

Water and Climate Update

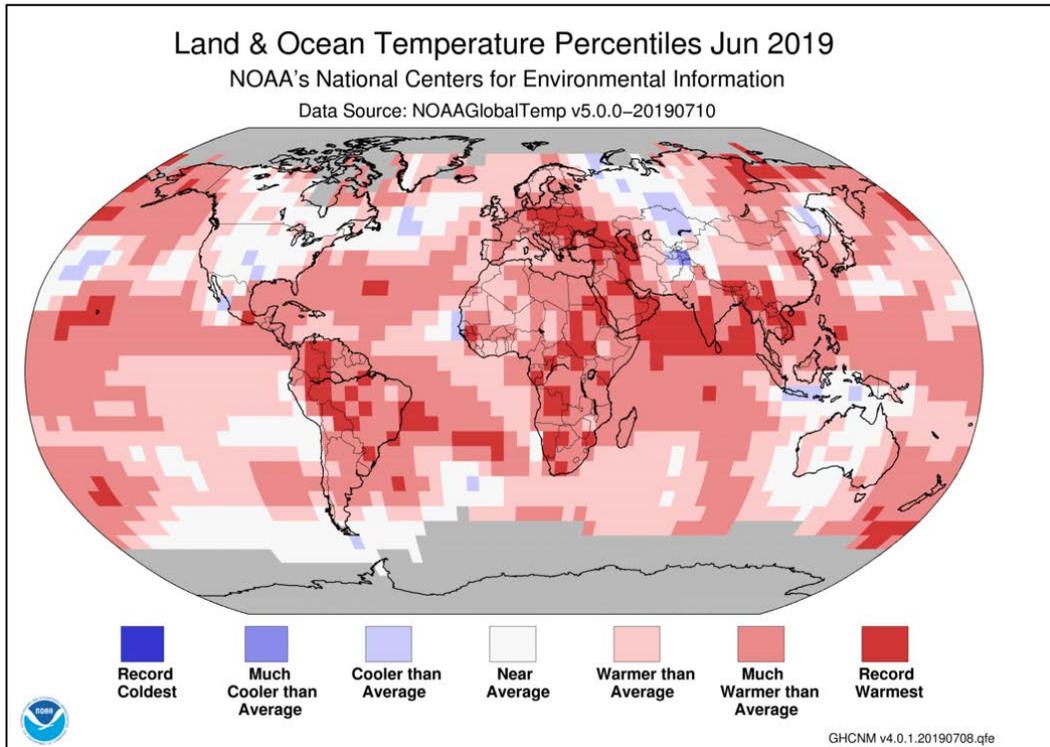
August 1, 2019

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.

Precipitation	2	Other Climatic and Water Supply Indicators	11
Temperature.....	6	Short- and Long-Range Outlooks.....	15
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June 2019 hottest on record globally

NOAA's National Centers for Environmental Information (NCEI) reports that the land and ocean surface temperature anomaly for June 2019 was the highest in the 140-year NOAA global temperature dataset, dating back to 1880.



The year-to-date temperature across land and ocean surfaces was 1.71°F above the 20th century average of 56.3°F — tying with 2017 as the second highest January through June on record. The most notable warm temperature anomalies occurred across portions of the Northern Hemisphere, specifically Alaska, western Canada, and central Russia, where temperature departures from average were +5.4°F or higher.

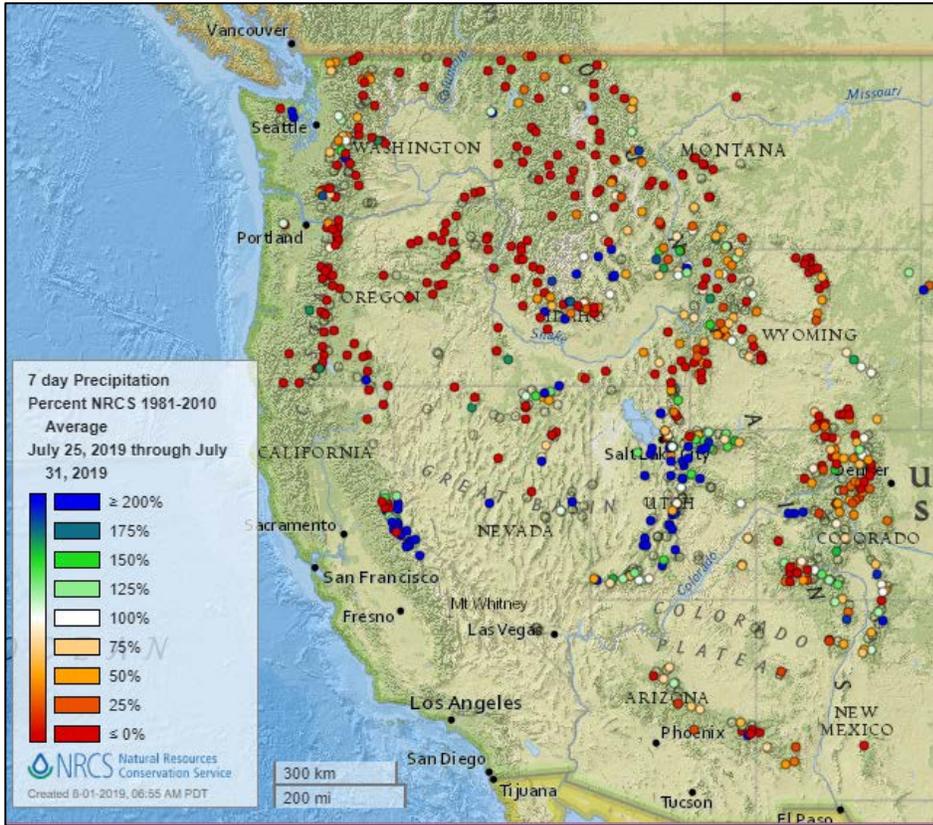
Related:

[June 2019 was hottest on record for the globe; Antarctic sea ice coverage shrank to new record low.](#) NOAA

[Last month was the hottest June ever recorded in Earth's history, with temperatures nearly 20 degrees Fahrenheit above average](#) Business Insider

Precipitation

Last 7 Days, NRCS SNOTEL Network

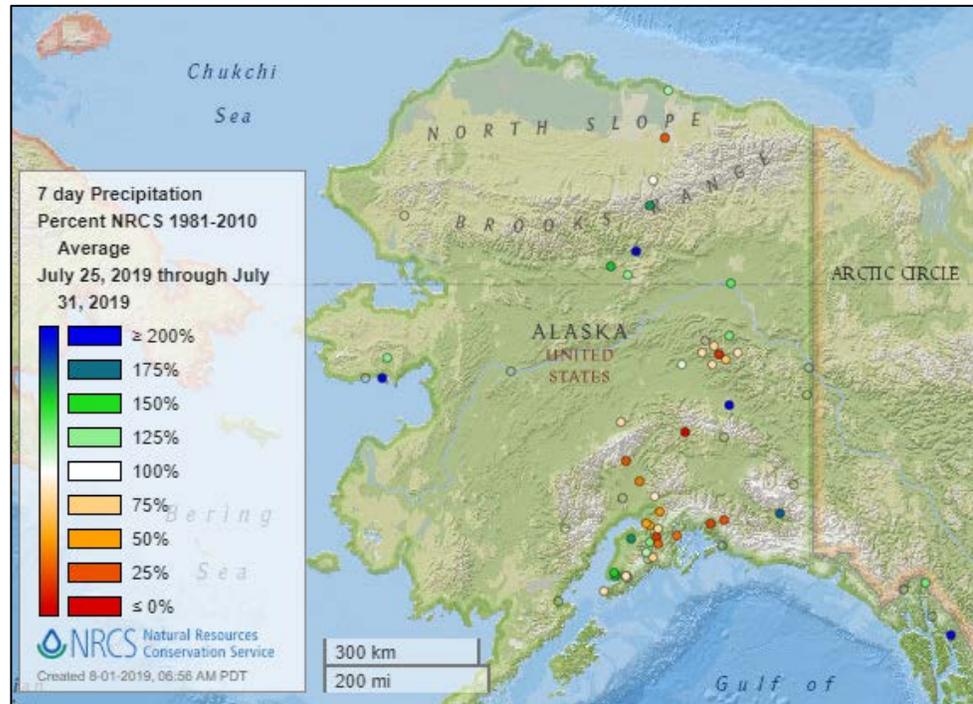


[7-day precipitation percent of average map](#)

