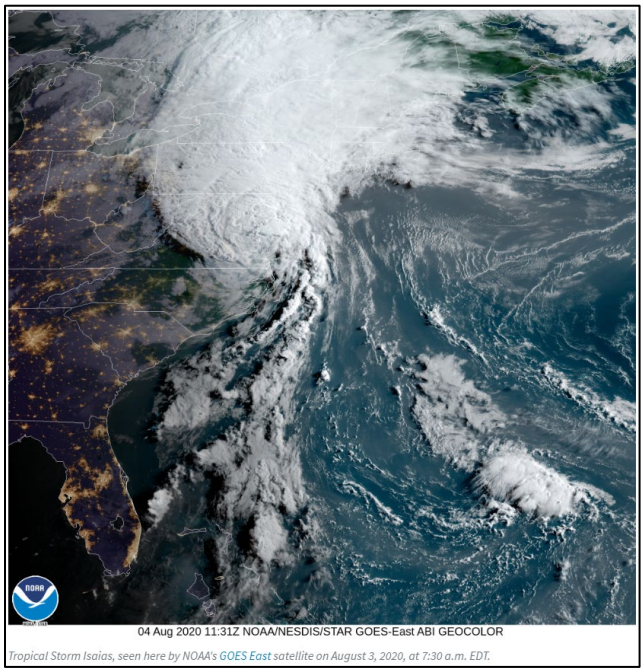
United States Department of Agriculture

Water and Climate Update

August 6, 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.

Hurricane Isaias moves up the East Coast



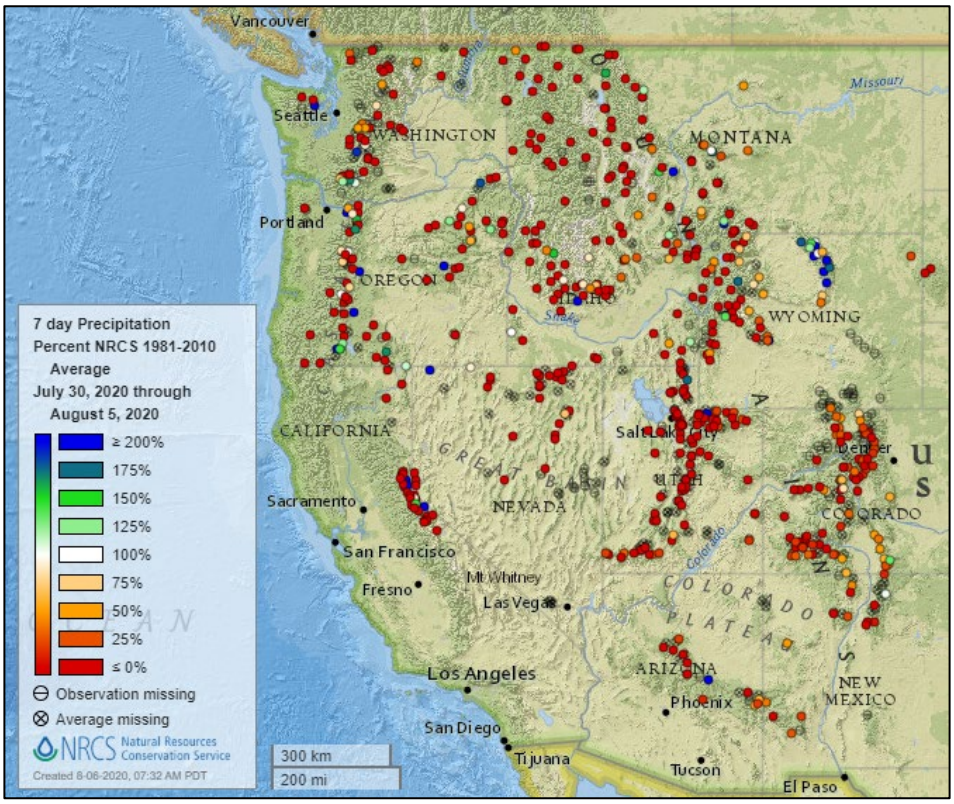
Tropical Storm Isaias, seen here by NOAA's GOES East satellite on August 3, 2020, at 7:30 a.m. EDT.

Hurricane Isaias battered the eastern seaboard of the U.S. from North Carolina to Maine this week. This fast-moving storm had winds of over 60 mph, tornadoes, storm surge, and heavy rain causing flash flooding. More than 3.6 million people were without power along its path. The large number of trees down in New Jersey, New York, and Connecticut could leave these states without power for days. Flooding was especially damaging in eastern Pennsylvania where water levels were near or above record levels. There were 33 tornado reports associated with the storm, and 9 deaths reported at this time.

