

# Water and Climate Update

May 10, 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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## May Western Snowpack and Water Supply Conditions

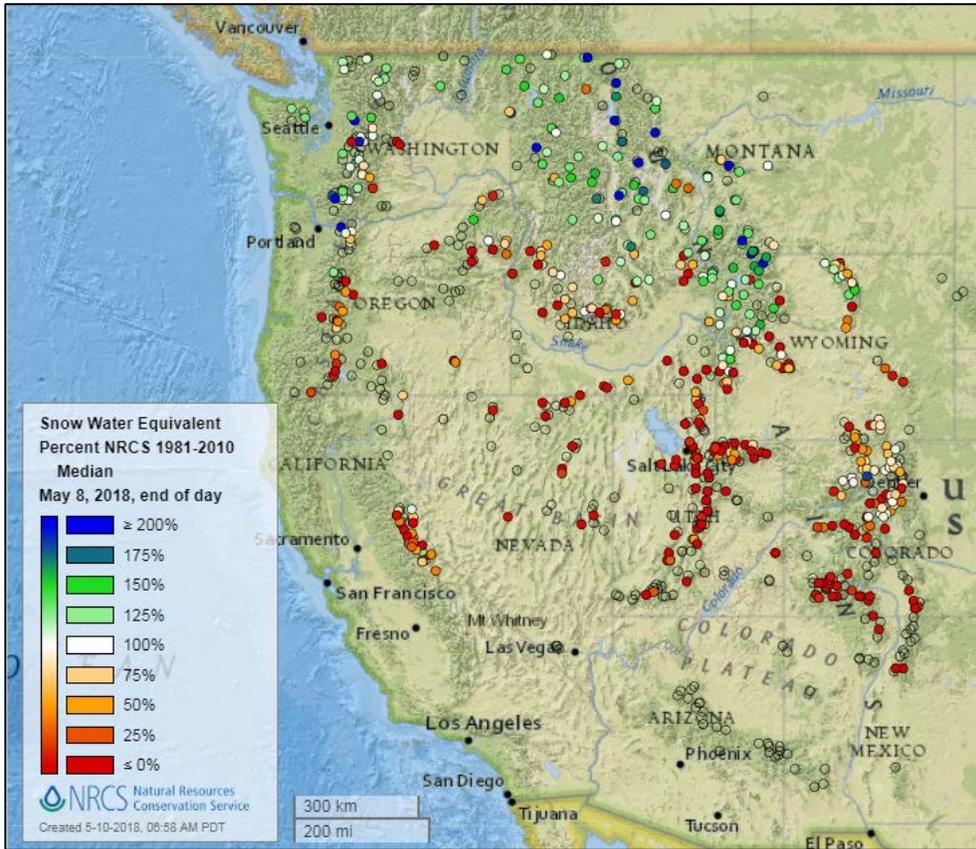


The May 2018 snowpack measurements and assessments are complete. The April weather patterns generally continued the previous months' patterns – wet in the north and dry in the south. **Precipitation** for the water year (beginning October 2017) has been well below normal in the four-state area of Colorado, Utah, Arizona, and New Mexico, whereas northern areas in Washington, Idaho, Montana, and Wyoming as well as Interior Alaska have been near to well above normal. **Snowpack** continues to show an extreme contrast between the wet northern areas, with near to well above normal snowpack, and the very low snowpack in the southerly areas. **Streamflow forecasts** reflect the snowpack distribution, with a majority of the West expecting well below average streamflow but the northern areas and Interior Alaska expecting near to well above average streamflow. **Reservoir storage** remains above average in most western states.

The latest [Western Snowpack and Water Supply Conditions](#) report summarizes the conditions across the West. Refer to the [State Water Supply Outlook Reports](#) for more in-depth information about current local conditions.

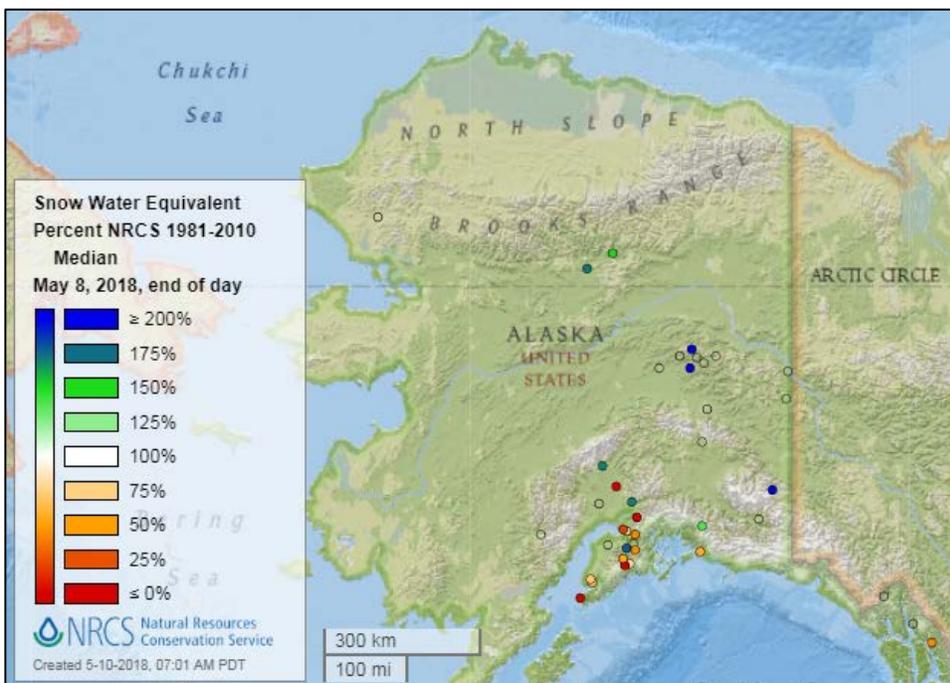
## Snow

### Current Snow Water Equivalent, NRCS SNOTEL Network



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

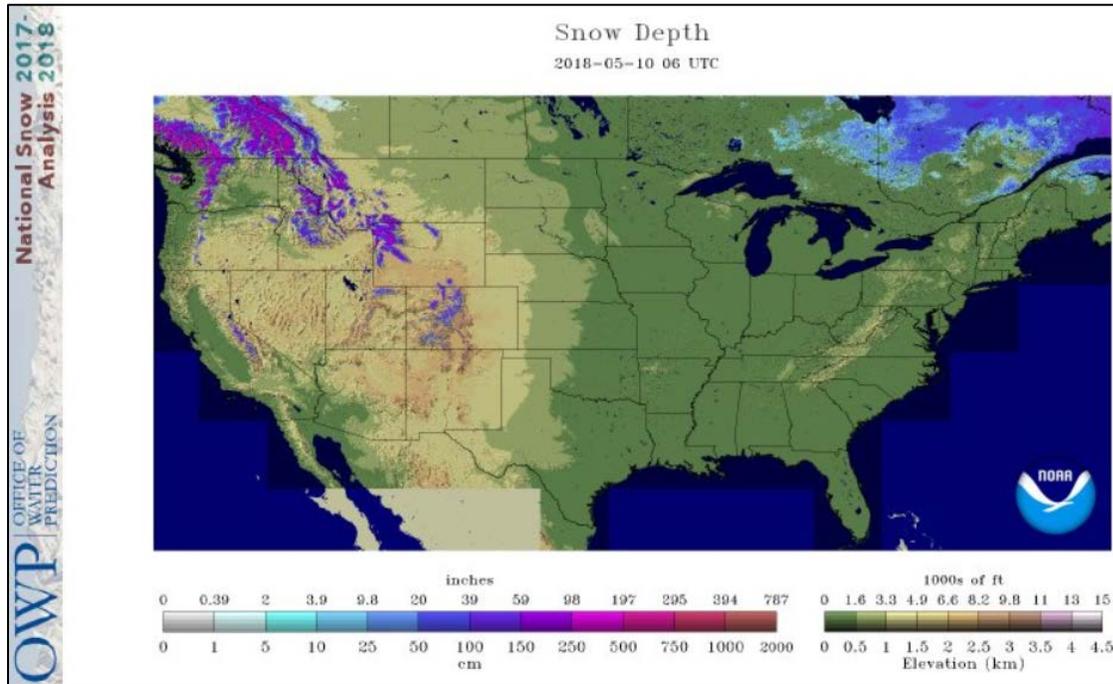
**See also:**  
[Snow water equivalent values \(inches\) map](#)