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](#)



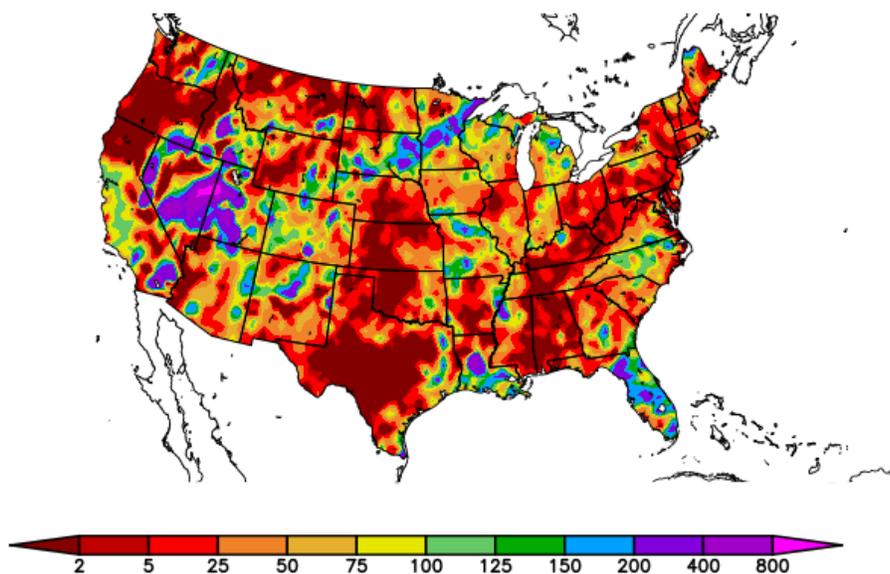
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
7/24/2019 – 7/30/2019



Generated 7/31/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

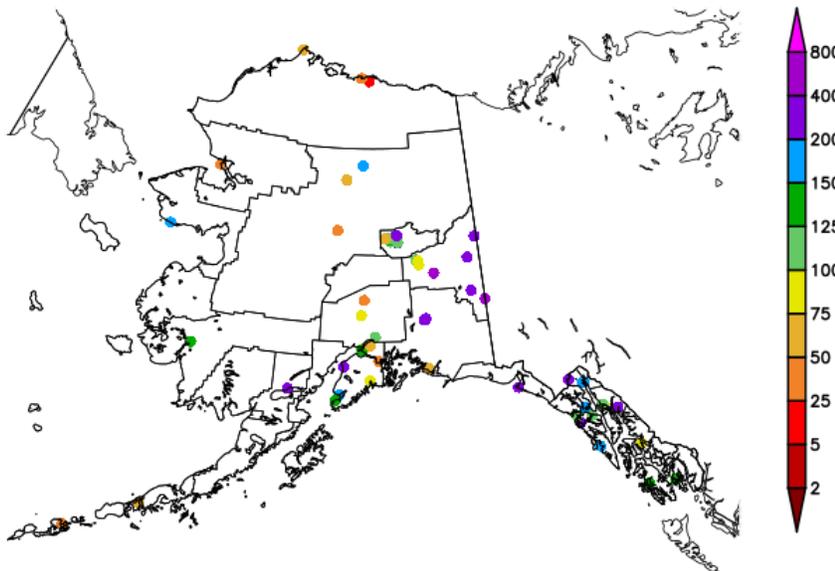
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
7/24/2019 – 7/30/2019

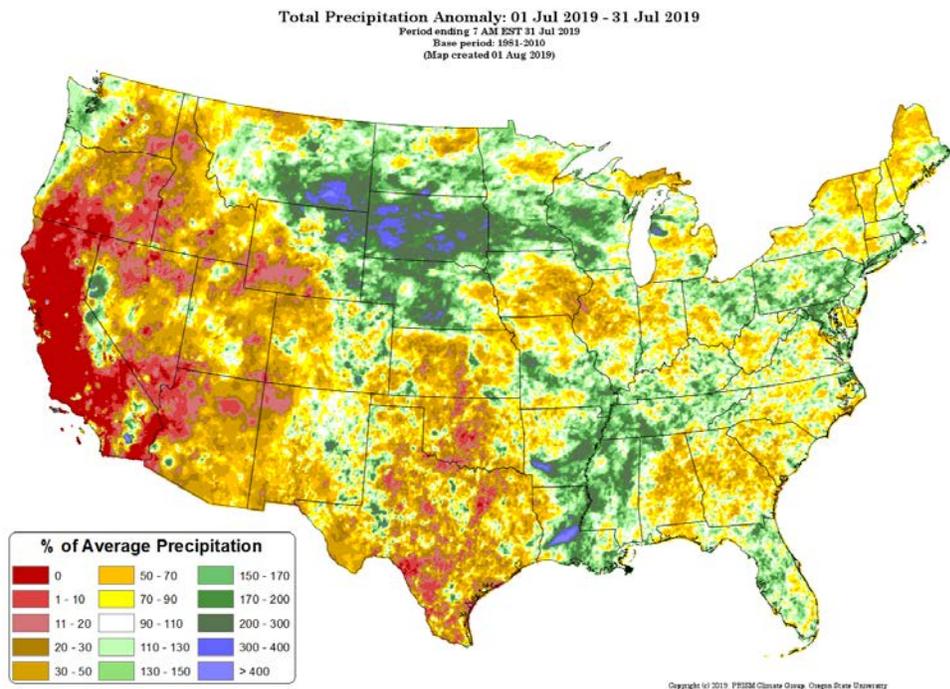


Generated 7/31/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

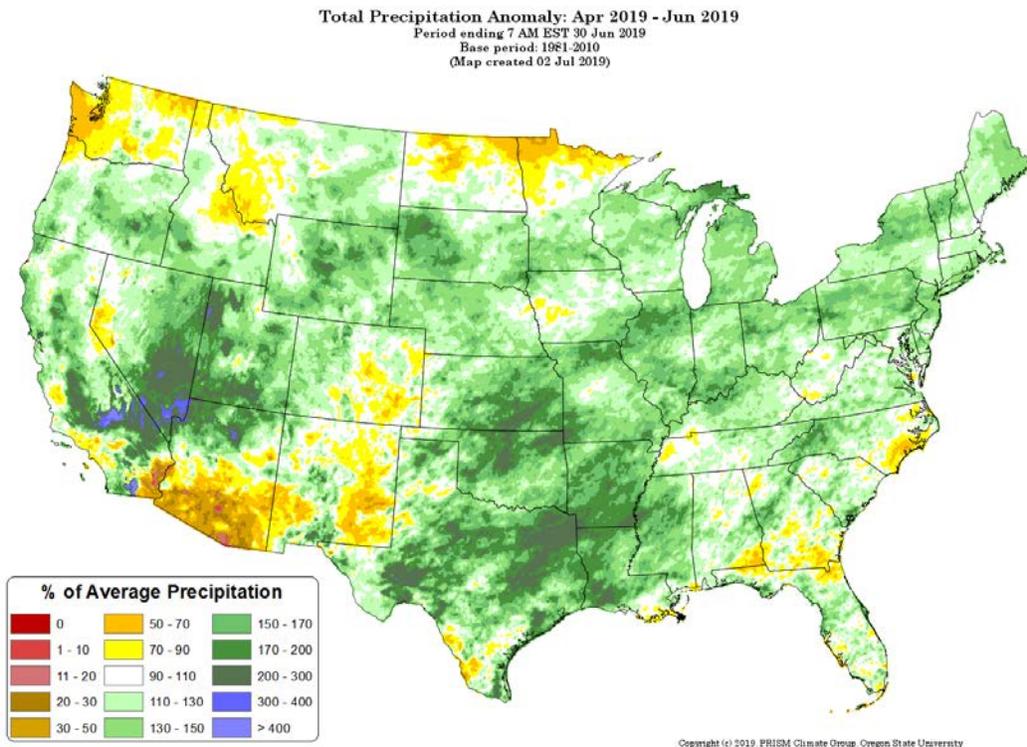


[Previous month national total precipitation percent of average map](#)

