

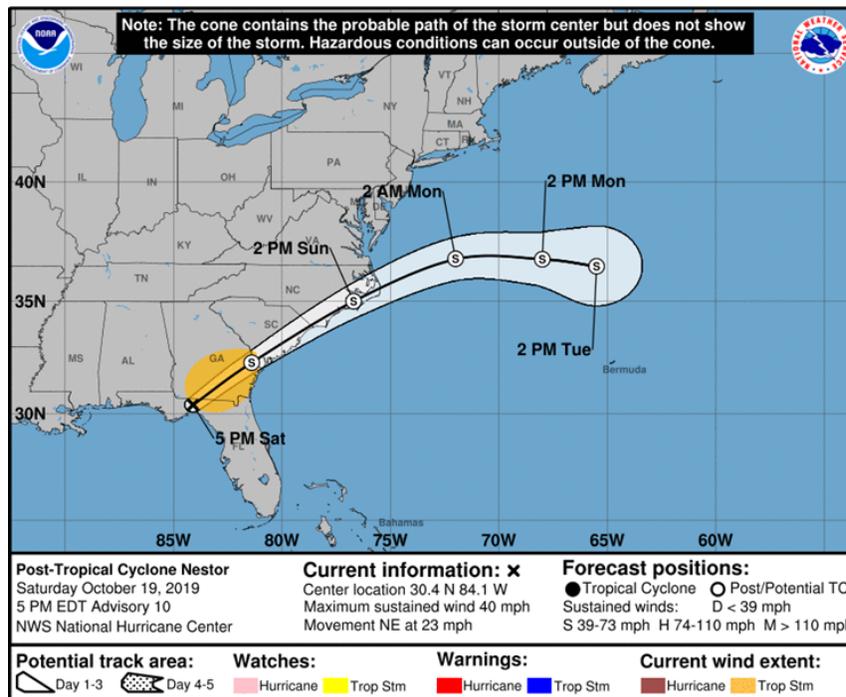
Water and Climate Update

October 24, 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.

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Tropical Storm Nestor delivers severe winds and rain to the Southeast



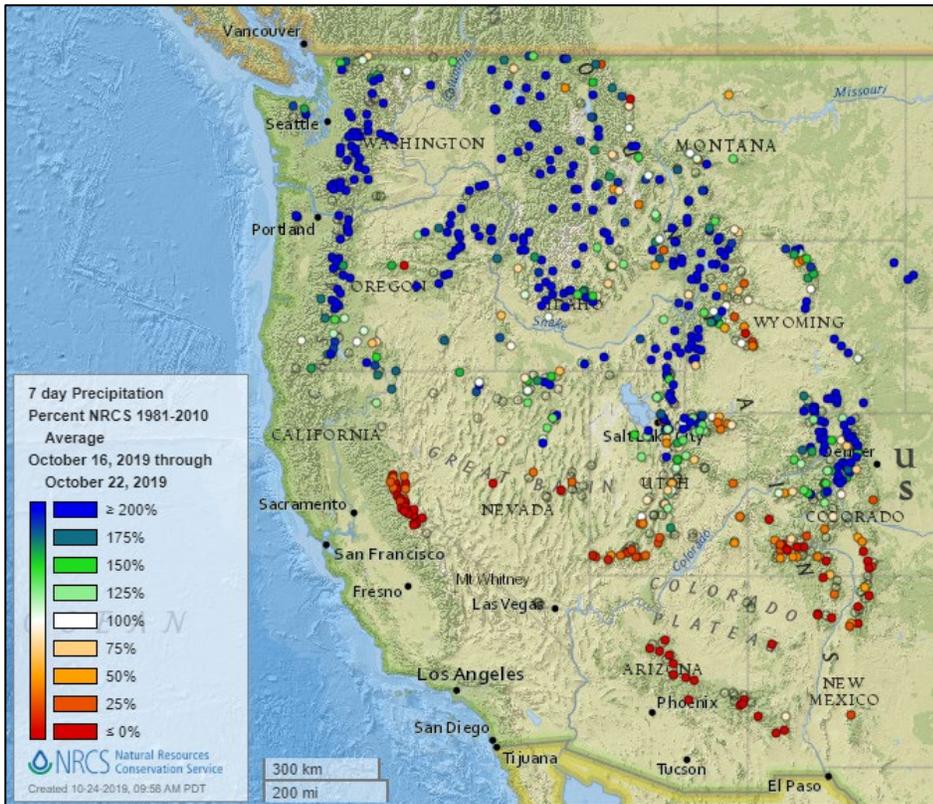
Tropical Storm Nestor brought rain and wind to the gulf coast of Florida late last week. Tropical storm-force winds spread along the Florida gulf coast with a storm surge forecast to reach up to five feet where Nestor made landfall. The storm spawned at least three tornadoes which damaged homes, businesses, and a school. Areas in Florida, Georgia, and the Carolinas experienced storm effects over the weekend.

Related:

- [Tropical Storm Nestor moves through Florida, swamps roads, restaurant: What we know Saturday](#) – Tallahassee Democrat on MSN.com (FL)
- [Tornado flips truck on I-4, damages school in Lakeland as Tropical Storm Nestor blows through Florida](#) – Orlando Sentinel (FL)
- [Nestor heads into Georgia after tornados damage Florida](#) – Orlando Sentinel (FL)
- [Tropical Storm Nestor Leaves Path of Destruction in Florida](#) – New York Times
- [Post-Tropical Storm Nestor sweeping across Florida with rain, tornado threat and ocean surge](#) – Washington Post
- [Former Tropical Storm Nestor moving out of central NC after bringing heavy rain](#) – Yahoo!

Precipitation

Last 7 Days, NRCS SNOTEL Network



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

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

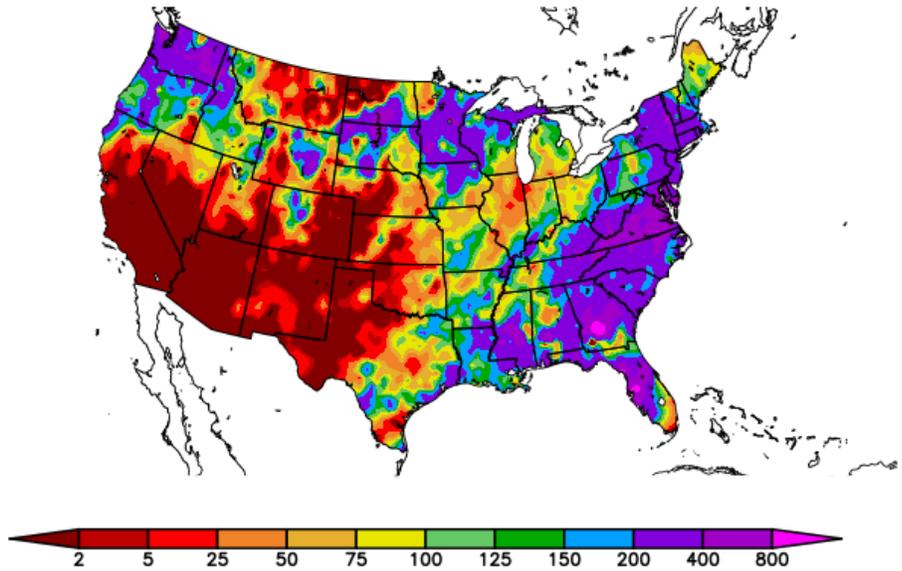
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
10/16/2019 – 10/22/2019



