

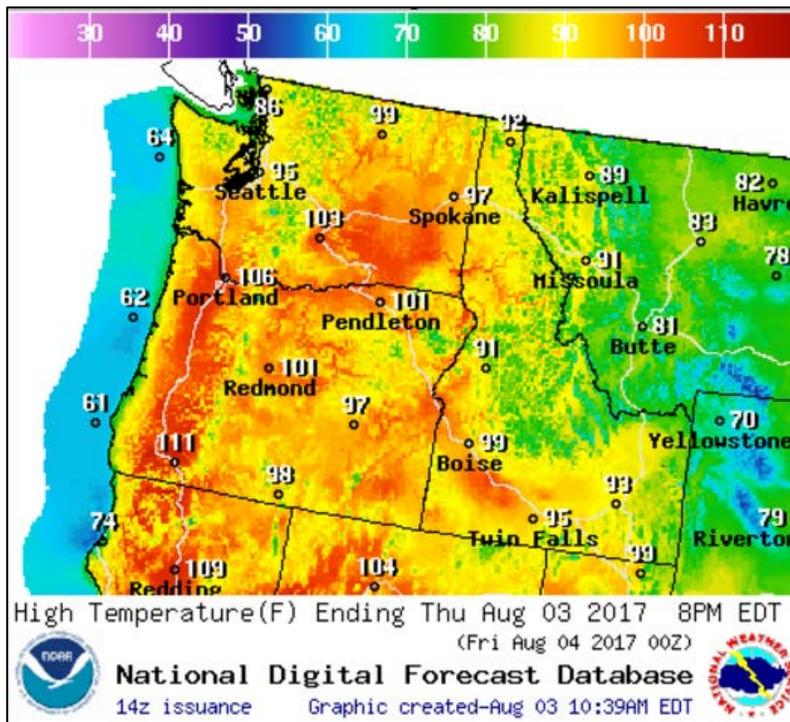
Water and Climate Update

August 3, 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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Extreme heat, smoky haze blankets the Pacific Northwest



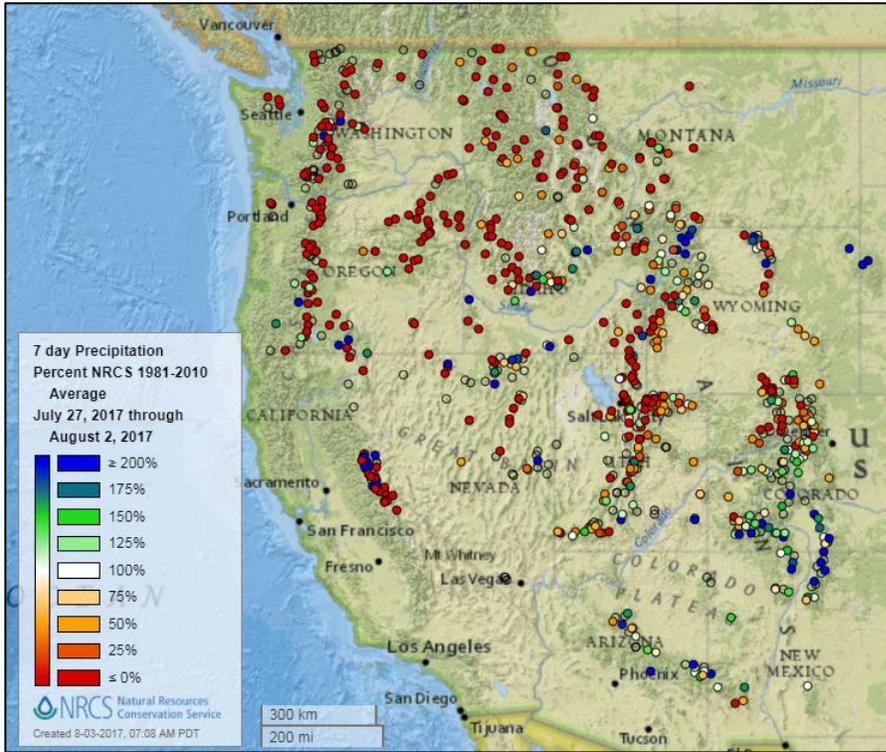
Portions of Washington, Oregon, and northern California have experienced extreme heat this week. In Portland, the [National Weather Service](#) reports the temperature could reach 107 degrees or higher, which would match or exceed its hottest temperature on record, set in 1942, 1965 and 1981. Smoke flowing into the region from British Columbia wildfires has affected air quality, but could help reduce temperatures.

Related:

- [Portland could hit 109 degrees this week, breaking all-time record](#), USA Today
- [Where's the AC? Heat grips Portland, Seattle](#), CNN
- [Pacific Northwest threatened by hottest weather ever recorded; Seattle could hit 100](#), The Washington Post
- [Pacific Northwest Been the Country's Most Extreme Weather Region in 2017](#), The Weather Channel
- [Strange weather soaks Southwest and heats Northwest](#), CBS News

Precipitation

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

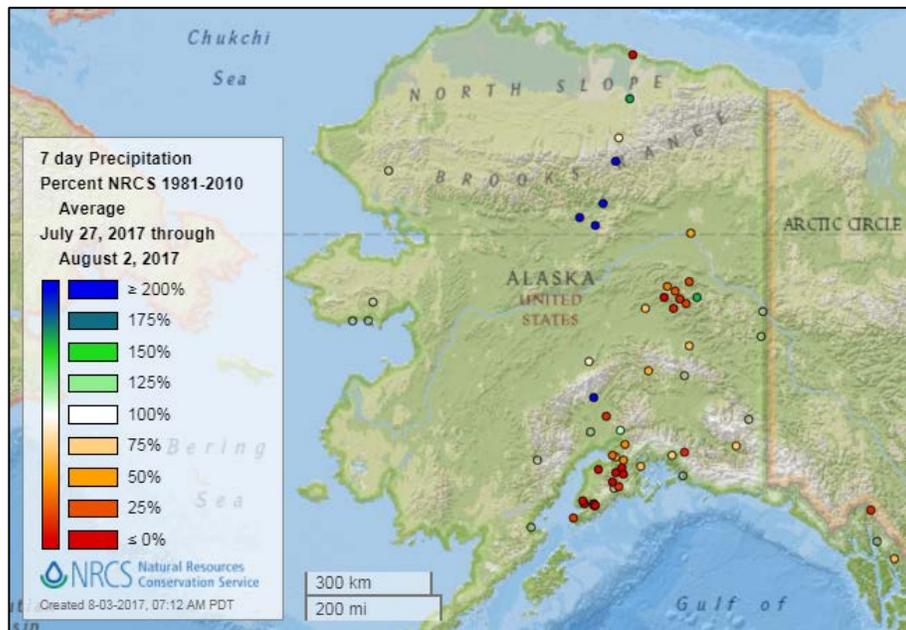


[7-day precipitation percent of average map](#)

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

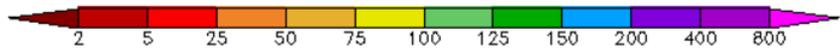
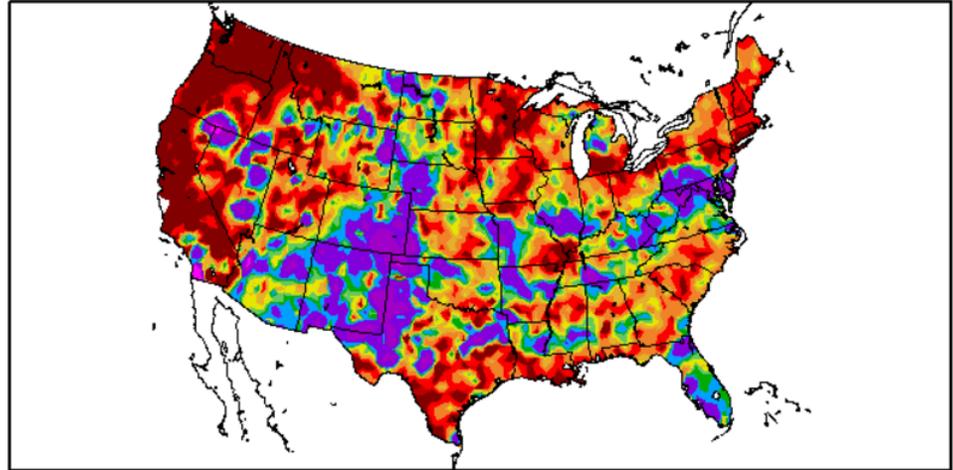
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for the continental U.S.

