

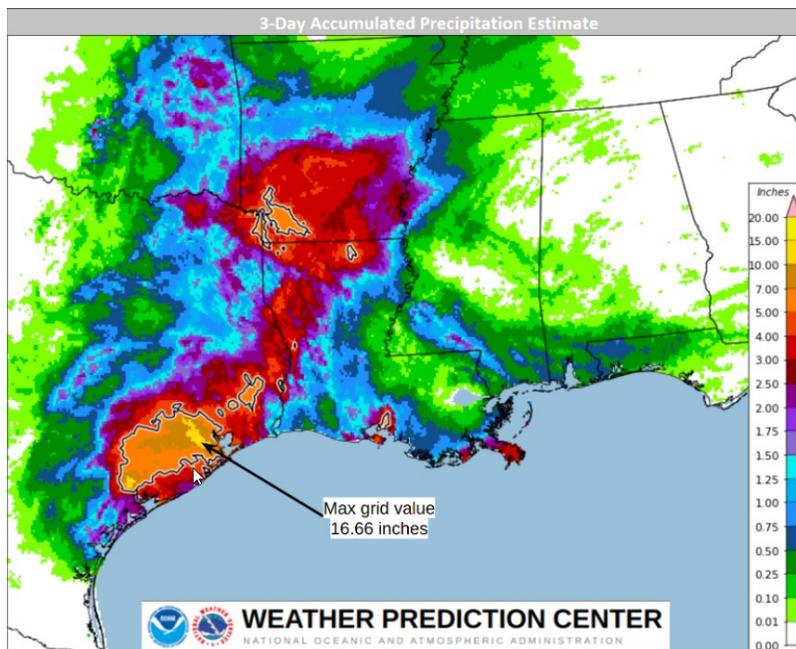
Water and Climate Update

September 24, 2020

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	1	Other Climatic and Water Supply Indicators	11
Temperature.....	6	More Information	18
Drought	8		

Tropical storms and hurricanes batter the Atlantic and Gulf Coasts



Hurricane Sally and Tropical Storm Beta combined to bring major impacts to the Gulf Coast and Southeast this week. Sally made landfall near Gulf Shores, Alabama, while Beta made landfall near Port O'Connor, Texas. High winds, heavy rain, storm surge, and flooding impacted Texas, Louisiana, Mississippi, Florida, and Alabama. Tropical Storm Beta had a three-day precipitation storm total estimate of 16.66 inches.

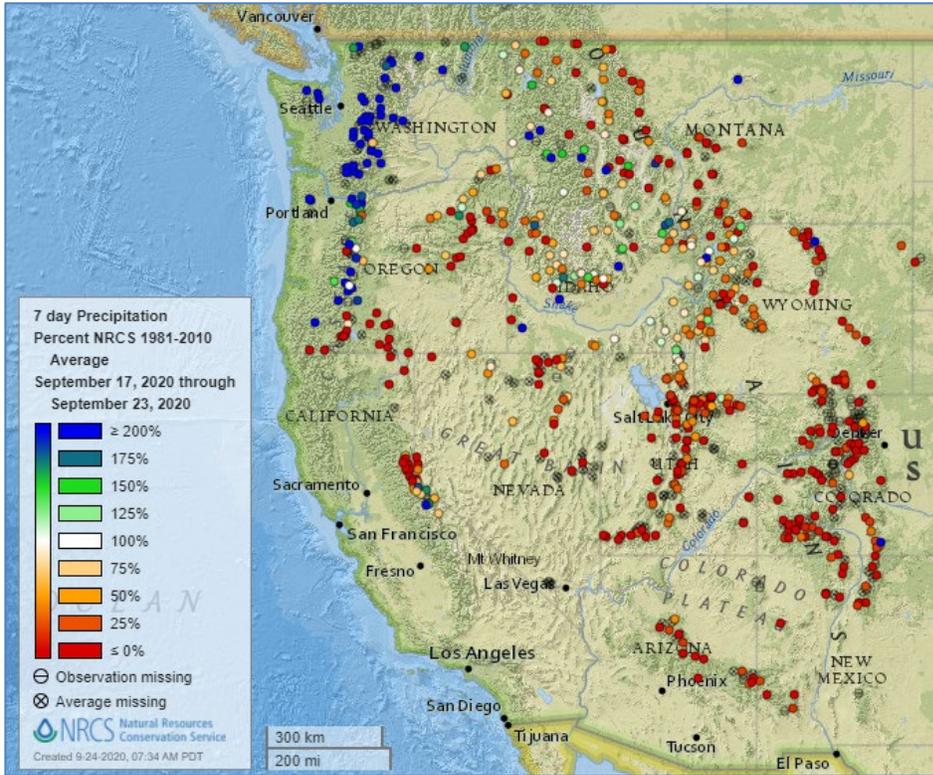
Meanwhile, Hurricane Teddy packed 90 mph winds as it passed Bermuda, and is causing storm surge, high surf, and rip currents along the Atlantic Coast as it moves toward northern New England.

Related:

- [Tropical Storm Beta makes landfall in Texas, bringing more rain and flooding to hurricane-weary Gulf Coast – USA Today](#)
- ['Crazy' 2020 hurricane season matches 2005 in activity, but not storm intensity USA Today on MSN.com](#)
- [Hurricane Sally by the numbers: 2 feet of rain, 92 mph winds and 5 foot storm surge – Pensacola News Journal \(FL\)](#)
- [Hurricane Teddy’s impact on Massachusetts: Coastal flooding, large breaking waves as high as 24 feet and winds as strong as 55 mph in the forecast – MassLive on MSN.com \(MA\)](#)
- [Raging Hurricane Teddy’s reach is far, flooding South Florida roads and stealing beaches - Palm Beach Post \(FL\)](#)

Precipitation

Last 7 Days, NRCS SNOTEL Network

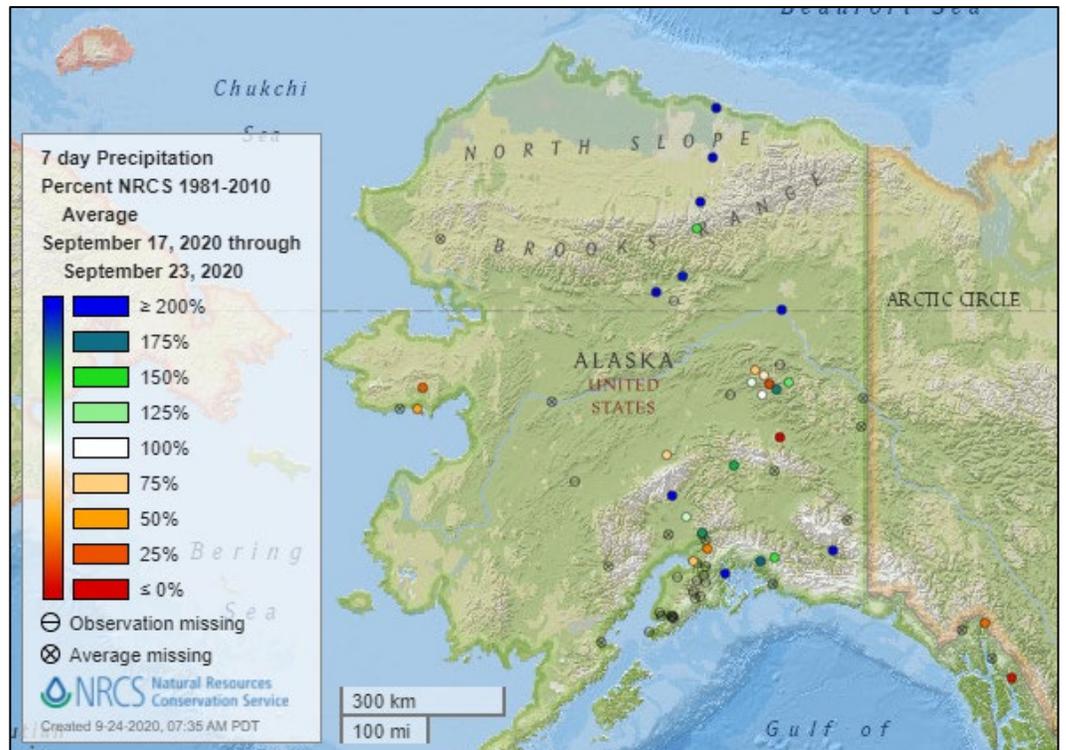


[7-day precipitation percent of average map](#)

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](#)



