



Water and Climate Update

July 20, 2017

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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Wildfire threatens Yosemite



Photo: Josh Edelson/AFP/Getty Images

More than 2,200 firefighters are working to stop a massive, quickly-growing wildfire near Yosemite National Park. Officials describe the fire that began on Sunday as “extreme and aggressive.” The fire has nearly doubled in size in the last two days, burning through more than 48,000 acres and forcing the evacuation of thousands. Statewide, about 6,000 firefighters are battling 17 large wildfires.

More information:

[California wildfire explodes in size as blazes scorch U.S. West](#), Reuters

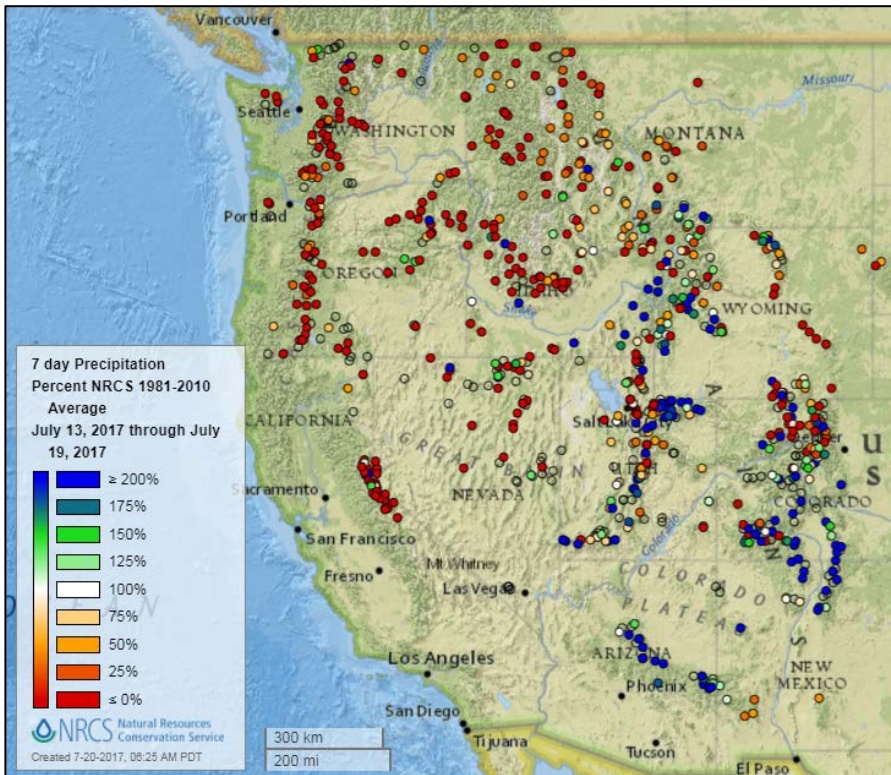
[Fire racing near Yosemite park destroys dozens of structures](#), ABC News

[Wildfire near Yosemite forces thousands to flee homes](#), CNN

[‘An insane amount of heat’ as fire near Yosemite National Park moves with frightening speed](#), LA Times

Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL Network)



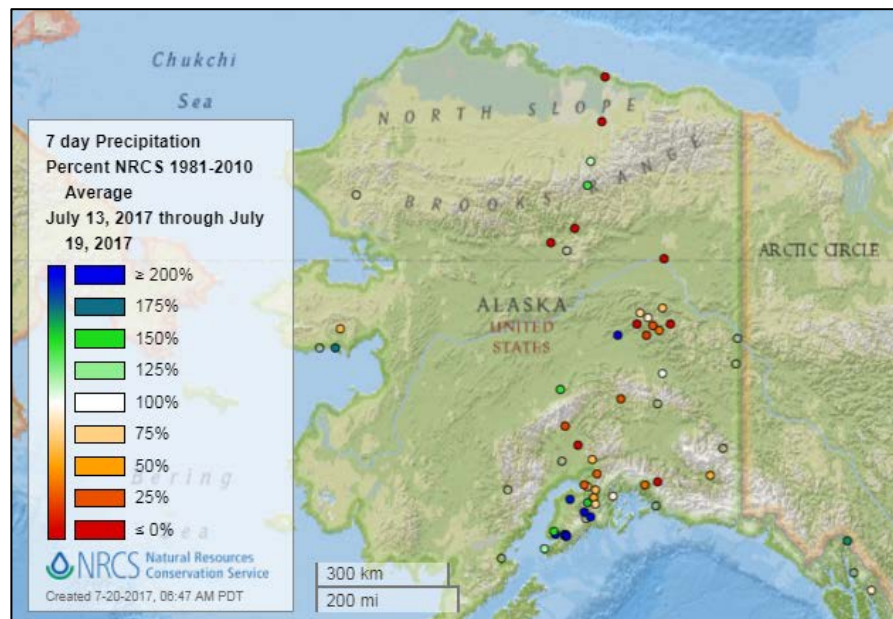
[7-day precipitation percent of average map](#)

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](#)



Water and Climate Update

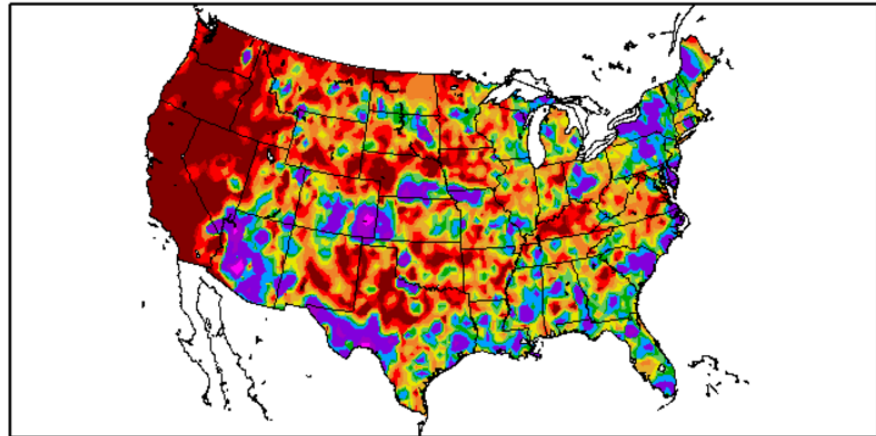
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
7/13/2017 - 7/19/2017



Generated 7/20/2017 at HPRCC using provisional data.

