

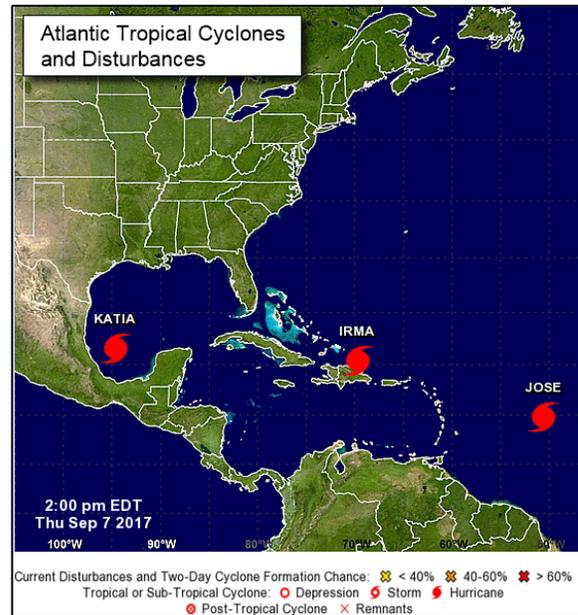
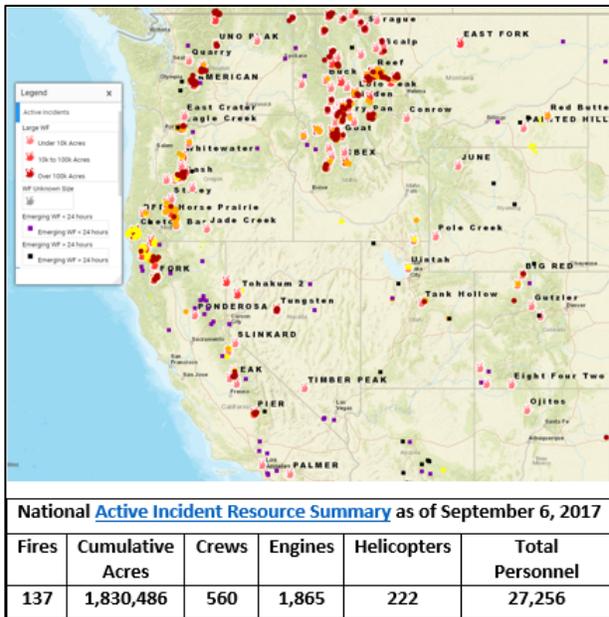
# Water and Climate Update

September 7, 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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## Major U.S. disasters from wildfires in the West and hurricanes in the East



Major weather-related disasters are currently impacting the U.S. Over 100 large, uncontained wildfires are burning throughout the West. The National Interagency Fire Center ([NIFC](#)) requested the assistance of [200 active military personnel](#) to help to bolster the current firefighting effort on the Umpqua North Complex fire in Oregon.

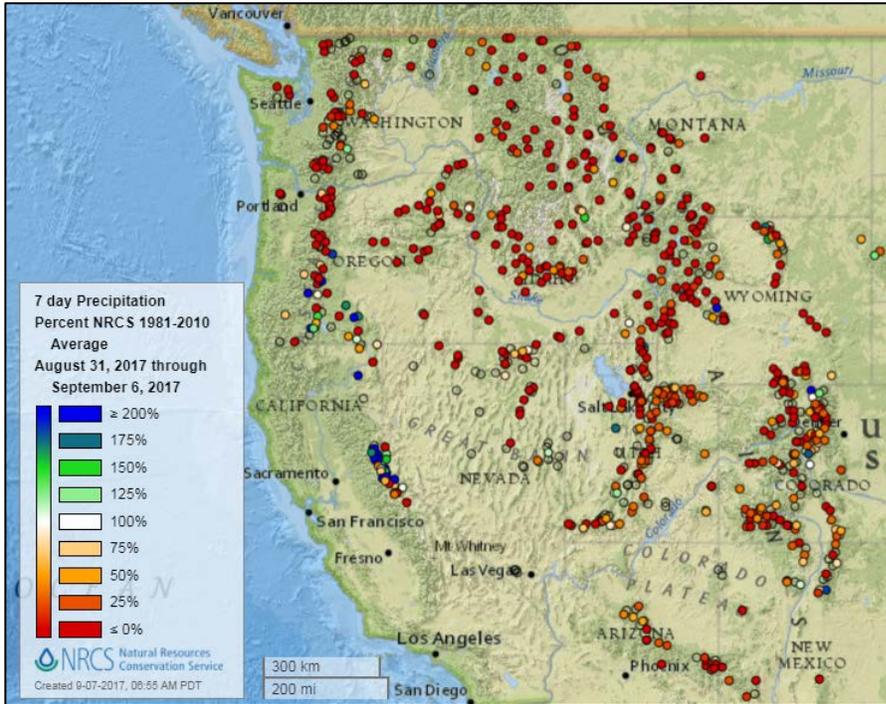
Extensive damage from Hurricane Harvey continues to impact much of Texas and Louisiana, while Hurricane Irma has left a path of destruction in the Caribbean, Puerto Rico, and is expected to create a major disaster when it reaches the U.S. mainland.

**Related:**

- [Wildfires ravaging the Western U.S. as smoke sprawls across the nation](#)
- [The Latest: Some Montana wildfires could last 1 more month](#)
- [More than 10000 battle major fires throughout California](#)
- [Hurricane Harvey is a billion-dollar disaster – America’s 10th in 2017](#)
- [Hurricane Irma Blasts Past Puerto Rico With 180-MPH Winds; Risk Rises For Florida](#)
- [Hurricane Irma, Churning Over Dominican Republic, Heads Toward Turks and Caicos](#)

## Precipitation

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

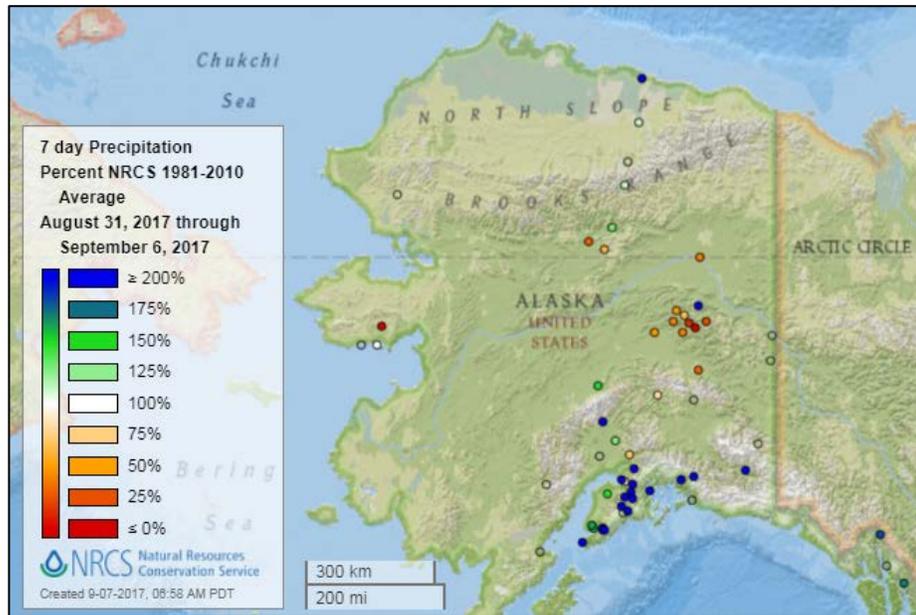


[7-day precipitation percent of average map](#)

