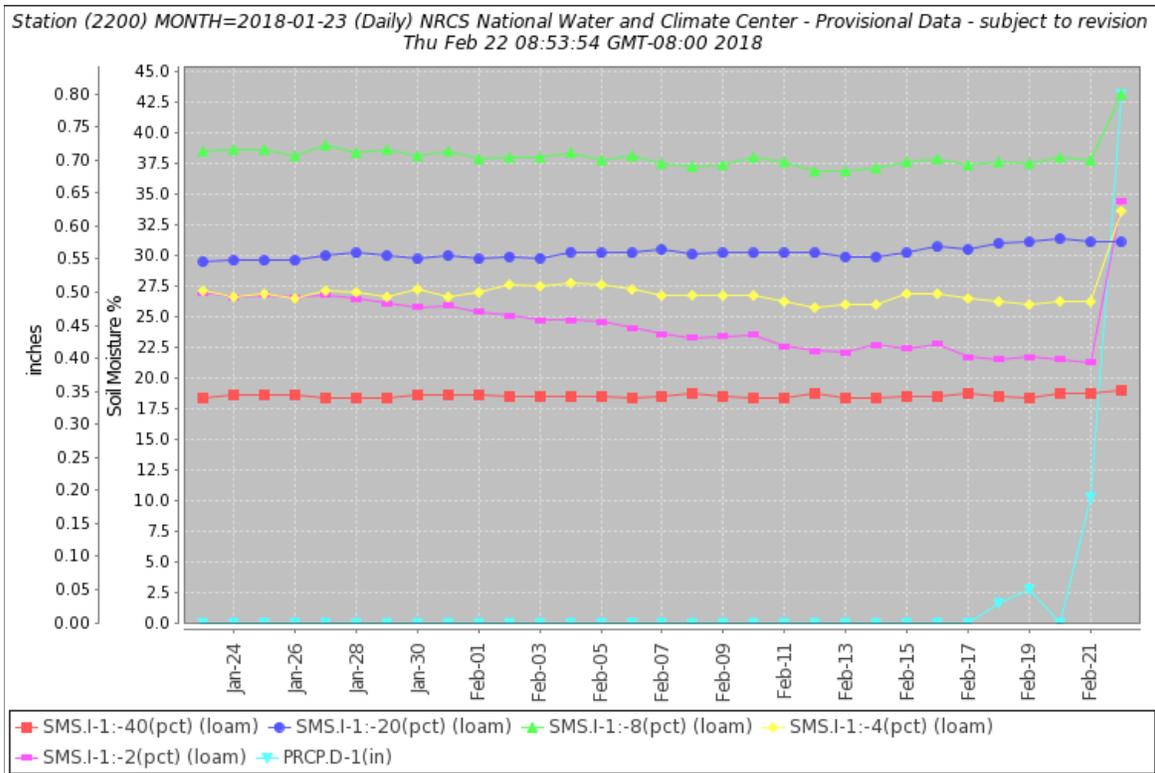
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of February 15, 2018.