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

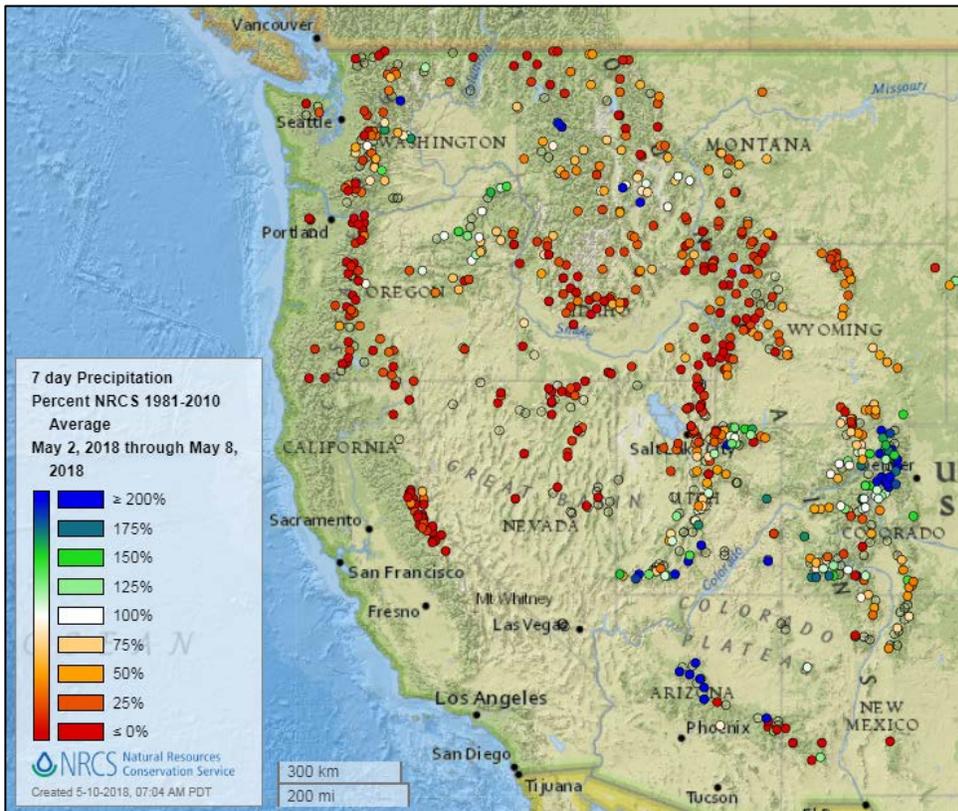
**See also:**  
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



## Precipitation

### Last 7 Days, NRCS SNOTEL Network



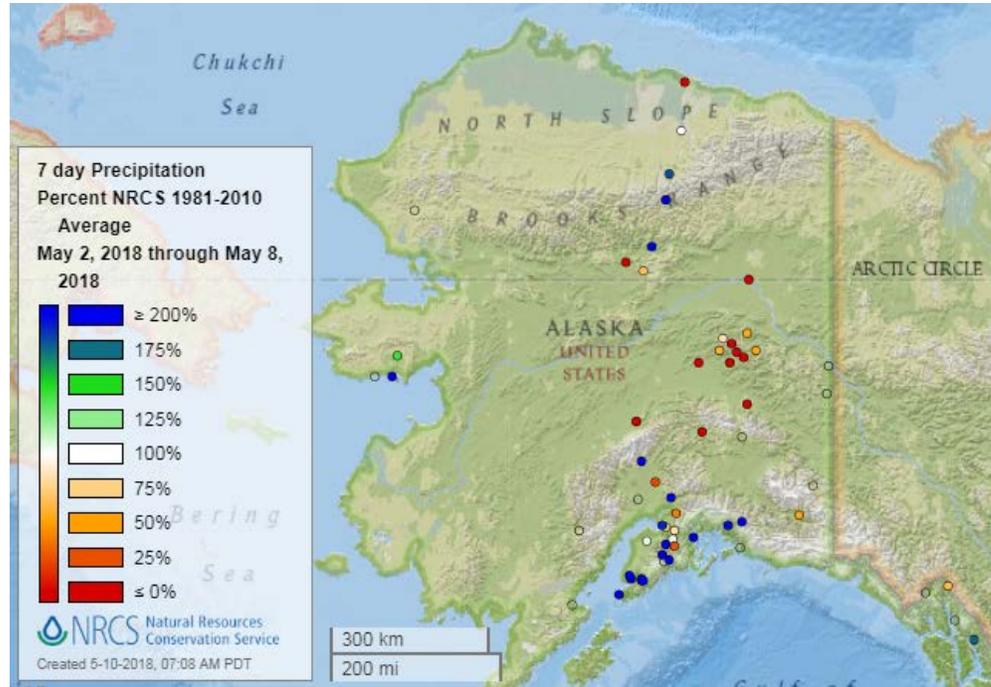
[7-day precipitation percent of average map](#)

**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](#)



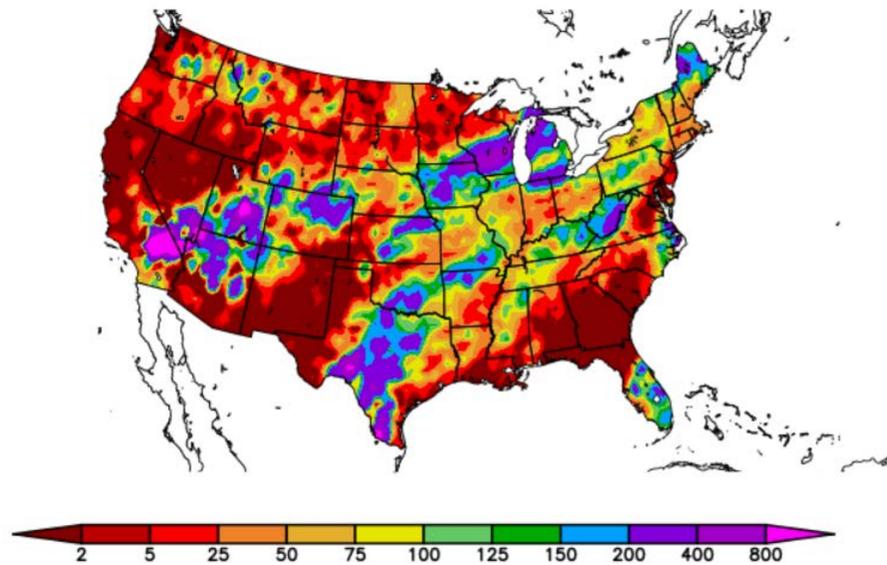
## Last 7 Days, National Weather Service (NWS) Networks