Related:
Millions left in the dark and historic floods: Isaias by the numbers – Washington Post
Tropical Storm Isaias kills at least 6 along East Coast: See photos of damage – NOLA.com
Isaias pulls away from Washington region after unleashing heavy rain, strong winds and tornadoes – Washington Post
Gov. Ned Lamont declares state of emergency with utilities warning it could take days to restore 720K outages from Tropical Storm Isaias – Hartford Currant on MSN.com (CT)
National Weather Service Confirms 5 Tornadoes Touched Down In Pennsylvania, New Jersey And Delaware – CBS Philly
Tropical Storm Isaias by the numbers: Wind speeds, power outages and more Delaware Online
NASA Captures Isaias Twice Along East Coast – NASA YouTube video

Precipitation

Last 7 Days, NRCS SNOTEL Network

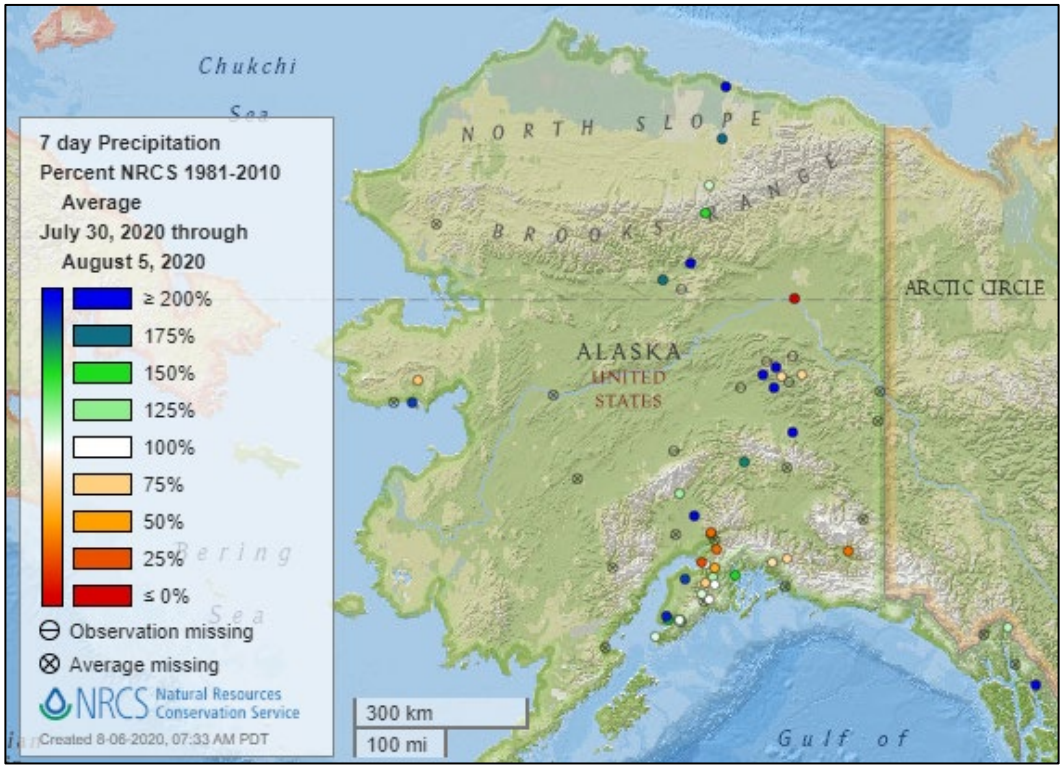


[7-day precipitation percent of average map]

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]

