

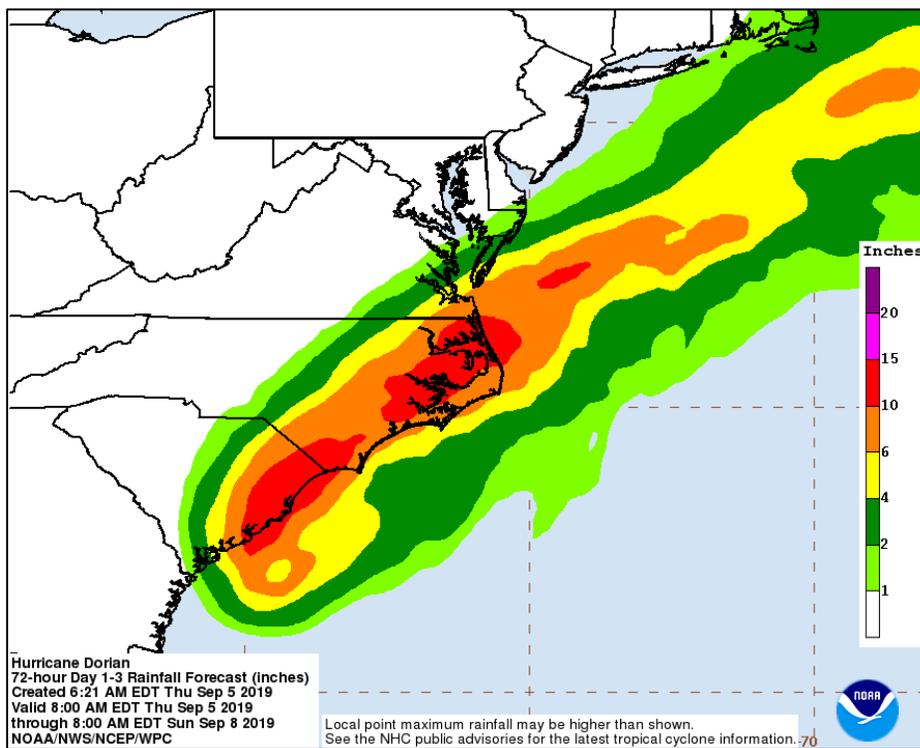
Water and Climate Update

September 5, 2019

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.

Precipitation	2	Other Climatic and Water Supply Indicators	11
Temperature.....	6	Short- and Long-Range Outlooks.....	15
Drought	8	More Information	17

Hurricane Dorian strikes the Carolinas, moving north



Hurricane Dorian 72-hour rainfall forecast

After devastating the Bahamas, Hurricane Dorian moved into the Carolinas early Thursday. According to the National Weather Service, Hurricane Dorian will continue to move along the Southeast U.S. coast today. With sustained winds of 115 mph, Dorian is currently moving to the north-northeast at 9 mph.

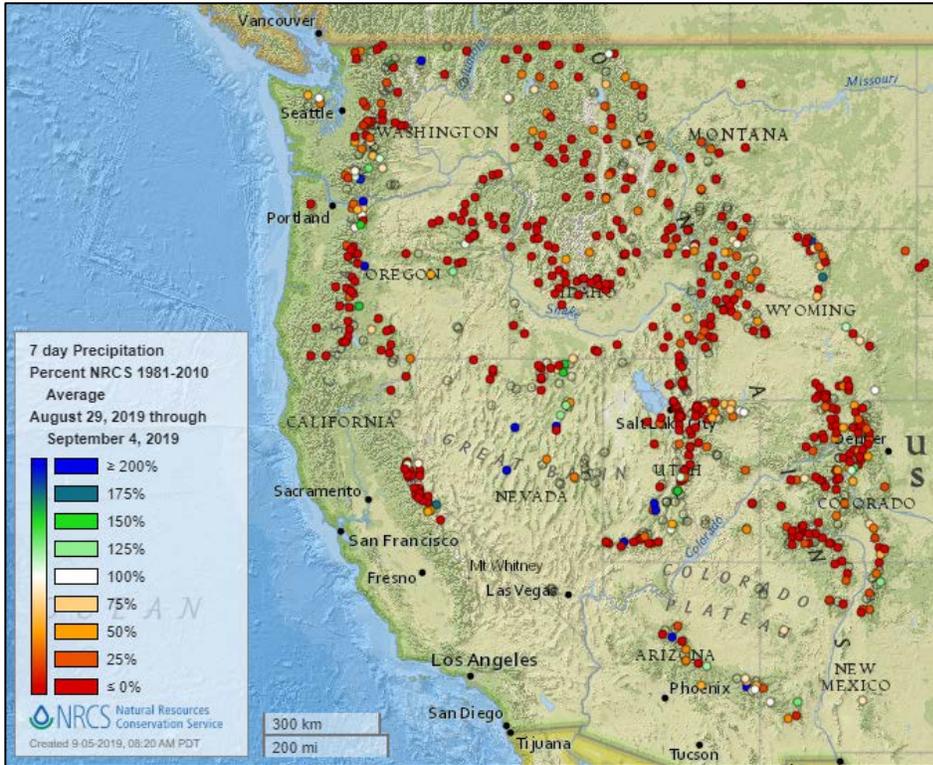
Dorian will remain a dangerous hurricane, bringing heavy rain, storm surge, damaging winds, and isolated tornadoes along and near the coasts of Georgia, North and South Carolina, and portions of southeast Virginia.

Related:

- [Dorian blasts Carolinas with coastal flooding, damaging winds and torrential rain](#) Washington Post
- [Carolinas brace for severe flooding as Dorian hits with high winds, rain](#) NBS News
- [Reinvigorated Dorian lasing North and South Carolina coasts](#) CBS News

Precipitation

Last 7 Days, NRCS SNOTEL Network

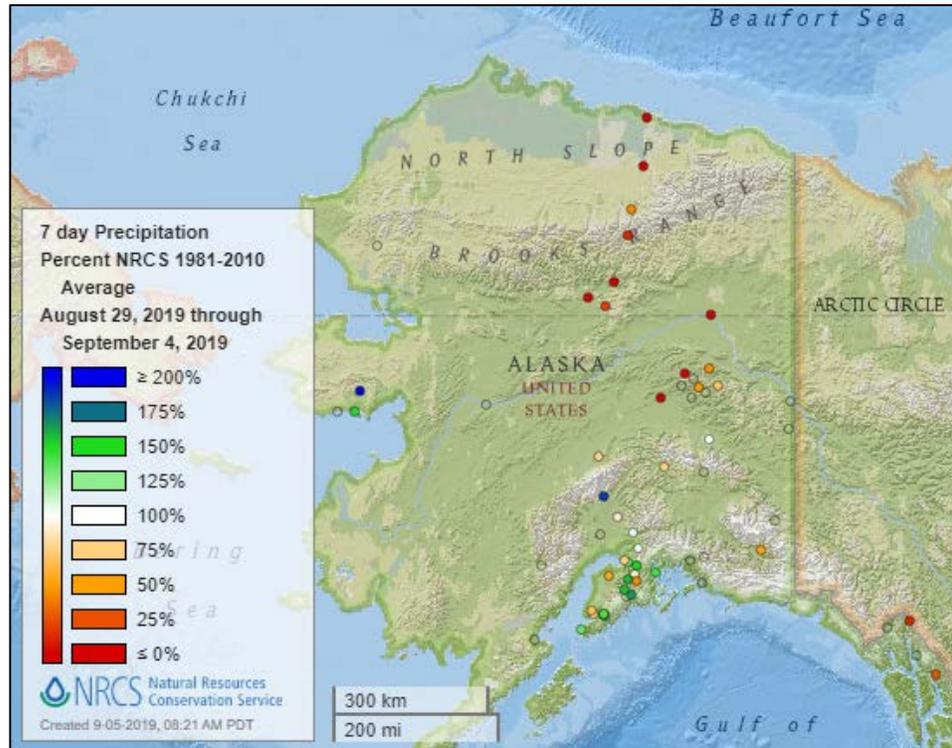


[7-day precipitation percent of average map](#)

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](#)