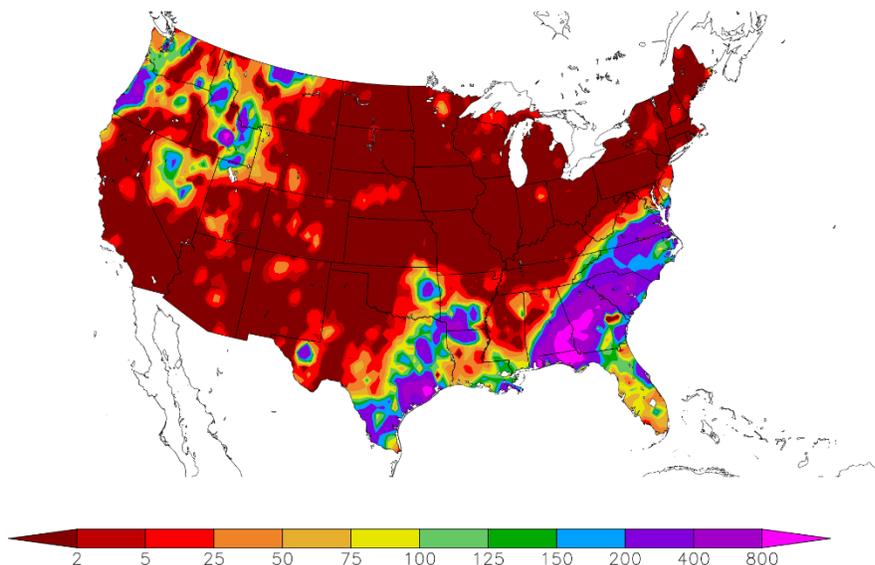
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
9/16/2020 – 9/22/2020



Generated 9/23/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

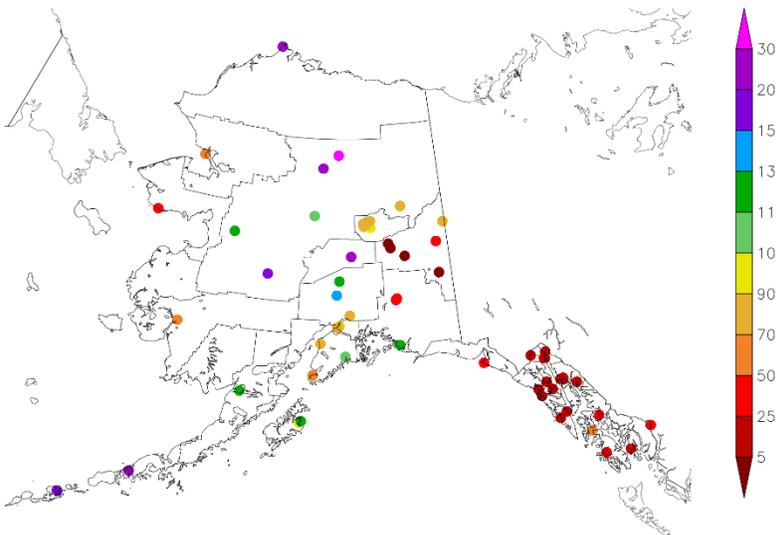
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
9/16/2020 – 9/22/2020



Generated 9/23/2020 at HPRCC using provisional data.

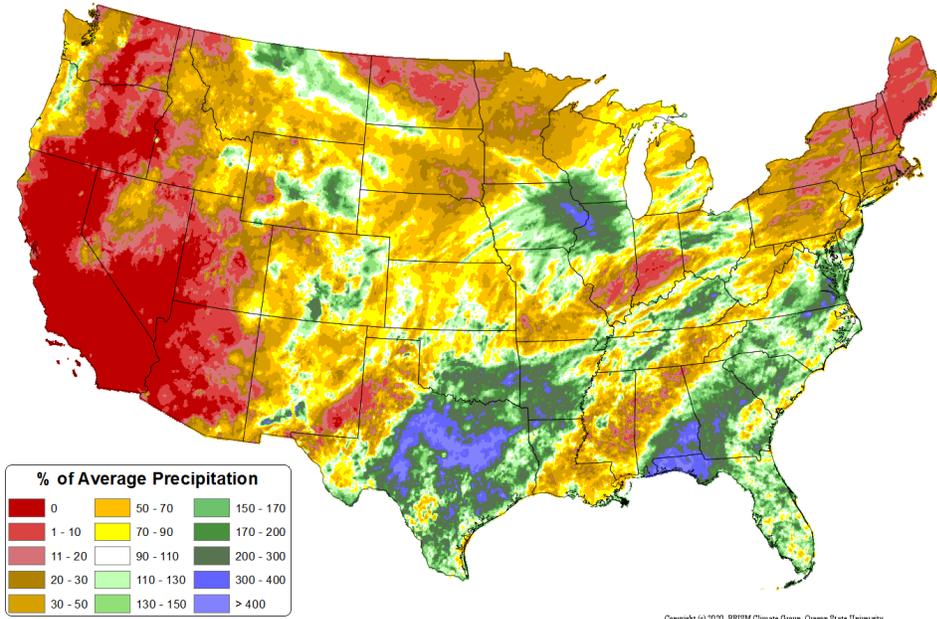
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 Sep 2020 - 23 Sep 2020
Period ending 7 AM EST 23 Sep 2020
Base period: 1981-2010
(Map created 24 Sep 2020)