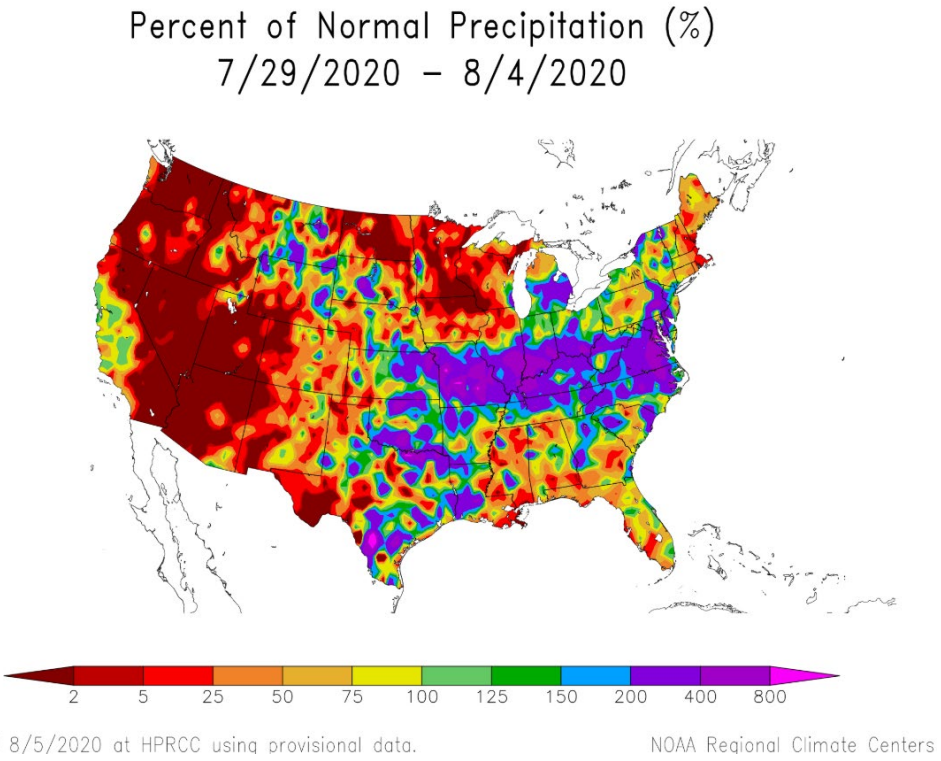


Last 7 Days, National Weather Service (NWS) Networks

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

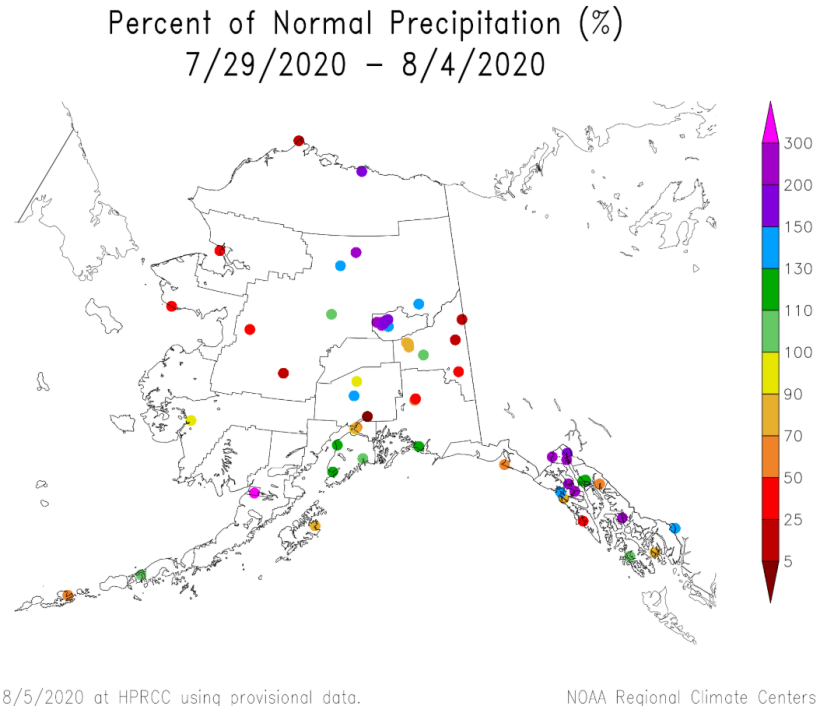


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

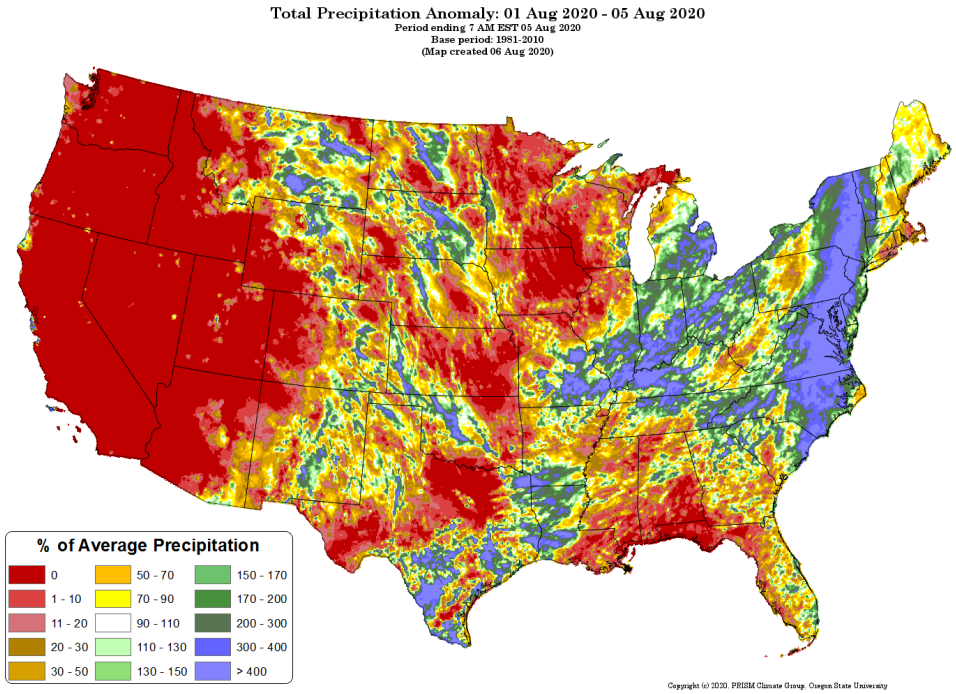
7-day precipitation anomaly map for Alaska.