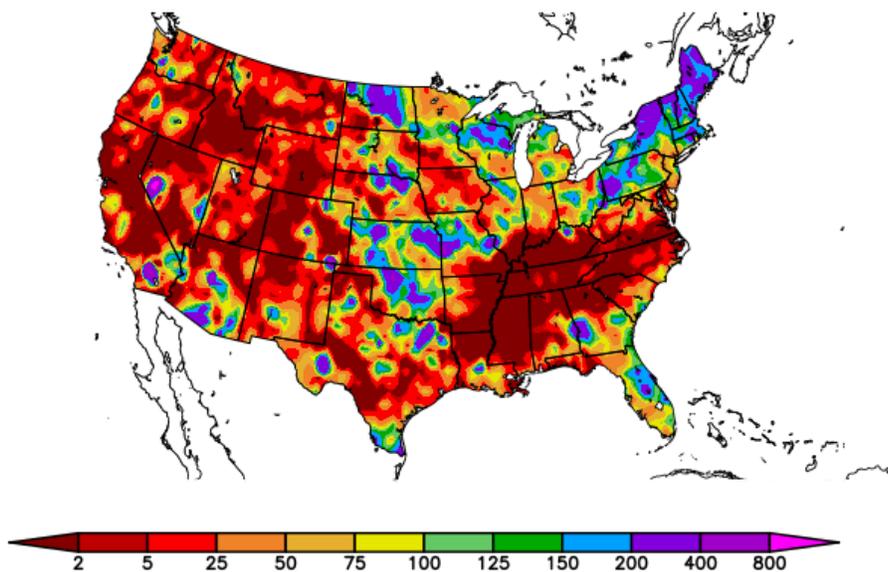
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
8/29/2019 – 9/4/2019



Generated 9/5/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

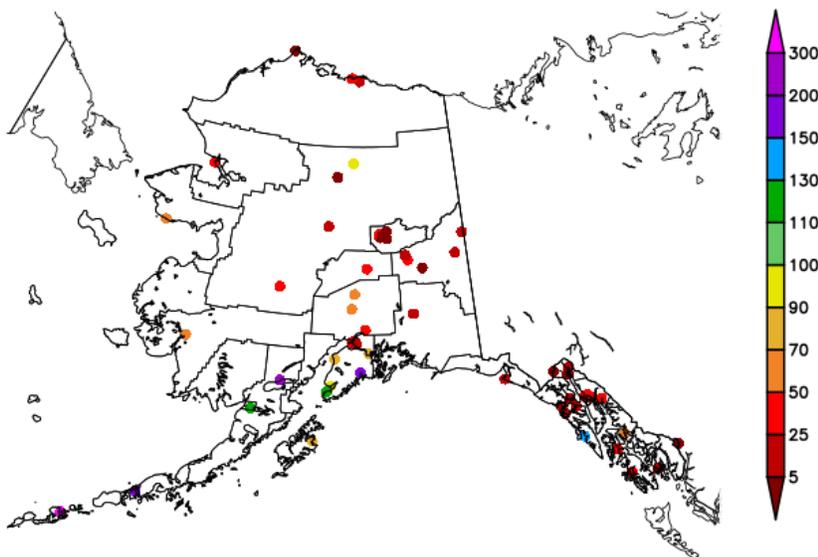
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
8/29/2019 – 9/4/2019

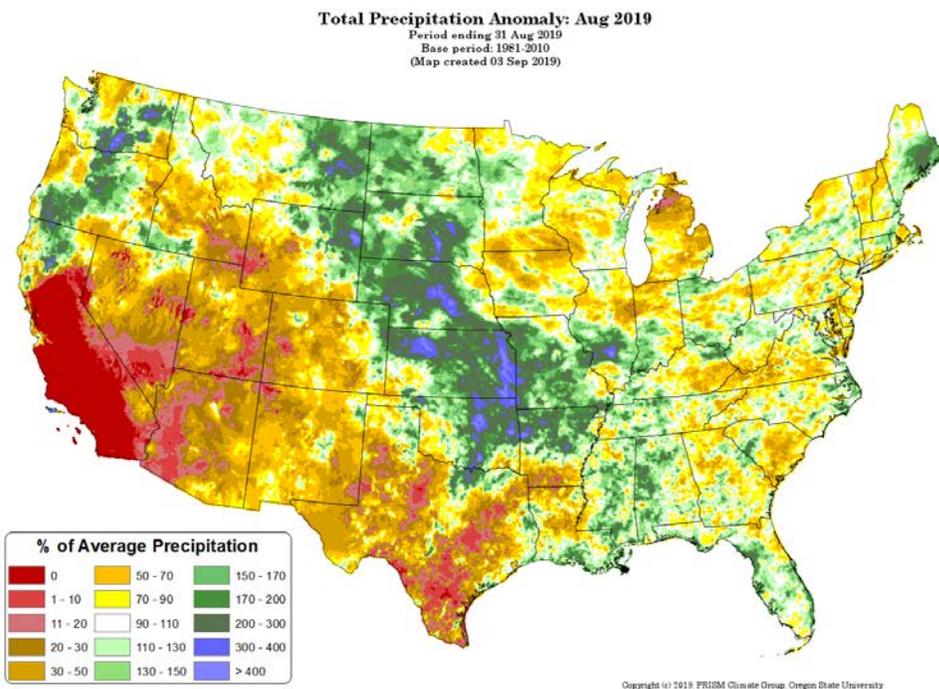


Generated 9/5/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

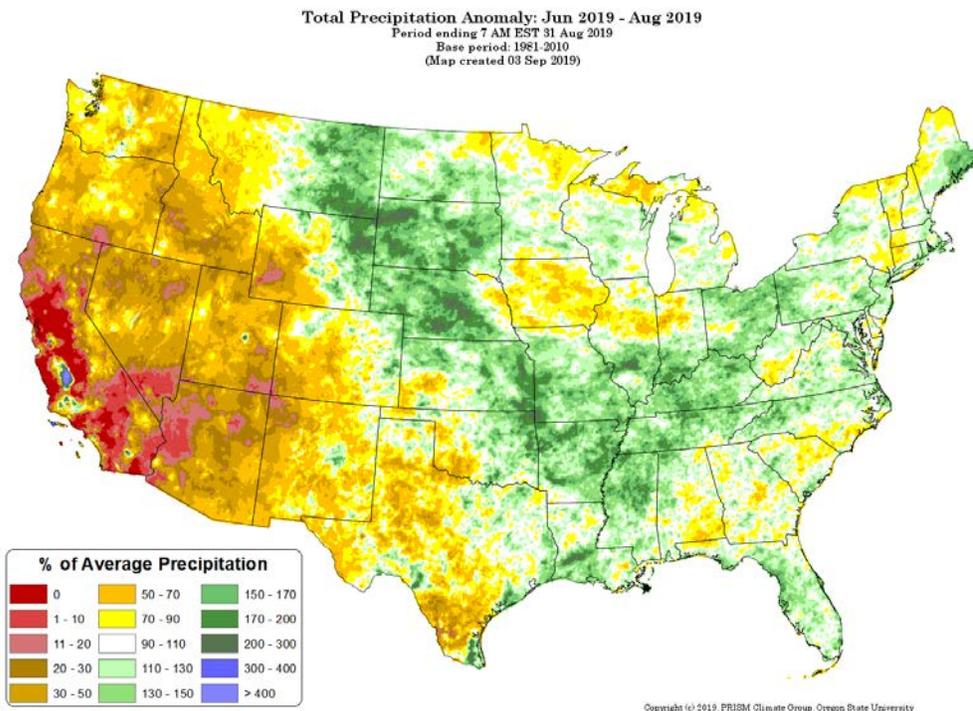


[Previous month national total precipitation percent of average map](#)