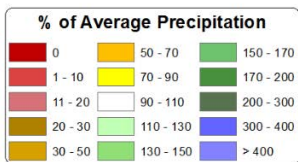
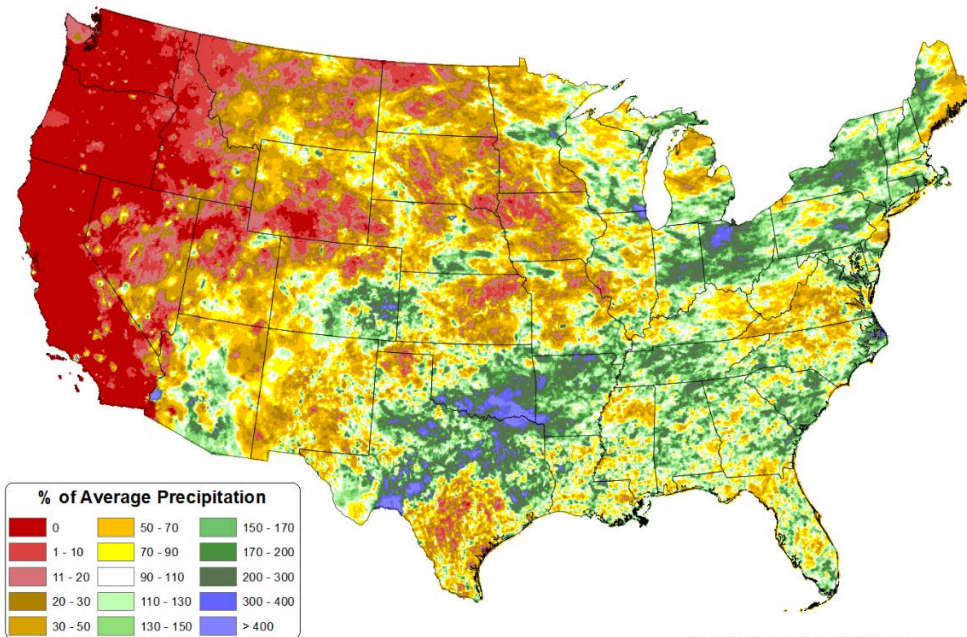
Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 July 2017 - 19 July 2017
Period ending 7 AM EST 19 Jul 2017
Base period: 1981-2010
(Map created 20 Jul 2017)

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

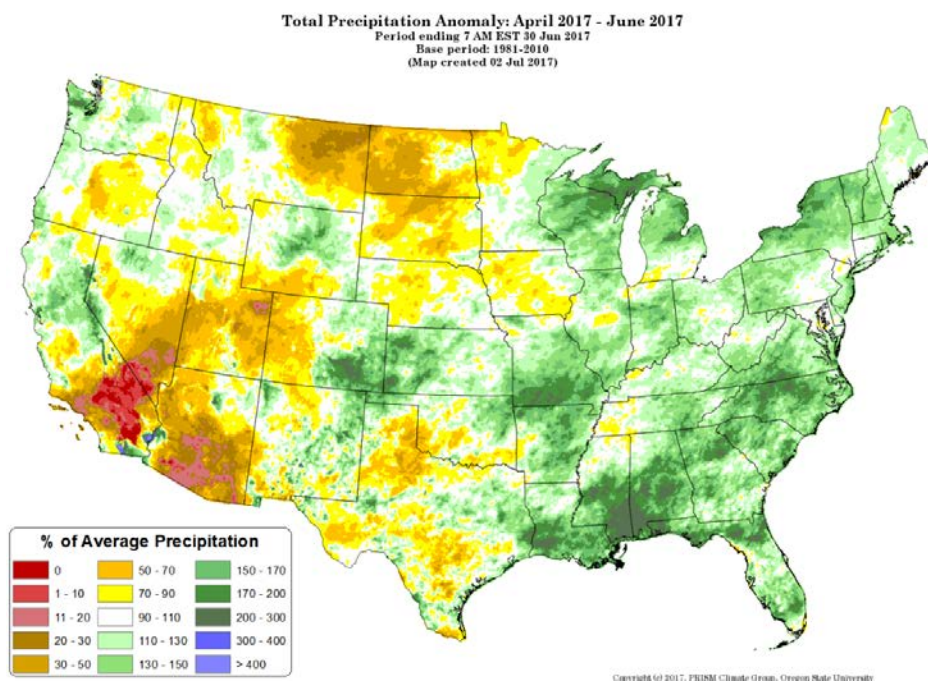


Copyright 6/1/2017, PRISM Climate Group, Oregon State University

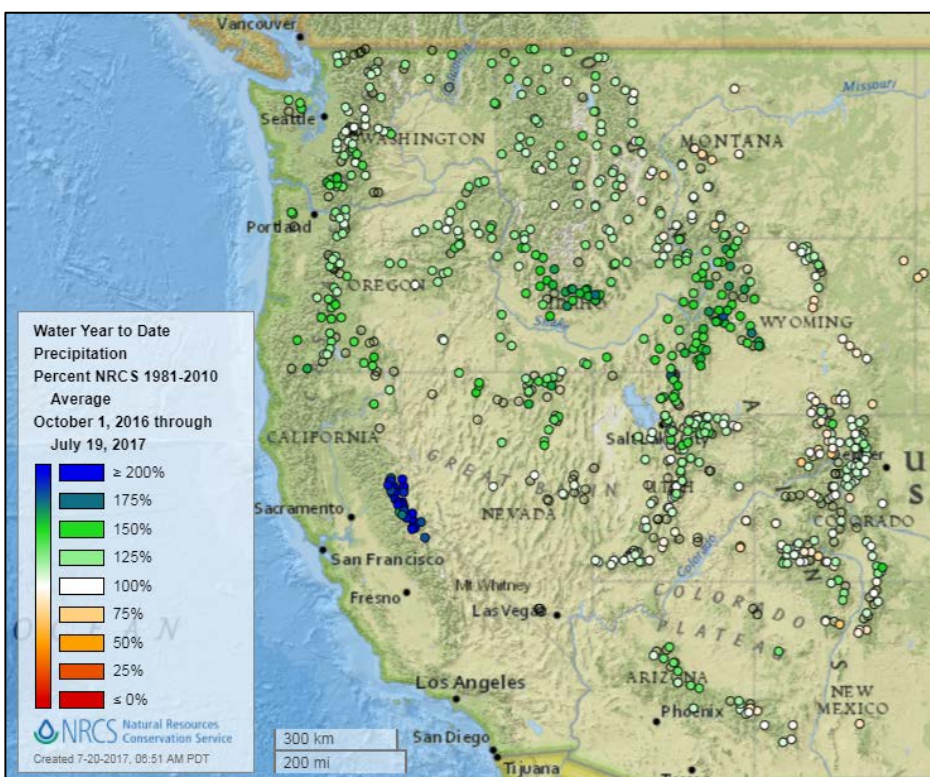
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[April through June 2017 daily mean precipitation anomaly map](#)

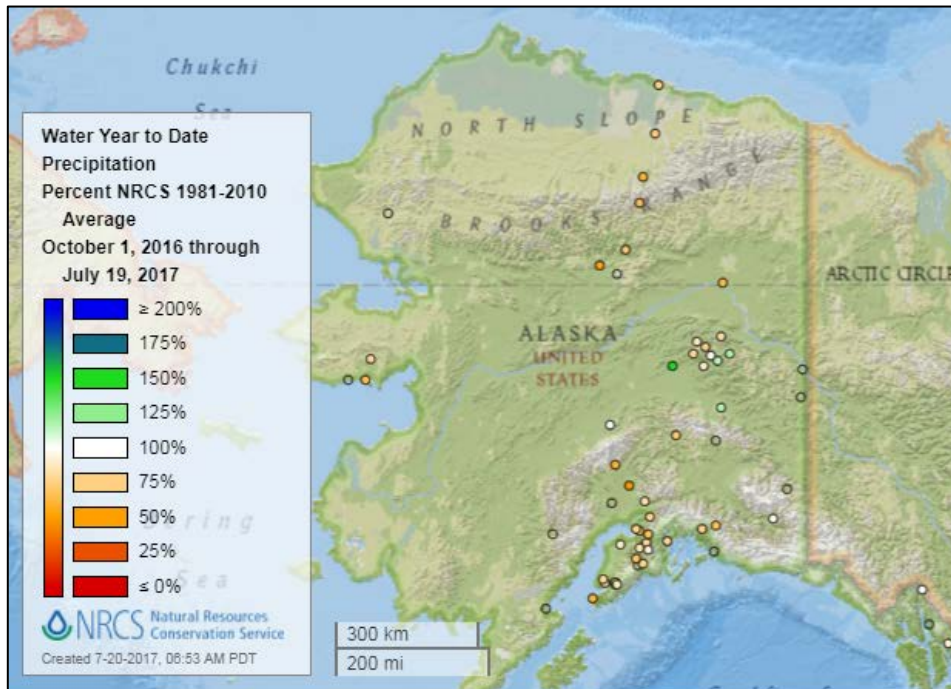


Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[2017 water year-to-date precipitation percent of average map](#)