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

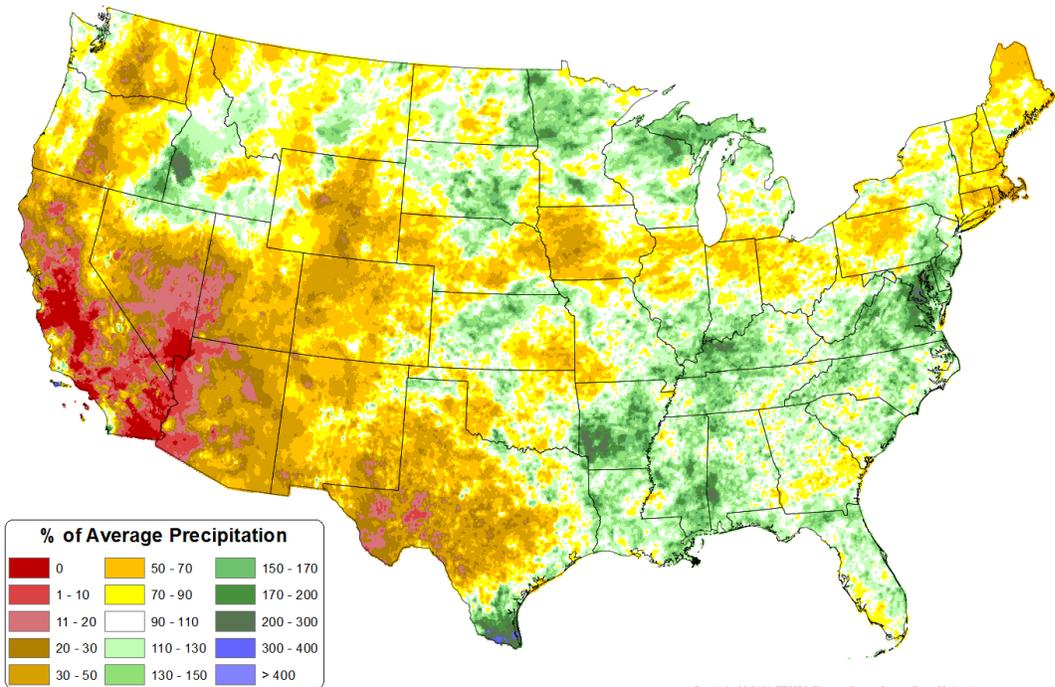


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

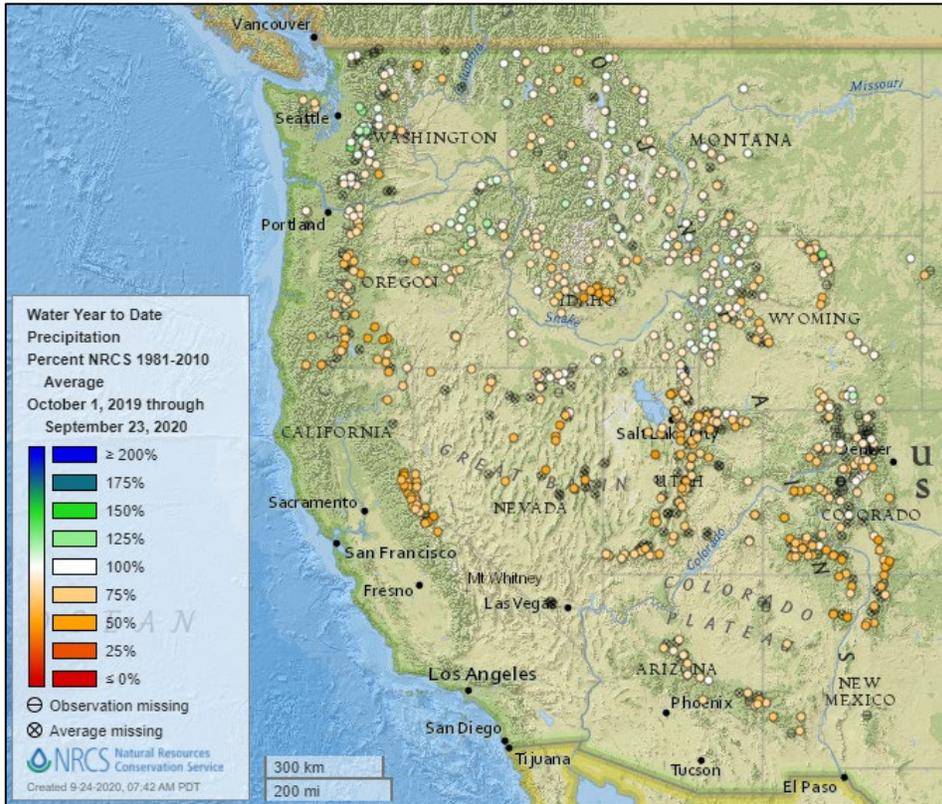
Source: PRISM

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

Total Precipitation Anomaly: Jun 2020 - Aug 2020
Period ending 7 AM EST 31 Aug 2020
Base period: 1981-2010
(Map created 02 Sep 2020)

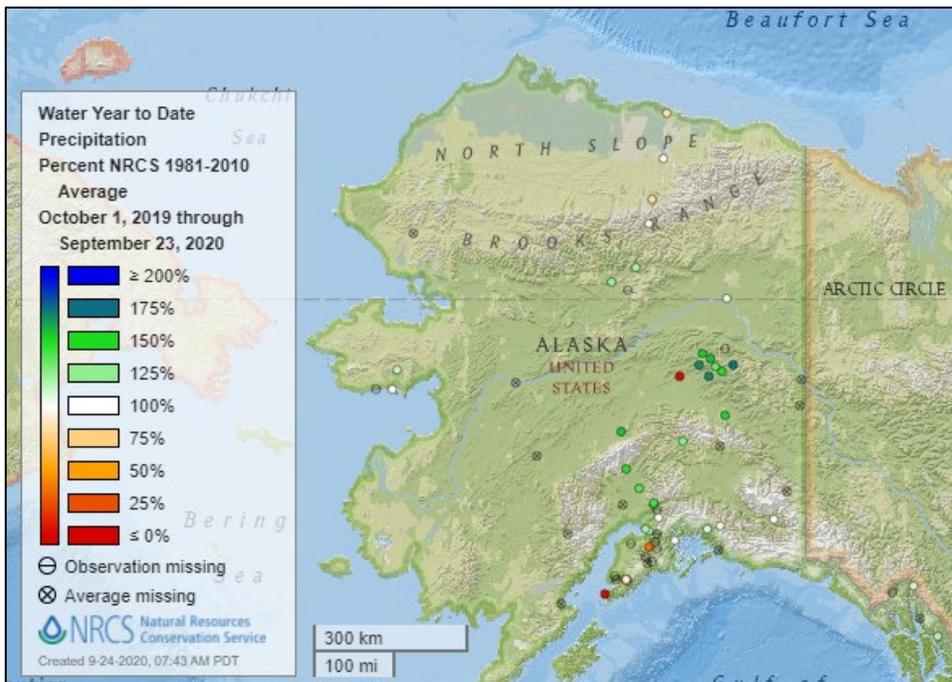


Water Year-to-Date, NRCS SNOTEL Network



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

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



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

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

Temperature

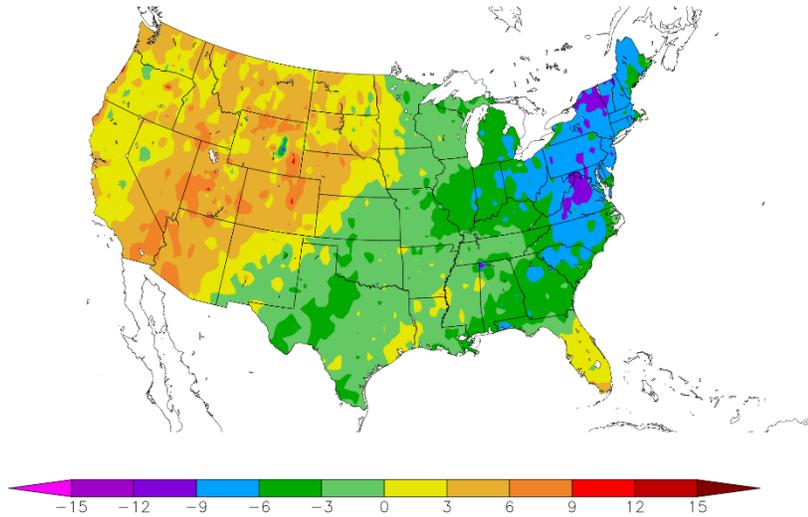
Last 7 Days, National Weather Service (NWS) Networks

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)
9/16/2020 – 9/22/2020



Generated 9/23/2020 at IPRCC using provisional data.

NOAA Regional Climate Centers

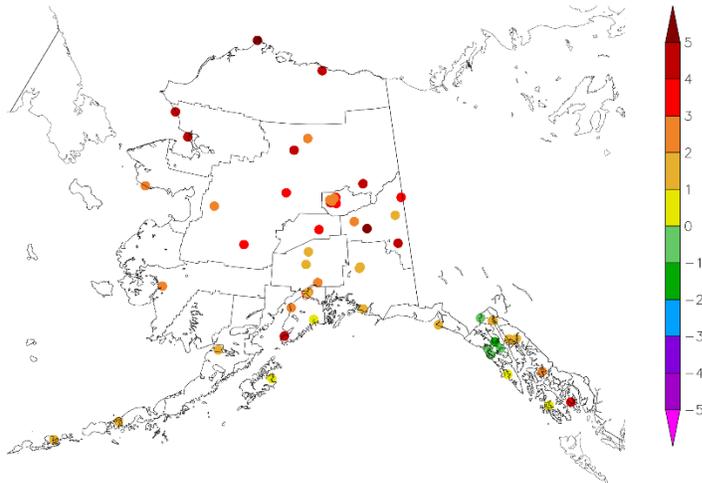
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
9/16/2020 – 9/22/2020



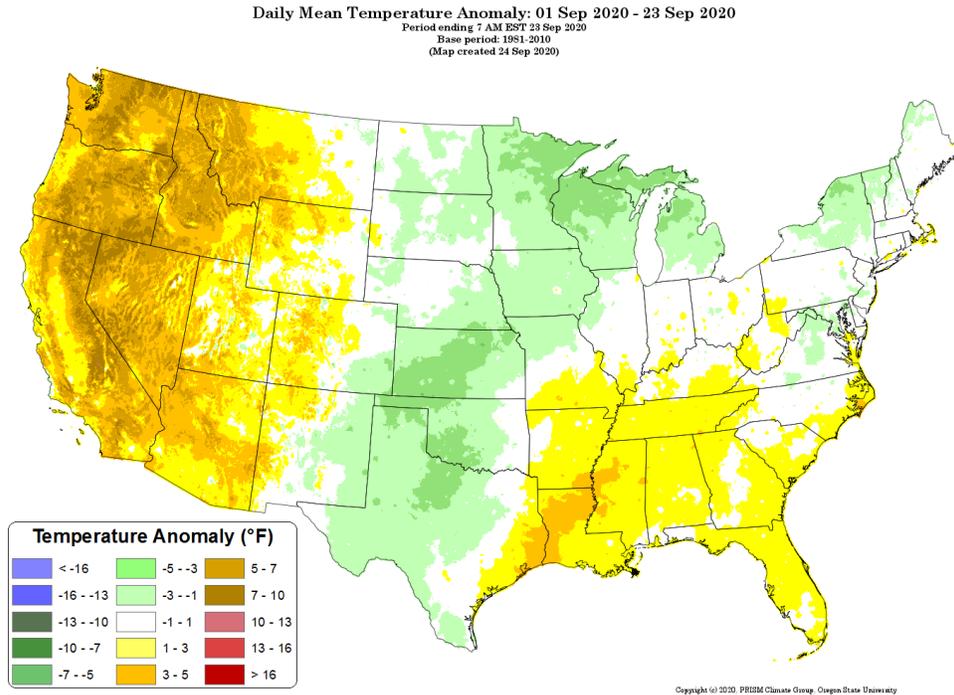
Generated 9/23/2020 at IPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

