



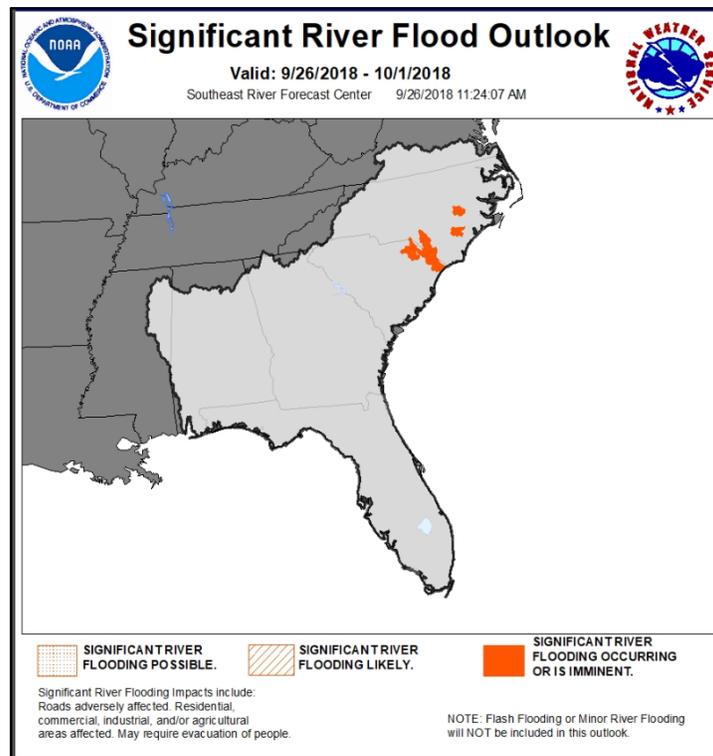
# Water and Climate Update

## September 27, 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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Temperature .....	6	Short- and Long-Range Outlooks.....	16
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### Extensive flooding continues from Hurricane Florence



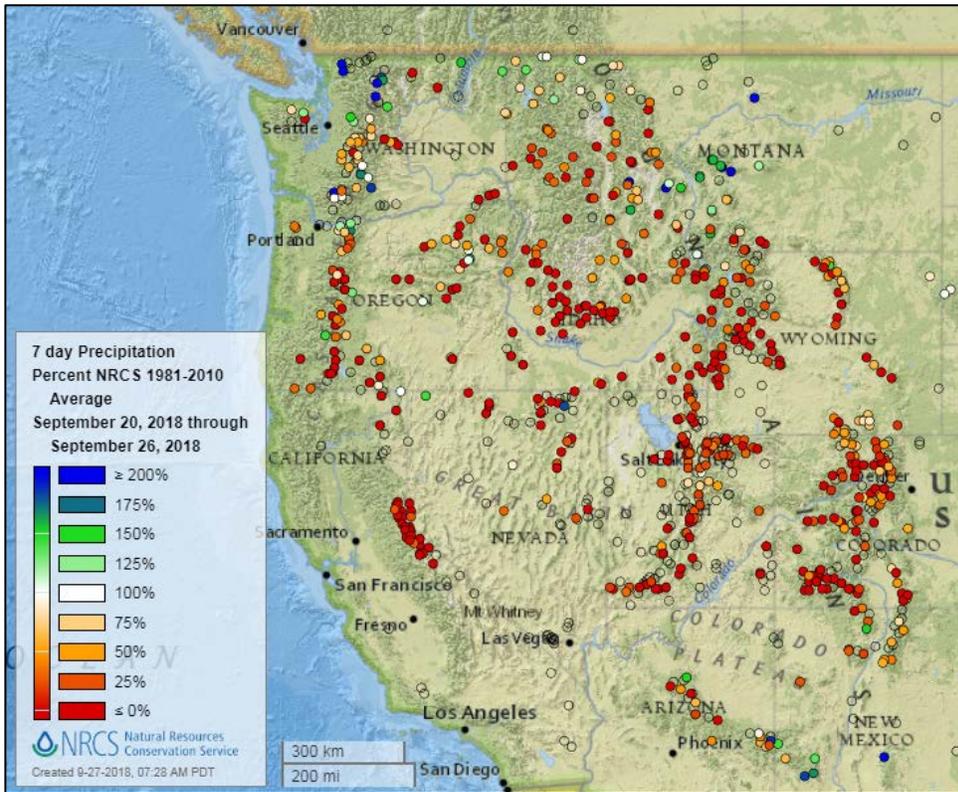
While Hurricane Florence left the East Coast more than a week ago, much of the region continues to experience [record flooding](#). Thousands of people remain evacuated as flood waters slowly move from inland to the Atlantic. In South Carolina, the crest of the floodwaters has yet to come, and coastal towns are preparing for record floods and debris. The USDA and other Federal, state, and local agencies are assisting people affected by the disaster.

**Related:**

- [South Carolina Is Still Bracing for More Hurricane Florence Flooding 12 Days Later – Time](#)
- [South Carolina city braces for up to 10-feet of Hurricane Florence floodwaters - USA Today](#)
- [The Latest: S. Carolina estimates 2K homes damaged by flood - Associated Press](#)
- [Flooding envelops South Carolina homes as Florence death toll rises – CBS News](#)
- [Waterways rise in South Carolina, residents told to leave – Thomson Reuters Foundation](#)
- [Florence's final act: Record flooding likely on South Carolina coast – CBS News](#)
- [USDA Provides Hurricane Florence Victims Needed Relief and Recovery Aid – USDA Press Release](#)

## Precipitation

### Last 7 Days, NRCS SNOTEL Network

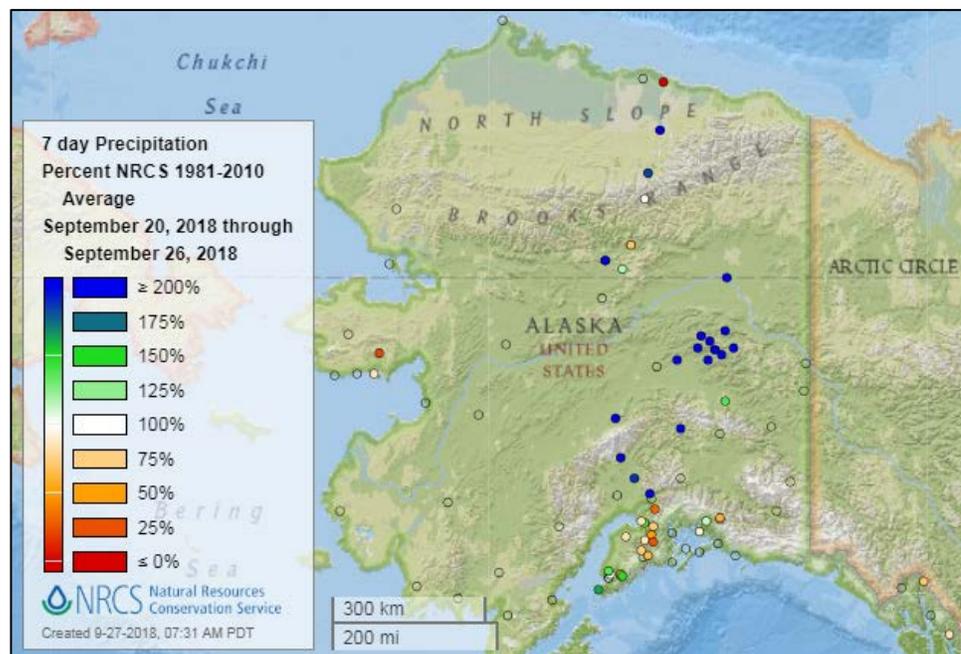


[7-day precipitation percent of average map](#)

**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](#)



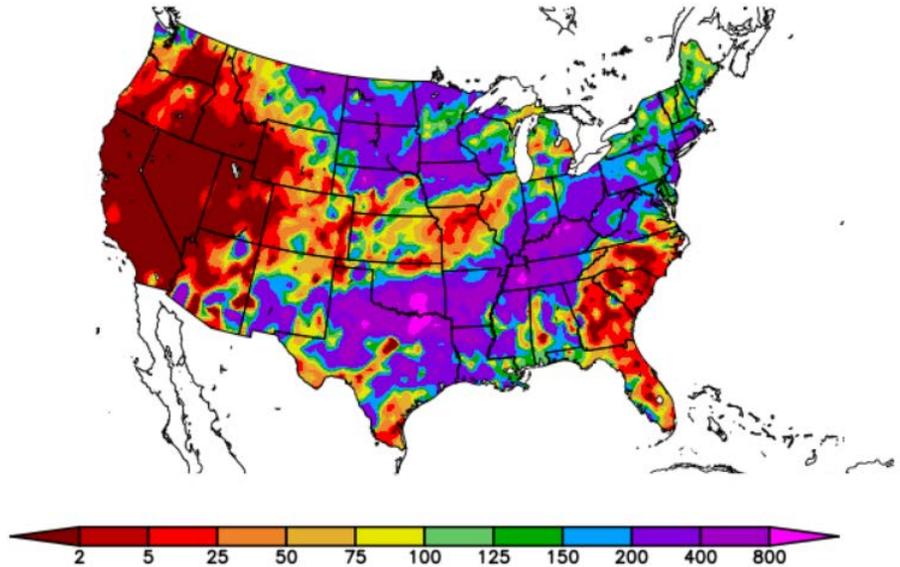
Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
9/20/2018 – 9/26/2018