See also:
7-day total precipitation values (inches) map



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

Source: PRISM

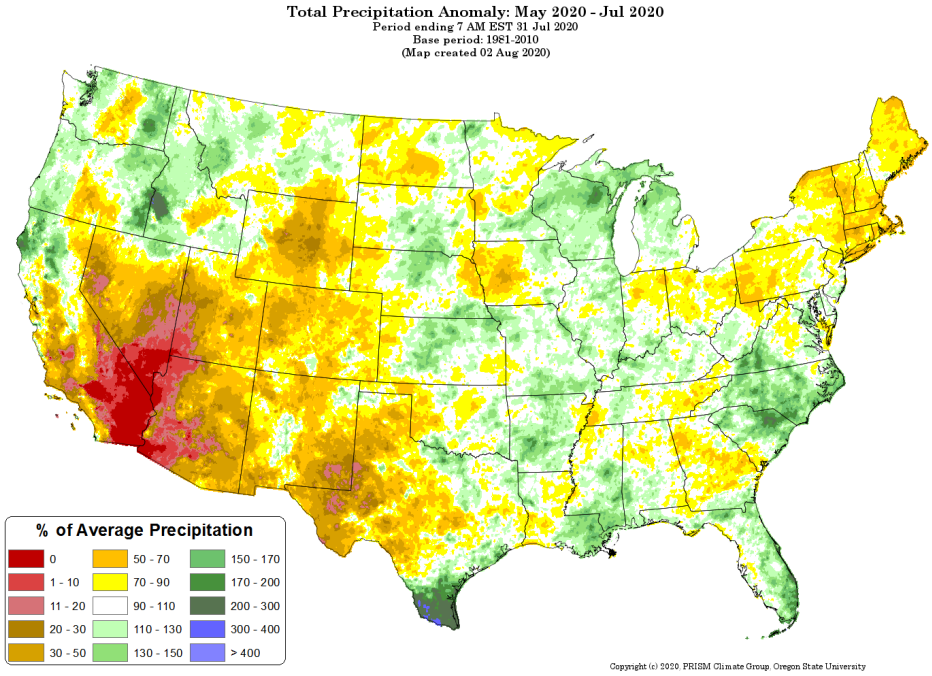


[Month to date national total precipitation percent of average map]

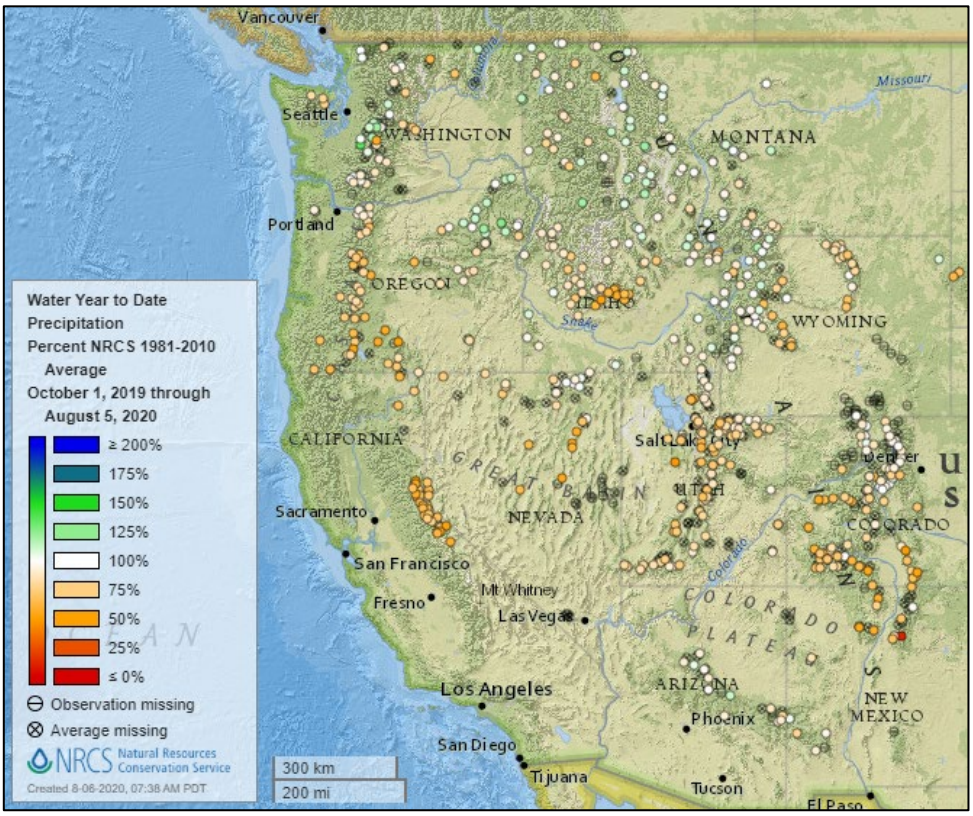
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[May through July precipitation percent of average map]