Generated 10/23/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

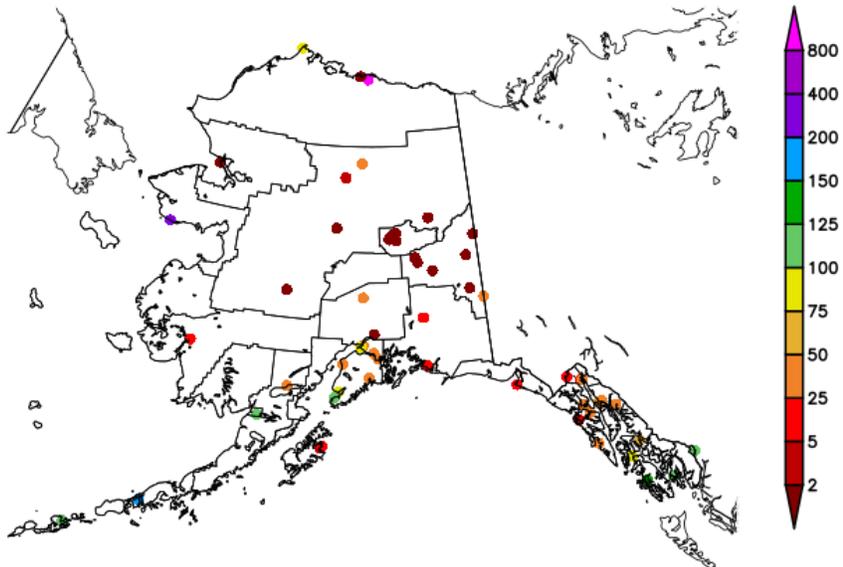
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
10/16/2019 – 10/22/2019



Generated 10/23/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

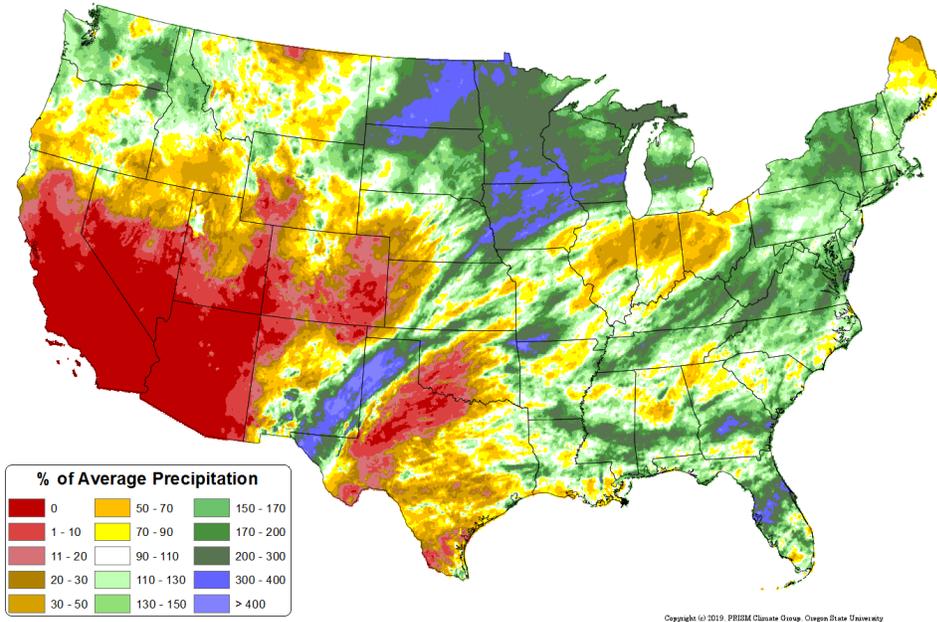
Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Oct 2019 - 23 Oct 2019
Period ending 7 AM EST 23 Oct 2019
Base period: 1981-2010
(Map created 24 Oct 2019)

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

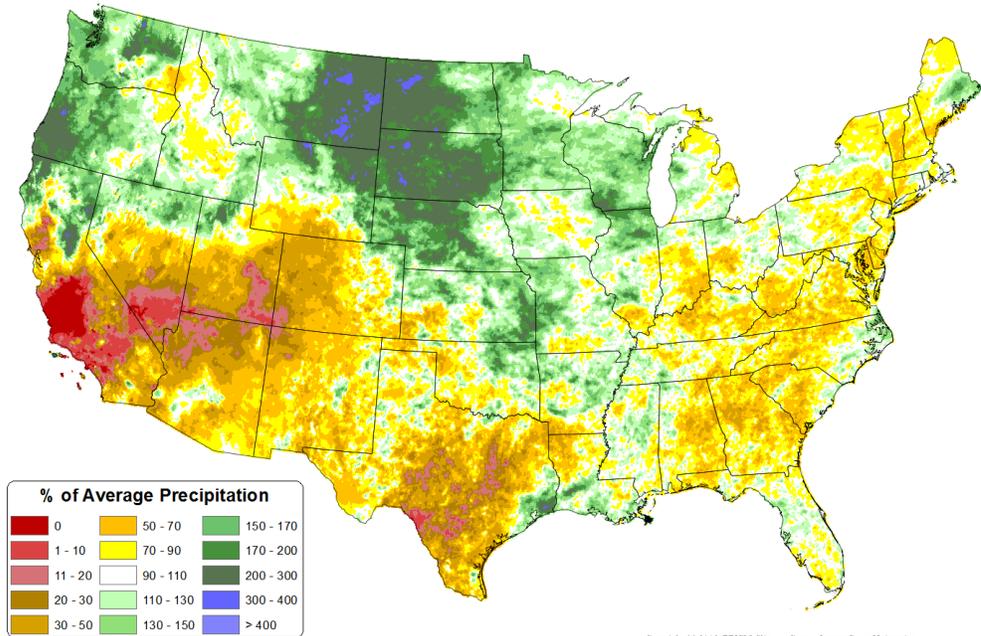


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

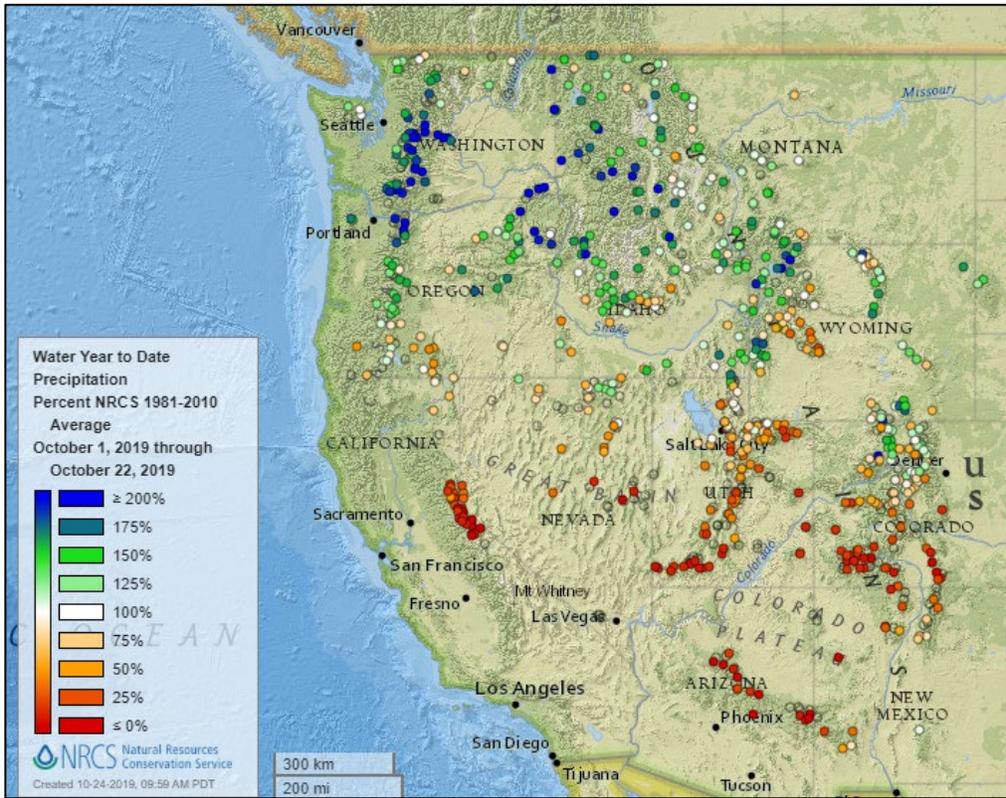
Source: PRISM

[July through September 2019 total precipitation percent of average map](#)