Generated 9/27/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

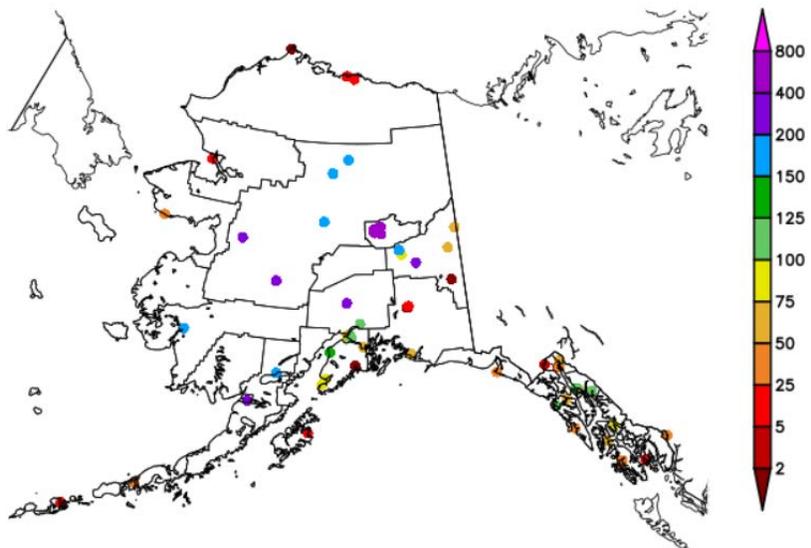
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
9/20/2018 – 9/26/2018



Generated 9/27/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

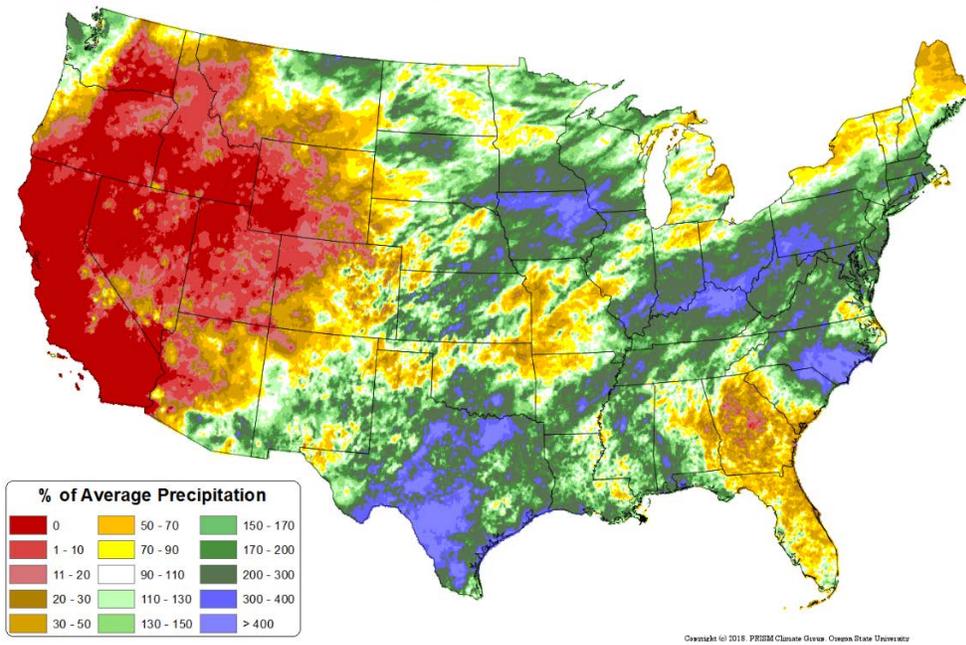
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Sep 2018 - 26 Sep 2018  
Period ending 7 AM EST 26 Sep 2018  
Base period: 1981-2010  
(Map created 27 Sep 2018)

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

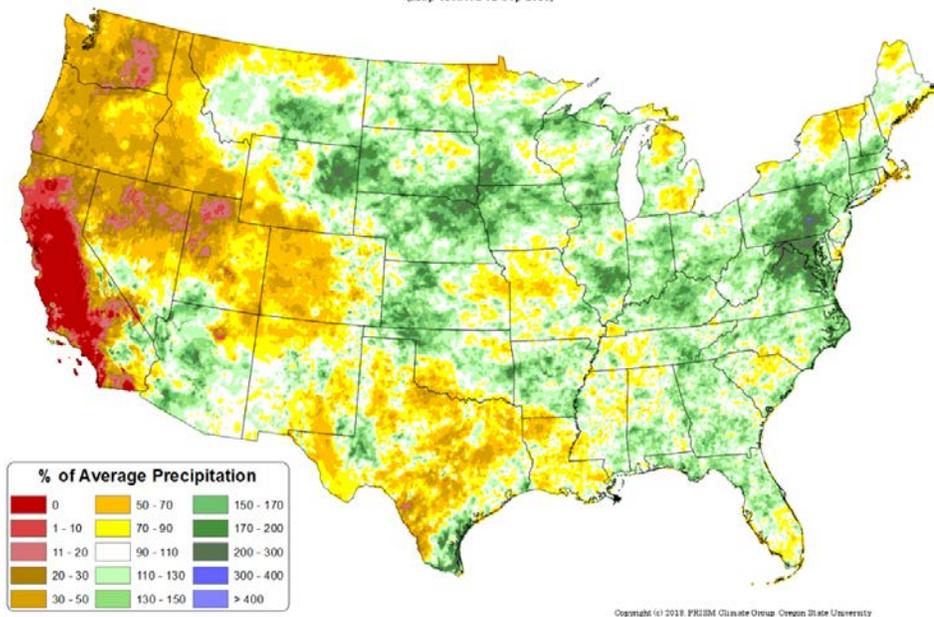


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

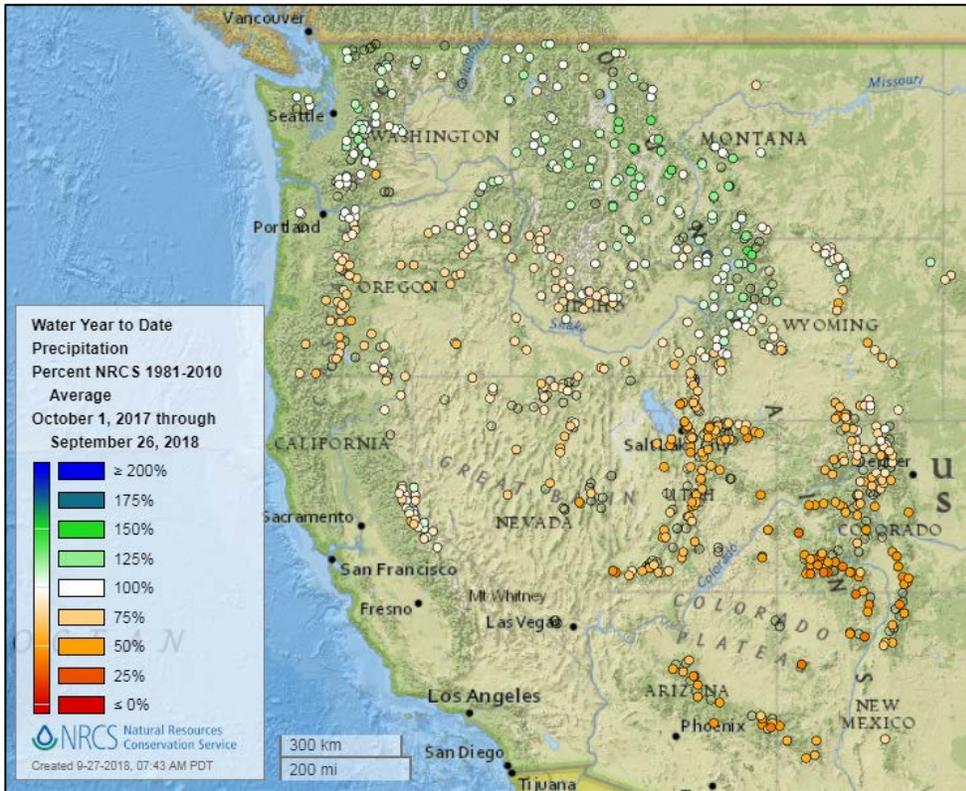
Source: PRISM

[June through August 2018 total precipitation percent of average map](#)