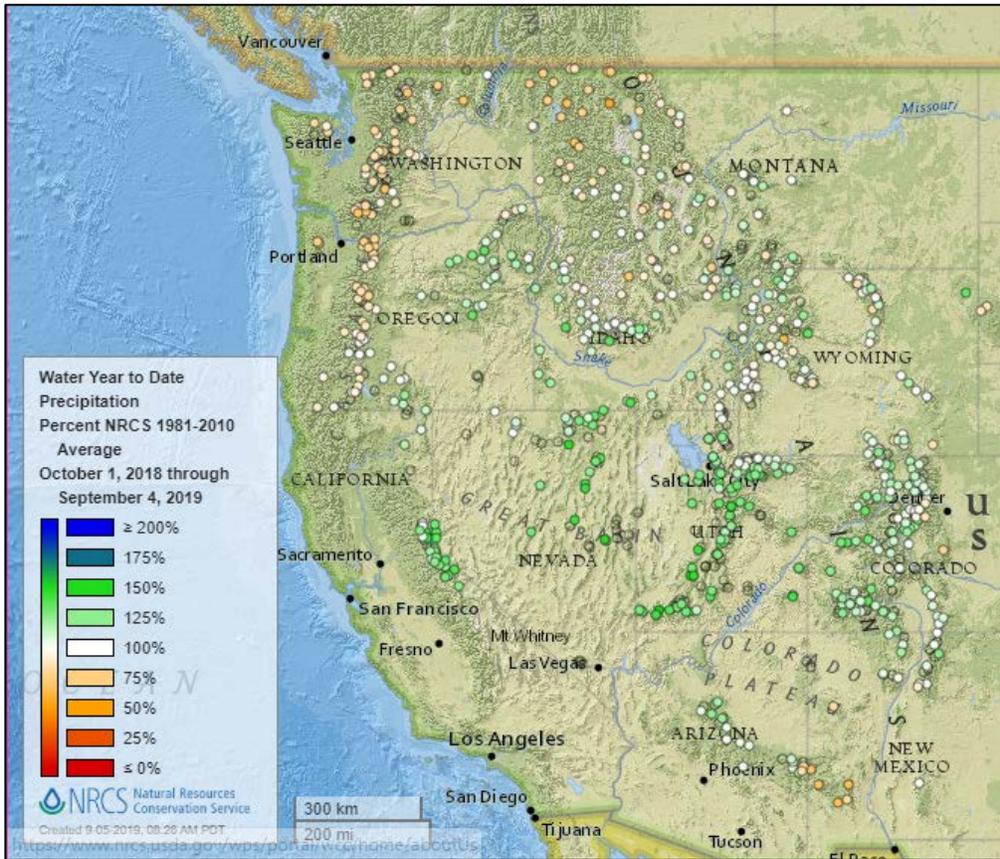
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[June through August 2019 total precipitation percent of average map](#)



Water Year-to-Date, NRCS SNOTEL Network



[2019 water year-to-date precipitation percent of average map](#)

See also:
[2019 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2019 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2019 water year-to-date precipitation values \(inches\) map](#)

Temperature

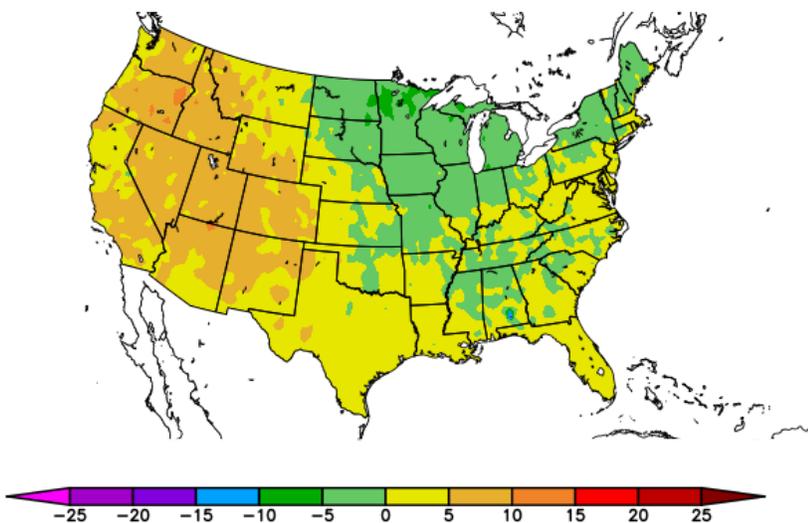
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the contiguous U.S.

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

Departure from Normal Temperature (F)
8/29/2019 – 9/4/2019



Generated 9/5/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

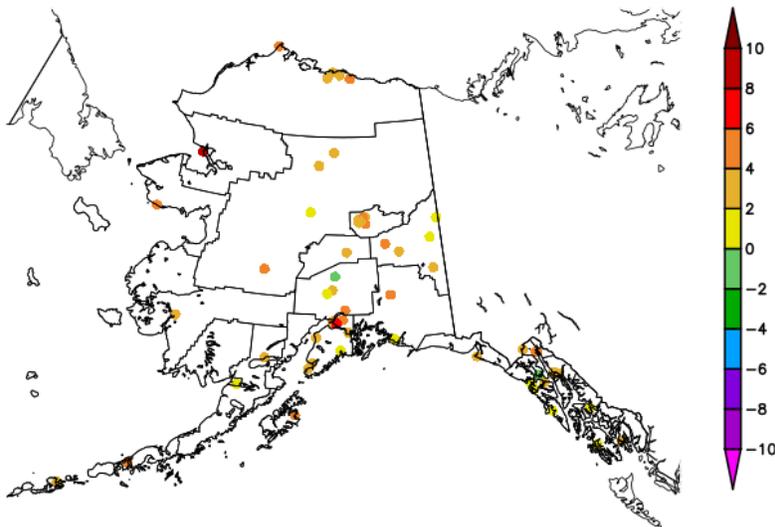
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
8/29/2019 – 9/4/2019



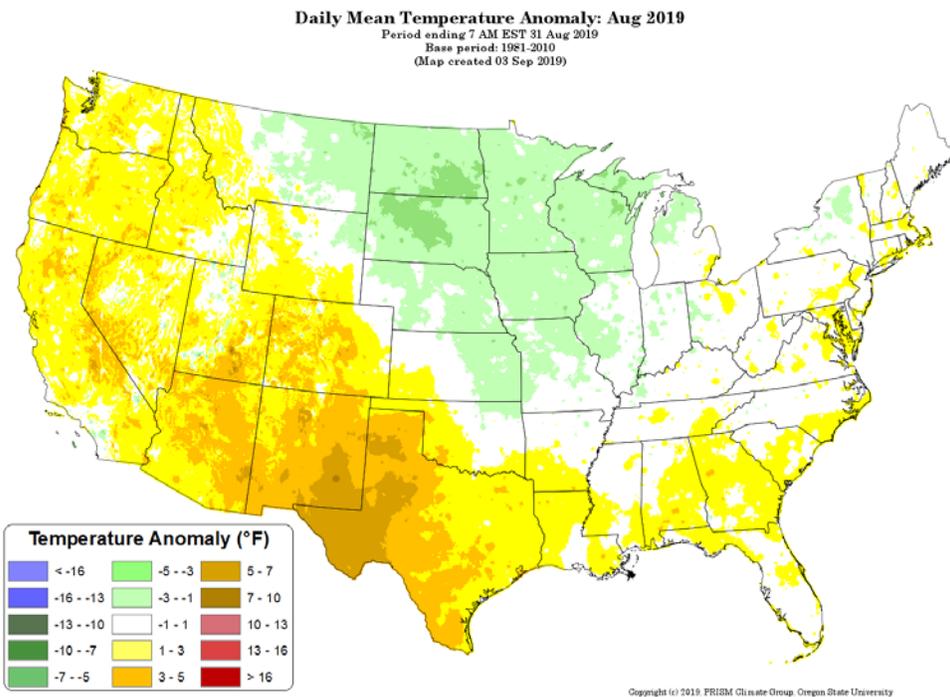
Generated 9/5/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