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 (%) 5/2/2018 – 5/8/2018



Generated 5/9/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

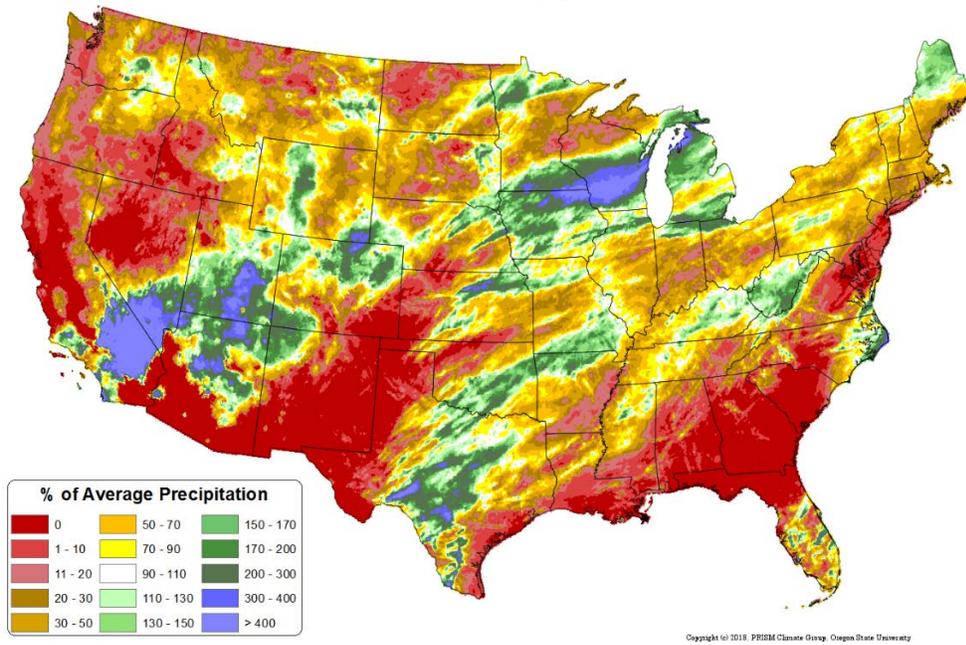
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 May 2018 - 09 May 2018  
Period ending 7 AM EST 09 May 2018  
Base period: 1981-2010  
(Map created 10 May 2018)

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

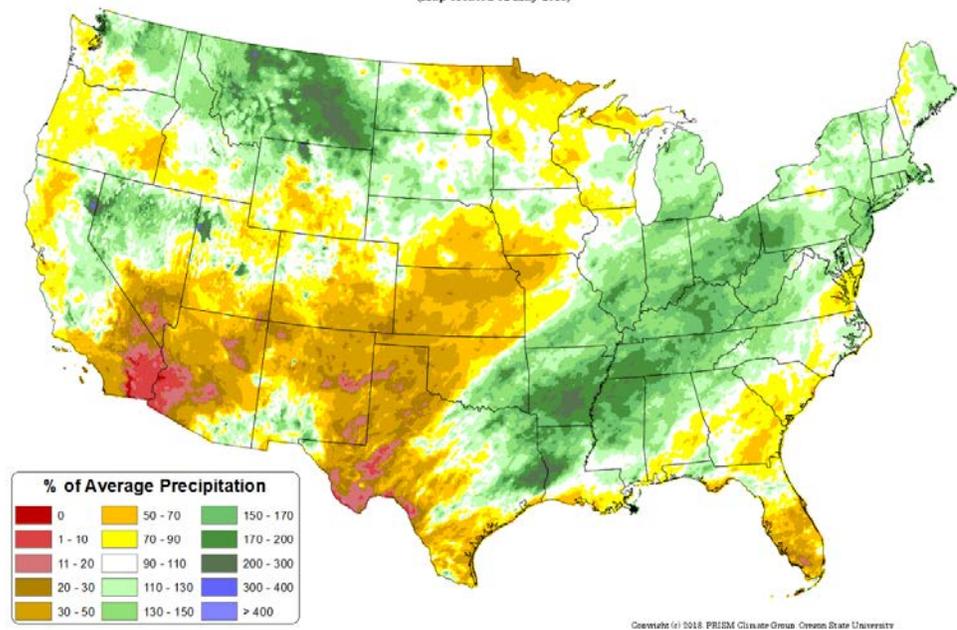


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

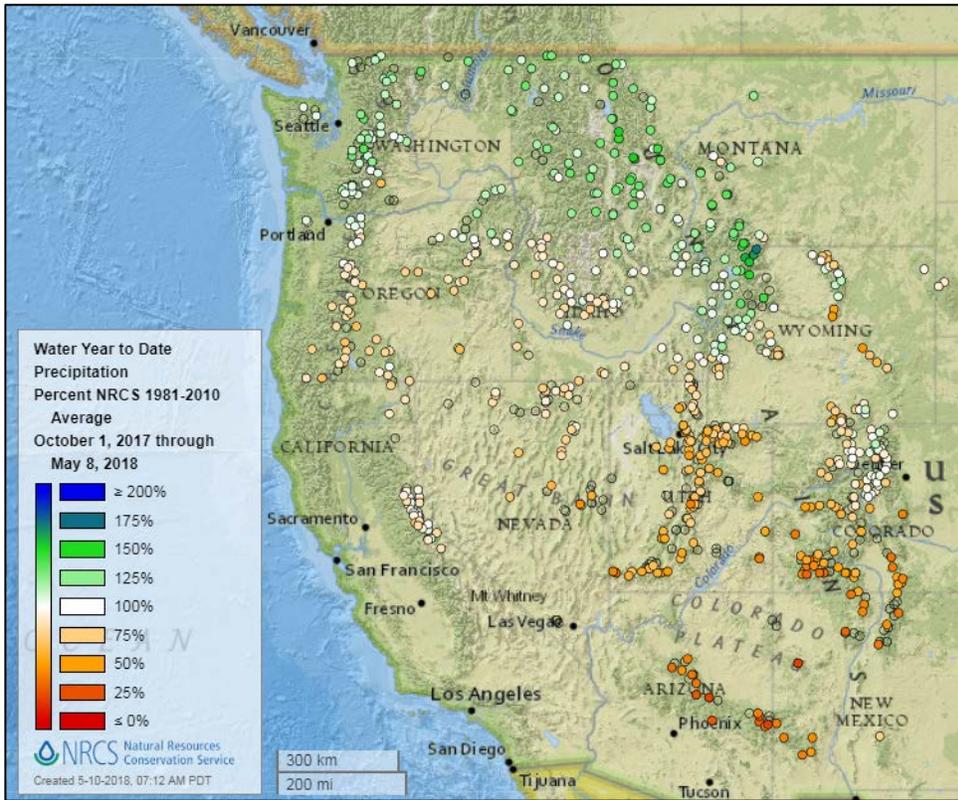
Source: PRISM

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

Total Precipitation Anomaly: February 2018 - April 2018  
Period ending 7 AM EST 30 Apr 2018  
Base period: 1981-2010  
(Map created 02 May 2018)

