

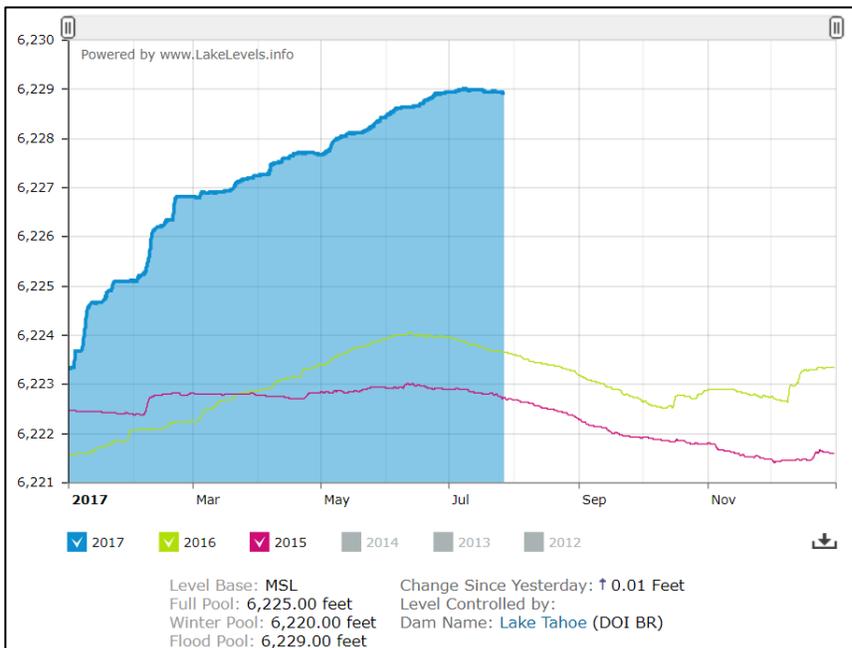
# Water and Climate Update

July 27, 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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## Lake Tahoe nearing capacity after almost 11 years



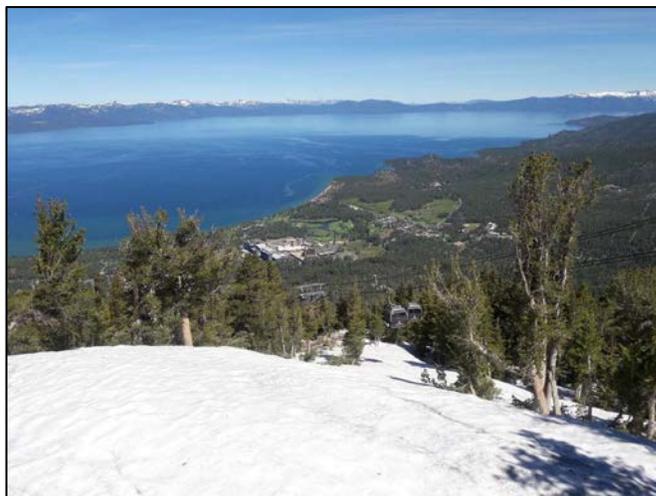
As a result of record snowpack and warm spring temperatures in the Sierra Nevada this season, Lake Tahoe is nearing capacity for the first time since 2006.

After sustaining record-low levels through the recent five-year drought, the lake peaked at 6,229.00 feet in early July. This comes very close to full capacity of 6,229.10 feet, a level which hasn't been reached in over a decade.

**Related:**

[It's been 11 years since this happened to Lake Tahoe, and it's beautiful](#), SFGate

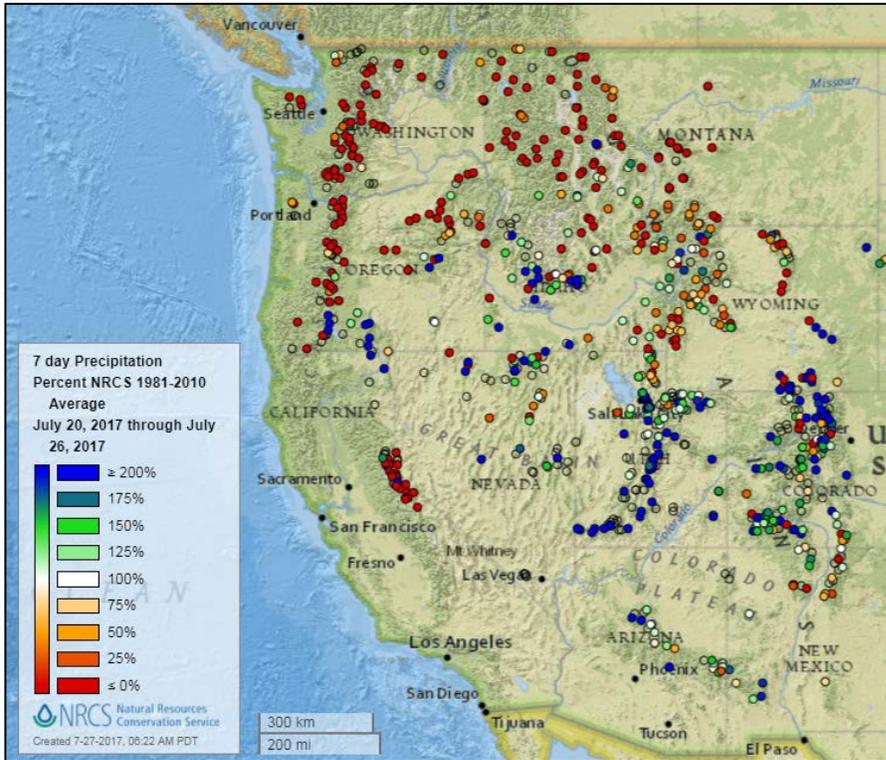
[Lake Tahoe Nears Full Capacity for first time in 11 Years](#), The Weather Channel



At right: From a mountain still packed with snow, Lake Tahoe at near capacity in June 2017. Photo: J.L. McFadden

## Precipitation

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

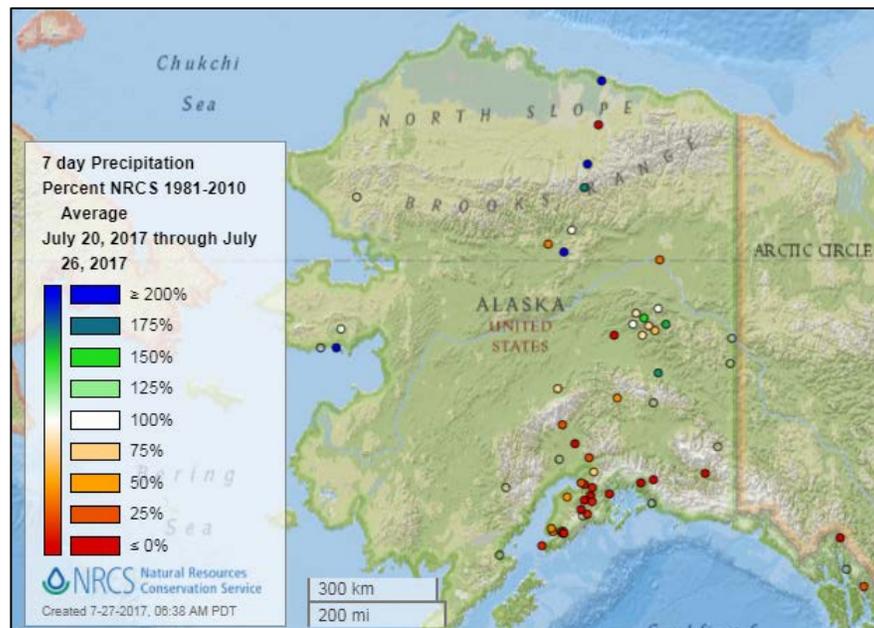


[7-day precipitation percent of average map](#)