See also: [2017 water year-to-date precipitation values \(inches\)](#)



[Alaska 2017 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2017 water year-to-date precipitation values \(inches\) map](#)

Temperature

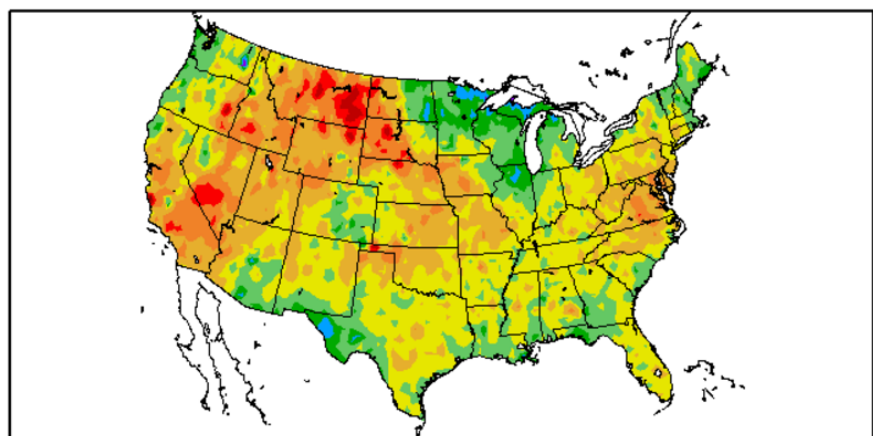
Last 7 Days, National Weather Service (NWS) Networks

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)
7/13/2017 – 7/19/2017



Generated 7/20/2017 at HPRCC using provisional data.

Regional Climate Centers

Water and Climate Update

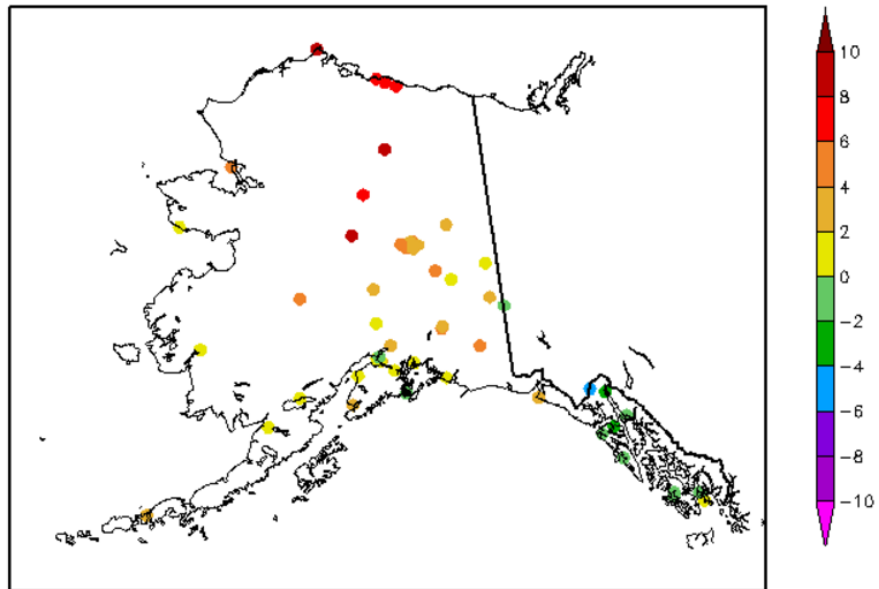
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
7/13/2017 – 7/19/2017



Generated 7/20/2017 at HPRCC using provisional data.

