

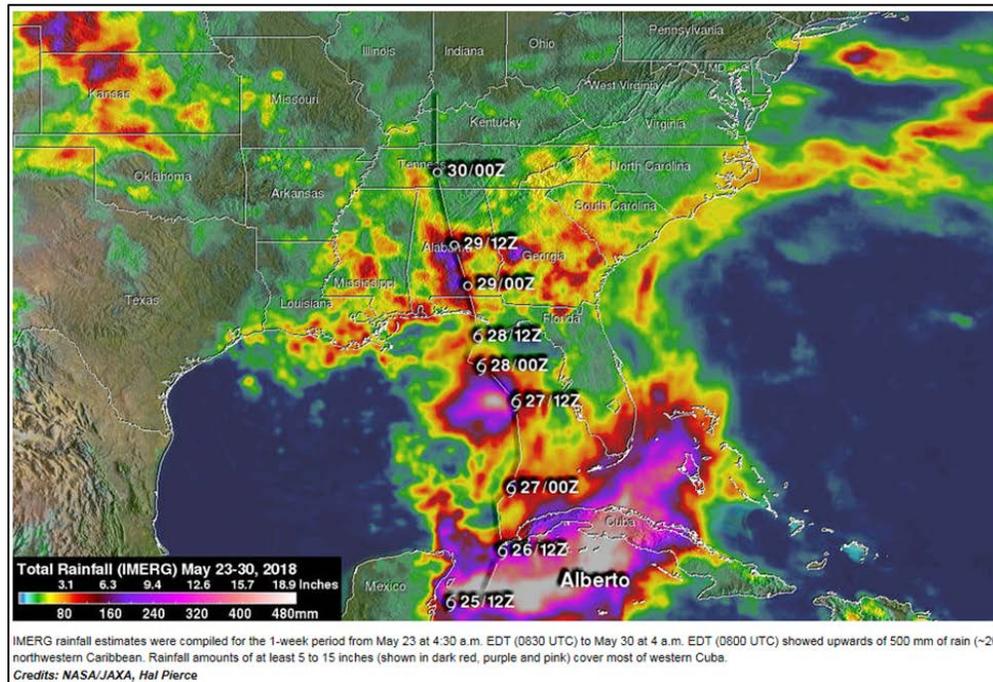
# Water and Climate Update

## May 31, 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.....	16
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Drought .....	10		

## Tropical Depression Alberto brings flooding to the Southeast



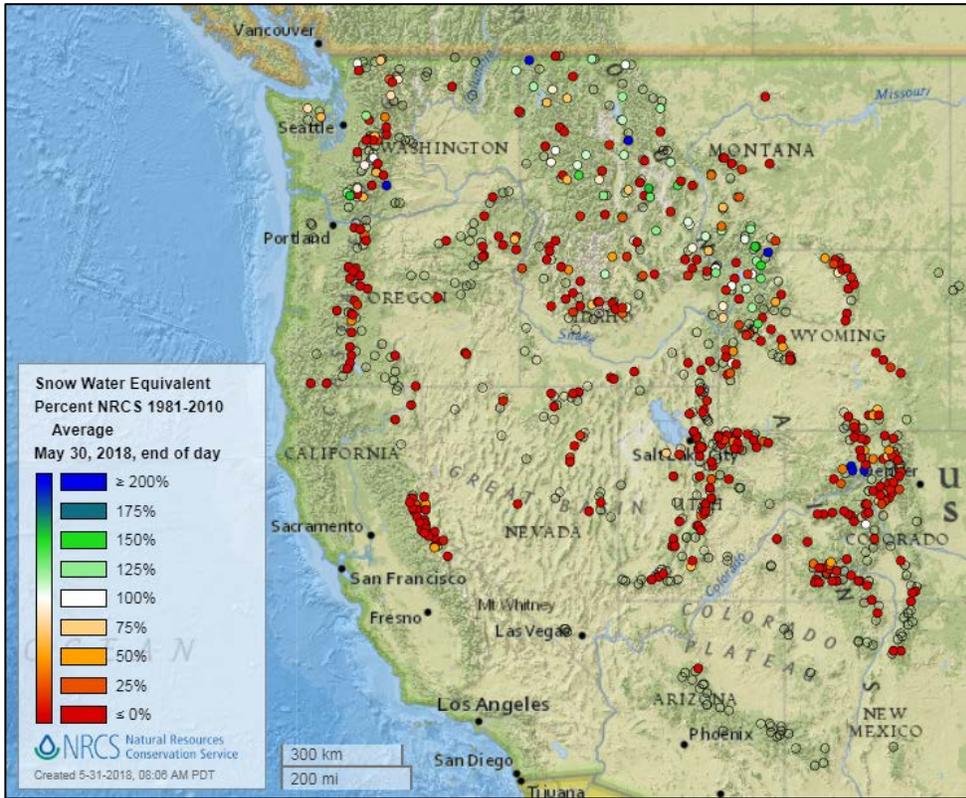
The first storm of the 2018 hurricane season, Alberto, made landfall in the Florida panhandle this week. The storm moved north in an unusual path to the Midwest, making it the first storm to do so in May since recordkeeping started in 1851. Thousands were evacuated near North Carolina’s Lake Tahoma Dam. The dam integrity was thought to be in danger of failure until expert inspections deemed it safe. The Southeast has had near-record rainfall during May, with Asheville N.C. recording 13.26 inches thus far, eclipsing their May record by more than 4 inches. The storm is currently continuing to produce heavy rain in the upper Midwest, resulting in minor flooding in Chicago.

**Related:**

- [Alberto's wrath kills 5, closes highways in NC due to floods, mudslides, fallen trees](#) Winston-Salem Journal (NC)
- [Storm Alberto moves inland causing mudslides and flooding](#) - USA Today
- [Thousands evacuated in North Carolina amid Alberto flooding, mudslides](#) – USA Today
- [Alberto, Now A Depression, Dumps Heavy Rains Across South](#) – CBS Atlanta
- [Record-setter: Alberto is the first May tropical system to make it to the Midwest](#) – WKOW
- [Alberto's last gasp: Mudslides and flooding in Appalachia](#) – ABC 7 News WJLA