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

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

**See also:**  
HYPERLINK  
"https://go.usa.gov/x/Rj4K" | [Alaska 7-day total precipitation values \(inches\) map](#)



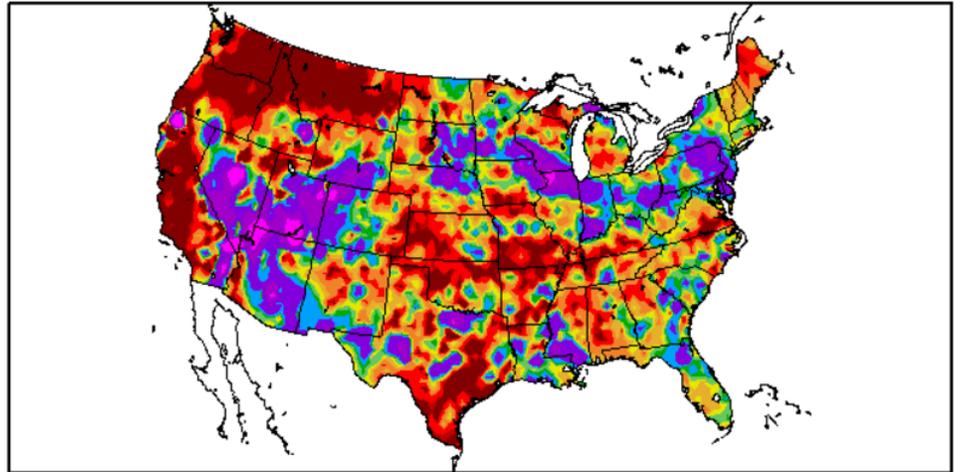
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)  
7/20/2017 - 7/26/2017

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



Generated 7/27/2017 at HPRCC using provisional data.

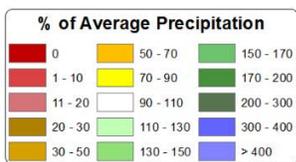
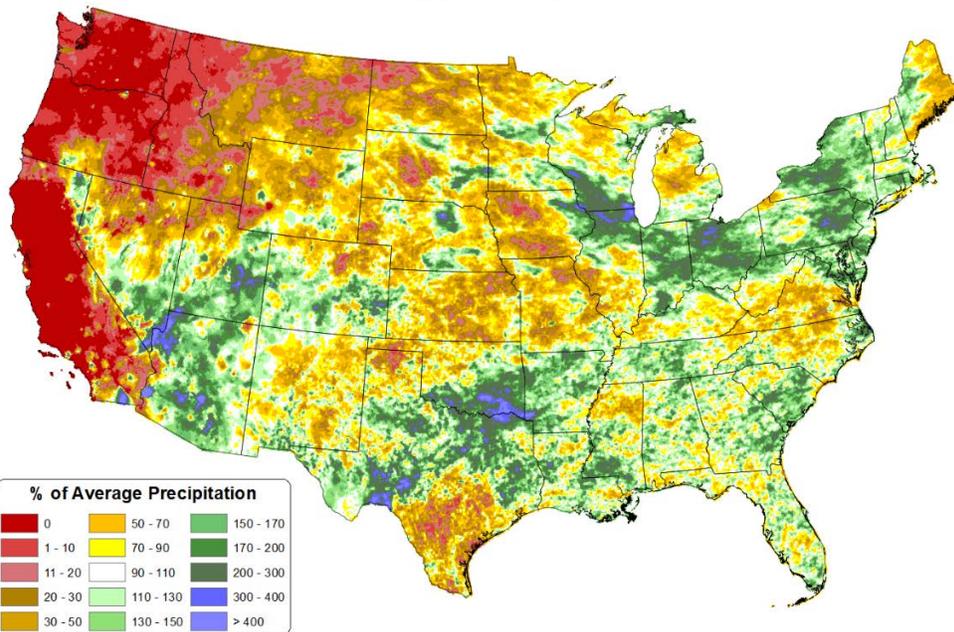
Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 July 2017 - 26 July 2017  
Period ending 7 AM EST 26 Jul 2017  
Base period: 1981-2010  
(Map created 27 Jul 2017)

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



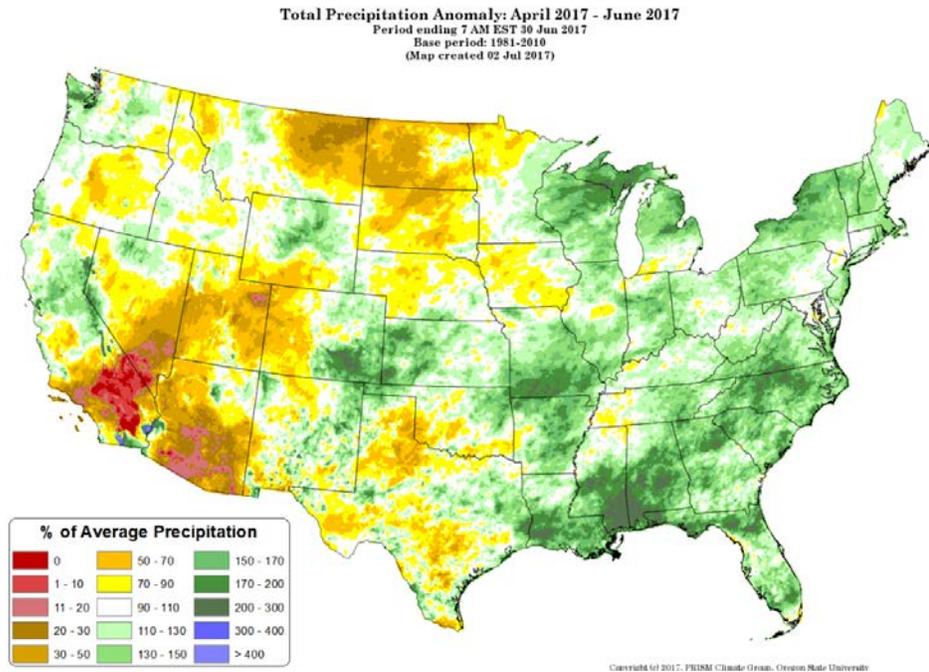
Copyright © 2017, PRISM Climate Group, Oregon State University

# Water and Climate Update

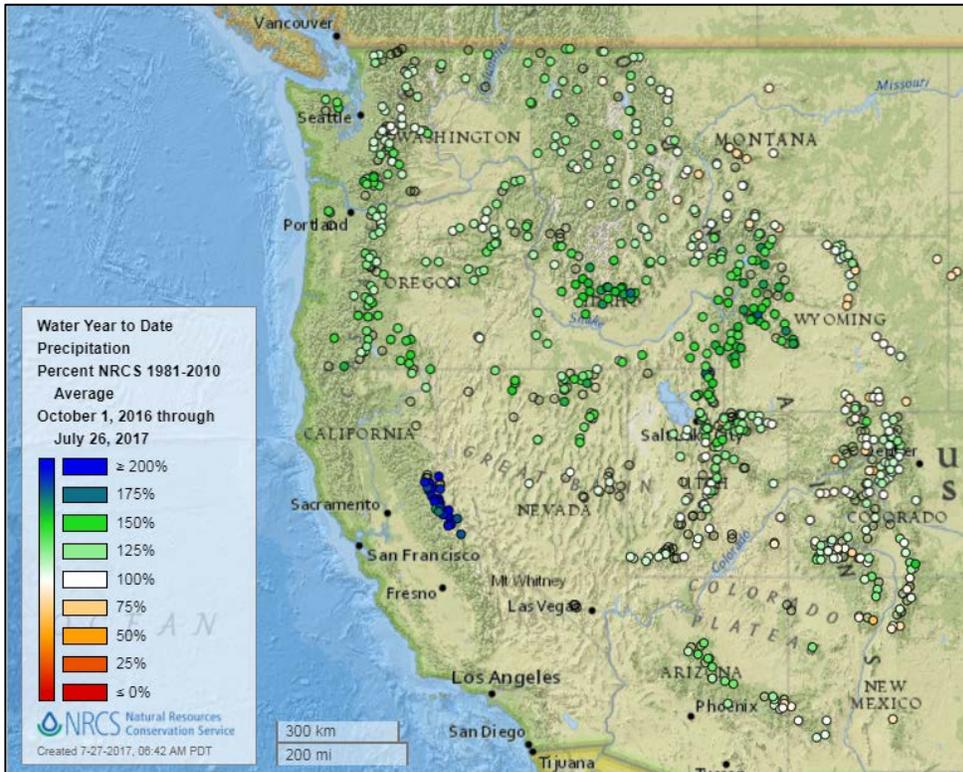
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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