### Soil Moisture Data

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



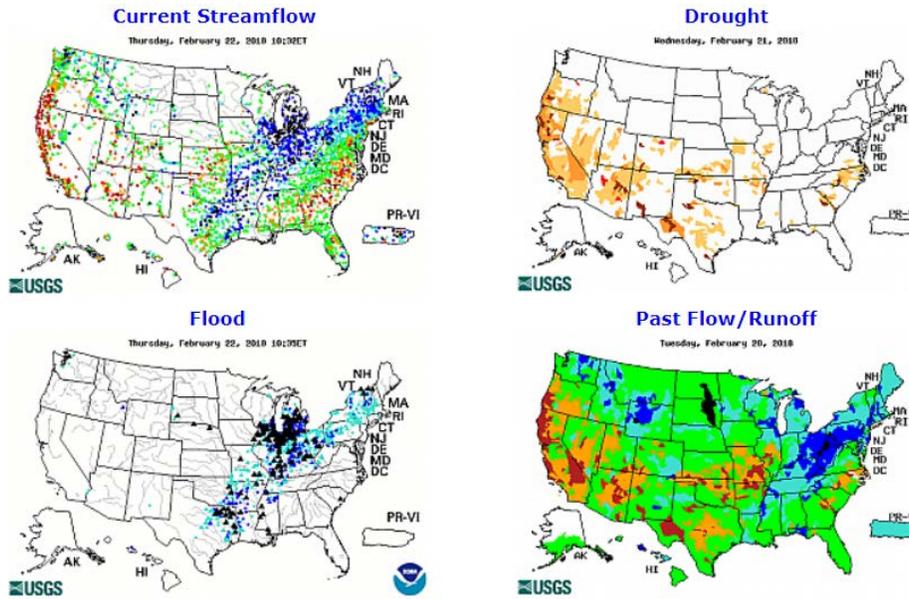
The chart shows precipitation and soil moisture for the last 30 days at the [San Angelo SCAN site 2200](#) in Texas. The past 30 days show very dry conditions with no precipitation until February 18. The larger precipitation event on February 21 increased the soil moisture at the 2-, 4-, and 8-inch sensor depths.