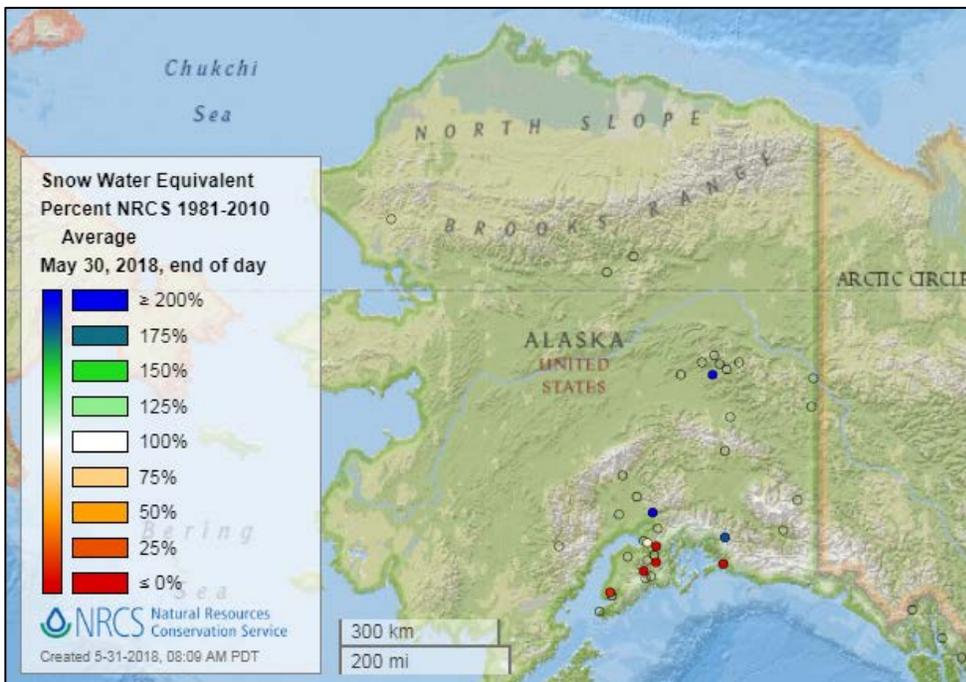
## Snow

### Current Snow Water Equivalent, NRCS SNOTEL Network



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

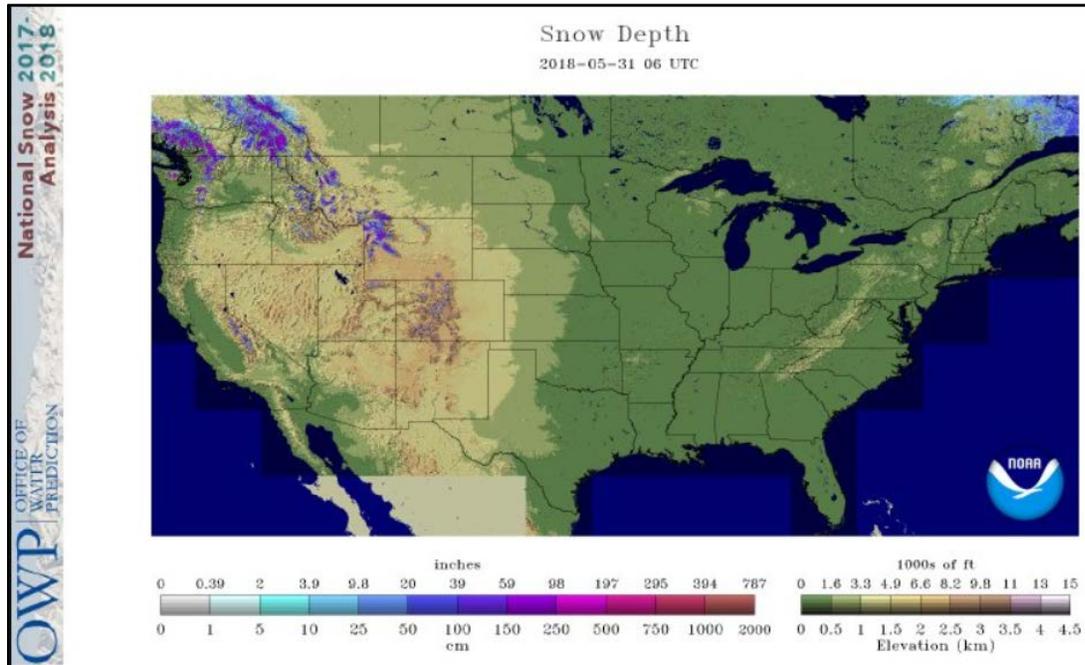
**See also:**  
[Snow water equivalent values \(inches\) map](#)



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

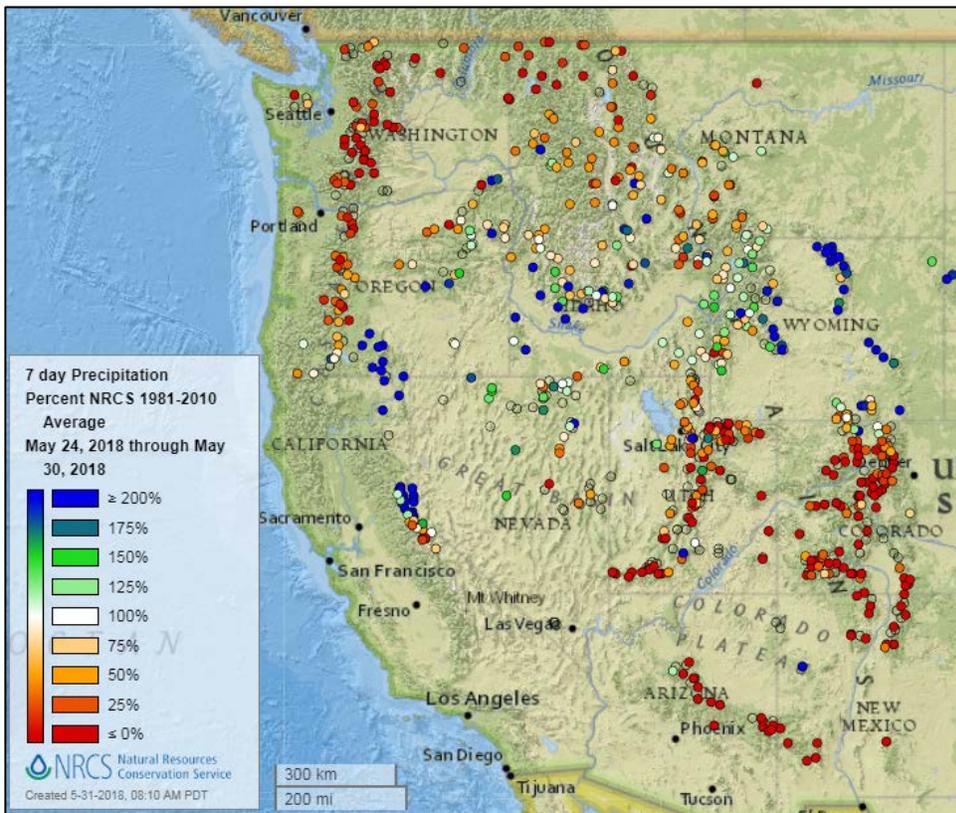
**See also:**  
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



## Precipitation

### Last 7 Days, NRCS SNOTEL Network



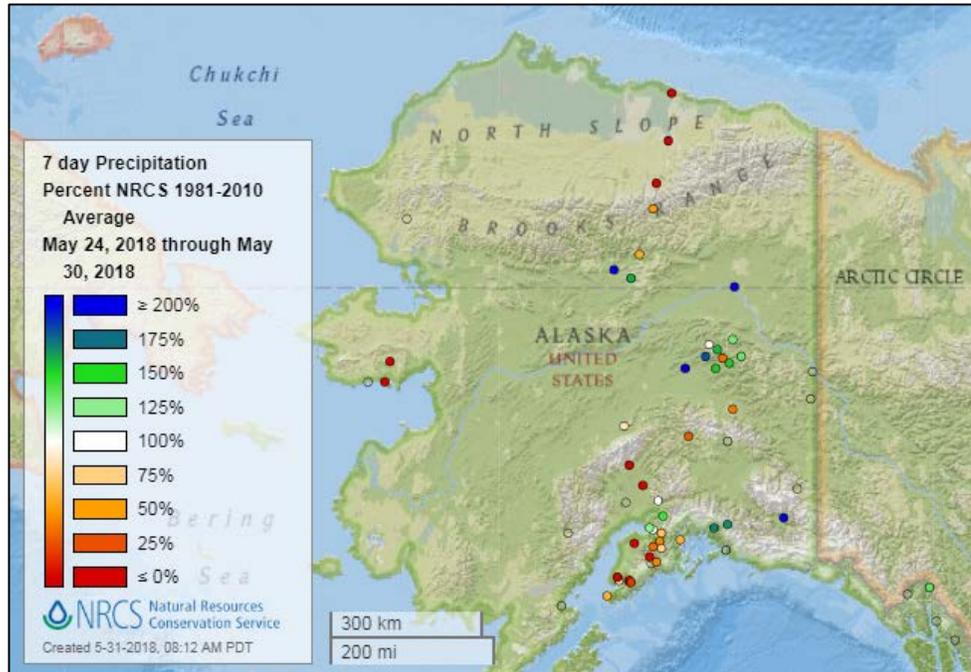
[7-day precipitation percent of average map](#)

**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](#)



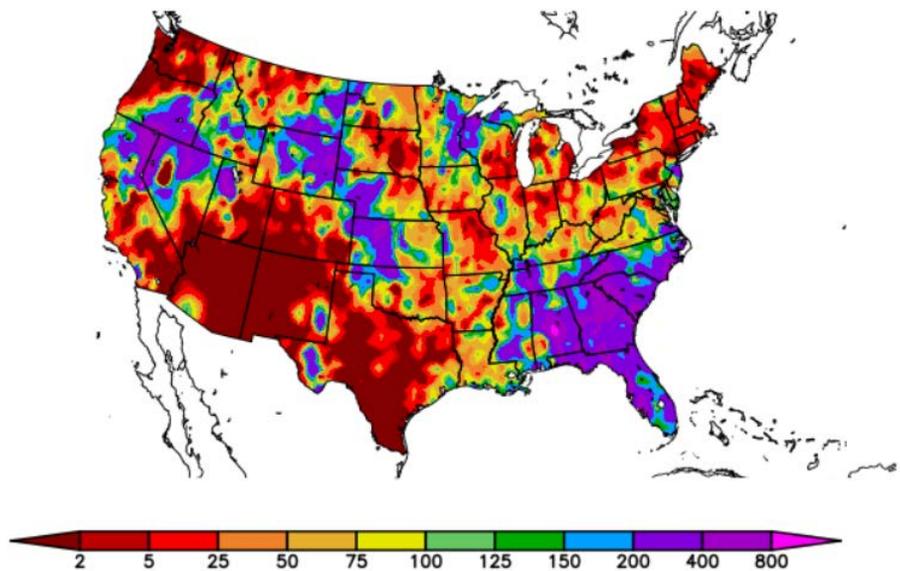
## Last 7 Days, National Weather Service (NWS) Networks

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 (%) 5/24/2018 – 5/30/2018



Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

# Water and Climate Update

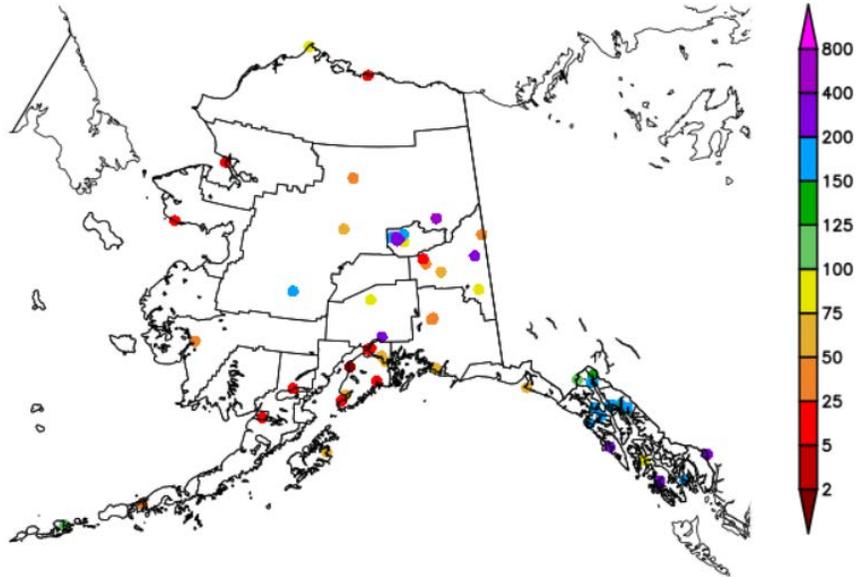
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

### Percent of Normal Precipitation (%) 5/24/2018 – 5/30/2018



Generated 5/31/2018 at HPRCC using provisional data.

