

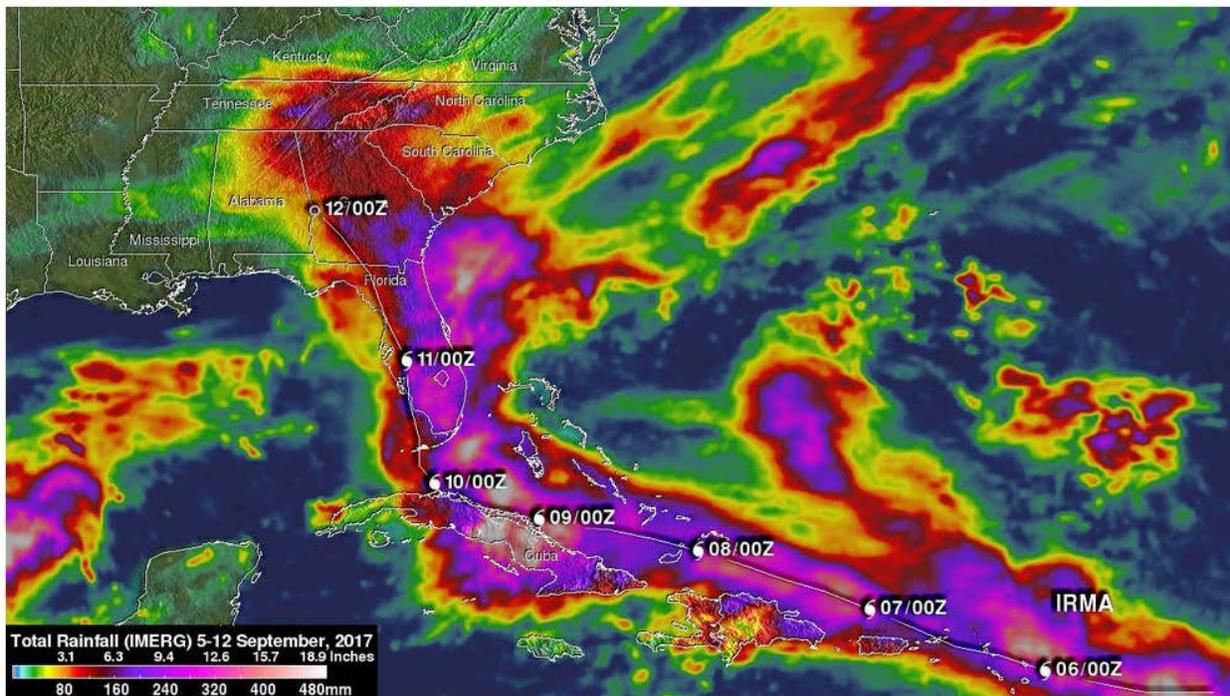
Water and Climate Update

September 14, 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.

<i>Precipitation</i>	1	<i>Other Climatic and Water Supply Indicators</i>	11
<i>Temperature</i>	5	<i>Short- and Long-Range Outlooks</i>	14
<i>Drought</i>	7	<i>More Information</i>	16

Heavy rain recorded along path of Hurricane Irma



Credit: NASA/JAXA, Hal Pierce

The image above tracks total rainfall estimates along the path of Hurricane Irma from NASA’s IMERG (Integrated Multi-satellitE Retrievals for GPM) data product. From September 5 to 12, IMERG calculated heavy rain along Irma’s path. Rainfall totals often exceeded 6 inches, with the greatest rainfall estimates at more than 20 inches over Cuba.

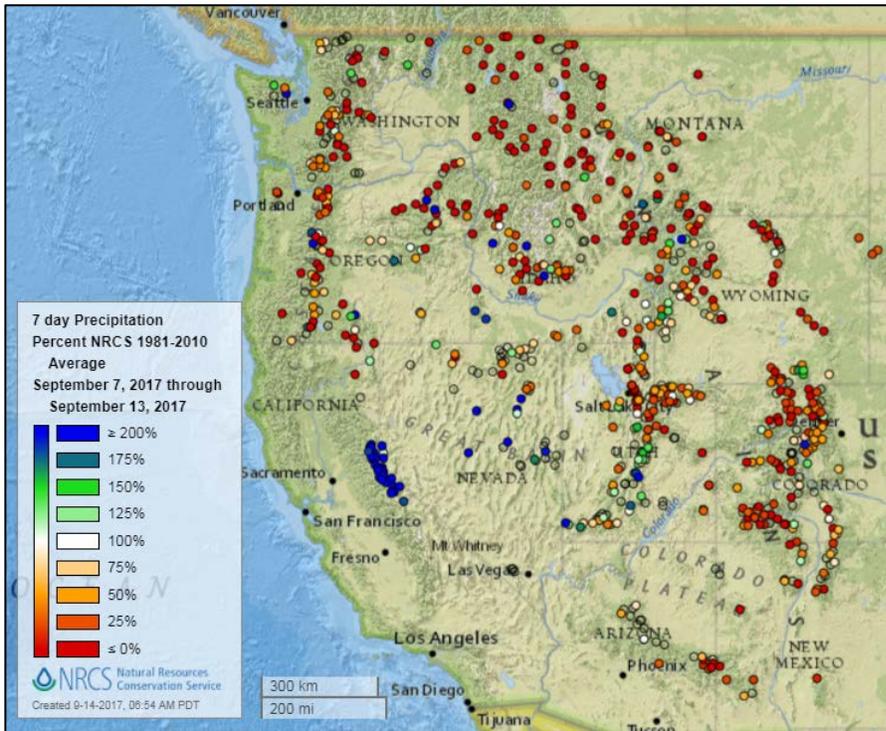
Irma is the second major hurricane to reach the mainland U.S. in the past 30 days. Major damage and recovery is still being assessed.

Related:

- [Hurricane Irma broke a bunch of meteorological records — here are some of the biggest](#)
- [The US Virgin Islands, devastated by Hurricane Irma, are in serious need of aid](#)
- [The Battered Southeast Grapples With Irma's Aftermath](#)
- [Hurricane Irma: Keys residents line up at checkpoint](#)
- [New aerial images show Florida Keys left in ruin after Irma](#)
- [Florida turns to recovery after Irma as scenes of wreckage, new dangers emerge](#)

Precipitation

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

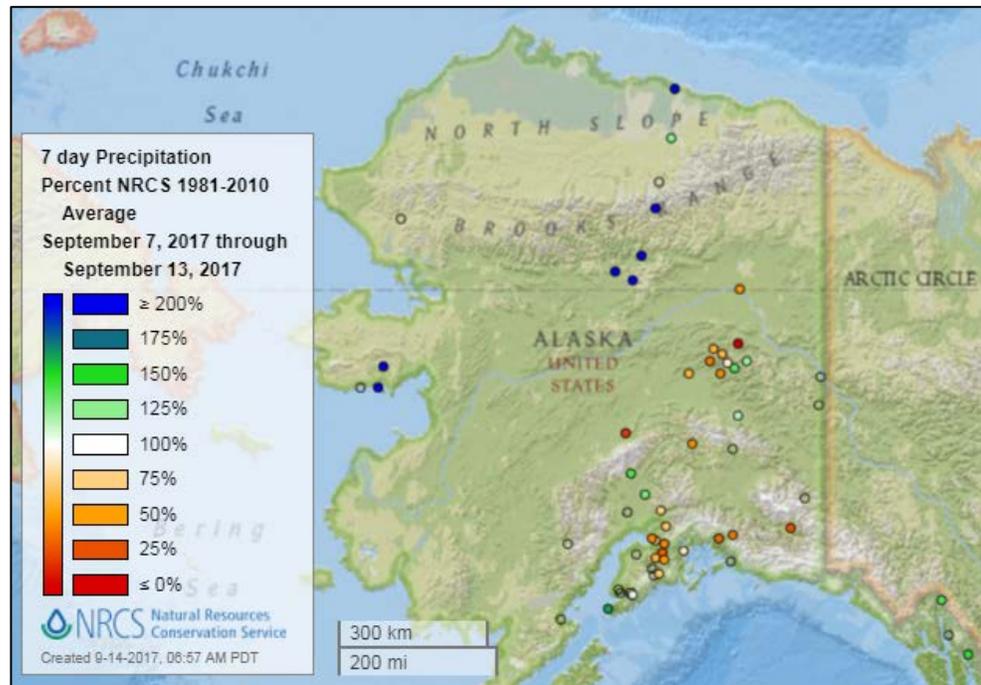


[7-day precipitation percent of average map](#)