**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](#)



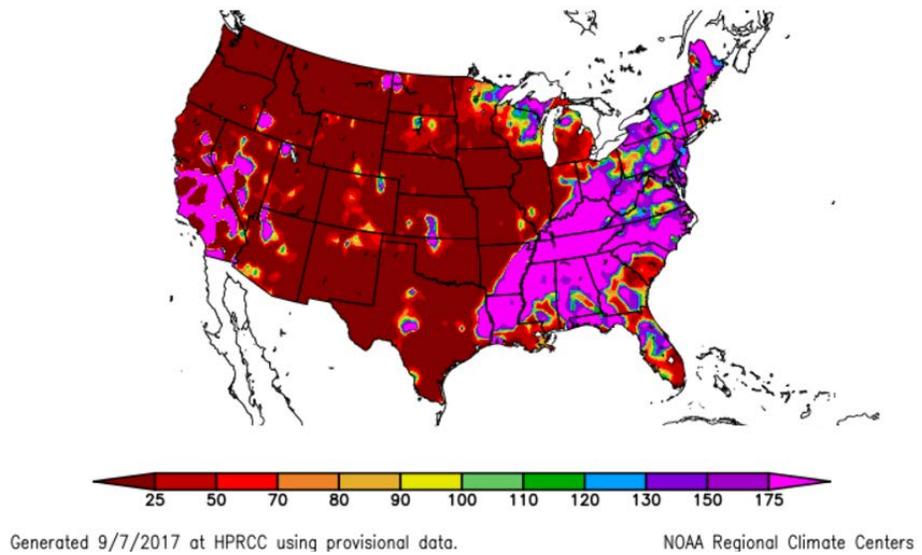
Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
8/31/2017 – 9/6/2017

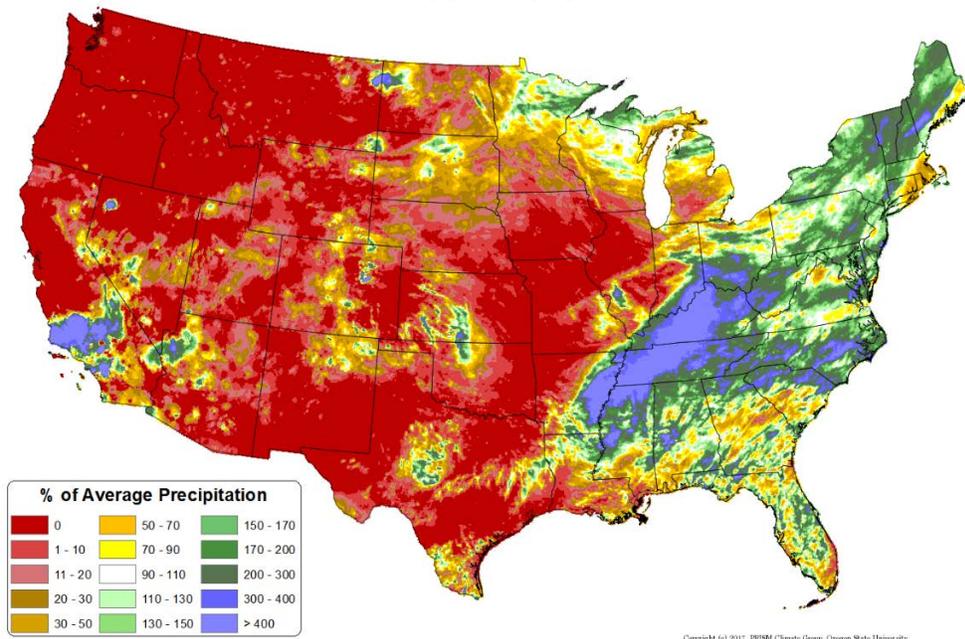


Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: 01 September 2017 - 06 September 2017  
Period ending 7 AM EST 06 Sep 2017  
Base period: 1981-2010  
(Map created 07 Sep 2017)