Percent of Normal Precipitation (%)
7/27/2017 - 8/2/2017

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



Generated 8/3/2017 at HPRCC using provisional data.

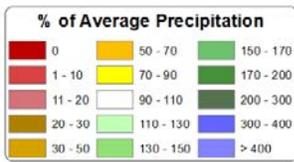
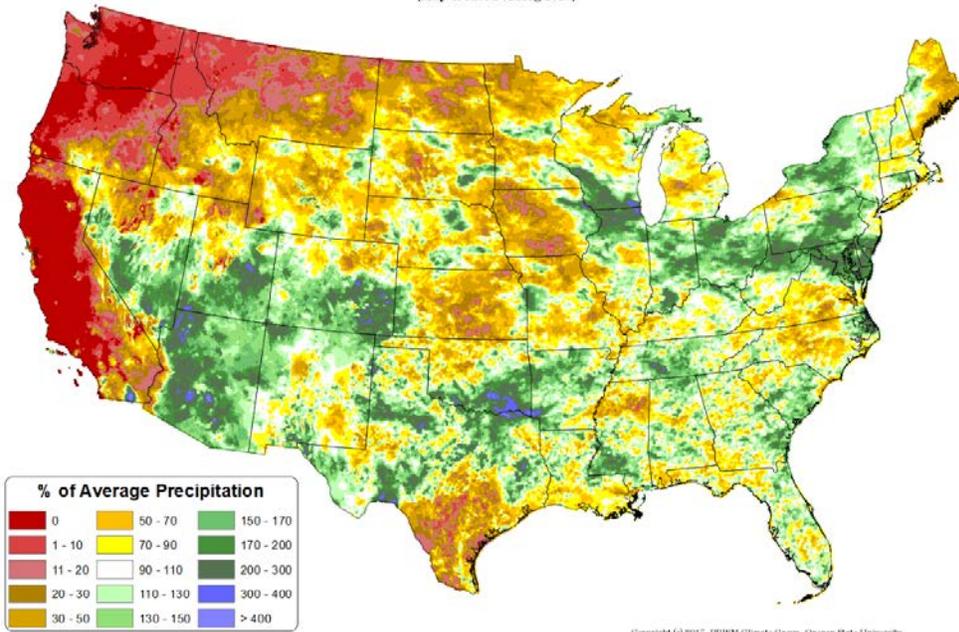
Regional Climate Centers

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: July 2017
Period ending 31 Jul 2017
Base period: 1981-2010
(Map created 02 Aug 2017)

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

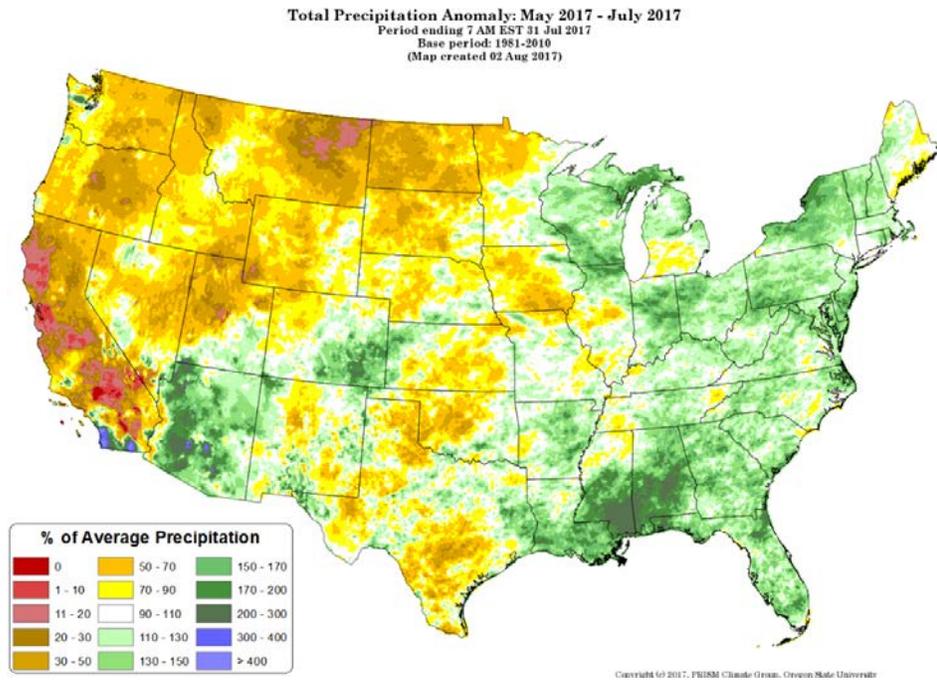


Copyright © 2017, PRISM Climate Group, Oregon State University

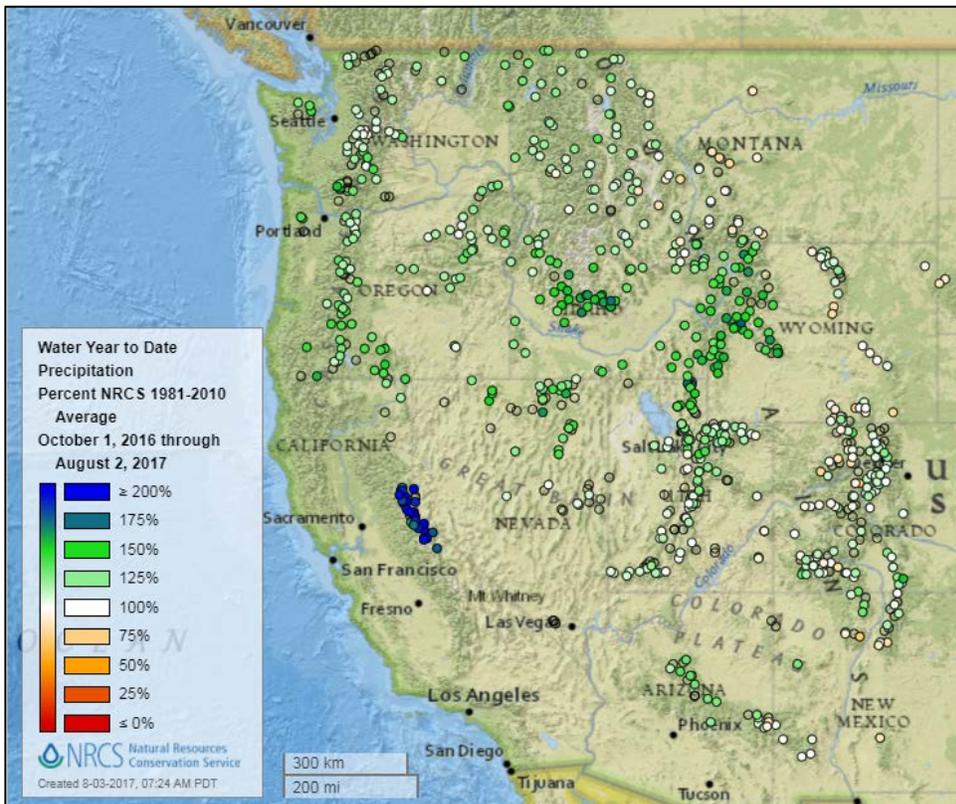
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[May through July 2017 daily mean precipitation anomaly map](#)