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

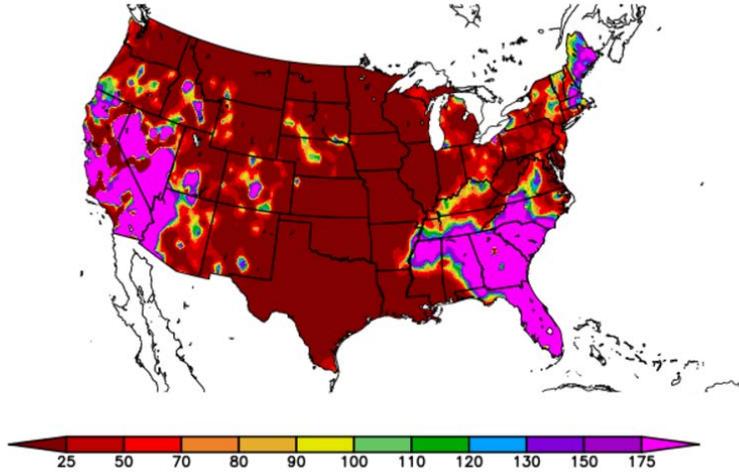
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
9/7/2017 - 9/13/2017



Generated 9/14/2017 at HPRCC using provisional data

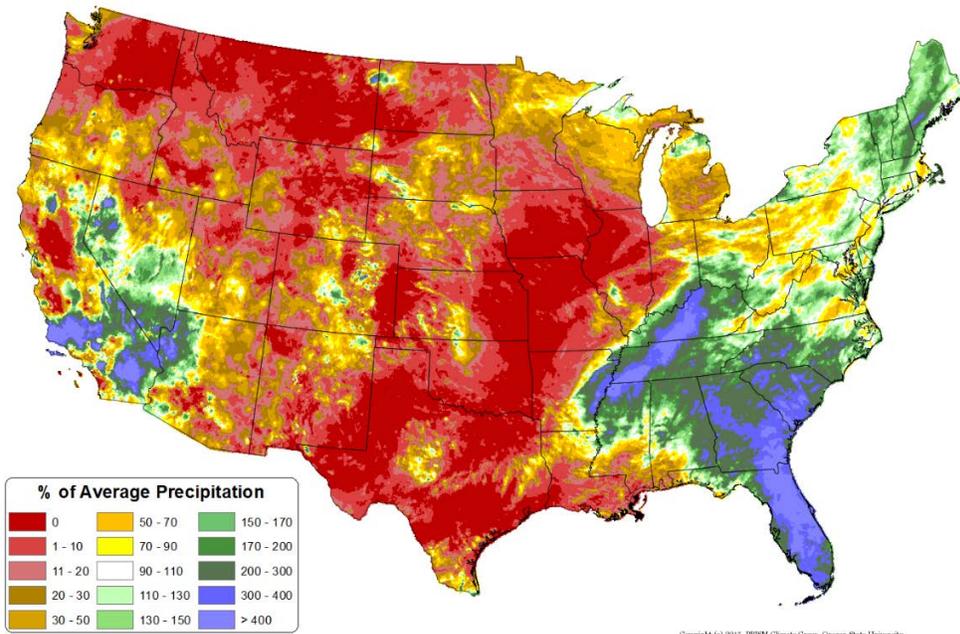
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 September 2017 - 13 September 2017
Period ending 7 AM EST 13 Sep 2017
Base period: 1981-2010
(Map created 14 Sep 2017)