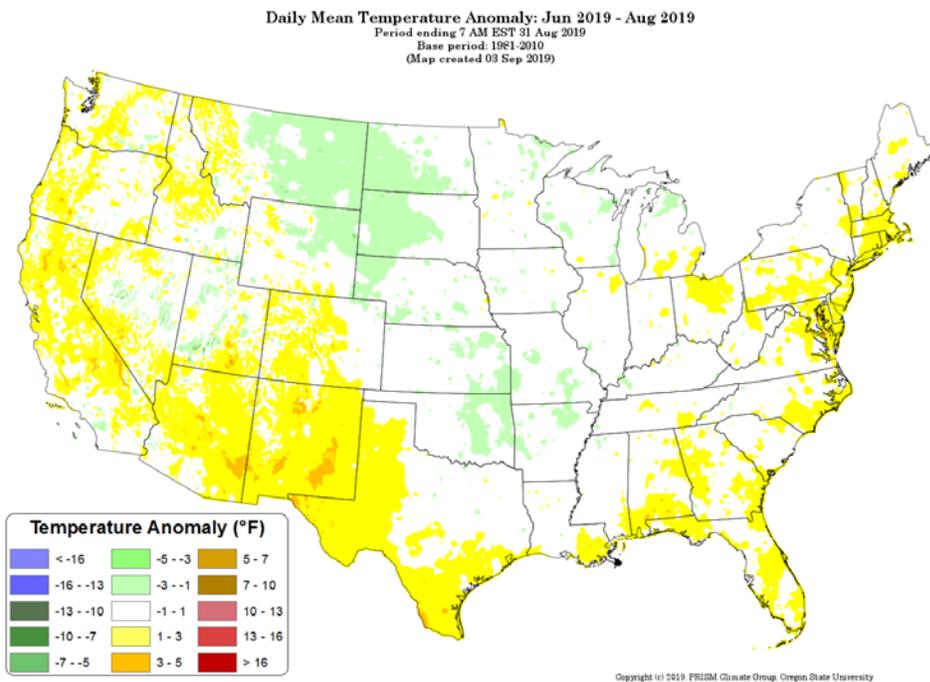
[Previous month national daily mean temperature anomaly map](#)



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

Source: PRISM

[June through August 2019 daily mean temperature anomaly map](#)



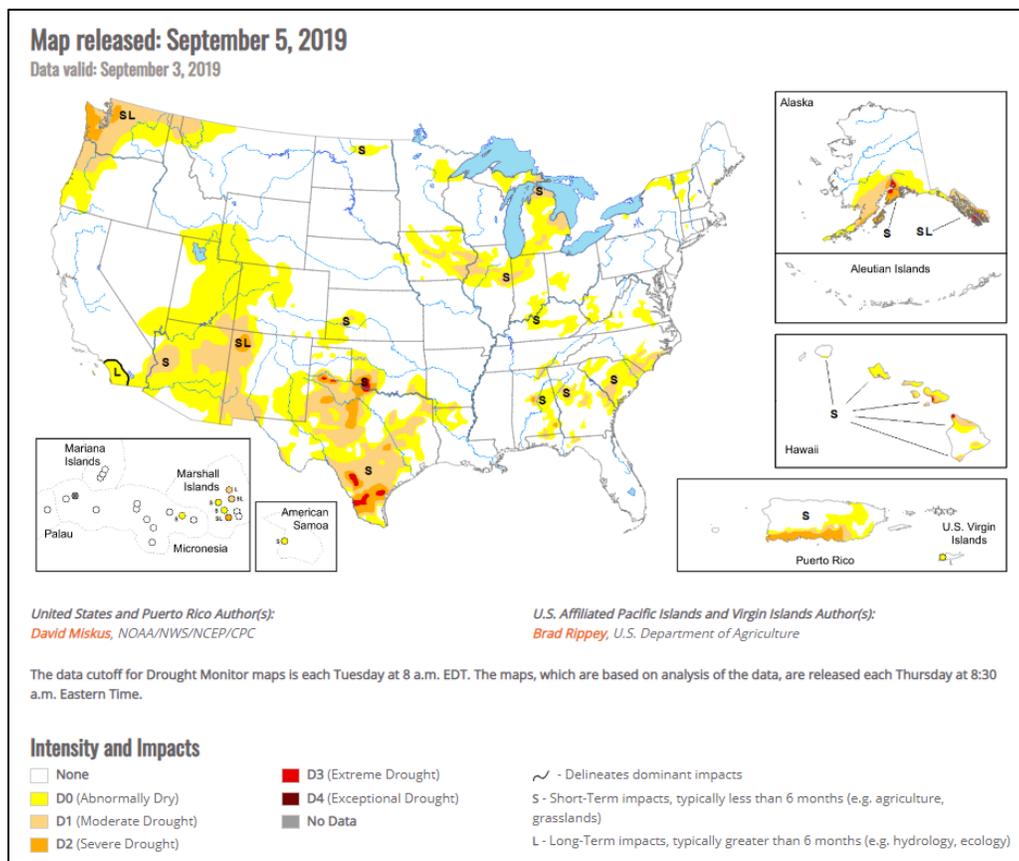
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



[Current National Drought Summary, September 5, 2019](#)

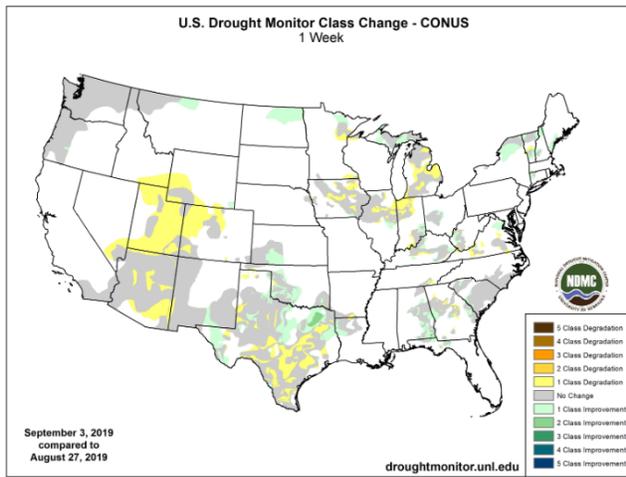
Source: National Drought Mitigation Center

“The highlight of the week was intense and destructive Hurricane Dorian, with sustained winds of 185 mph and a central pressure as low as 911 mbs. Fortunately for the U.S. (as of Sep. 4), Dorian never made landfall along the Southeastern coast; however, while a Category 5 hurricane, it stalled over the northern Bahamas, devastating the islands of Great Abaco and Grand Bahama. For the most part, Florida dodged a Dorian disaster as the hurricane remained stalled over the northern Bahamas, slowly weakened, and finally drifted northward by the period’s end. Some rain bands from Dorian dropped 1-4 inches along Florida’s east coast. Puerto Rico also missed a direct hit from Dorian as it was strengthening into a hurricane to its east, although scattered convection did bring the island some welcome rain. Elsewhere, a series of cold fronts dropped southeastward out of Canada, bringing subnormal temperatures to most of the Nation east of the Rockies, and helping to prevent Hurricane Dorian from tracking westward and making landfall in Florida. The fronts brought light to moderate rain to the northern Plains, upper Midwest, Great Lakes region, and Northeast, while clusters of storms dumped occasionally moderate to heavy (2-6 inches) rains on parts of the south-central Great Plains, lower Missouri Valley, and Southeast. The Southwest monsoon made a partial comeback, bringing light showers to portions of southern Arizona, most of New Mexico, and southwestern Texas, but overall has been a disappointment. The Far West, with high pressure in control, was mostly dry and warm. Light to moderate showers fell along southern coastal Alaska, but it was not enough for any improvement. Meanwhile, increased rainfall across southern sections of the Big Island aided vegetative growth and diminished deficits, thus improvement was shown.”