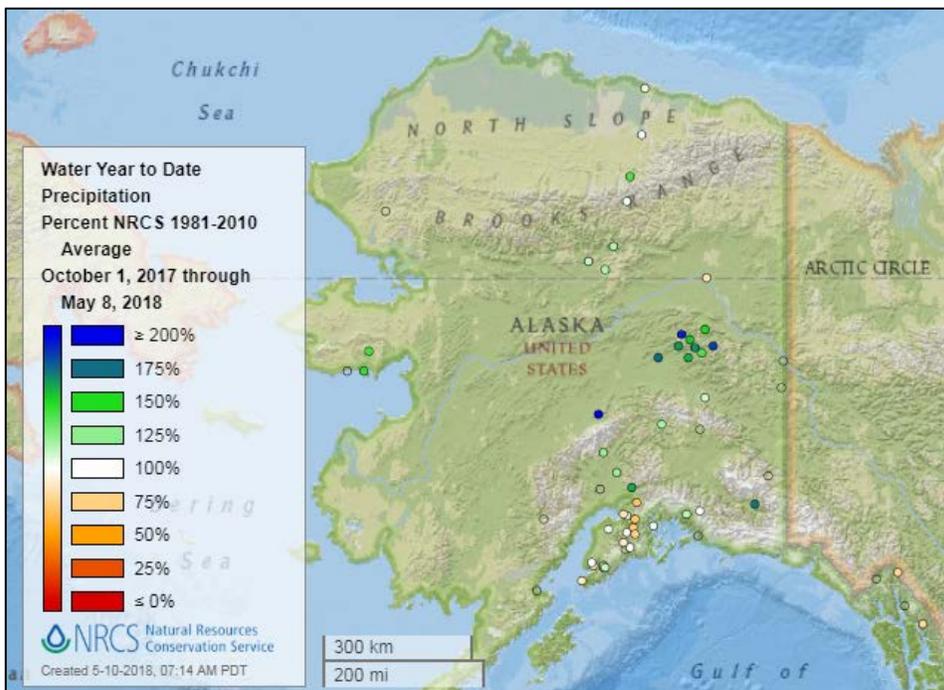


Water Year-to-Date, NRCS SNOTEL Network



[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

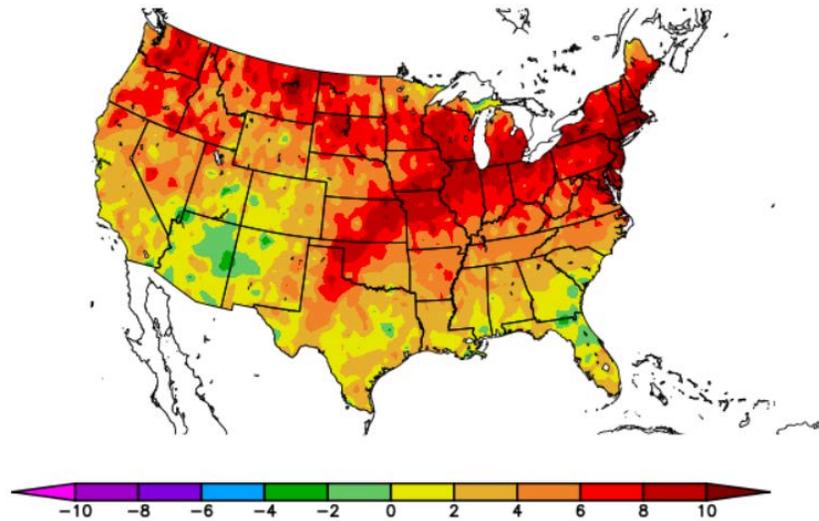
Last 7 Days, National Weather Service (NWS) Networks

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)  
5/2/2018 – 5/8/2018



Generated 5/9/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

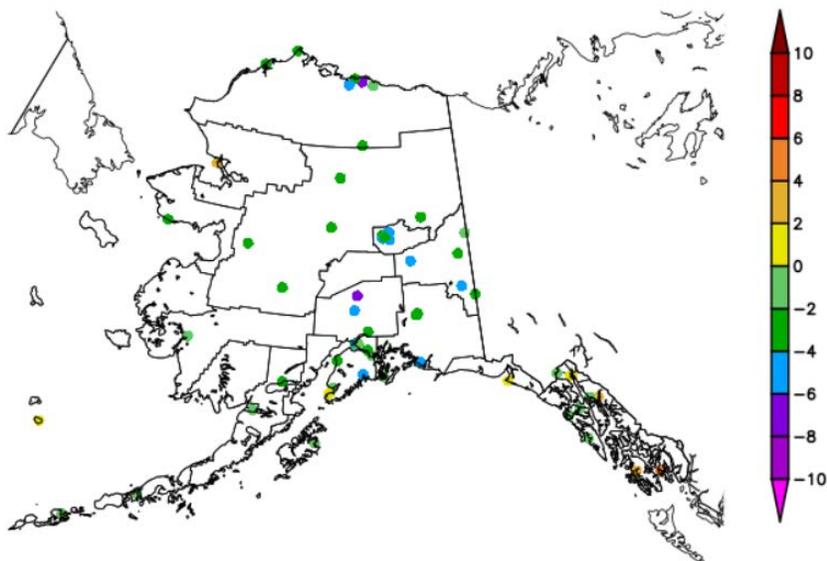
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
5/2/2018 – 5/8/2018



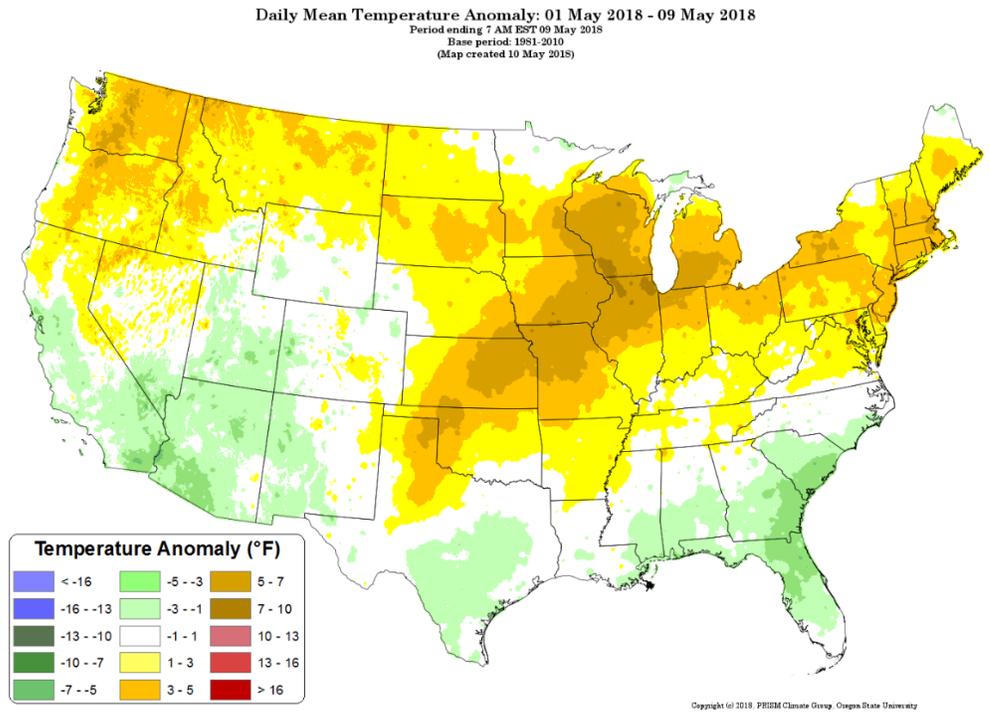
Generated 5/9/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