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

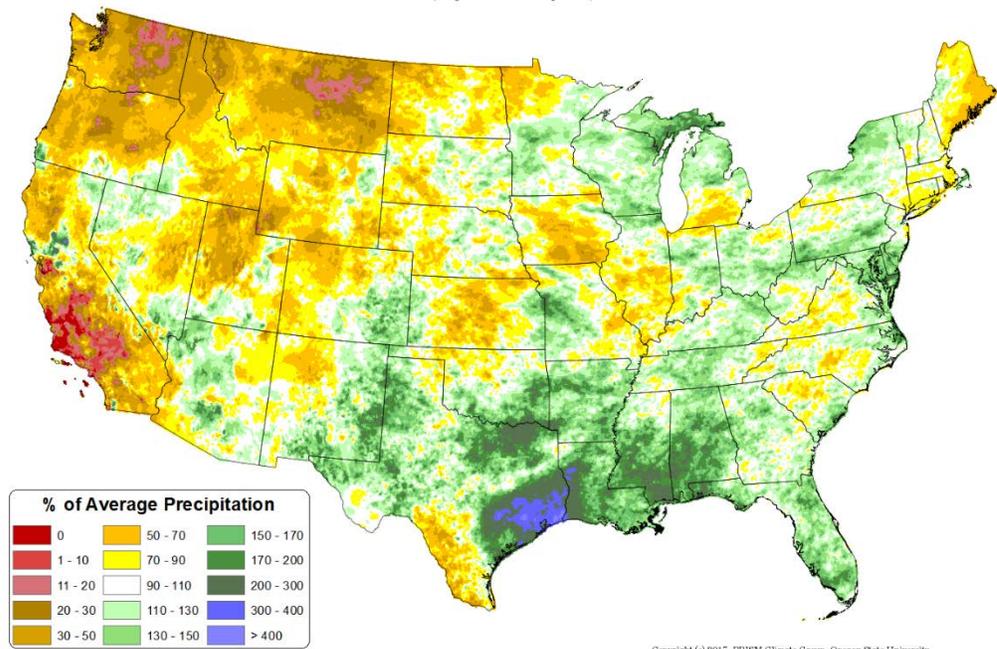


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

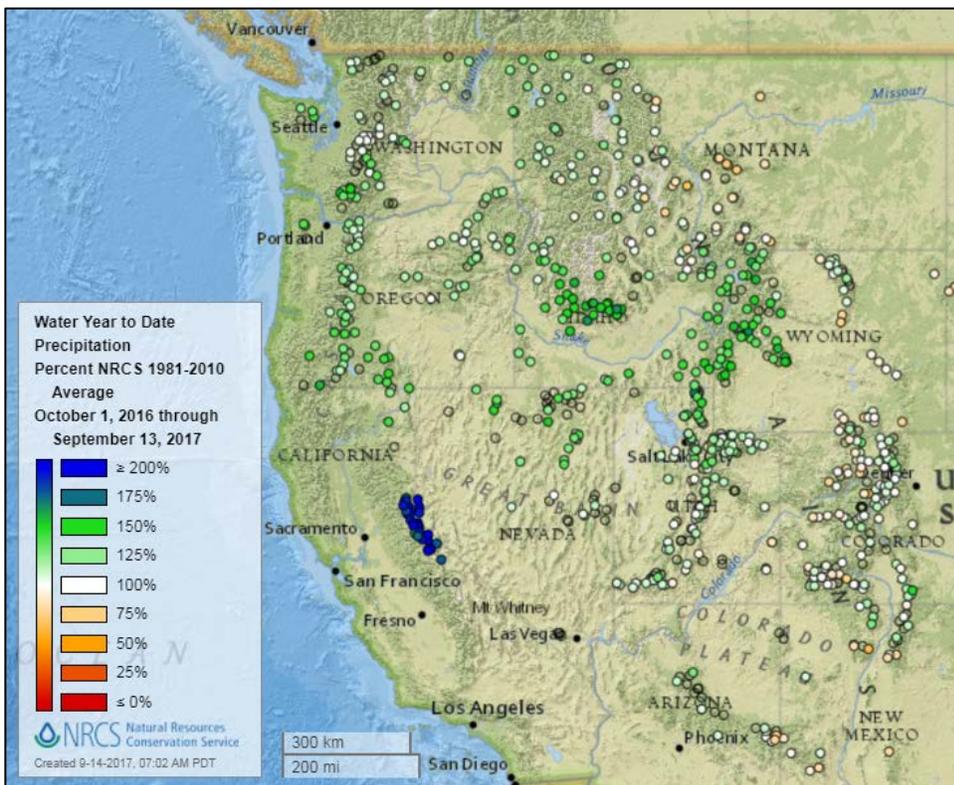
[June through August 2017 total precipitation anomaly map](#)

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



Copyright © 2017, PRISM Climate Group, Oregon State University

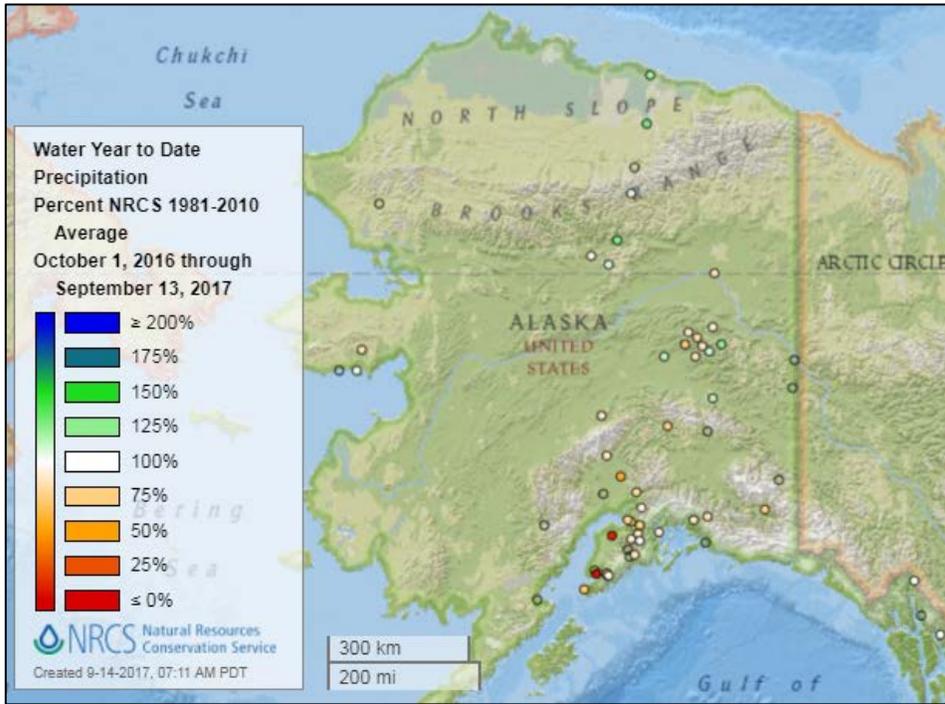
Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[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

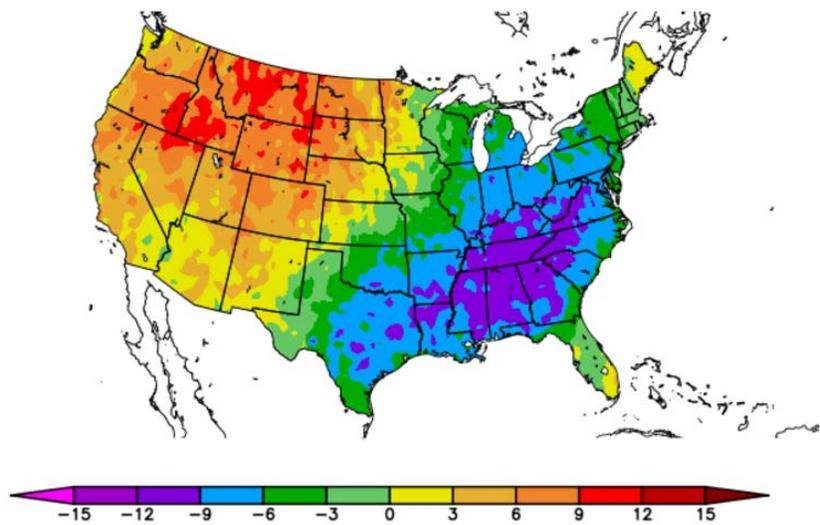
Last 7 Days, National Weather Service (NWS) Networks

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)
9/7/2017 – 9/13/2017



Generated 9/14/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

Water and Climate Update

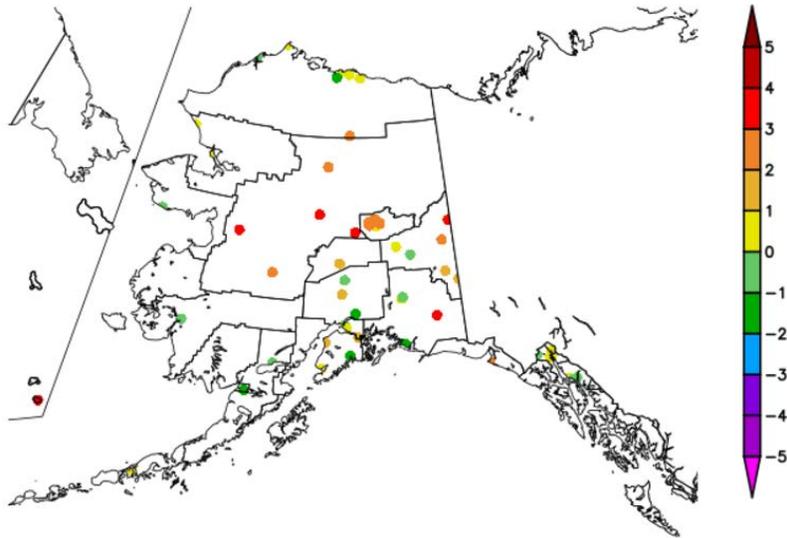
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F) 9/7/2017 – 9/13/2017



Generated 9/14/2017 at HPRCC using provisional data.