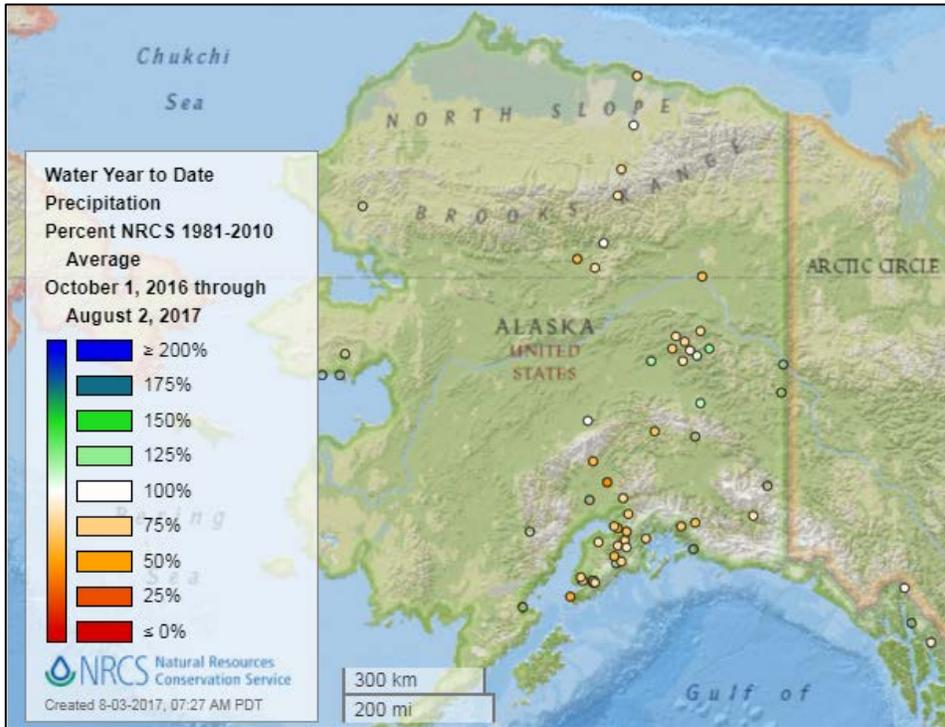
Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



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

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

Water and Climate Update



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

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

Temperature

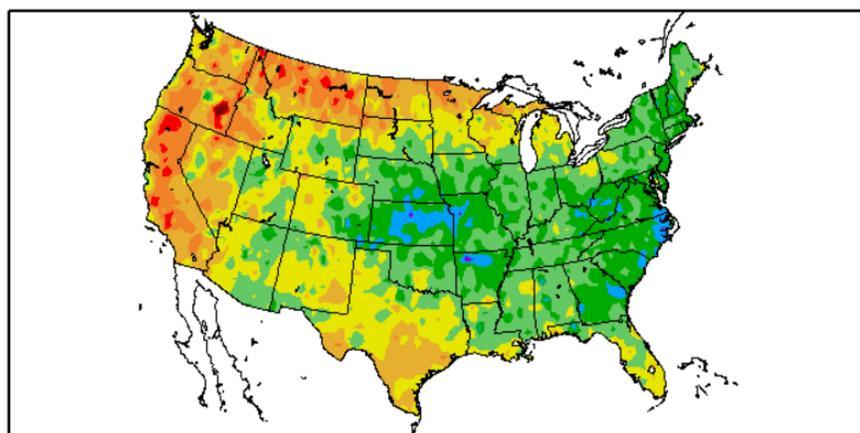
Last 7 Days, National Weather Service (NWS) Networks

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)
7/27/2017 – 8/2/2017



Generated 8/3/2017 at HPRCC using provisional data.

Regional Climate Centers

Water and Climate Update

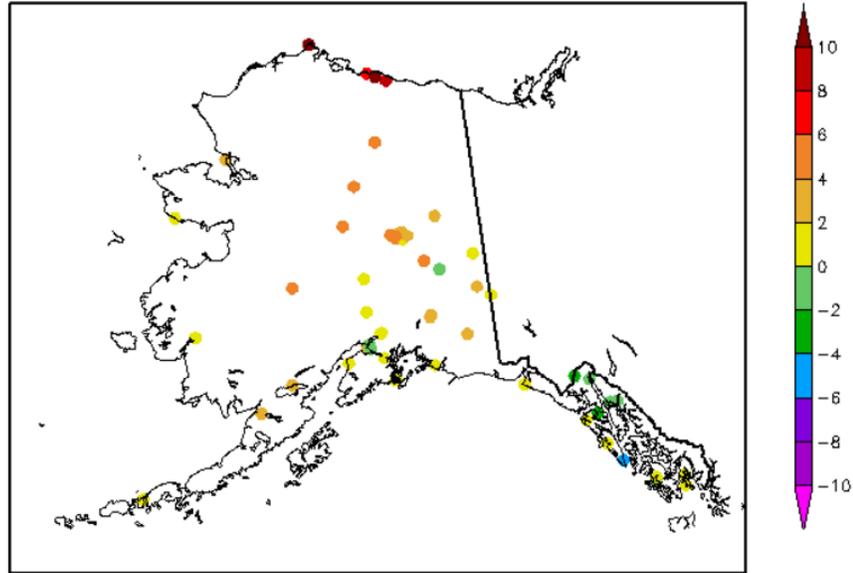
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F) 7/27/2017 – 8/2/2017



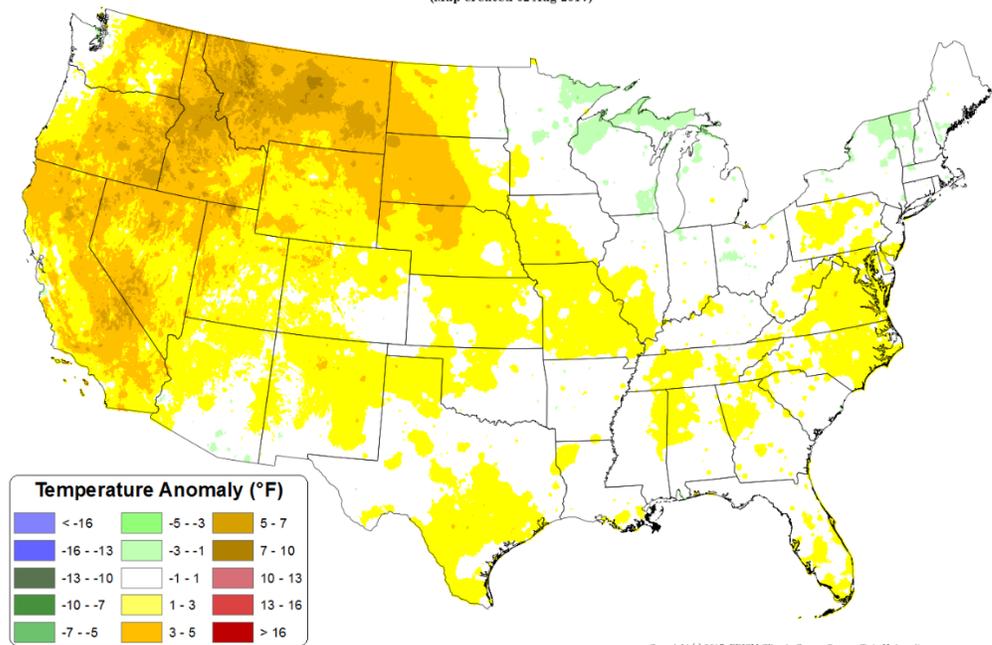
Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