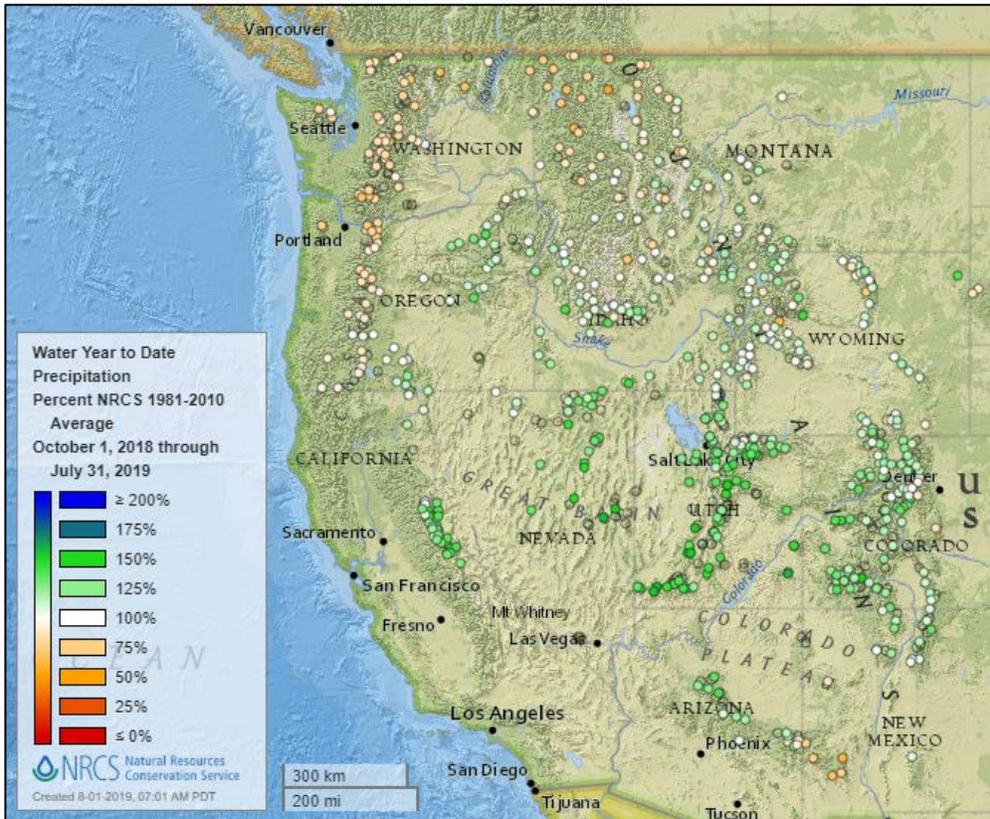
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

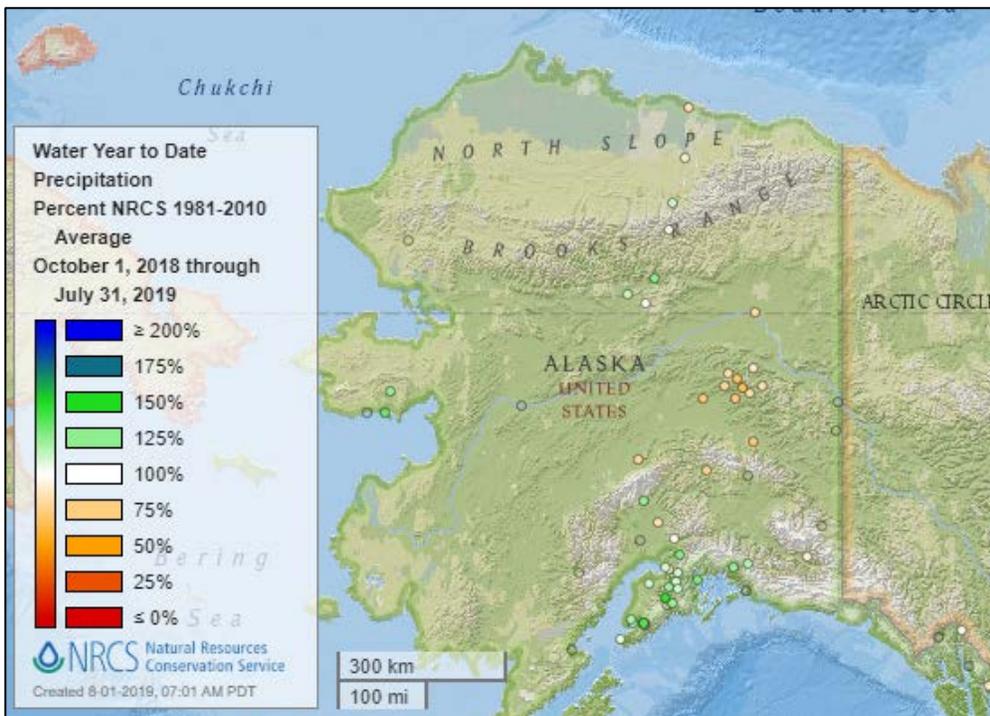


Water Year-to-Date, NRCS SNOTEL Network



[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

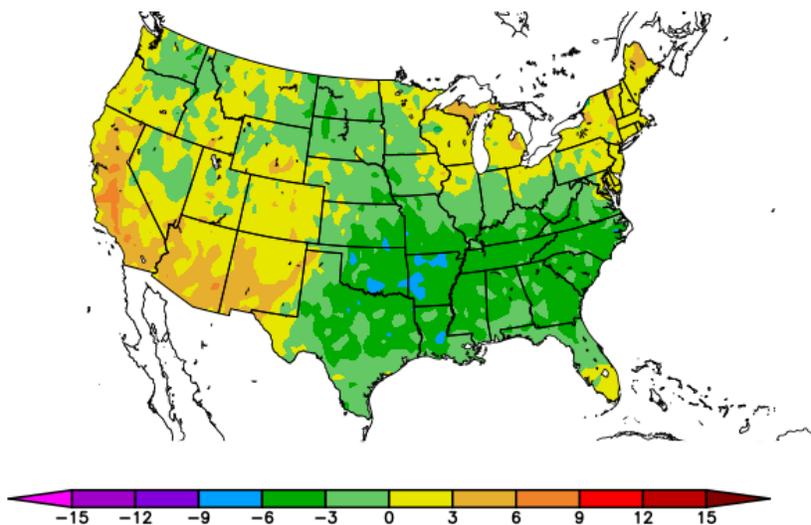
Last 7 Days, National Weather Service (NWS) Networks

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) 7/24/2019 – 7/30/2019



Generated 7/31/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

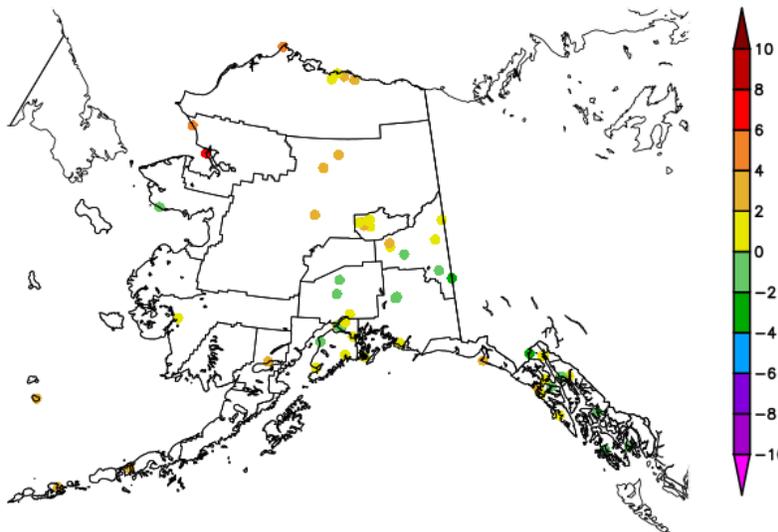
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F) 7/24/2019 – 7/30/2019