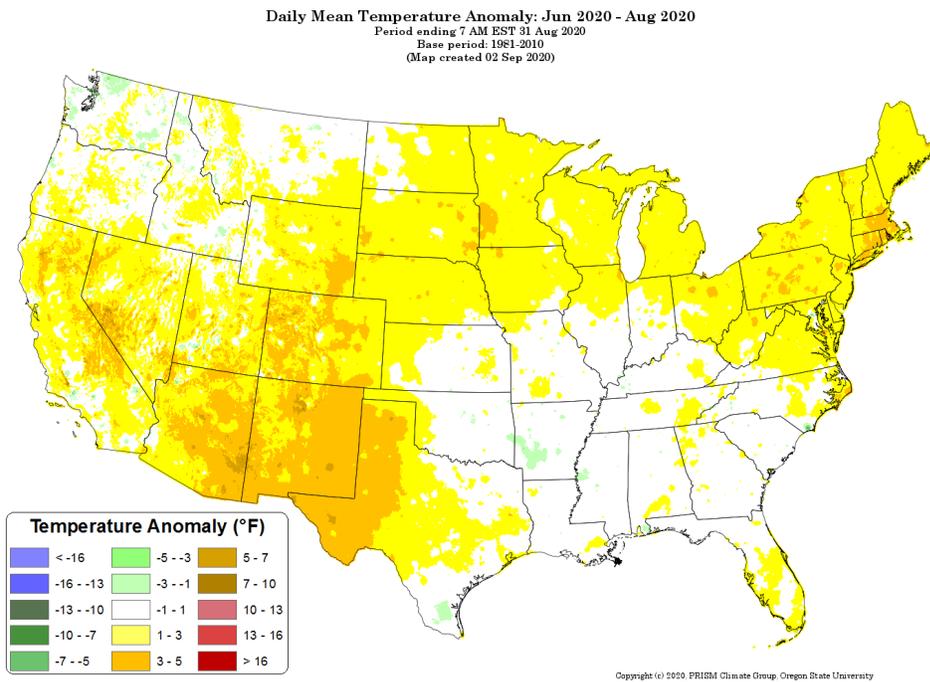
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[June through August 2020 daily mean temperature anomaly map](#)



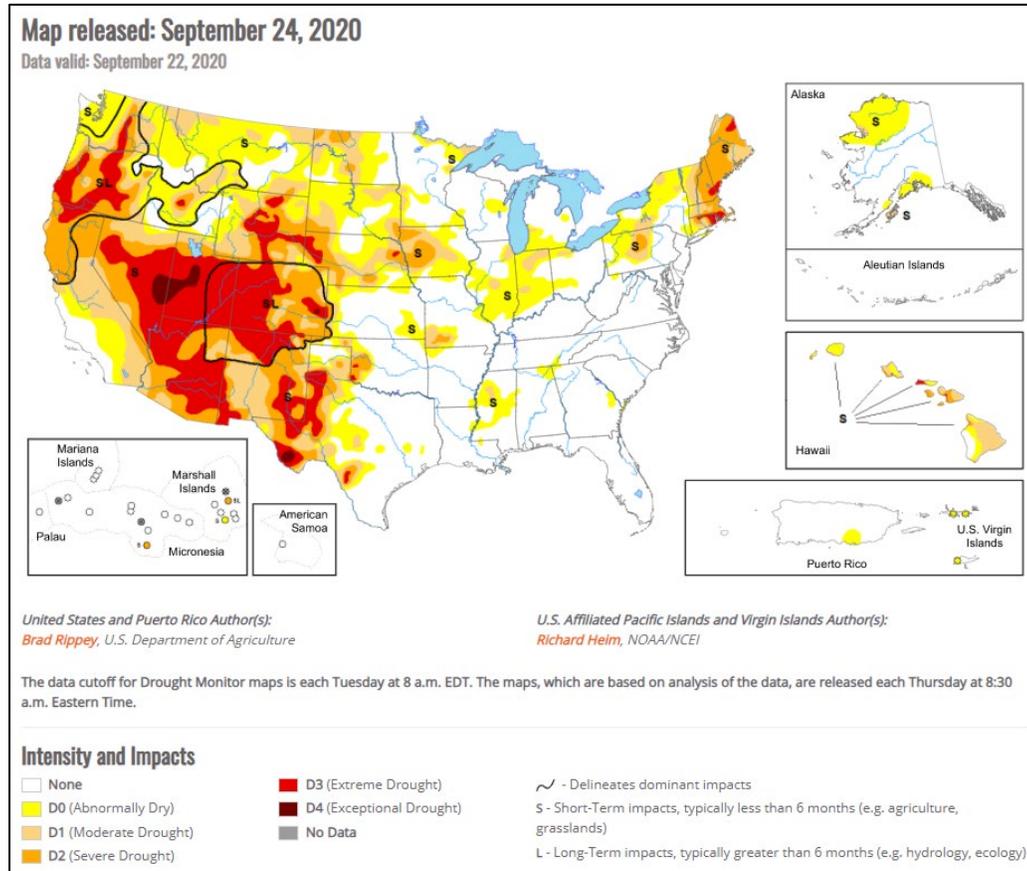
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



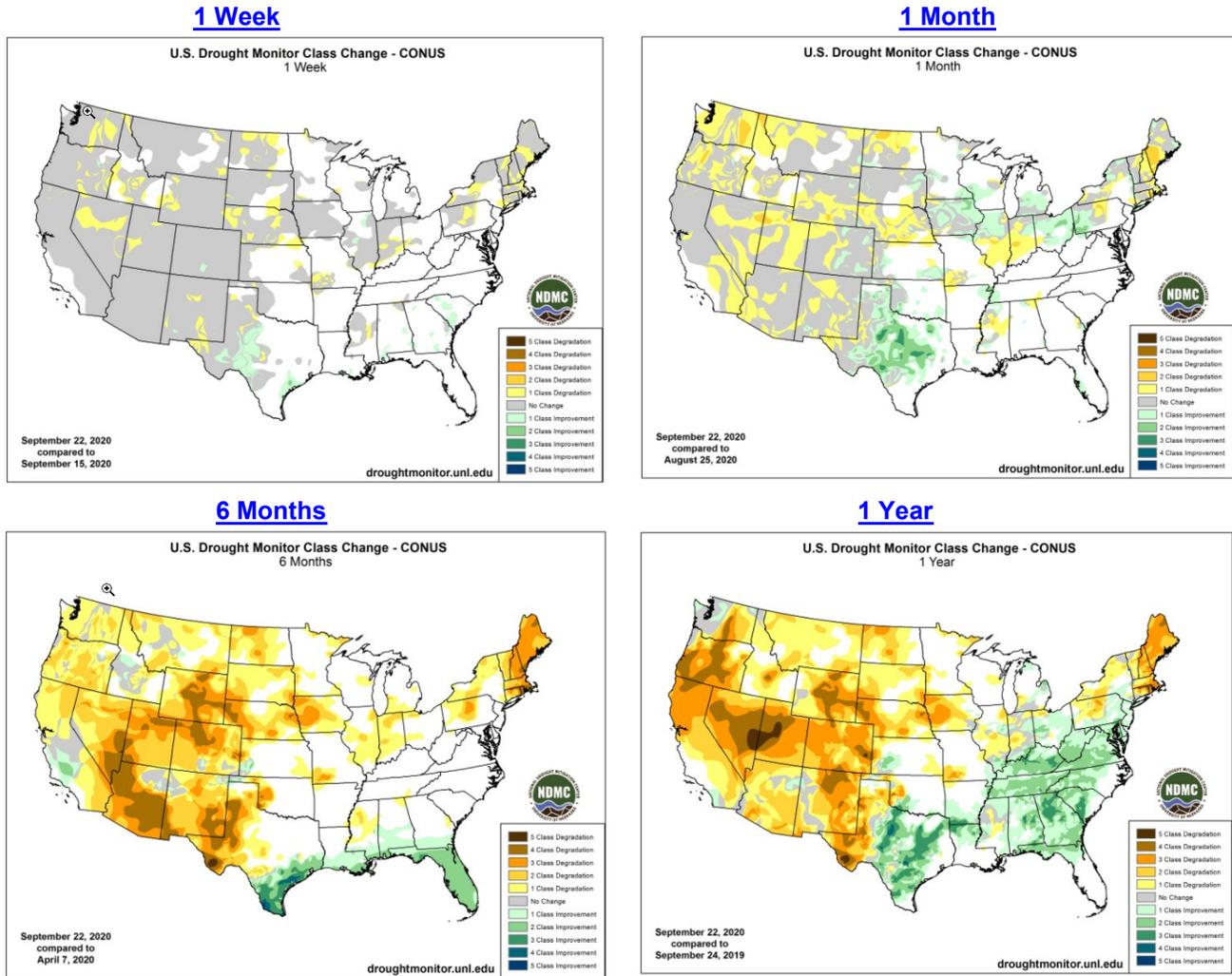
[Current National Drought Summary, September 24, 2020](#)