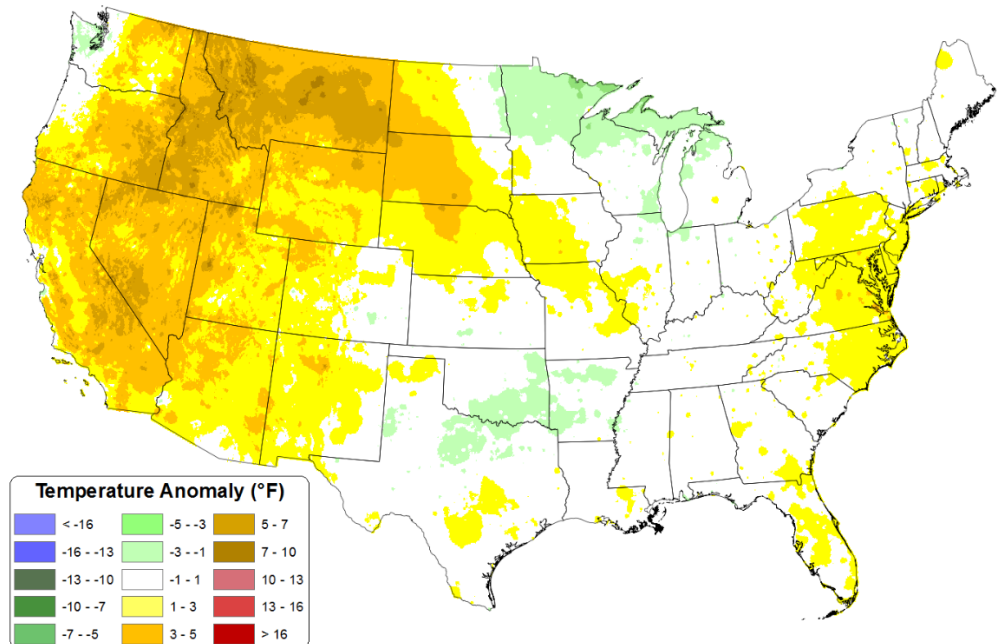
Regional Climate Centers

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

Source: PRISM

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

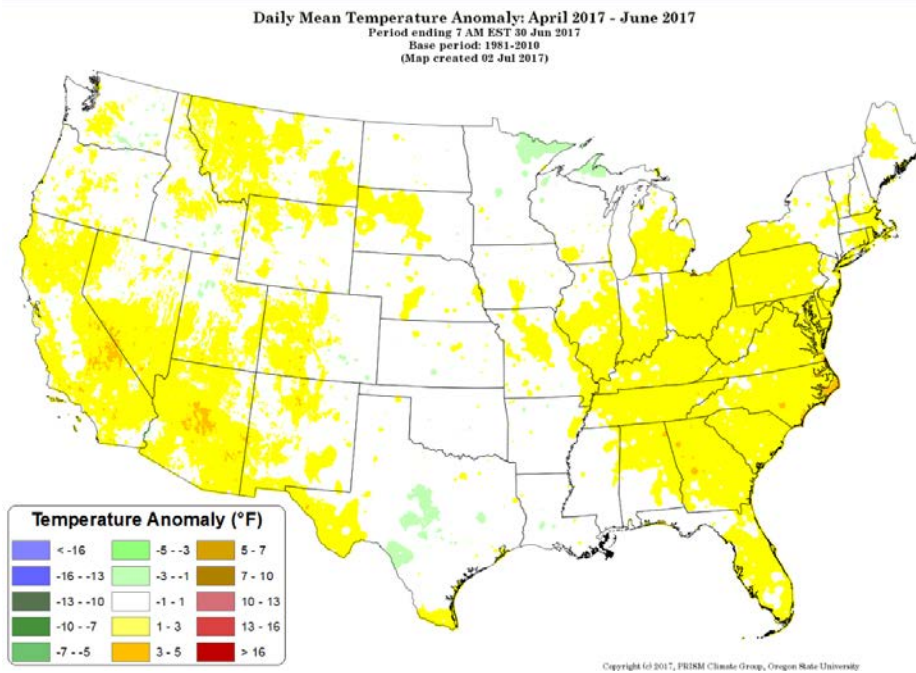
Daily Mean Temperature Anomaly: 01 July 2017 - 19 July 2017
Period ending 7 AM EST 19 Jul 2017
Base period: 1981-2010
(Map created 20 Jul 2017)



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

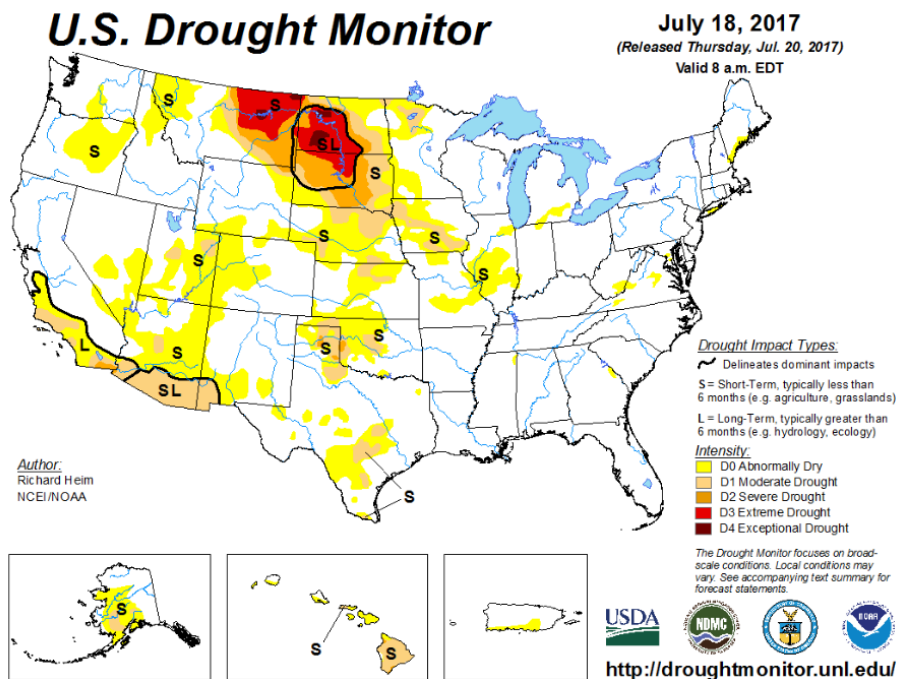
Source: PRISM



[April through June 2017 daily mean temperature anomaly map](#)

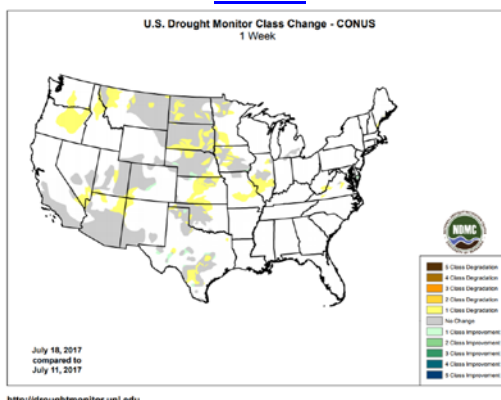
Drought

[U.S. Drought Monitor](#) Click on map below. [U.S. Drought Portal](#) Comprehensive drought resource.