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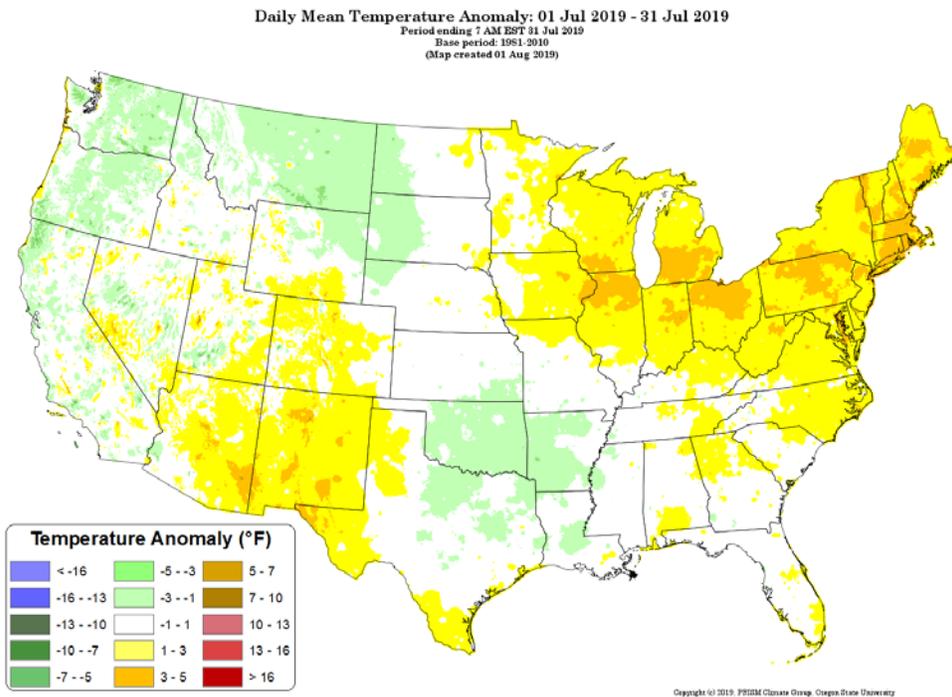
NOAA Regional Climate Centers

Water and Climate Update

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

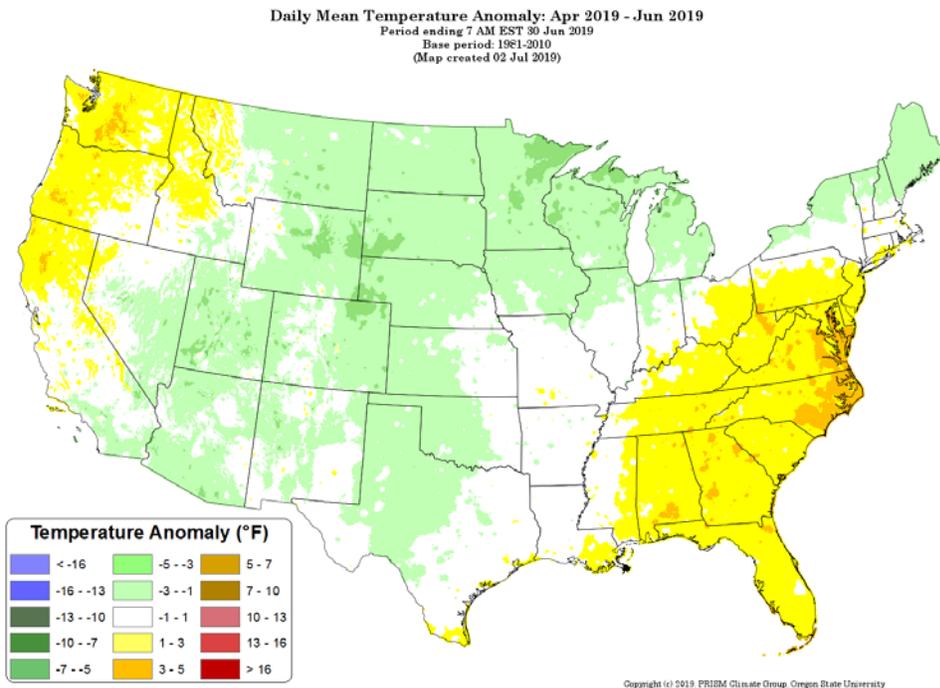
[Previous month national daily mean temperature anomaly map](#)



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

Source: PRISM

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



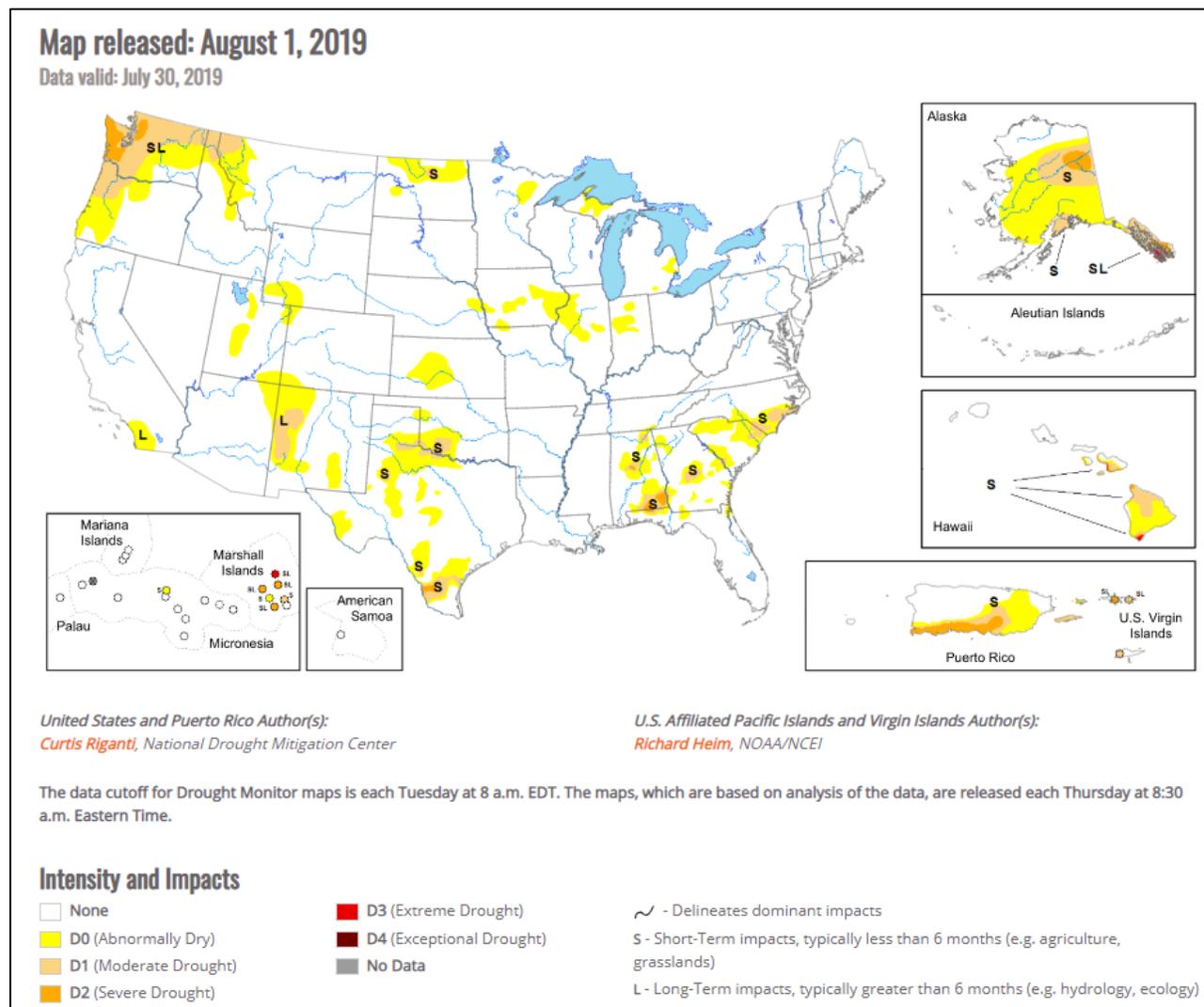
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), August 1, 2019