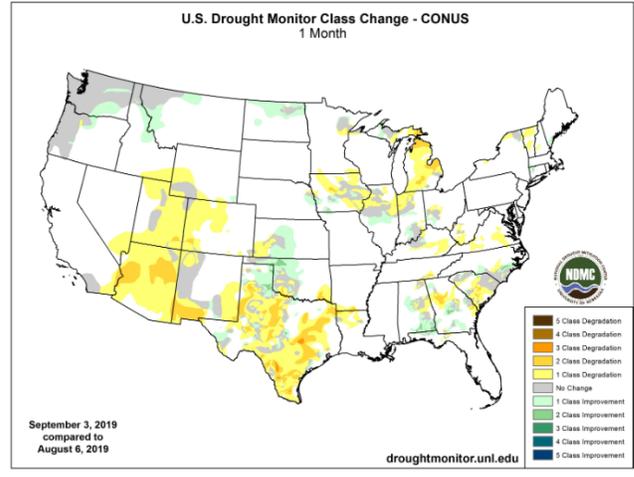
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

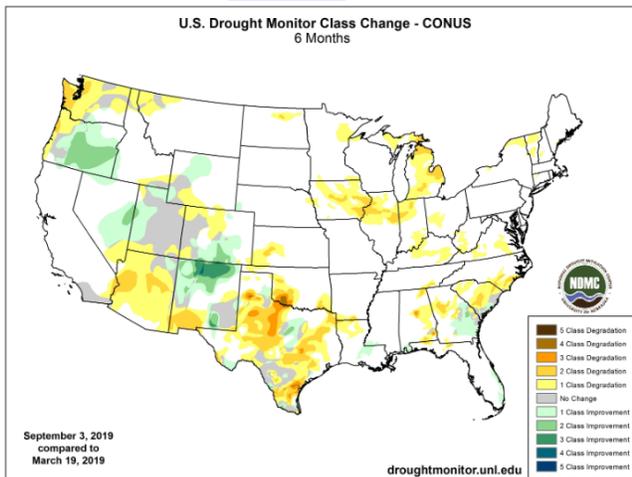
1 Week



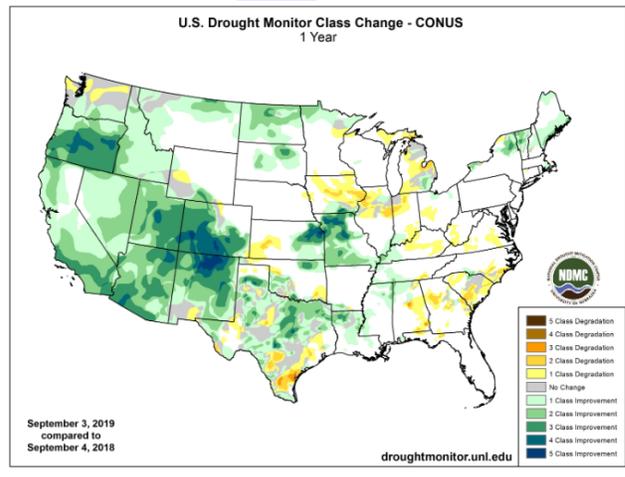
1 Month



6 Months



1 Year



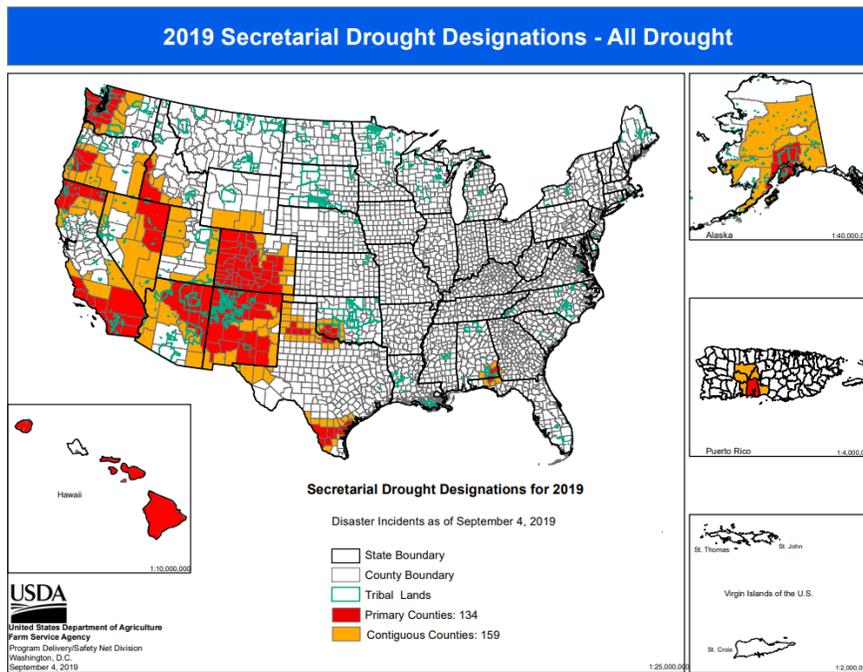
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

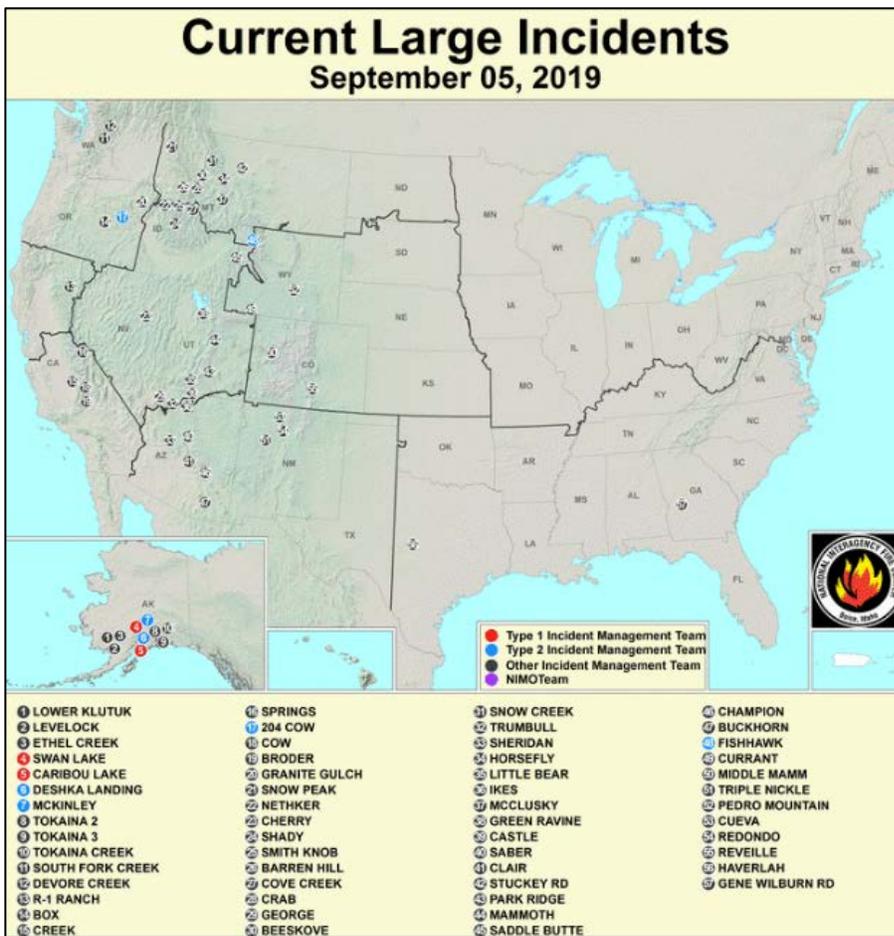
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



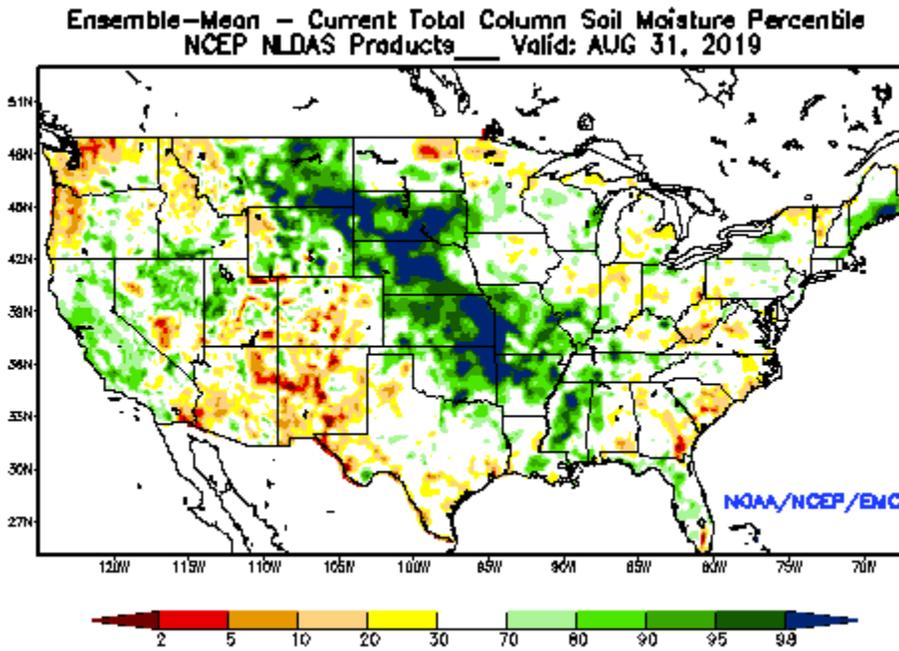
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of August 31, 2019