Total Precipitation Anomaly: Jul 2019 - Sep 2019
Period ending 7 AM EST 30 Sep 2019
Base period: 1981-2010
(Map created 02 Oct 2019)



Water Year-to-Date, NRCS SNOTEL Network



[2020 water year-to-date precipitation percent of average map](#)

See also:
[2020 water year-to-date precipitation values \(inches\) map](#)

Temperature

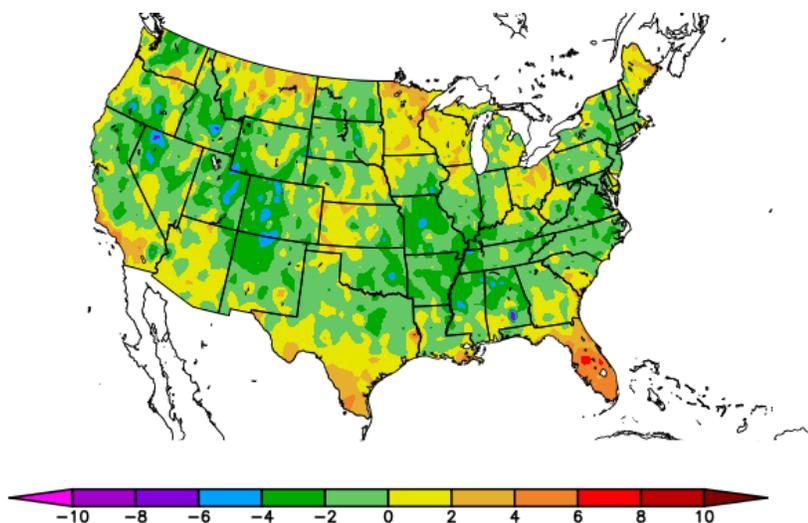
Last 7 Days, National Weather Service (NWS) Networks

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)
10/16/2019 – 10/22/2019



Generated 10/23/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

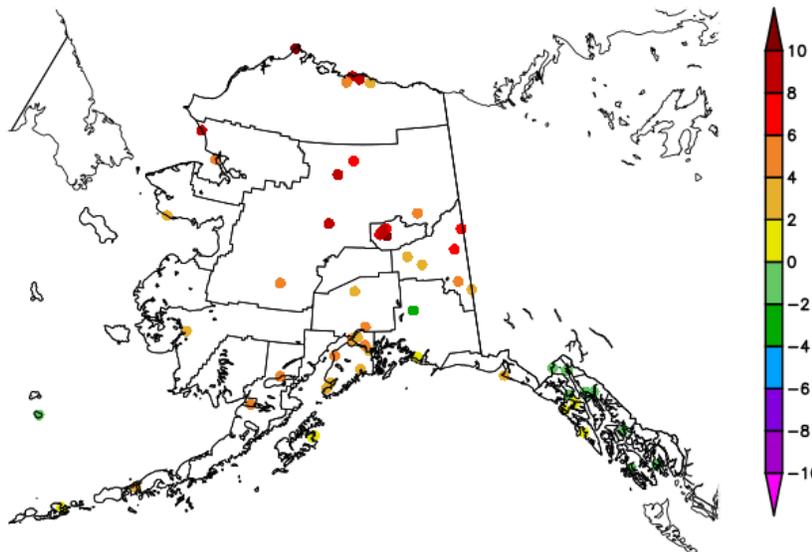
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
10/17/2019 – 10/23/2019



Generated 10/24/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

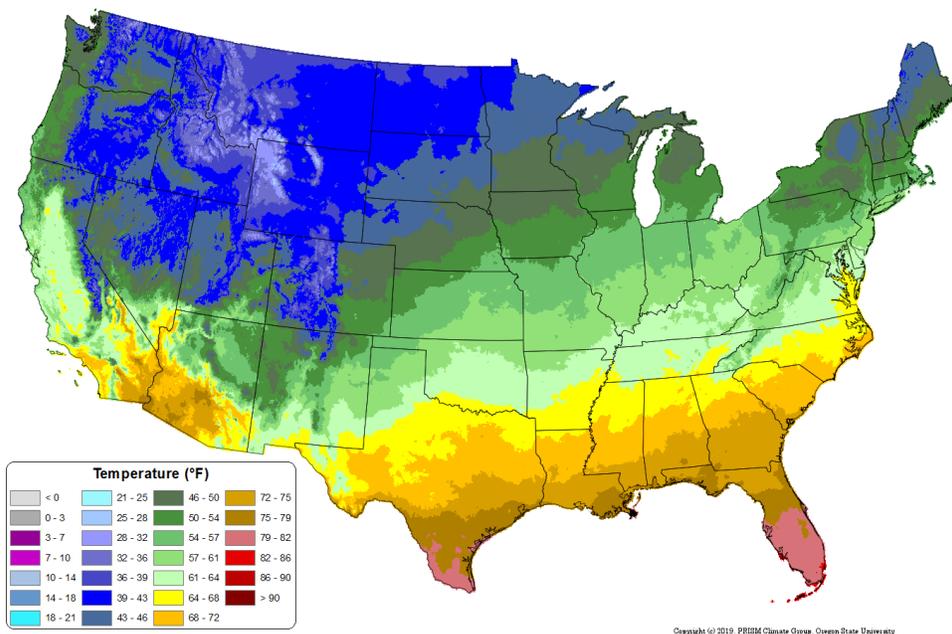
Water and Climate Update

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

Source: PRISM

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

Average Daily Mean Temperature: 01 Oct 2019 - 23 Oct 2019
 Period ending 7 AM EST 23 Oct 2019
 (Map created 24 Oct 2019)

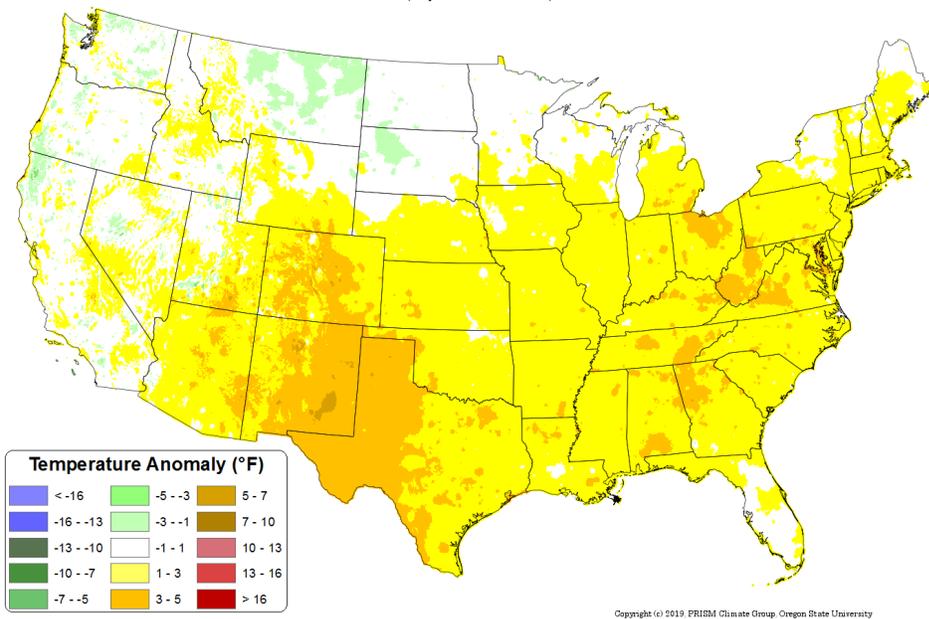


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[July through September 2019 daily mean temperature anomaly map](#)