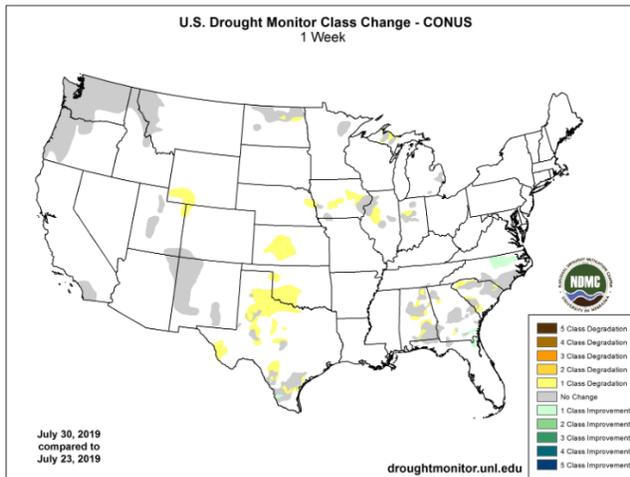
Source: National Drought Mitigation Center

“The far western United States was dry this week while monsoonal thunderstorms were scattered about parts of Arizona, Utah, Colorado, and New Mexico. Widespread precipitation fell from northeast Colorado to southwest South Dakota to northeast Minnesota, and in Missouri and southwest Iowa. Widespread rainfall took place in Florida, southeast Georgia, and North Carolina and Virginia. Meanwhile, dry weather encompassed much of Alabama, Kentucky, Ohio, and the central and southern Great Plains. Generally, below-normal temperatures occurred from the southern Plains to the mid-South to the Southeast, while warmer than normal temperatures were common in the Southwest, particularly in California, Arizona, and New Mexico.”

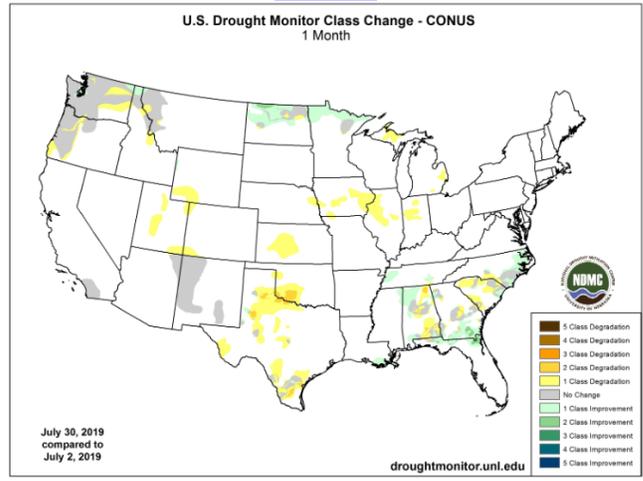
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

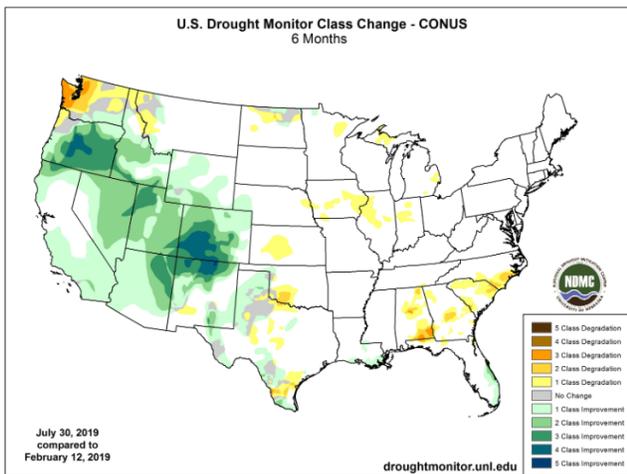
1 Week



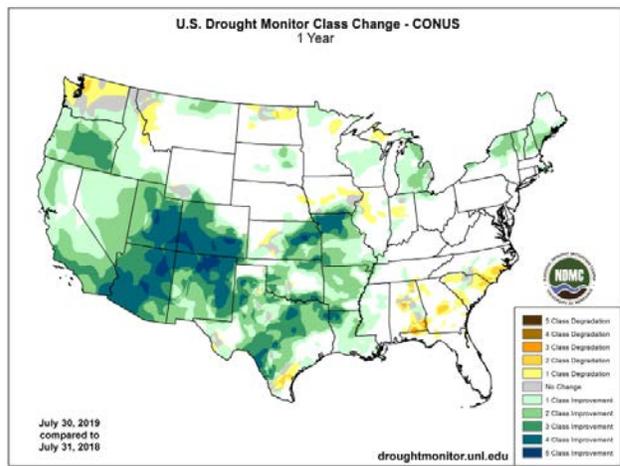
1 Month



6 Months



1 Year



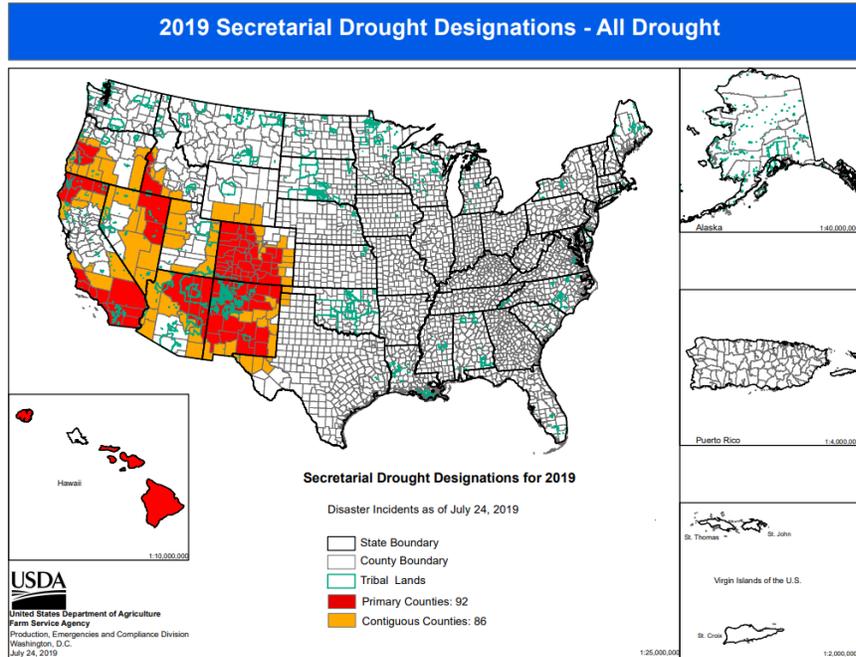
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

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



Wildfires: USDA Forest Service Active Fire Mapping



Highlighted Wildfire Resources

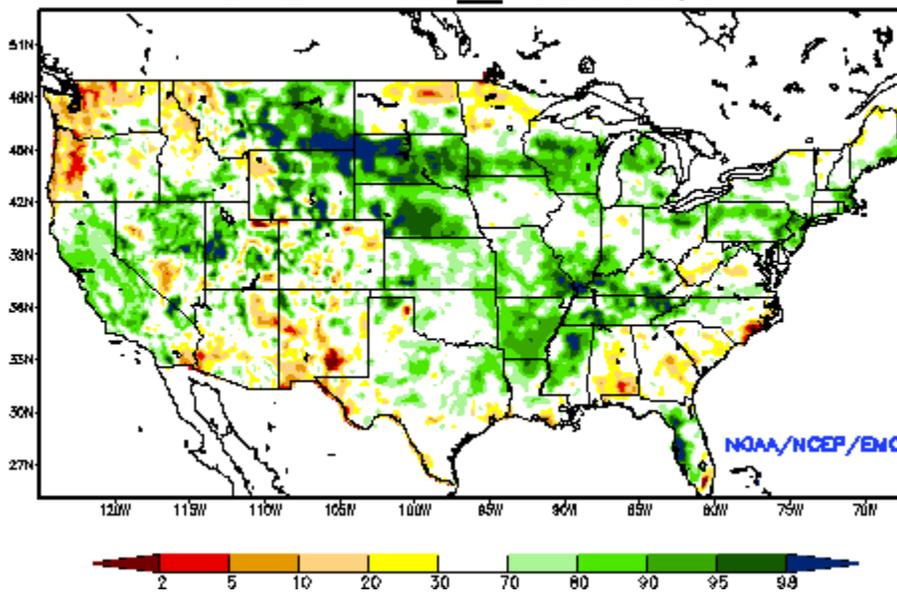
- [National Interagency Fire Center](#)
- [InciWeb Incident Information System](#)
- [Significant Wildland Fire Potential Outlook](#)