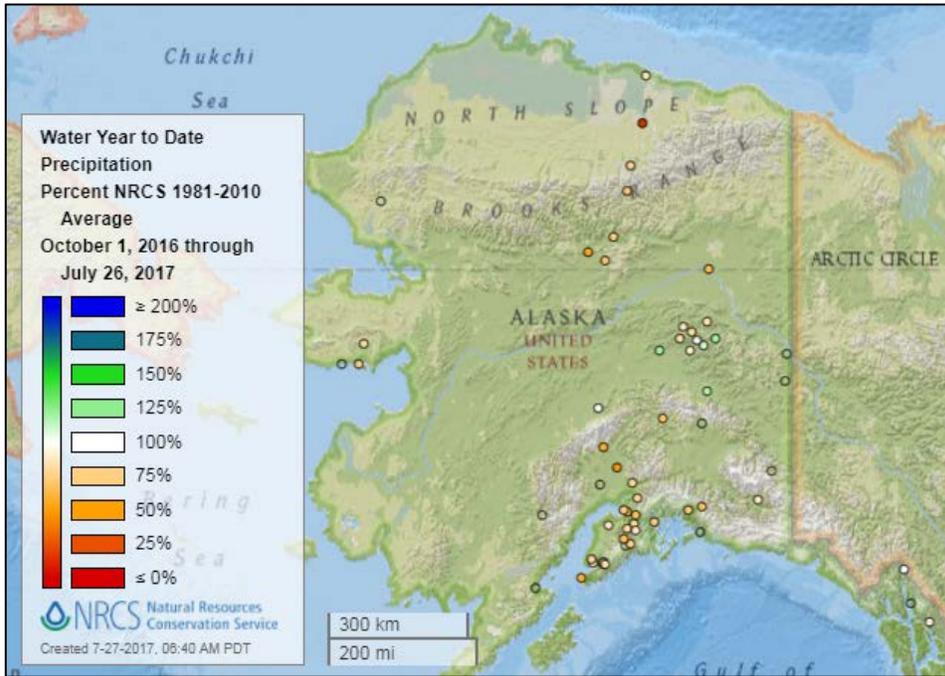
## Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



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

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

# 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

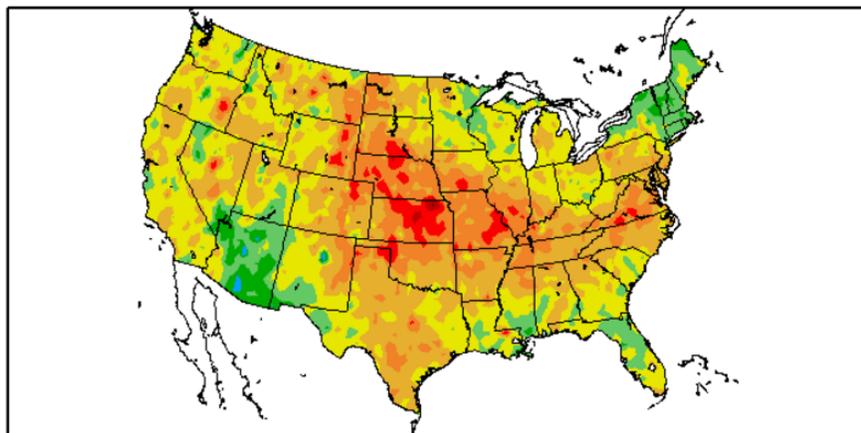
Last 7 Days, National Weather Service (NWS) Networks

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)  
7/20/2017 - 7/26/2017



Generated 7/27/2017 at HPRCC using provisional data.

Regional Climate Centers

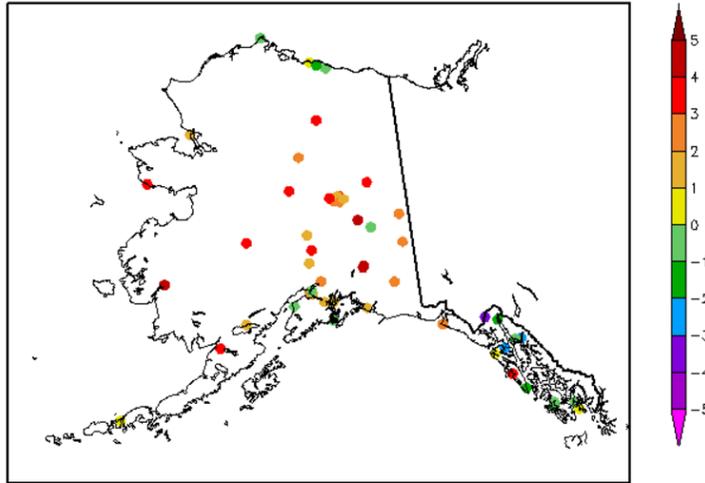
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
7/20/2017 - 7/26/2017