Source: National Drought Mitigation Center

“Category 2 Hurricane Sally made landfall on September 16 near Gulf Shores, Alabama, around 4:45 am CDT, with sustained winds near 105 mph. Torrential rainfall across southern Alabama and western Florida sparked major to record flooding, while wind-related damage and power outages were common. Once inland over the Southeast, Sally quickly weakened but continued to produce heavy rain, extending as far north as southern Virginia. Mostly dry weather covered the remainder of the country, except for showers in the Pacific Northwest and heavy rain in the western Gulf Coast region associated with the arrival of Tropical Storm Beta along the middle Texas coast. Beta, the 23rd named storm of the Atlantic hurricane season—behind only 28 tropical cyclones in 2005—made landfall at 10:00 pm CDT on September 21 near Port O’Connor, Texas, with sustained winds near 45 mph. Meanwhile, drought remained entrenched across much of the western half of the country and parts of the Northeast. In the latter region, growing season-ending freezes (starting September 19) may limit re-growth of drought-stressed pastures, even if widespread precipitation returns during autumn. Western wildfires continued to degrade air quality across a vast area, with approximately six dozen fires in various stages of containment by September 22.”

Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center



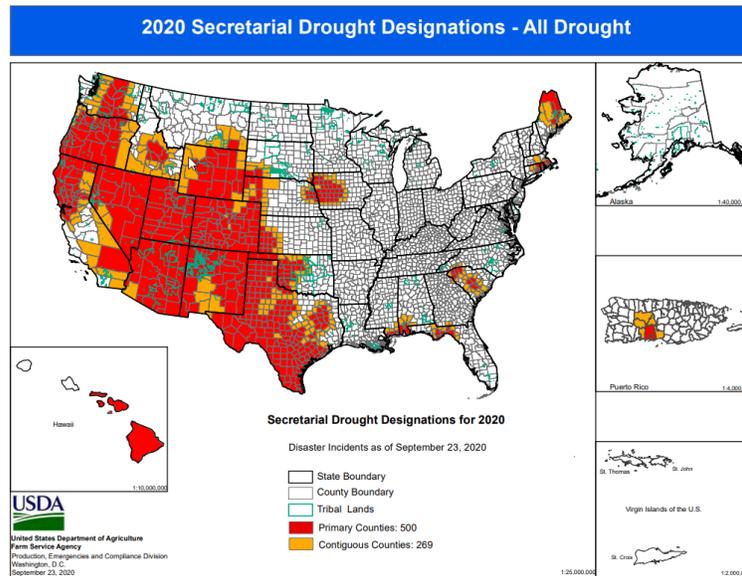
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

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



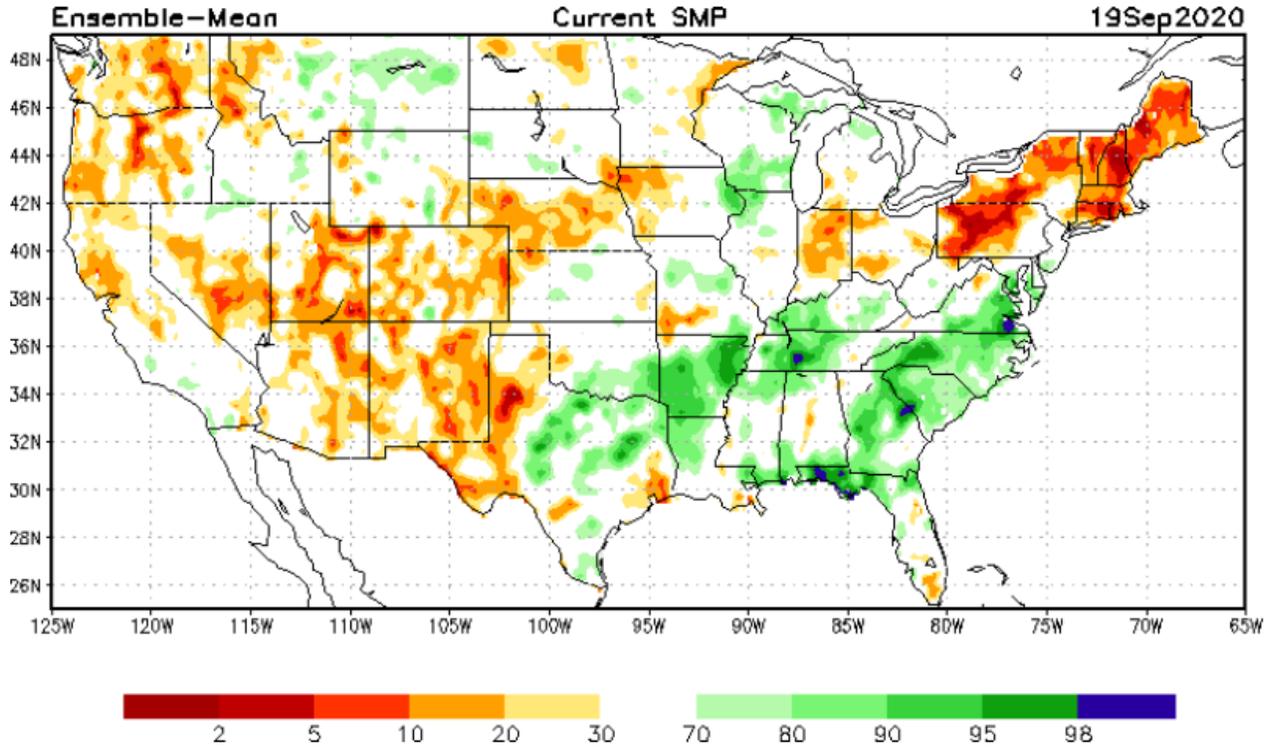
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

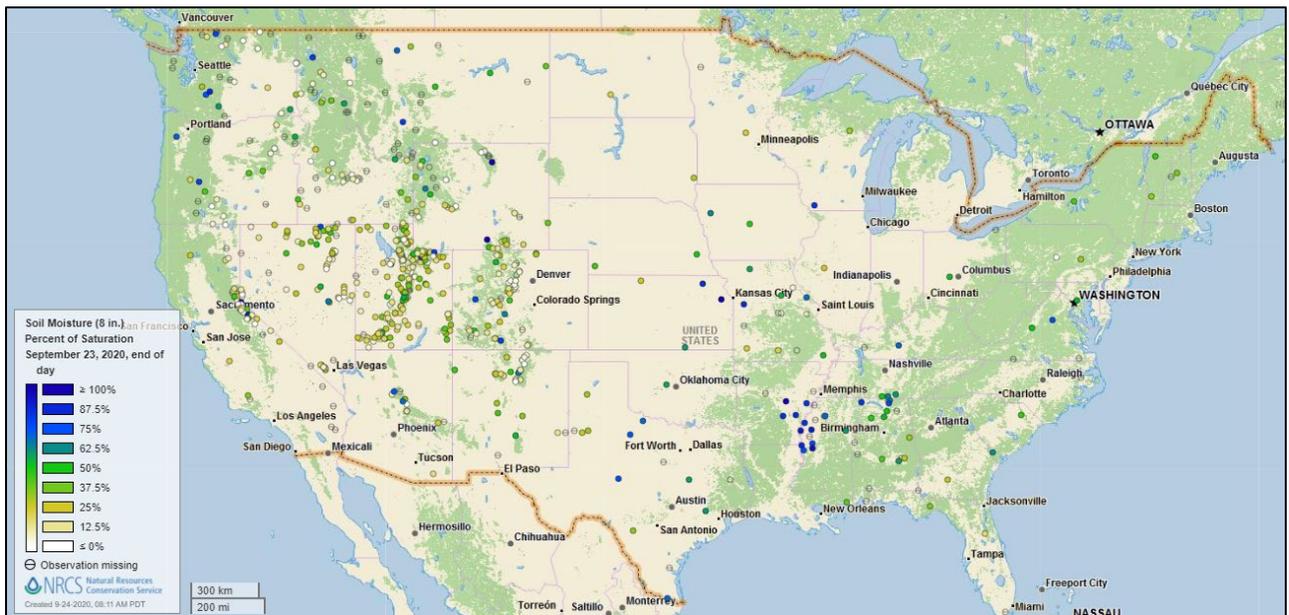
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of September 19, 2020