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

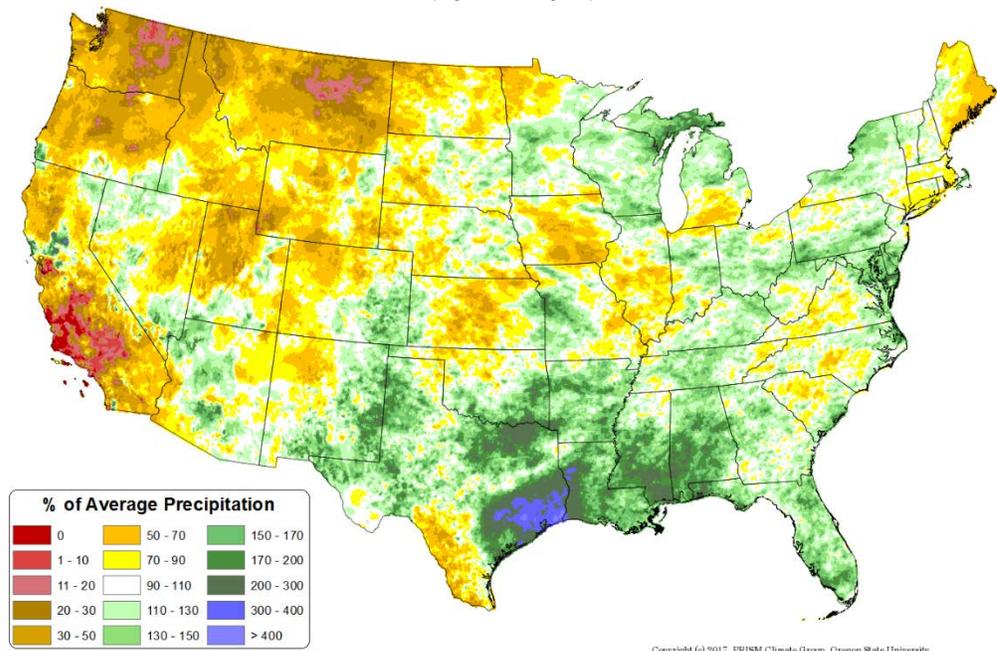


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

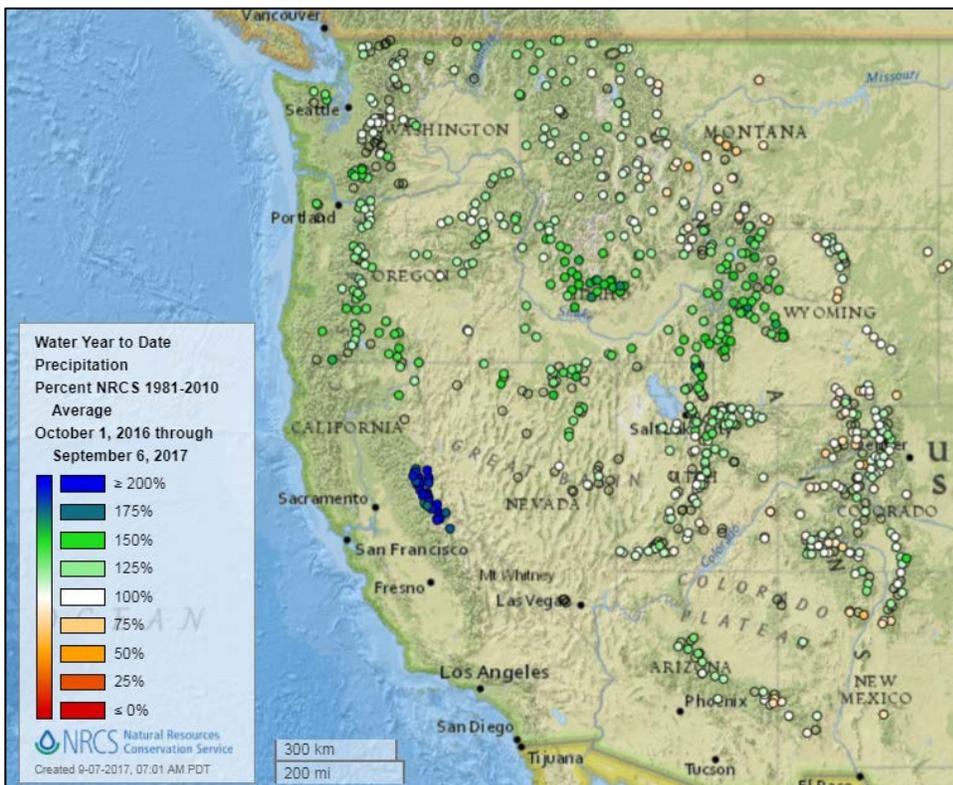
Source: PRISM

[June through August 2017 total precipitation anomaly map](#)

Total Precipitation Anomaly: June 2017 - August 2017  
 Period ending 7 AM EST 31 Aug 2017  
 Base period: 1981-2010  
 (Map created 02 Sep 2017)

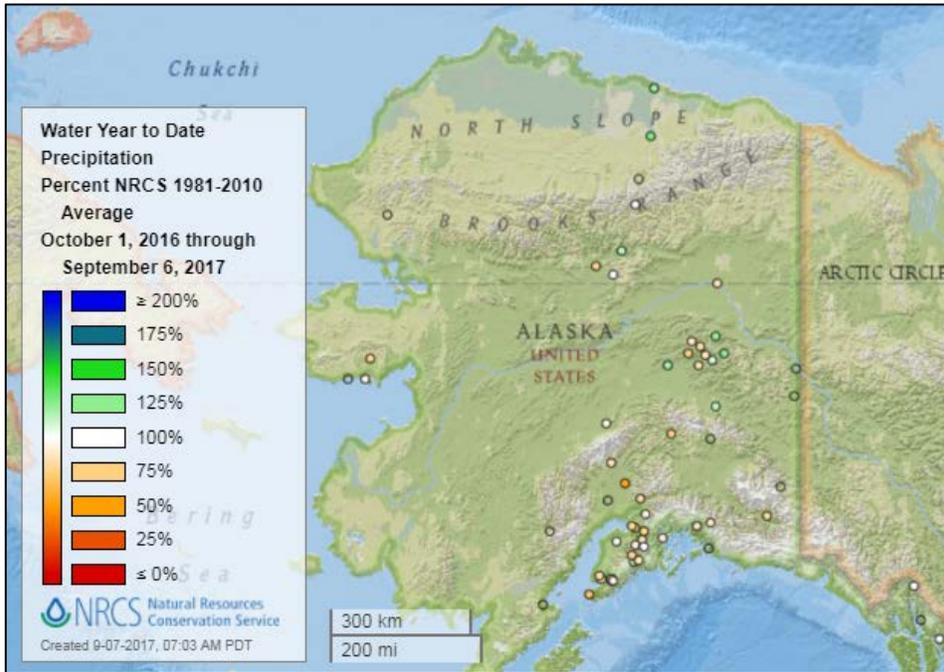


Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[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

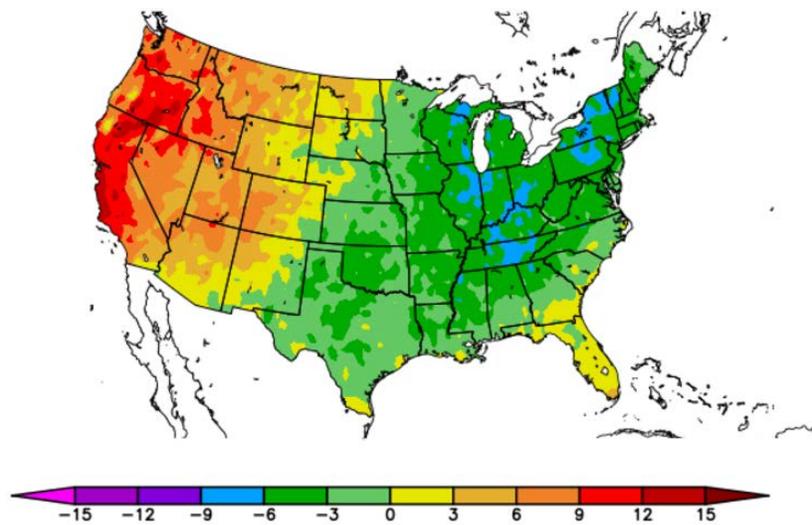
Last 7 Days, National Weather Service (NWS) Networks

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)  
8/31/2017 – 9/6/2017



Generated 9/7/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

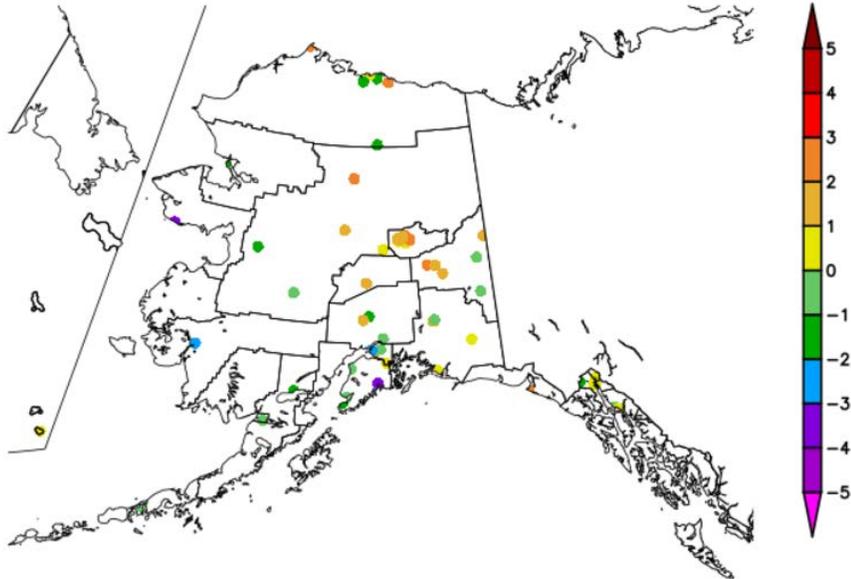
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
8/31/2017 – 9/6/2017



Generated 9/7/2017 at HPRCC using provisional data.

