

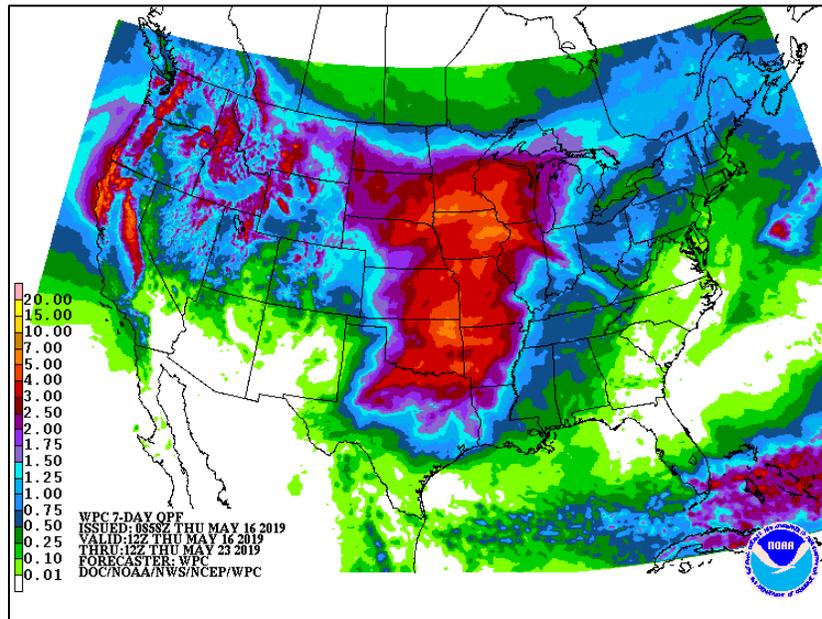
# Water and Climate Update

May 16, 2019

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.

|                     |    |  |    |
|---------------------|----|--|----|
| Snow .....          | 2  | Other Climatic and Water Supply Indicators ..... | 13 |
| Precipitation ..... | 4  | Short- and Long-Range Outlooks.....              | 17 |
| Temperature.....    | 8  | More Information .....                           | 20 |
| Drought .....       | 10 |  |    |

## Severe storms forecast to deliver 3-7 inches of precipitation to the Midwest



The National Weather Service Quantitative Precipitation Forecast (QPF) for the next seven days shows continuing severe storms throughout the Midwest. Flooding is ongoing in the South and Southeast as storms pound the region. The Mississippi River is now expected to surpass the record for the longest lasting flood conditions since 1927. Officials in Mississippi are trying to minimize impacts from another current peak along the flooded river levee system, impacting thousands of acres of farmland.

**Related:**

[Mississippi River Flooding: With New Orleans Levee Pressure Increasing, Bonnet Carré spillway Opened: Louisiana Governor Declares Statewide Emergency](#) - Newsweek

[Severe weather brings a tornado, flooding and hail to the South](#) – CBS News (LA)

['We're tired of it': Residents in Brazoria County still dealing with flooding after heavy storms](#) – Click2Houston (TX)

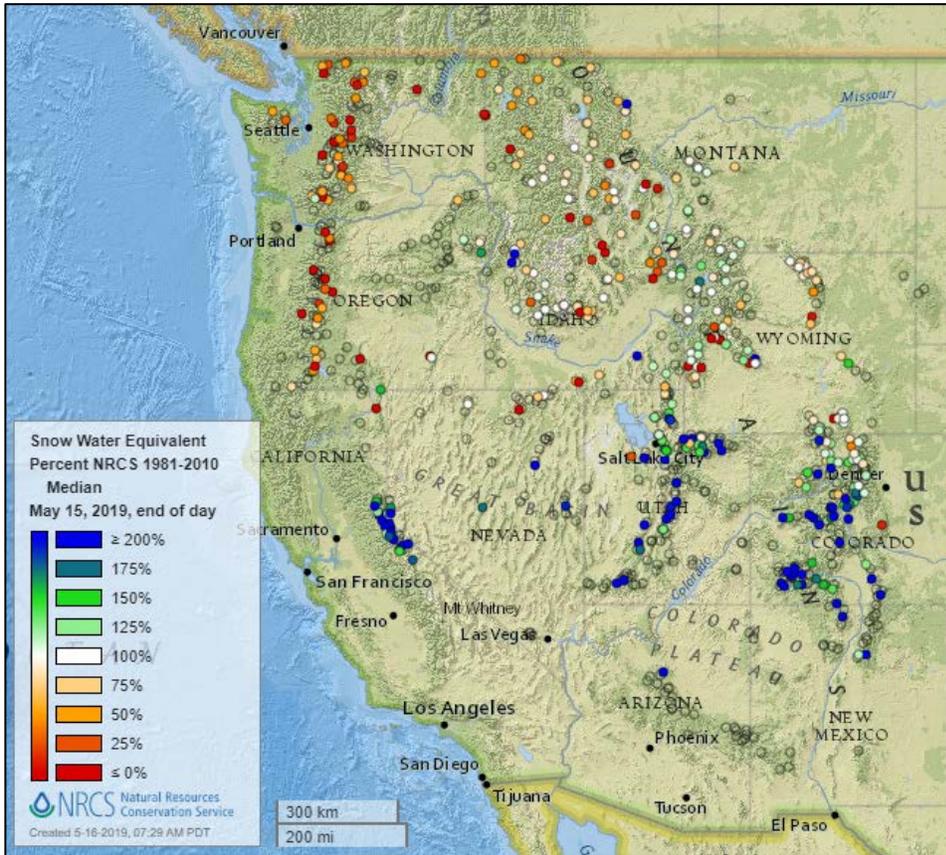
[The Latest: New record predicted in inland Mississippi flood](#) – St. Louis Post-Dispatch

[2019 Mississippi River Flood the Longest-Lasting Since the Great Flood of 1927](#) – The Weather Channel

[Central U.S. faces long stretch of potentially violent storms and flooding rain starting Friday](#) – The Washington Post

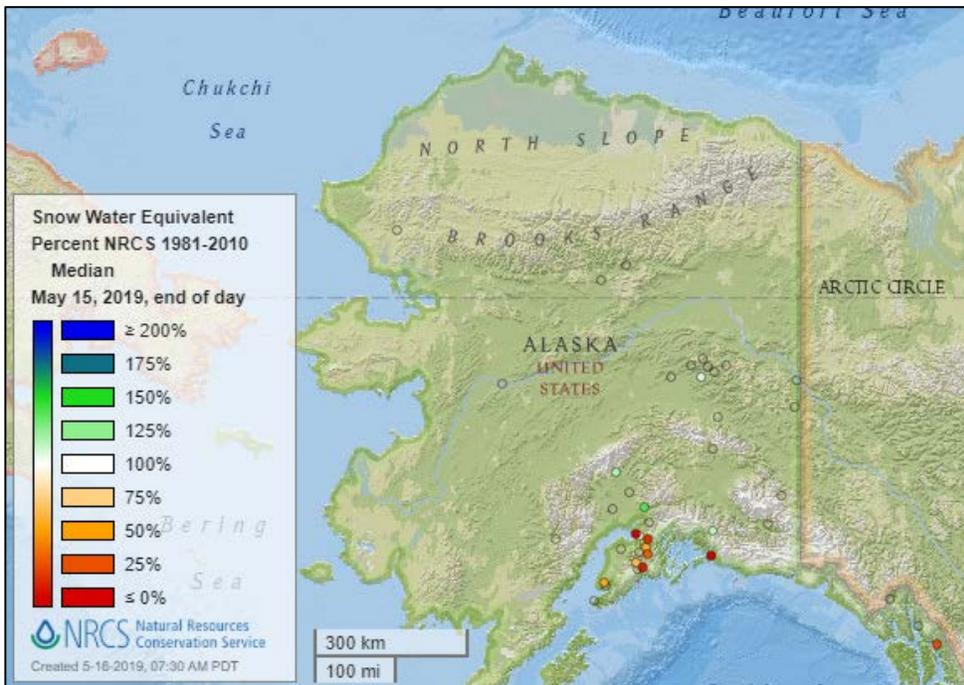
## Snow

### Current Snow Water Equivalent, NRCS SNOTEL Network



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

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

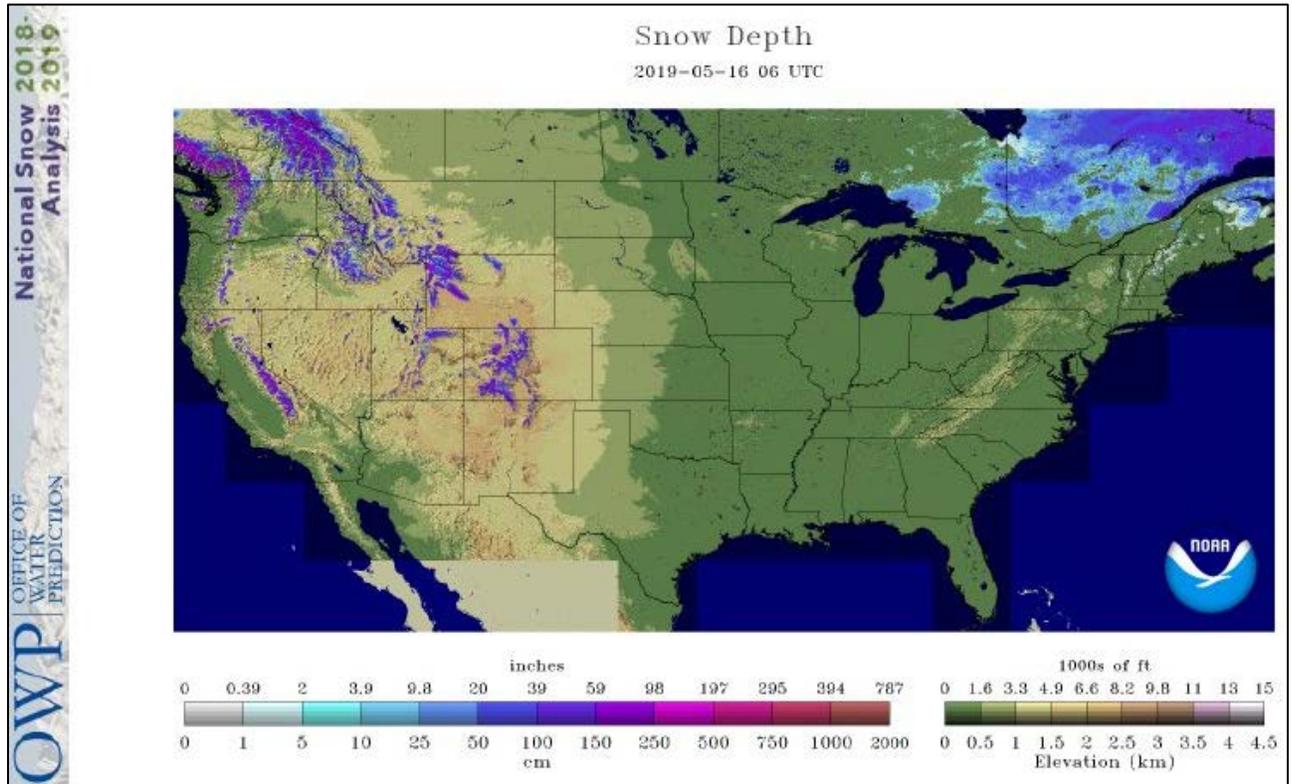


[Alaska snow water equivalent percent of median map](#)