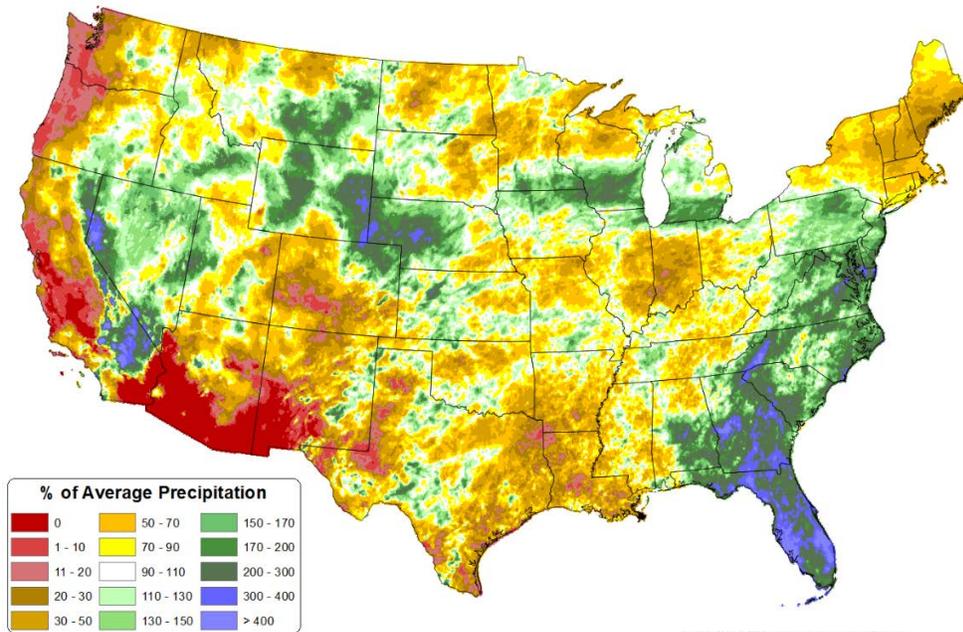
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 May 2018 - 30 May 2018  
 Period ending 7 AM EST 30 May 2018  
 Base period: 1981-2010  
 (Map created 31 May 2018)

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



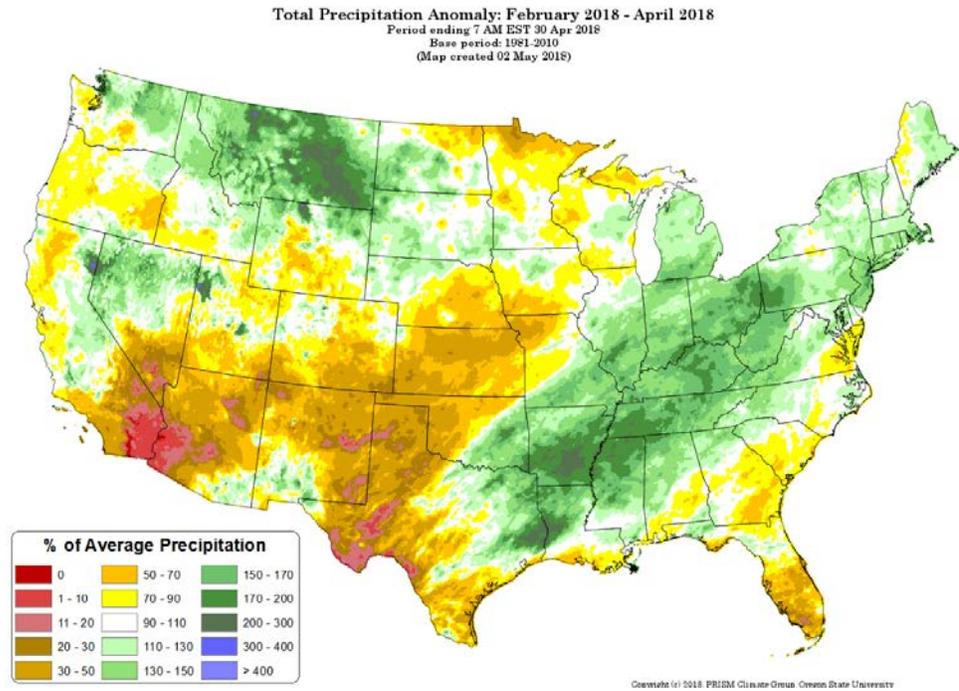
Copyright © 2018 PRISM Climate Group, Oregon State University

# Water and Climate Update

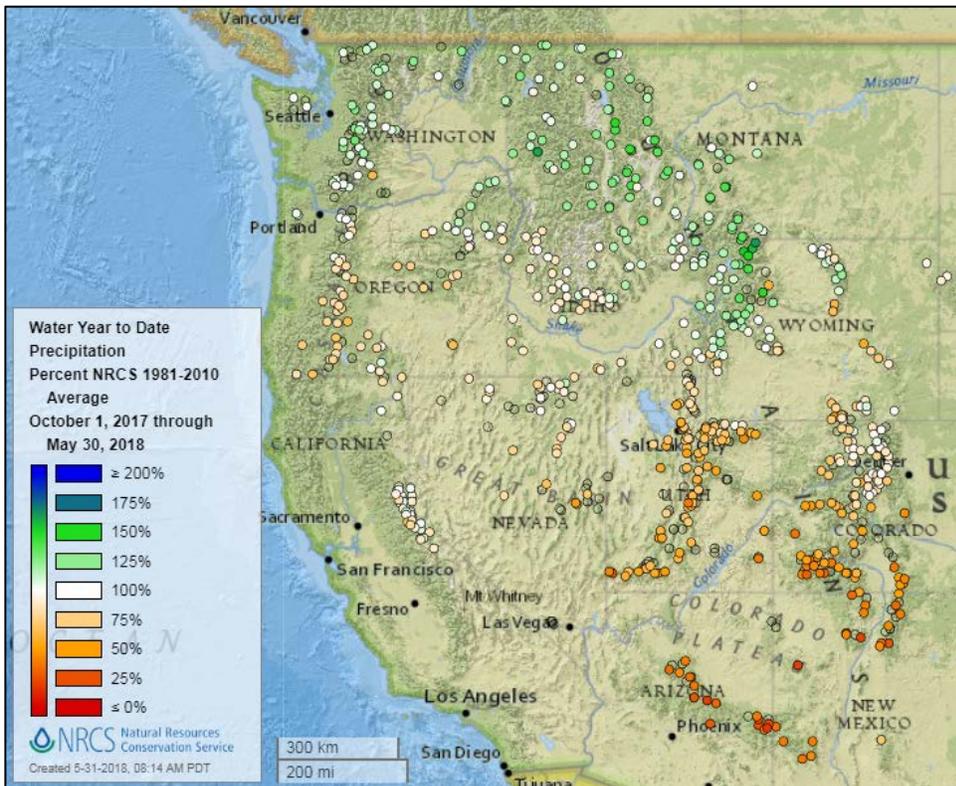
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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