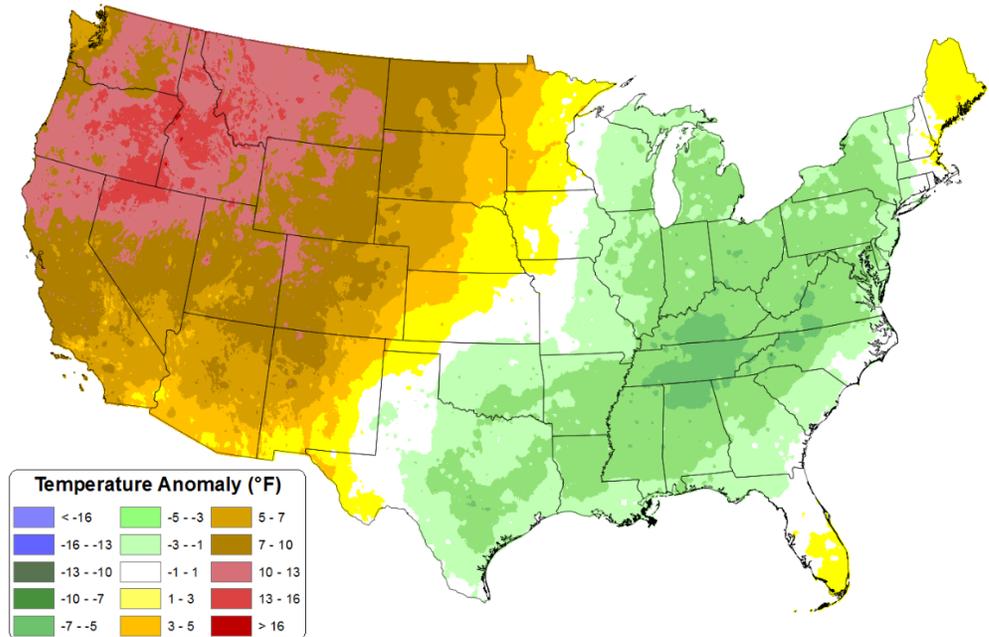
NOAA Regional Climate Centers

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 - 13 September 2017 Period ending 7 AM EST 13 Sep 2017 Base period: 1981-2010 (Map created 14 Sep 2017)

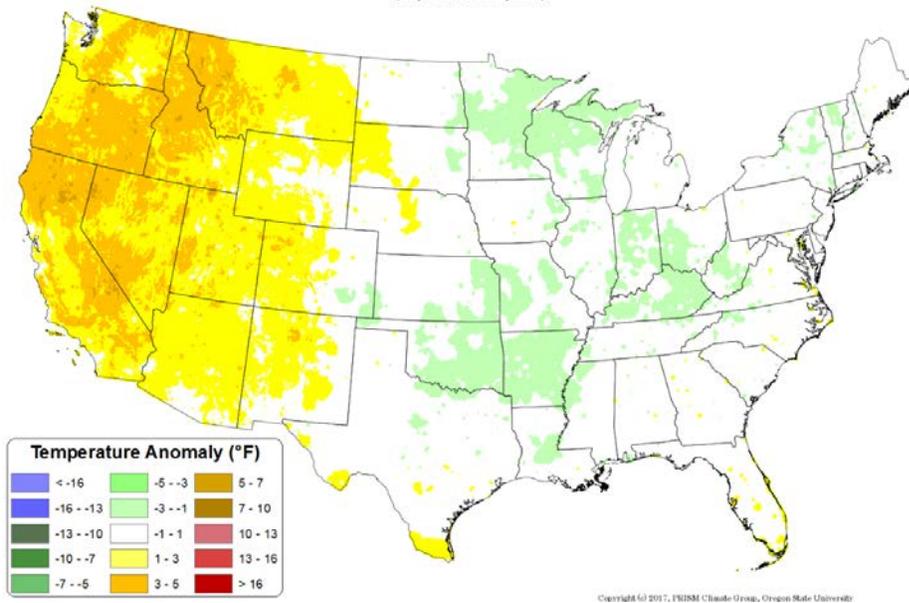


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

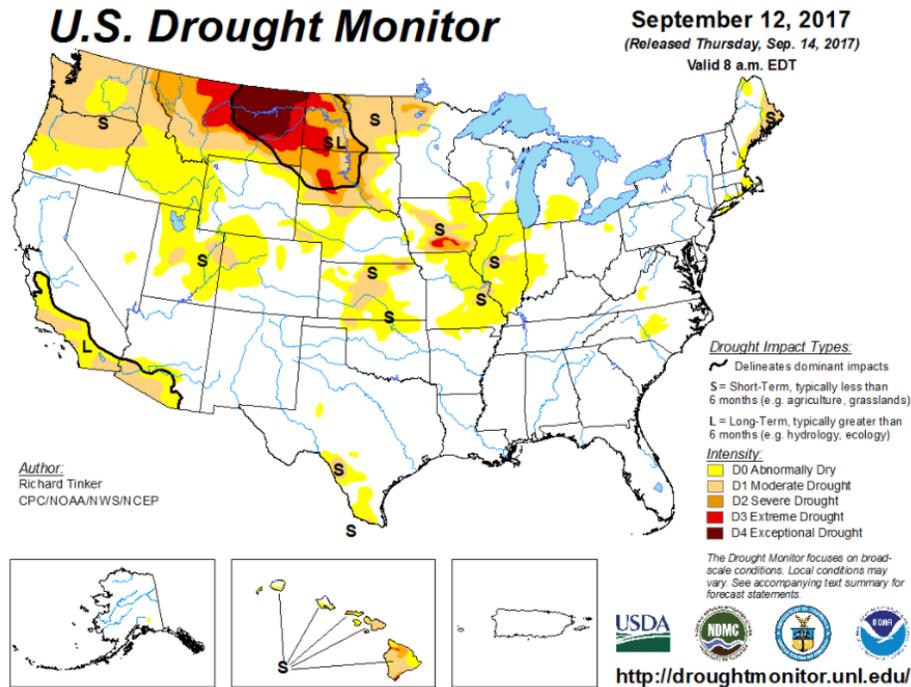
Daily Mean Temperature Anomaly: June 2017 - August 2017
 Period ending 7 AM EST 31 Aug 2017
 Base period: 1981-2010
 (Map created 02 Sep 2017)