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

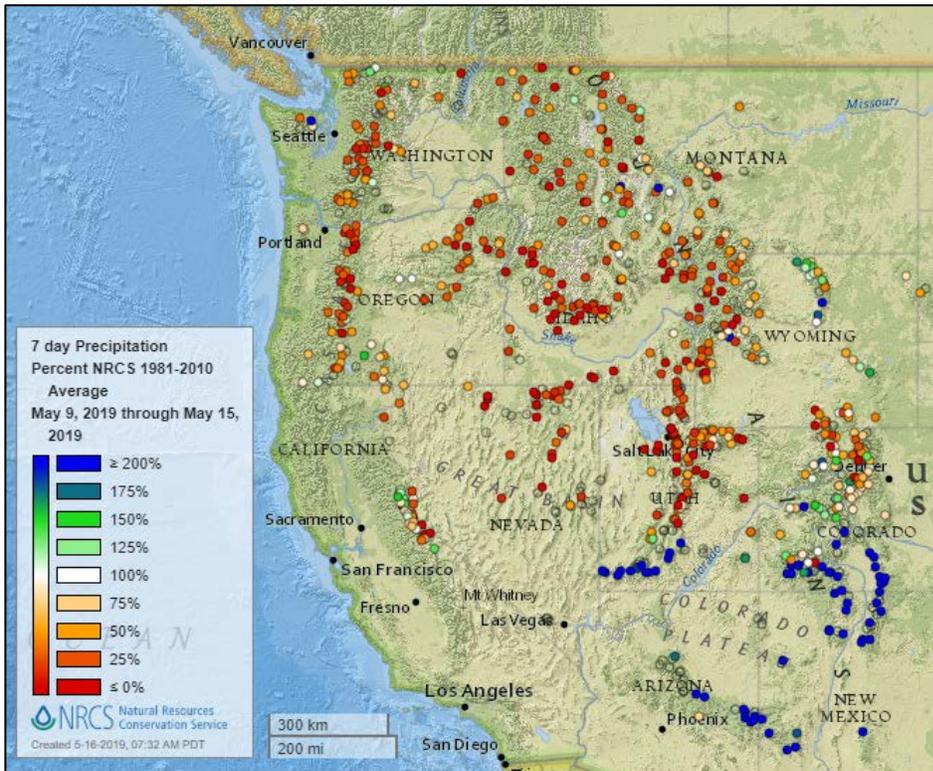
Current Snow Depth

Source: National Weather Service Snow Analysis



## Precipitation

### Last 7 Days, NRCS SNOTEL Network

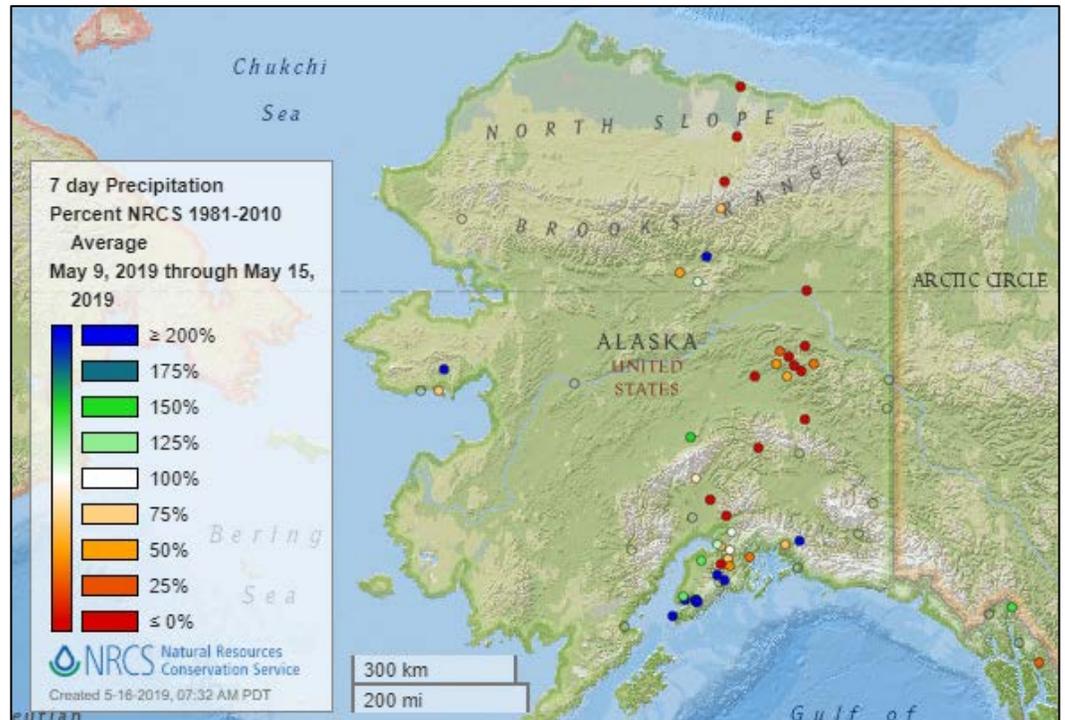


[7-day precipitation percent of average map](#)

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

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

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



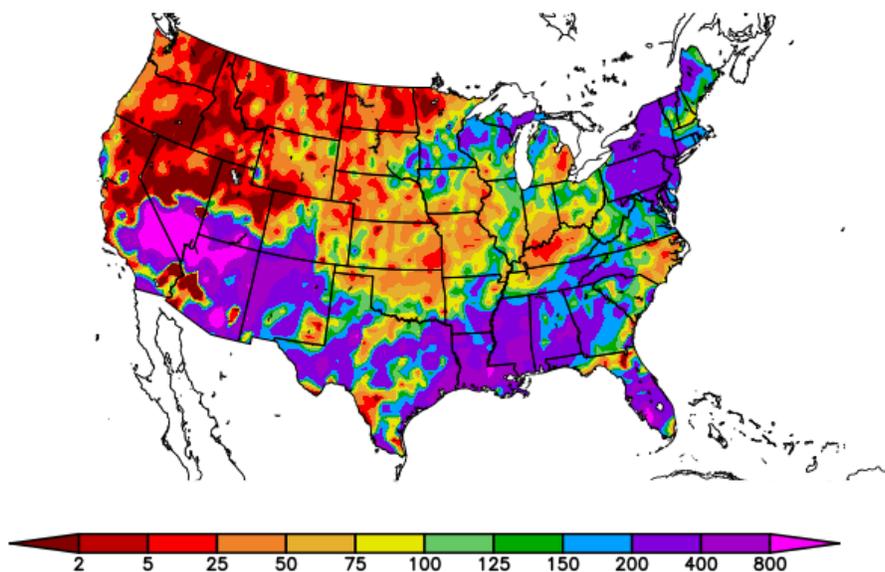
**Last 7 Days, National Weather Service (NWS) Networks**

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 (%)  
5/9/2019 – 5/15/2019



Generated 5/16/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

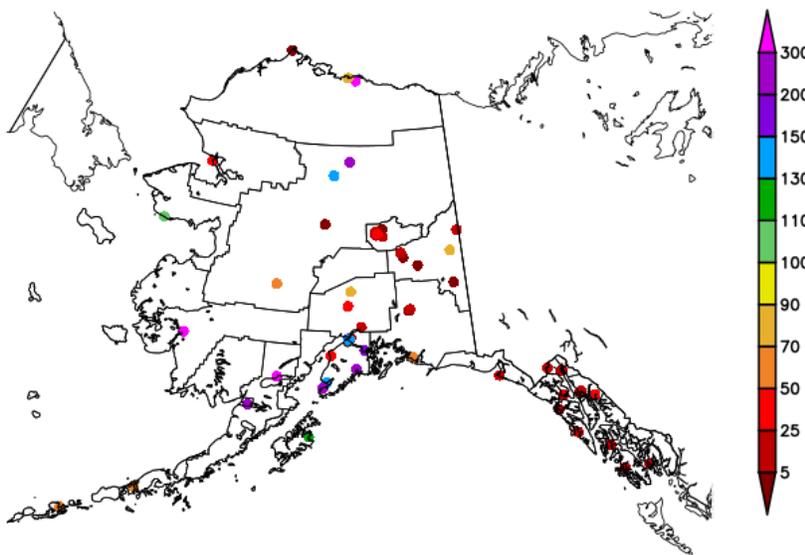
**Last 7 Days, National Weather Service (NWS) Networks**