Other Climatic and Water Supply Indicators

Soil Moisture

Source: NOAA National Centers for Environmental Prediction

Ensemble-Mean - Current Total Column Soil Moisture Percentile
NCEP NLDAS Products Valid: JUL 27, 2019



[Modeled soil moisture percentiles](#) as of July 27, 2019

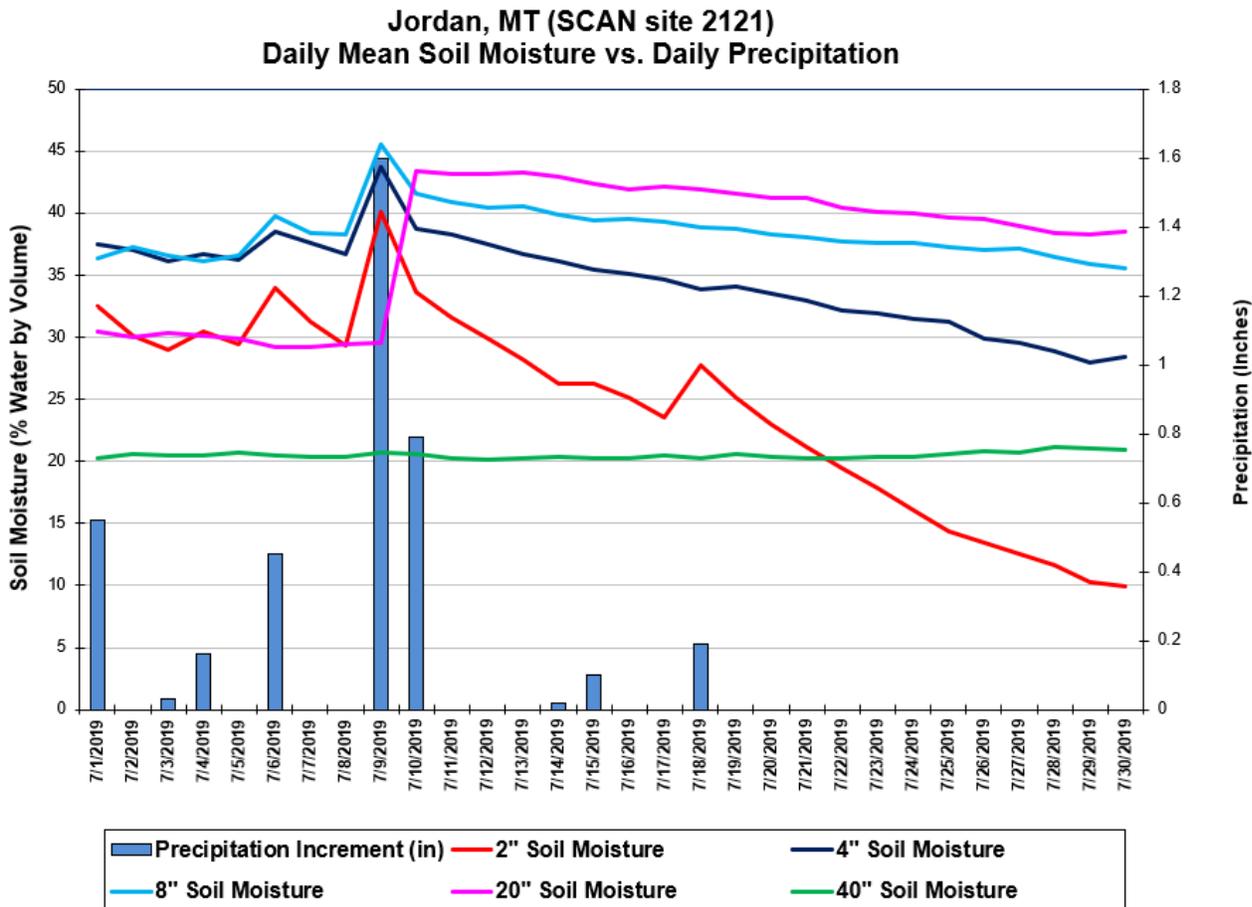
Soil Moisture Percent of Saturation

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



Soil Moisture Data

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



This chart shows the soil moisture and precipitation for the last 30 days at the [Jordan SCAN site](#) in Montana. Between July 9-10, accumulated precipitation at this site totaled 2.39 inches and soil moisture increased at the -2", -4", -8", and -20" sensor levels. The -40" sensor showed little response to the precipitation events.

Soil Moisture Data Portals

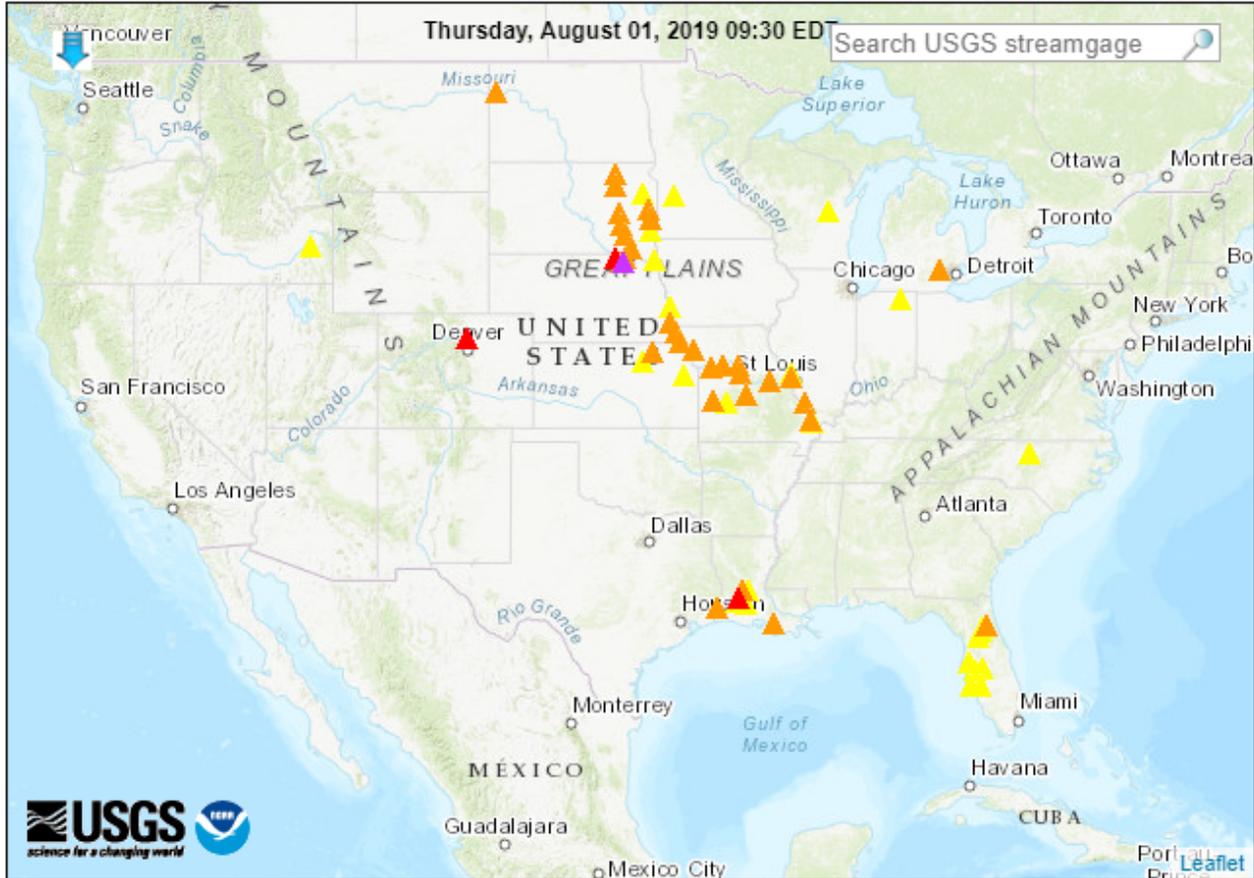
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(1 in major flood, 3 in moderate flood, 31 in minor flood, 25 in near flood)