Total Precipitation Anomaly: June 2018 - August 2018  
Period ending 7 AM EST 31 Aug 2018  
Base period: 1981-2010  
(Map created 02 Sep 2018)

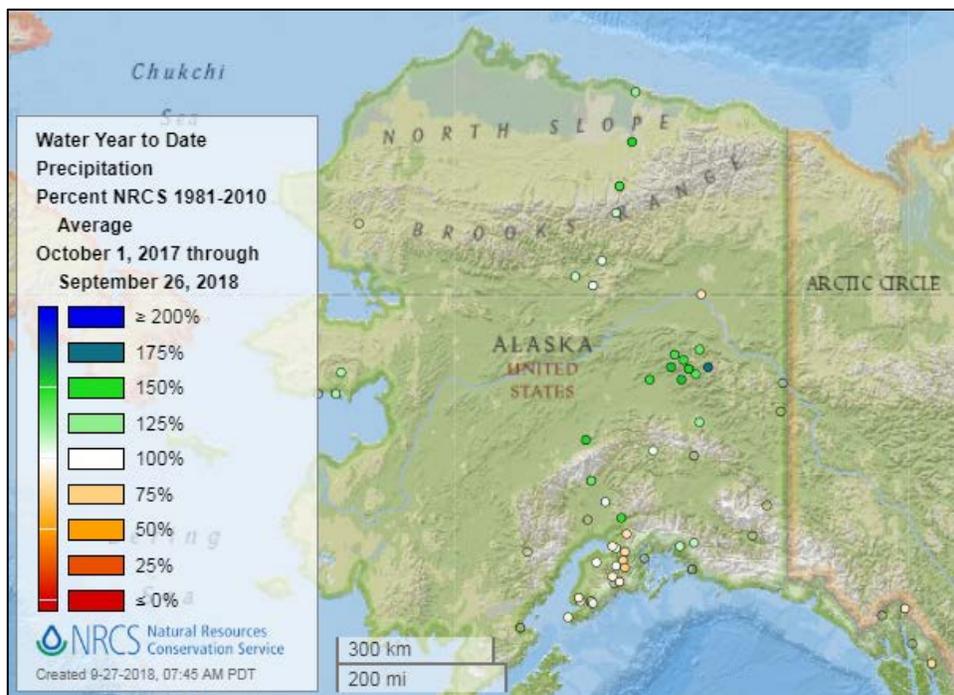


Water Year-to-Date, NRCS SNOTEL Network



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

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



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

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

## Temperature

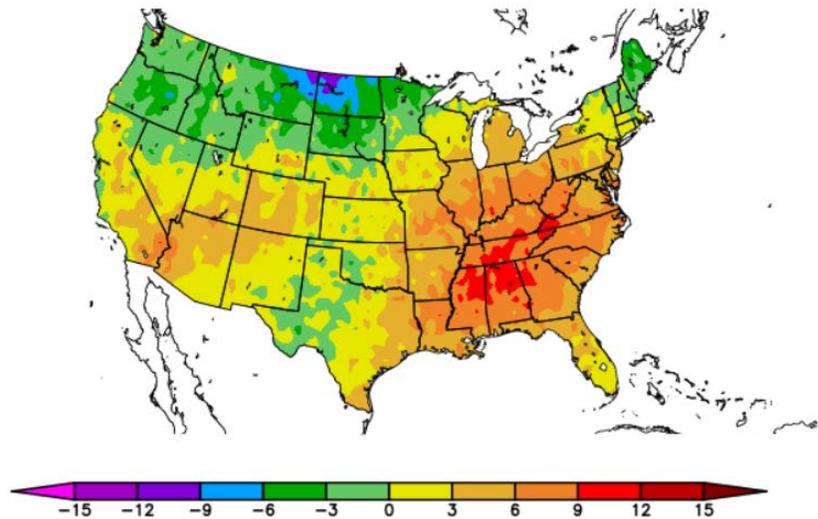
Last 7 Days, National Weather Service (NWS) Networks

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)  
9/20/2018 – 9/26/2018



Generated 9/27/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

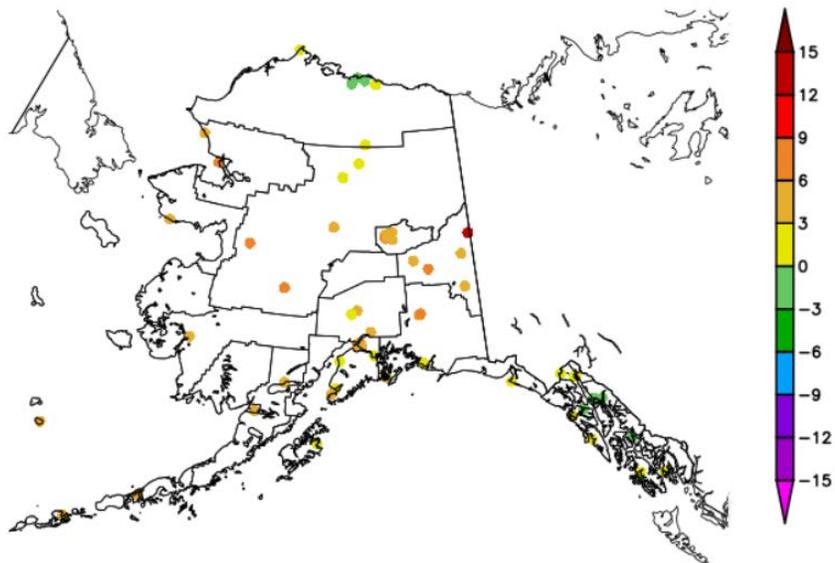
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
9/20/2018 – 9/26/2018



Generated 9/27/2018 at HPRCC using provisional data.

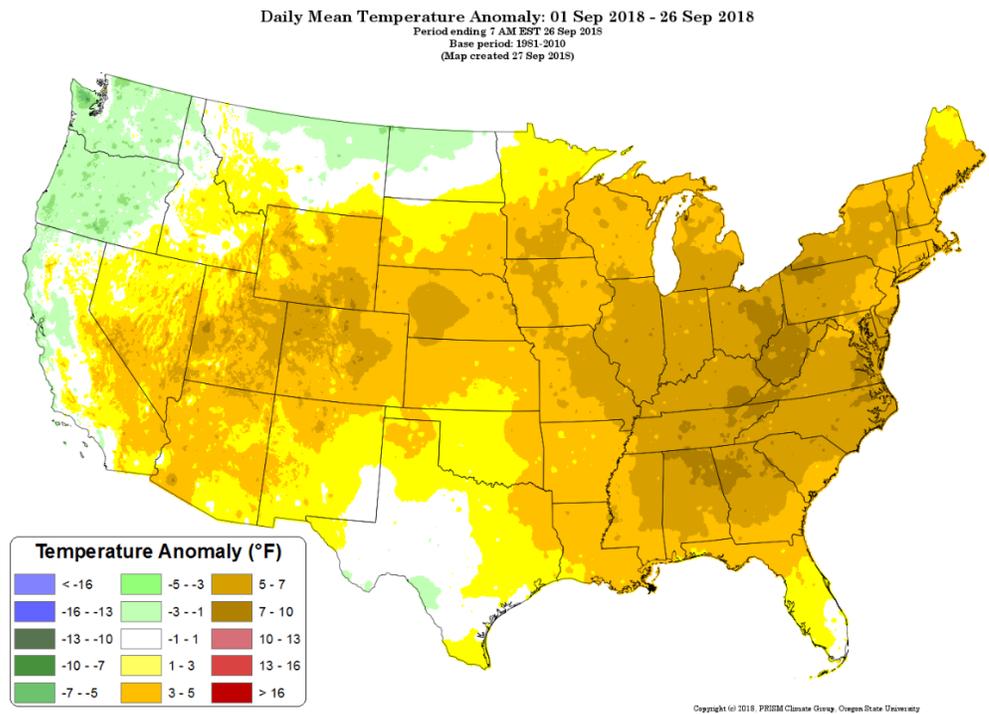
NOAA Regional Climate Centers

# Water and Climate Update

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

Source: PRISM

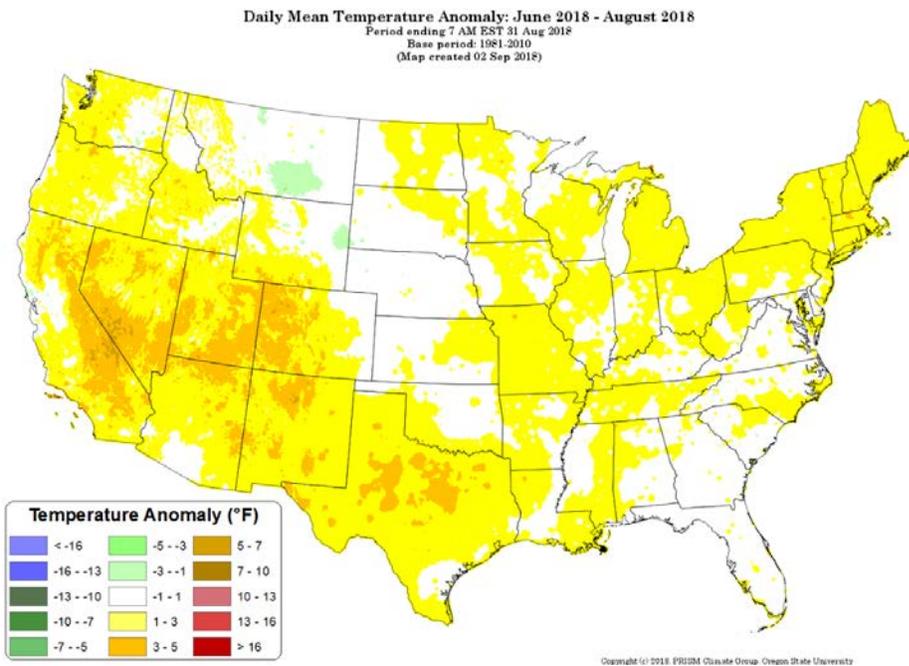
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