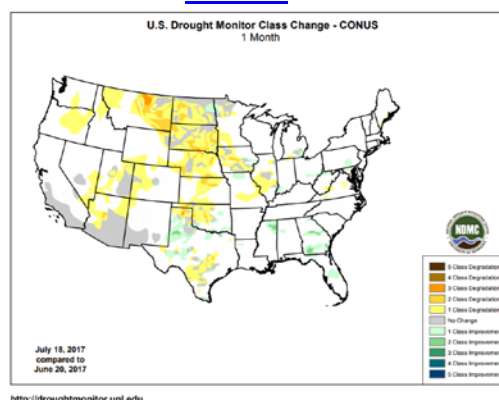


Changes in Drought Monitor Categories over Time

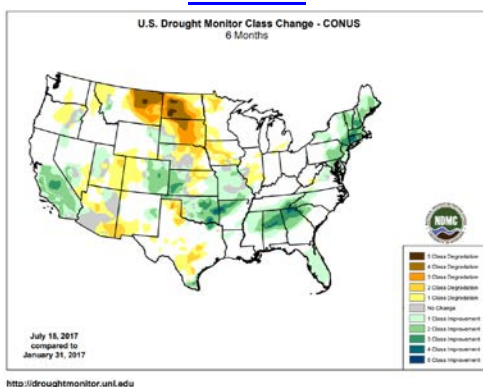
1 Week



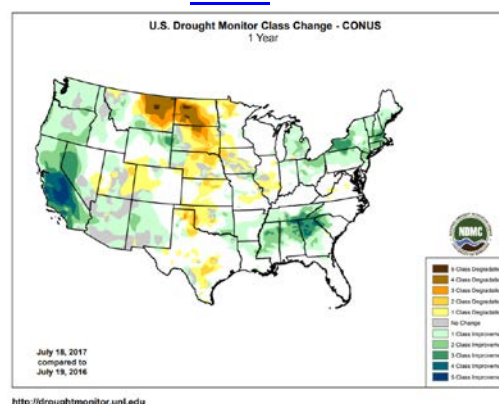
1 Month



6 Months



1 Year



Changes in drought conditions over the last 12 months

Current National Drought Summary, July 18, 2017

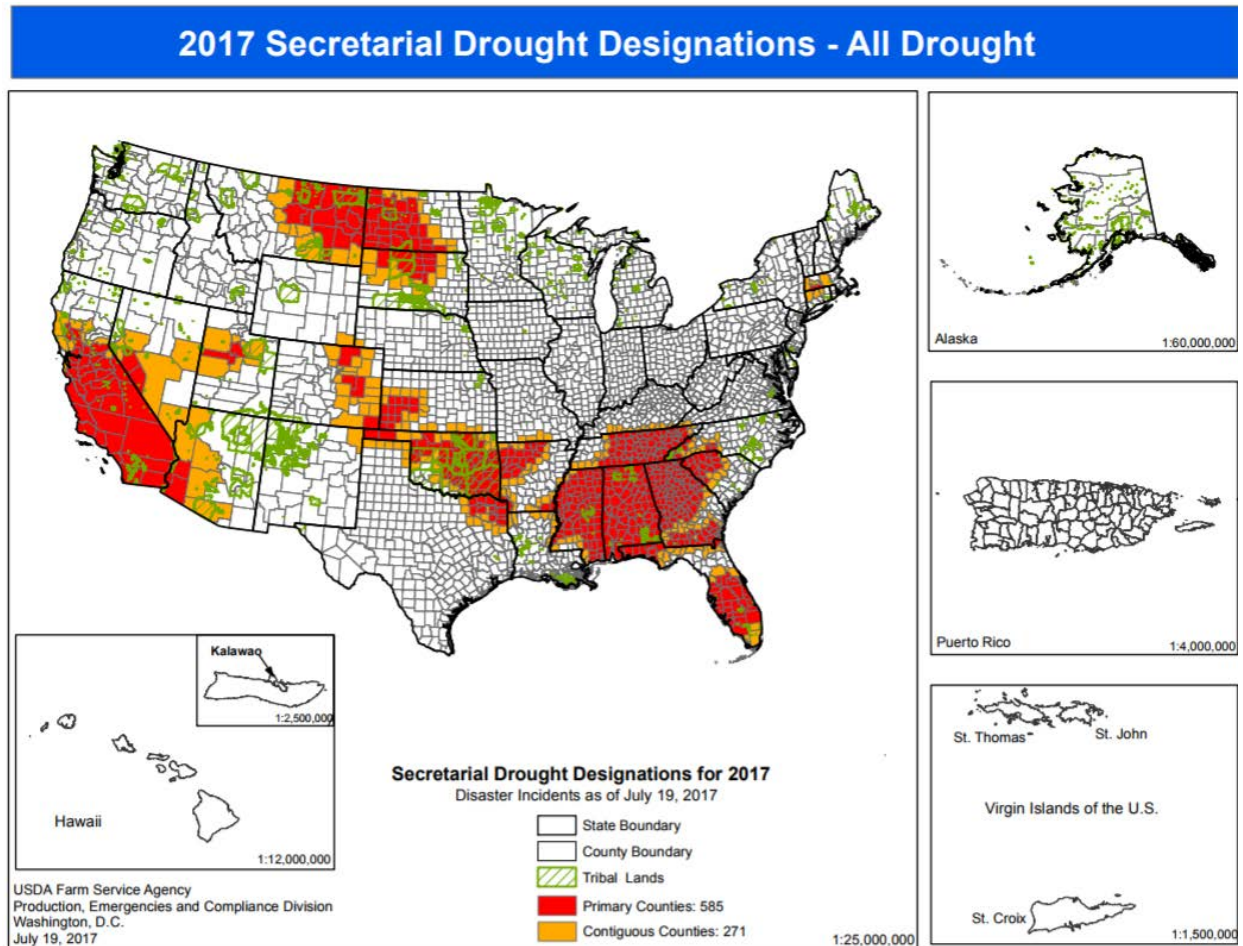
Author: Richard Heim, NOAA/NCEI

"An upper-level ridge of high pressure dominated the western contiguous U.S. (CONUS) during this U.S. Drought Monitor (USDM) week. The ridge inhibited precipitation and kept temperatures warmer than normal across much of the West. Weekly mean temperatures were as much as 8 degrees above the long-term average from the Southwest to northern High Plains. Pacific fronts and weather systems rode over the top of the ridge, taking a northerly track which brought them across the drought-plagued northern Plains then into a trough over the eastern CONUS where they stalled out over the Southeast. Monsoon showers developed in the Southwest, bringing above-normal precipitation to some areas, and small but intense storms developed with the fronts as they moved across the northern and central Plains. But only a few of these storms brought above-normal precipitation to the Plains. Summertime convection and frontal lifting brought rain to parts of the southern Plains and areas east of the Mississippi River. The prolonged and intensifying drought ravaged crops and rangeland in the northern Plains, while soils continued to dry out across the West, Plains, and into the Mid-Atlantic region. Exceptional Drought (D4) returned to the USDM map this week as spots of D4 developed in the northern Plains where below-normal rain fell, and D0 expanded in parts of the Southwest where the monsoon precipitation was below normal. Persistent below-normal precipitation and enhanced evapotranspiration due to excessive heat expanded areas of drought and abnormal dryness in the central Plains to Midwest."

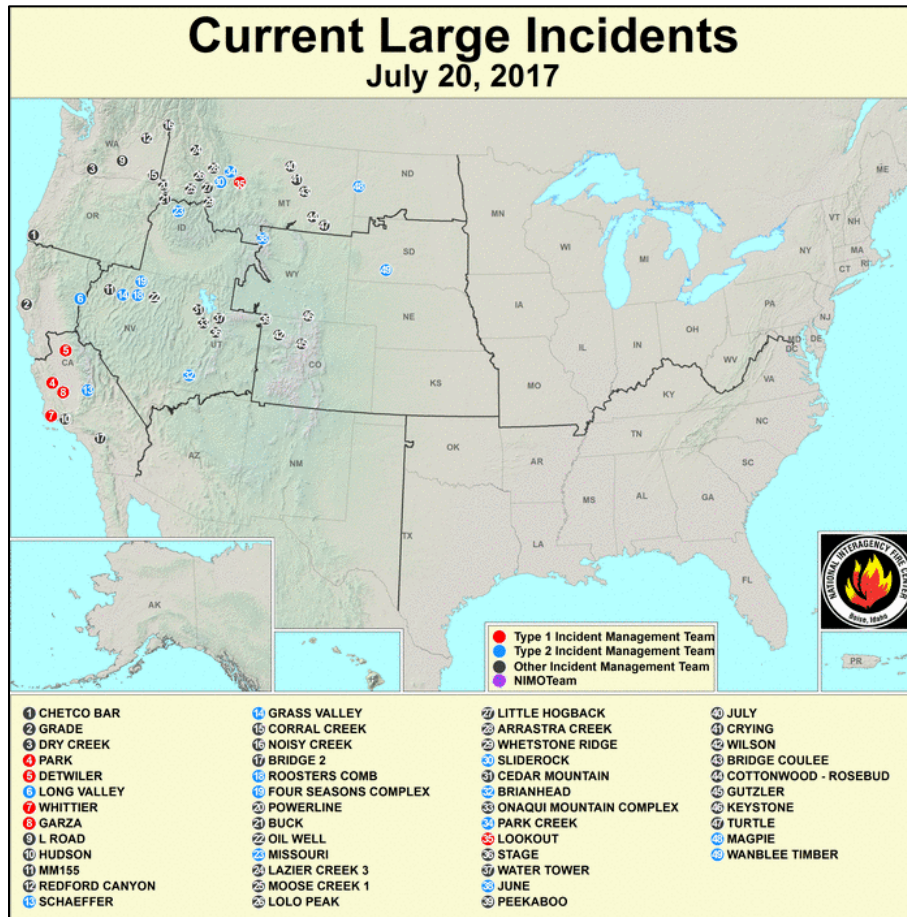
Highlighted Drought Resources

- [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 2017 Secretarial [Drought Designations](#)