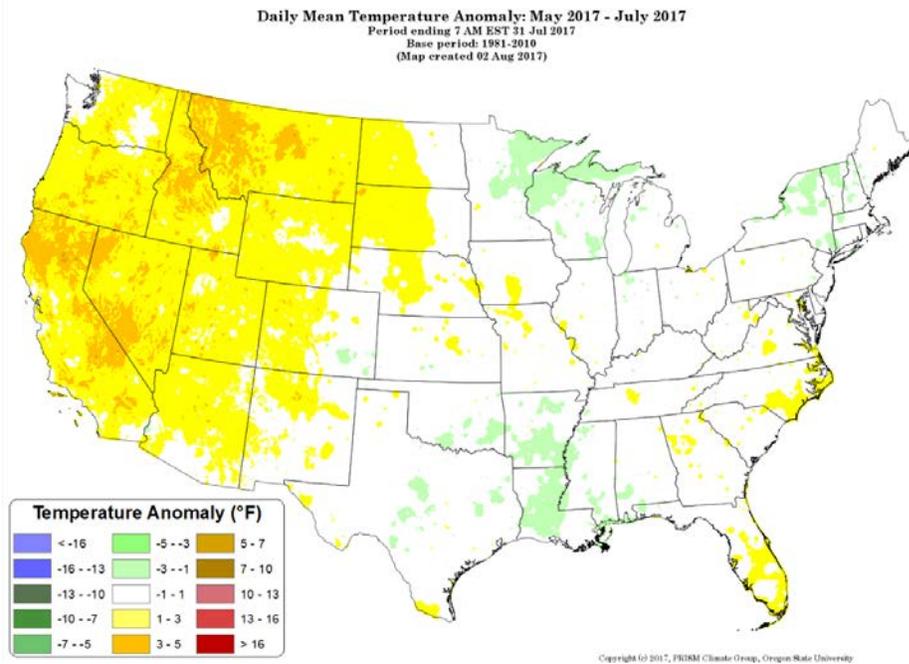
Daily Mean Temperature Anomaly: July 2017

Period ending 7 AM EST 31 Jul 2017
Base period: 1981-2010
(Map created 02 Aug 2017)



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

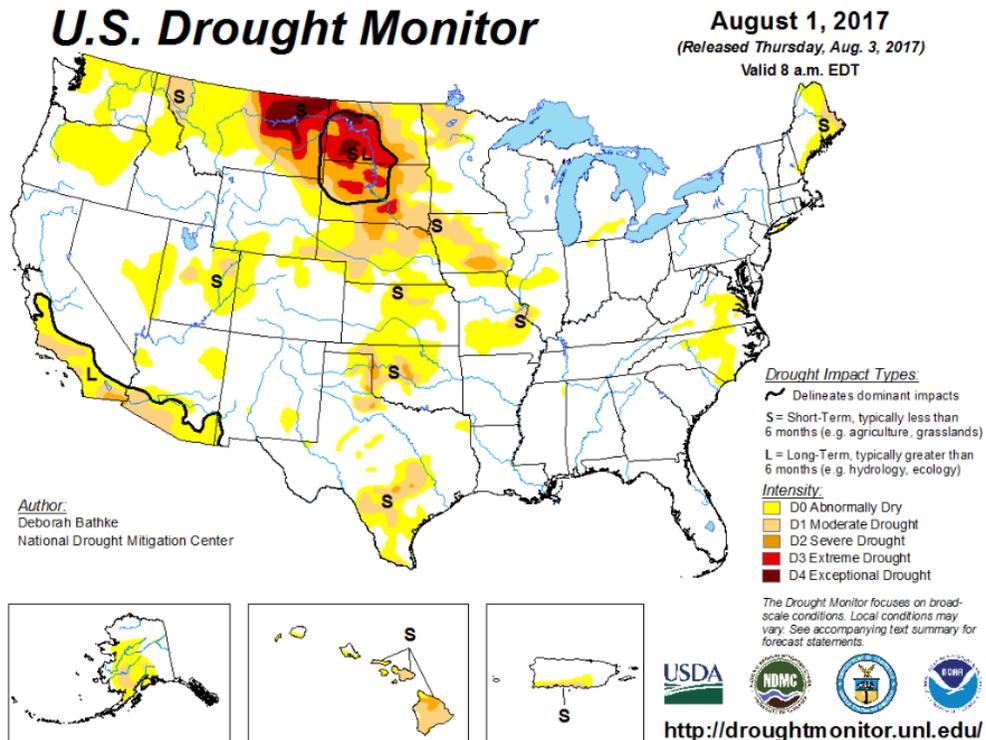
Source: PRISM



[May through July 2017 daily mean temperature anomaly map](#)