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

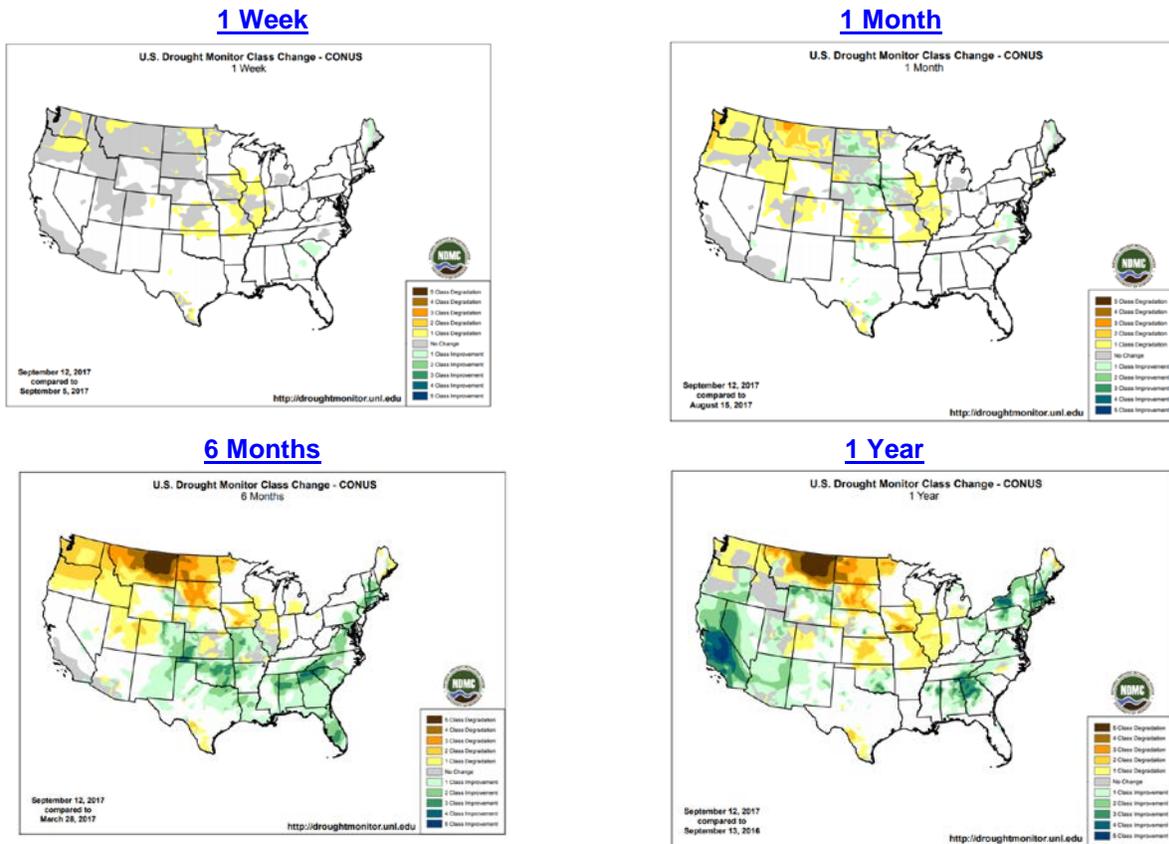


Drought

[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](#), September 12, 2017

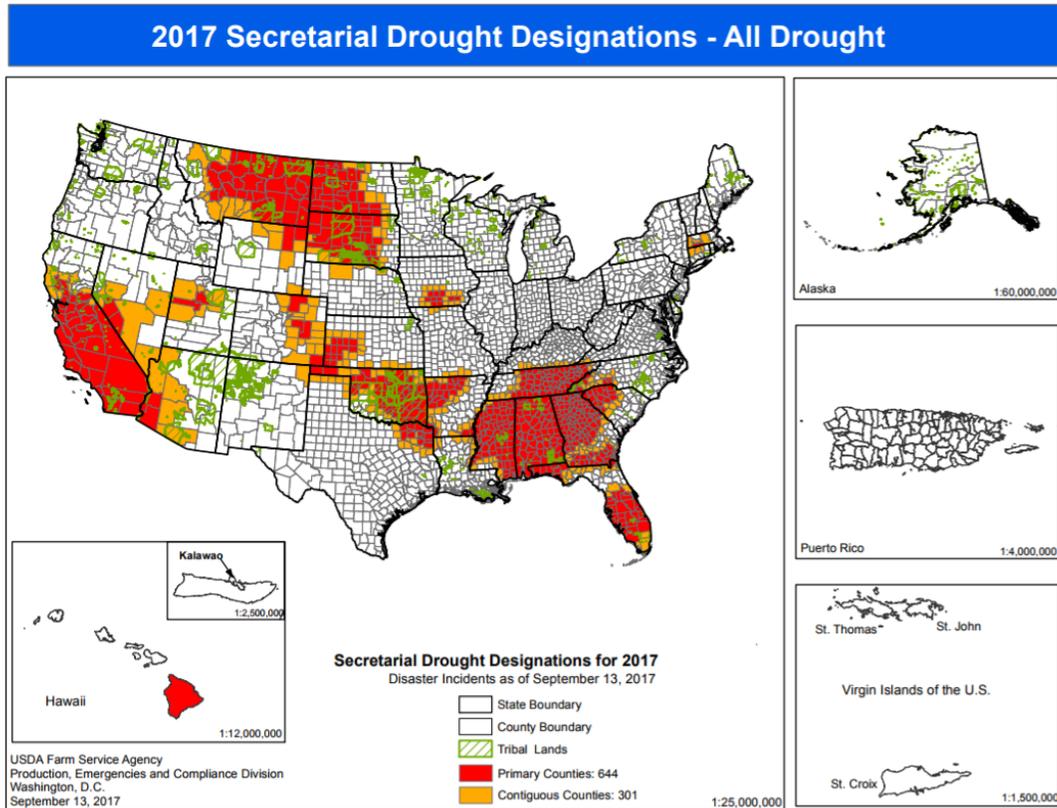
Author: Richard Tinker, NOAA/NWS/NCEP/CPC

“While Hurricane Irma pummeled Florida and (to a lesser extent) other parts of the Southeast, most other parts of the contiguous 48 states caught little if any precipitation, save for scattered moderate to isolated heavy precipitation in parts of the Northeast. Irma brought intense rains (approaching 1.5 feet in some spots) and powerful wind gusts (measured at 140 mph at one place on the West Coast of the Florida Peninsula) that removed any suggestion of dryness from the Southeast. Enough precipitation fell on part of eastern Maine to shave down areas of D0 and D1 from the west, but most of the country -- from the Ohio and lower Mississippi Rivers westward to the Pacific Coast – recorded little precipitation, if any. Only isolated patches in the eastern Great Lakes Region and the lower Colorado River Valley recorded more than an inch of rain.”