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

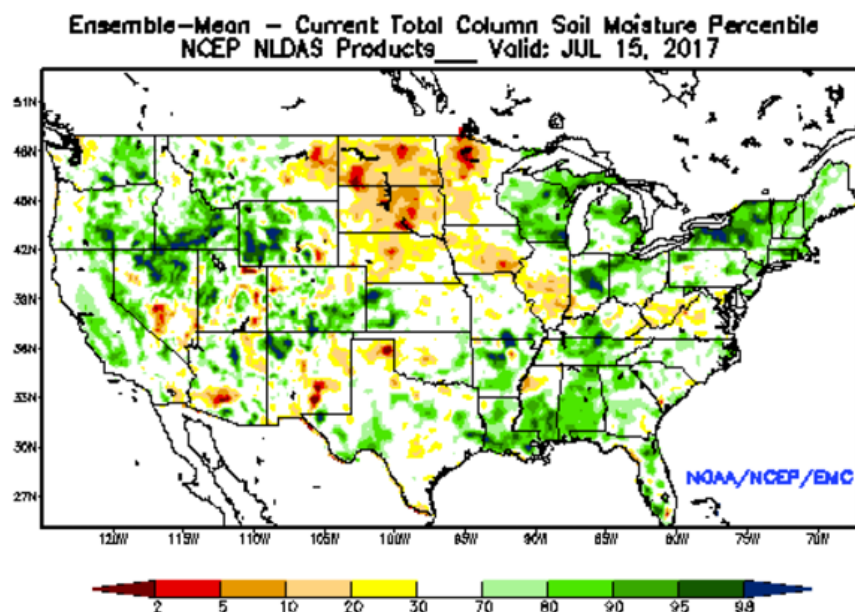


Highlighted Wildfire Resources

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

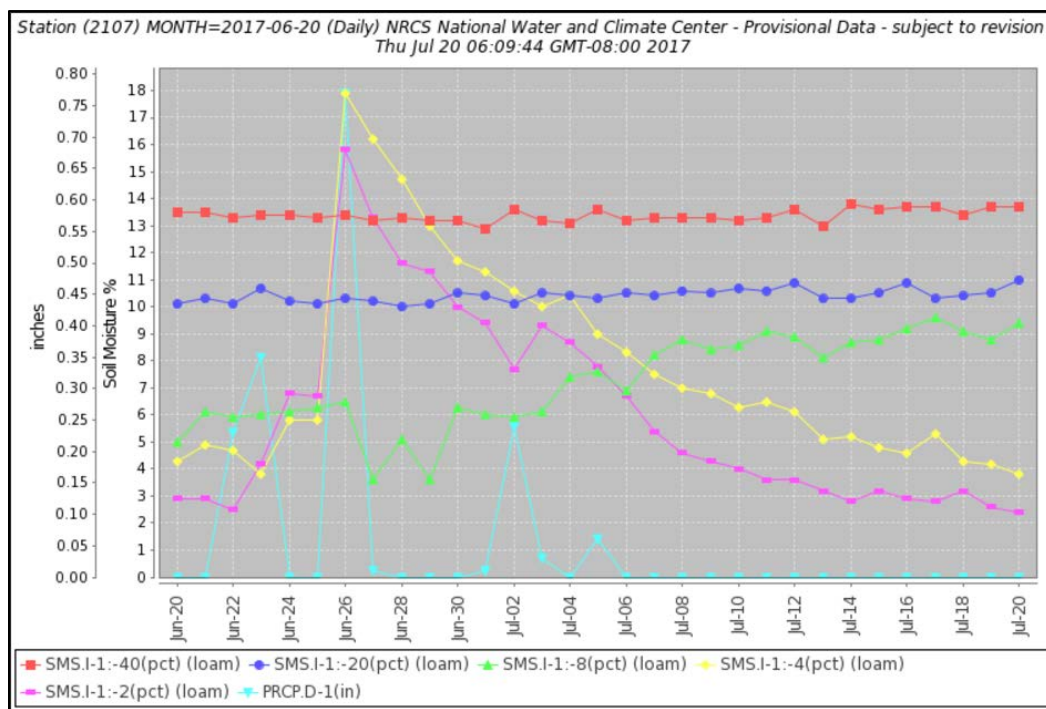
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of July 15, 2017.

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



Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the past 30 days at the [Crossroads SCAN site 2107](#) in eastern New Mexico. The 2- and 4-inch sensors showed immediate response to the precipitation events in late June, whereas the 8-inch sensor was slower to respond. The 20- and 40-inch moisture sensors remained essentially unchanged.

Soil Moisture Data Portals

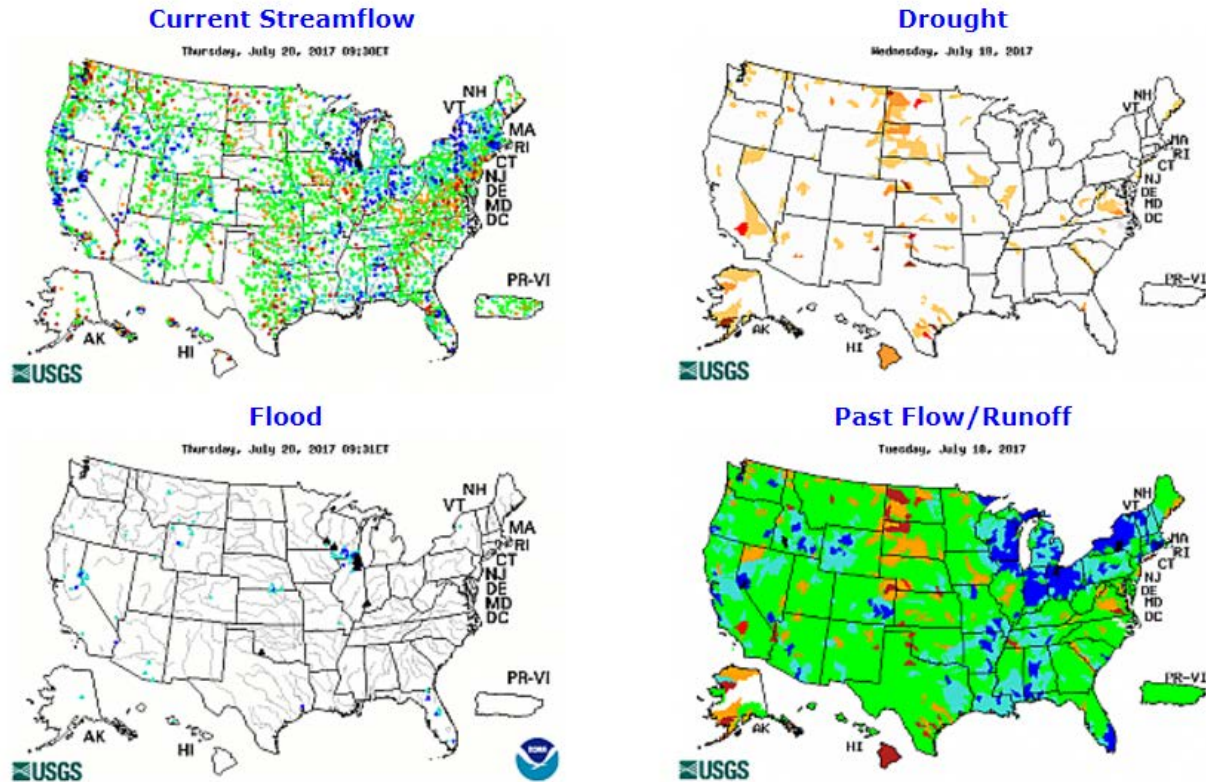
[CRN Soil Moisture](#)

[Texas A&M University North American Soil Moisture Database](#)

[University of Washington Experimental Modeled Soil Moisture](#)