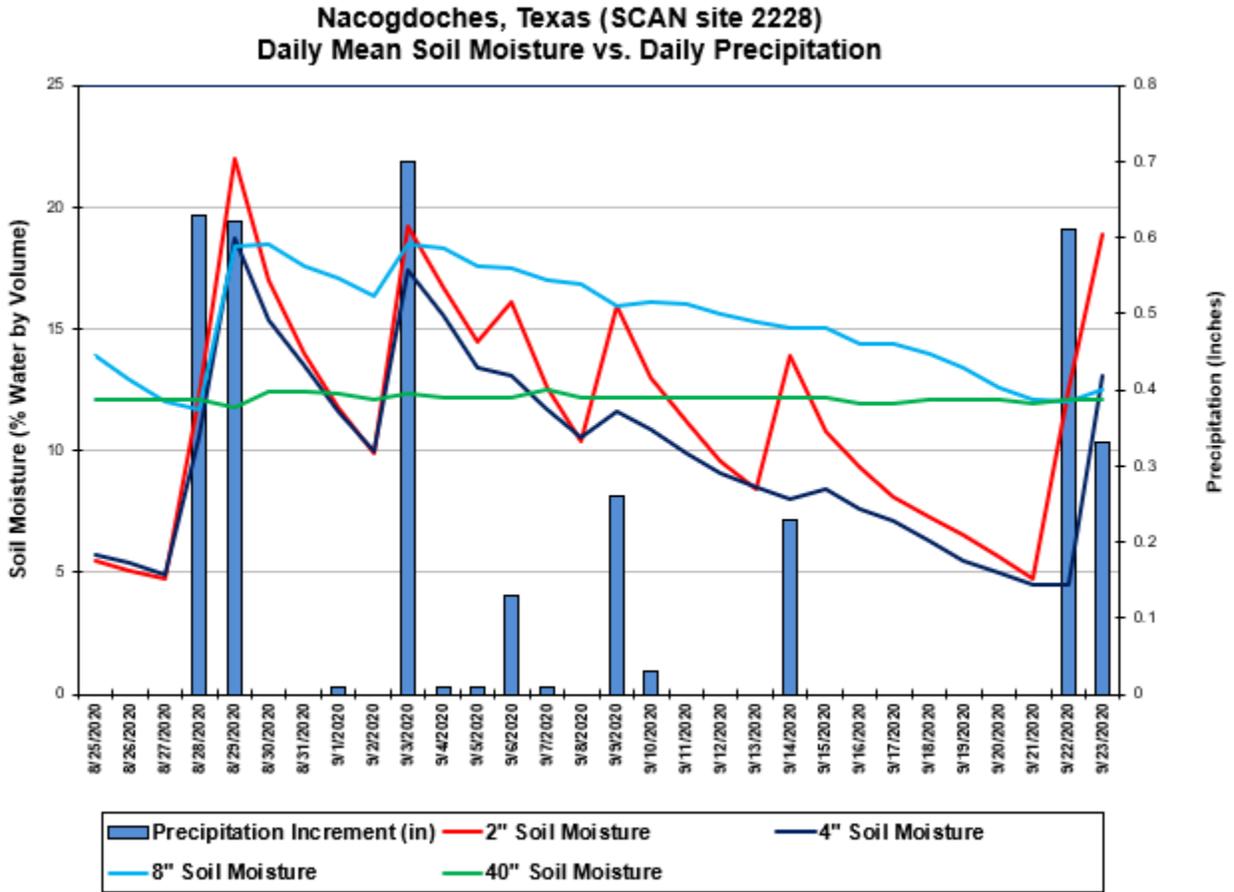
Soil Moisture Percent of Saturation

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



Soil Moisture

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



This chart shows the precipitation and soil moisture at the [Nacogdoches](#) SCAN site in Texas. This site has had several precipitation events in the last 30 days impacting soil moisture at the -2", -4", and -8" sensors. Accumulated precipitation for the period was 3.97".

Soil Moisture Data Portals

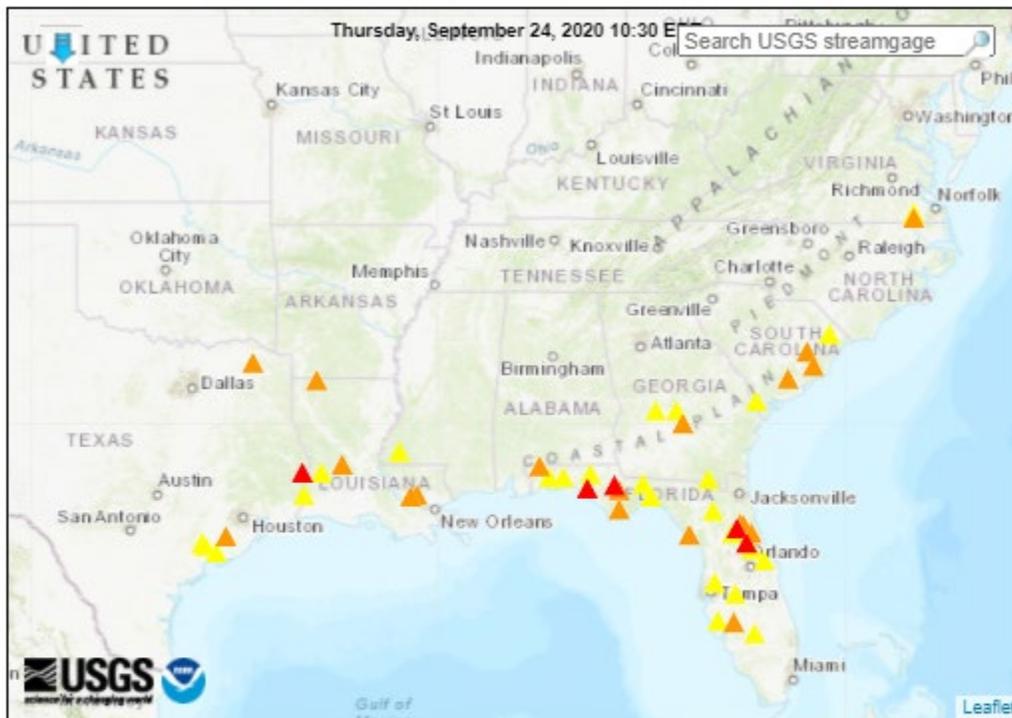
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(25 in floods [moderate: 5, minor: 20], 25 in near-flood)