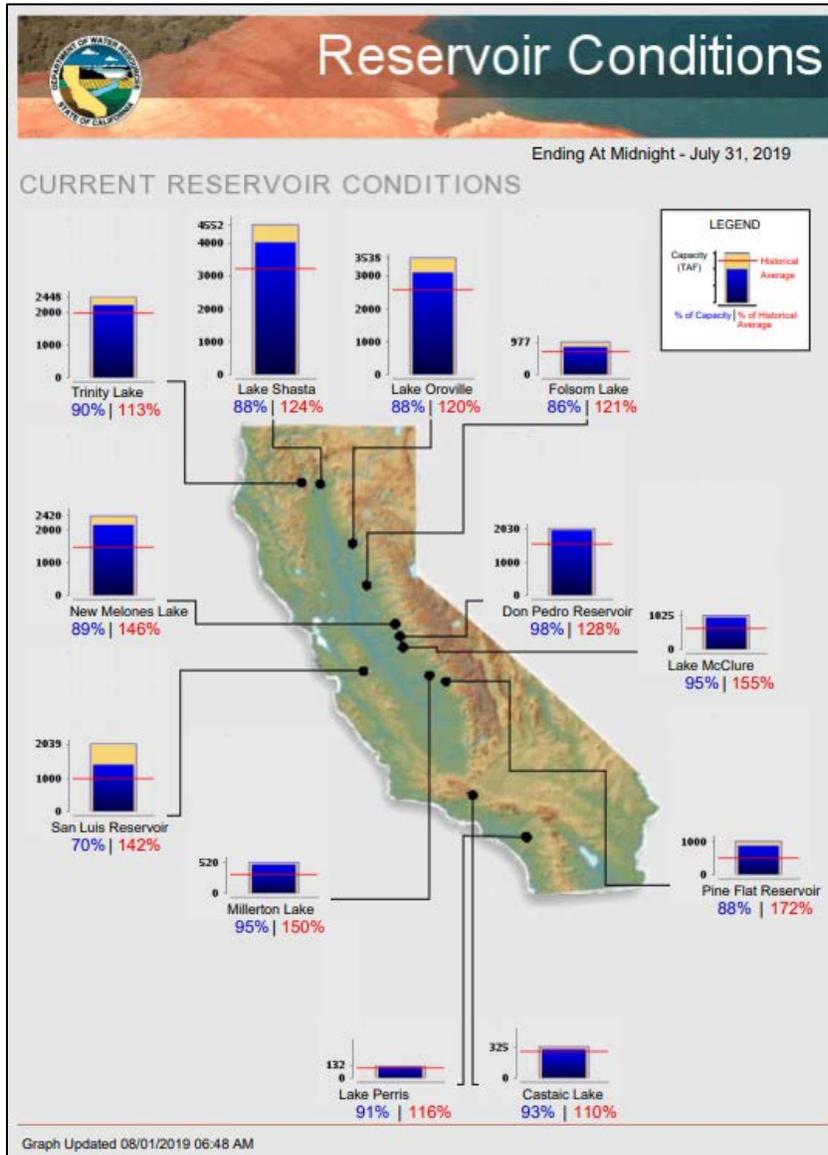
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

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

Reservoir Storage

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

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](#)

Short- and Long-Range Outlooks

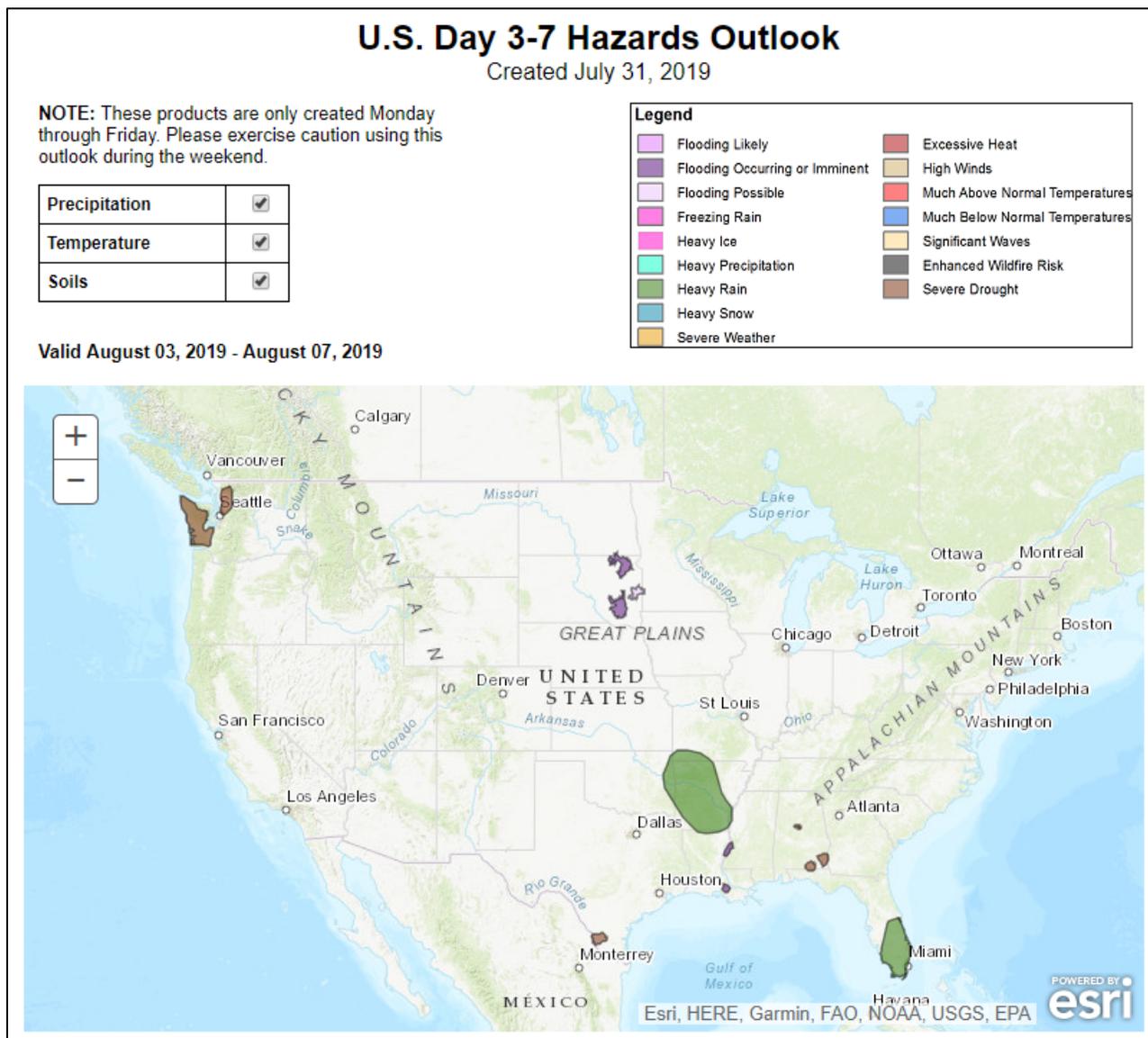
Agricultural Weather Highlights

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

National Outlook, Thursday, August 1, 2019: “Eastern Kansas, western Missouri, and environs will remain a focal point for heavy rain and possible flooding through Friday. Meanwhile, heavy showers will also dot the Southeast, with 5-day totals reaching 1 to 3 inches or more in many locations. Elsewhere, scattered, monsoon-related showers will extend northward from the Four Corners States, while mostly dry weather will cover the southern High Plains, the central and eastern Corn Belt, and the Far West. Hot weather across the southern High Plains will end during the weekend, but heat will persist across parts of the interior West. The NWS 6- to 10-day outlook for August 6 – 10 calls for near- or above normal temperatures nationwide, except for cooler-than-normal conditions in coastal California and parts of the north-central U.S. Meanwhile, near- or above-normal rainfall across most of the country will contrast with drier-than-normal weather across the South from Texas to Georgia”