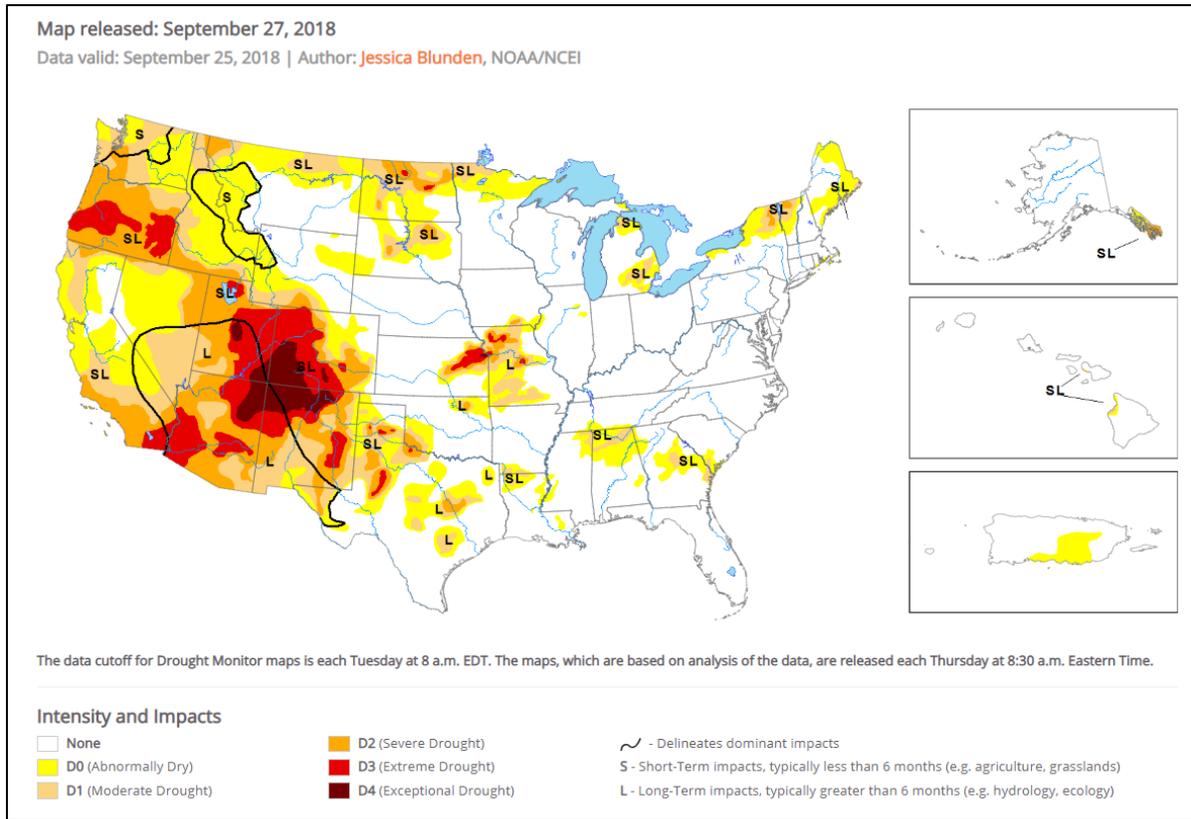
[June through August 2018 daily mean temperature anomaly map](#)



## Drought

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

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

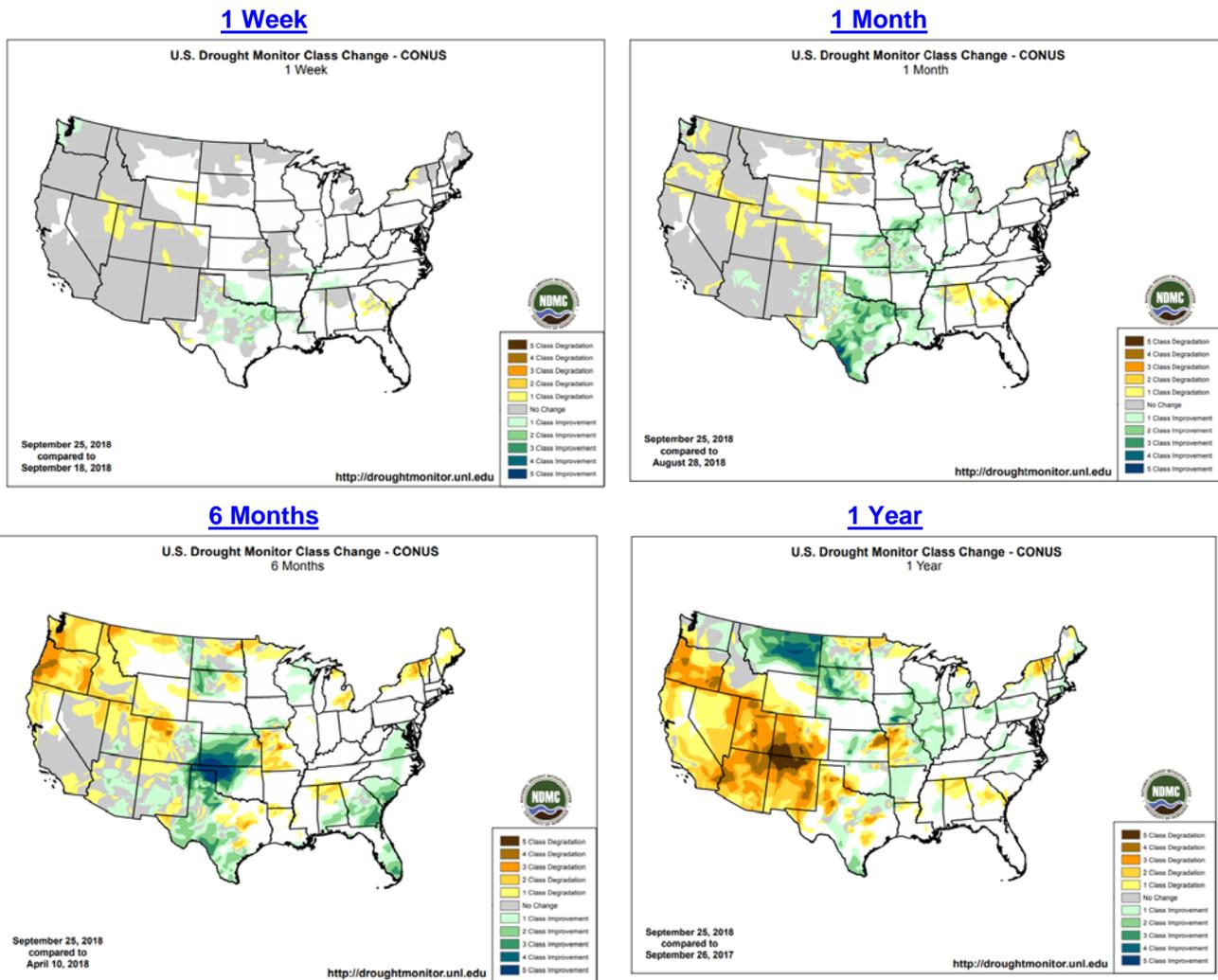


### Current [National Drought Summary](#), September 27, 2018

Author: Jessica Blunden, NOAA/NCEI

“The combination of energetics from northern Mexico lifting toward the Southern Rockies/Great Plains and enhanced moisture from the remains of a tropical depression led to heavy precipitation events across the south-central U.S., particularly notable as a frontal zone stalled. Significant rain fell across much of the South, leading to much improved drought conditions in many areas. In fact, several regions across the U.S. received at least double (or more) of their typical precipitation for this time of the year over the past week, including the far Pacific Northwest, eastern Montana to northern Nebraska and Iowa and western Wisconsin, southwestern Arizona into northwestern New Mexico, and a large swath encompassing much of Texas northeastward to southern New Hampshire, part of which was from the remnants of Florence, now classified as the second wettest storm of the past half century to impact the U.S. Parts of the Southeast and most of the West were dry and drought conditions spread or worsened in several regions.”