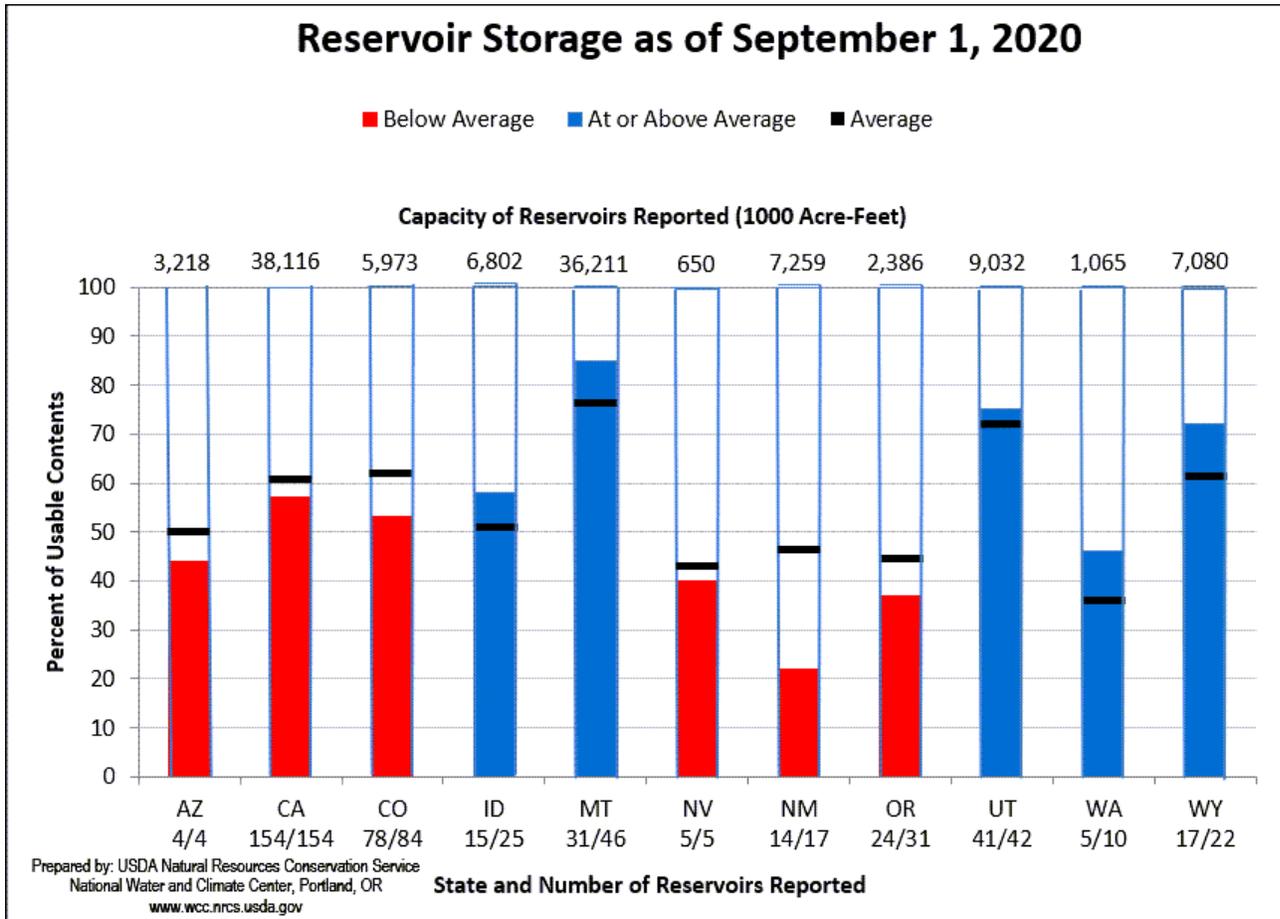
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

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

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



September 1, 2020 Reservoir Storage: [Chart](#) | [Dataset](#)

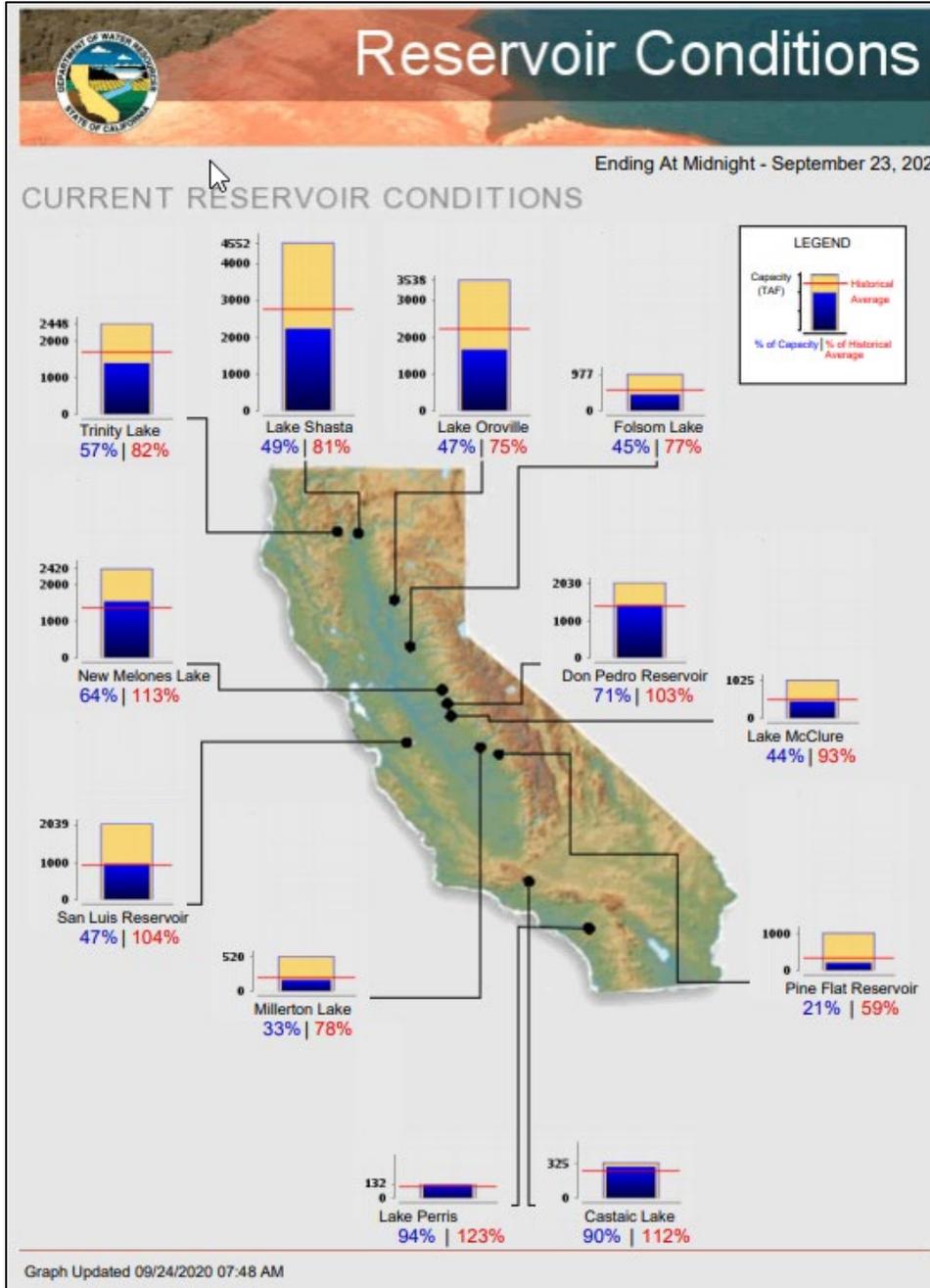
Hydromet Teacup Reservoir Depictions

Source: U.S. Bureau of Reclamation

- [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



[Current California Reservoir Conditions](#)