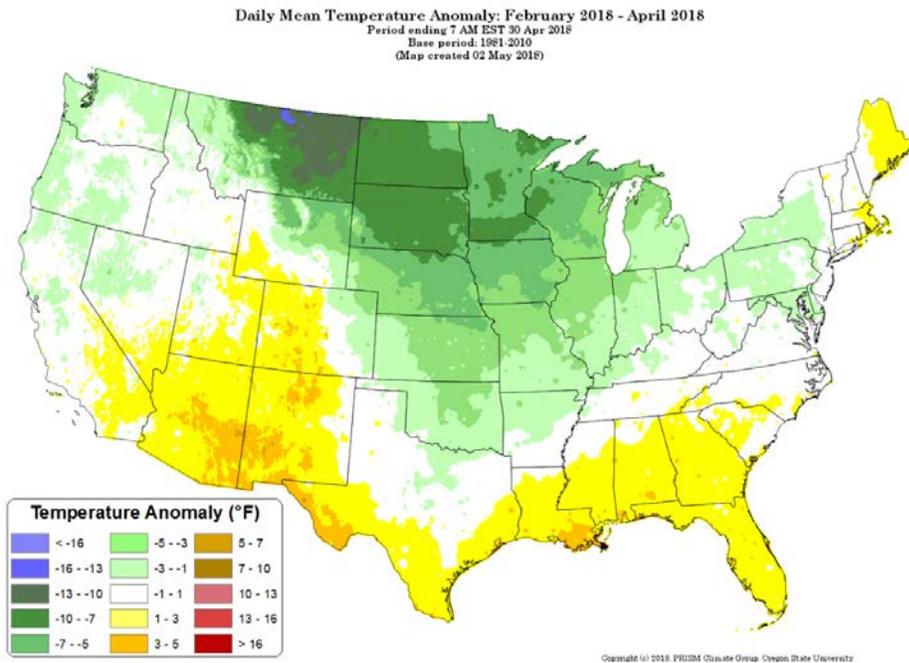
# Water and Climate Update

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

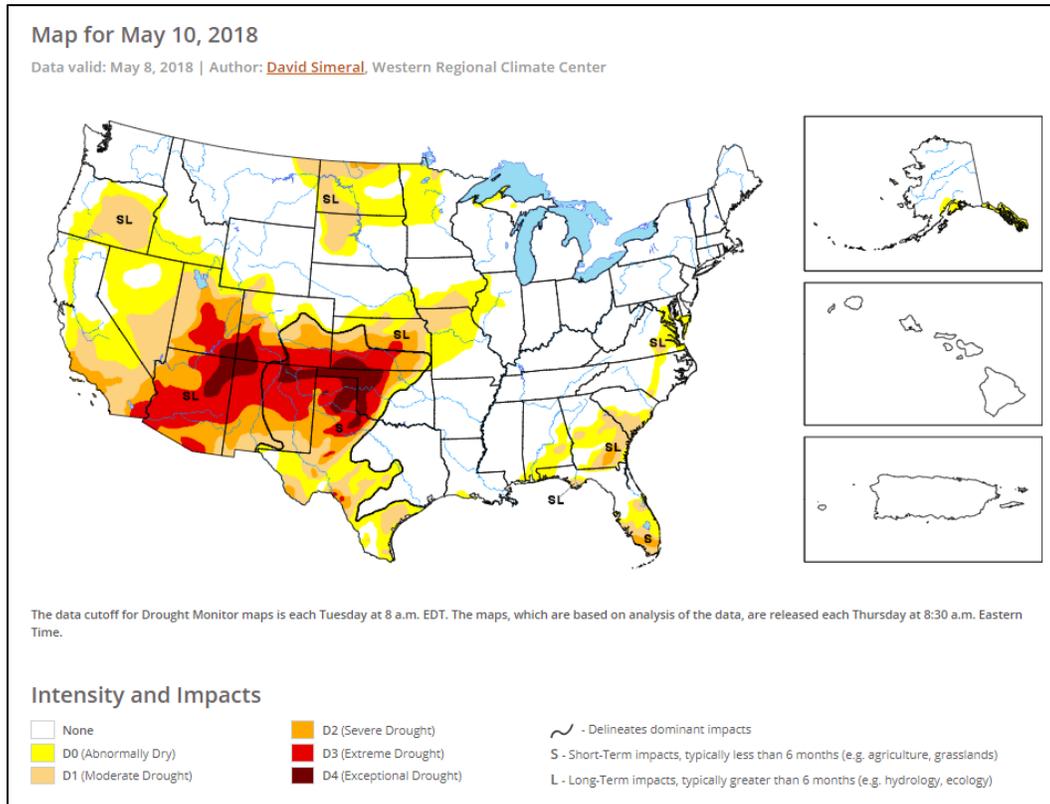


[February through April 2018 daily mean temperature anomaly map](#)

## Drought

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

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



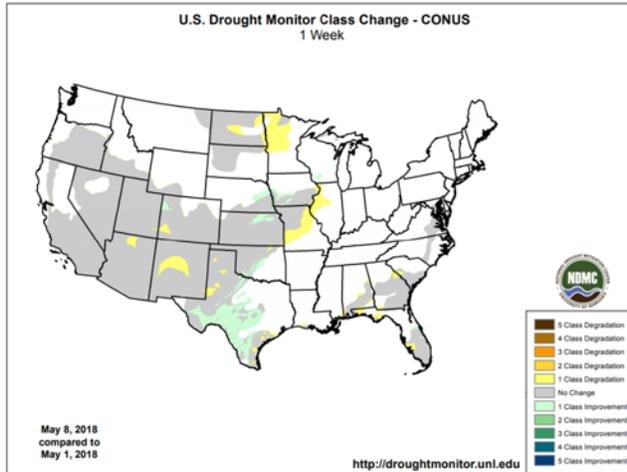
### Current [National Drought Summary](#), May 10, 2018

Author: David Simeral, Western Regional Climate Center

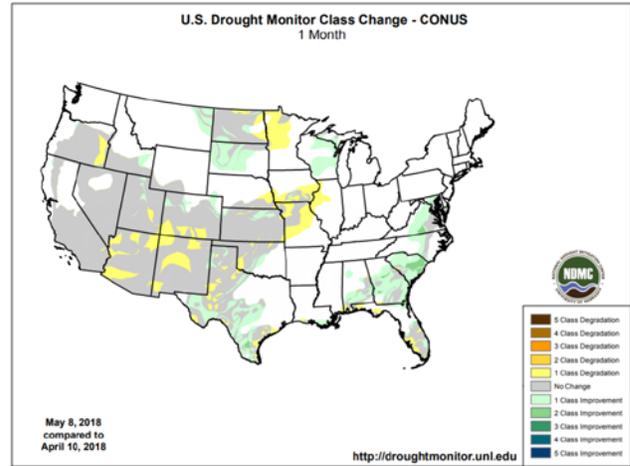
“This U.S. Drought Monitor week saw scattered showers and thunderstorms across portions of the South, southern and central Plains, Midwest, and Northeast. This week’s storm activity led to targeted improvements in drought-related conditions in portions of Texas, Kansas, Iowa, and Florida while conditions deteriorated in parts of the Desert Southwest, northern Plains, and the Midwest. Across most of the continental U.S., average temperatures for the week were well above normal including some recording-breaking heat last week in parts of the Mid-Atlantic and Northeast where temperatures soared into the 90s. In the southern and central Plains, concerns continue with regard to the condition of the winter wheat crop with the USDA World Agricultural Outlook Board reporting 50% of the Kansas winter wheat crop in poor to very poor condition while Oklahoma and Texas are worse off at 68% and 60%, respectively. In the Southwest, a very dry winter and spring season are taking a toll on the vegetation with the USDA reporting 95% of Arizona pasture and rangeland in poor to very poor condition with New Mexico at 60%.”