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

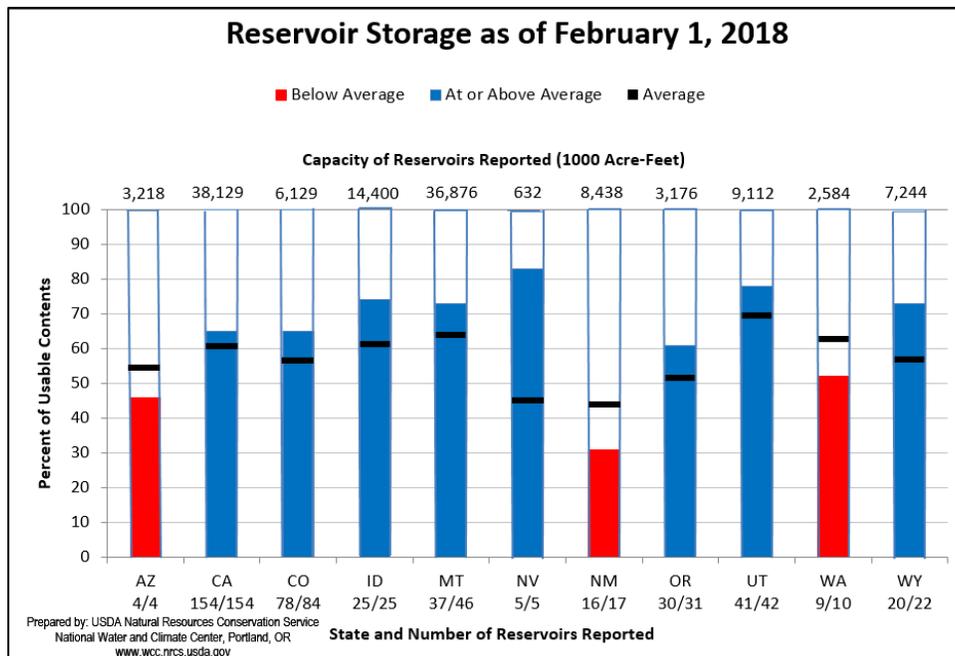


[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



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

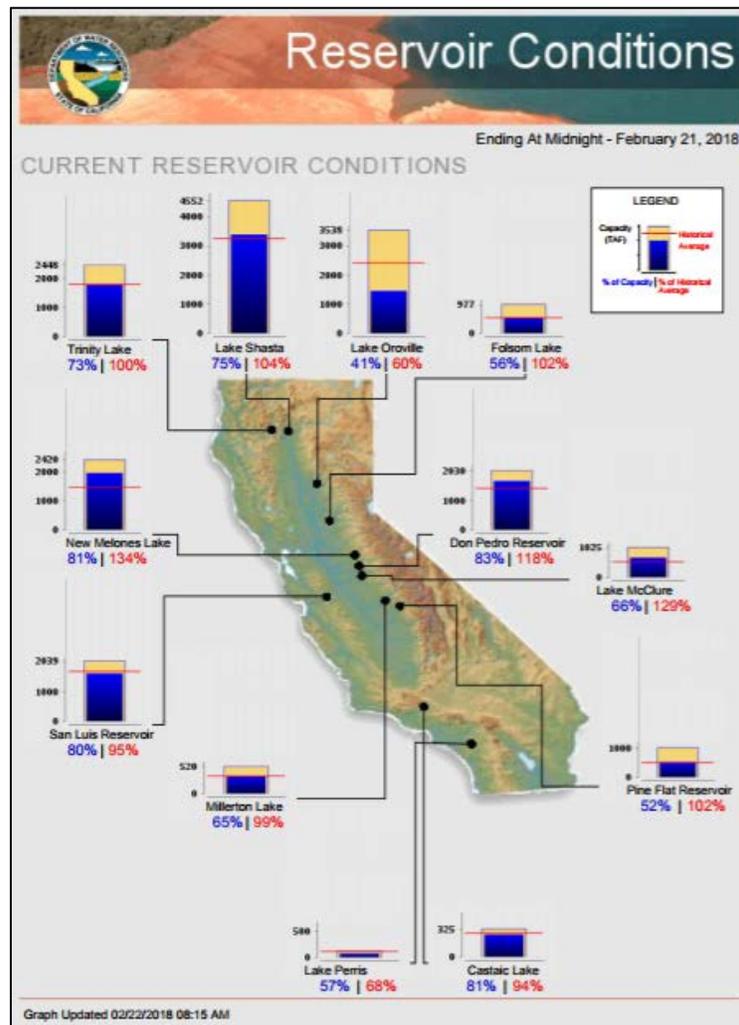
# Water and Climate Update

## 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

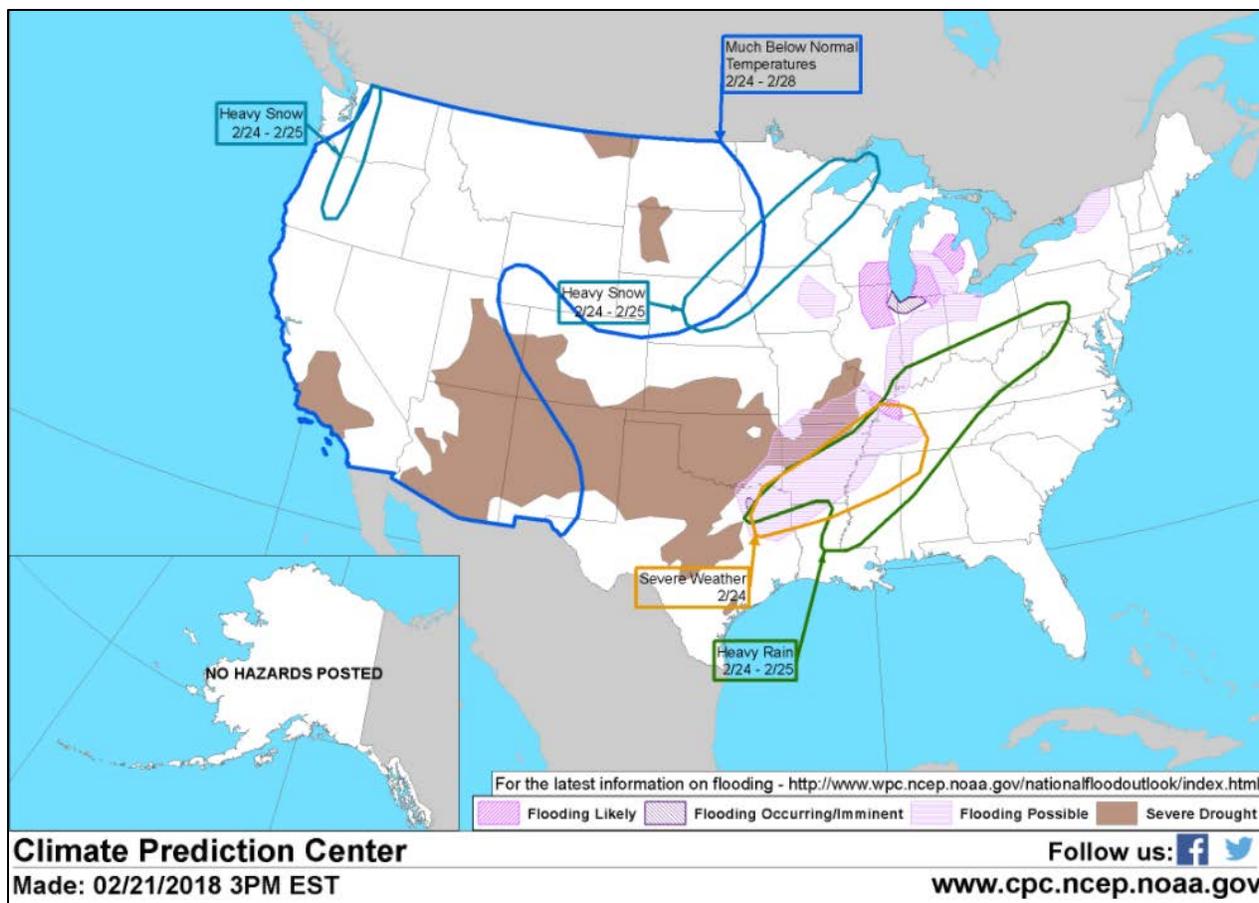
### Agricultural Weather Highlights

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

[National Outlook, Thursday, February 22](#): “Warm weather will continue in the Southeast and gradually expand to cover the eastern half of the U.S. Cold conditions will persist into next week, however, in the West. Meanwhile, heavy precipitation (locally 2 to 4 inches) will linger into the weekend from eastern Texas into the Ohio Valley, prolonging the flood threat. An area from Texas into