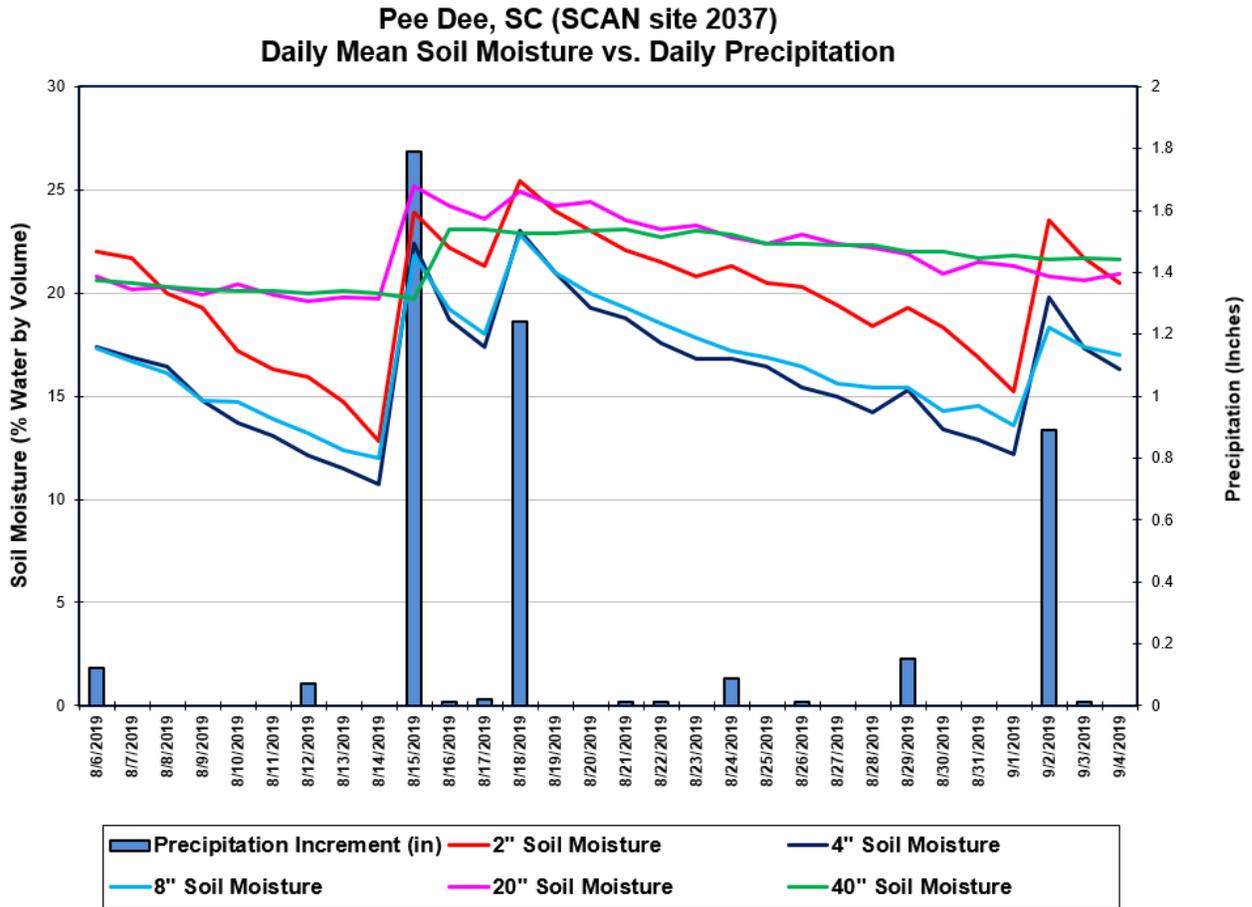
Soil Moisture Percent of Saturation

Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)



Soil Moisture Data

Source: NRCS [Soil Climate Analysis Network](#) (SCAN)



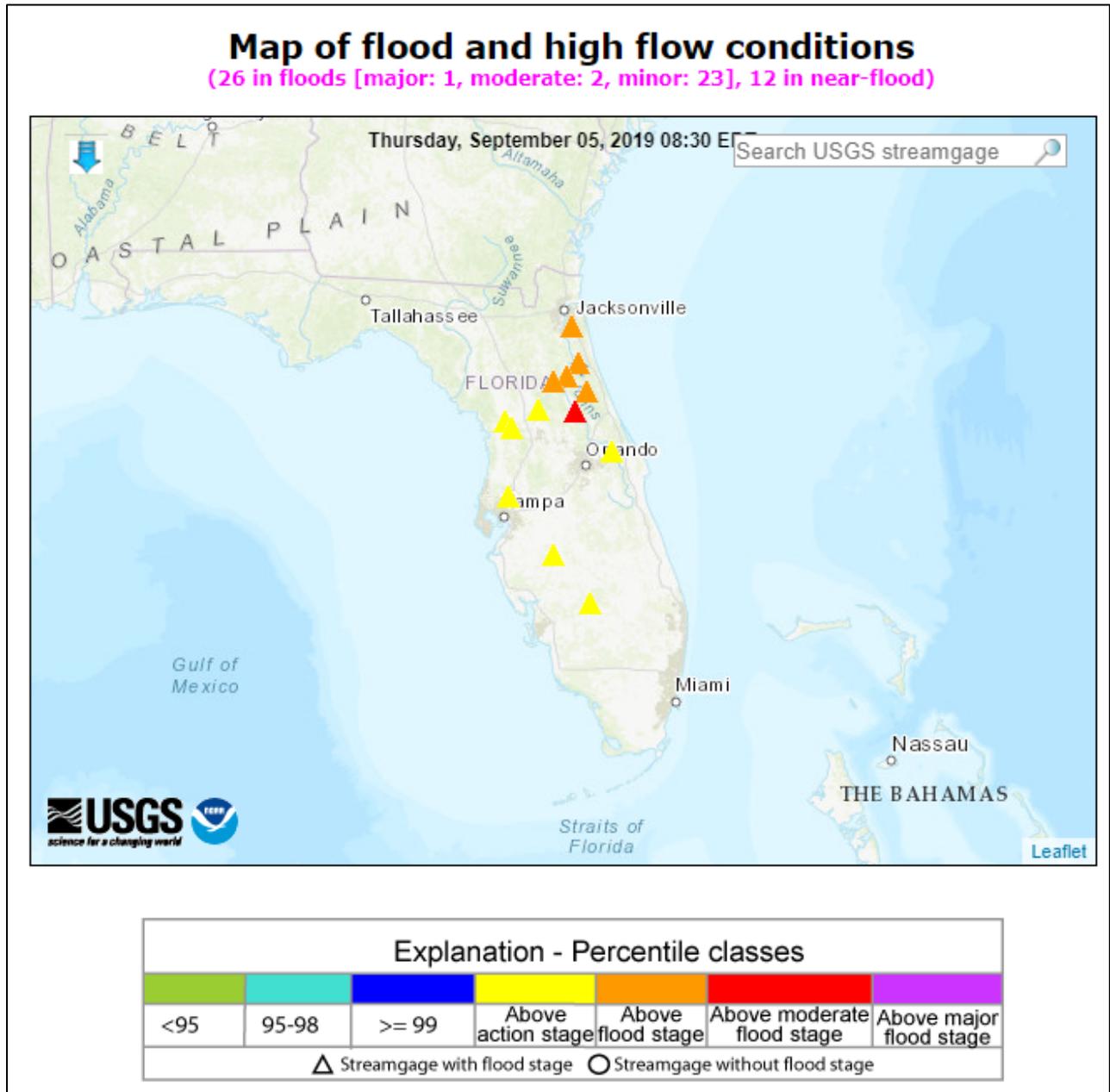
This chart shows the soil moisture and precipitation for the last 30 days at the [Pee Dee SCAN site](#) in South Carolina. Several precipitation events throughout the month increased soil moisture at the -2", -4", and -8" sensor levels. The larger rainfall events on August 15 and 18 also increased the soil moisture at the -20" and -40" sensor levels.