## Changes in Drought Monitor Categories over Time

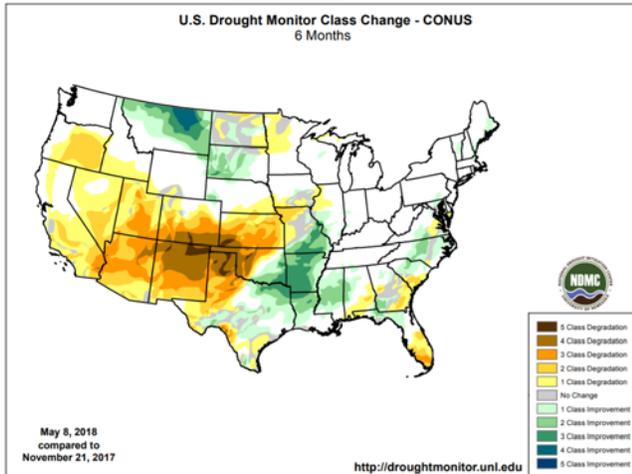
### 1 Week



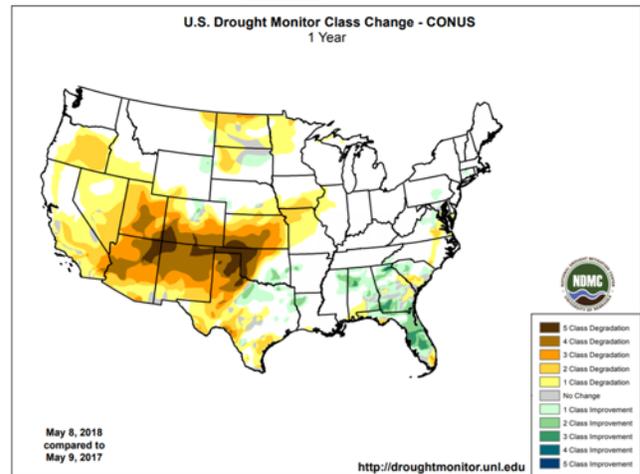
### 1 Month



### 6 Months



### 1 Year



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

## Highlighted Drought Resources

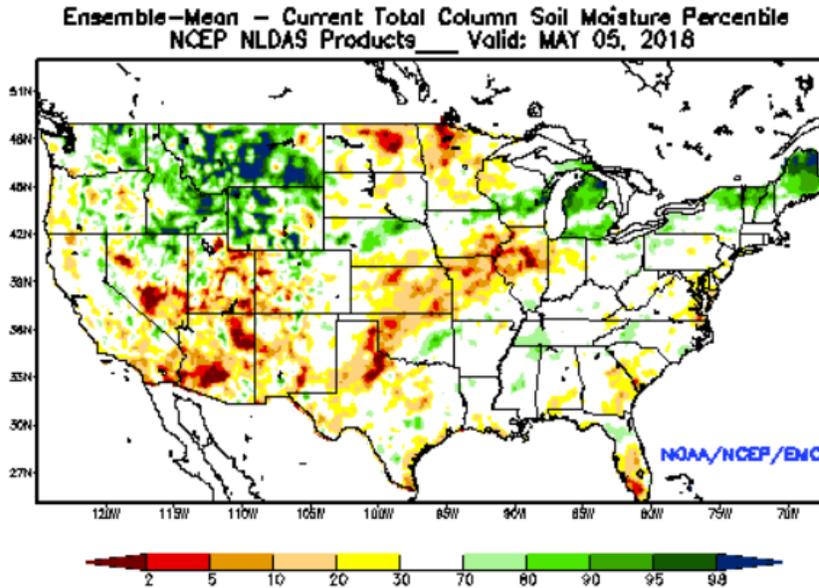
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)



## Other Climatic and Water Supply Indicators

### Soil Moisture

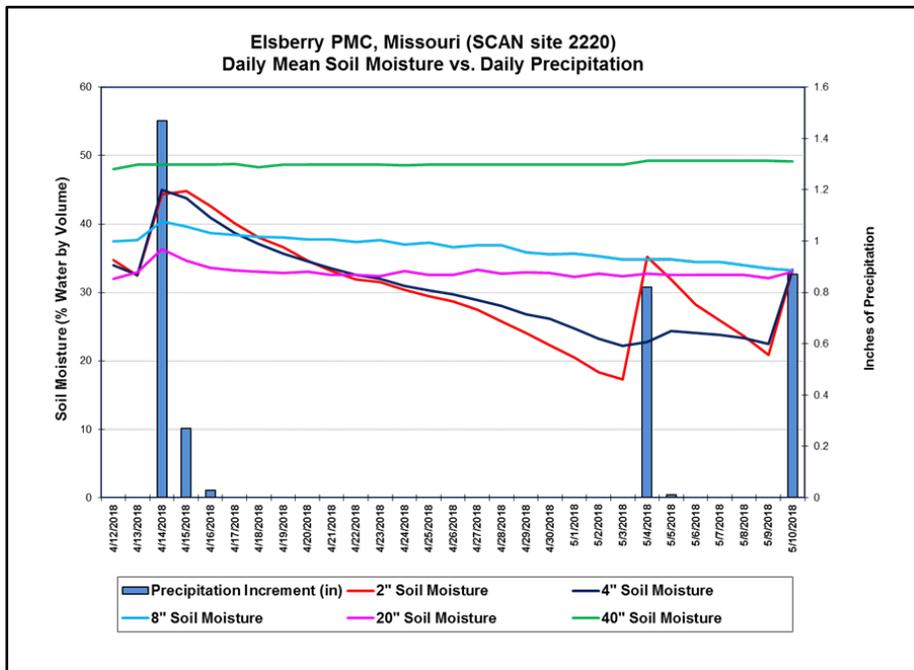
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of May 5, 2018.

### Soil Moisture Data

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



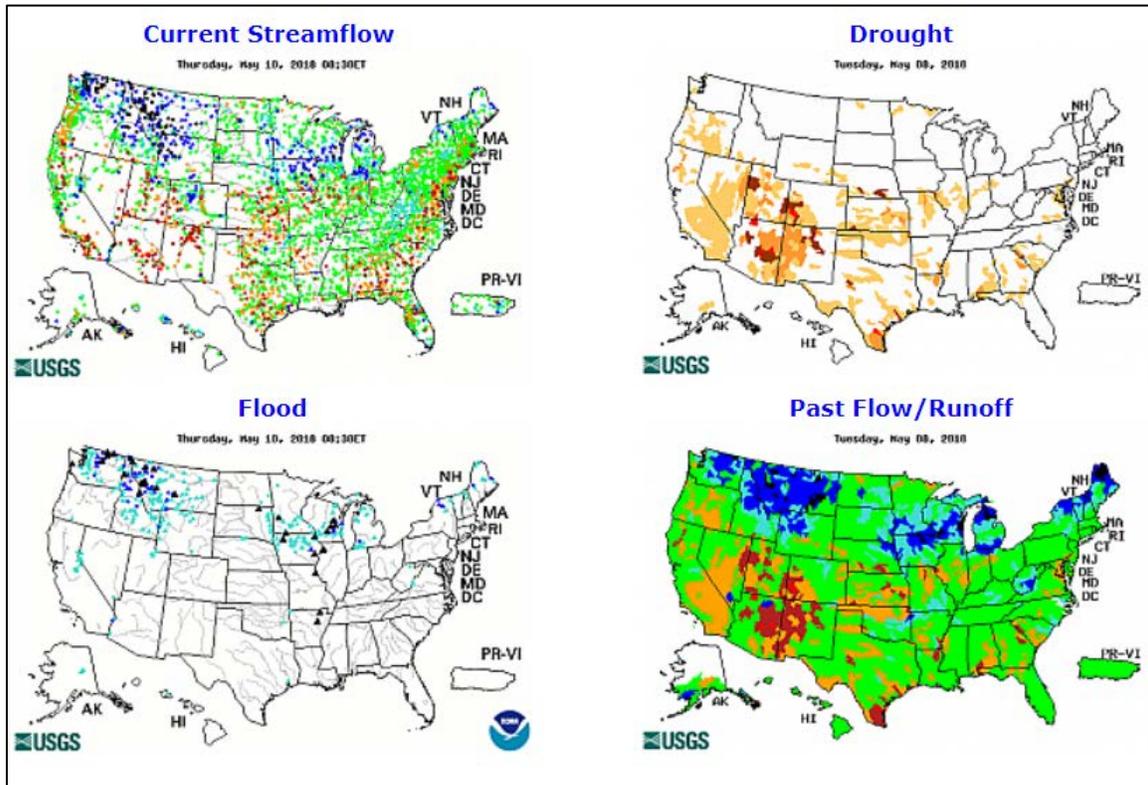
The chart shows precipitation and soil moisture for the last 30 days at the [Elsberry PMC SCAN site 2220](#) in Missouri. This station is located in an area that has experienced significant rain events in the last 30 days. On April 18, accumulated precipitation totaled 1.47 inches and the 2", 4", 8", and 20" sensors all showed an increase in soil moisture.