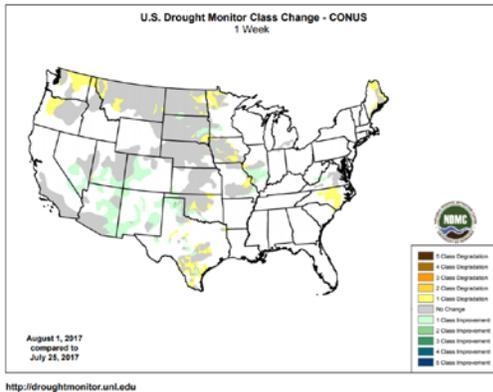
Drought

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

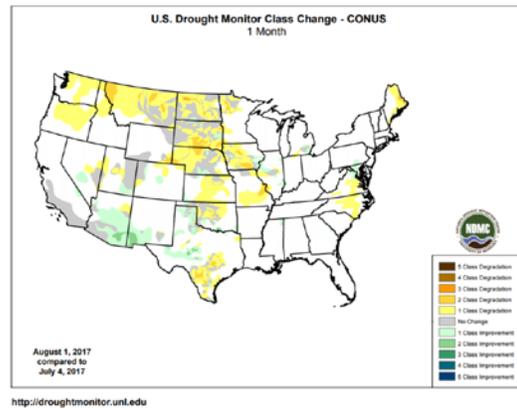


Changes in Drought Monitor Categories over Time

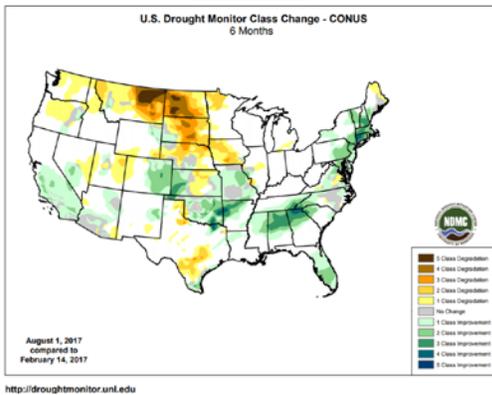
1 Week



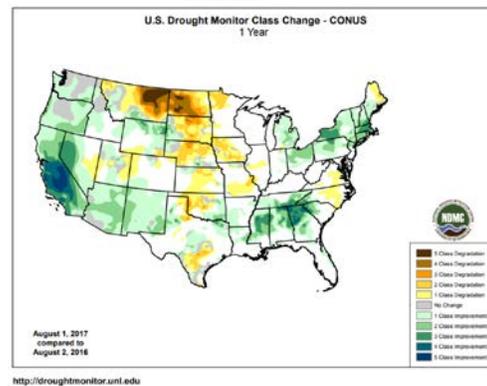
1 Month



6 Months



1 Year



Changes in drought conditions over the last 12 months

Current National Drought Summary, August 1, 2017

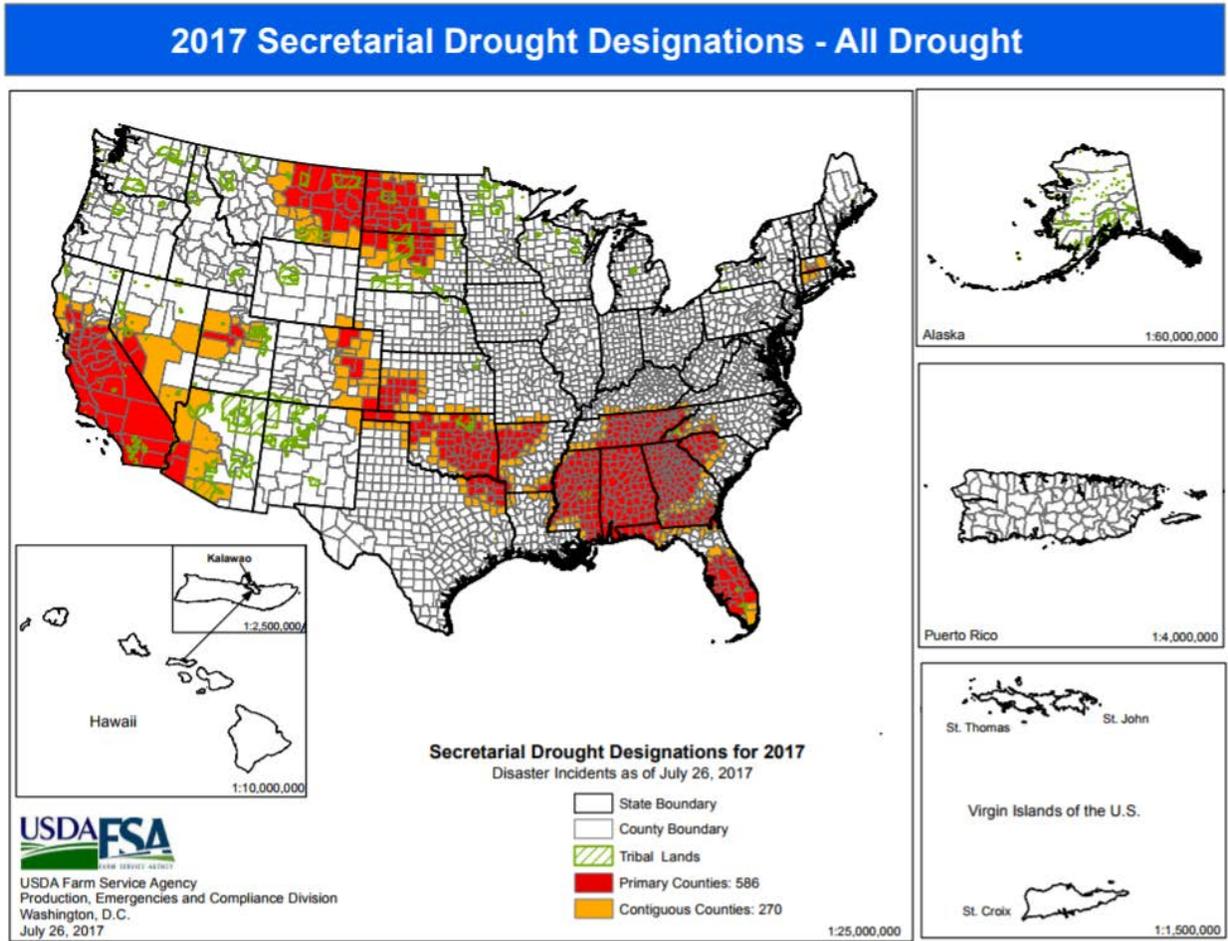
Author: Deborah Bathke, National Drought Mitigation Center

“Rain fell in much of the country last week with the greatest amounts occurring in a band that extended from the Southwest to the Great Plains and across much of the eastern half of the country. Rainfall bypassed the Northwest, south-central U.S., and parts of the north-central U.S. Continued precipitation deficits combined with above normal temperatures resulted in an expansion of abnormal dryness and drought. Seasonal monsoon showers in the Southwest alleviated lingering short-term dryness and began to chip away at the long-term deficits. Rainfall in the Plains and Midwest brought relief to a few locations and staved off degradation in others.”

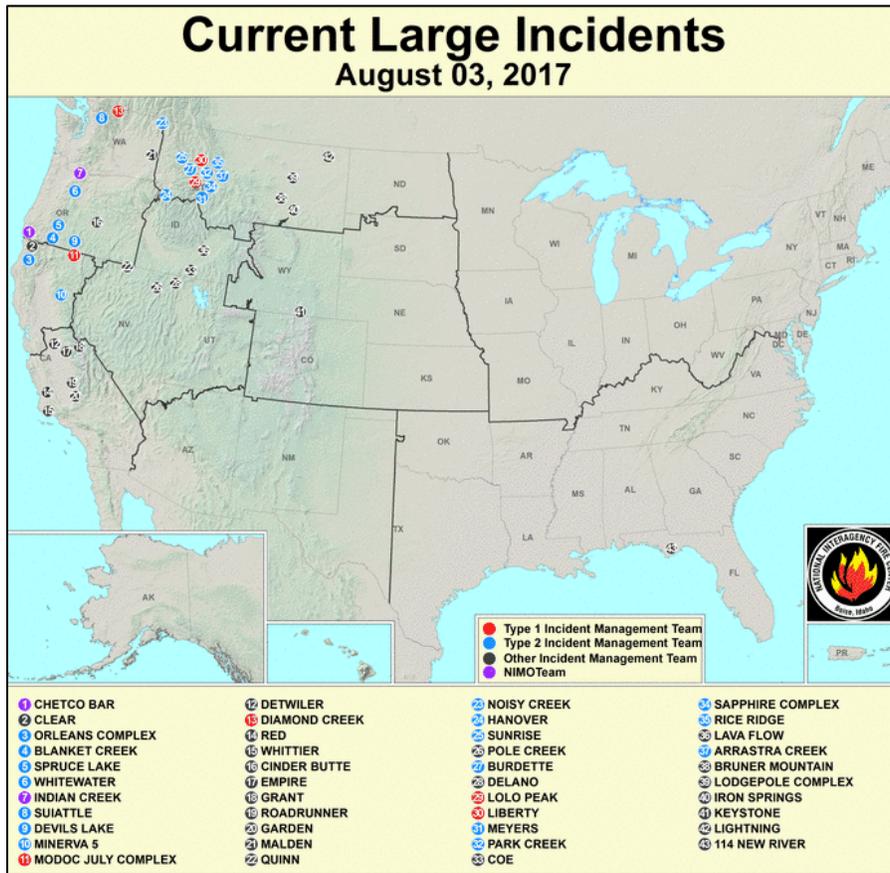
Highlighted Drought Resources

- [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](#)