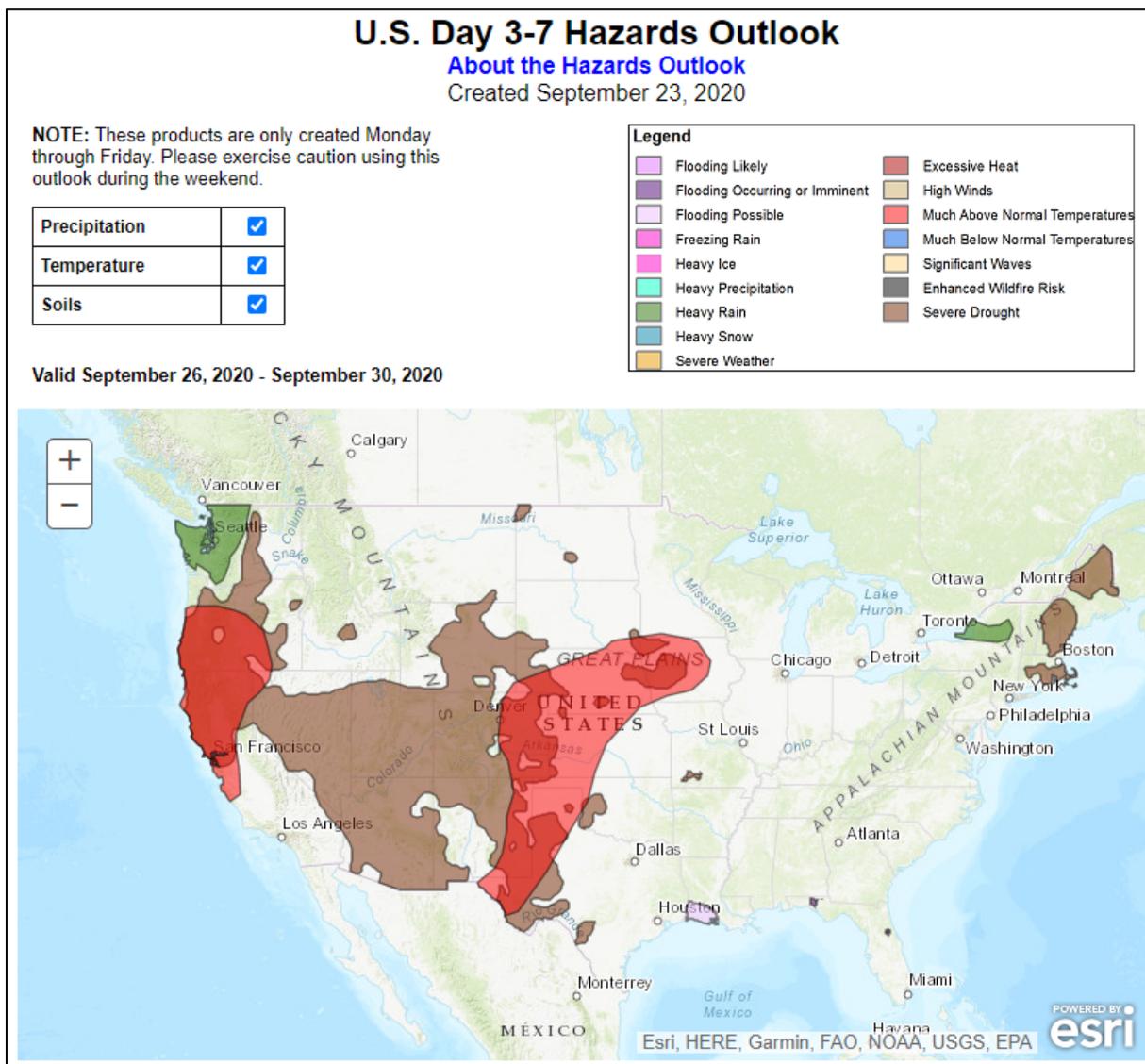
Agricultural Weather Highlights

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

National Outlook, Thursday, September 24, 2020: “Post-Tropical Cyclone Beta will continue to move northeastward across the South, generating additional rainfall of 2 to 4 inches from the Tennessee Valley into the southern Appalachians. Meanwhile, a series of cold fronts will deliver much needed precipitation in the Northwest. However, little or no rain will fall during the next 5 days from California to the central and southern Rockies, maintaining the threat of new or expanding wildfires amid a warm, breezy weather regime. Dry weather will also cover the Plains, while spotty showers will affect areas from the Mississippi Valley eastward, as a cooler weather pattern becomes established. By early next week, summer-like warmth in the West will contrast with chilly conditions across much of the eastern half of the U.S. The NWS 6- to 10-day outlook for September 29 – October 3 calls for the likelihood of above-normal temperatures in Maine and throughout the West, while cooler-than-normal conditions will cover most of the eastern half of the country. Meanwhile, near- or below-normal precipitation across most of the nation should contrast with wetter-than-normal weather in southern Florida and from the Great Lakes region to the northern and middle Atlantic States.”

Weather Hazards Outlook: [September 26 – 30, 2020](#)

Source: NOAA Weather Prediction Center

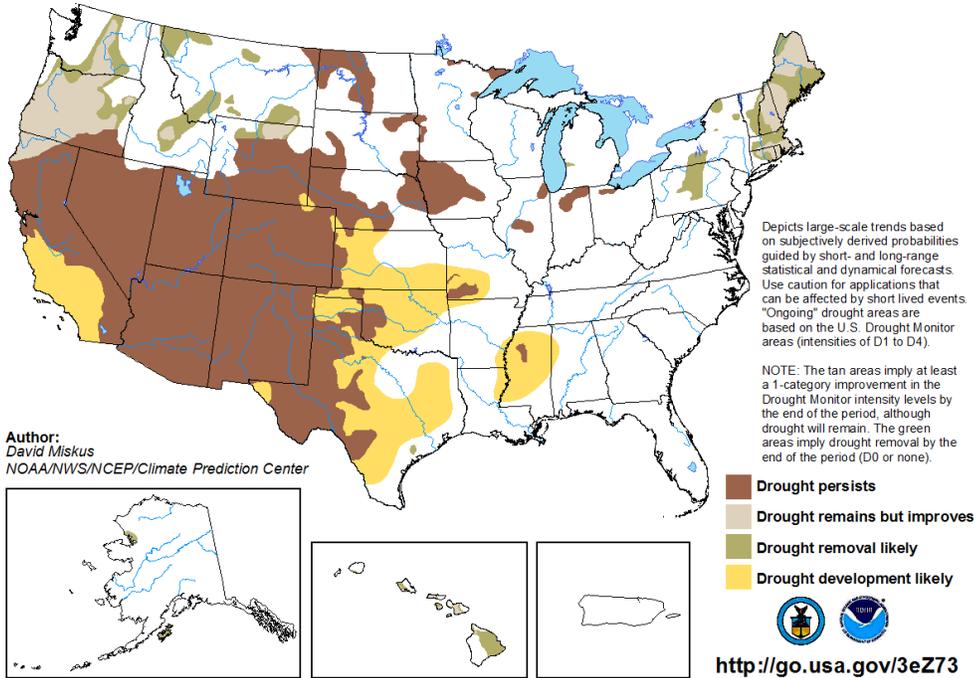


Seasonal Drought Outlook: [September 17 – December 31, 2020](#)

Source: National Weather Service

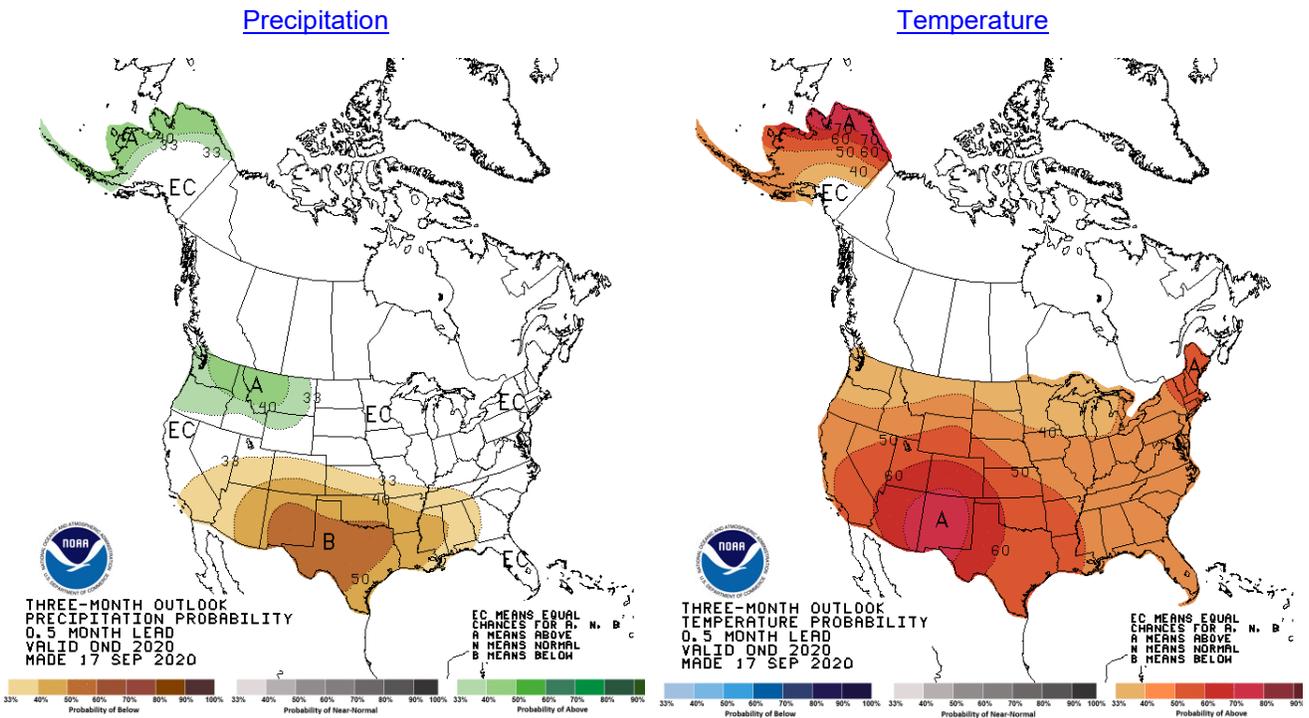
U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for September 17 - December 31, 2020
Released September 17



Climate Prediction Center 3-Month Outlook

Source: National Weather Service



[October-November-December \(OND\) 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](#).