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
5/9/2019 – 5/15/2019



Generated 5/16/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

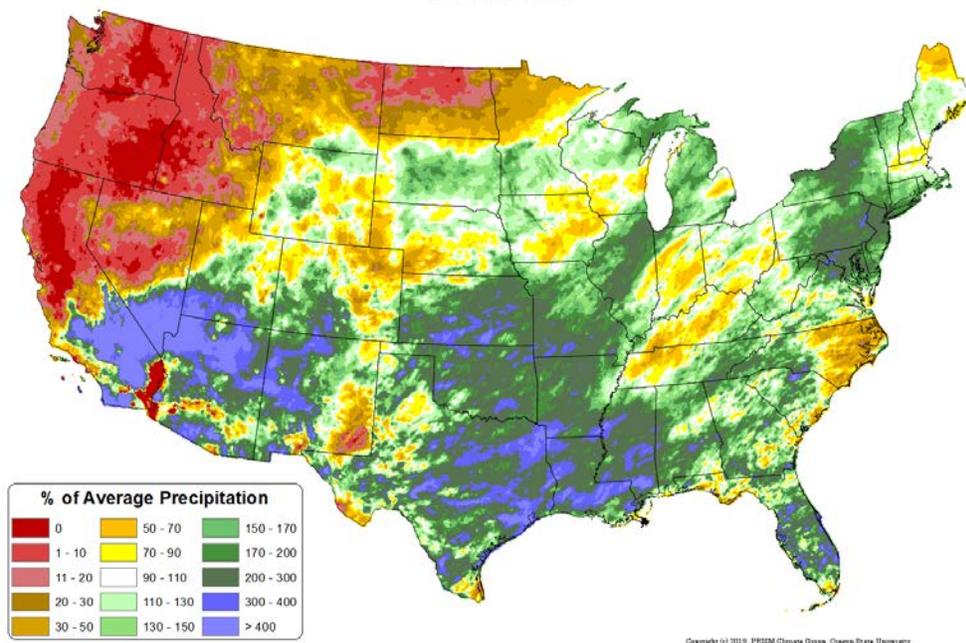
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 May 2019 - 15 May 2019  
Period ending 7 AM EST 15 May 2019  
Base period: 1981-2010  
(Map created 16 May 2019)

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

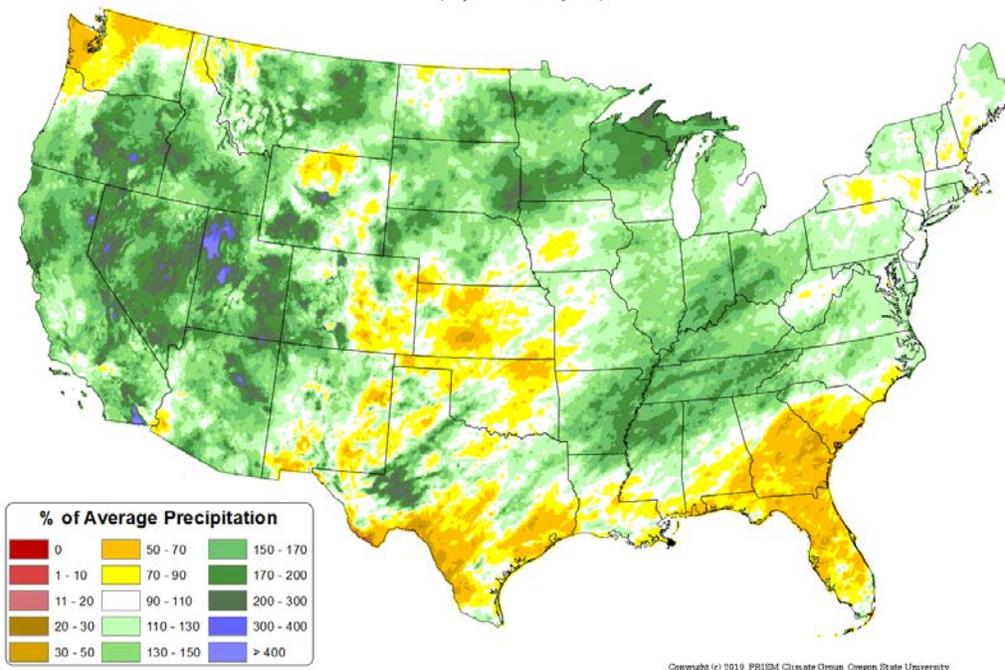


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

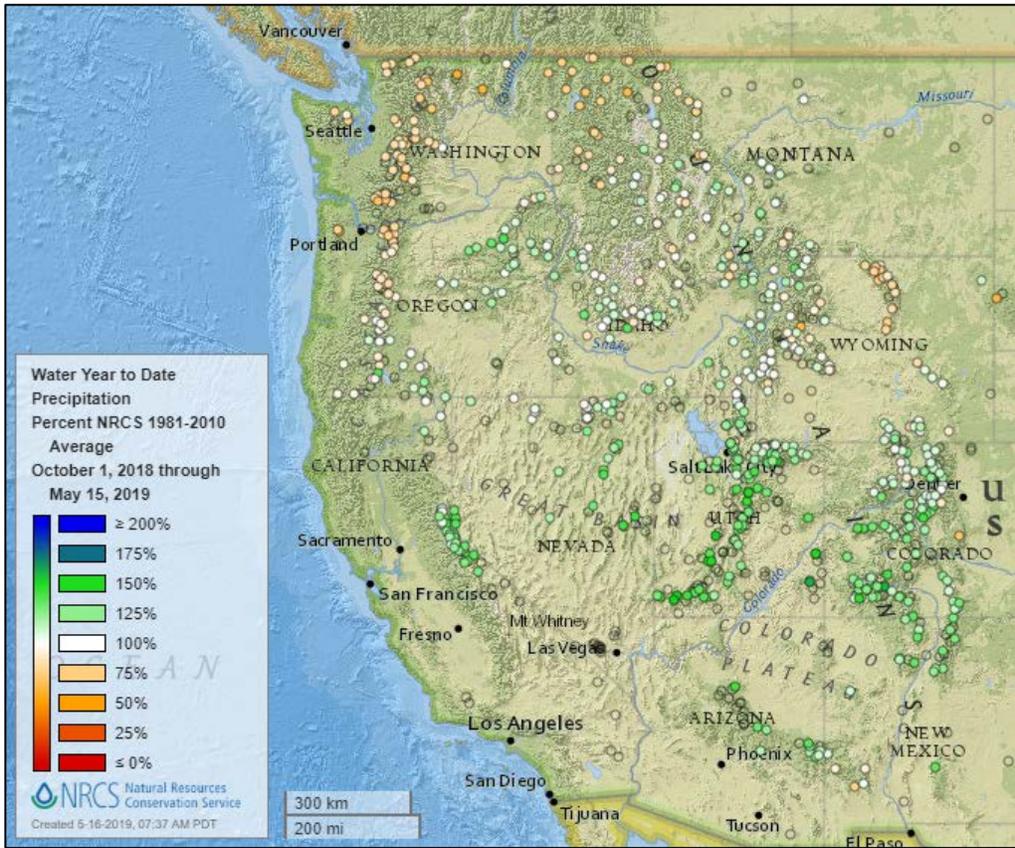
Source: PRISM

[February through April 2019 total precipitation percent of average map](#)

Total Precipitation Anomaly: Feb 2019 - Apr 2019  
Period ending 7 AM EST 30 Apr 2019  
Base period: 1981-2010  
(Map created 02 May 2019)



Water Year-to-Date, NRCS SNOTEL Network



[2019 water year-to-date precipitation percent of average map](#)

**See also:**  
[2019 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2019 water year-to-date precipitation percent of average map](#)

**See also:**  
[Alaska 2019 water year-to-date precipitation values \(inches\) map](#)

## Temperature

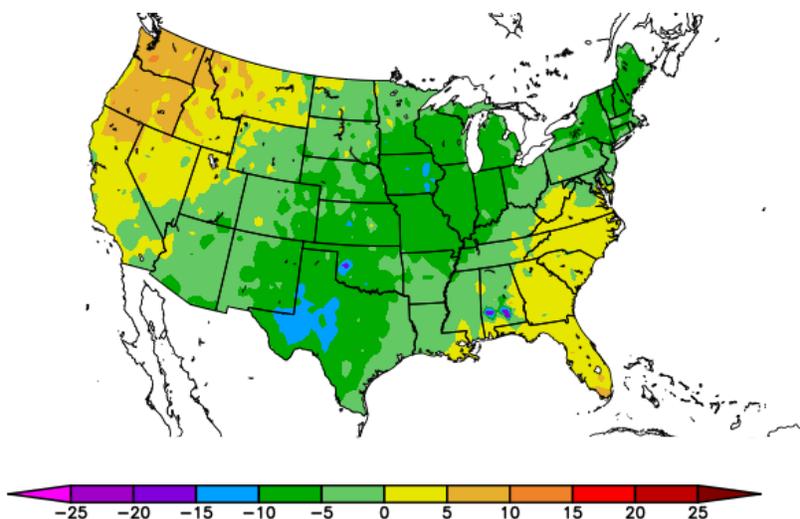
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the contiguous U.S.