## Changes in Drought Monitor Categories over Time



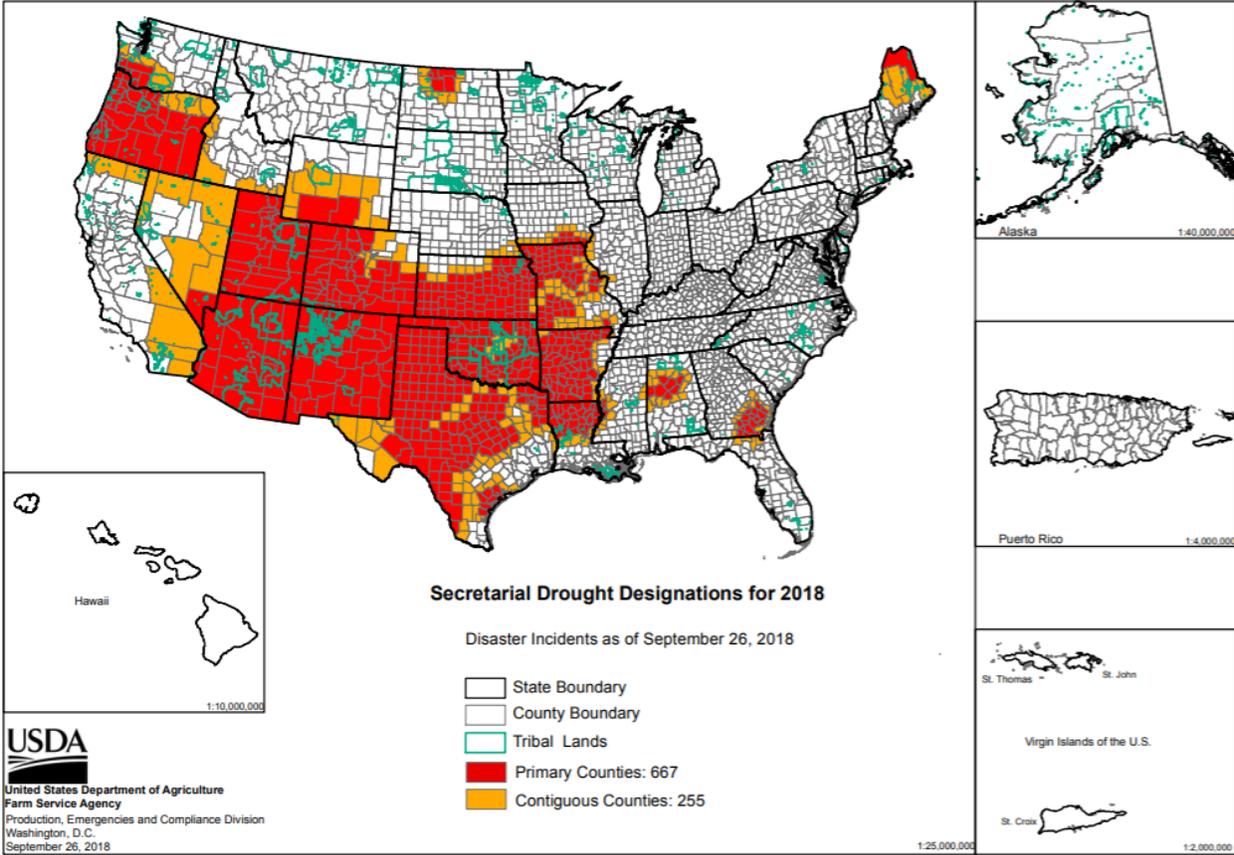
### [Changes in drought conditions over the last 12 months](#)

#### Highlighted Drought Resources

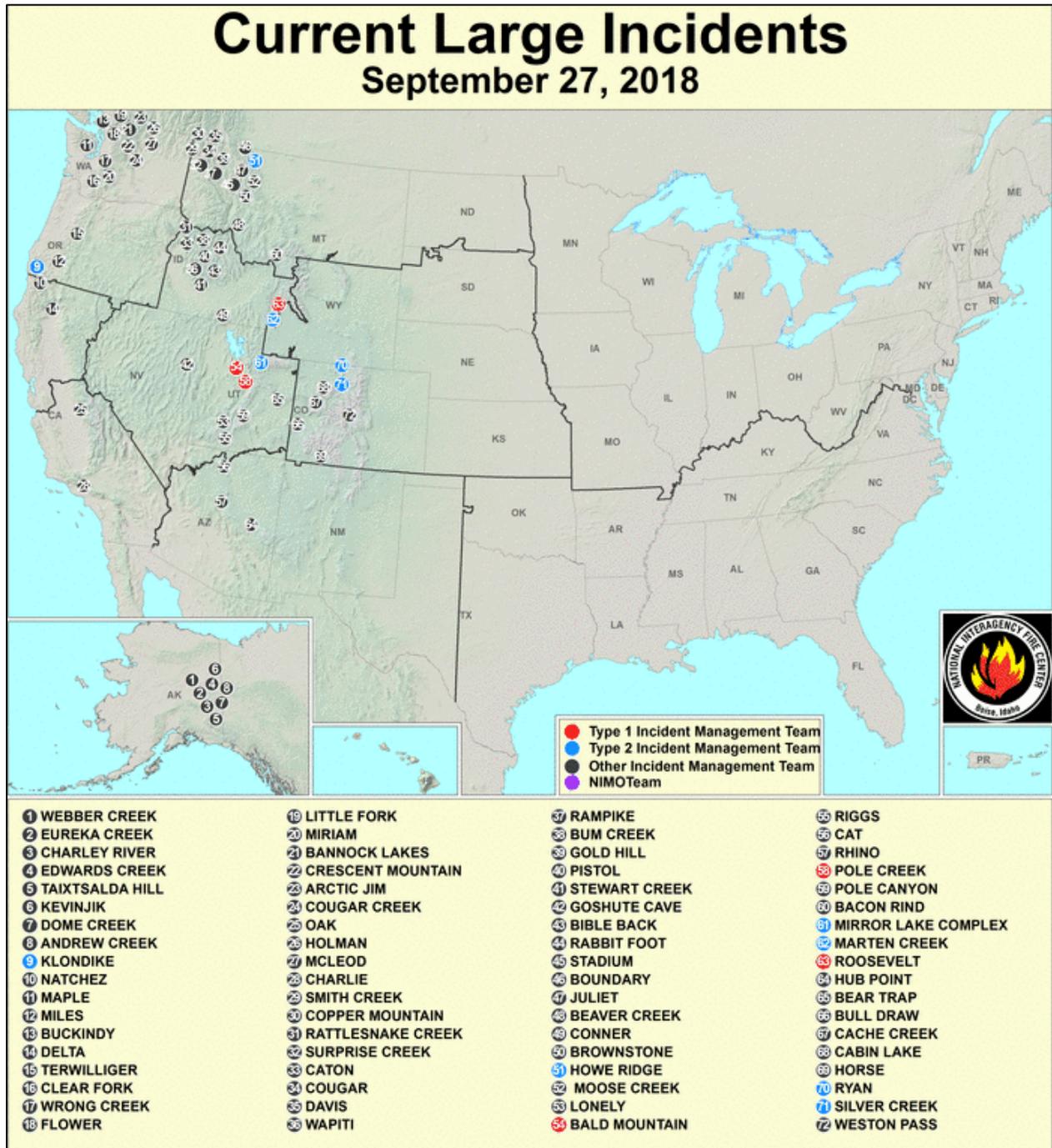
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA 2018 Secretarial [Drought Designations](#)