the upper Great Lakes region will experience wintry weather, with freezing rain possible in some areas and weekend snow expected from the central Plains into the upper Midwest. Snow will also affect portions of the West, with the greatest accumulations expected in the Intermountain West and the Pacific Northwest. The NWS 6- to 10-day outlook for February 27 – March 3 calls for the likelihood of below-normal temperatures across the northern Plains and the West, while warmer-than-normal weather will prevail east of a line from central Texas to Lake Michigan. Meanwhile, near- to above-normal precipitation across most of the country should contrast with drier-than-normal conditions in southern Florida, the southern High Plains, and parts of the northern Rockies.”

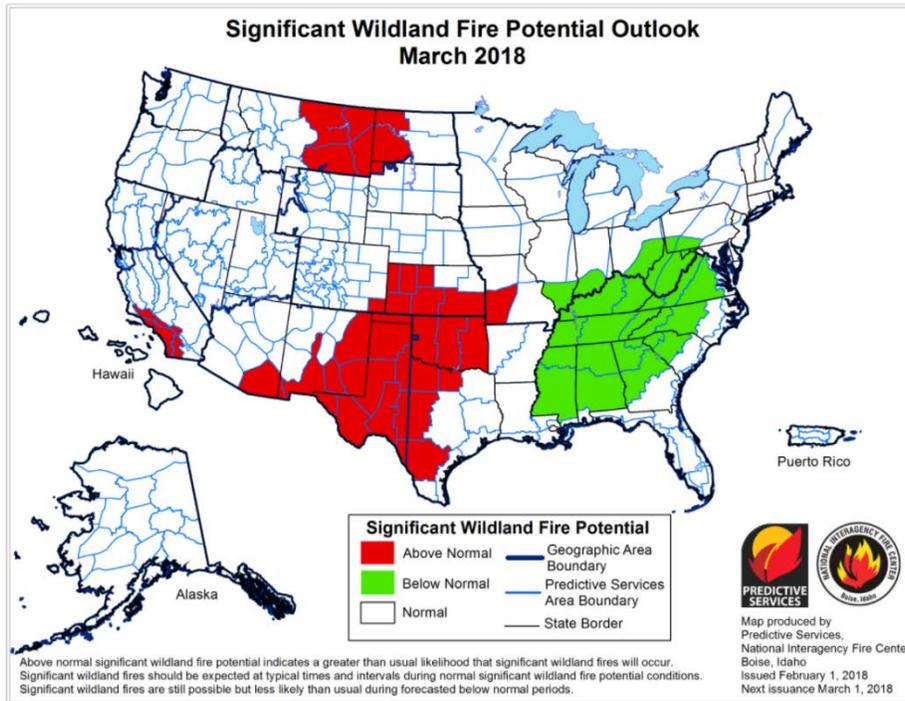
### Weather Hazard Outlook [February 24 - 28, 2018](#)