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

Departure from Normal Temperature (F)  
5/9/2019 – 5/15/2019



Generated 5/16/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

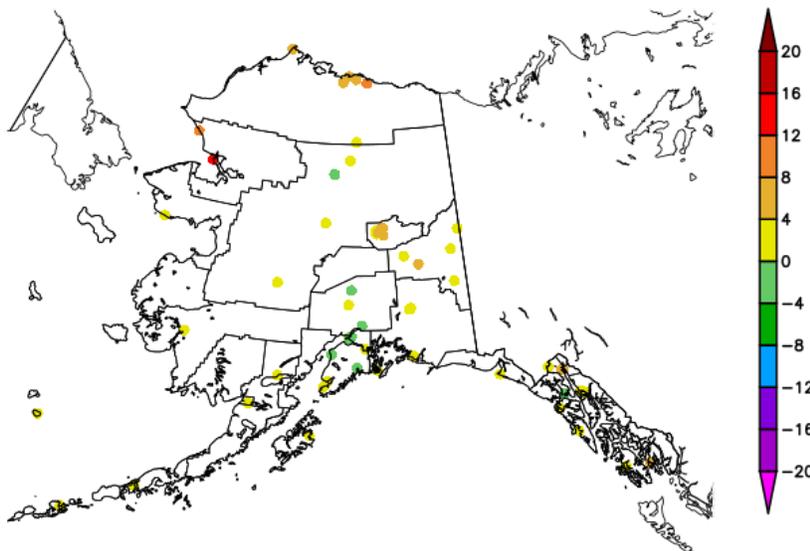
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
5/9/2019 – 5/15/2019



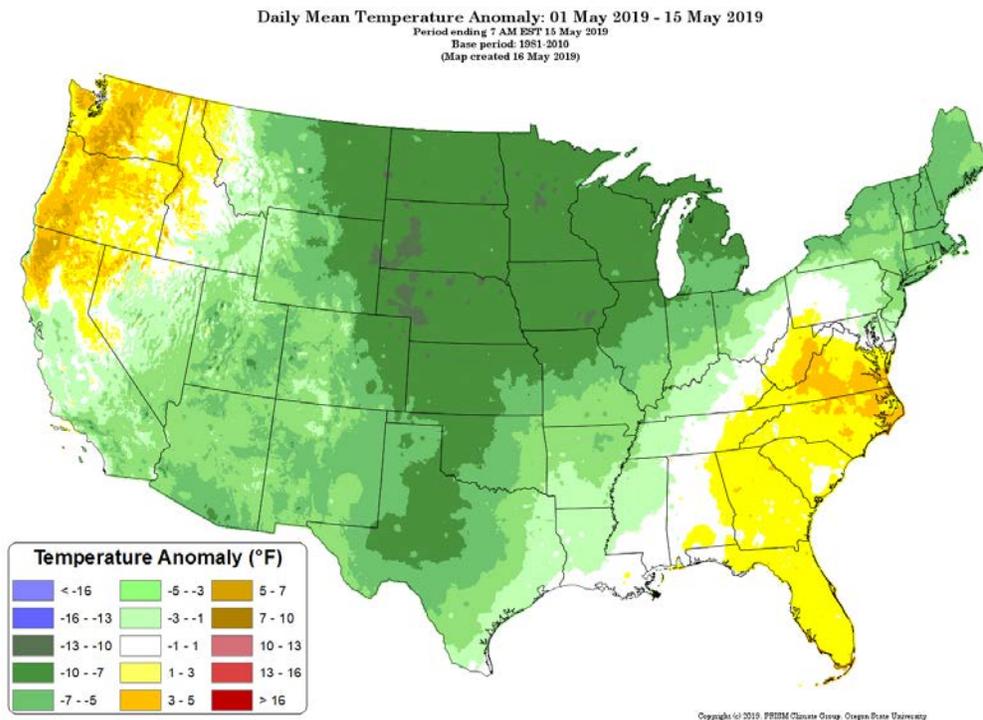
Generated 5/16/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

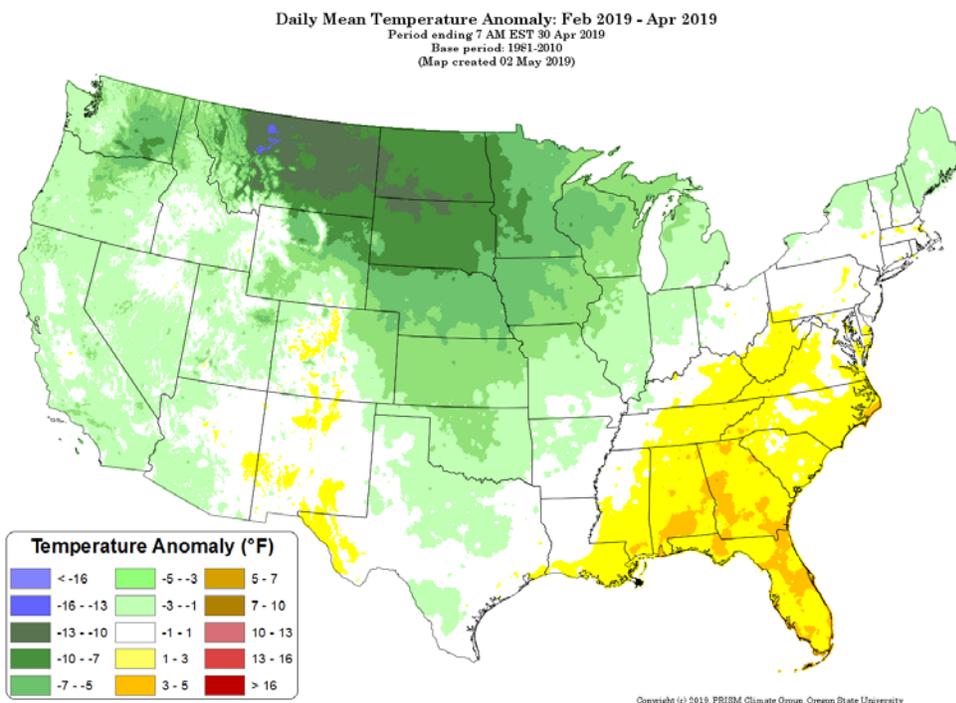
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[February through April 2019 daily mean temperature anomaly map](#)



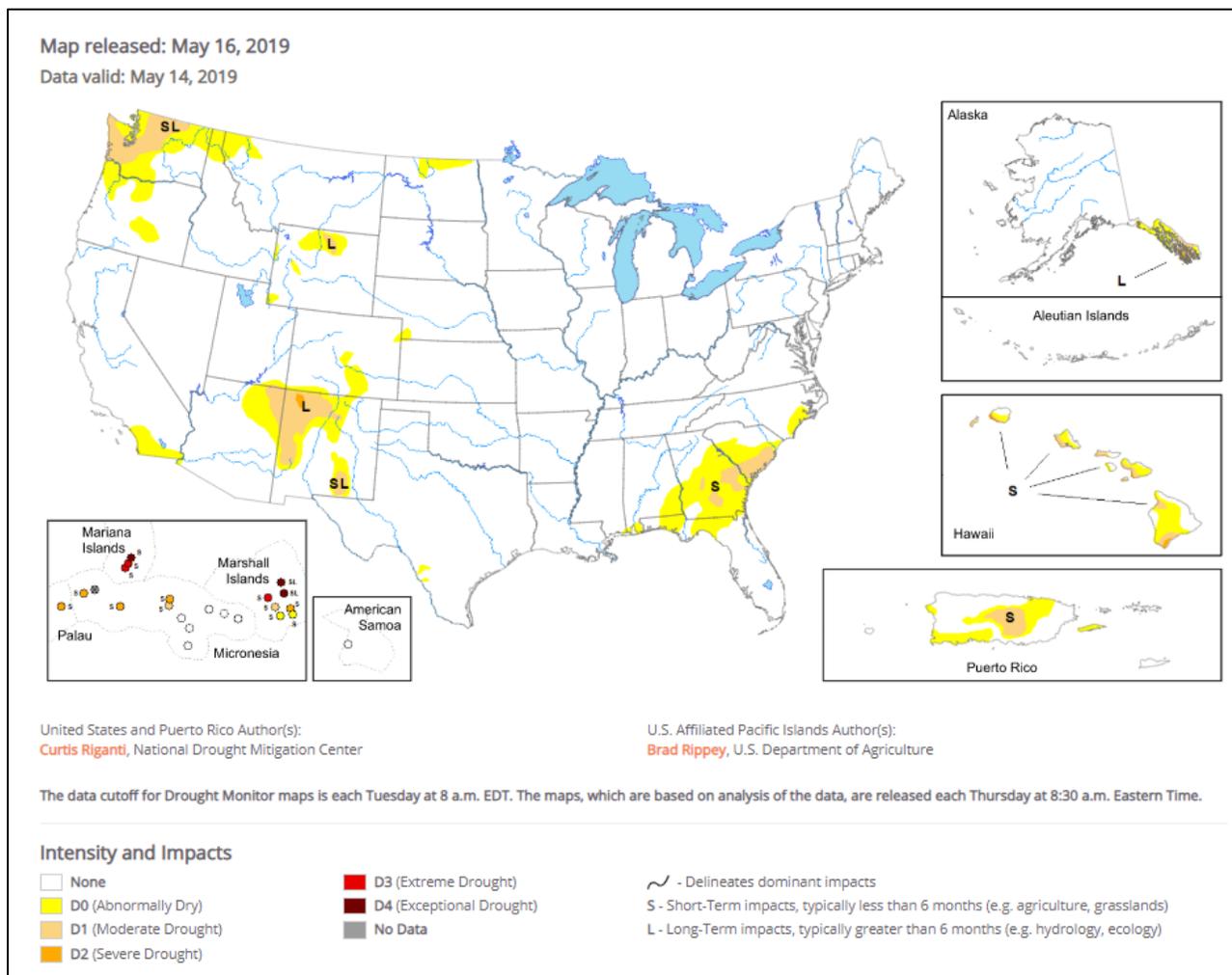
## Drought

### [U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

### [U.S. Drought Portal](#)

Source: NOAA



### Current [National Drought Summary](#), May 16, 2019

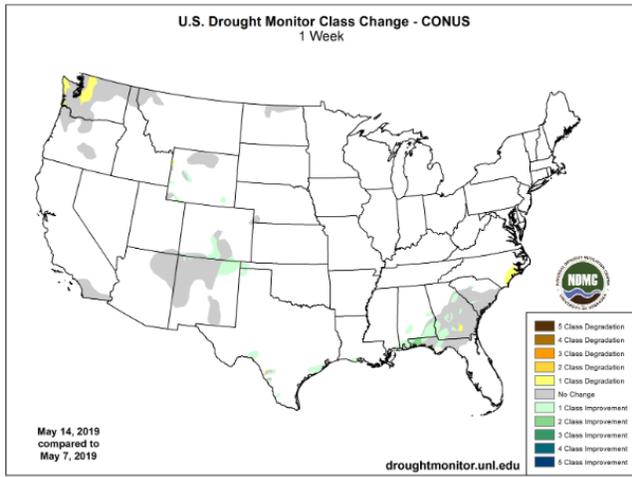
Source: National Drought Mitigation Center

“Widespread precipitation this week led mostly to improvements in moderate drought and abnormally dry regions across the Southeast and South, and in the Rocky Mountains in southern Colorado and northern New Mexico. In parts of central and western Washington where high evaporative demand and paltry precipitation amounts continued, conditions degraded to moderate drought. Moderate and severe drought continued in southeast Alaska and in parts of Hawaii, while moderate drought and abnormal dryness coverage was adjusted in Puerto Rico.”