2018 Secretarial Drought Designations - All Drought



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



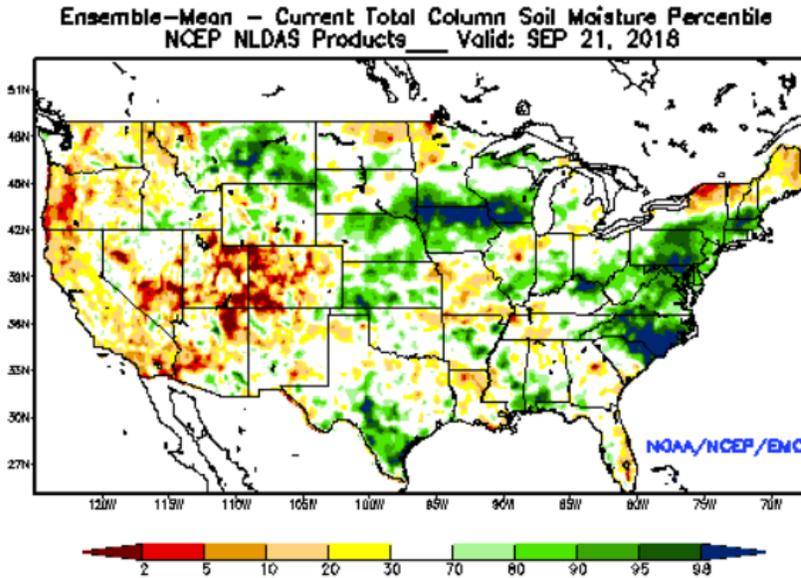
**Highlighted Wildfire Resources**

- [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



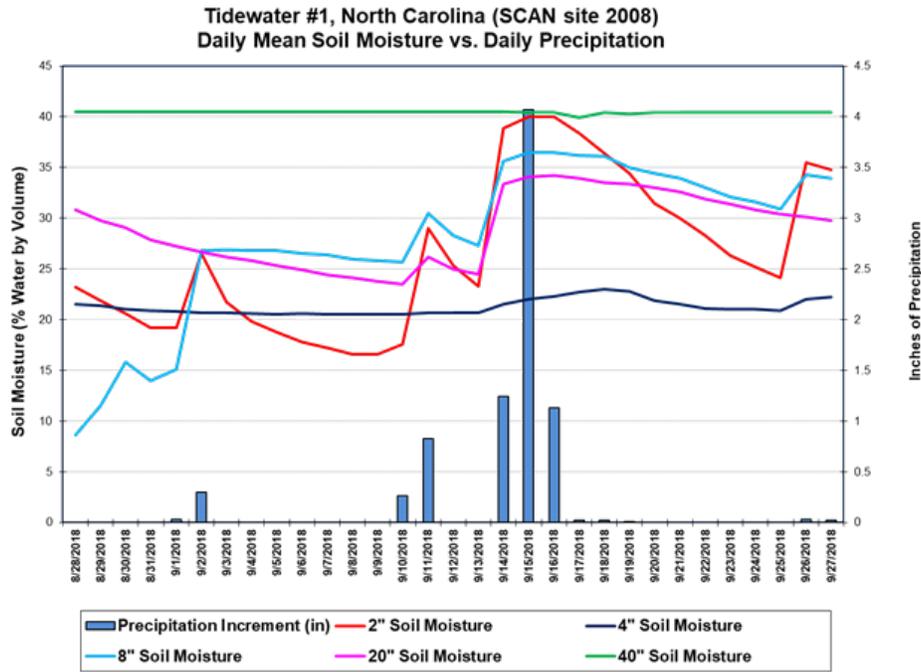
#### Soil Moisture Data Portals

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

[Modeled soil moisture percentiles](#) as of September 21, 2018

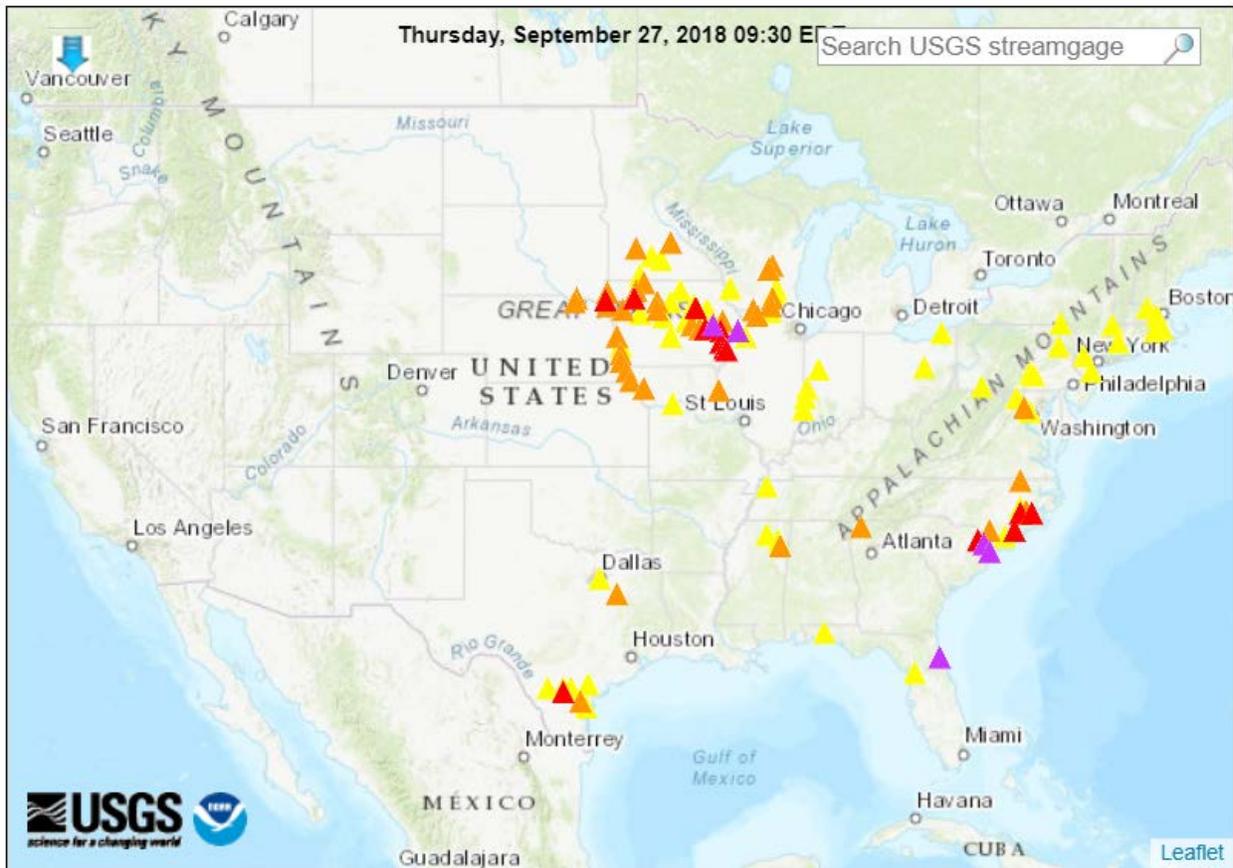
### Soil Moisture Data

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



This chart shows the precipitation and soil moisture during the last 30 days at the [Tidewater #1 SCAN site 2008](#) in North Carolina. The largest precipitation event occurred during Hurricane Florence, between 9/14/18 – 9/16/18, where accumulation totaled 6.44 inches. During this event the 2-, 8-, and 20-inch sensors showed large increases in soil moisture.

### Map of flood and high flow conditions



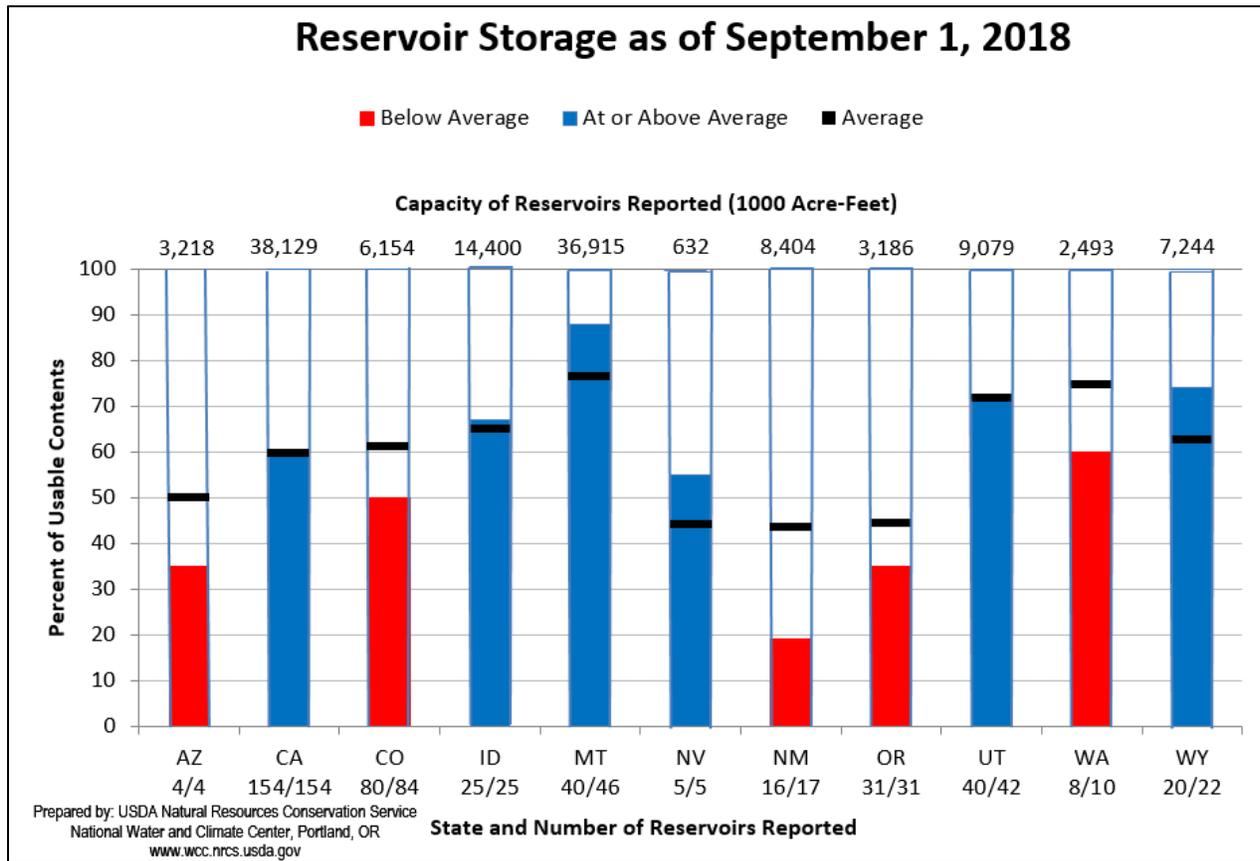
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage			○ Streamgage without flood stage			