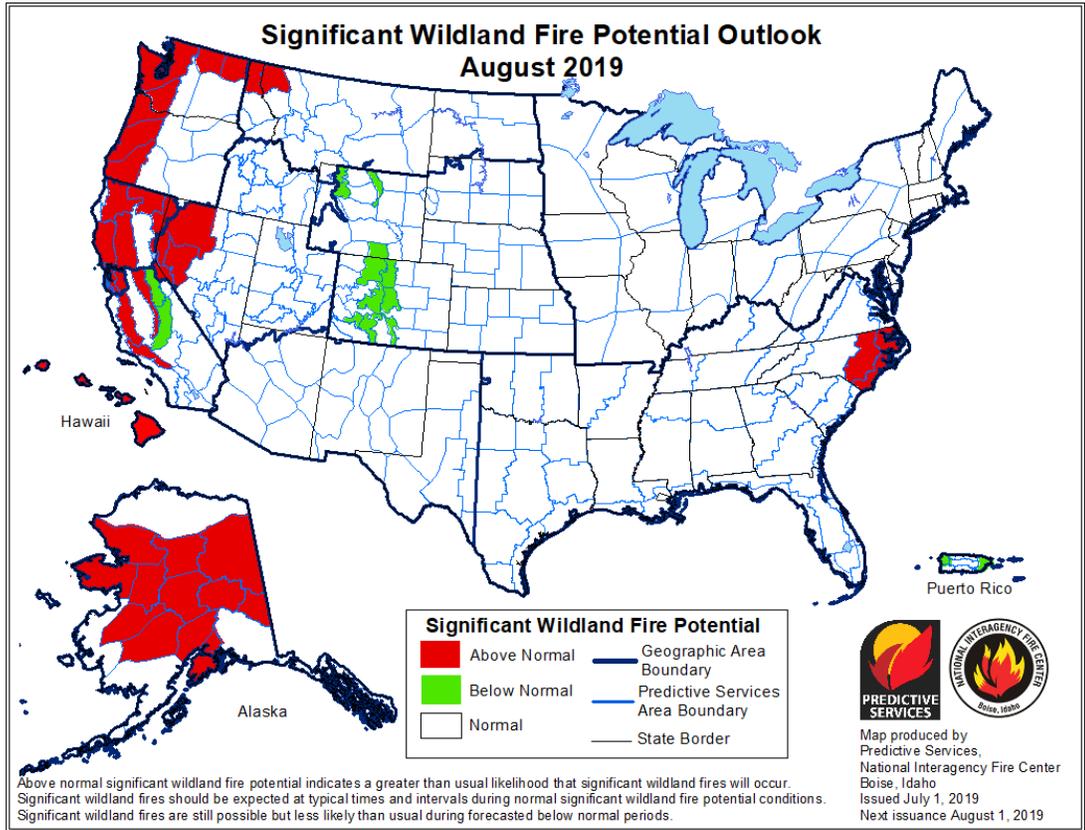
Weather Hazards Outlook: [August 3 – 7, 2019](#)

Source: NOAA Climate Prediction Center



Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center

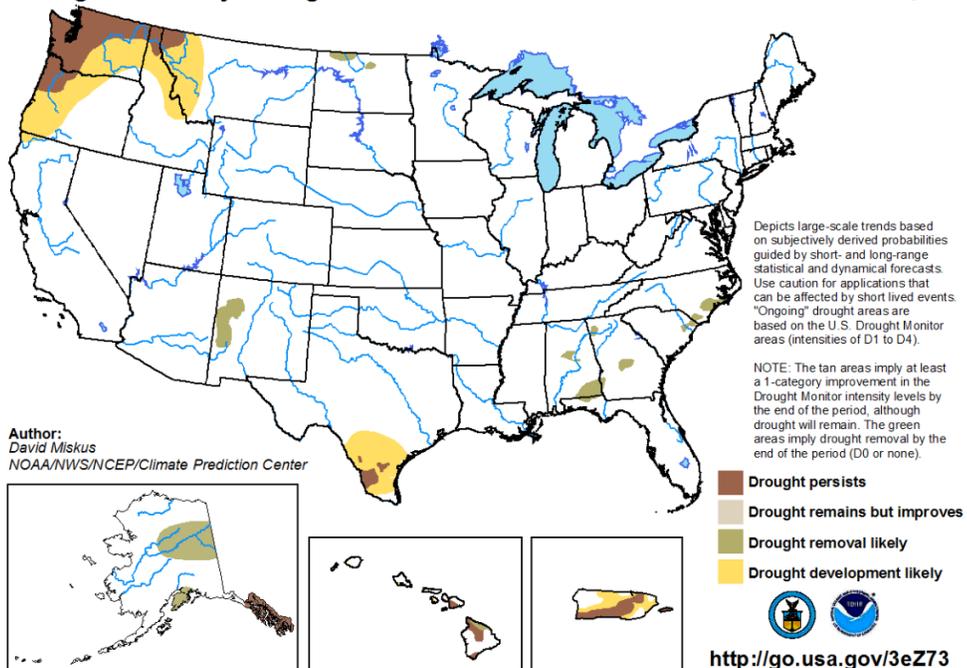


Seasonal Drought Outlook: July 18 – October 31, 2019

Source: National Weather Service

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

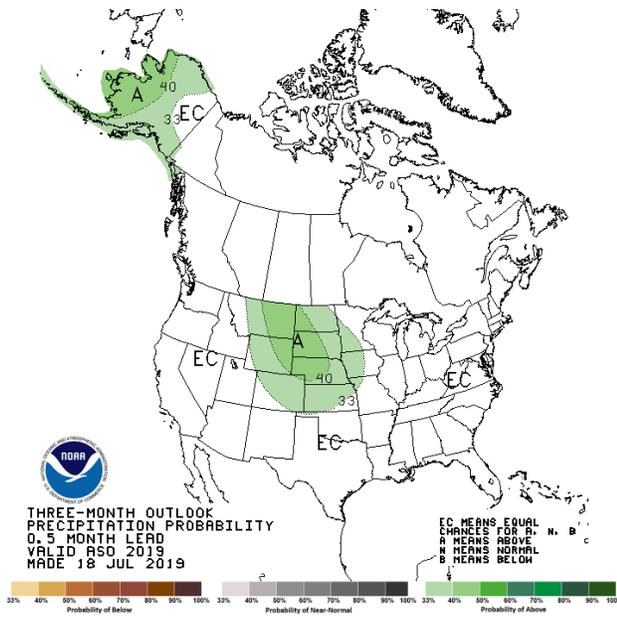
Valid for July 18 - October 31, 2019
Released July 18



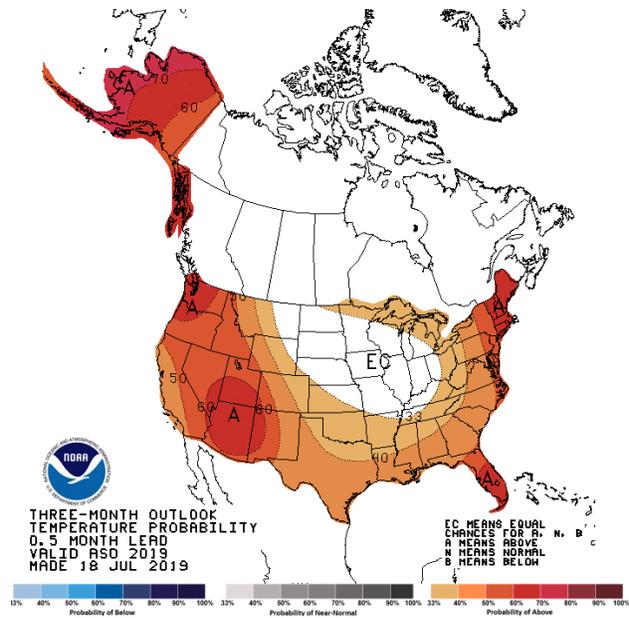
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[August-September-October \(ASO\) 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](#).