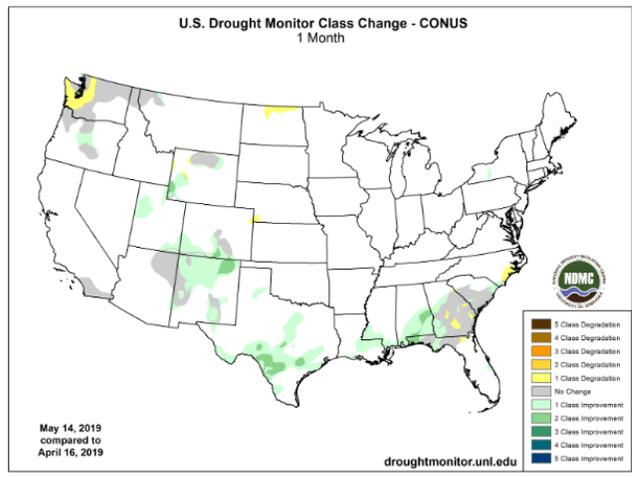
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

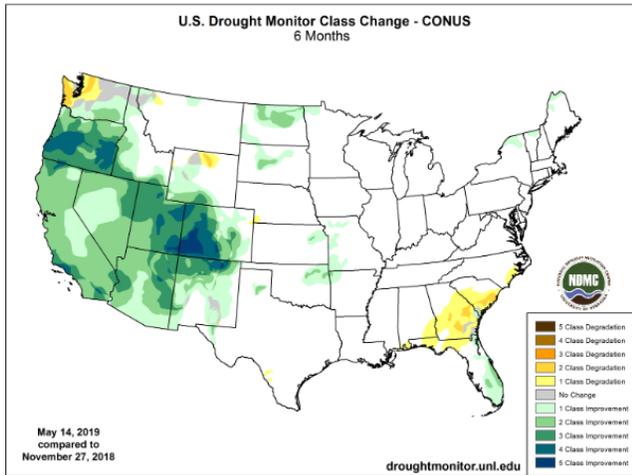
### 1 Week



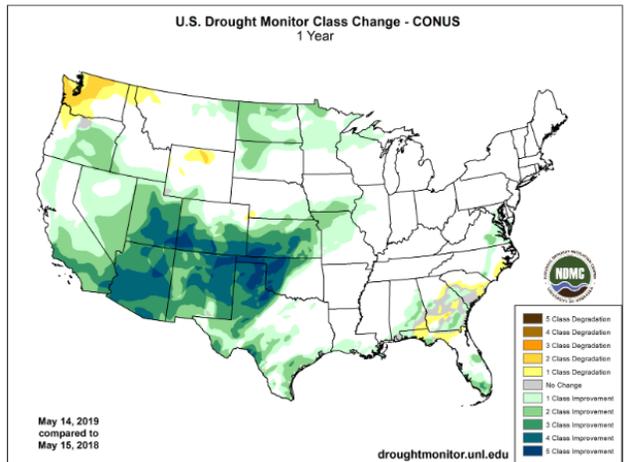
### 1 Month



### 6 Months



### 1 Year



[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

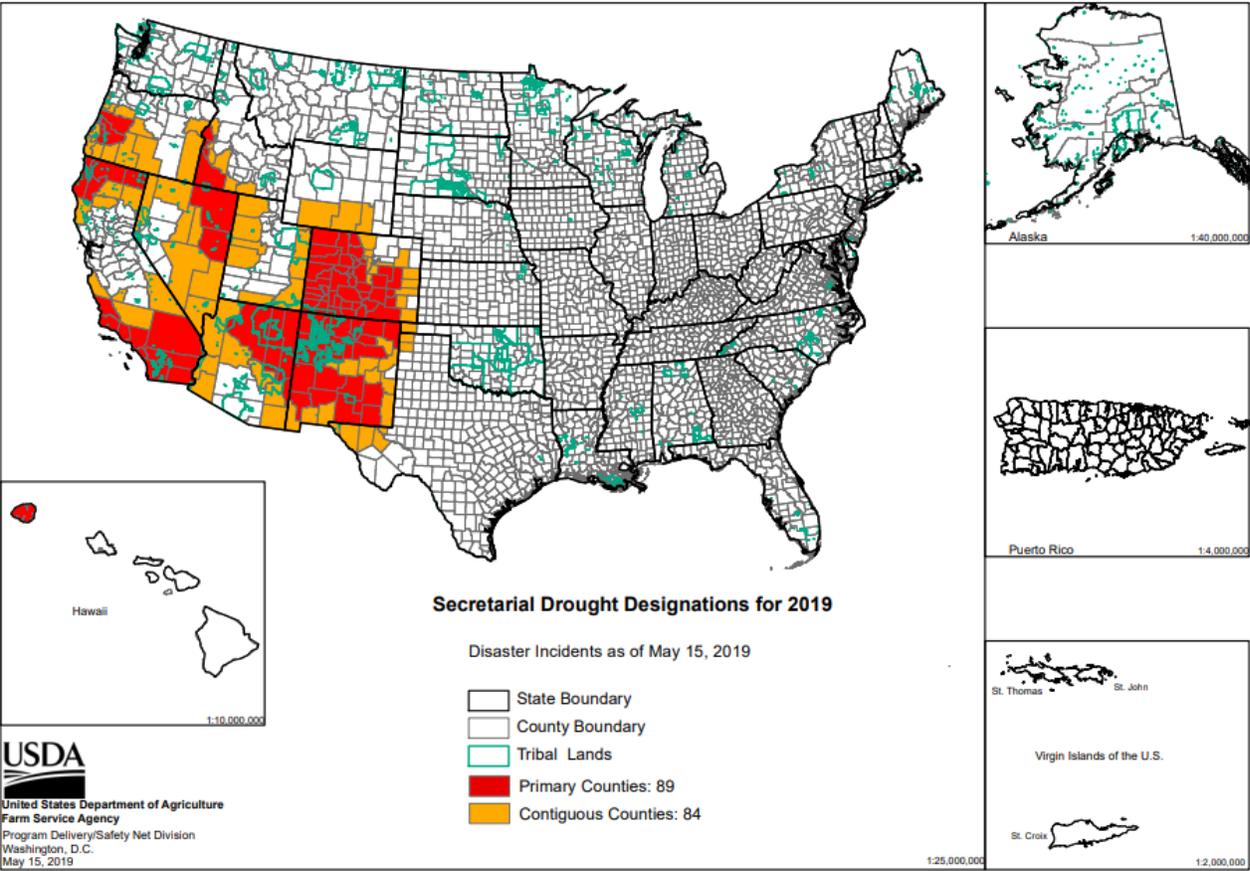
### Highlighted Drought Resources

- [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](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency

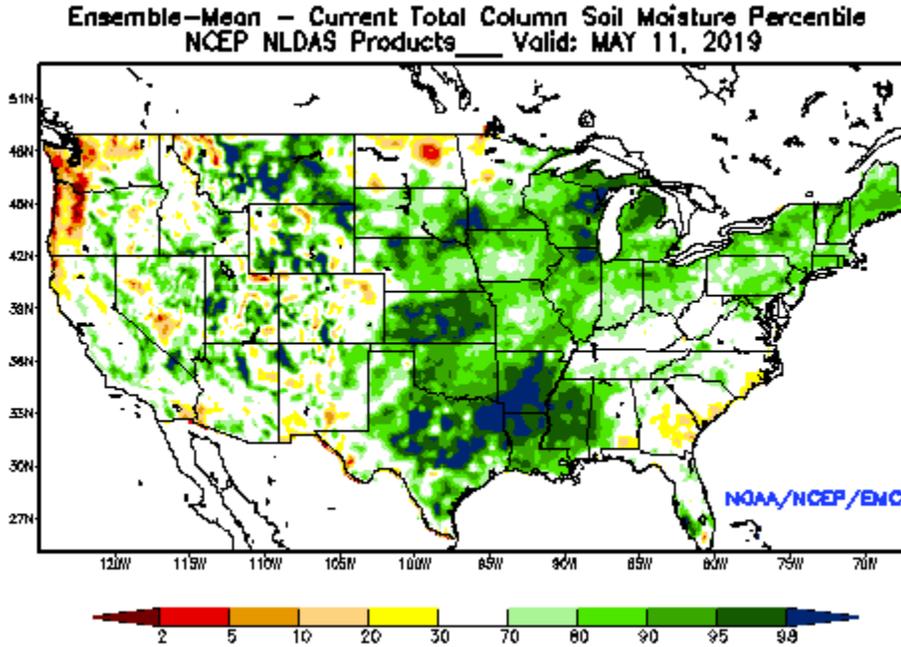
2019 Secretarial Drought Designations - All Drought