Source: Climate Prediction Center

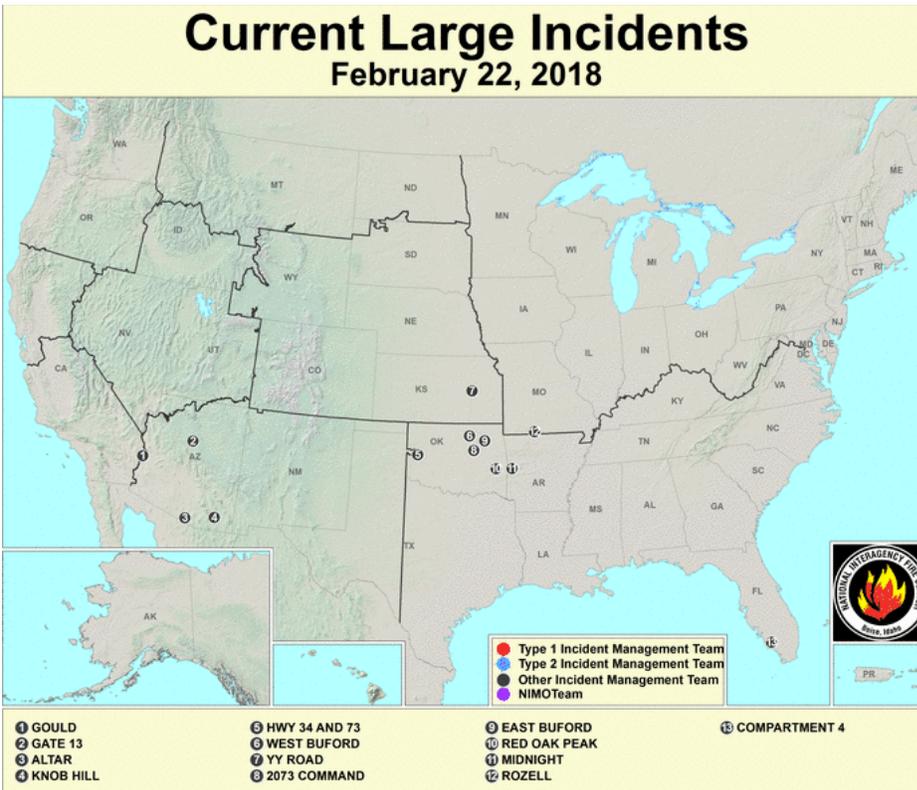


Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center



Wildfires: [USDA Forest Service Active Fire Mapping](#)