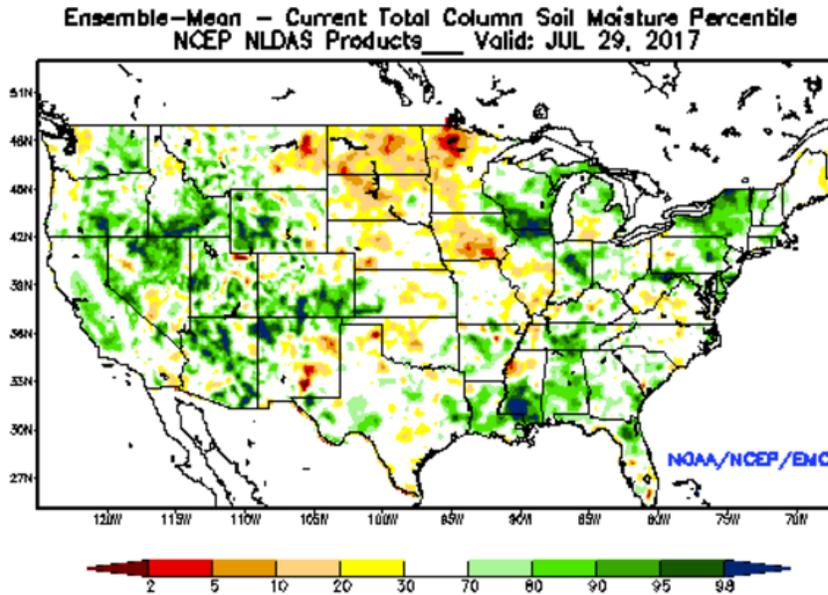


Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

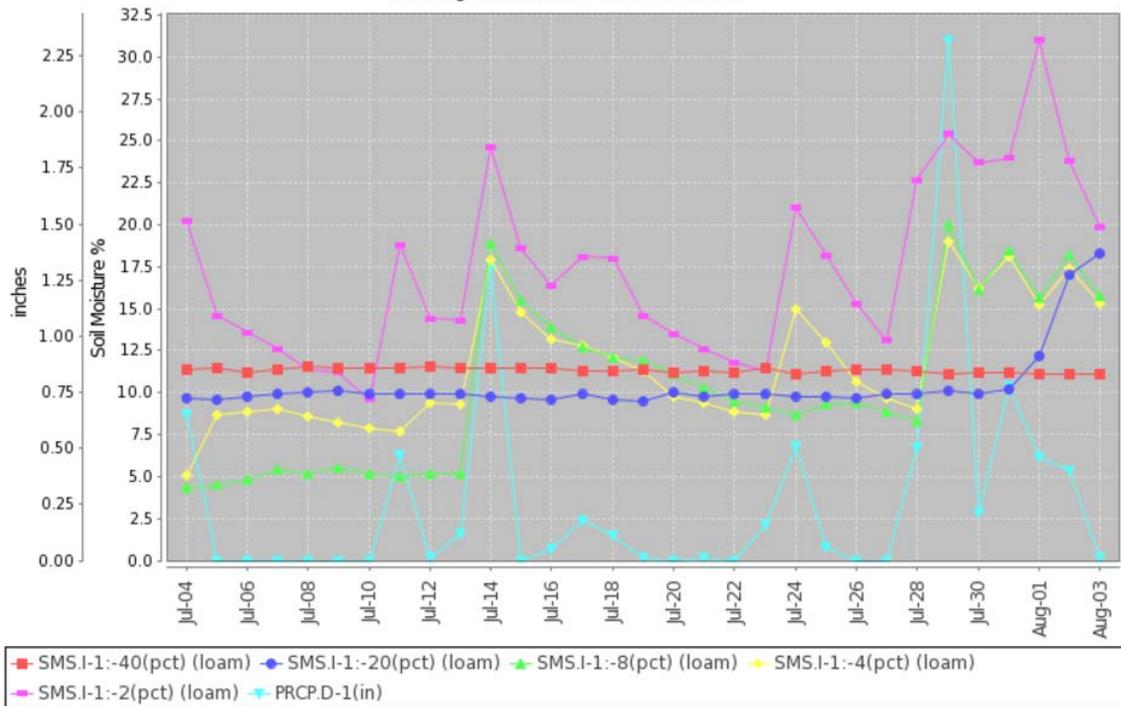
Soil Moisture



[Modeled soil moisture percentiles](#) as of July 29, 2017.

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

Station (2026) MONTH=2017-07-04 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Aug 03 06:41:24 GMT-08:00 2017



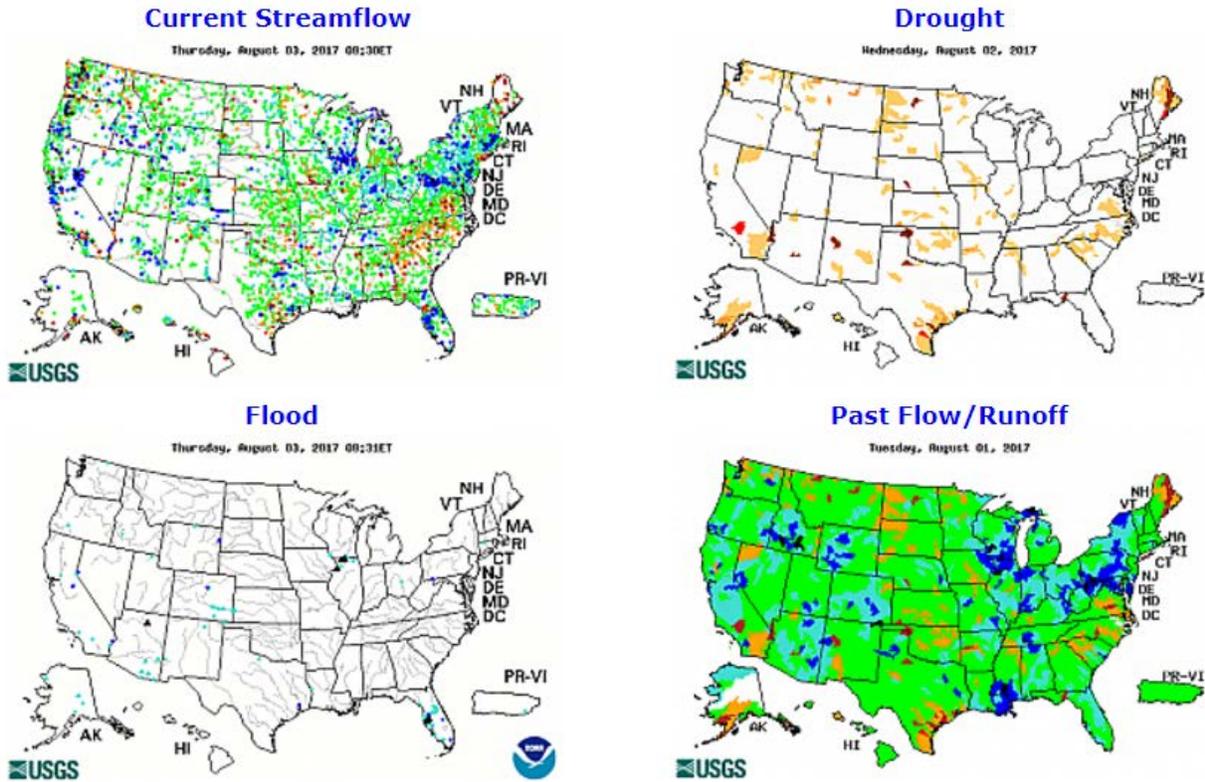
The chart shows precipitation and soil moisture for the last 30 days at the [Walnut Gulch #1 SCAN Site 2026](#) in south-central Arizona. Multiple precipitation events throughout the month increased soil moisture at the 2-, 4-, and 8-inch sensors. The precipitation events in late July increased soil moisture significantly at the 20-inch sensor, whereas the 40-inch sensor 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