## Other Climatic and Water Supply Indicators

### Soil Moisture

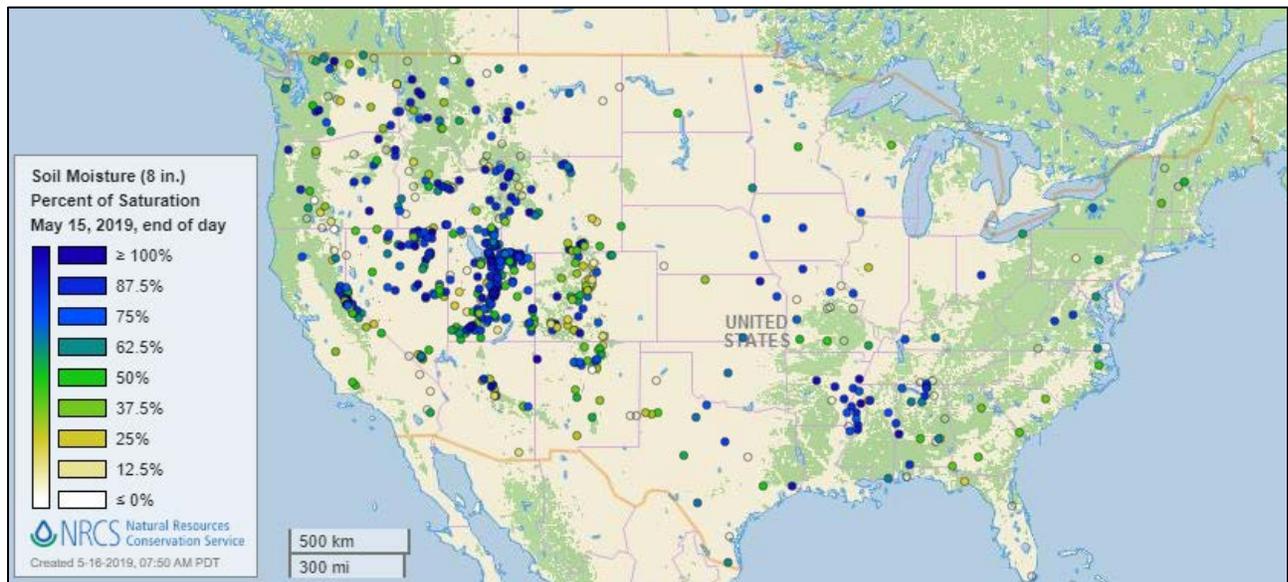
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of May 11, 2019

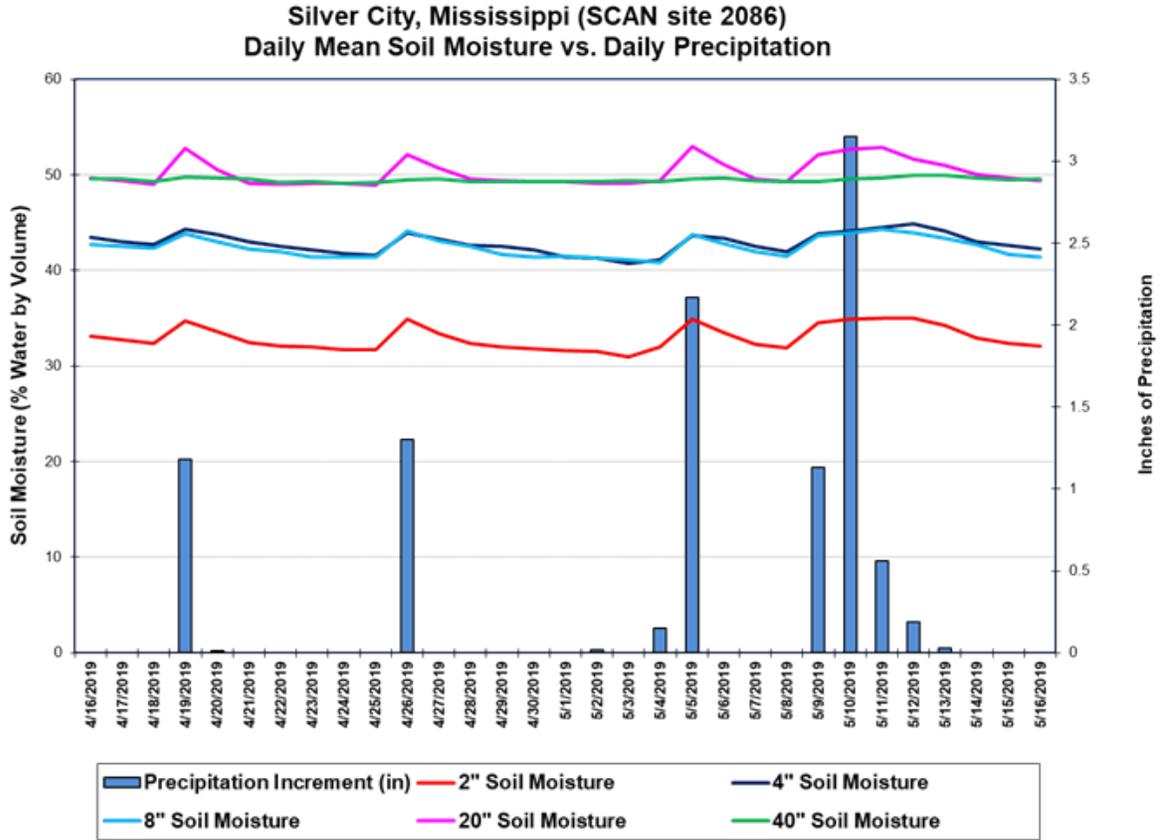
### Soil Moisture Percent of Saturation

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



**Soil Moisture Data**

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



This graph shows the soil moisture and precipitation for the last 30 days at the [Silver City SCAN site 2086](#) in Mississippi. The soil in this area is level to gently sloping on natural levees and low terraces along former channels of the Mississippi River. Between May 9 and May 13, accumulated precipitation totaled 5.06 inches and soil moisture increased at the 2-, 4-, 8-, and 20-inch sensor levels. Soil moisture at the 40-inch sensor level was at saturation and remained unchanged.

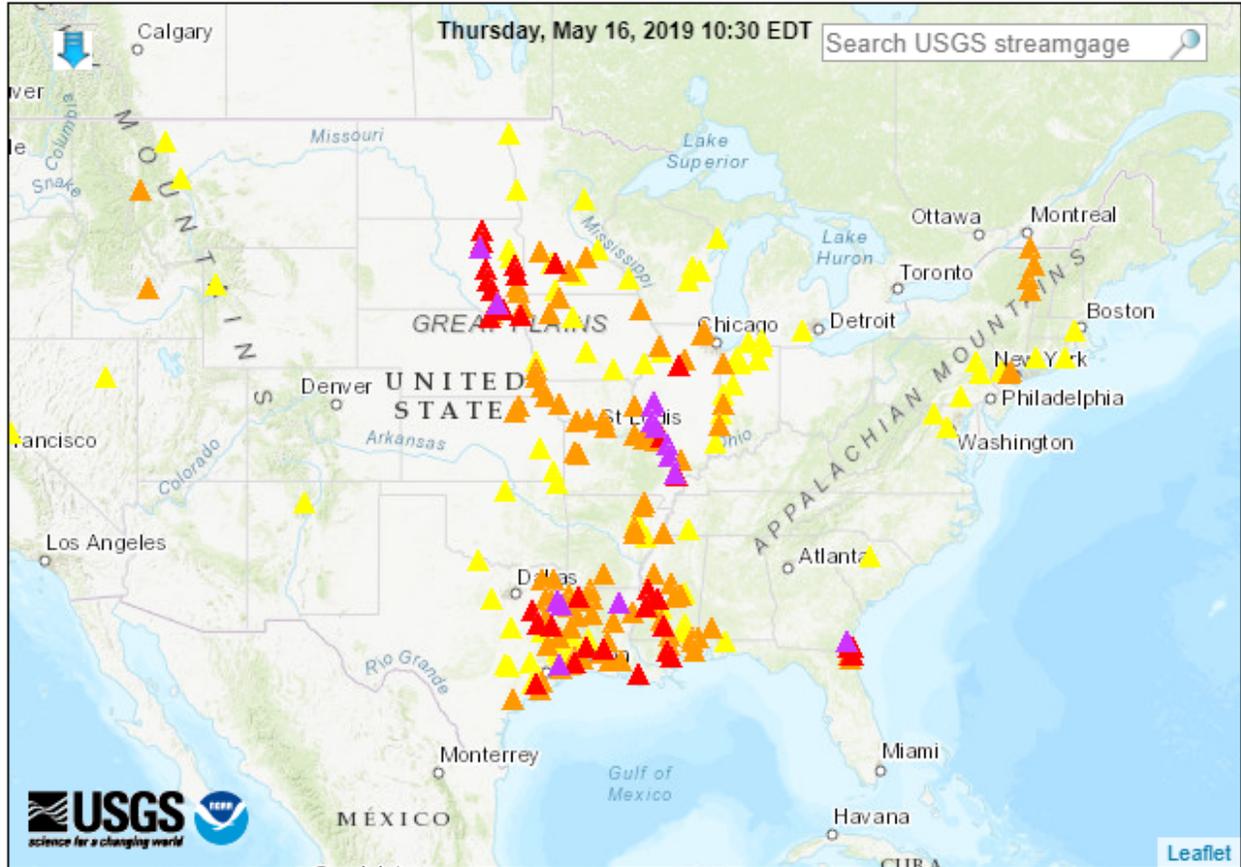
**Soil Moisture Data Portals**

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

**Streamflow, Drought, Flood, and Runoff**

Source: U.S. Geological Survey

**Map of flood and high flow conditions**  
 (14 in major flood, 33 in moderate flood, 97 in minor flood, 75 in near flood)