Streamflow

Source: USGS



[Current streamflow maps](#) Click image to enlarge and display legends

Reservoir Storage

[National Water and Climate Center Reservoir Data](#)

U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions:

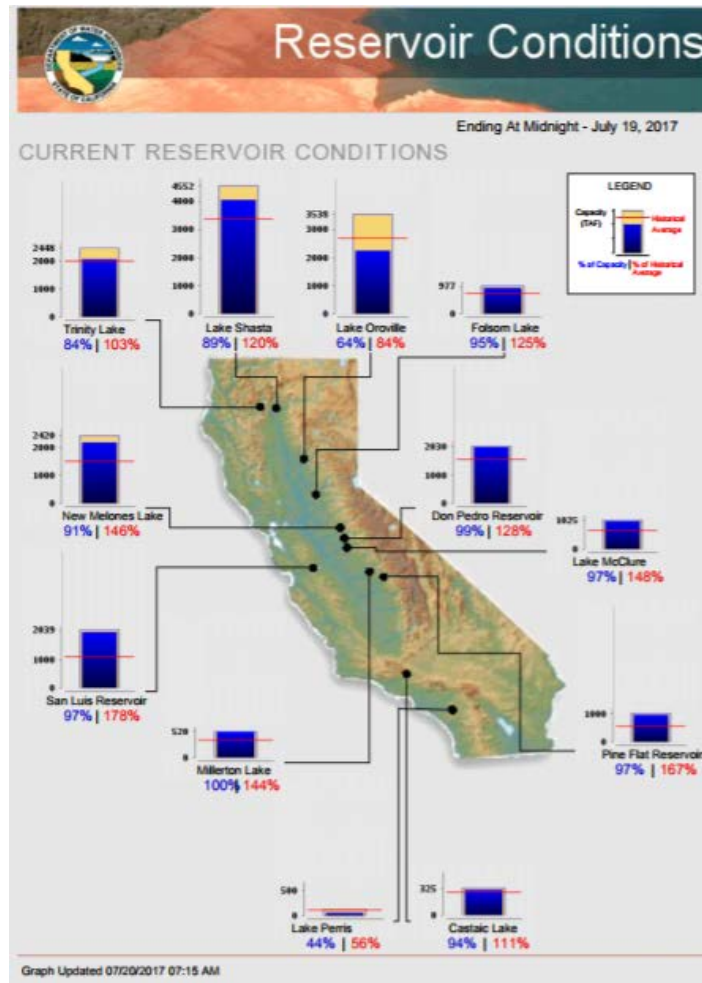
[Upper Colorado](#)

[Pacific Northwest/Snake/Columbia](#)

[Sevier River Water, Utah](#)

[Upper Missouri, Kansas, Oklahoma, Texas](#)

[California Current Reservoir Conditions](#)



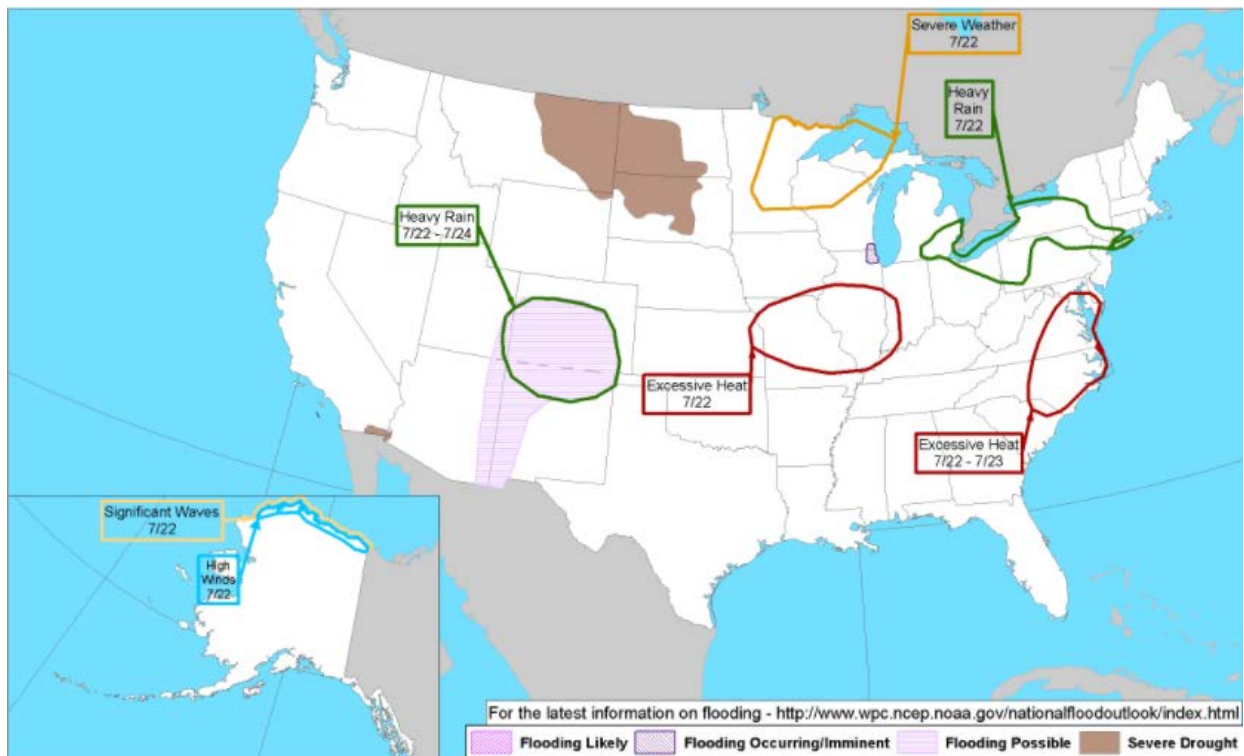
Short- and Long-Range Outlooks

Agricultural Weather Highlights

Authors: Brad Rippey and Seth Cohen, Meteorologists, USDA/OCE/WAOB

[National Outlook, Thursday, July 20, 2017](#): “Over the next few days, rain will continue to impact the Four Corners States and the upper Midwest. Some of the heaviest rain, as much as 2 to 5 inches, should occur across the northern and eastern Corn Belt, resulting in local flooding. Flash flooding will also remain a threat in the Southwest. Meanwhile, occasional showers into Friday on the northern Plains could provide limited drought relief. Late in the week, dry weather will return to the northern and western Corn Belt as thunderstorms shift into the South and East. Meanwhile, a strong ridge of high pressure will result in a few more days of hot, humid conditions across a broad area of the central and eastern U.S. Elsewhere, dry weather will accompany building heat in California and the Northwest. The NWS 6- to 10-day outlook for July 25 – 29 calls for the likelihood of above-normal temperatures across much of the Deep South and from California to the Mississippi Valley, while cooler-than-normal conditions will be limited to the Northeast and the Pacific Northwest. Meanwhile, wetter-than-normal weather in the Southwest and parts of the Southeast will contrast with below-normal rainfall across much of the Plains and parts of the North.”