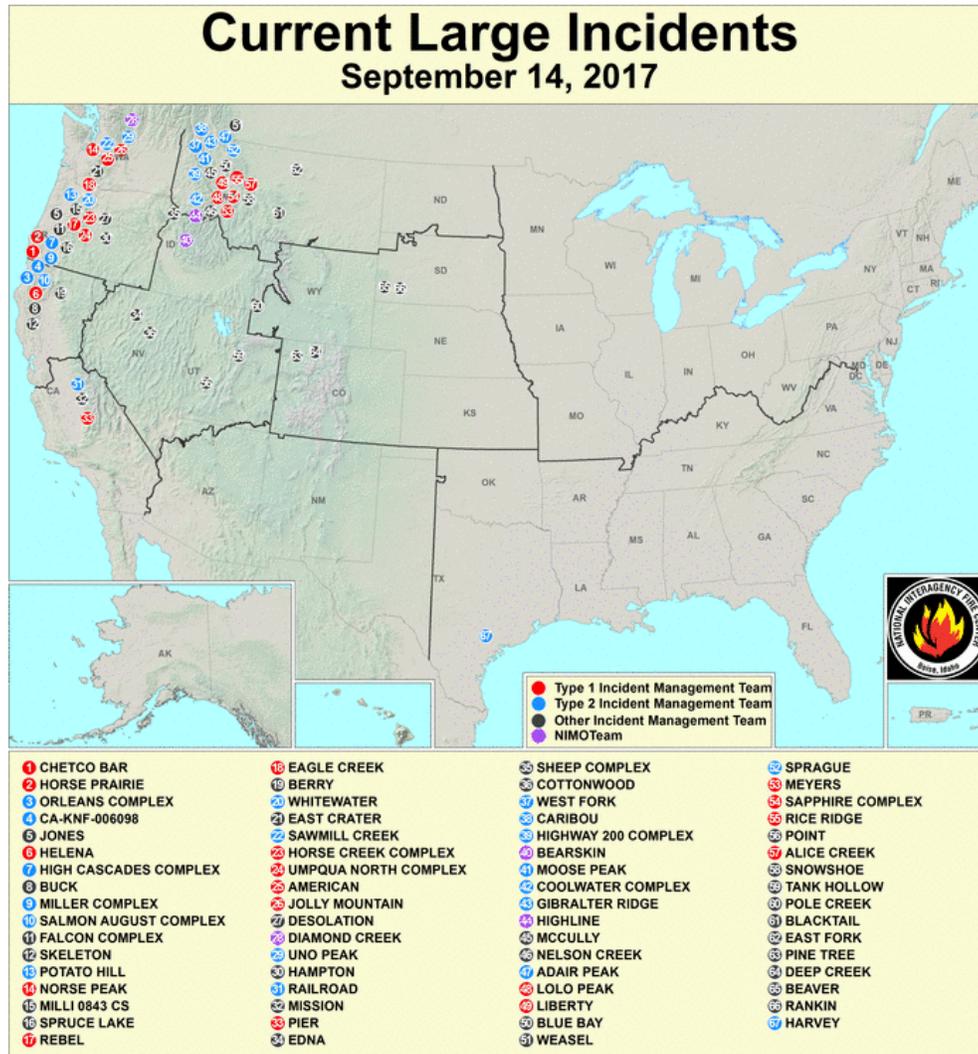
Highlighted Drought Resources

- [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](#)

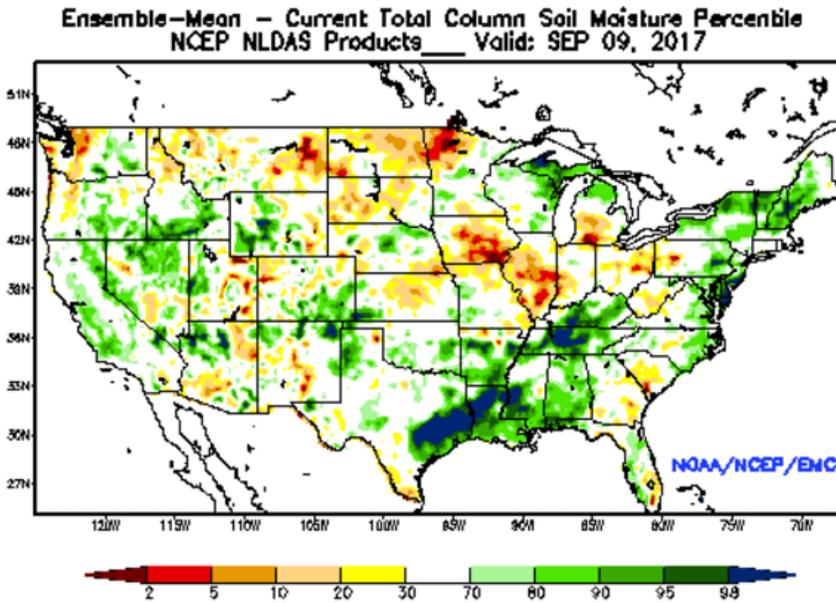


Highlighted Wildfire Resources

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

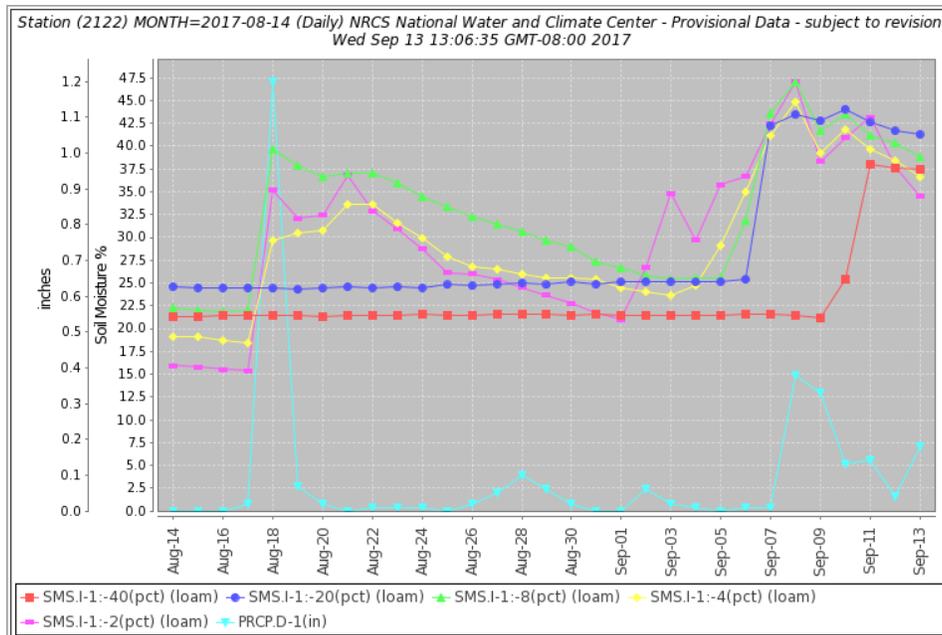
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of September 9, 2017.

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



The chart shows precipitation and soil moisture for the last 30 days at the [Fortuna SCAN Site 2122](#) in southern Puerto Rico. The graph shows the rainfall from Hurricane Harvey on August 18 and the rainfall from Hurricane Irma on September 8 and 9. Harvey increased the soil moisture at the 2-, 4-, and 8-inch sensor depths, whereas Irma produced soil moisture increases at all sensor depths.

Soil Moisture Data Portals

[CRN Soil Moisture](#)

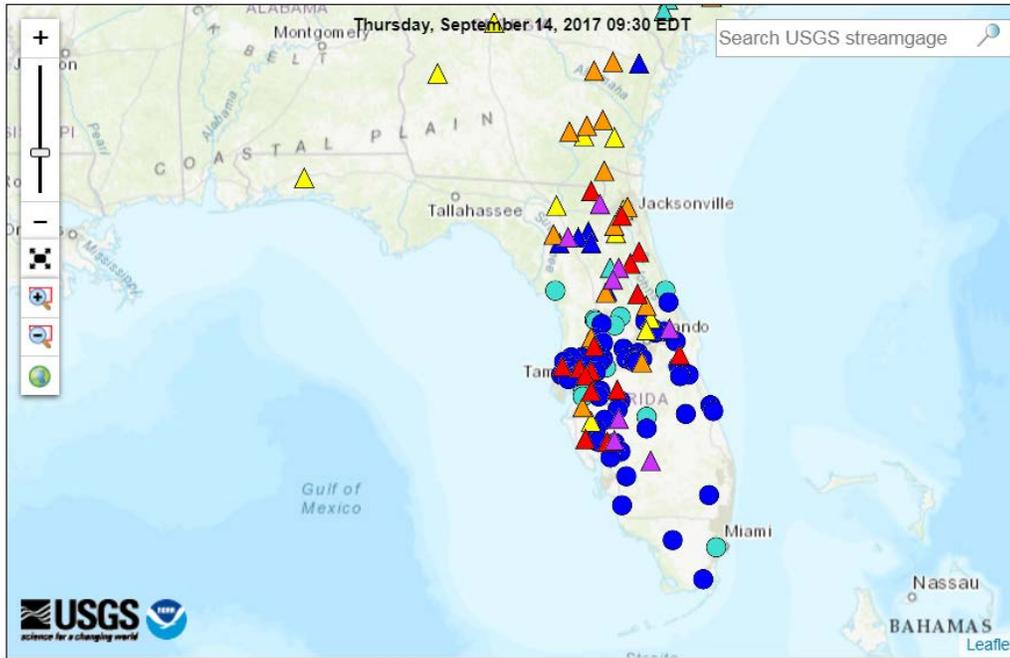
[Texas A&M University North American Soil Moisture Database](#)