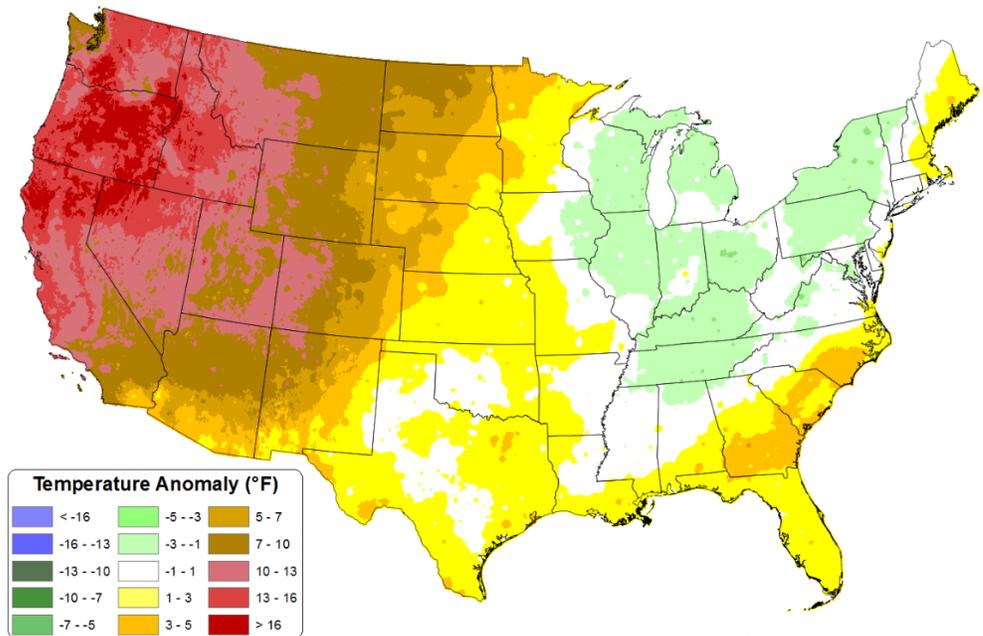
NOAA Regional Climate Centers

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 September 2017 - 06 September 2017  
Period ending 7 AM EST 06 Sep 2017  
Base period: 1981-2010  
(Map created 07 Sep 2017)



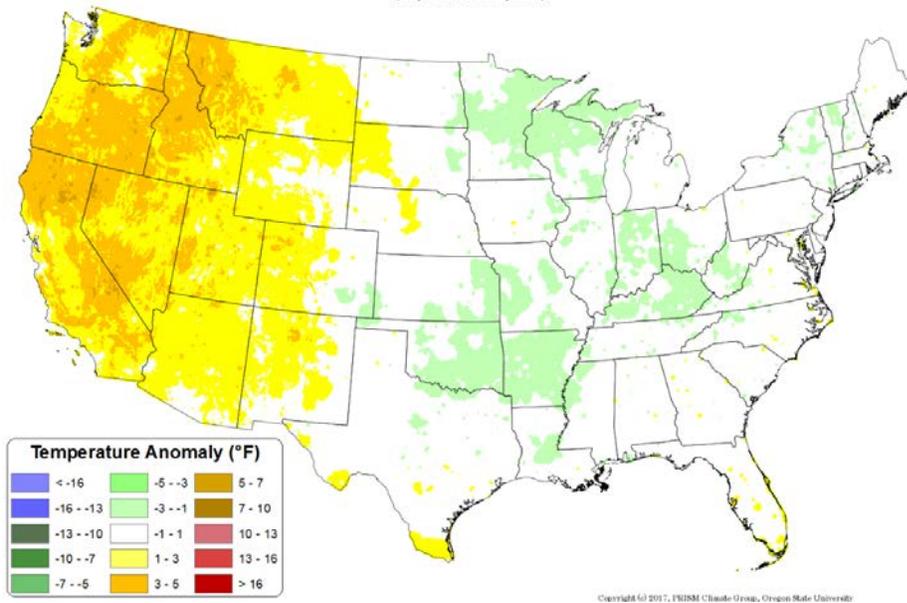
Copyright © 2017, PRISM Climate Group, Oregon State University

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

Source: PRISM

Daily Mean Temperature Anomaly: June 2017 - August 2017  
 Period ending 7 AM EST 31 Aug 2017  
 Base period: 1981-2010  
 (Map created 02 Sep 2017)

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



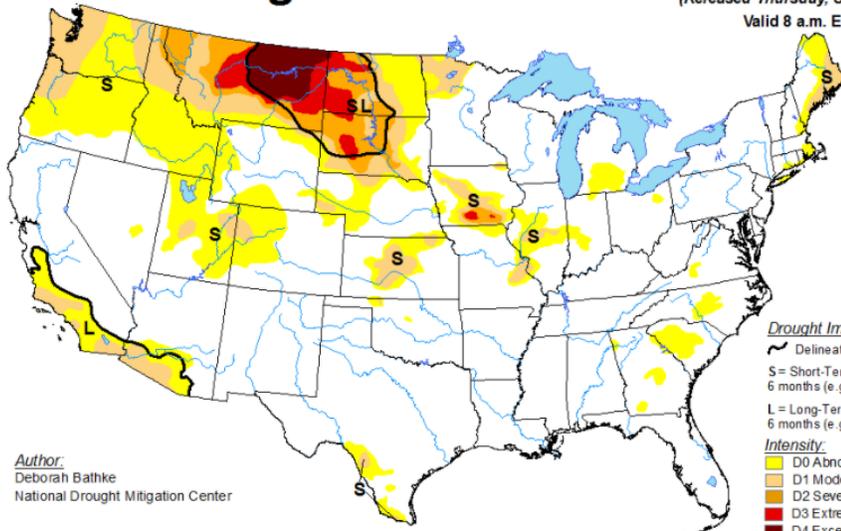
Copyright © 2017, PRISM Climate Group, Oregon State University

## Drought

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

### U.S. Drought Monitor

September 5, 2017  
 (Released Thursday, Sep. 7, 2017)  
 Valid 8 a.m. EDT



Author:  
 Deborah Bathke  
 National Drought Mitigation Center

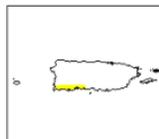
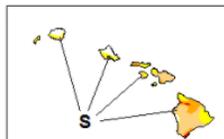
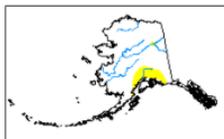
**Drought Impact Types:**