Source: USGS



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

Reservoir Storage

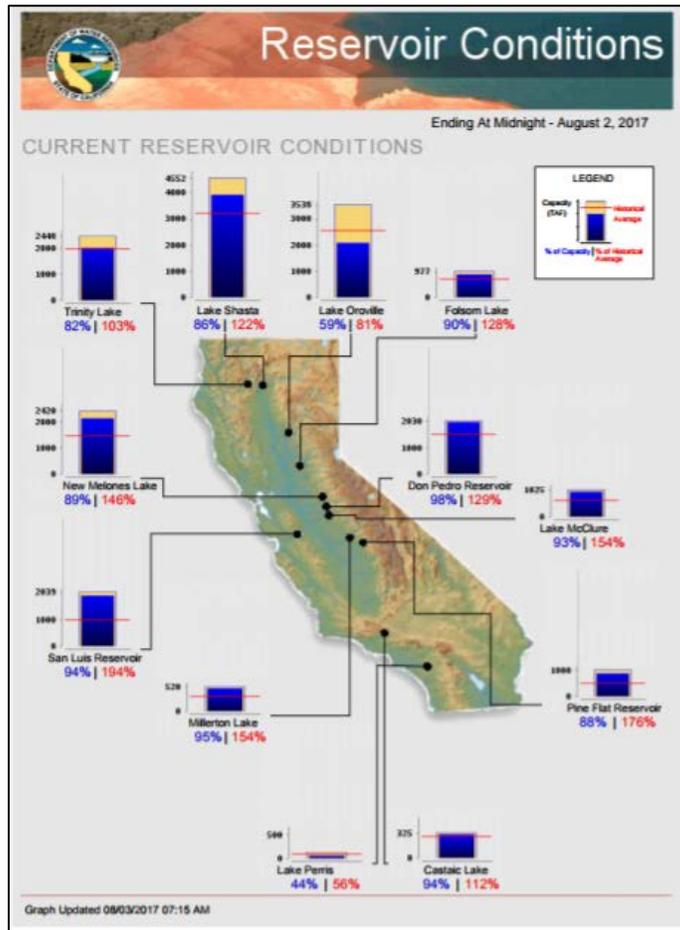
[National Water and Climate Center Reservoir Data](#)

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](#)

Water and Climate Update

California Current Reservoir Conditions



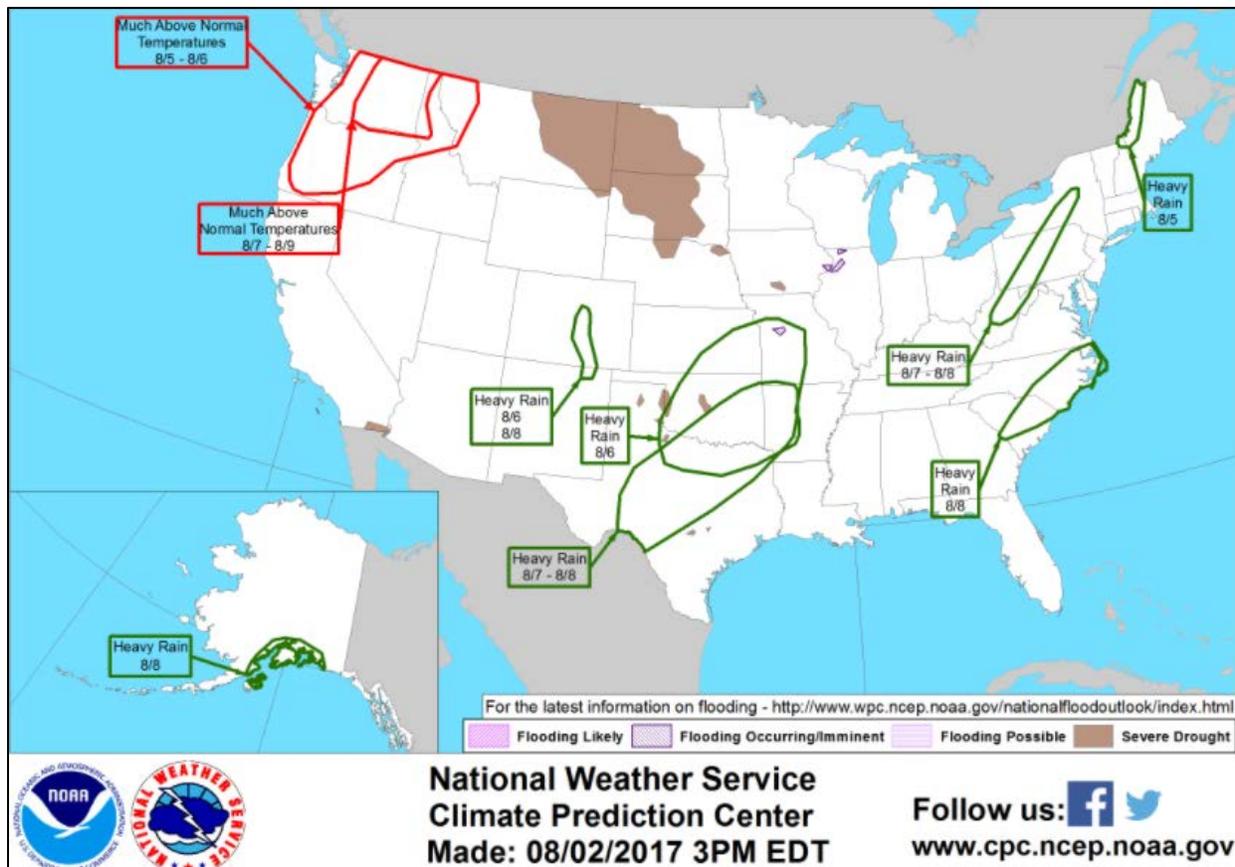
Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