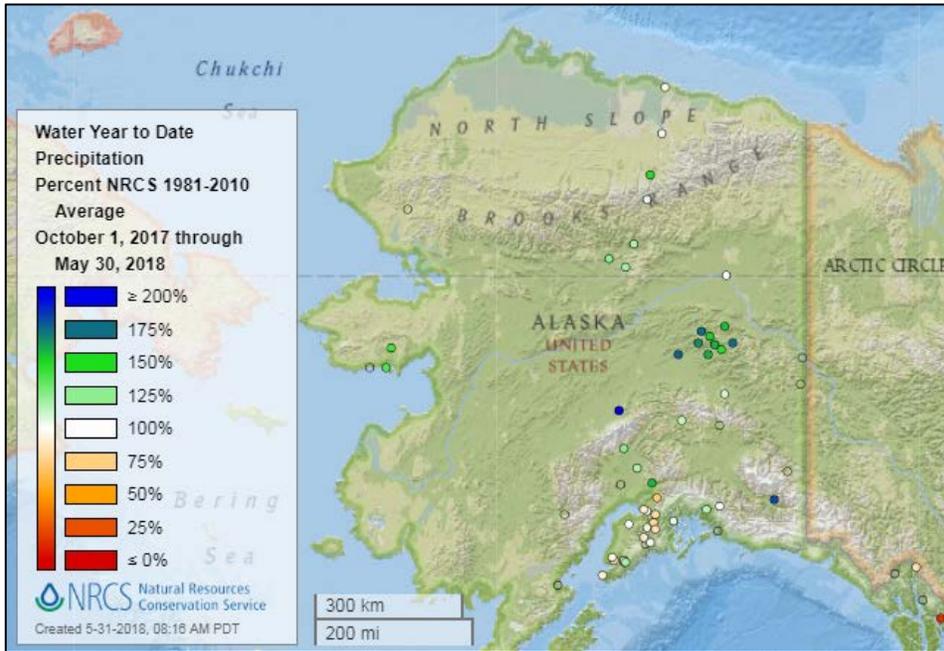
## Water Year-to-Date, NRCS SNOTEL Network



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

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

# Water and Climate Update



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

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

## Temperature

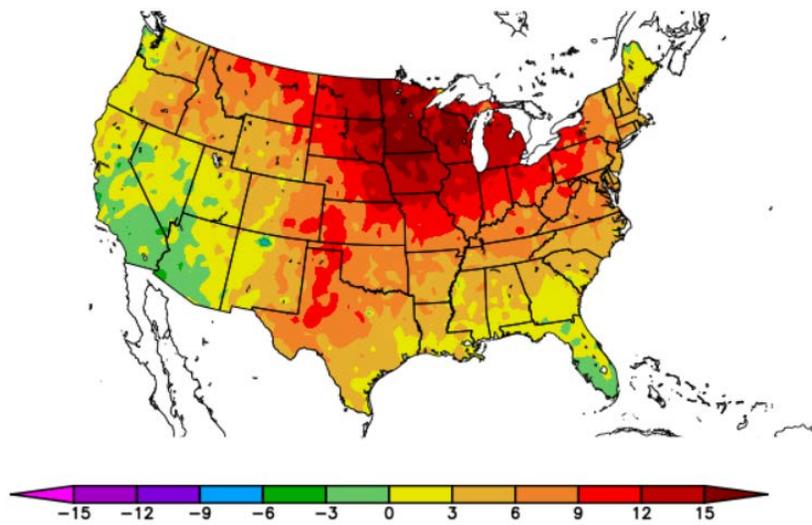
Last 7 Days, National Weather Service (NWS) Networks

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)  
5/24/2018 – 5/30/2018



Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

# Water and Climate Update

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

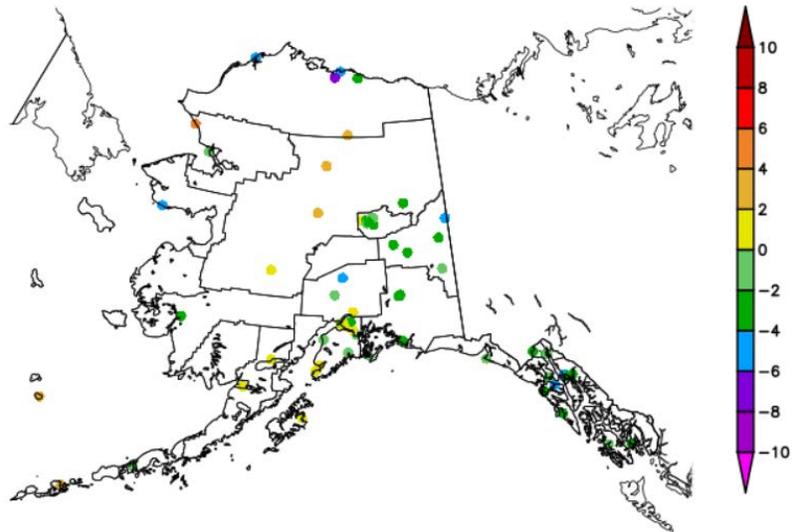
Source: Regional Climate Centers

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

**See also:**

[7-day temperature \(° F\) map](#)

### Departure from Normal Temperature (F) 5/24/2018 – 5/30/2018



Generated 5/31/2018 at HPRCC using provisional data.

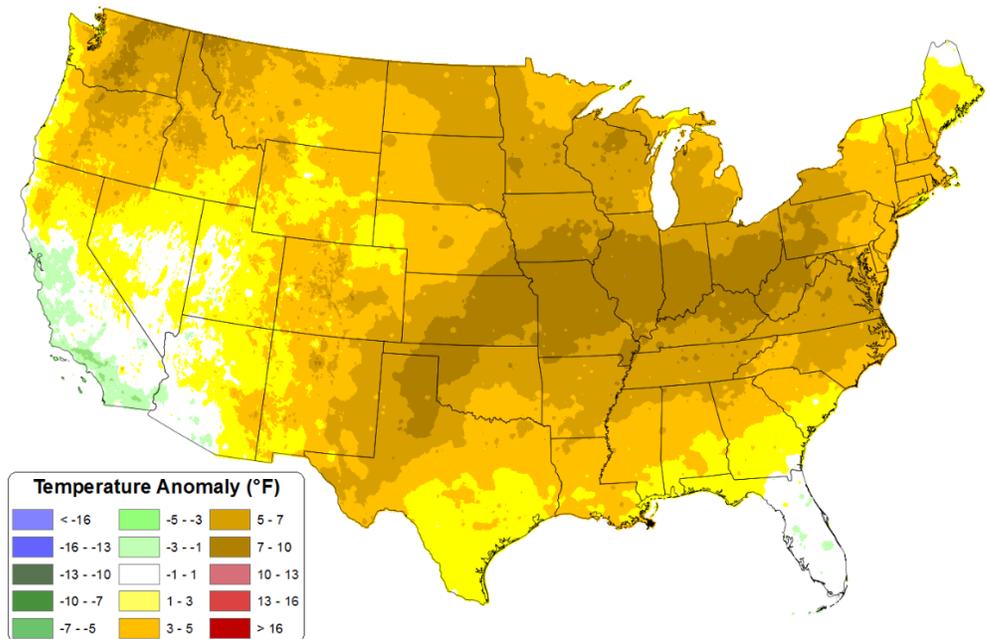
NOAA Regional Climate Centers

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

Source: PRISM

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

### Daily Mean Temperature Anomaly: 01 May 2018 - 30 May 2018 Period ending 7 AM EST 30 May 2018 Base period: 1981-2010 (Map created 31 May 2018)



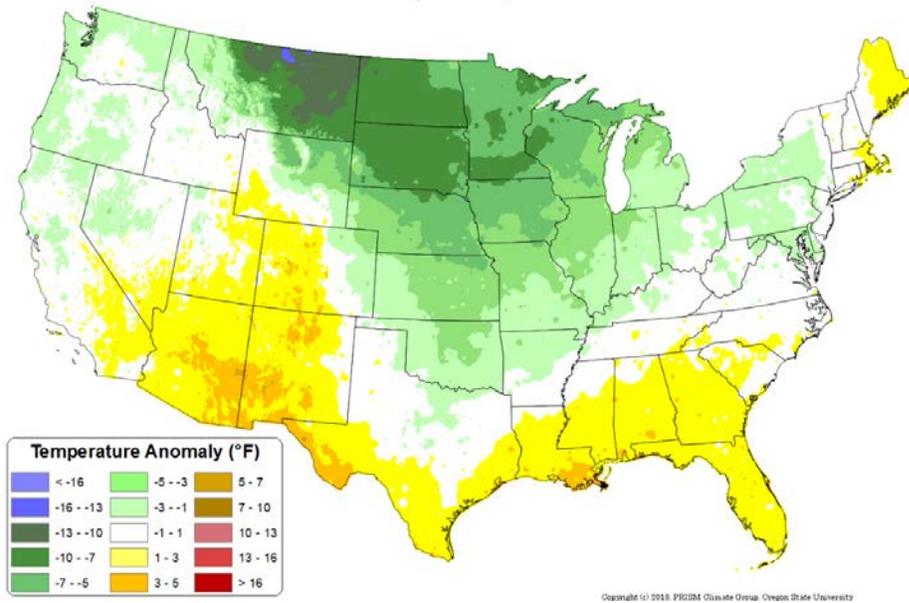
Copyright © 2018, PRISM Climate Group, Oregon State University

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

Source: PRISM

Daily Mean Temperature Anomaly: February 2018 - April 2018  
Period ending 7 AM EST 30 Apr 2018  
Base period: 1961-2010  
(Map created 02 May 2018)