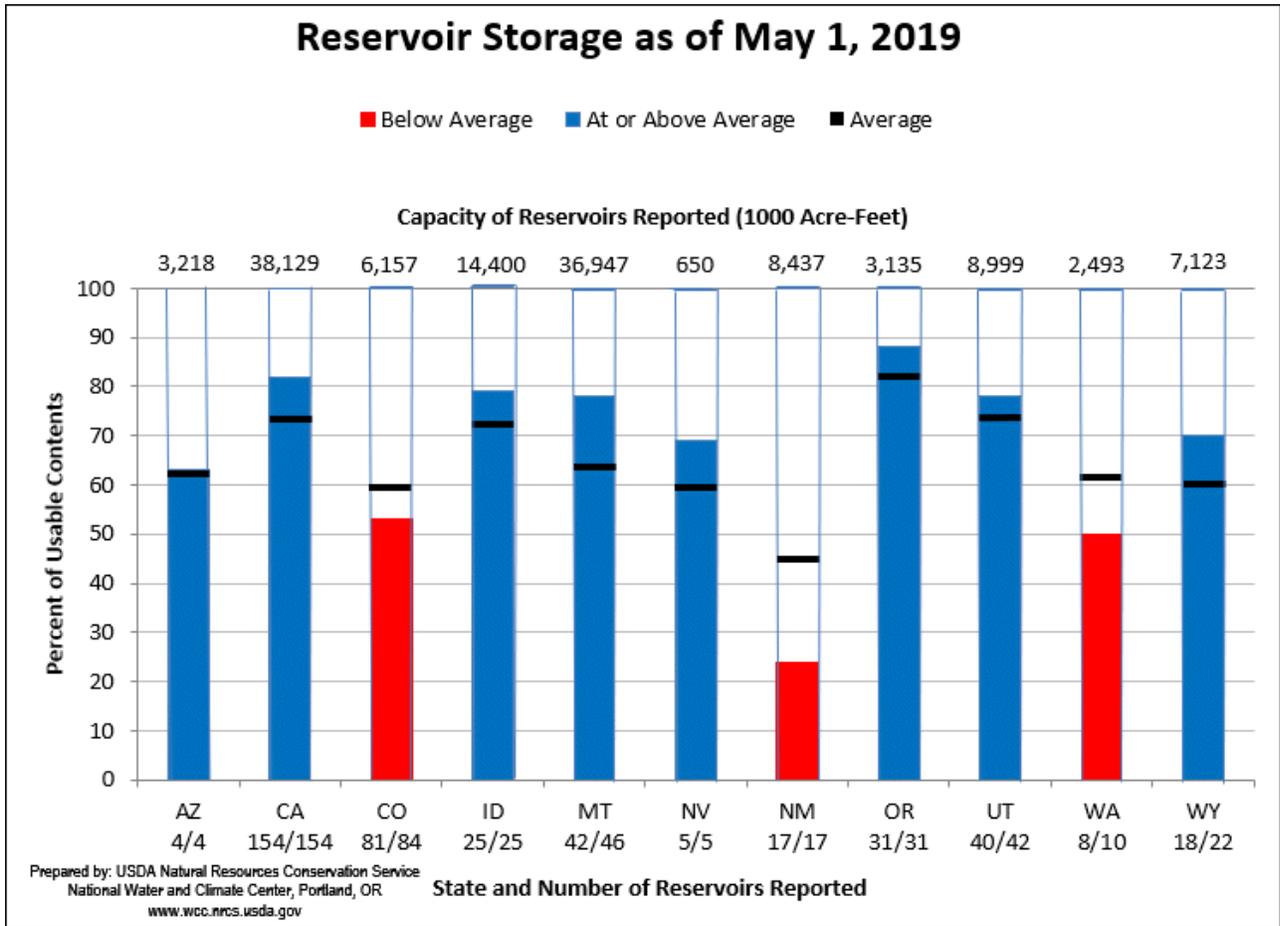
| Explanation - Percentile classes |       |       |                               |                                  |                            |                         |
|----------------------------------|-------|-------|-------------------------------|----------------------------------|----------------------------|-------------------------|
| <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, 2019 Reservoir Storage: [Chart](#) | [Dataset](#)

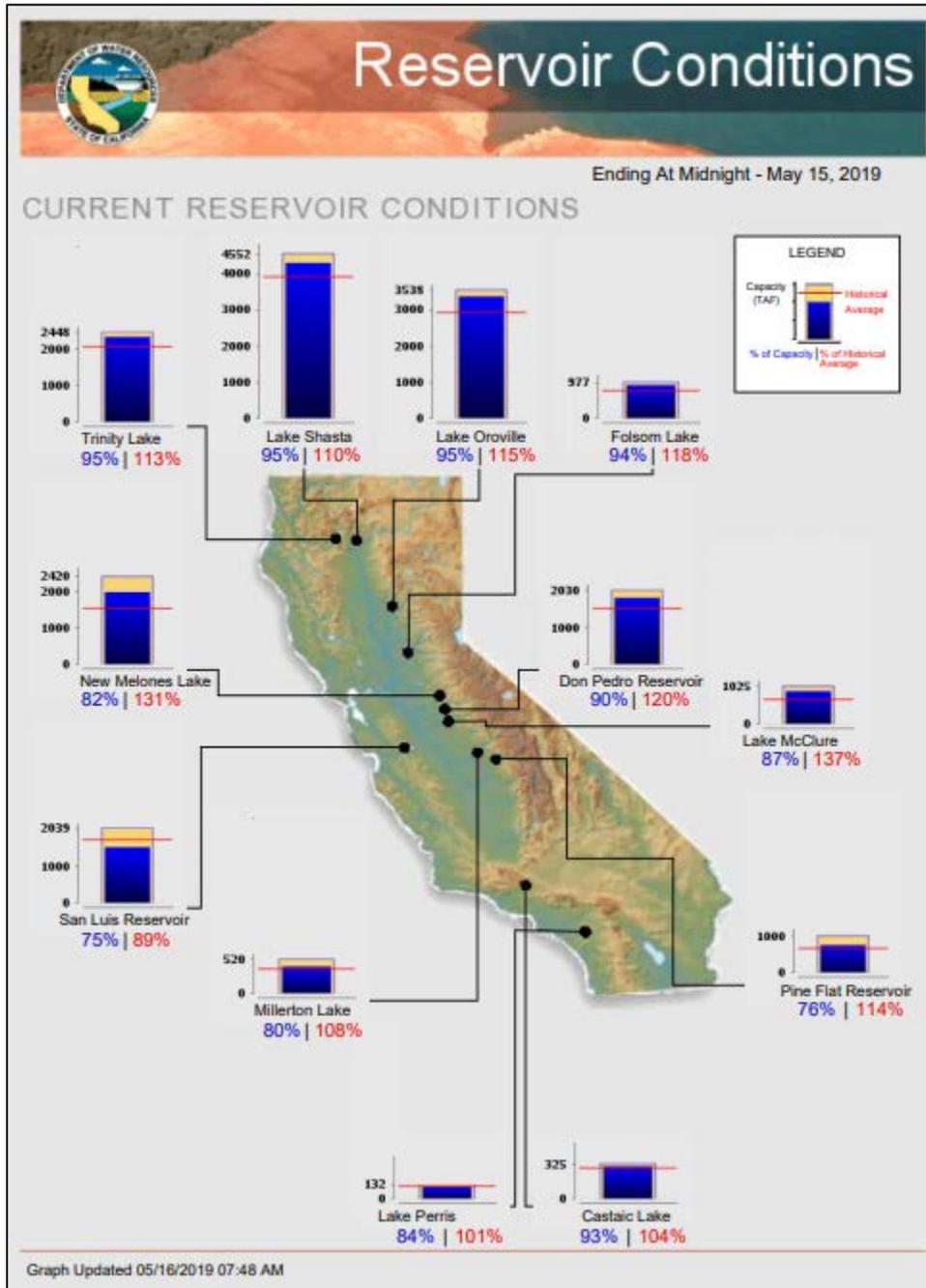
### Hydromet Tea Cup Reservoir Depictions