Daily Mean Temperature Anomaly: Jul 2019 - Sep 2019
 Period ending 7 AM EST 30 Sep 2019
 Base period: 1981-2010
 (Map created 02 Oct 2019)



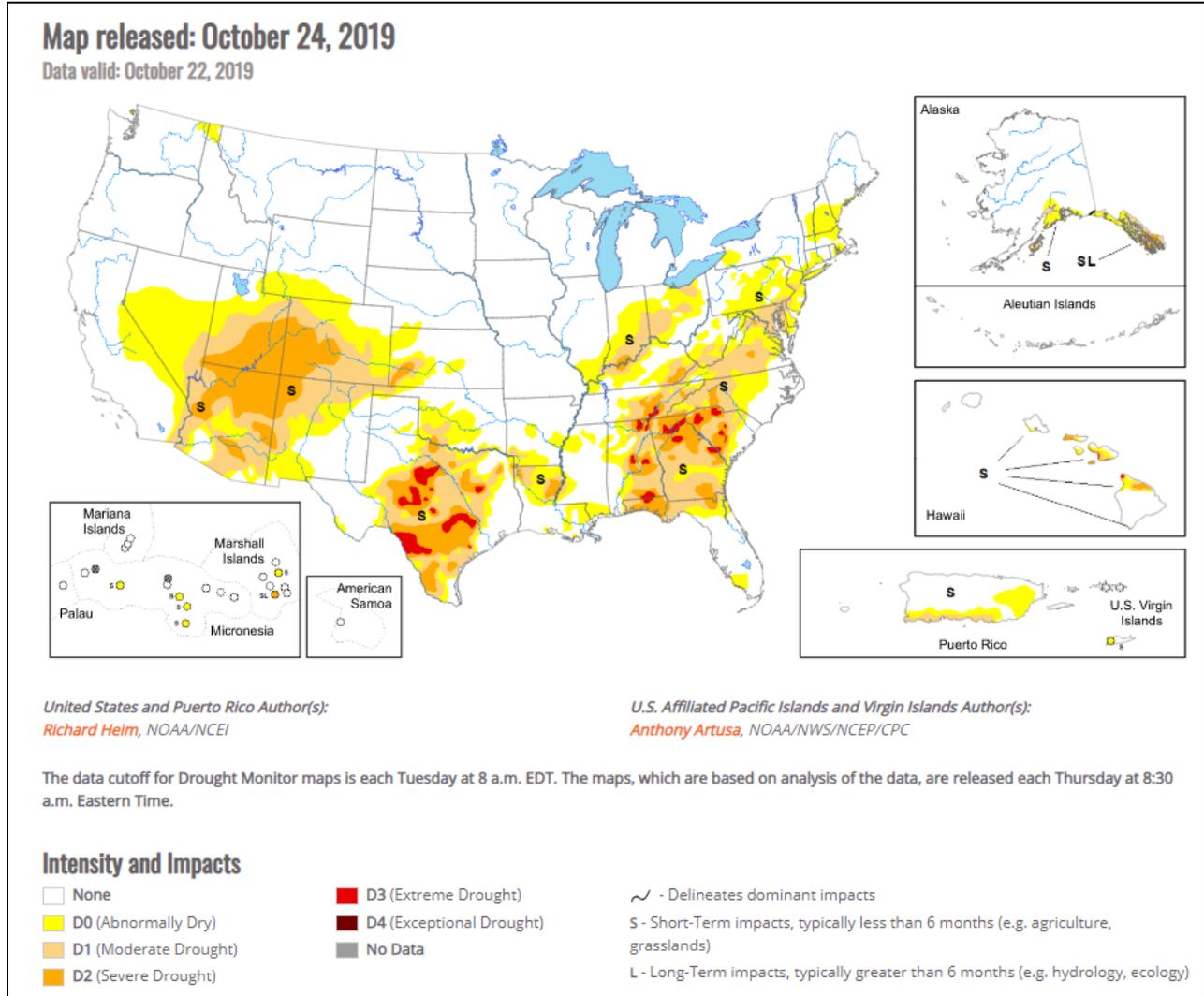
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



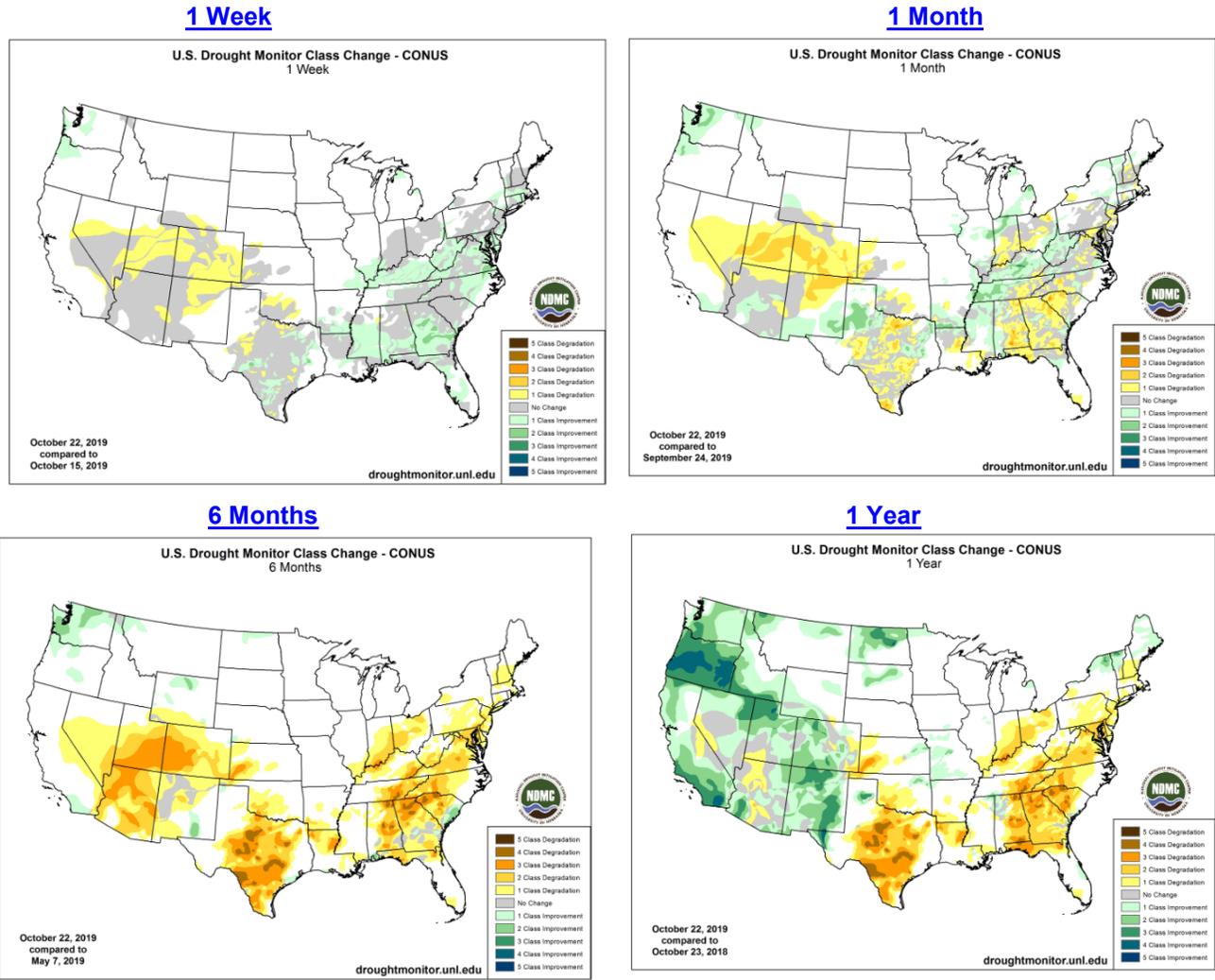
Current [National Drought Summary](#), October 24, 2019