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

**Intensity:**

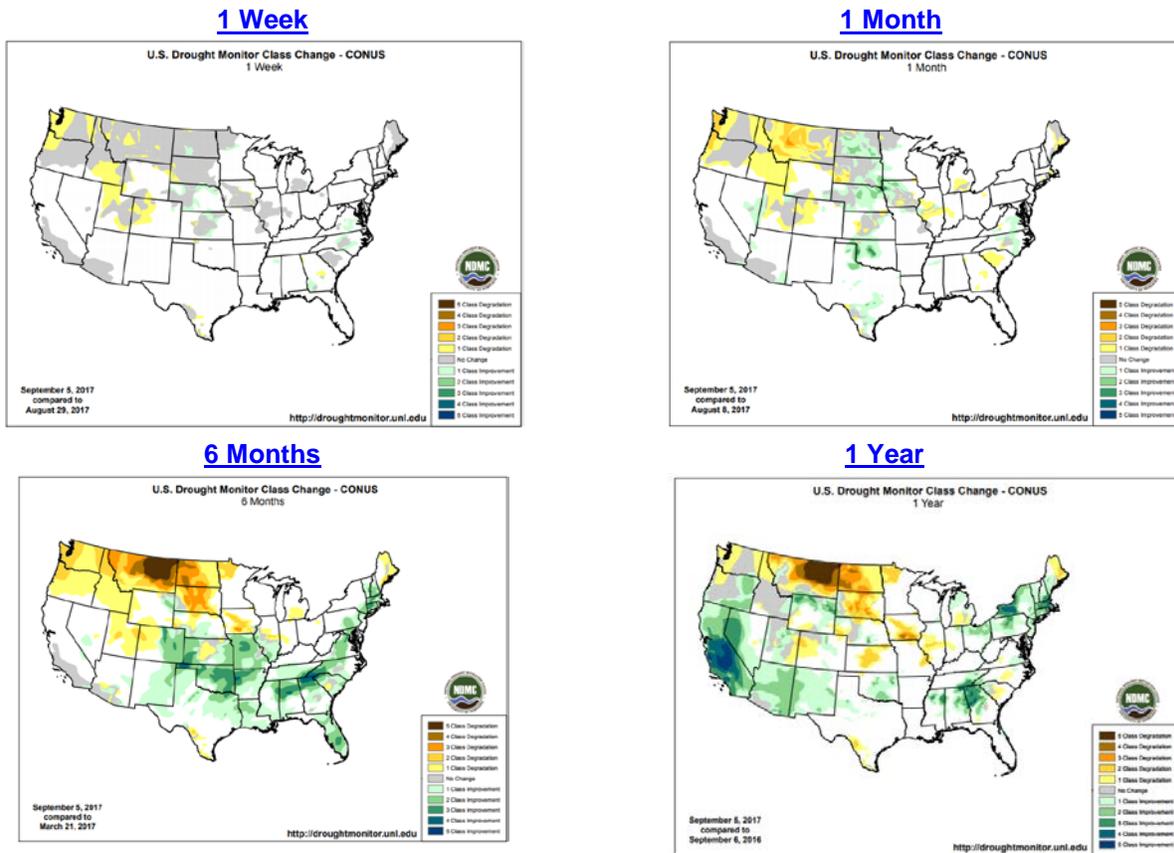
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

## Changes in Drought Monitor Categories over Time



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

## Current National [Drought Summary](#), September 5, 2017

Author: Deborah Bathke, National Drought Mitigation Center

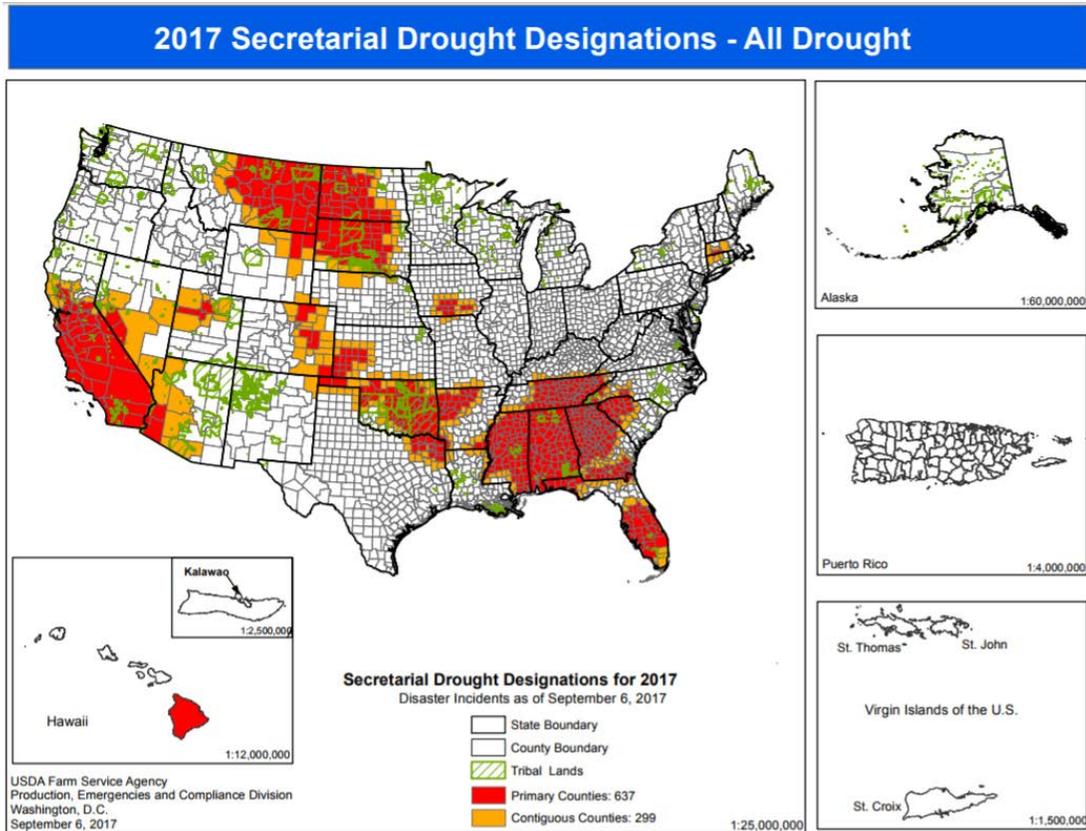
“This past week saw too much rainfall and historic flooding along the Gulf Coast as a result of Hurricane Harvey. After dumping record-breaking rainfall on the Texas coast, the remnants of Harvey tracked to the northeast, bringing excess rainfall from the Lower Mississippi Valley to the Mid-Atlantic states. Despite this, pockets of abnormal dryness continue to develop in the Southeast in areas that missed the bands of heavy rains. With Hurricane Irma approaching the United States, there is a potential for heavy rainfall to alleviate these conditions

While many eyes were on the devastation in Texas, drought continued to intensify in the Pacific Northwest. Record-breaking heat and dry streaks have parched vegetation and fueled devastating wildfires across the region. Smoke from these fires traveled along the jet stream and stretched to the East Coast.”