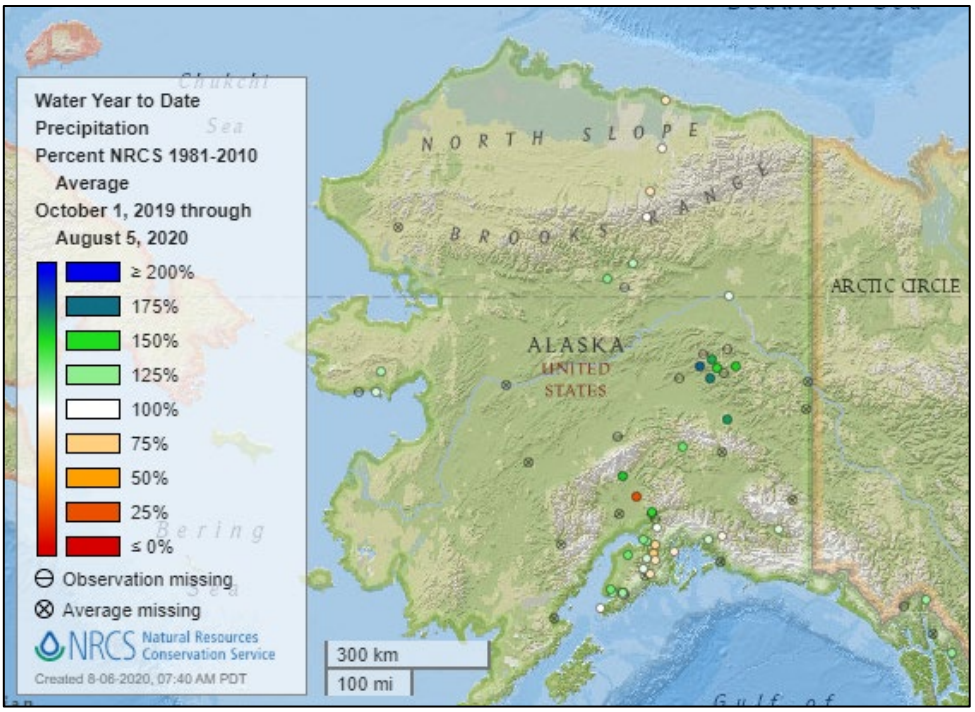


Water Year-to-Date, NRCS SNOTEL Network



[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]