Source: National Drought Mitigation Center

“This U.S. Drought Monitor (USDM) week began with a low pressure and frontal system draped across the Gulf and East Coasts. Tropical Storm Nestor and its remnants moved across the Southeast then up the East Coast at mid-week. Another front moved across the South and approached the East Coast as the week ended. This combination of synoptic systems dropped several inches of rain across the drought areas of eastern Texas and from the Mississippi River to the East Coast. Meanwhile, several Pacific frontal systems brought precipitation to the Pacific Northwest while the Southwest to southern High Plains continued dry. Drought and abnormal dryness contracted across parts of the Pacific Northwest and southern Plains, and much of the Southeast, Ohio Valley, and Mid-Atlantic to Northeast. Drought and abnormal dryness expanded in the Southwest and parts of the southern and central Plains, as well as northeast Puerto Rico.”

Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center



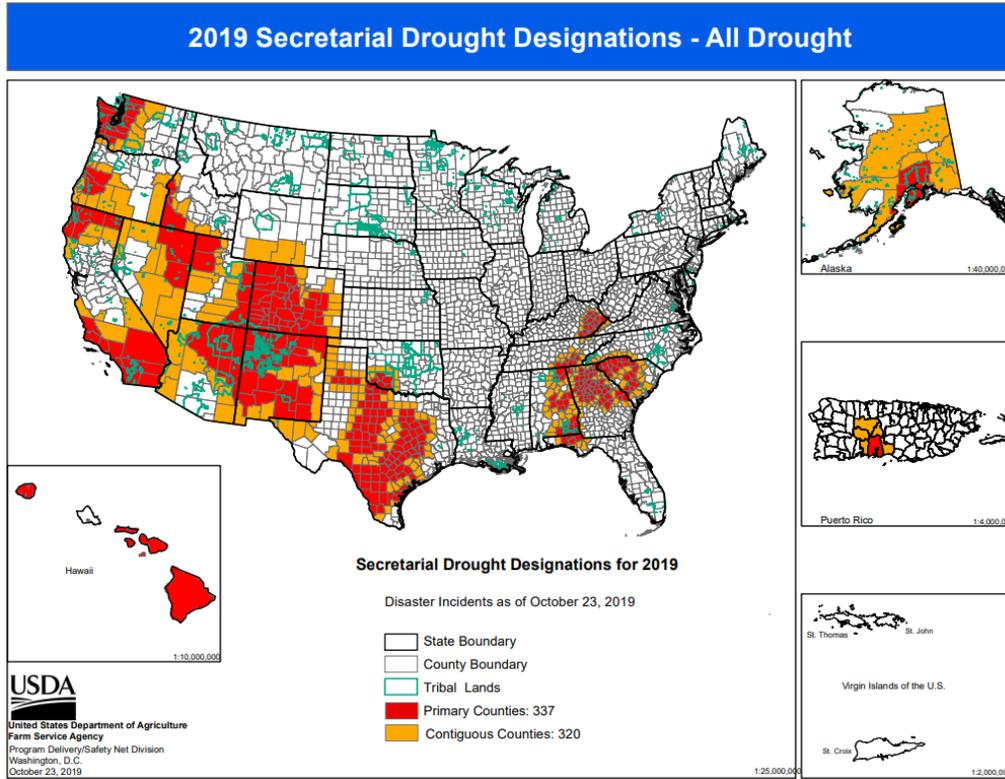
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

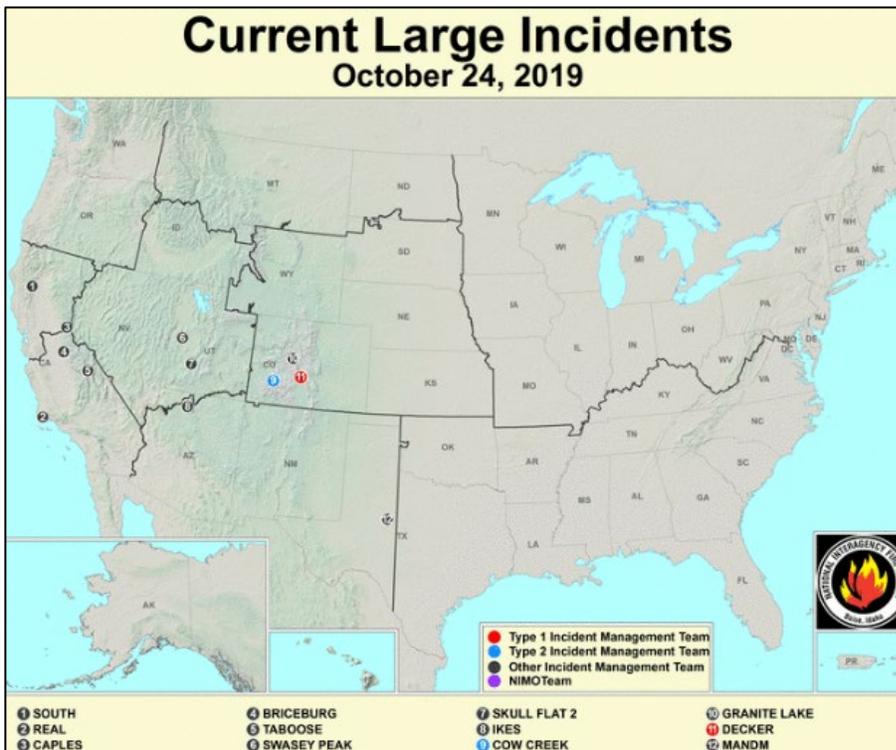
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