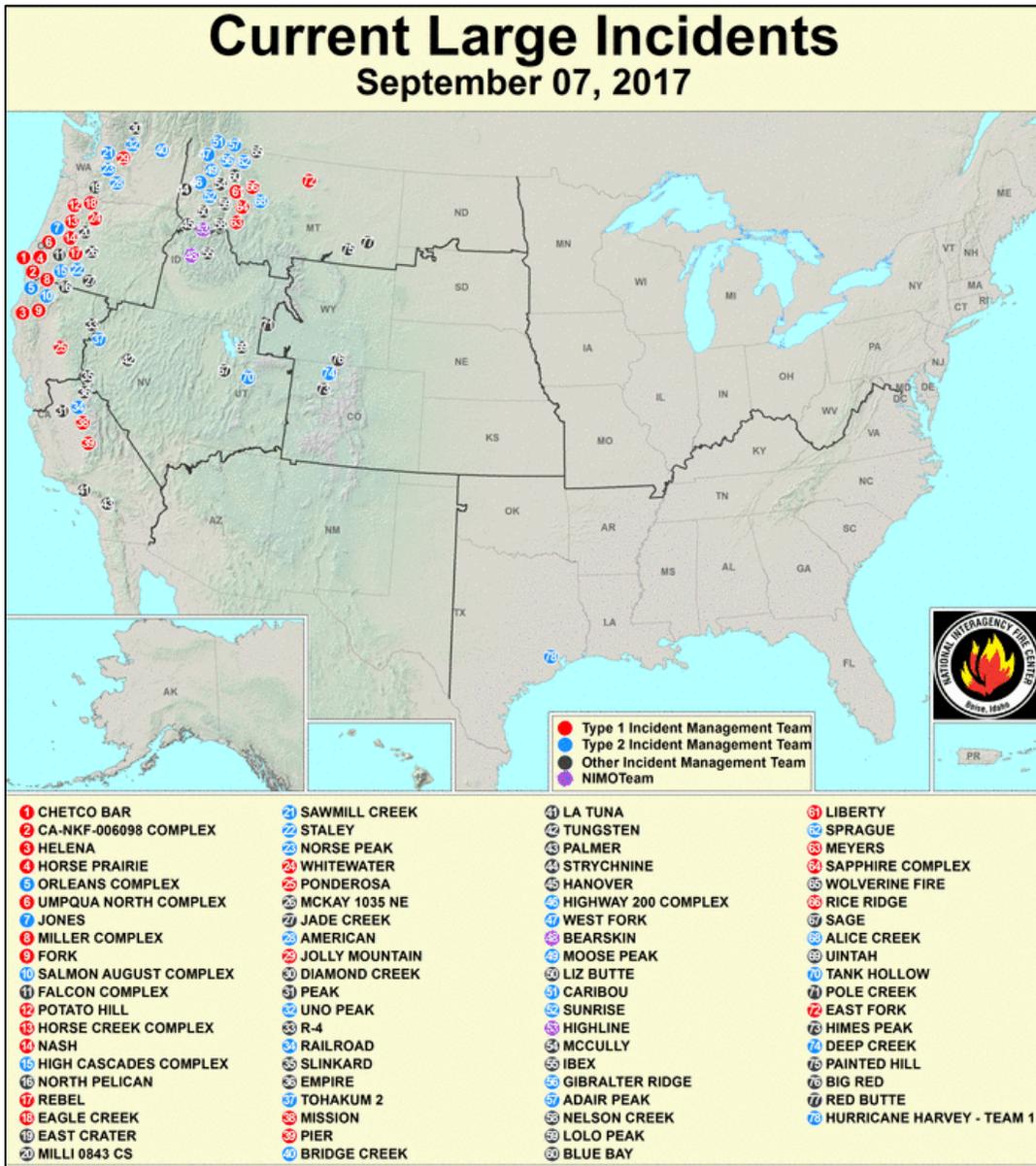
### Highlighted Drought Resources

- [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](#)

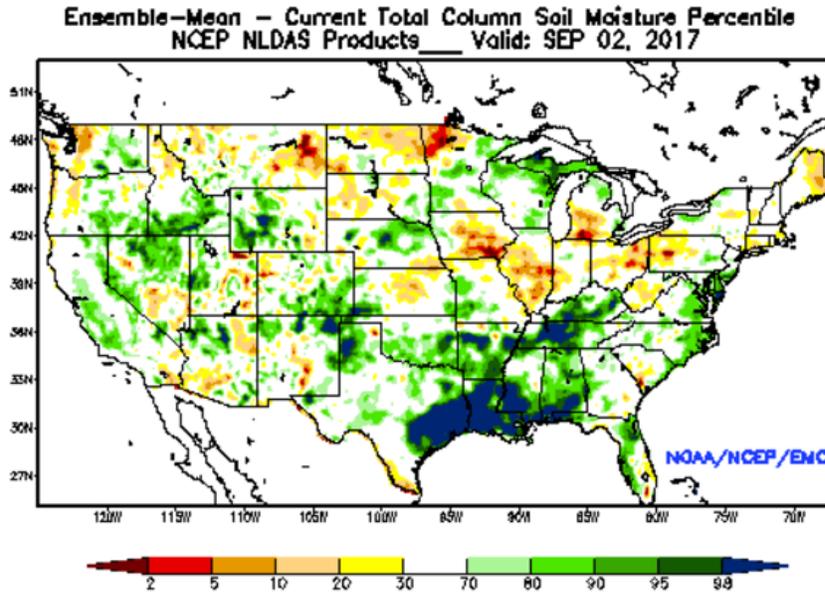


Highlighted Wildfire Resources

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

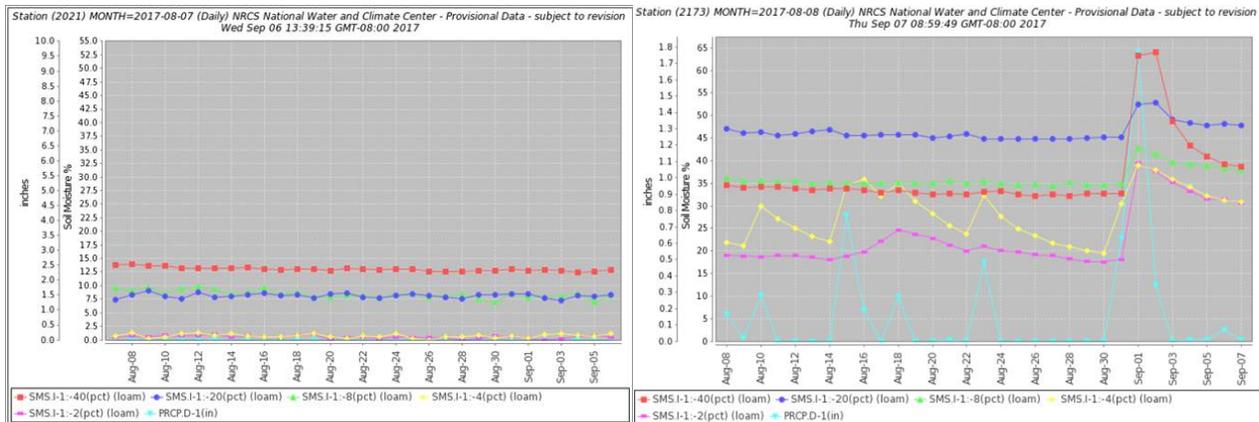
## Other Climatic and Water Supply Indicators

### Soil Moisture



[Modeled soil moisture percentiles](#) as of September 2, 2017.

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



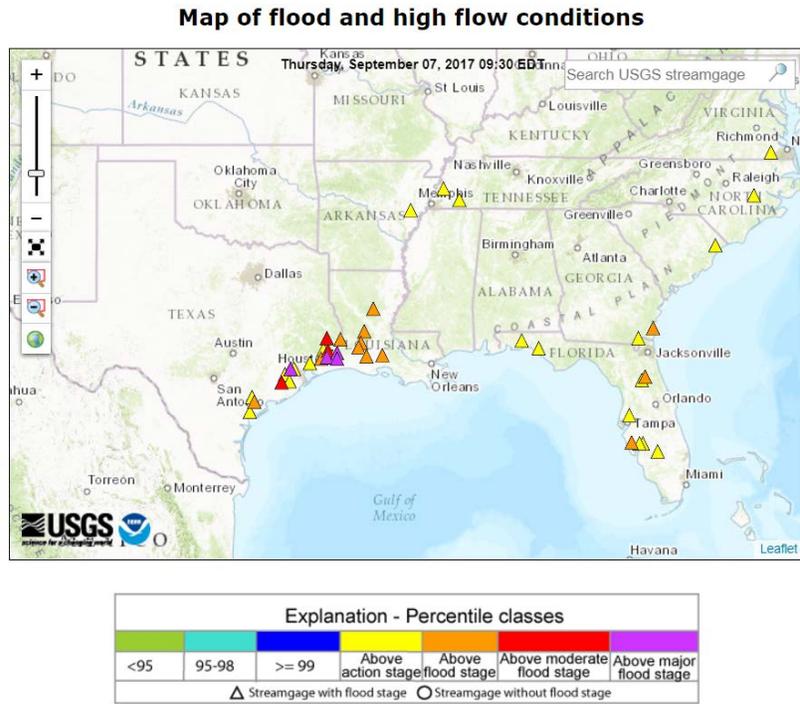
The charts show the last 30 days of very dry soil moisture in the West at the [Lind #1 SCAN site 2021](#) in Washington, and very wet soil moisture in the East from the remnants of Hurricane Harvey at the [Isabell Farms SCAN site 2173](#) in Alabama. Much of the West has had little precipitation to improve soil moisture, whereas flooding and high soil moisture from major storm events have been recorded in much of the East.