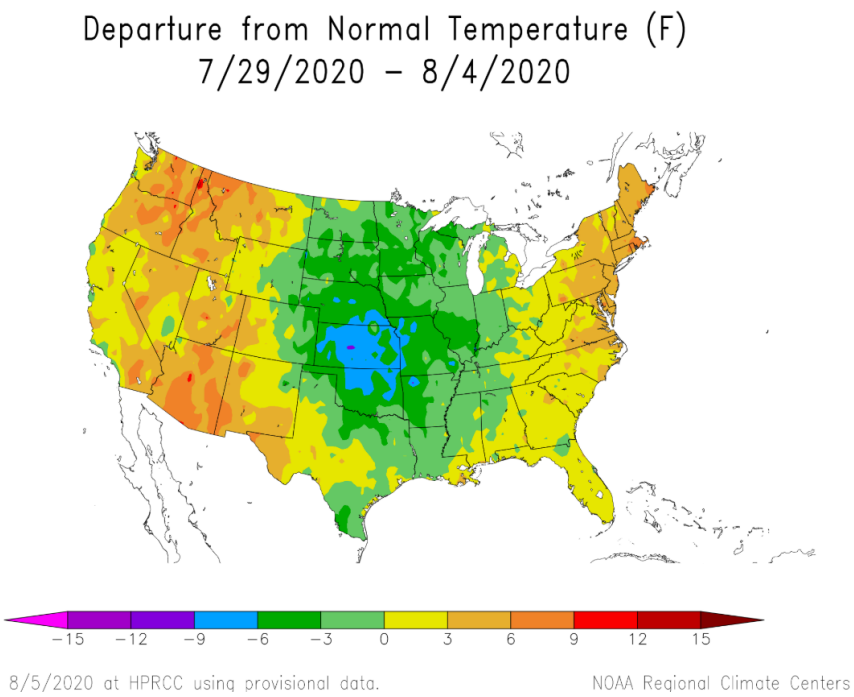
Temperature

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

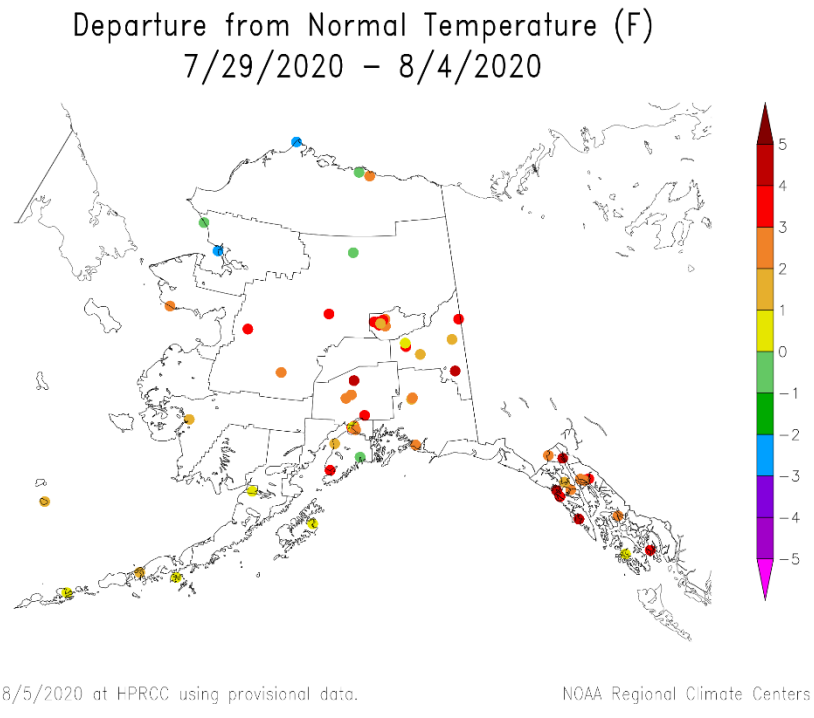


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

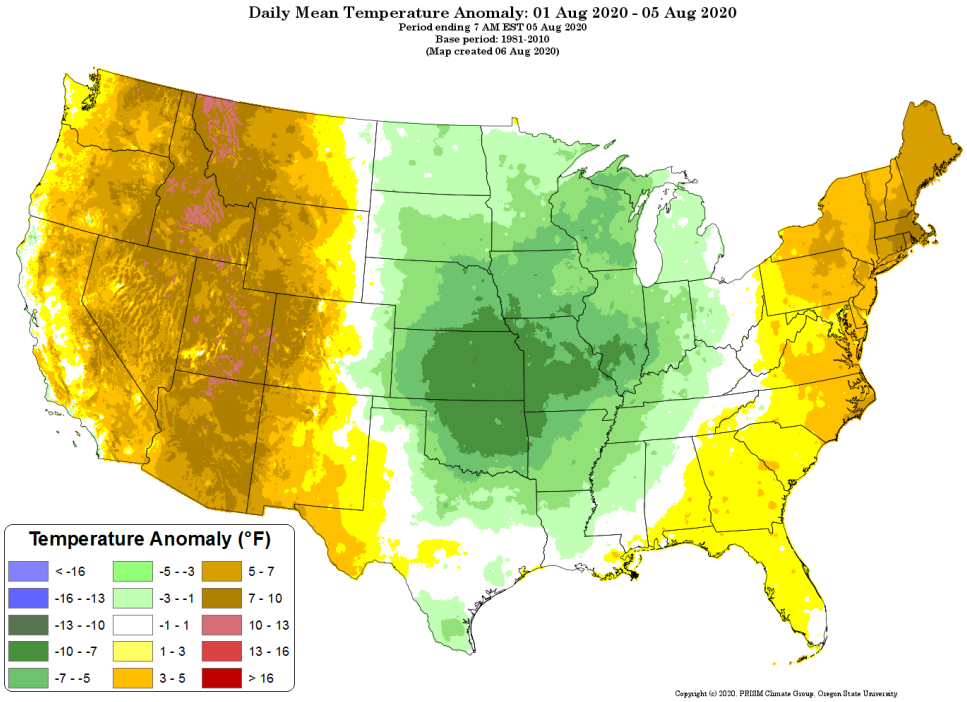
See also: 7-day temperature (° F) map



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

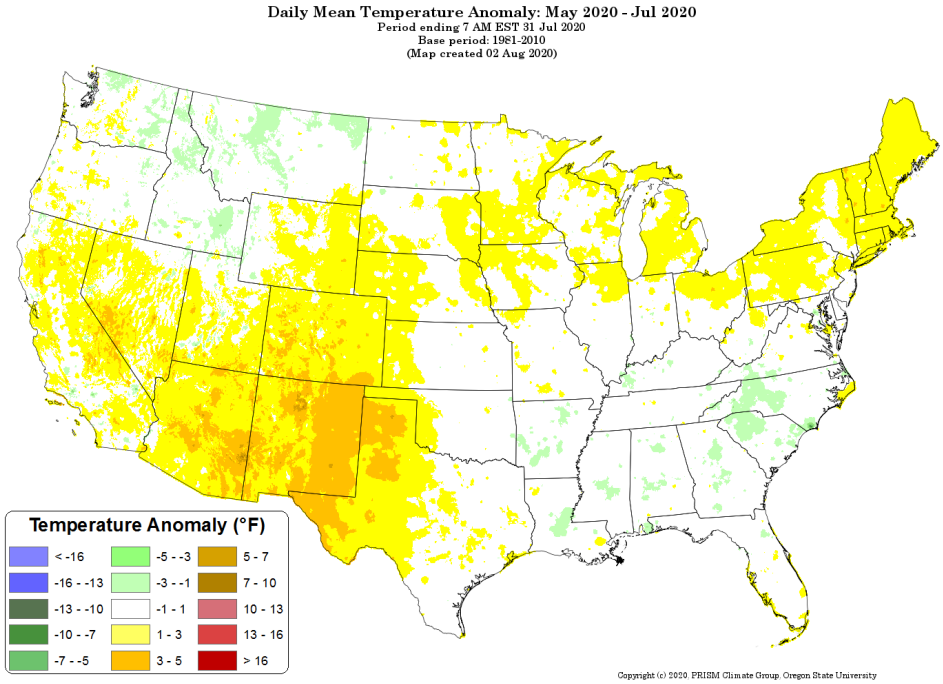
Source: PRISM

[Month to date national daily mean temperature anomaly map]



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

Source: PRISM



[May through July 2020 daily mean temperature anomaly map]