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

Streamflow

Source: USGS

Map of flood and high flow conditions



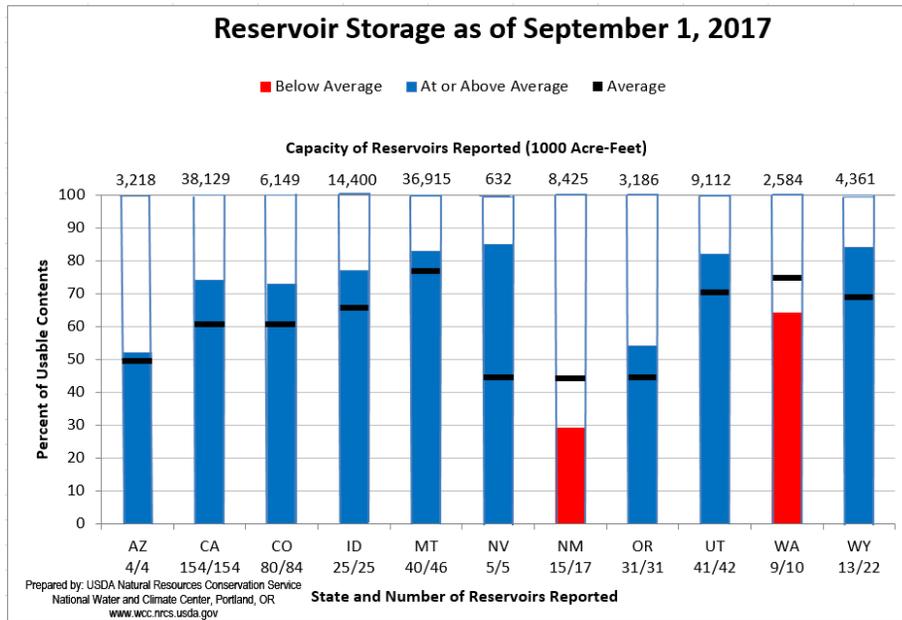
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

[Flood and high flow conditions interactive map](#)

Reservoir Storage

September 1 Western States Reservoir Storage

Source: NRCS National Water and Climate Center



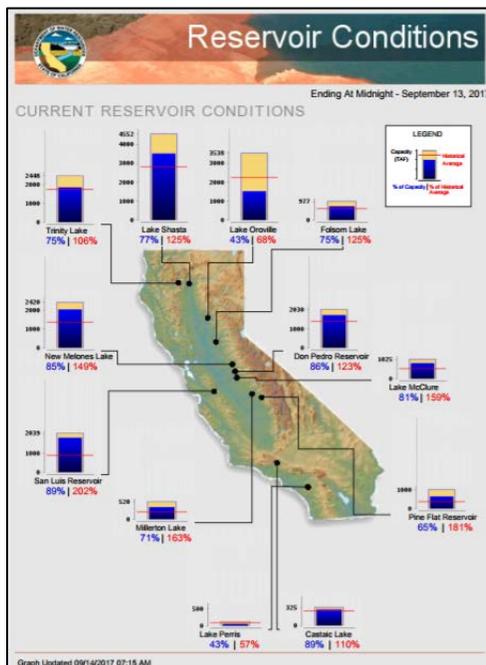
[National Water and Climate Center Reservoir Data](#)

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

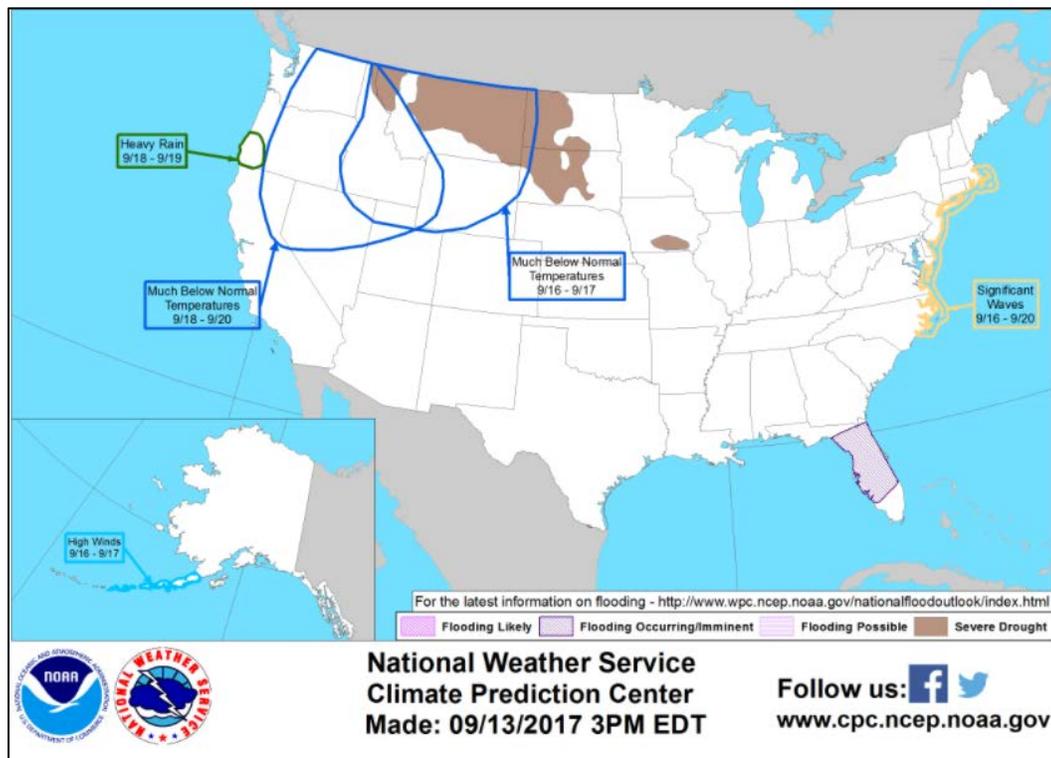
Agricultural Weather Highlights

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

[National Outlook, Thursday, September 14, 2017](#): “Showers associated with the remnants of Irma should end by Friday across the eastern U.S. However, warm, humid weather and scattered showers will linger for the next few days across Florida, where some rivers—including the St. Johns River—remain very high. Meanwhile, a winter-like storm will provide much-needed precipitation—including high-elevation snow—across northern sections of the Rockies and Plains. During the weekend, a second storm will bring the season’s first significant precipitation to the Pacific Northwest. Five-day precipitation totals could reach 1 to 3 inches from the Pacific Northwest into the upper Midwest. Elsewhere, lateseason warmth will continue to spread across the South, East, and lower Midwest. The NWS 6- to 10-day outlook for September 19 – 23 calls for the likelihood of above-normal temperatures along and east of a line from the southern Rockies into the upper Midwest, while cooler-than-normal conditions will cover the northern High Plains and much of the West. Meanwhile, near- to below-normal rainfall across the southern and eastern U.S. should contrast with wetter-than-normal weather from the Pacific Northwest into the upper Midwest.”