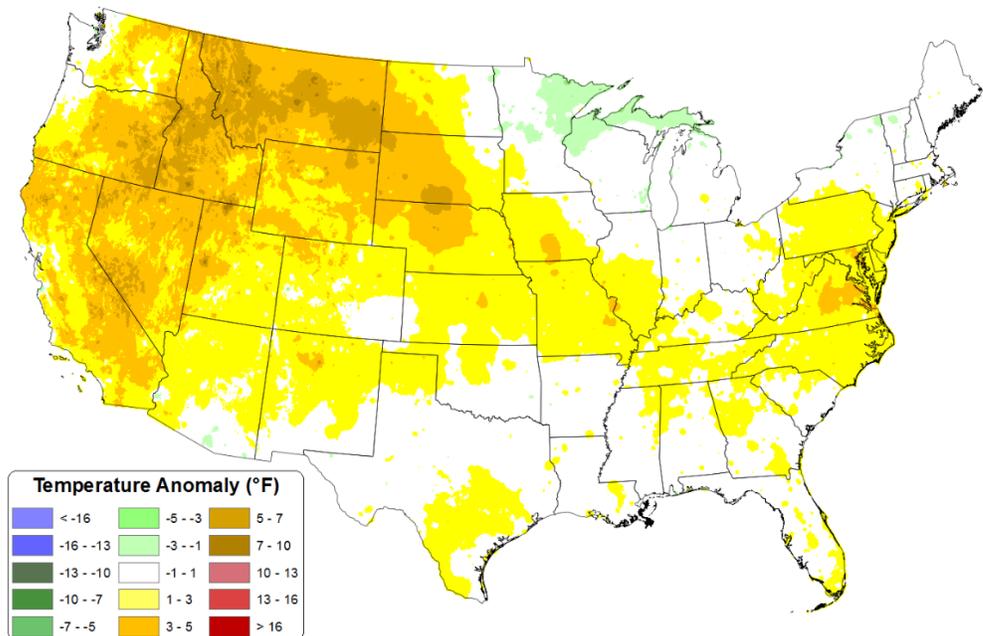


Month-to-Date, All Available Data Including SNOTEL and NWS Networks

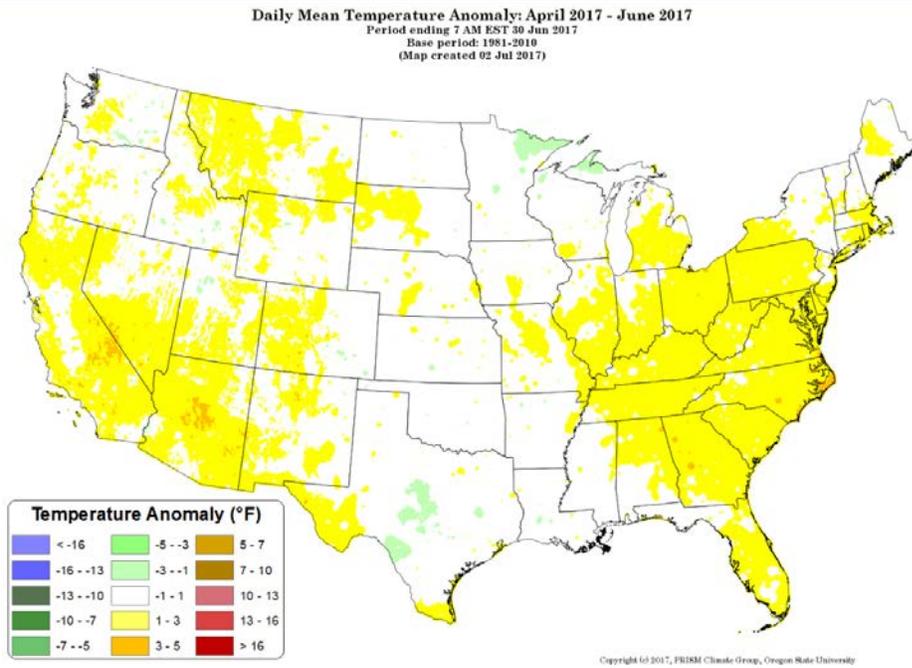
Source: PRISM

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

Daily Mean Temperature Anomaly: 01 July 2017 - 26 July 2017  
Period ending 7 AM EST 26 Jul 2017  
Base period: 1981-2010  
(Map created 27 Jul 2017)



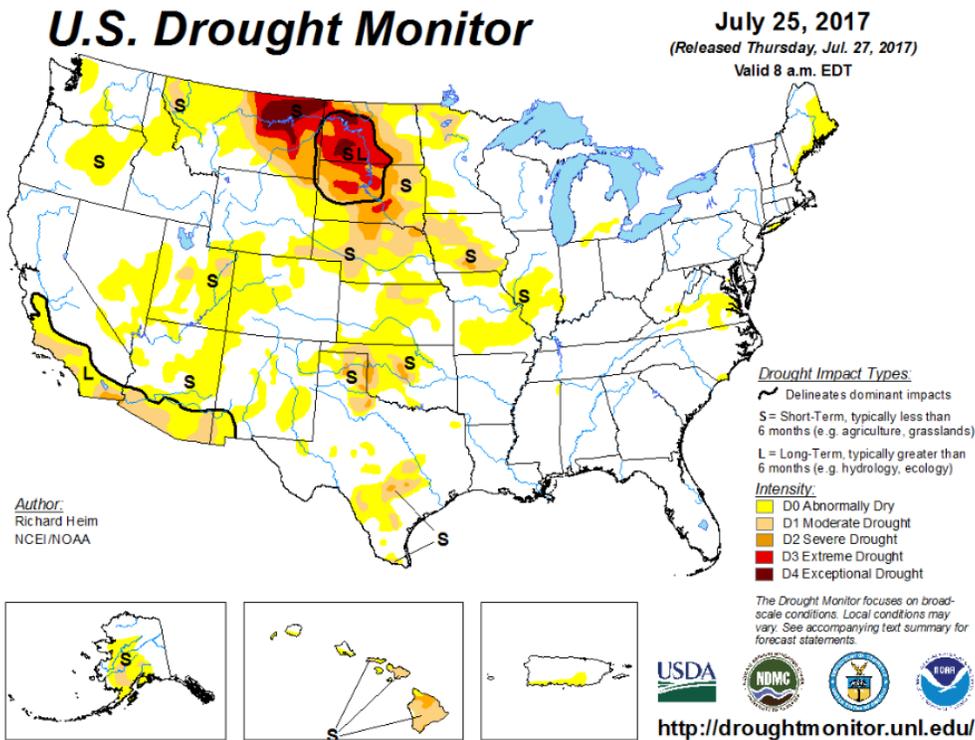
Copyright © 2017, PRISM Climate Group, Oregon State University



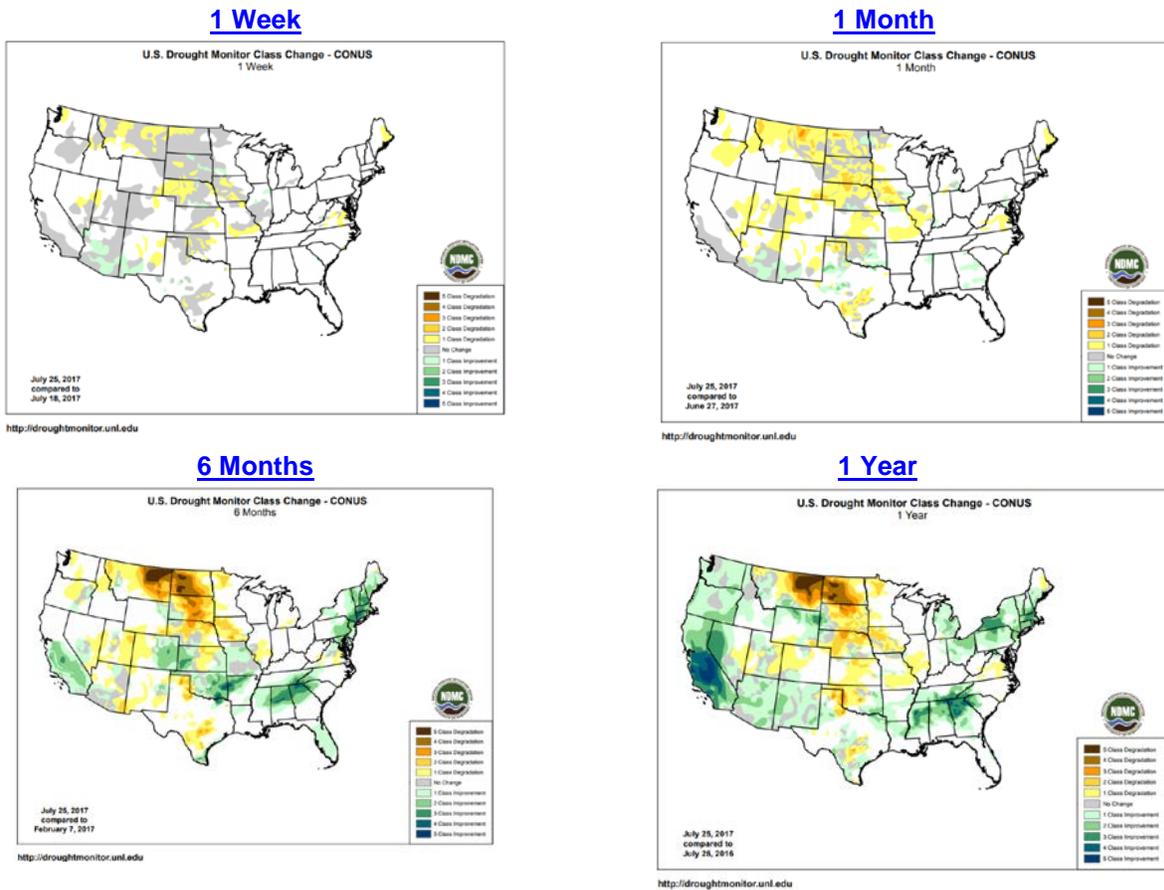
[April through June 2017 daily mean temperature anomaly map](#)