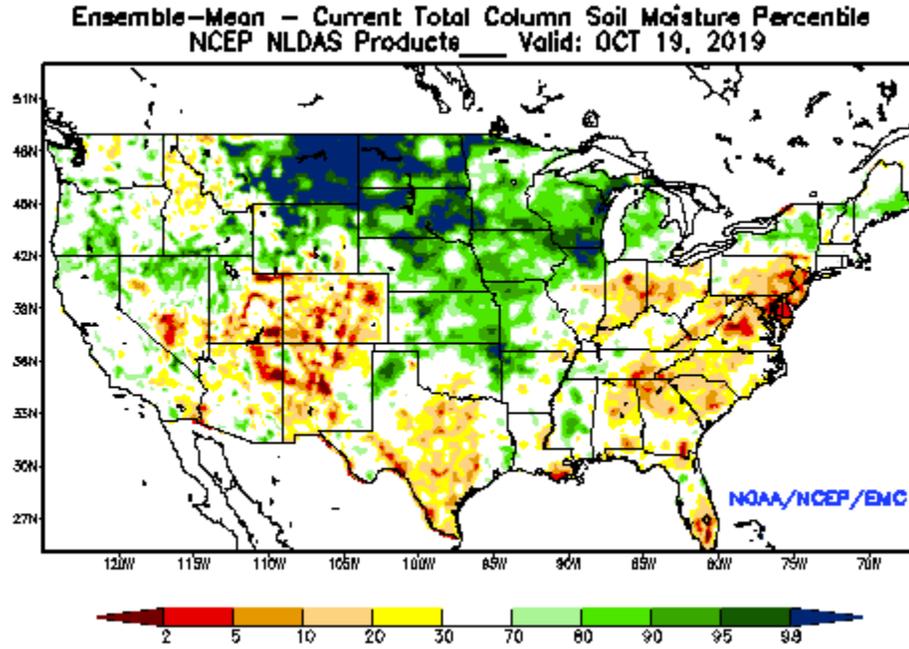
Highlighted Wildfire Resources

- [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 October 19, 2019

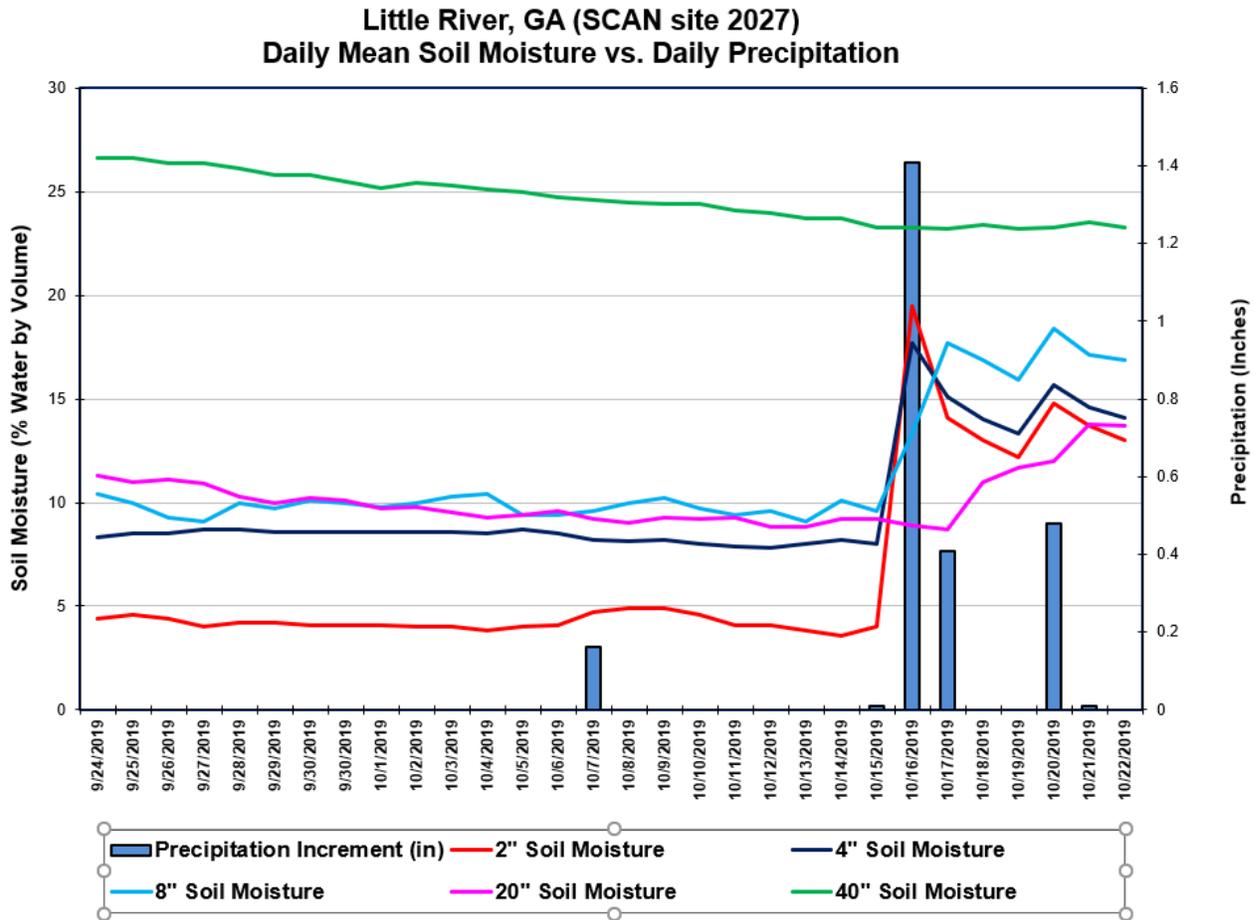
Soil Moisture Percent of Saturation

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 [Little River SCAN site](#) in Georgia. From October 16-20, precipitation associated with Tropical Storm Nestor increased the soil moisture at the -2", -4", -8", and -20" sensor depths.

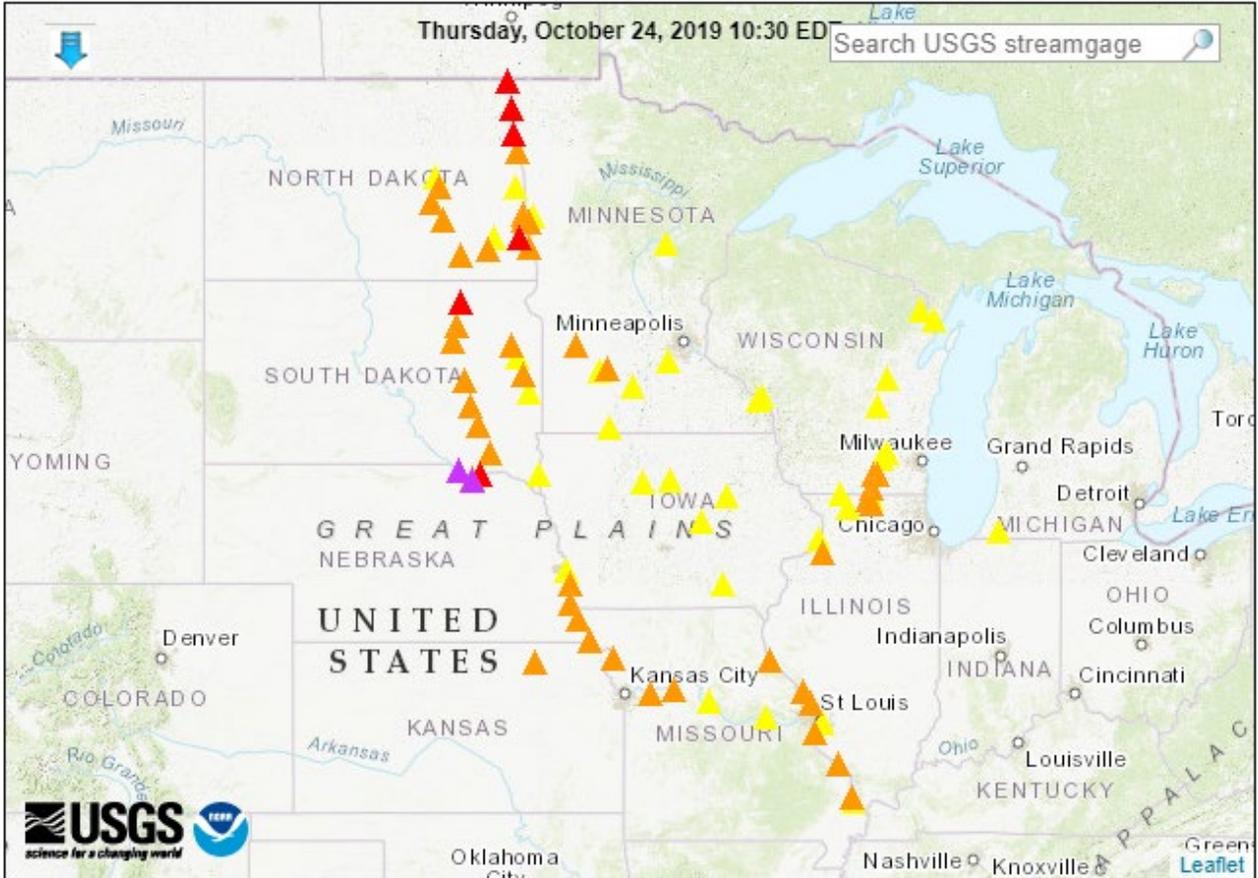
Soil Moisture Data Portals

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

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions
 (50 in floods [major: 2, moderate: 7, minor: 41], 38 in near-flood)