Soil Moisture Data Portals

- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

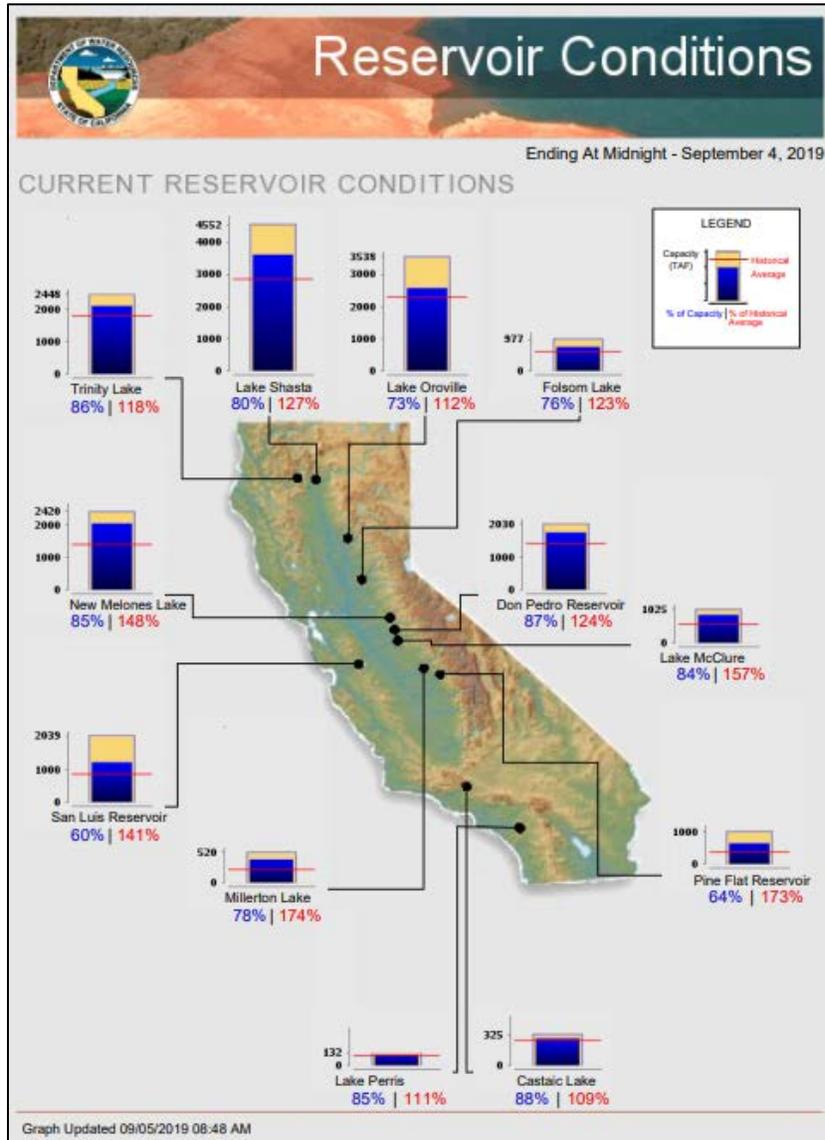


[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

Hydromet Tea Cup Reservoir Depictions

Source: U.S. Bureau of Reclamation

- [Upper Colorado](#)
- [Pacific Northwest/Snake/Columbia](#)
- [Sevier River Water, Utah](#)
- [Upper Missouri, Kansas, Oklahoma, Texas](#)

Short- and Long-Range Outlooks

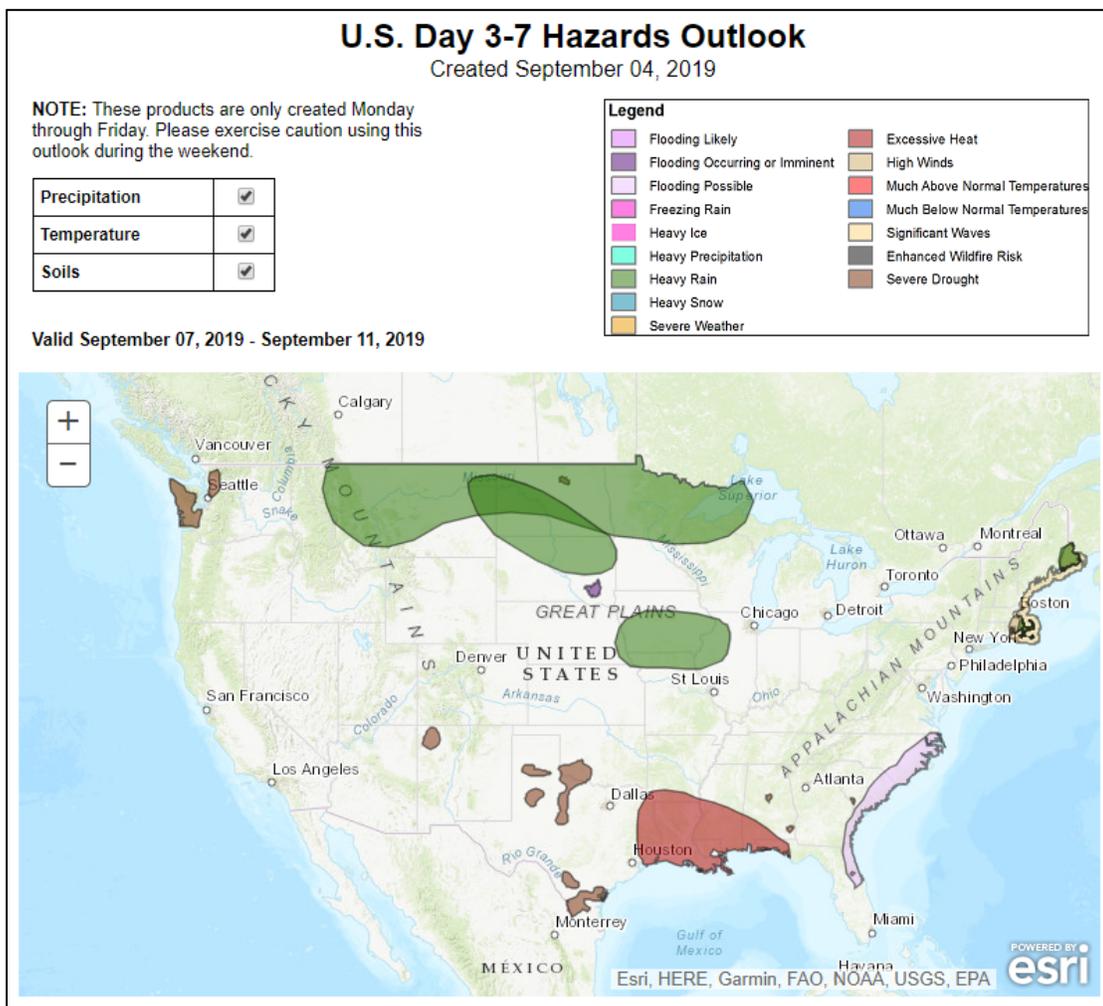
Agricultural Weather Highlights

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

National Outlook, Thursday, September 5, 2019: “For today and early Friday, Hurricane Dorian will pass very close to the coastal Carolinas, delivering a 2- to 8-foot storm surge and hurricane-force winds (74 mph or greater). In addition, both coastal and inland locations in the eastern Carolinas and environs can expect heavy rain, which could total 6 to 12 inches or more. Meanwhile, the remnants of Tropical Storm Fernand could produce locally heavy showers through today across southern Texas. Much of the remainder of the southern and eastern U.S. will experience dry weather into early next week. Farther west, however, late week shower activity will increase across the North, eventually reaching as far east as the upper Great Lakes region. During the weekend, cooler air will engulf much of the northern and western U.S., leaving lingering heat mostly confined to the South. The NWS 6- to 10- day outlook for September 10 – 14 calls for the likelihood of near- or above-normal temperatures and rainfall across most of the country. Cooler-than-normal conditions will be confined to New England and parts of the Far West, while drier-than-normal weather should be limited to the Southeast.”