## Drought

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



## Changes in Drought Monitor Categories over Time



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

## Current National [Drought Summary](#), July 25, 2017

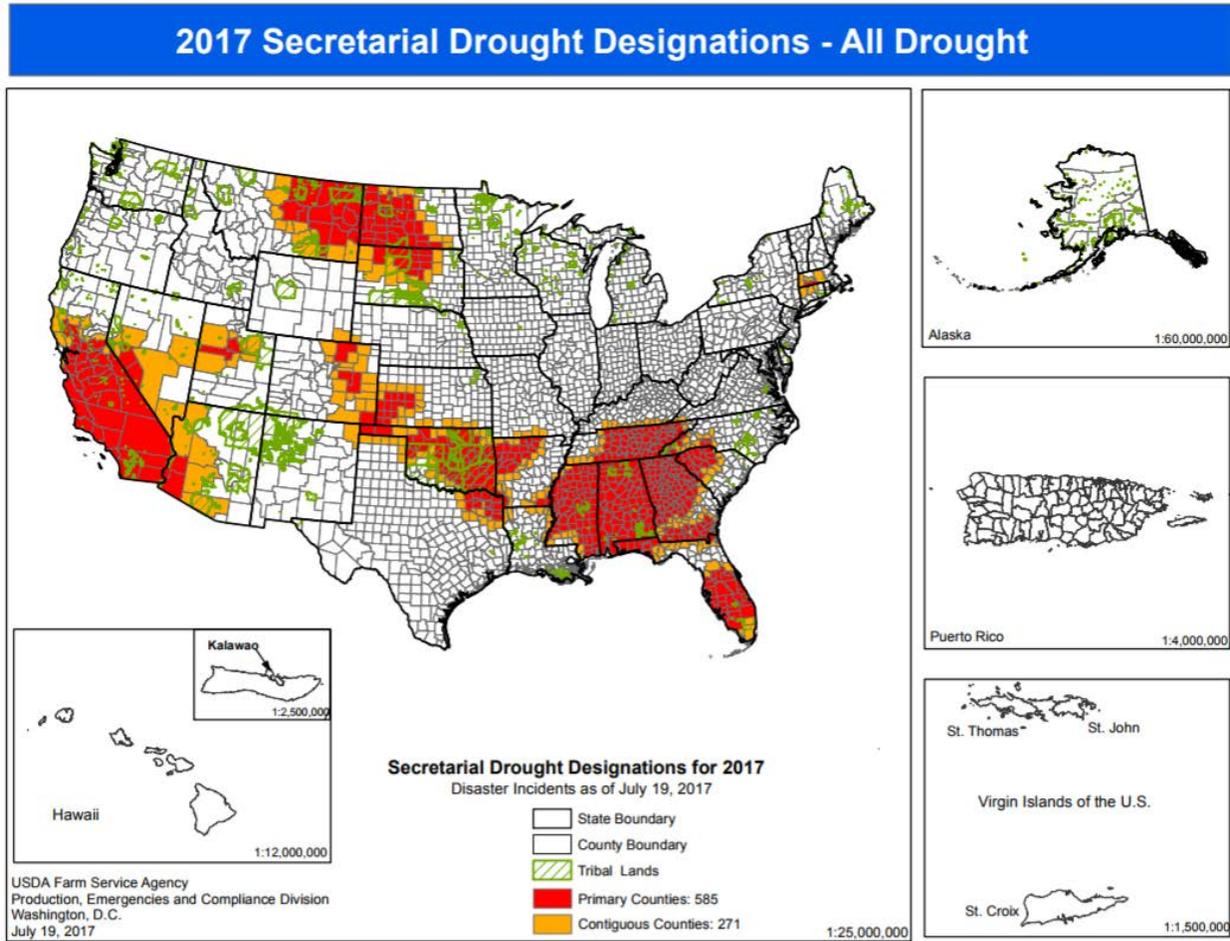
Author: Richard Heim, NOAA/NCEI

“An upper-level ridge of high pressure maintained its grip across the contiguous U.S. (CONUS) during this U.S. Drought Monitor (USDM) week. The ridge kept temperatures warmer than normal from coast to coast, with the highest temperature departures from the High Plains to Mid-Atlantic States. Weather systems moving in the jet stream flow rode over the top of the ridge, taking their surface lows and Pacific fronts along a northerly track into a trough over the eastern CONUS where they stalled out across the Midwest. Showers and thunderstorms developed as the fronts moved across the northern Plains and into the Midwest, but rainfall amounts were mostly below normal. Above-normal precipitation fell in places along the North Dakota/South Dakota border, from northeast South Dakota to northern Illinois, from the Ohio Valley to Mid-Atlantic States, and across parts of Nebraska and Kansas. Above-normal precipitation fell across parts of the southern Plains to Southeast as afternoon heating triggered convective storms, and a front near the end of the week sagged south. The Southwest Monsoon continued this week, bringing above-normal precipitation to much of the 4-Corners States and contracting drought and abnormal dryness. But drier-than-normal weather dominated the rest of the West, most of the Plains, much of the Midwest and South, and parts of the Mid-Atlantic and New England. Soils continued to dry out and crops suffered as drought and abnormal dryness continued to expand or intensify across the Plains, Midwest, northern Rockies, and Virginia.”