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

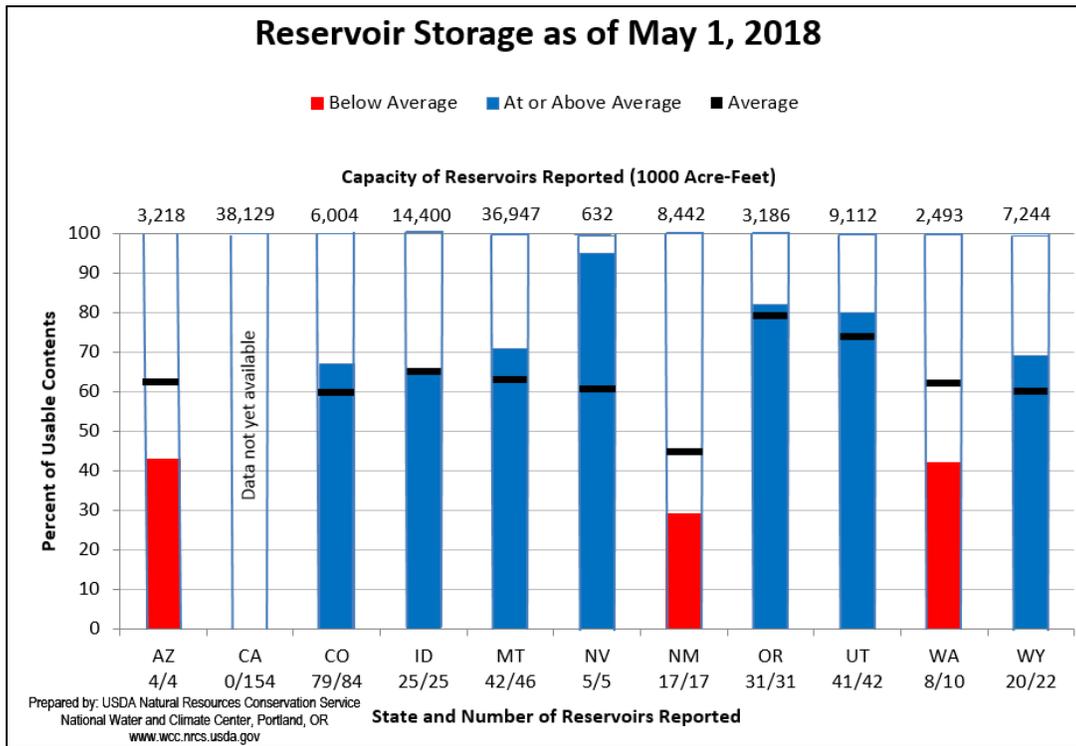


[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

## Reservoir Storage

### Western States Reservoir Storage

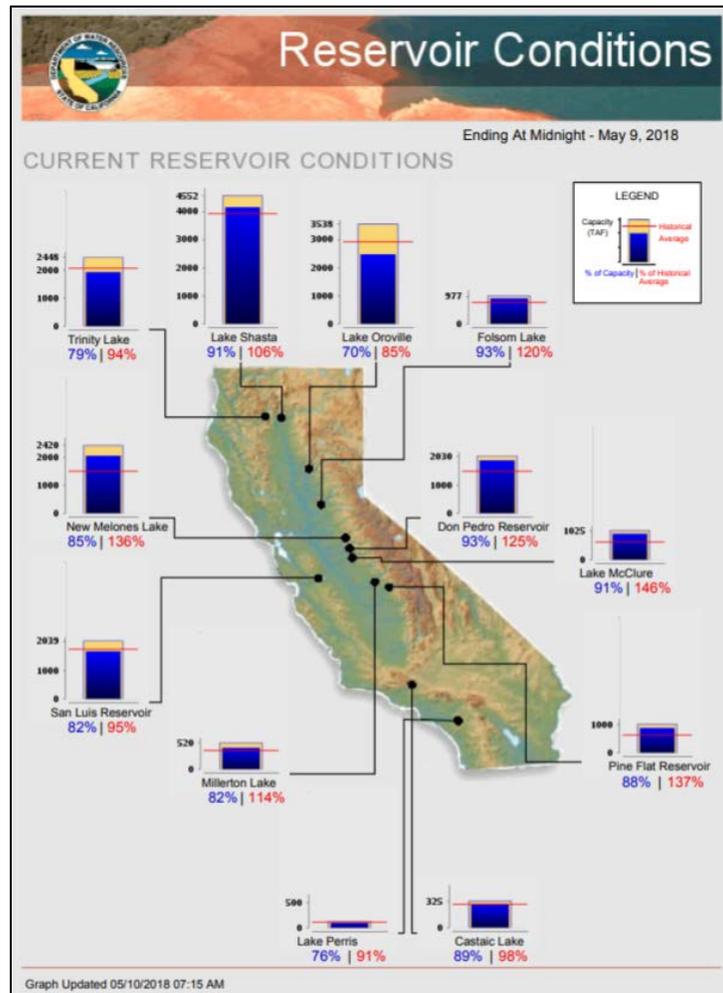
Source: NRCS National Water and Climate Center



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](#)

## Short- and Long-Range Outlooks

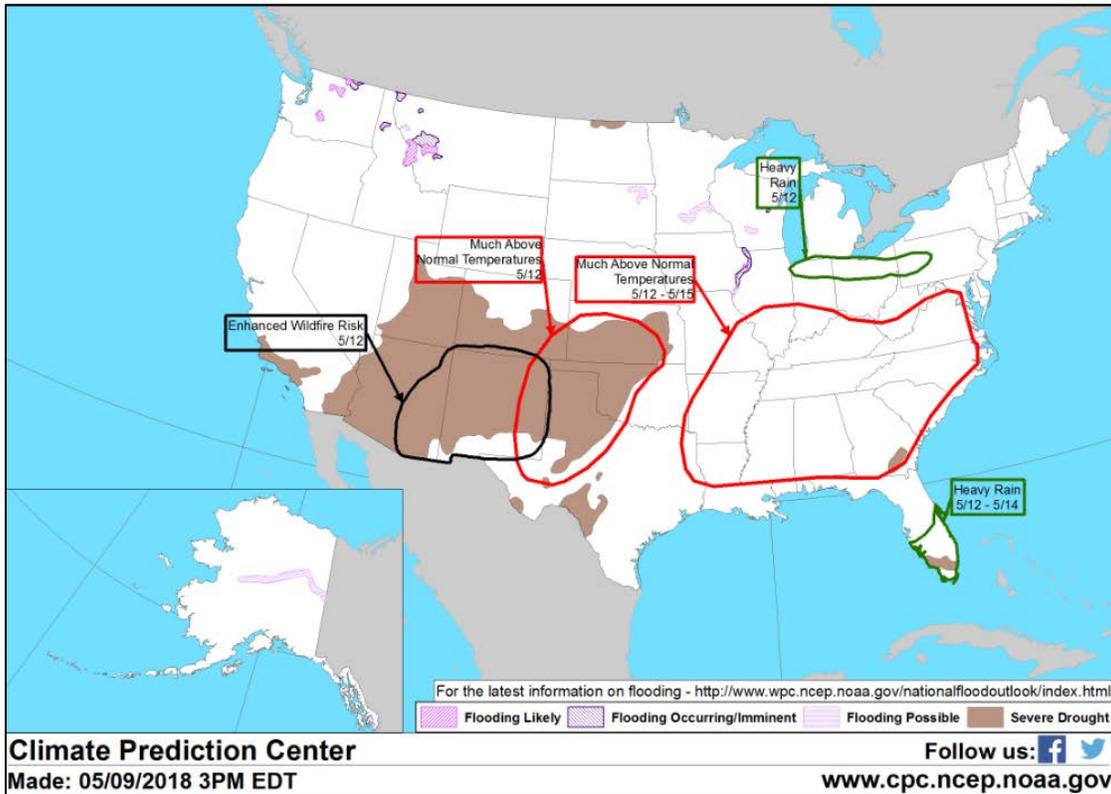
### Agricultural Weather Highlights

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

[National Outlook, Thursday, May 10](#): “Cool air will further expand to encompass much of the northern and western U.S. during the next few days. However, early-season warmth will continue across the South. During the weekend and early next week, above-normal temperatures will return across the Northwest and eventually expand across the remainder of the northern U.S. Meanwhile periods of rain will continue across the northern U.S. during the next several days, with 1- to 2-inch totals expected in a broad area stretching from the northern Rockies into the Northeast. In contrast, little or no rain will fall across the southern one-third of the U.S., excluding southern Florida. The NWS 6- to 10- day outlook for May 15 – 19 calls for the likelihood of warmer-than-normal weather nationwide, except for near- to below-normal temperatures in southern California and the upper Great Lakes region. Meanwhile, near- to above-normal rainfall across most of the country will contrast with drier-than-normal conditions in a few areas, including the Pacific Northwest, northern New England, southern Texas, and the Four Corners region.”