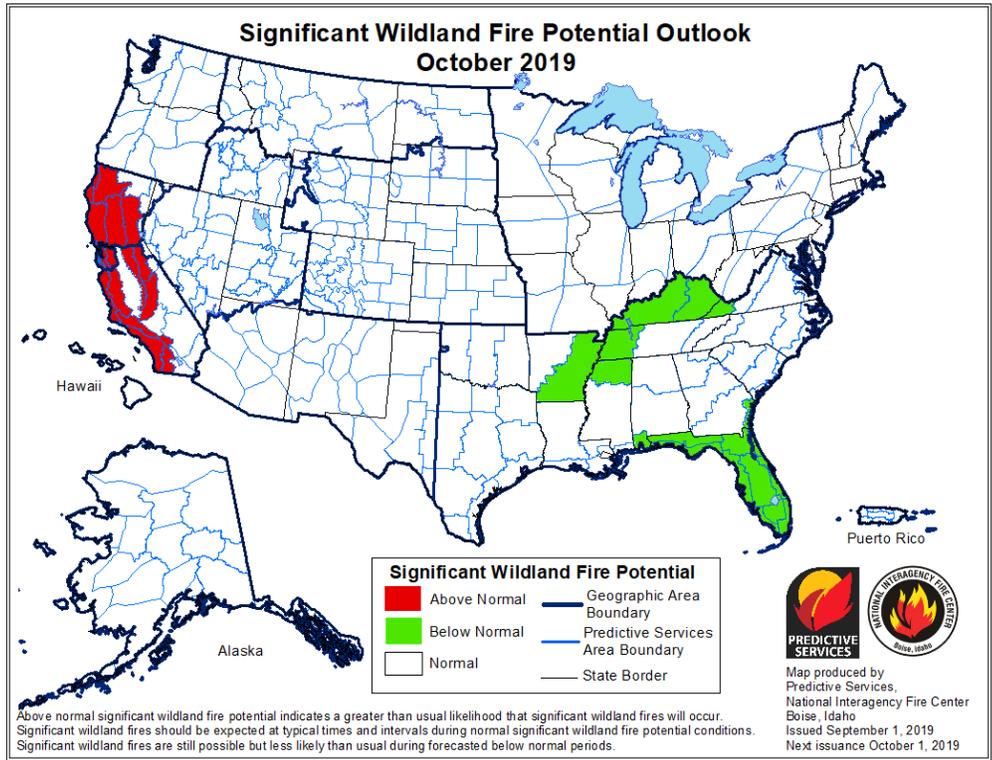
Weather Hazards Outlook: [September 7 – 11, 2019](#)

Source: NOAA Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

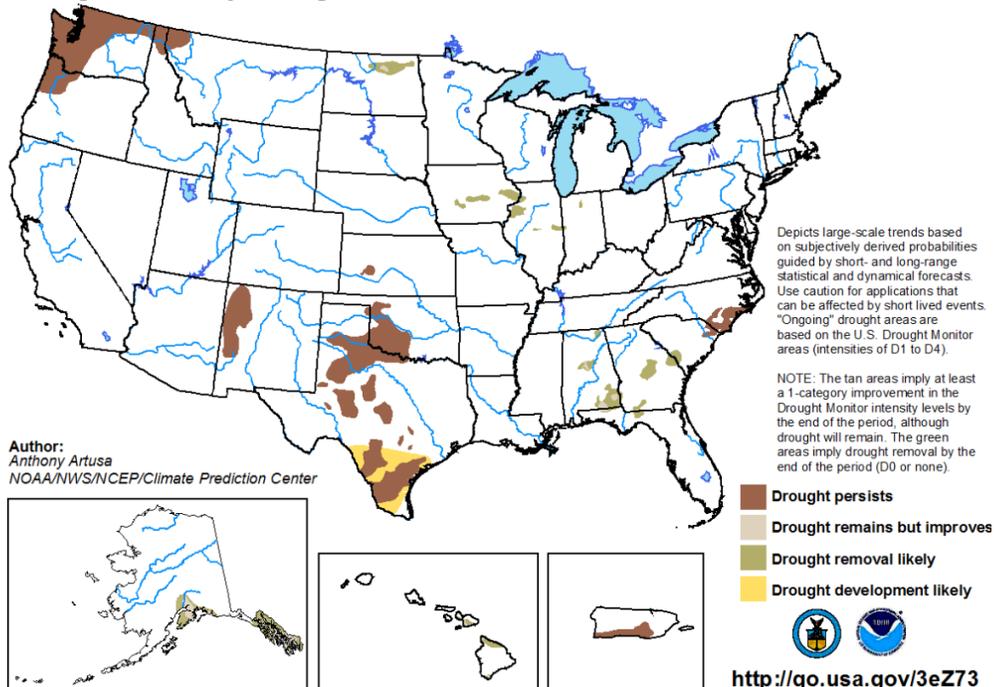


Seasonal Drought Outlook: [August 15 – November 30, 2019](#)

Source: National Weather Service

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

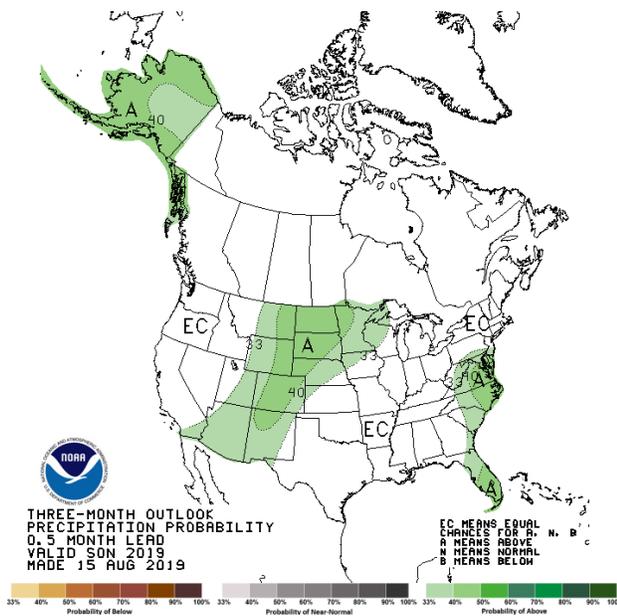
Valid for August 15 - November 30, 2019
Released August 15



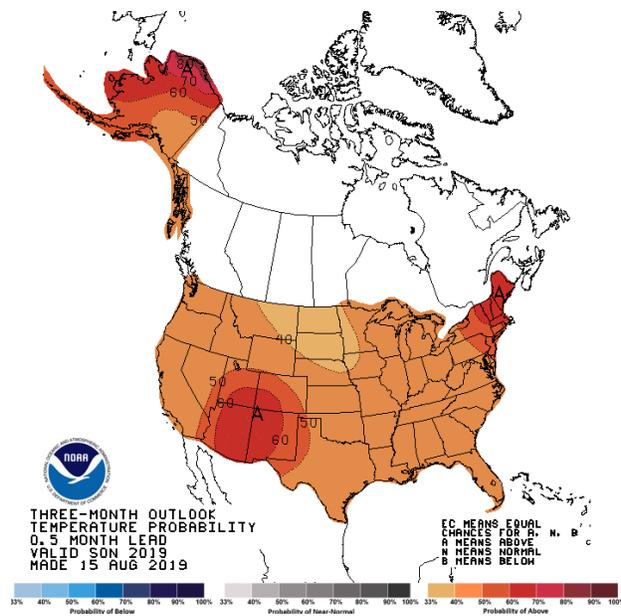
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[September-October-November \(SON\) 2019 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](#).