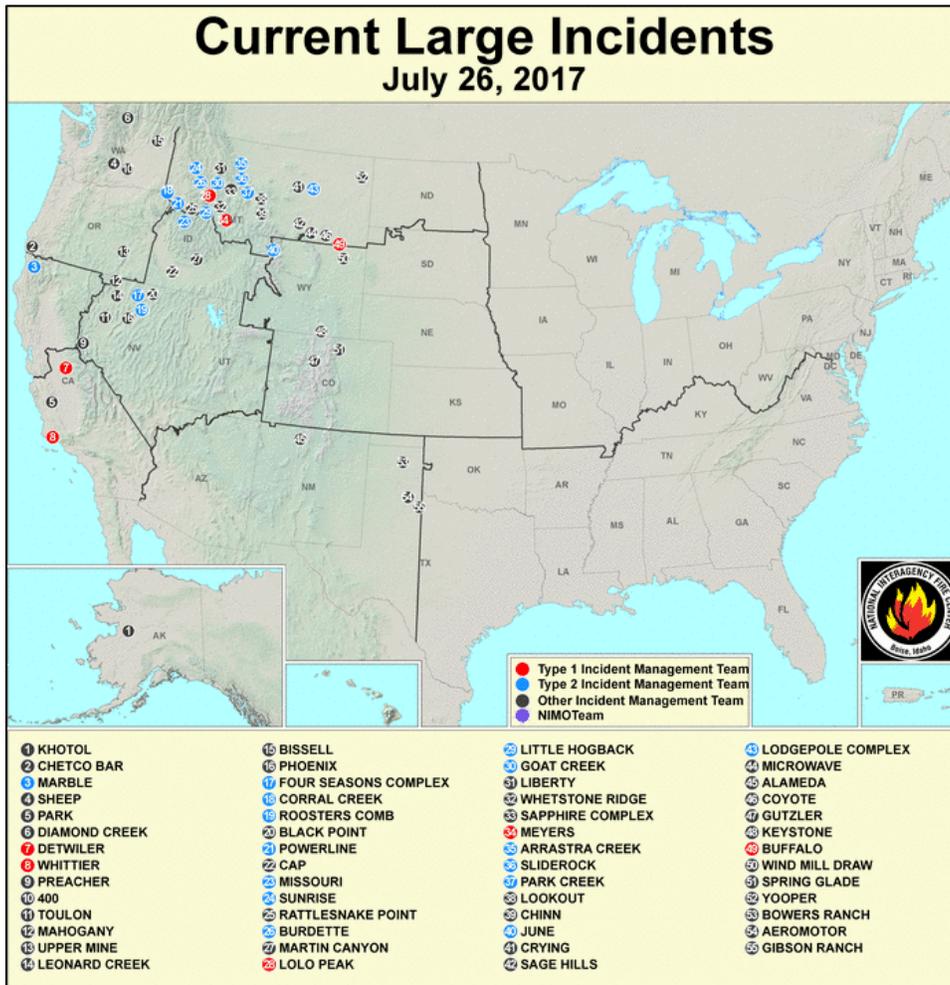
### Highlighted Drought Resources

- [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](#)

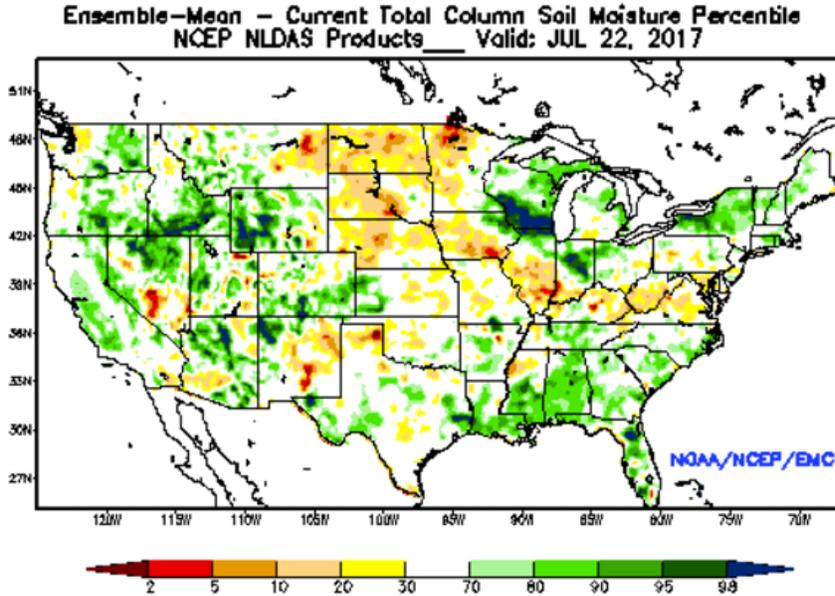


Highlighted Wildfire Resources

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

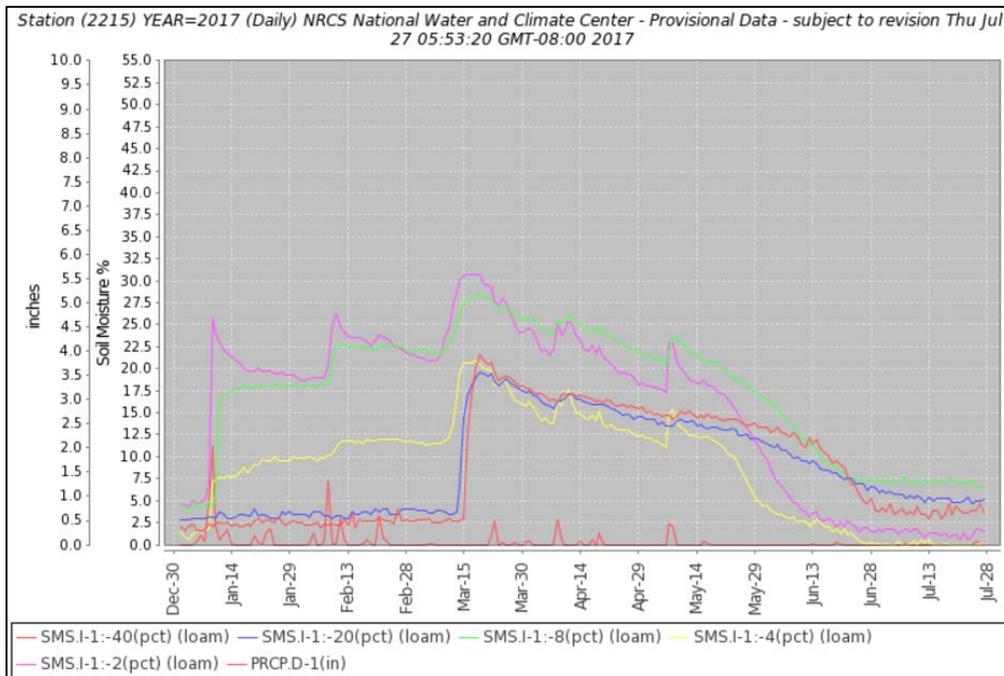
## Other Climatic and Water Supply Indicators

### Soil Moisture



[Modeled soil moisture percentiles](#) as of July 22, 2017.

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



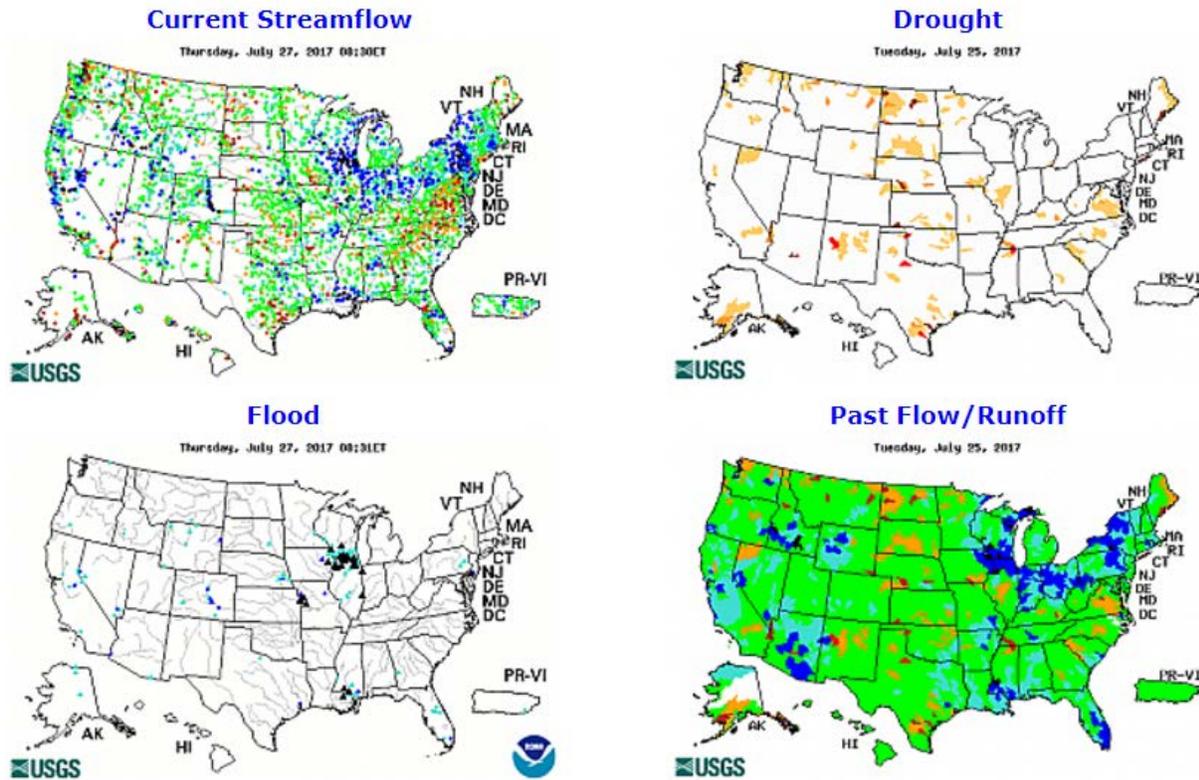
The chart shows liquid precipitation and soil moisture for the 2017 calendar year at the [Bodie Hills SCAN Site 2215](#) located south of Lake Tahoe, CA. Multiple precipitation events in January and February increased soil moisture at the 2-, 4-, and 8-inch sensors. A temperature surge the week of March 9 resulted in a significant increase in soil moisture at all sensor levels. Since then, the site has seen a gradual decrease in soil moisture, possibly due to snowmelt.