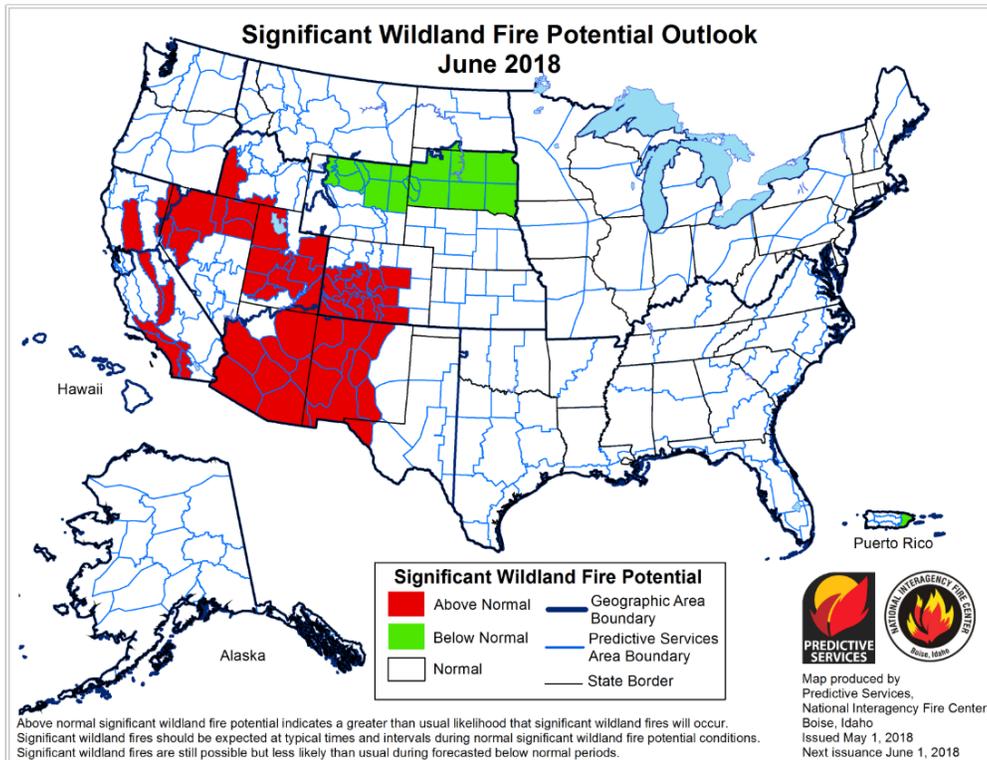
Weather Hazard Outlook [May 12 – 16, 2018](#)

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

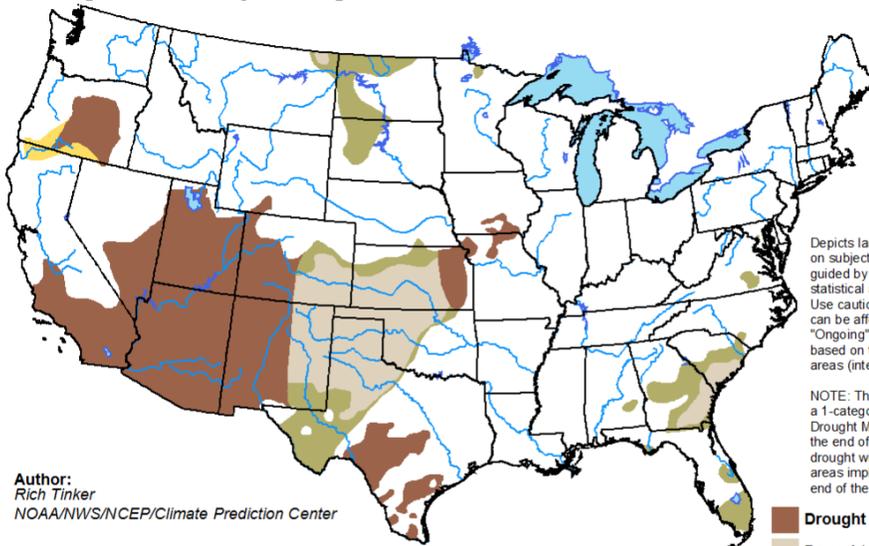


Seasonal Drought Outlook: [April 19 - July 31, 2018](#)

Source: National Weather Service

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

Valid for April 19 - July 31, 2018  
Released April 19, 2018

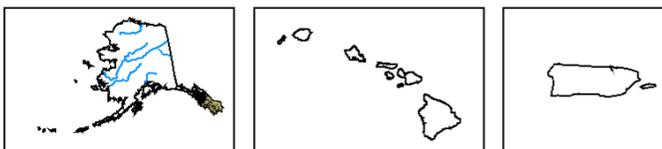


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to 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:  
Rich Tinker  
NOAA/NWS/NCEP/Climate Prediction Center

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



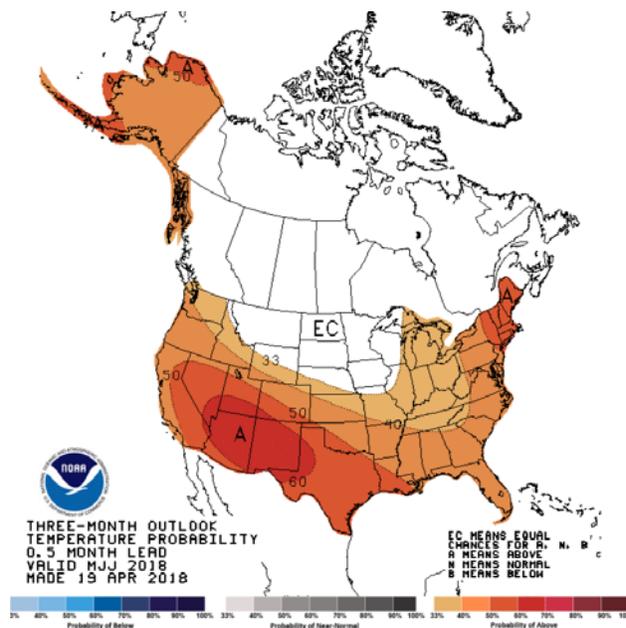
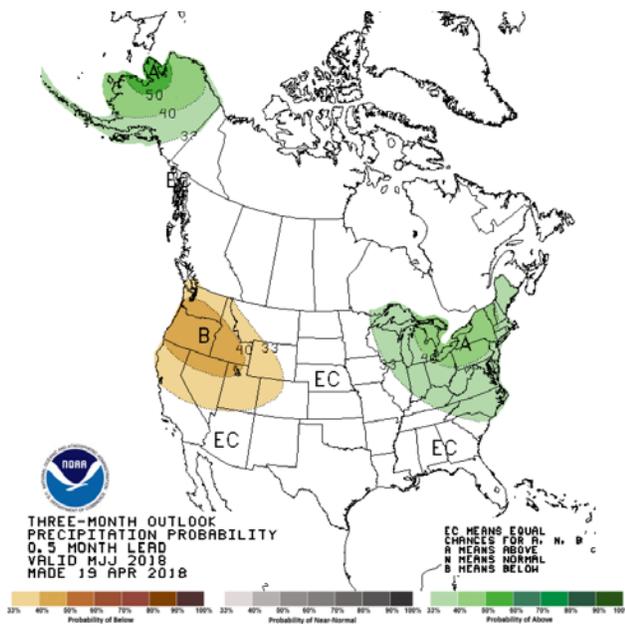
<http://go.usa.gov/3eZ73>

Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[May-June-July \(MJJ\) 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](#).