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

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



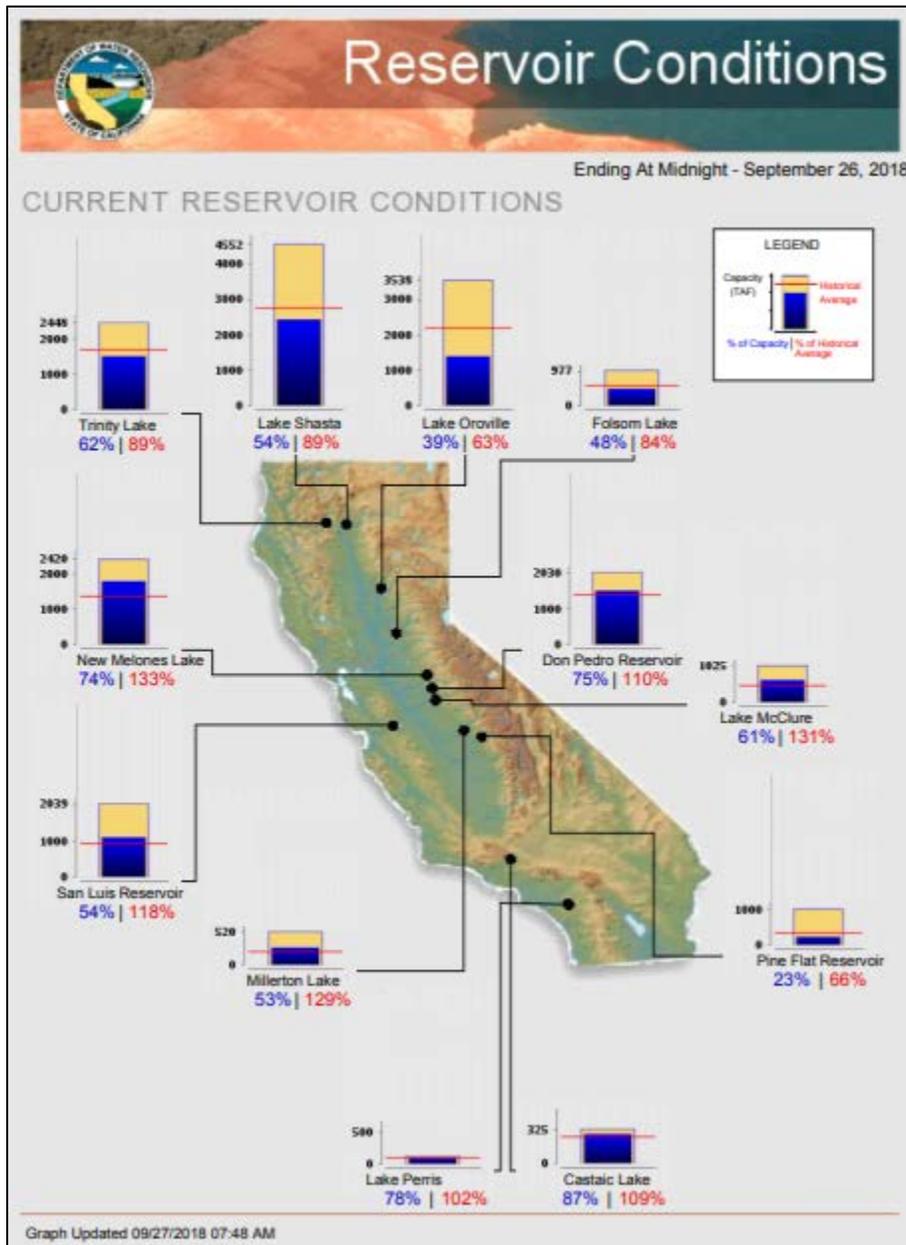
September 1, 2018 Reservoir Storage: [Chart](#) | [Dataset](#)

### 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

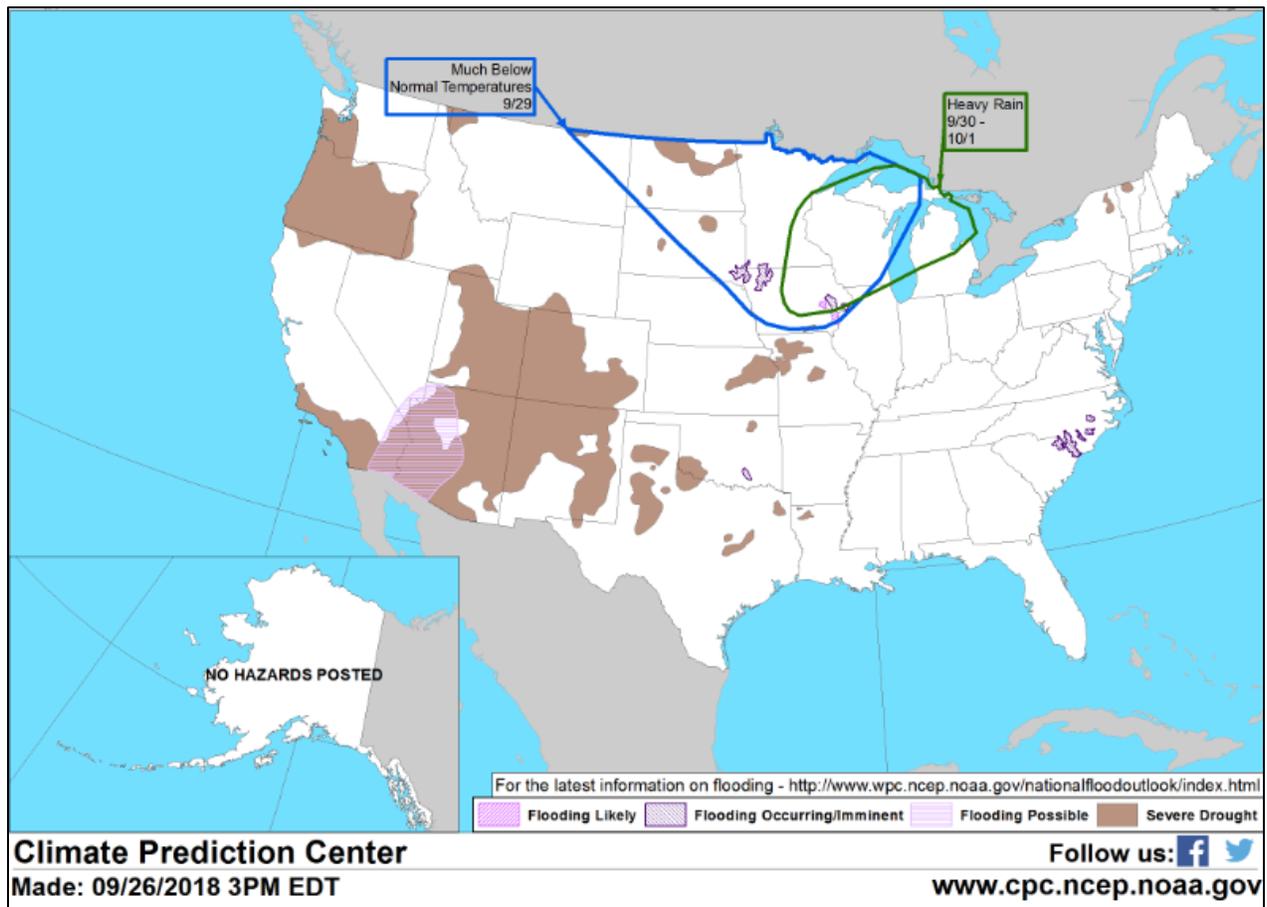
### Agricultural Weather Highlights

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

**National Outlook, Thursday, September 27:** “Western warmth will continue through much of the weekend. Early next week, however, the remnants of eastern Pacific Hurricane Rosa are expected to veer toward northwestern Mexico and the southwestern U.S., generating locally heavy showers and contributing to cooler conditions. Meanwhile, two surges of chilly air will overspread the northern Plains and upper Midwest, resulting in widespread late-week and weekend freezes from Montana to Wisconsin. Farther east, 5-day rainfall totals could reach 1 to 2 inches, with locally higher amounts, from the Gulf Coast region to the Atlantic Coast States. Similar totals can be expected in parts of the upper Midwest. The NWS 6- to 10-day outlook for October 2 – 6 calls for the likelihood of above-normal temperatures and precipitation across the majority of the country. Cooler-than-normal conditions will be limited to the Pacific Coast States and the nation’s northern tier as far east as Lake Superior, while near-normal rainfall should be confined to parts of the Southeast.”