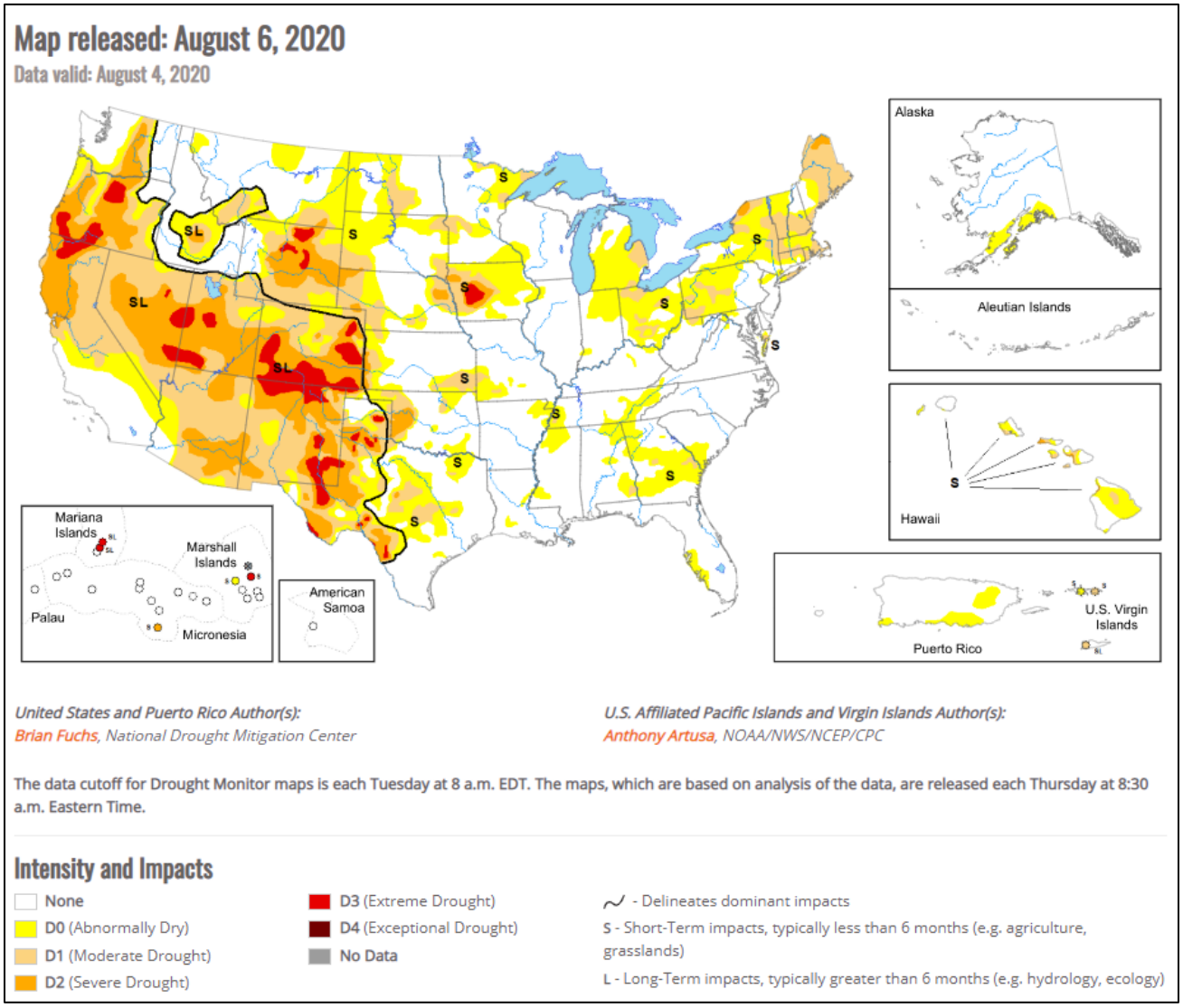
Drought

U.S. Drought Monitor

Source: National Drought Mitigation Center

U.S. Drought Portal

Source: NOAA



Current National Drought Summary, August 6, 2020

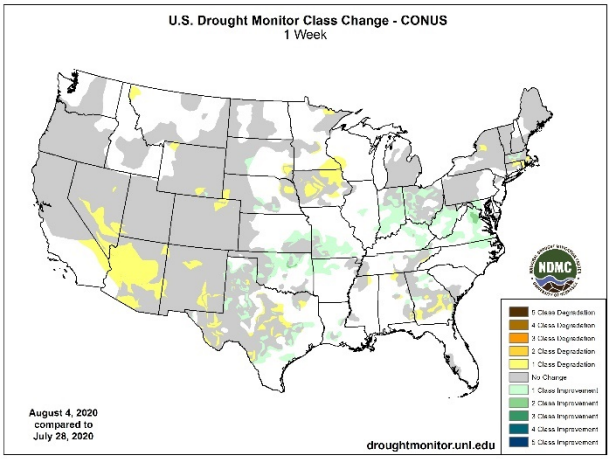
Source: National Drought Mitigation Center

“As Tropical Storm Isaias churned through the northern Caribbean and then northward along the east coast of the United States, an active pattern from the central Plains through the Midwest also brought precipitation with it. Temperatures were cooler through the center of the country, with departures of 6 to 8 degrees below normal in Kansas and Oklahoma while temperatures were well above normal in the Northwest, Southwest and from the Mid-Atlantic up into New