### 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

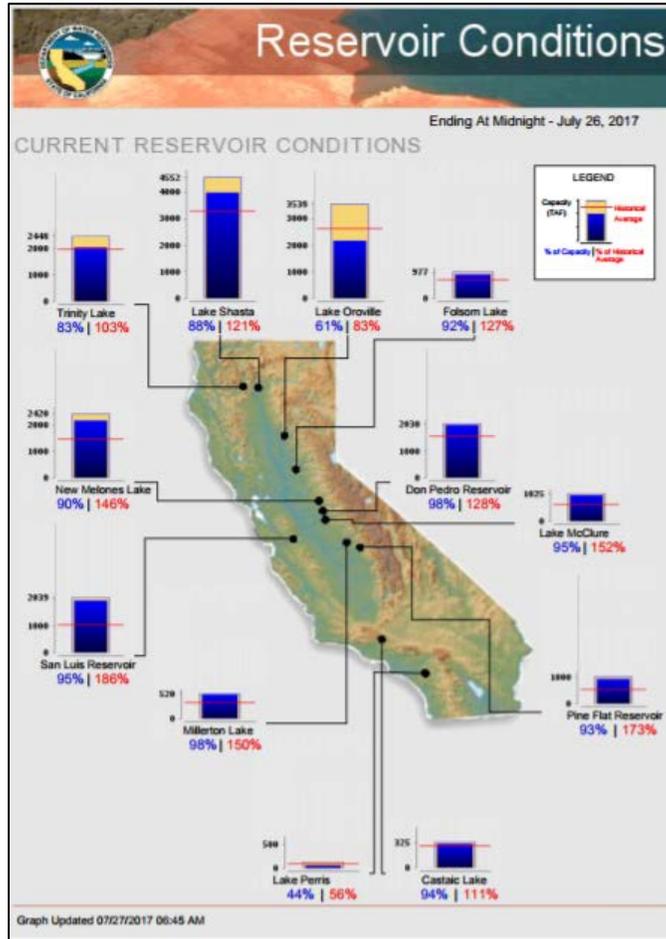
[National Water and Climate Center Reservoir Data](#)