NWS Climate Prediction Center Weather Hazard Outlook: [July 22 - 26, 2017](#)

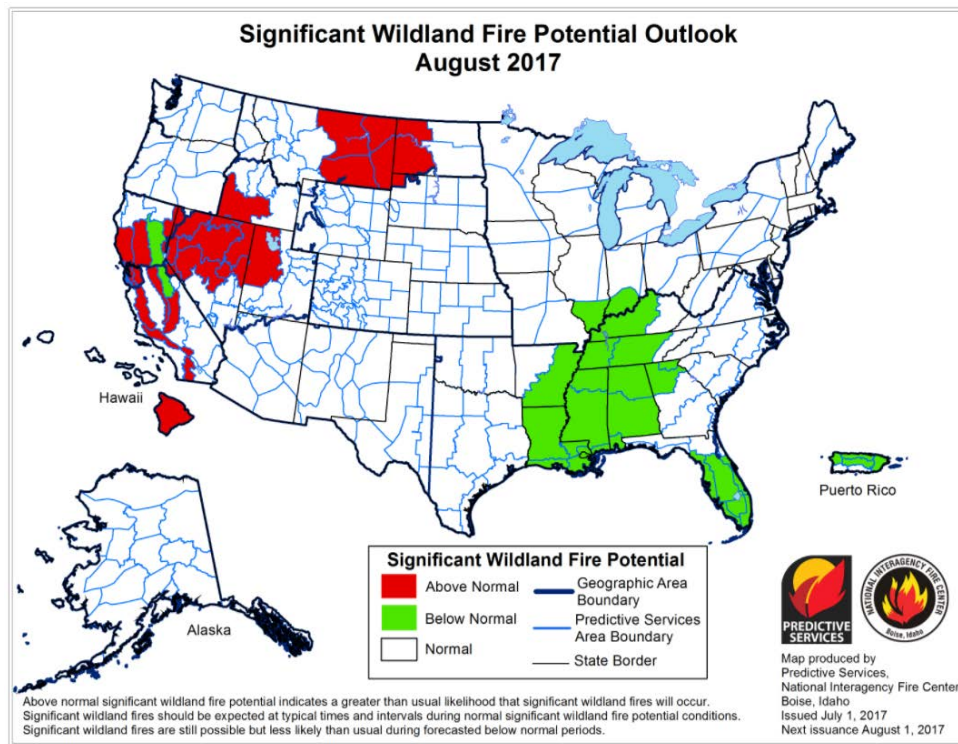


**National Weather Service
Climate Prediction Center
Made: 07/19/2017 3PM EDT**

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Significant Wildland Fire Potential Outlook

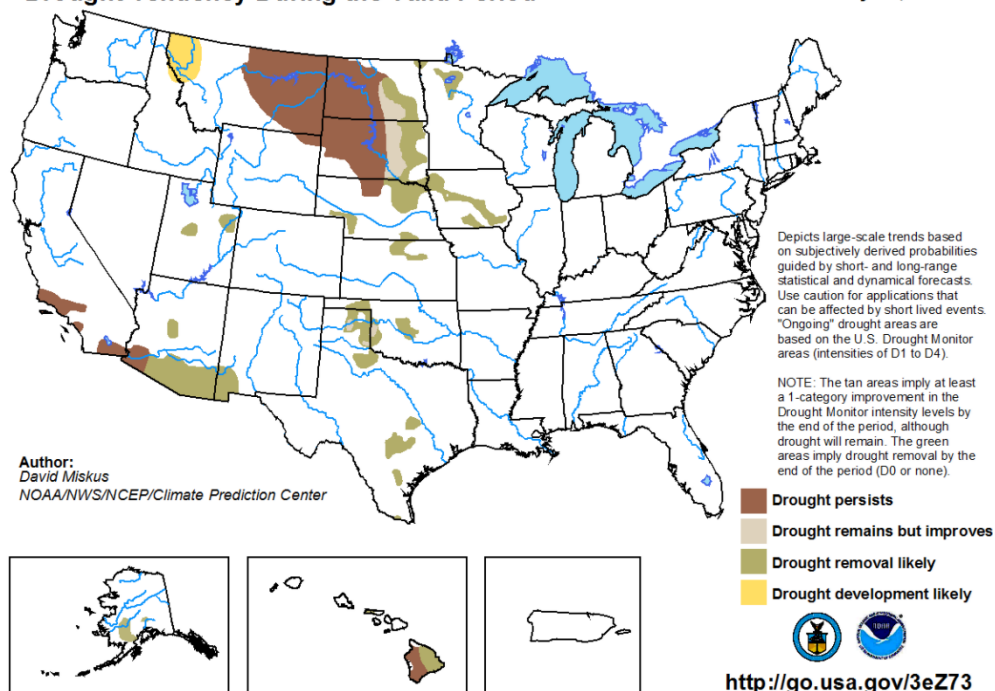
Source: National Interagency Fire Center



NWS Seasonal Drought Outlook: [July 20 - October 31, 2017](#)

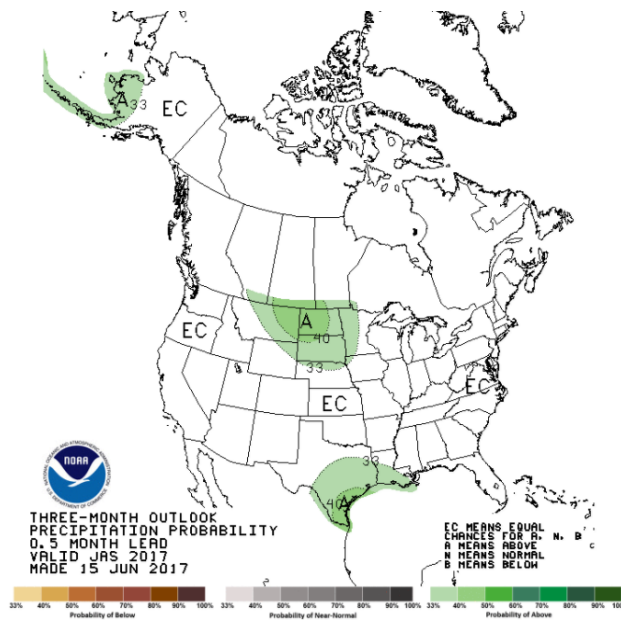
U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for July 20 - October 31, 2017
Released July 20, 2017

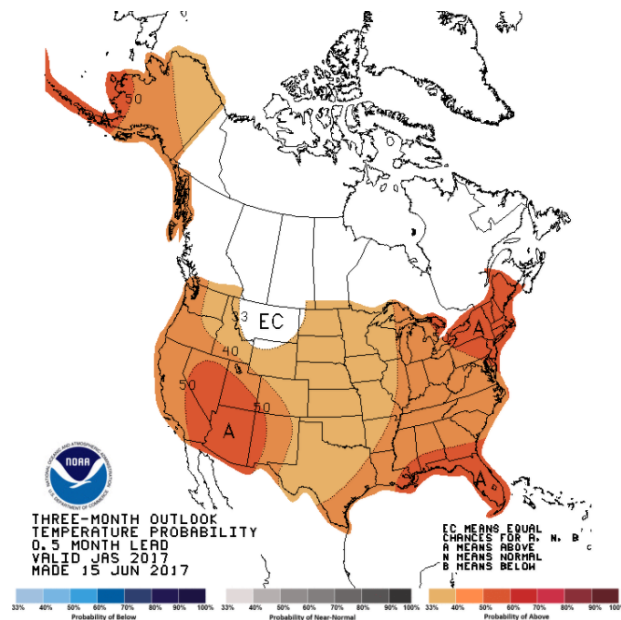


NWS Climate Prediction Center 3-Month Outlook

Precipitation



Temperature



July-Aug-Sep-Oct (JAS) 2017 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](#).