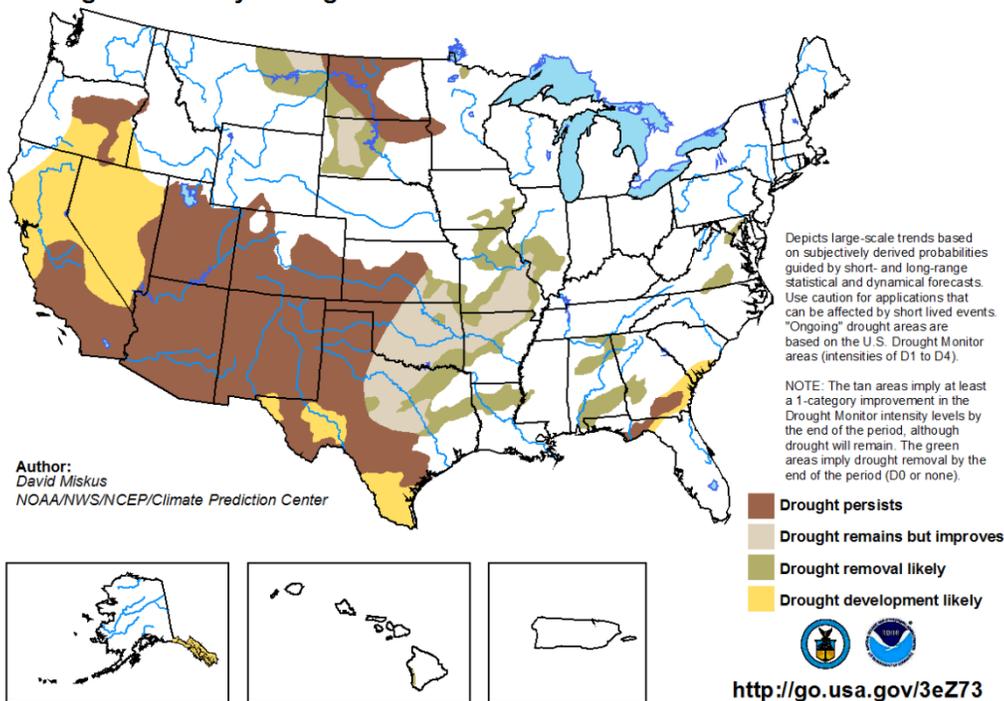
Highlighted Wildfire Resources

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

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

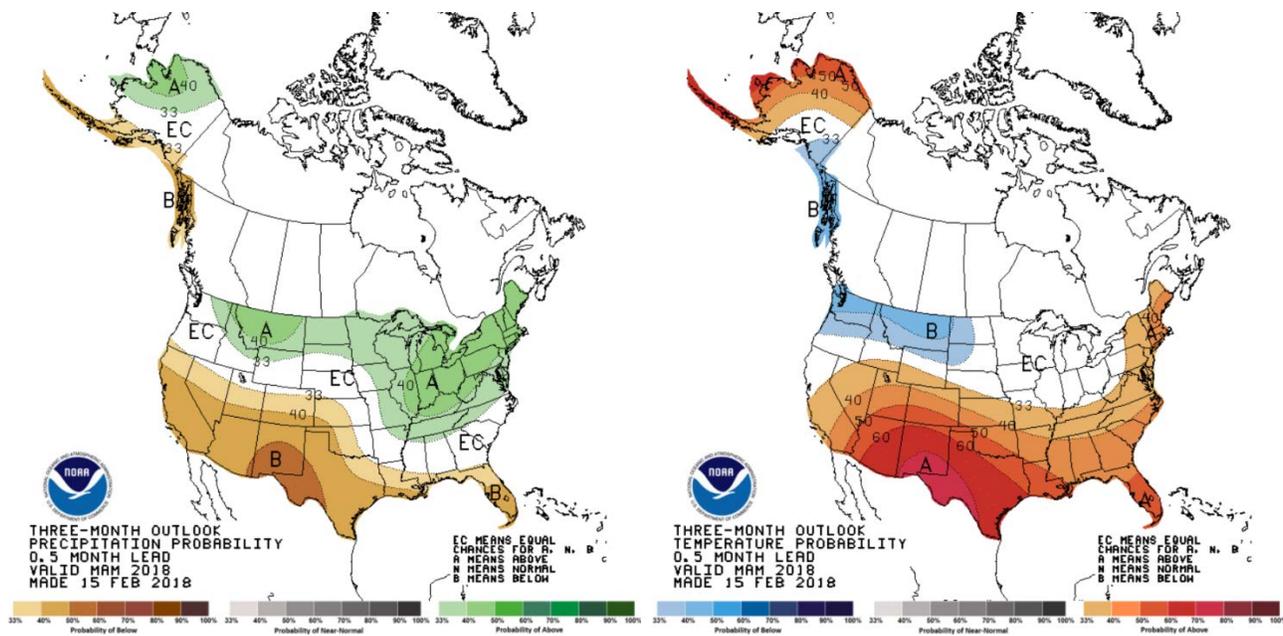


**Climate Prediction Center 3-Month Outlook**

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](#).