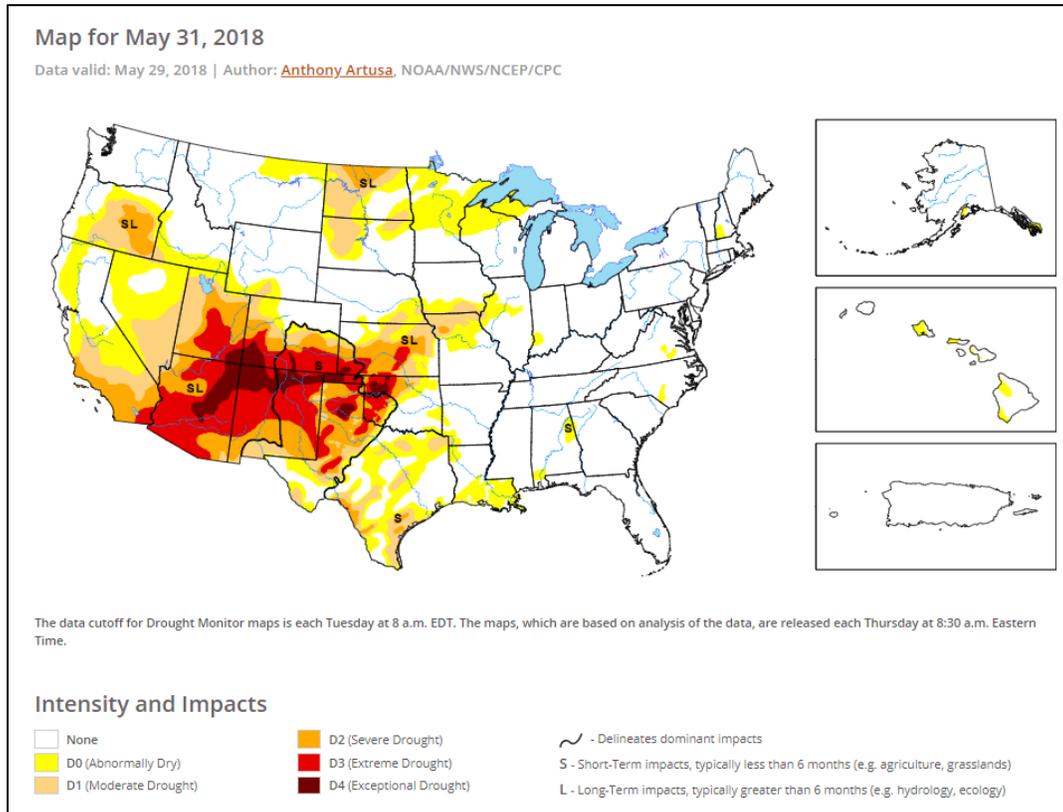
[February through April 2018 daily mean temperature anomaly map](#)



## Drought

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

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



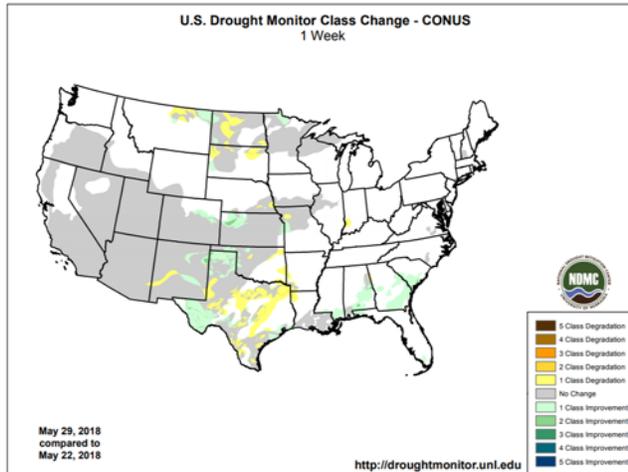
### Current [National Drought Summary](#), May 31, 2018

Author: Anthony Artusa, NOAA/NWS/NCEP/CPC

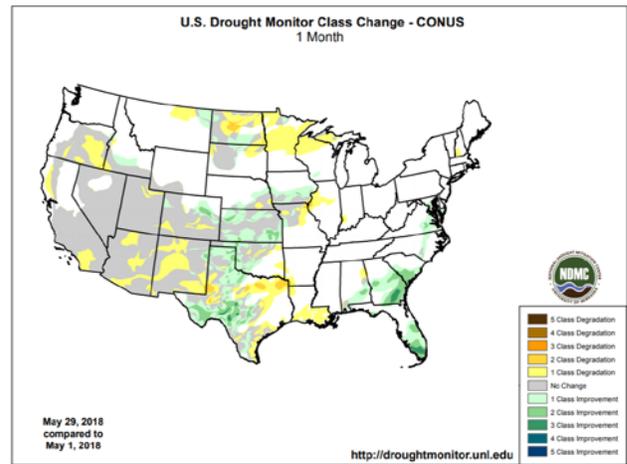
“Hot weather (daytime high temperatures in the 90’s) stretched from Arizona eastward to Louisiana early in the drought week, before spreading rapidly northward over the Great Plains and much of the Mississippi Valley. Some locations reported triple-digit heat during the week, associated with an amplifying ridge in the middle troposphere over the central contiguous U.S. Though the observed weekly precipitation pattern was largely convective in nature, both AHPs and ACIS depict the heavier precipitation amounts (over an inch) generally across the Southeast, the central Gulf Coast area, and the northern and central High Plains. These areas of heavier rainfall were associated with Subtropical Storm Alberto and baroclinic activity. Alberto developed early in the drought week over the western Caribbean Sea and tracked north over the eastern Gulf of Mexico. By early Monday evening (May 28th, Memorial Day), the center of Alberto crossed the Florida panhandle near Panama City. Preliminary wind reports indicated 40 mph sustained winds at Panama City, with a gust to 59 mph. Near and along Alberto’s path northward, rainfall amounts of 3-8 inches were generally received, with locally heavier amounts.”