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



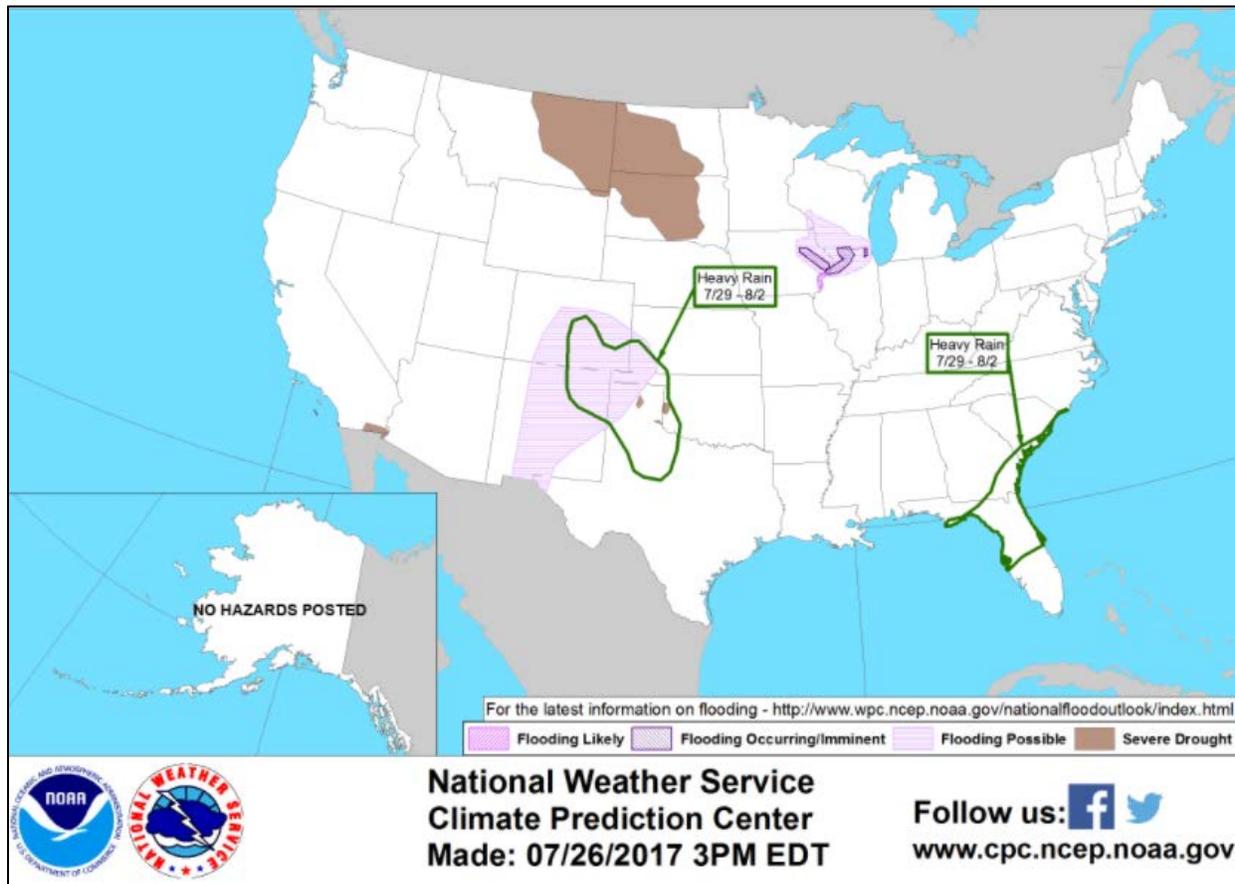
## Short- and Long-Range Outlooks

### Agricultural Weather Highlights

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

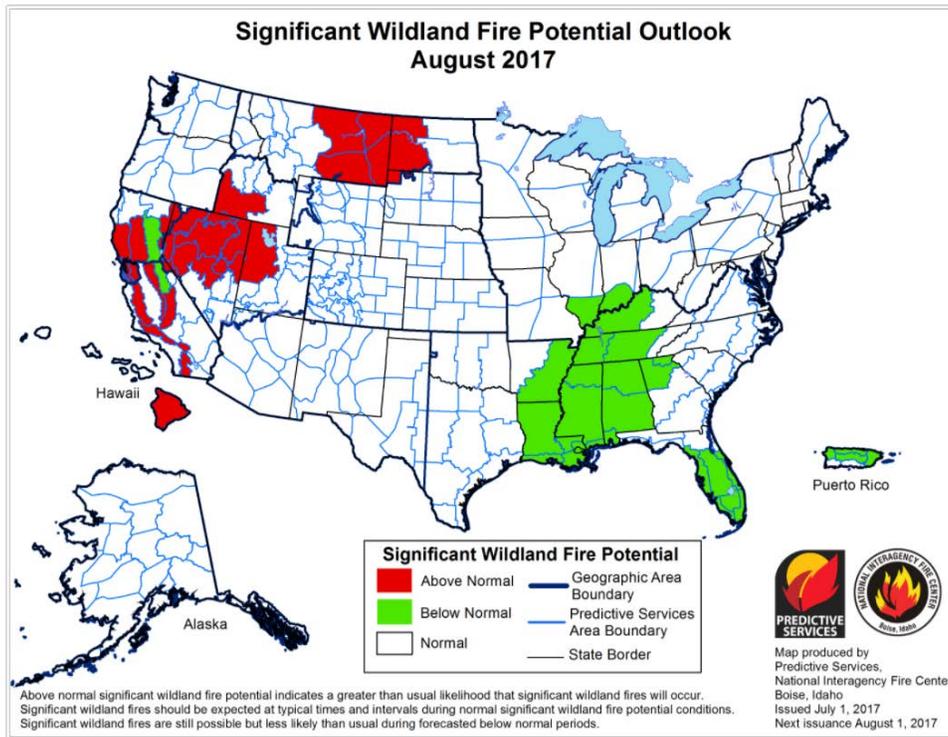
[National Outlook, Thursday, July 27, 2017](#): “As a cold front moves into the South and East, cooler weather will follow. In the vicinity of the front, showers and thunderstorms should soak the Ohio Valley and environs later today with 1 to 3 inches of rain. Toward week’s end, heavy rain (locally 2 to 5 inches) can be expected in the Mid-Atlantic States. Elsewhere, monsoon-related showers in the Southwest and neighboring areas will contrast with hot, mostly dry weather in northern California and the Northwest. The NWS 6- to 10-day outlook for August 1 – 5 calls for the likelihood of hotter-than-normal weather across the northern Plains, the West, and Florida’s peninsula, while below-normal temperatures can be expected in most areas from the central and southern Plains into the Southeast and lower Midwest. Meanwhile, drier-than-normal conditions across the northern U.S., including the Midwest, will contrast with above-normal rainfall in much of the South.”

### NWS Climate Prediction Center Weather Hazard Outlook: [July 29 - August 2, 2017](#)



Significant Wildland [Fire Potential Outlook](#)

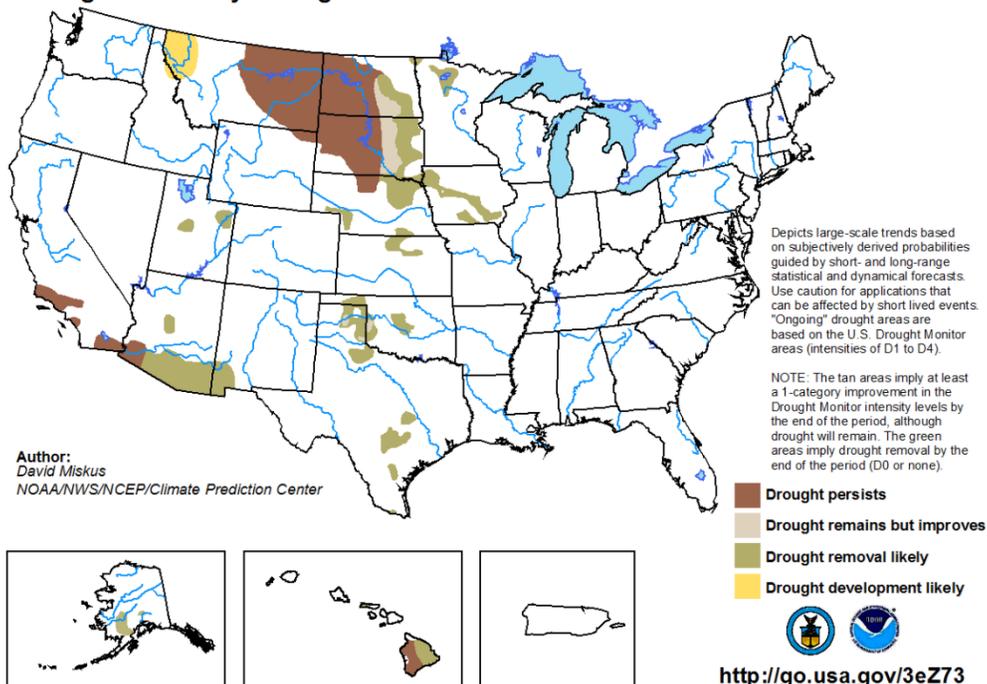
Source: National Interagency Fire Center



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

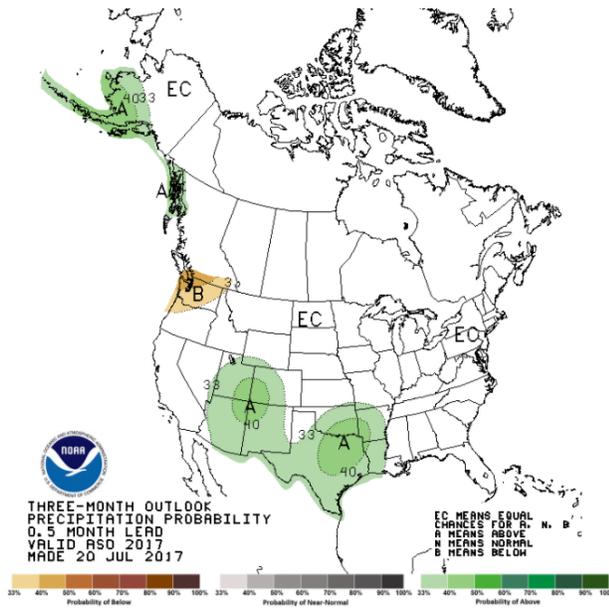
**U.S. Seasonal Drought Outlook**  
Drought Tendency During the Valid Period

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

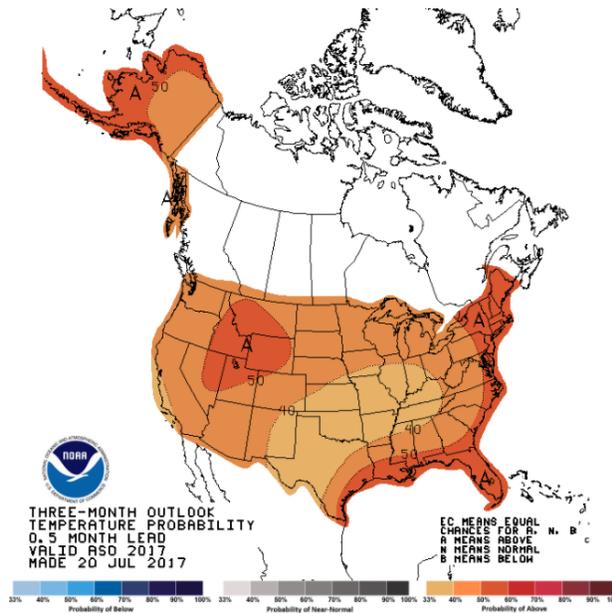


## NWS Climate Prediction Center 3-Month Outlook

### [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](#).