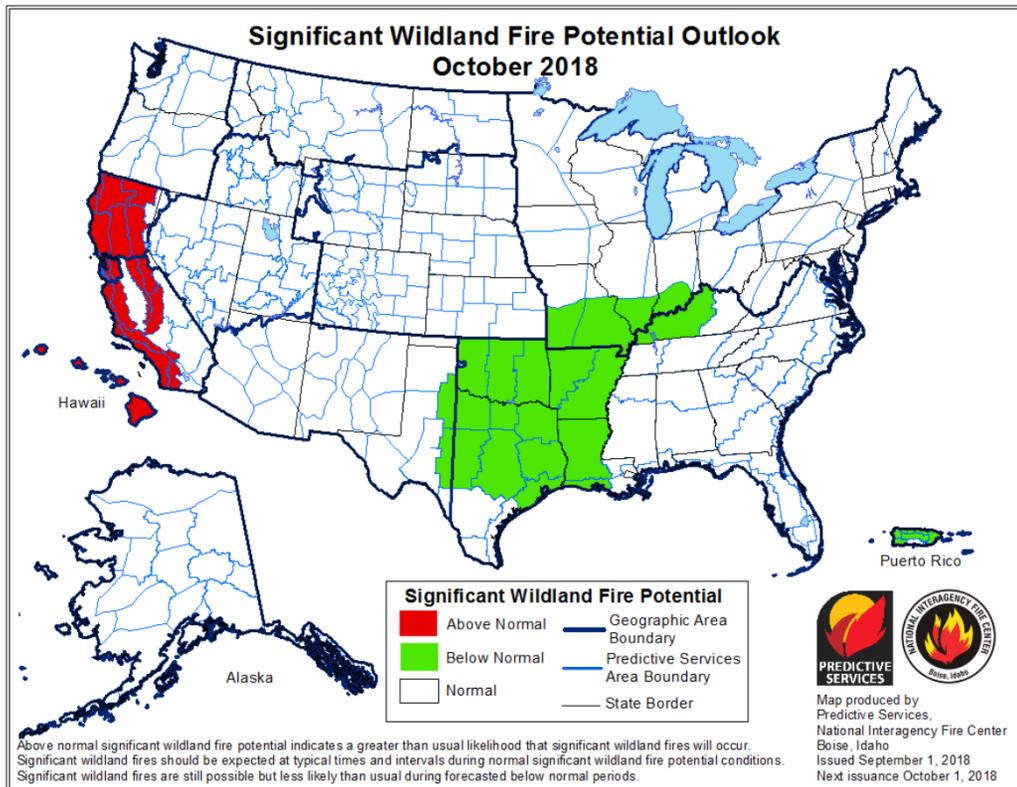
### Weather Hazard Outlook September 29 – October 3, 2018

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

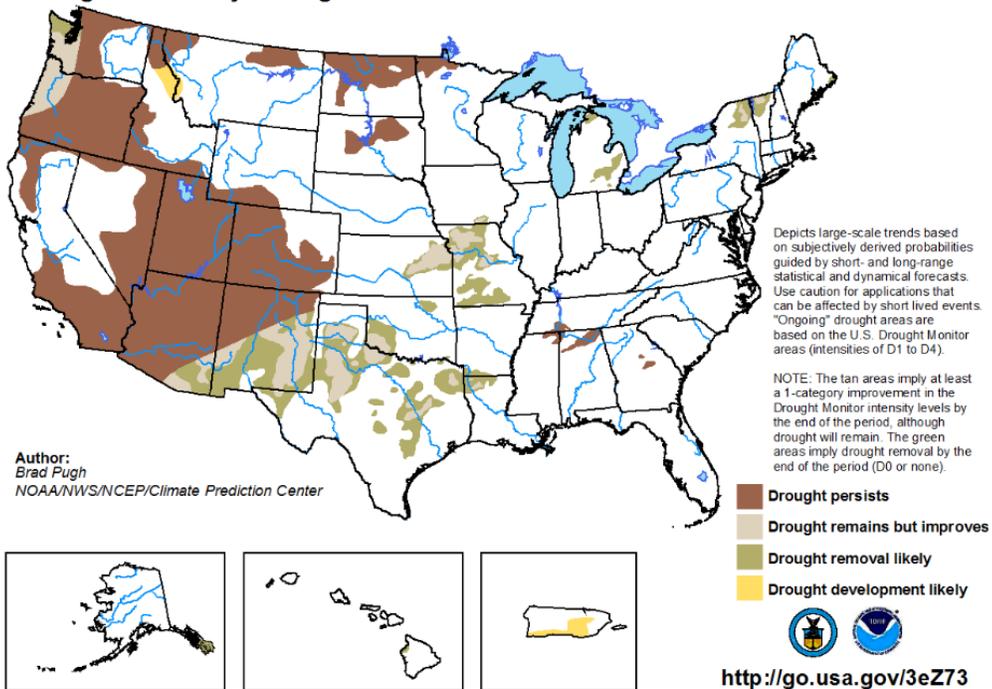
Source: National Interagency Fire Center



Seasonal Drought Outlook: [September 20 - December 31, 2018](#)

Source: National Weather Service

**U.S. Seasonal Drought Outlook** Valid for September 20 - December 31, 2018  
Drought Tendency During the Valid Period Released September 20, 2018

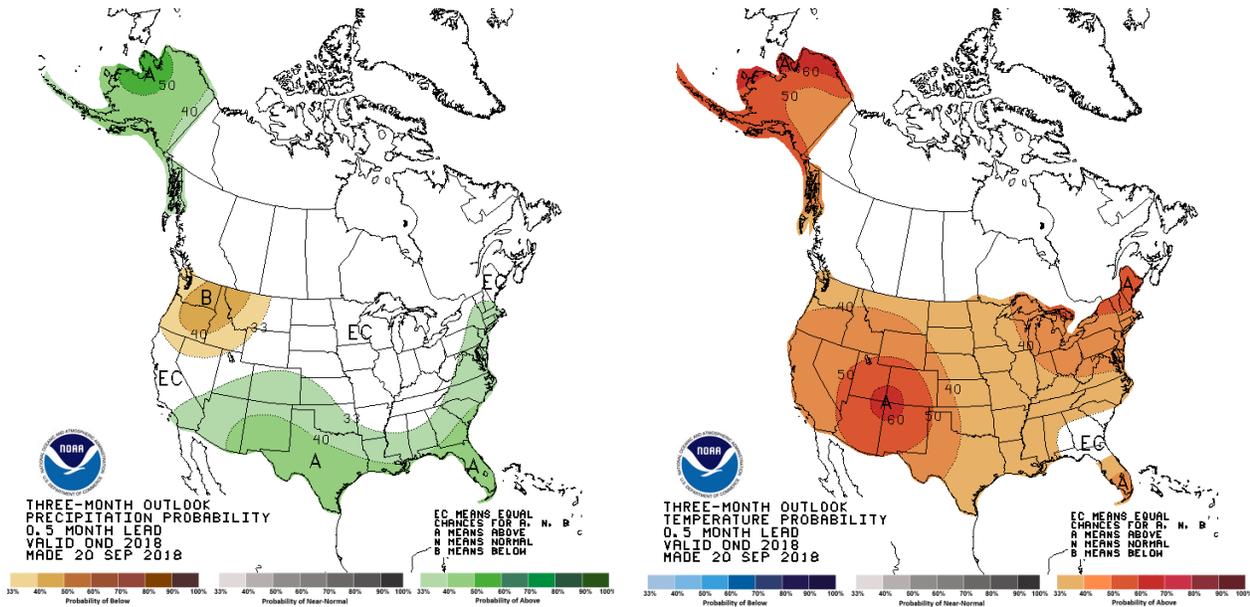


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

[Precipitation](#)

[Temperature](#)



[October-November-December \(OND\) 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](#).