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

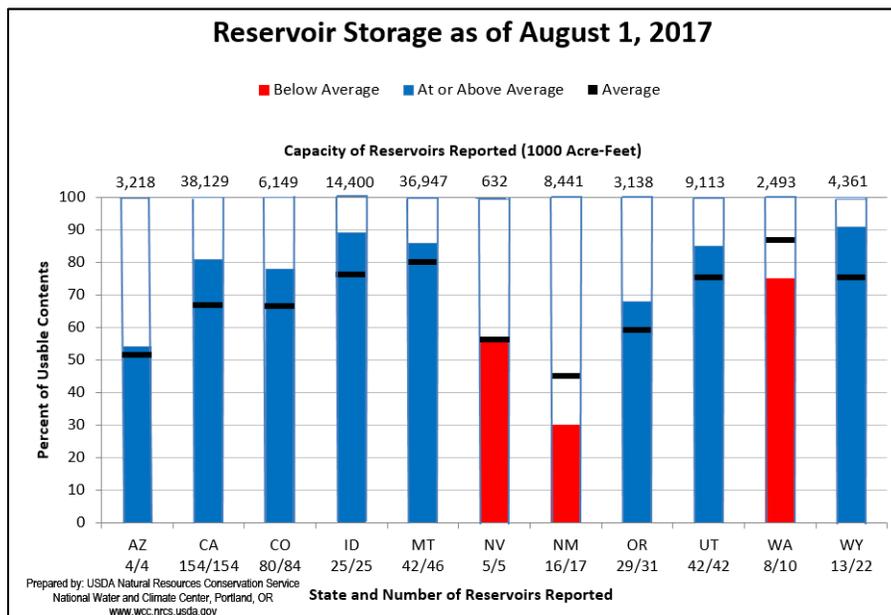


[Current streamflow maps](#)

Reservoir Storage

August 1 Western States Reservoir Storage

Source: NRCS National Water and Climate Center



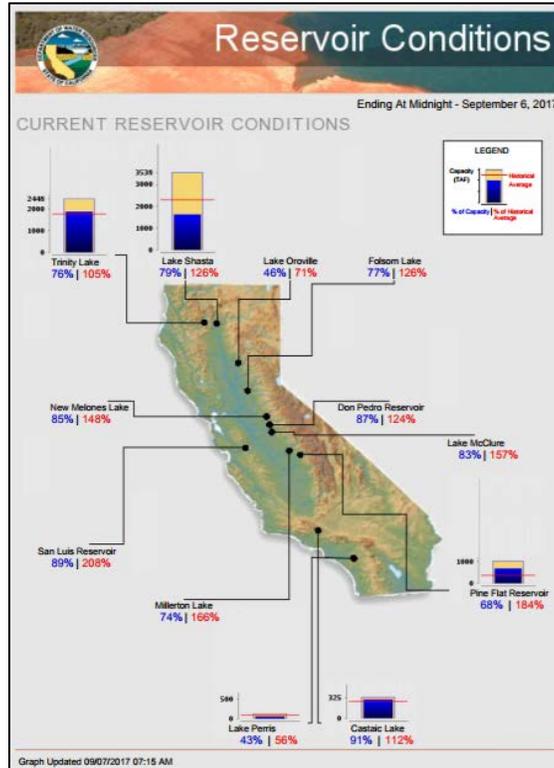
[National Water and Climate Center Reservoir Data](#)

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](#)

Current California Reservoir Conditions

Source: California Department of Water Resources



[California Current Reservoir Conditions](#)

## Short- and Long-Range Outlooks

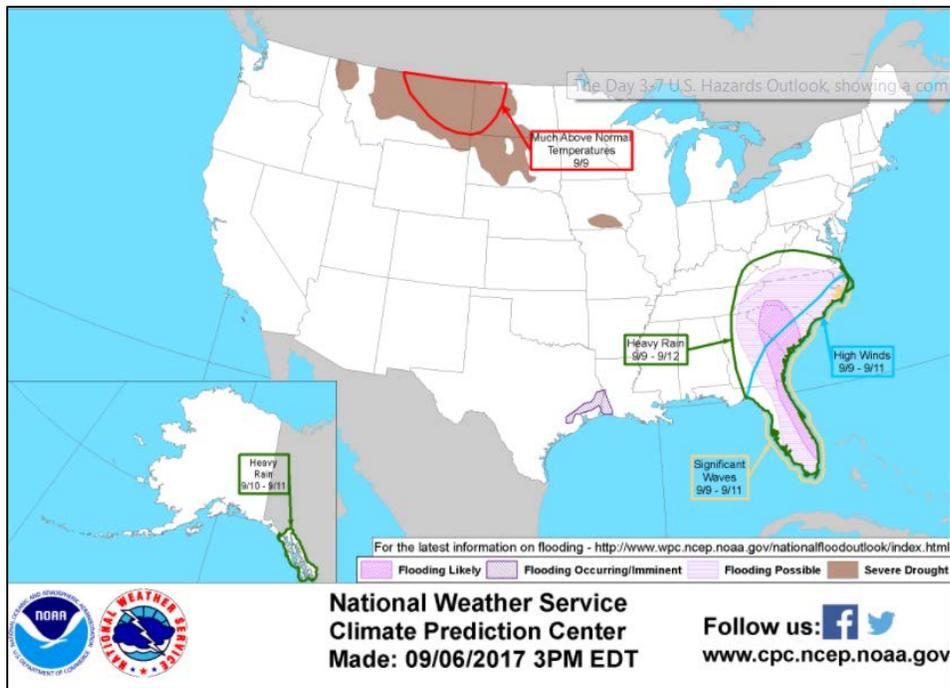
### Agricultural Weather Highlights

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

[National Outlook, Thursday, September 7, 2017](#): “Irma remains a deadly Category 5 hurricane—and one of the strongest storms on record in the Atlantic Basin. The powerful storm should reach southern Florida on Saturday night or early Sunday as a major hurricane, with exact impacts in the southeastern U.S. to be determined by the strength of the system before, during, and after landfall, as well as the timing of Irma’s turn toward the north. Meanwhile, Hurricane Katia will not pose a threat to the U.S., but should drift westward and make landfall along Mexico’s gulf coast late this week. Meanwhile, above normal temperatures will persist in much of the West, but an increase in shower activity may locally aid wildfire containment efforts. Elsewhere, cool conditions will linger in the Southeast, while warmer weather will gradually overspread the Plains and upper Midwest. The NWS 6- to 10-day outlook for September 12 – 16 calls for the likelihood of below-normal temperatures in the Southeast and lower Midwest, while warmer-than-normal weather should prevail across the West and the northwestern half of the Plains. Meanwhile, near- to above-normal precipitation in the West and wet weather along the Atlantic Seaboard—courtesy of Irma—should contrast with mostly dry weather across large sections of the Plains, Midwest, and mid-South.”