## Changes in Drought Monitor Categories over Time

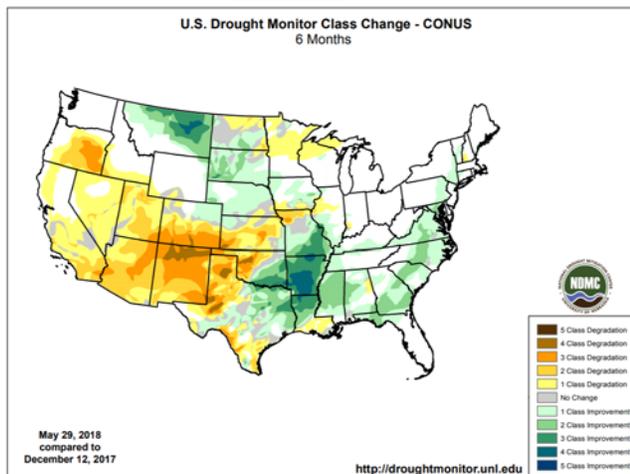
### 1 Week



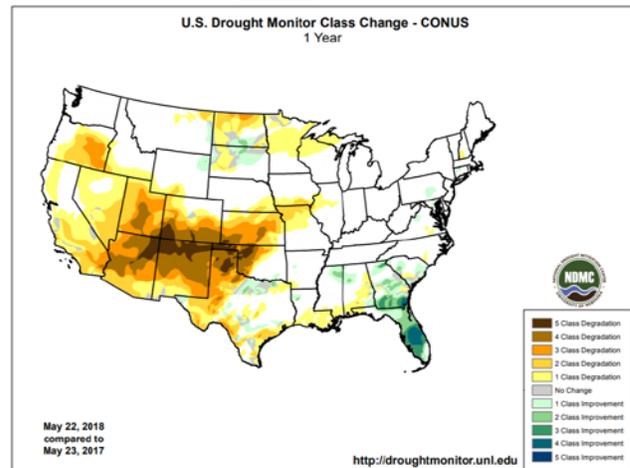
### 1 Month



### 6 Months



### 1 Year

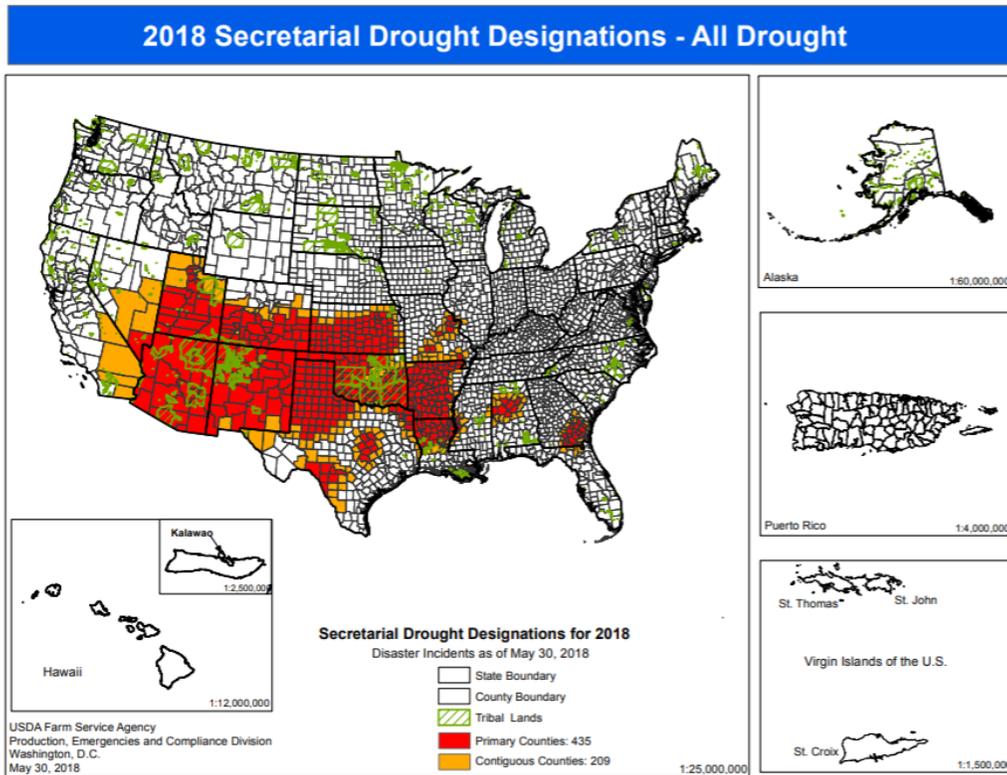


### Changes in drought conditions over the last 12 months

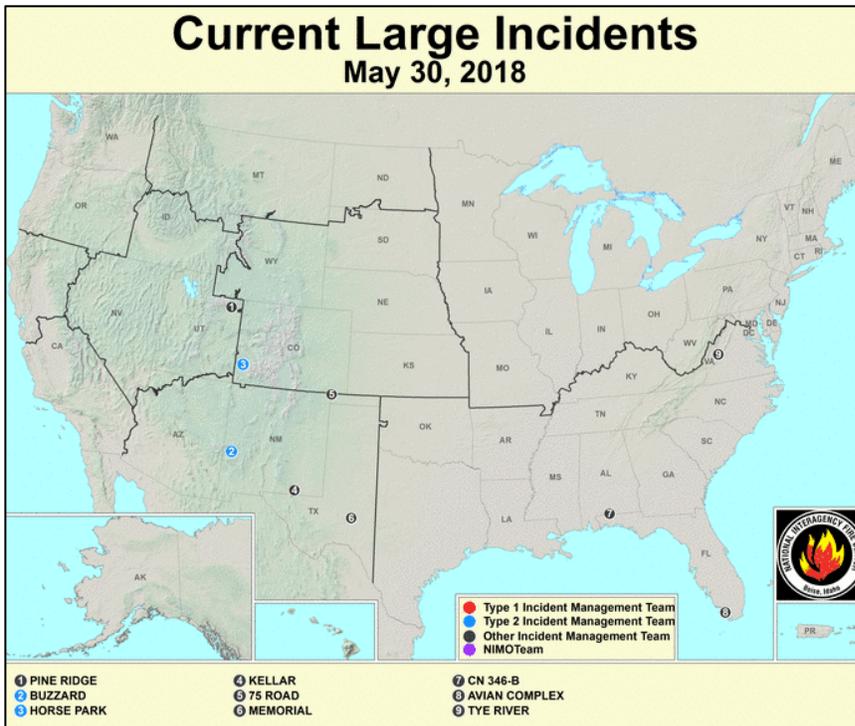
#### Highlighted Drought Resources

- [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](#)



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



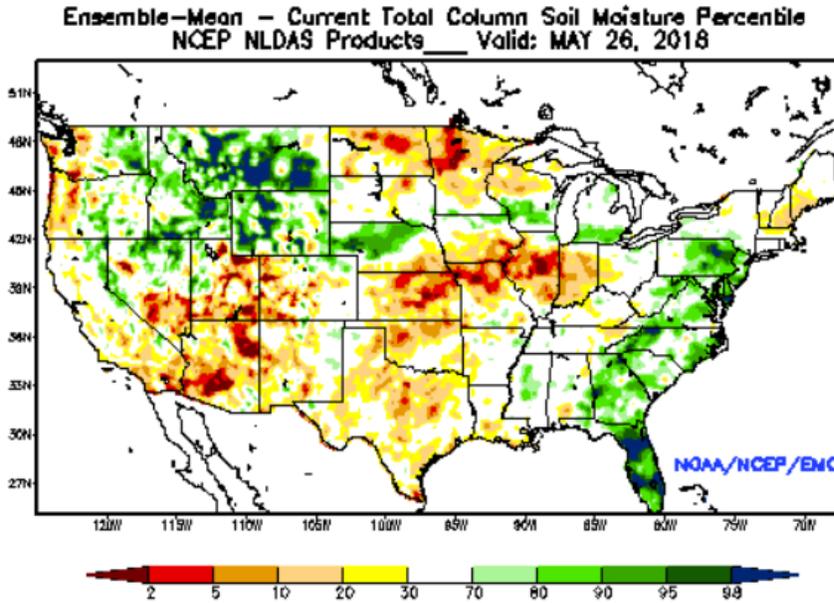
Highlighted Wildfire Resources

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

## Other Climatic and Water Supply Indicators

### Soil Moisture

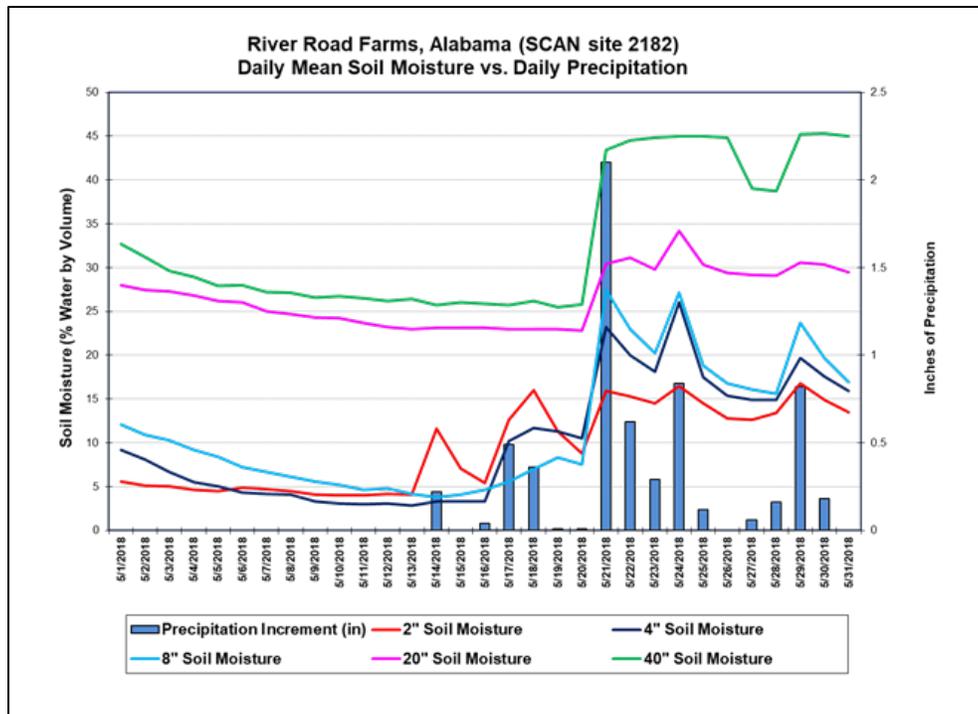
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of May 26, 2018.

### Soil Moisture Data

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



The chart shows several large precipitation events during the last 30 days at the [River Road Farms SCAN site 2182](#) in Alabama. This station is located in an area affected by rainfall from Tropical Depression Alberto, resulting in flooding across the region. On May 21, Alberto's accumulated precipitation at the site totaled 2.10 inches. The 2", 4", 8", 20", and 40" sensors all showed a significant increase in soil moisture levels.