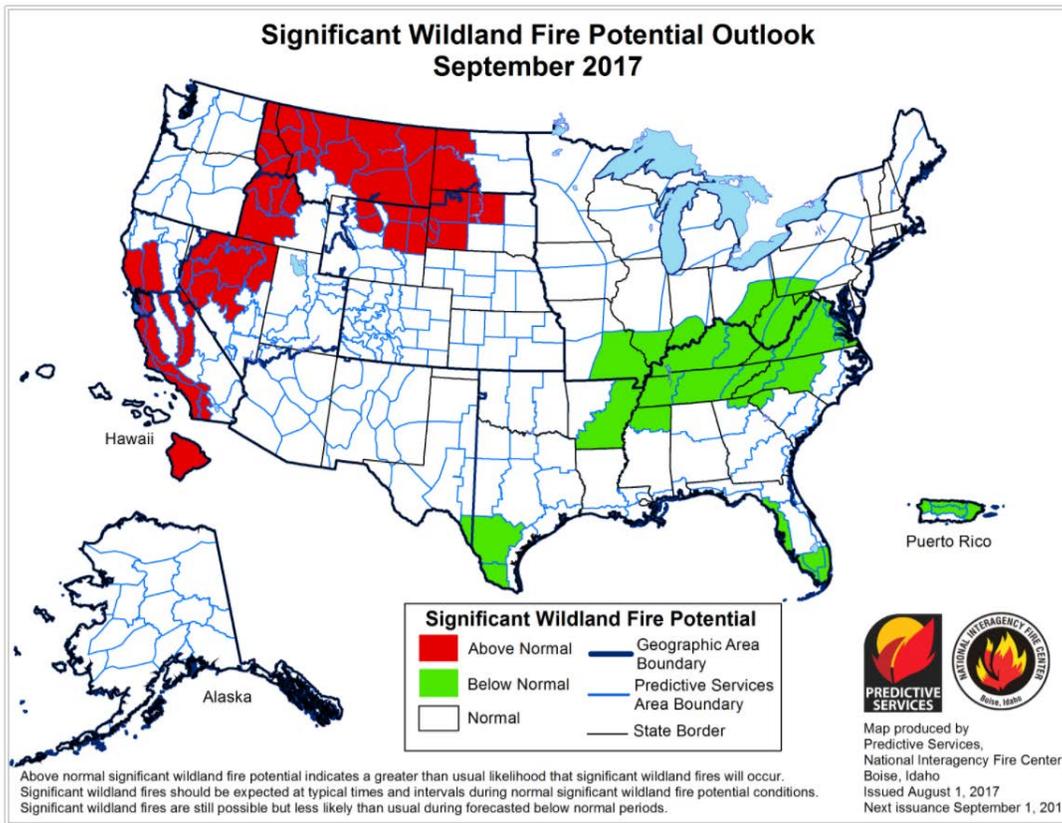
[National Outlook, Thursday, August 3, 2017](#): “Scorching, record-breaking heat will persist into next week across much of northern California and the Pacific Northwest. All-time temperature records could be threatened in some Northwestern locations. Conversely, a series of cold fronts will reinforce cooler-than-normal conditions throughout the nation’s mid-section. Monsoon showers will continue in parts of the Great Basin and Four Corners States, where rainfall could total 1 to 3 inches during the next 5 days. Additional rainfall of 1 to 4 inches can be expected in much of the central and eastern U.S., with the highest totals expected in conjunction with a developing low-pressure system from the central Plains to the Gulf Coast. The NWS 6- to 10-day outlook for August 8 – 12 calls for the likelihood of below-normal temperatures across a large swath of the country, particularly between the Rockies and Appalachians. Hotter-than-normal conditions will be limited to the Far West and areas along and near the Gulf and southern Atlantic Coasts. Meanwhile, below-normal rainfall across Arizona, Florida’s peninsula, and an area from the Pacific Northwest to the northern Plains, should contrast with wetter-than-normal weather across the remainder of the U.S.”

NWS Climate Prediction Center Weather Hazard Outlook: [August 5 - 9, 2017](#)



Significant Wildland [Fire Potential Outlook](#)

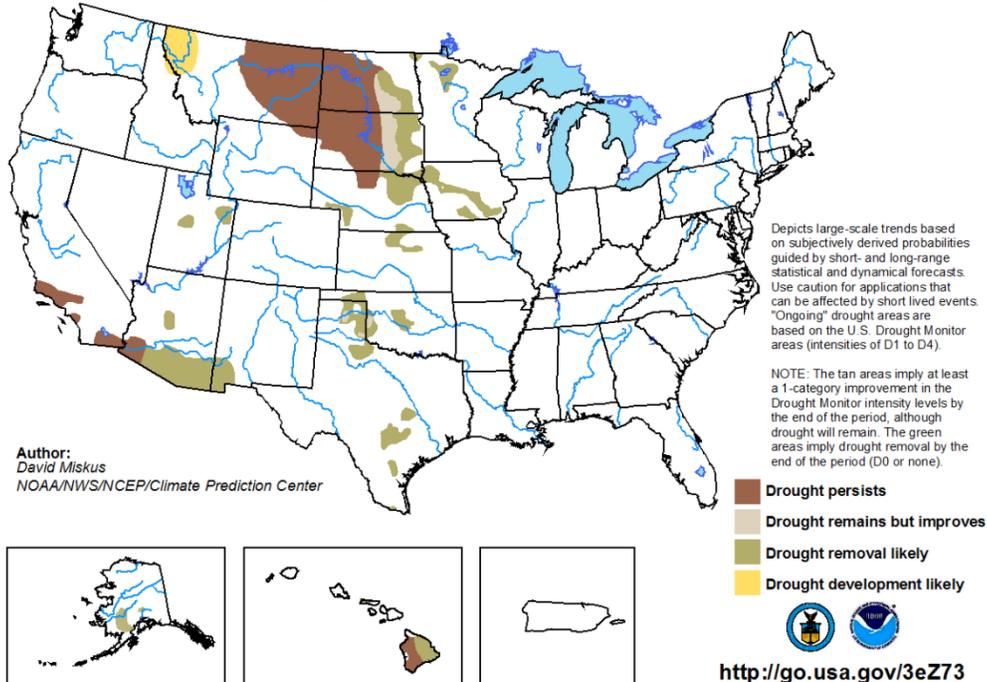
Source: National Interagency Fire Center



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

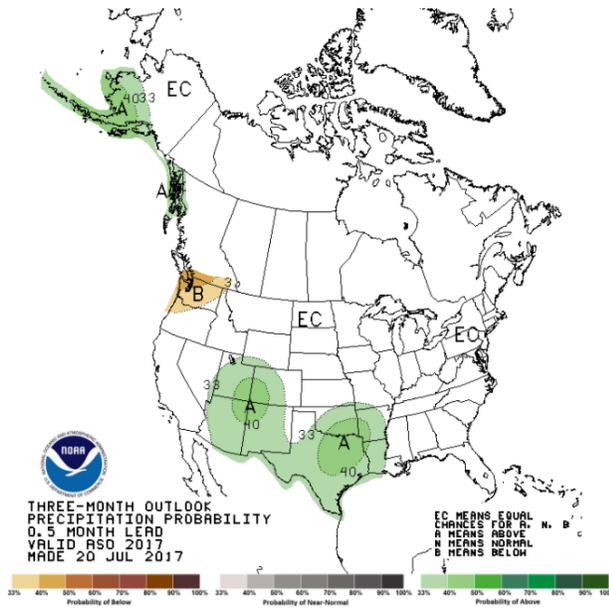
U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

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

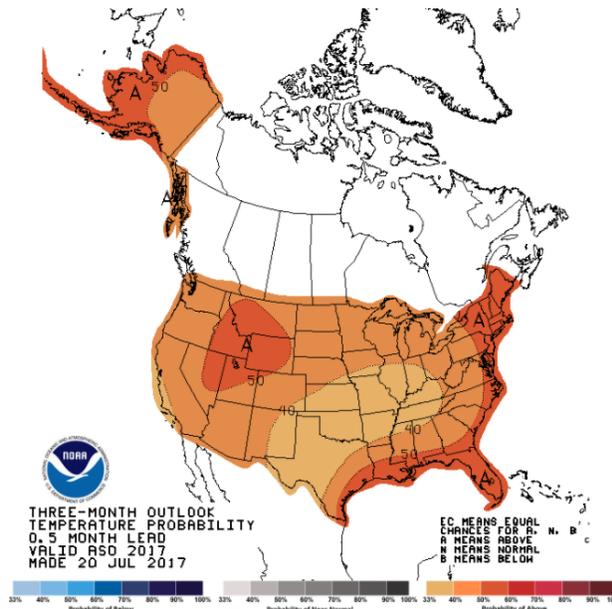


NWS Climate Prediction Center 3-Month Outlook

[Precipitation](#)



[Temperature](#)



[Aug-Sep-Oct \(ASO\) 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](#).