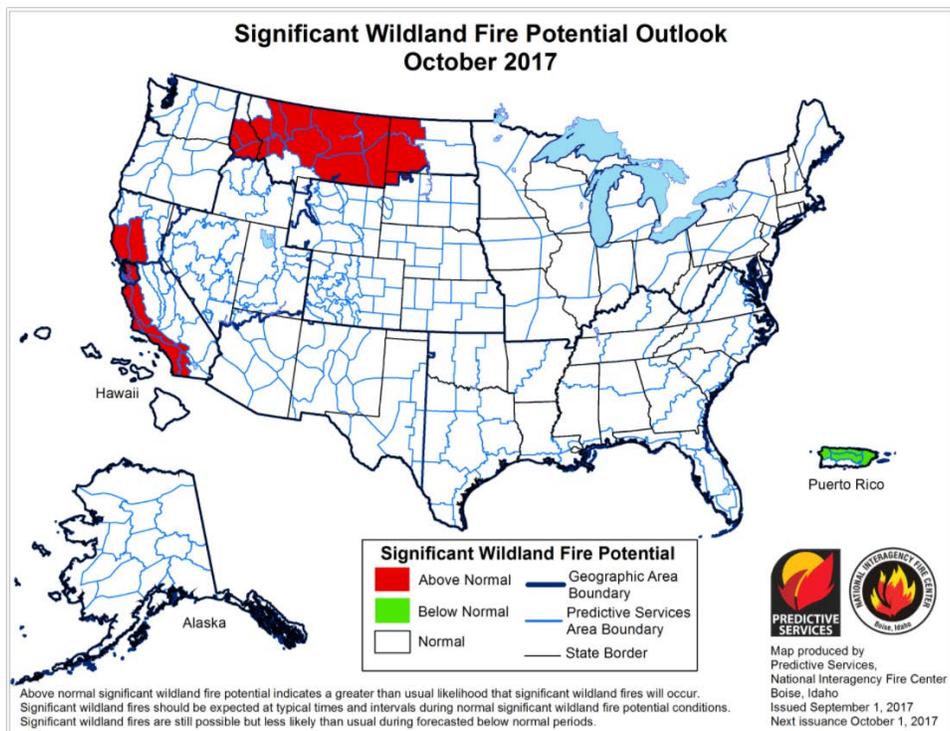
Weather Hazard Outlook [September 9 - 13, 2017](#)

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

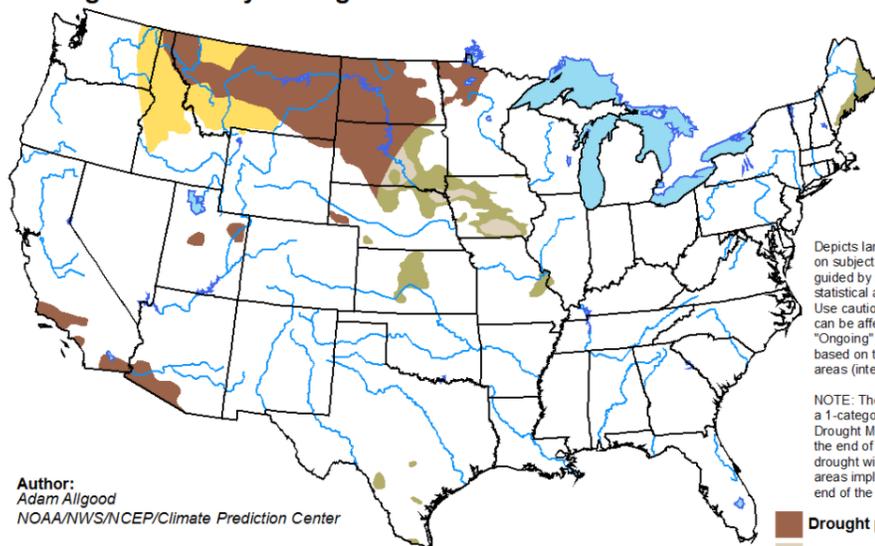
Source: National Interagency Fire Center



Seasonal Drought Outlook: [August 17 - November 30, 2017](#)  
Service

Source: National Weather Service

**U.S. Seasonal Drought Outlook** Valid for August 17 - November 30, 2017  
Drought Tendency During the Valid Period Released August 17, 2017



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:  
Adam Allgood  
NOAA/NWS/NCEP/Climate Prediction Center

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



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

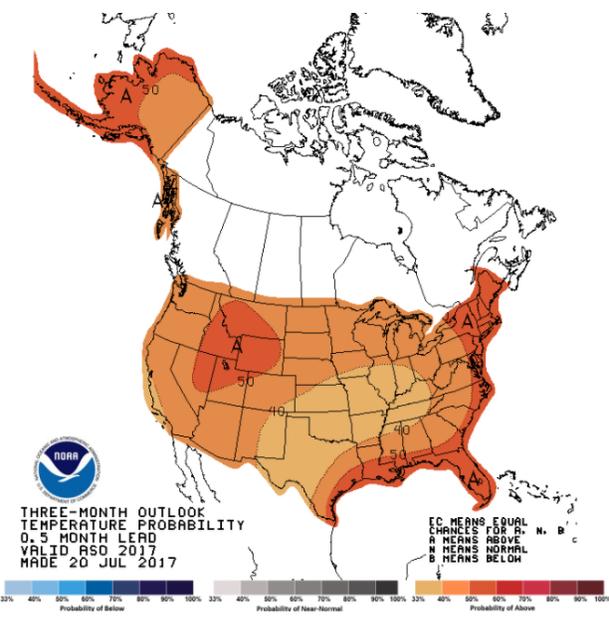
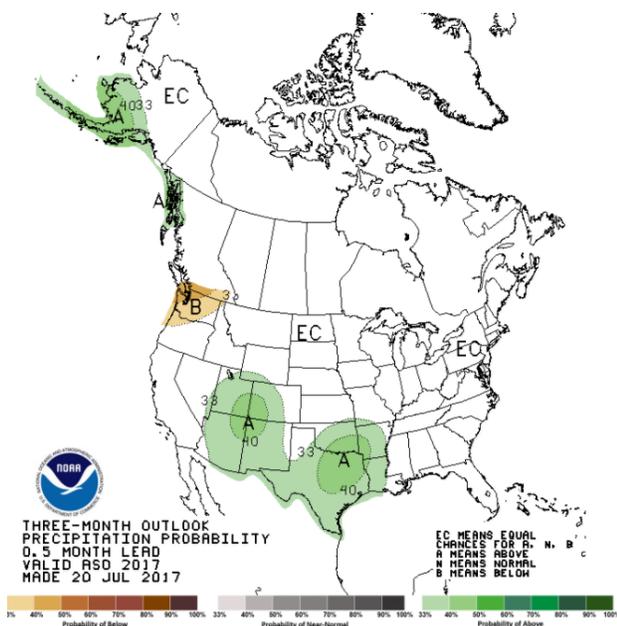


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

[Precipitation](#)

[Temperature](#)



[Sep-Oct-Nov \(SON\) 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](#).