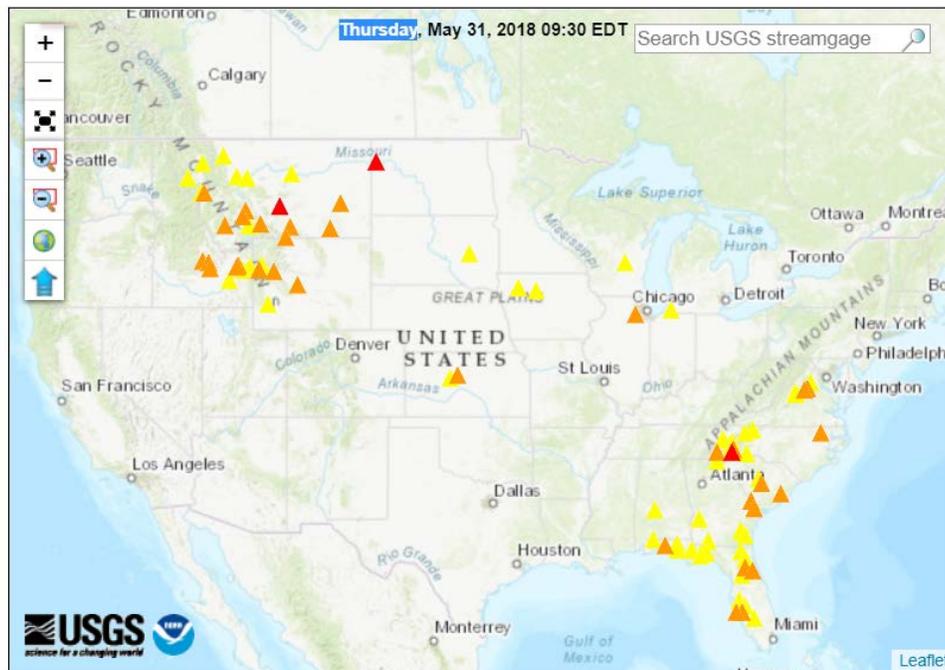
Soil Moisture Data Portals

- [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



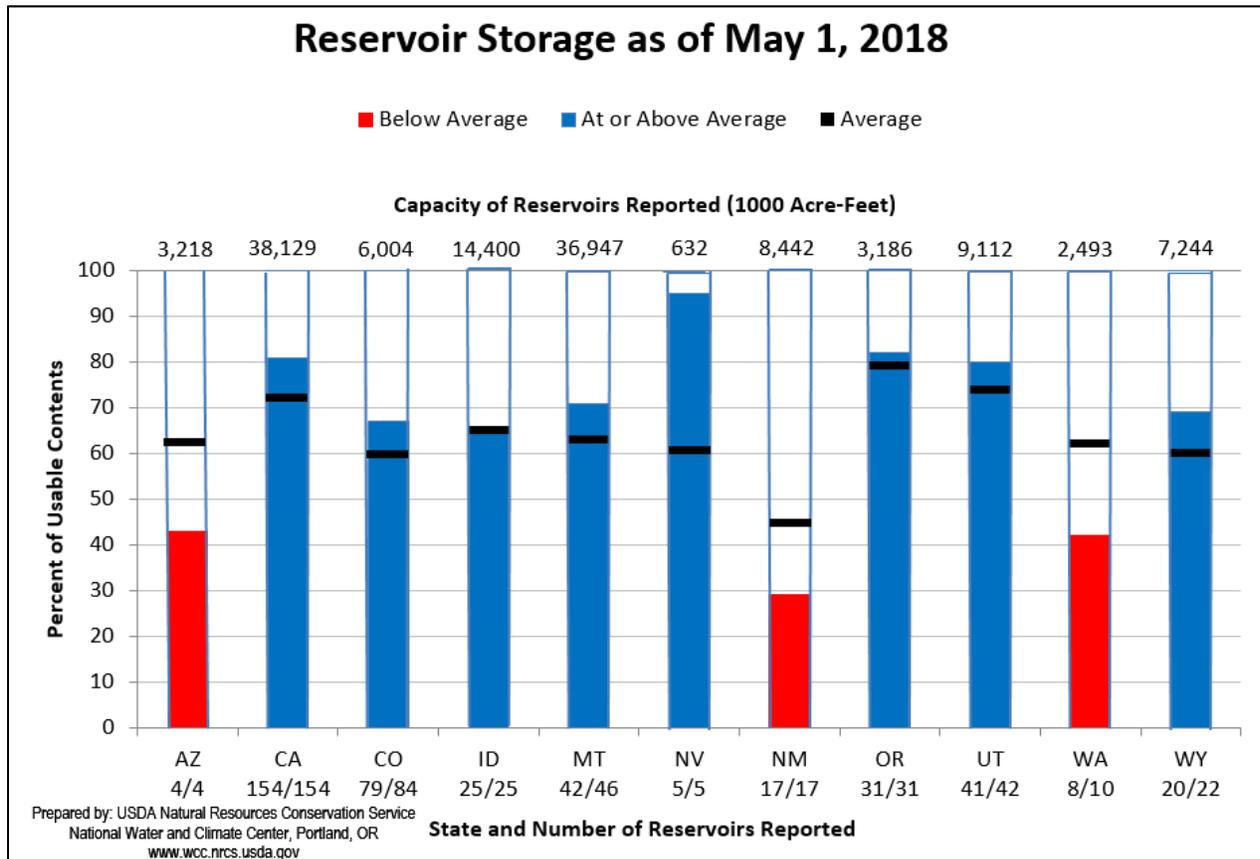
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

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

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



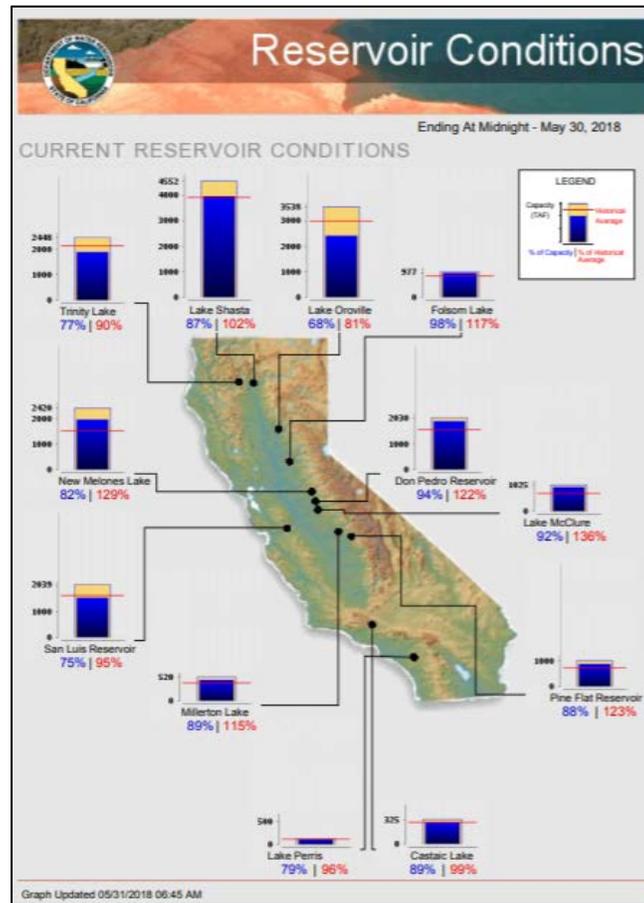
May 1 Reservoir Storage: [Chart](#) | [Dataset](#)