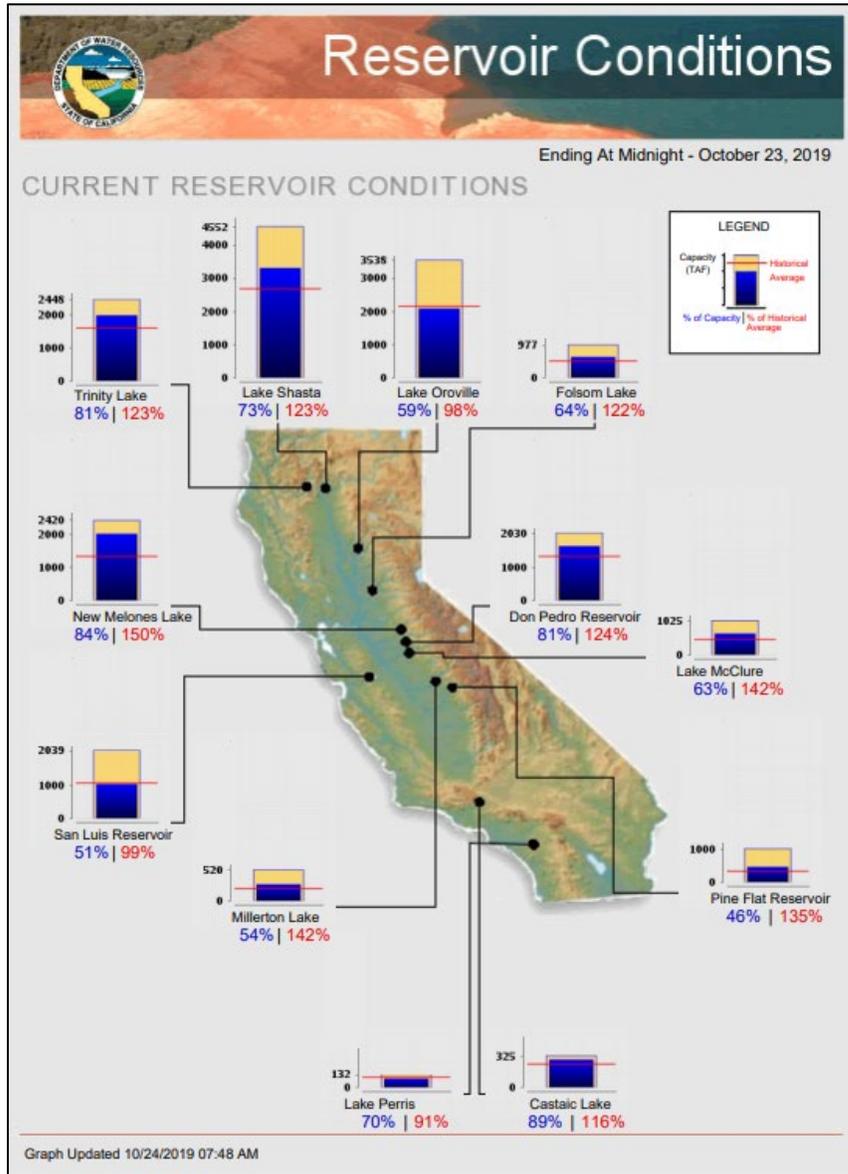
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

[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

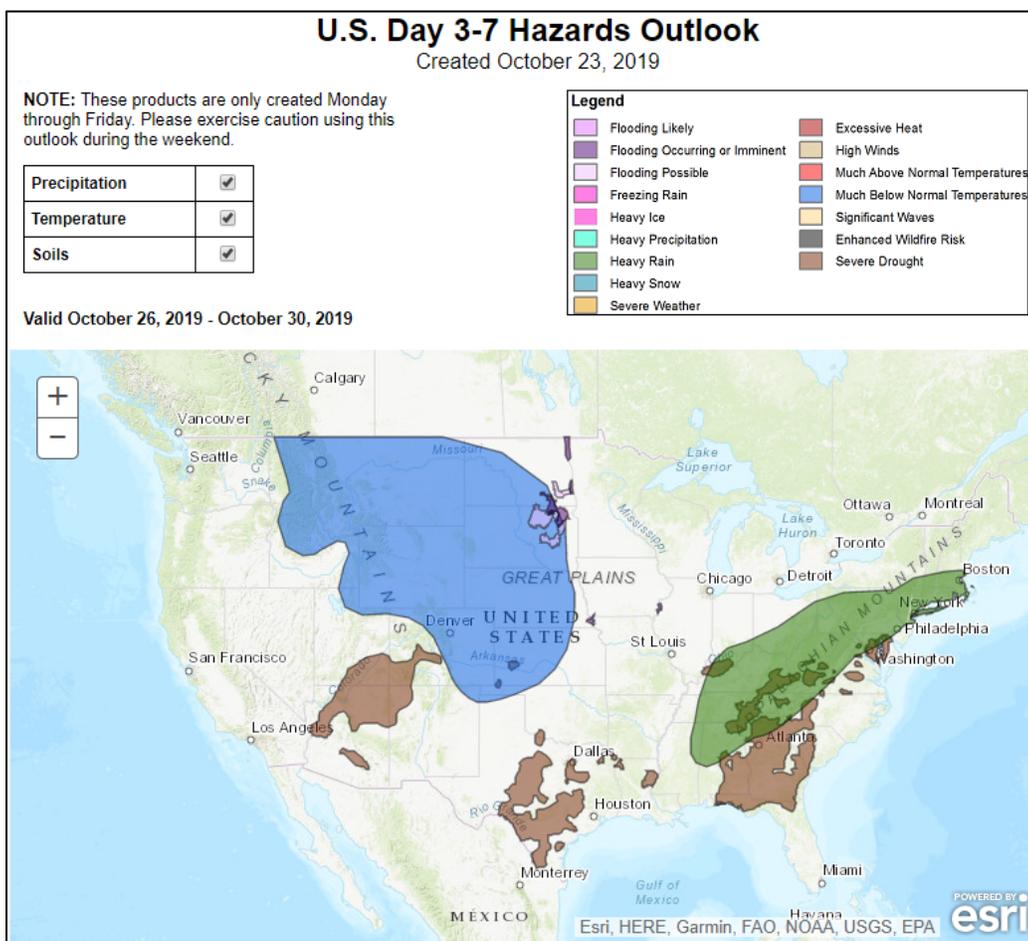
Agricultural Weather Highlights

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

National Outlook, Thursday, October 24, 2019: “A cold front stretching from the lower Great Lakes region to Texas will slowly progress eastward. Tropical moisture currently over the Gulf of Mexico will be drawn northward in advance of the front, leading to heavy rain across portions of the South, East, and lower Midwest. Five-day rainfall totals could reach 2 to 5 inches or more from the lower Ohio Valley southward to the central Gulf Coast. Meanwhile, favorably dry weather will prevail during the next 5 days across the soggy north-central U.S. However, dry weather will also cover the Far West, leading to a continued risk of wildfire ignition and expansion across parts of California. During the weekend, a strong surge of cold air will arrive across the Rockies and Plains before quickly overspreading most of the remainder of the country. The NWS 6- to 10-day outlook for October 29 – November 2 calls for the likelihood of below-normal temperatures over much of the nation, with warmer-than-normal conditions limited to the Atlantic Coast States and the central Pacific Coast. Meanwhile, above-normal precipitation across the eastern half of the U.S. should contrast with drier-than-normal conditions across much of the West.”