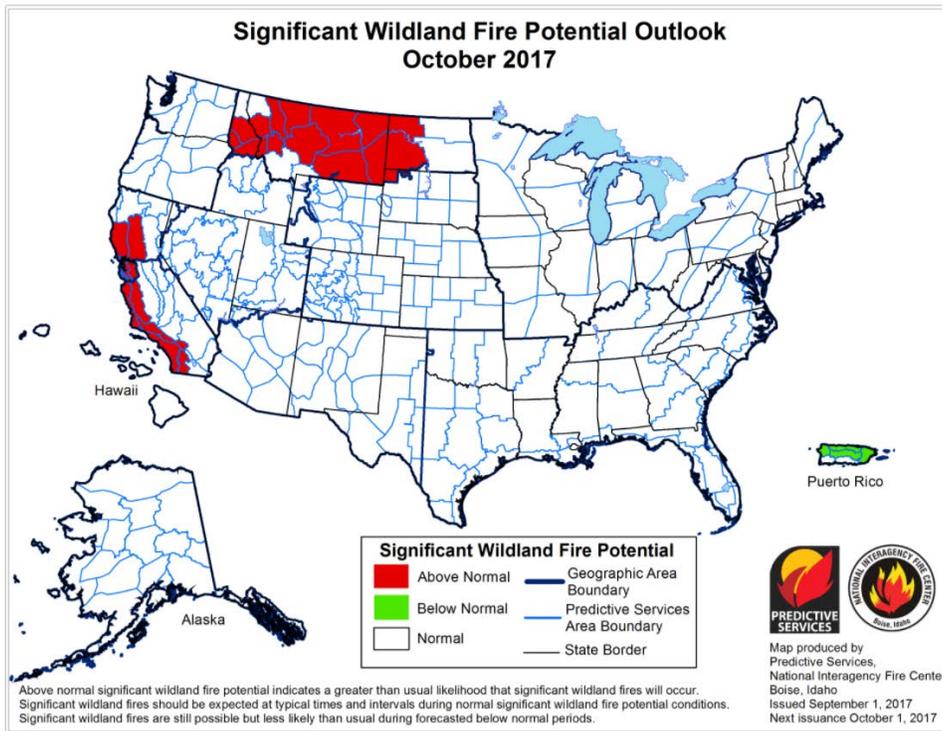
Weather Hazard Outlook [September 16 - 20, 2017](#)

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

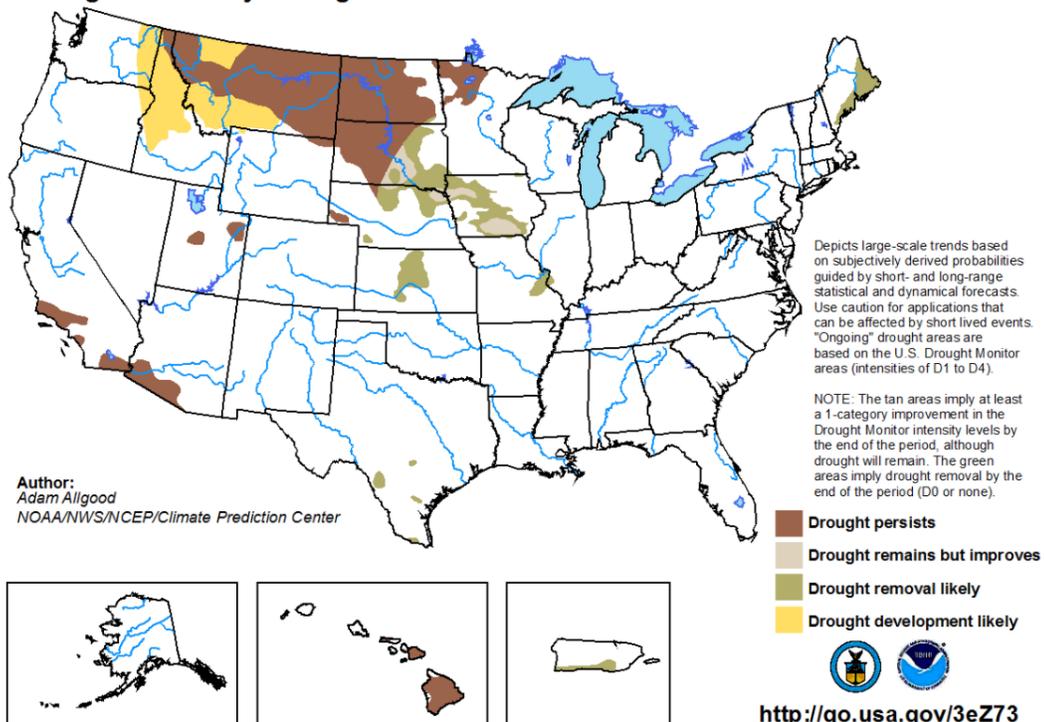
Source: National Interagency Fire Center



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

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

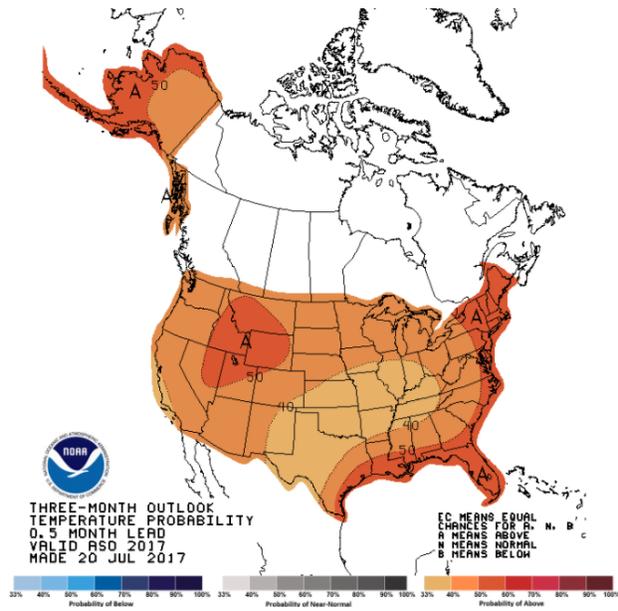
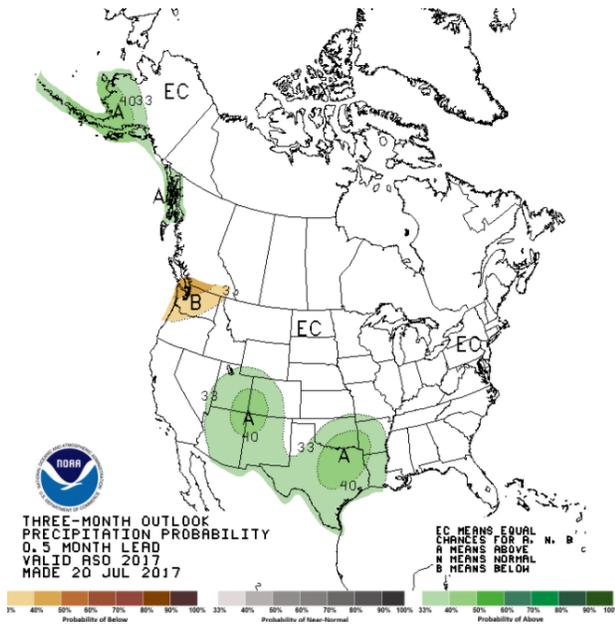


Climate Prediction Center 3-Month Outlook

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](#).