### 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

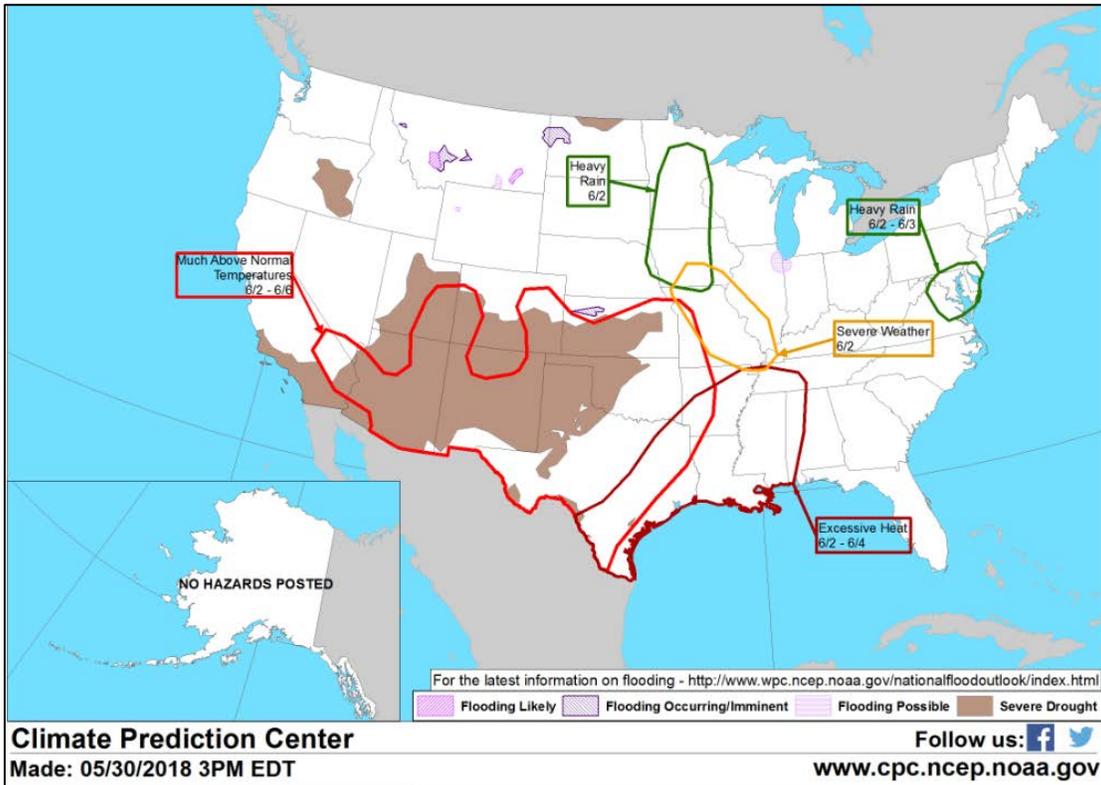
### Agricultural Weather Highlights

Author: Eric Luebehusen, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, Thursday, May 31](#): “A pair of disturbances — one currently over the east-central Plains and the other in the northern Great Lakes — will march east, with the northern system weakening while the southern low stalls upon reaching the Mid-Atlantic Coast. The two will combine to produce widespread showers in lower portions of the Corn Belt and Ohio Valley and from the Mid-Atlantic into the Northeast, with the latter regions susceptible to potentially heavy rain and localized flash flooding over the weekend. Meanwhile, heat will intensify on the Plains before a cold front currently over the northern Rockies brings a brief respite to the northern half of the region. Rain associated with the front will be locally heavy but largely confined to areas along the Canadian border. Out west, hot, dry weather will return, save for cooler, showery conditions in the Northwest and potentially heavy showers in the eastern Four Corners Region Sunday into Monday. The NWS 6- to 10-day outlook for June 5 – 9 calls for above-normal temperatures over much of the central, southern, and western U.S., with cooler-than-normal conditions confined to the nation’s northern and eastern tiers. Meanwhile, near- to below-normal rainfall over much of the U.S. will contrast with pockets of wetter-than-normal weather in the Southeast, Upper Midwest, and lower Four Corners”

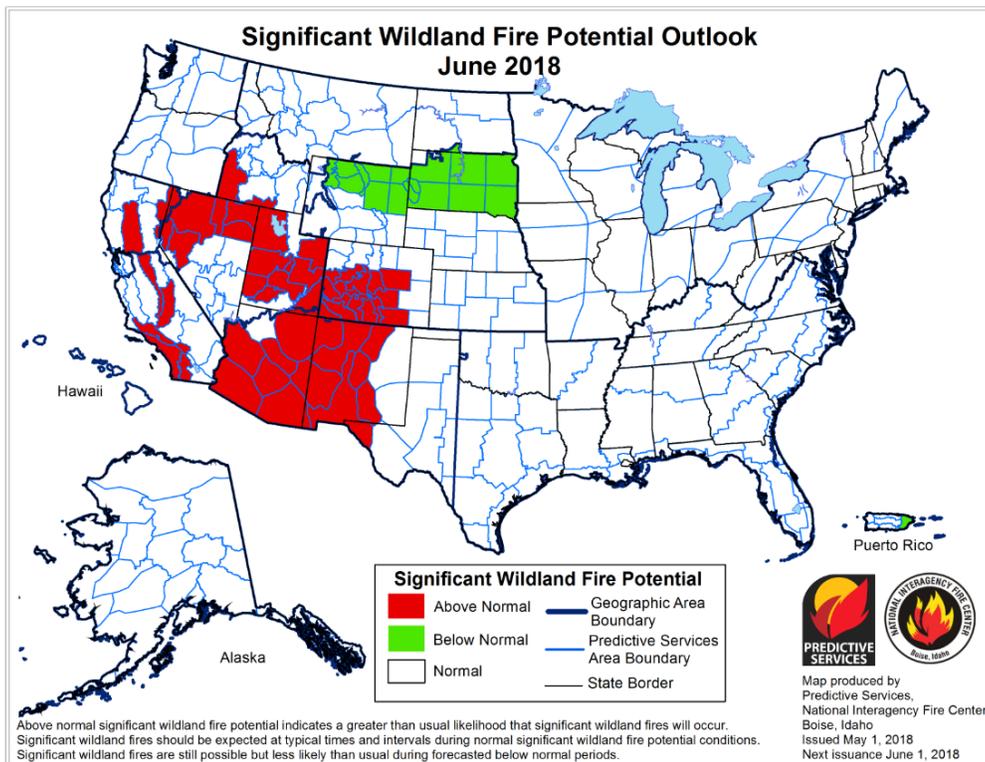
Weather Hazard Outlook [June 2 - 6, 2018](#)

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

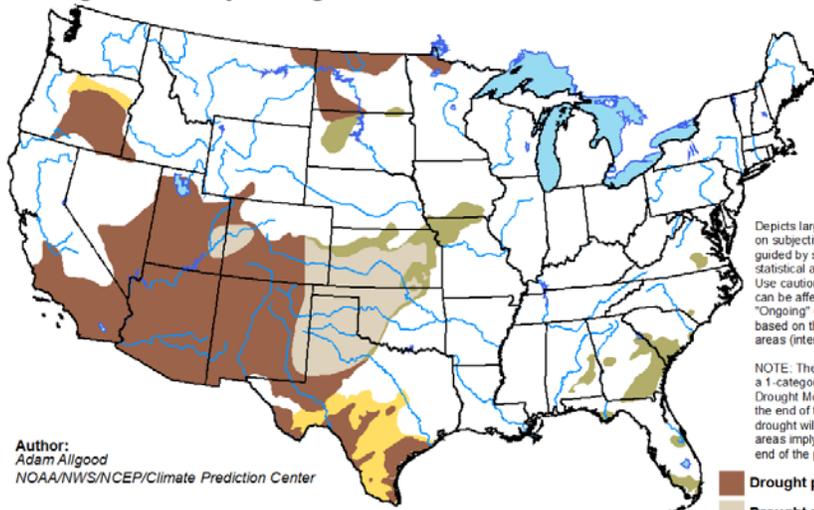


Seasonal Drought Outlook: [May 17 – August 31, 2018](#)

Source: National Weather Service

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

Valid for May 17 - August 31, 2018  
Released May 17, 2018



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
Adam Allgood  
NOAA/NWS/NCEP/Climate Prediction Center

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



<http://go.usa.gov/3eZ73>

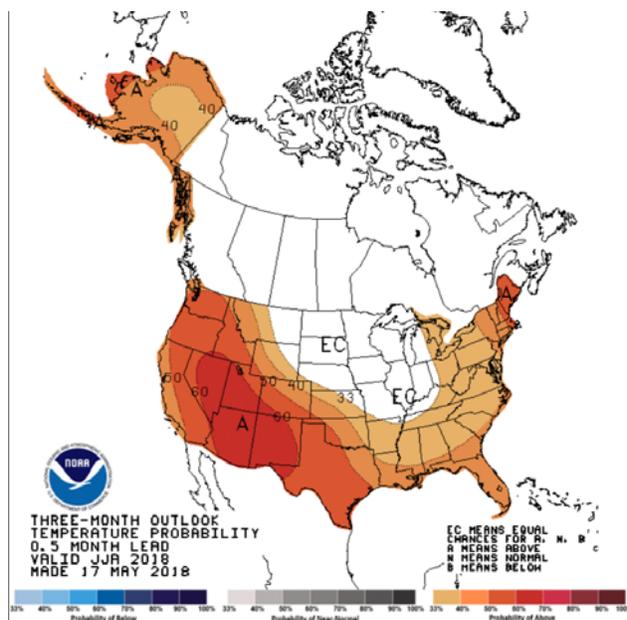
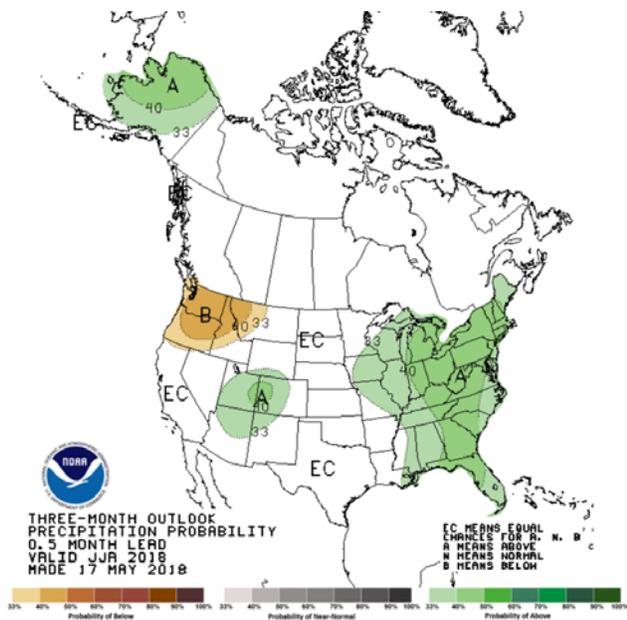


**Climate Prediction Center 3-Month Outlook**

Source: National Weather Service

[Precipitation](#)

[Temperature](#)



[June-July-August \(JJA\) 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](#).