Source: U.S. Bureau of Reclamation

- [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

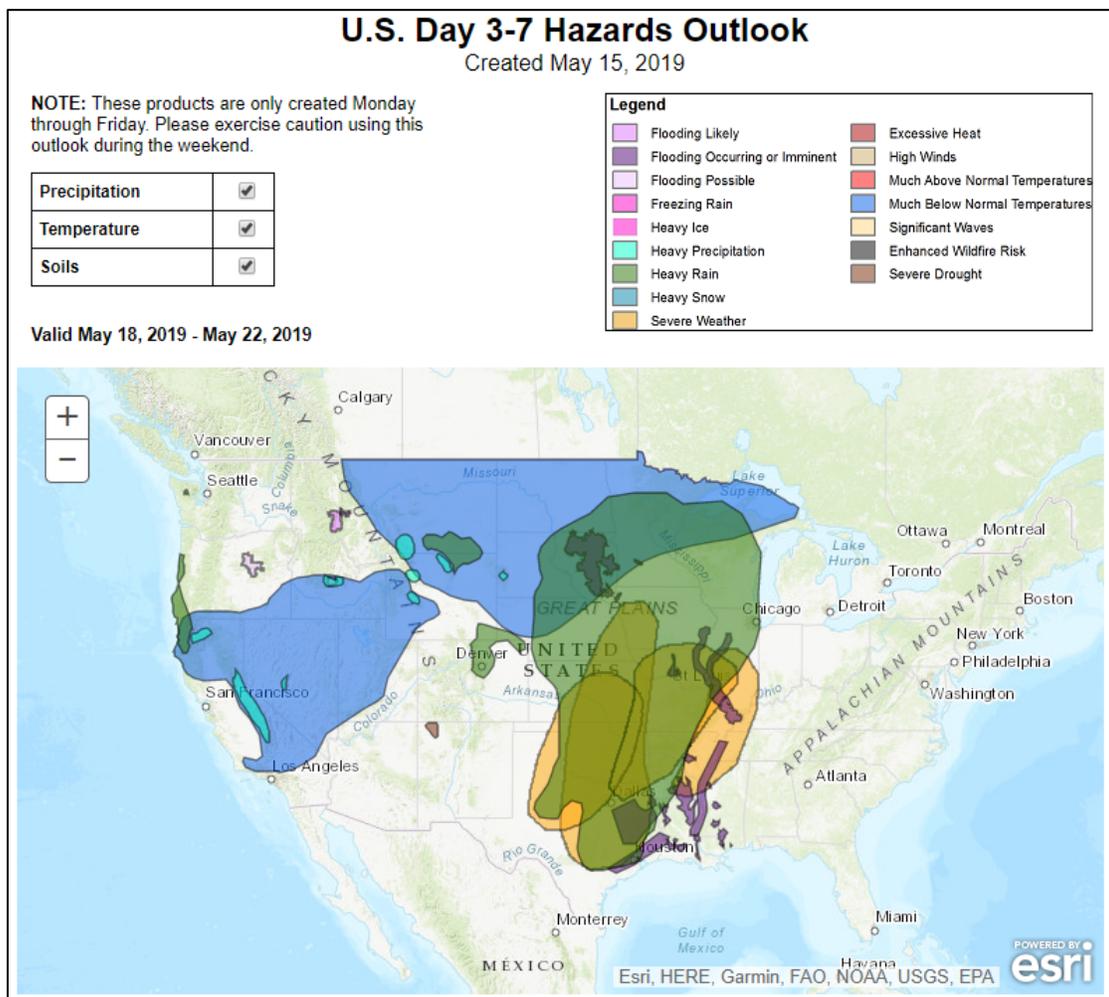
### Agricultural Weather Highlights

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

**National Outlook, Thursday, May 16, 2019:** “A procession of Pacific storms will maintain showery, unsettled weather during the next several days across the western and central U.S. As a result, a brief window of opportunity for planting will soon close across the Plains and western Corn Belt. Five-day precipitation totals could reach 2 to 4 inches or more in a vast area from the southern Plains into the upper Midwest. Significant precipitation, including high-elevation snow, will also fall from northern and central California and the Pacific Northwest to northern and central sections of the Rockies and Plains. Starting on Friday, a multi-day severe weather outbreak will affect areas from the Plains into the Mississippi Valley. Warmth in advance of the stormy weather will spread into the southern and eastern U.S., while much of the remainder of the country will experience cooler-than-normal weather. The NWS 6- to 10-day outlook for May 21 – 25 calls for the likelihood of above-normal temperatures across much of the eastern half of the U.S., while cooler-than-normal conditions will prevail along and west of a line from New Mexico to Minnesota. Meanwhile, below-normal rainfall in the Southeast will contrast with wetter-than-normal weather across the remainder of the country, including the Plains, West, and much of the Midwest.”

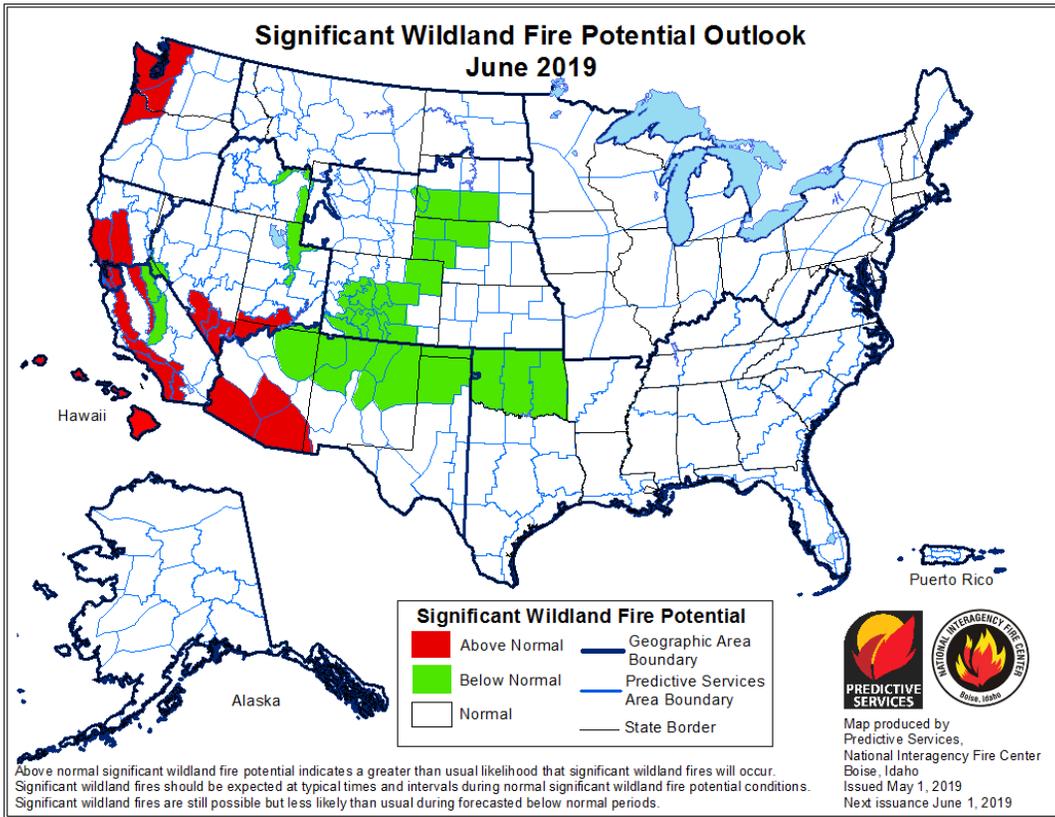
### Weather Hazards Outlook: May 18 – May 22, 2019

Source: NOAA Climate Prediction Center



**Significant Wildland [Fire Potential Outlook](#)**

Source: National Interagency Fire Center

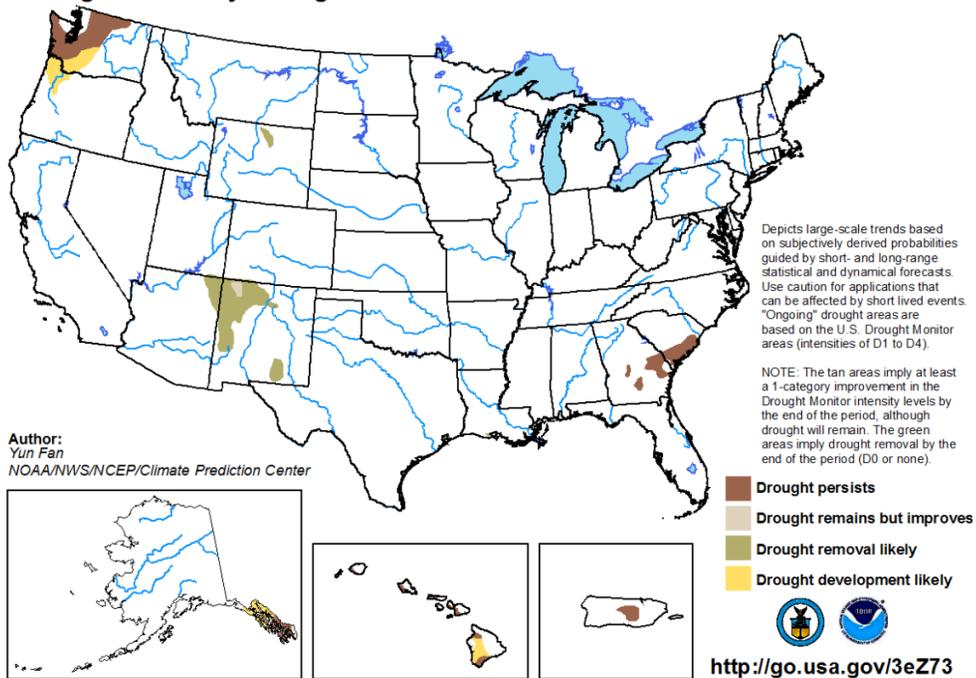


**Seasonal Drought Outlook: [May 16 – August 31, 2019](#)**

Source: National Weather Service

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

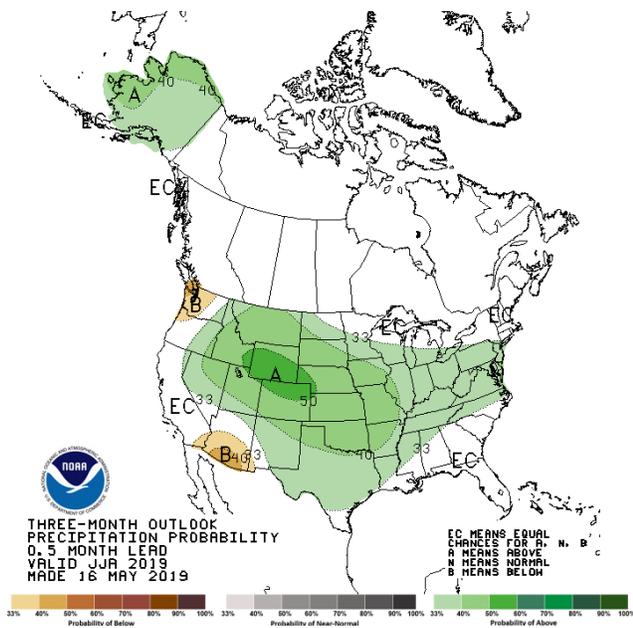
Valid for May 16 - August 31, 2019  
Released May 16



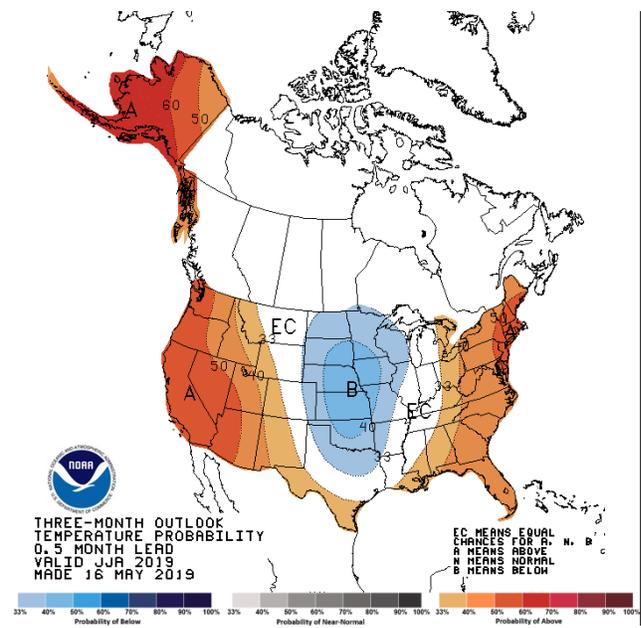
### Climate Prediction Center 3-Month Outlook

Source: National Weather Service

#### Precipitation



#### Temperature



[June-July-August \(JJA\) 2019 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](#).