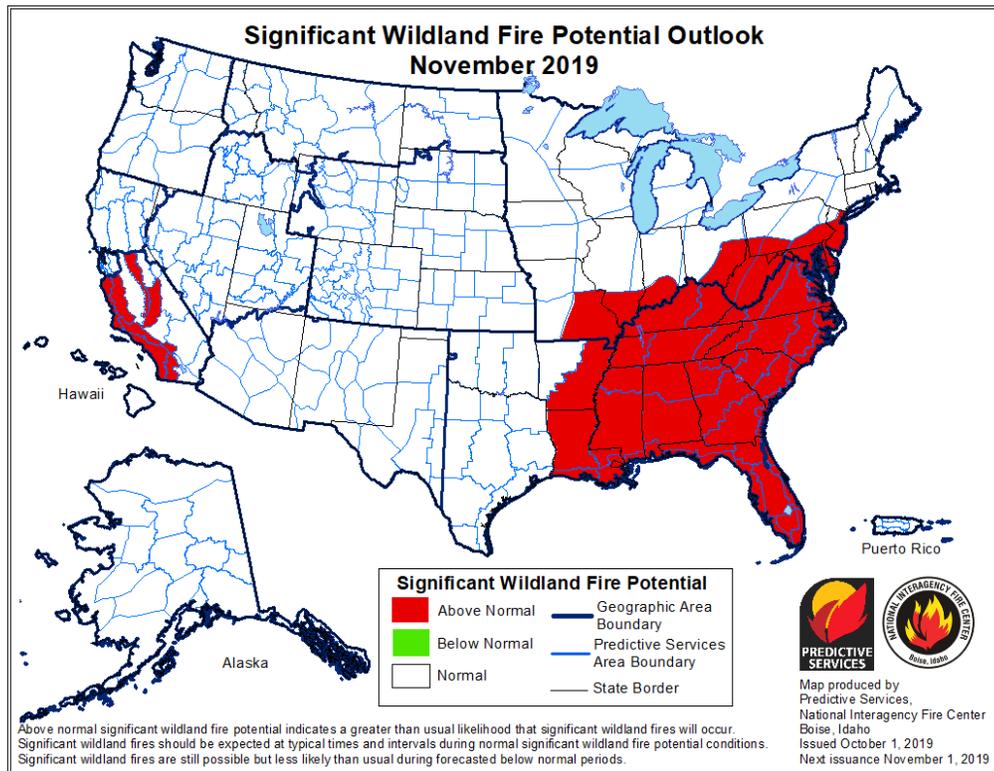
Weather Hazards Outlook: [October 26 – October 30, 2019](#)

Source: NOAA Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

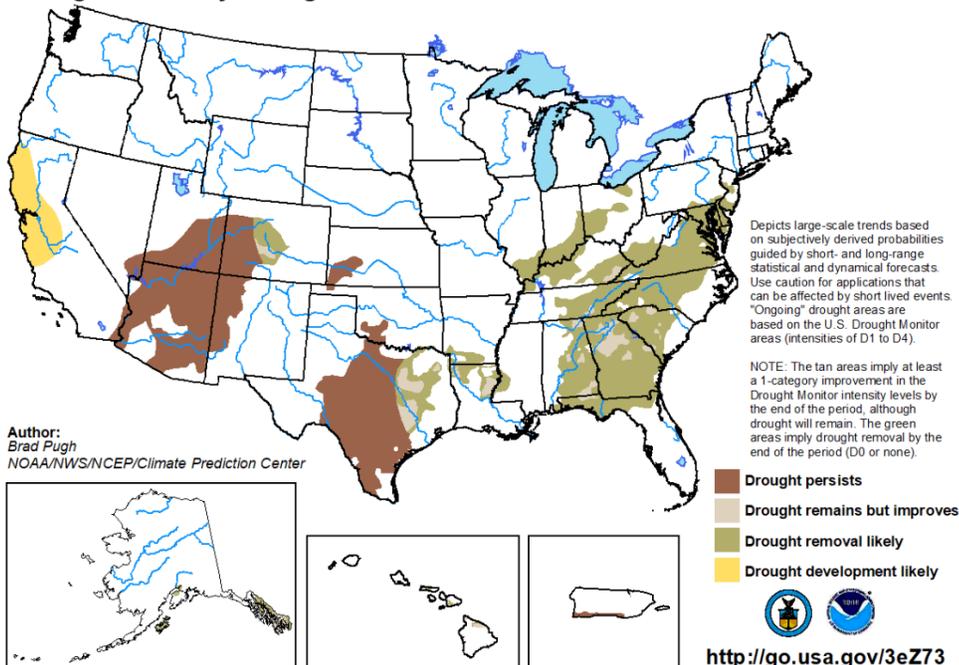
Source: National Interagency Fire Center



Seasonal Drought Outlook: [October 17, 2019 – January 31, 2020](#)

Source: National Weather Service

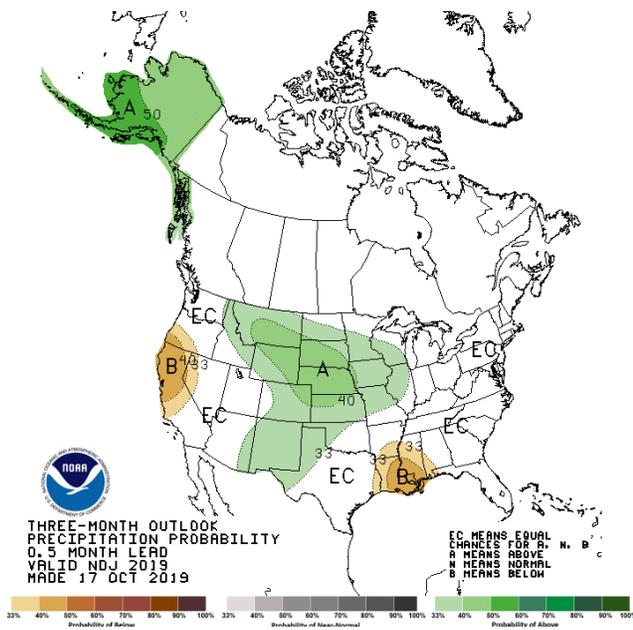
U.S. Seasonal Drought Outlook Valid for October 17, 2019 - January 31, 2020
Drought Tendency During the Valid Period Released October 17, 2019



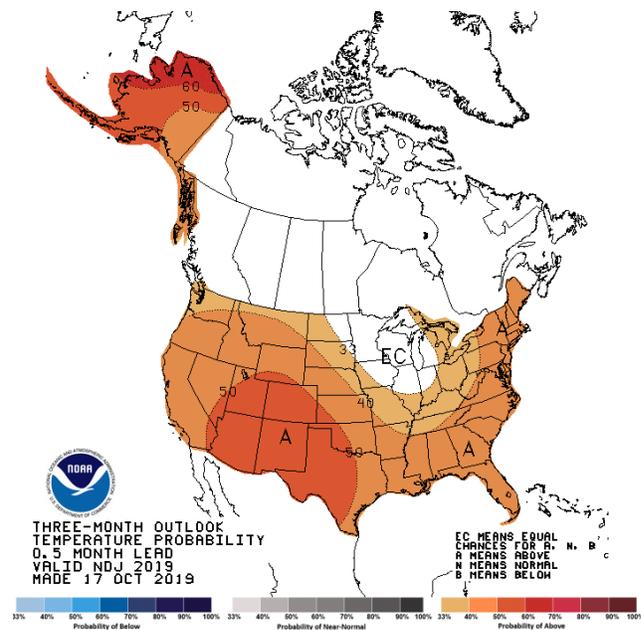
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[November-December-January \(NDJ\) 2019/2020 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](#).