England. Several areas broke or tied temperature records for the month: Phoenix had their all-time warmest month ever with an average temperature of 98.9 degrees and Tucson also had their warmest July ever at 91.5 degrees, breaking the previous warmest July by almost a full degree (90.6 degrees in 2005). Sitka, Alaska reached 88 degrees on July 31, tying an all-time record high originally set on July 30, 1976. Richland, Washington recorded 113 degrees on July 30, tying an all-time record high first achieved on August 5, 1961.”

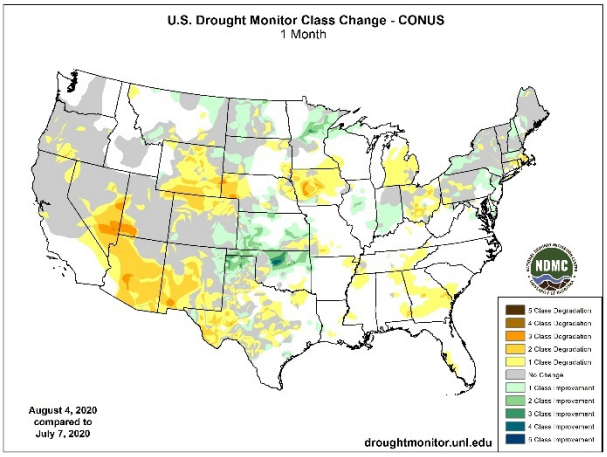
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

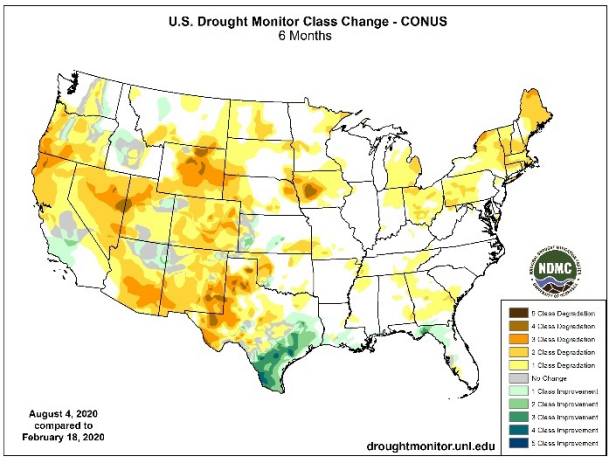
1 Week



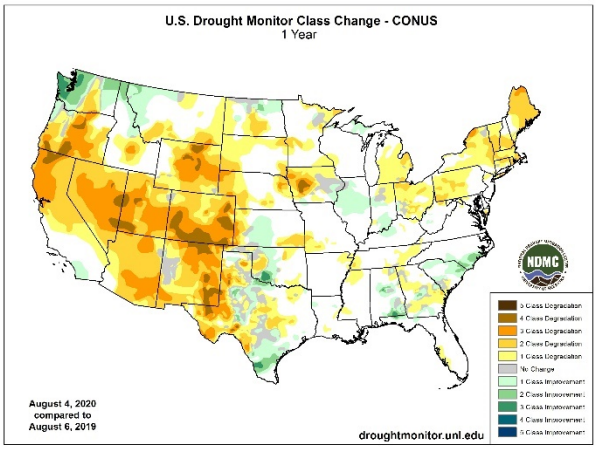
1 Month



6 Months



1 Year



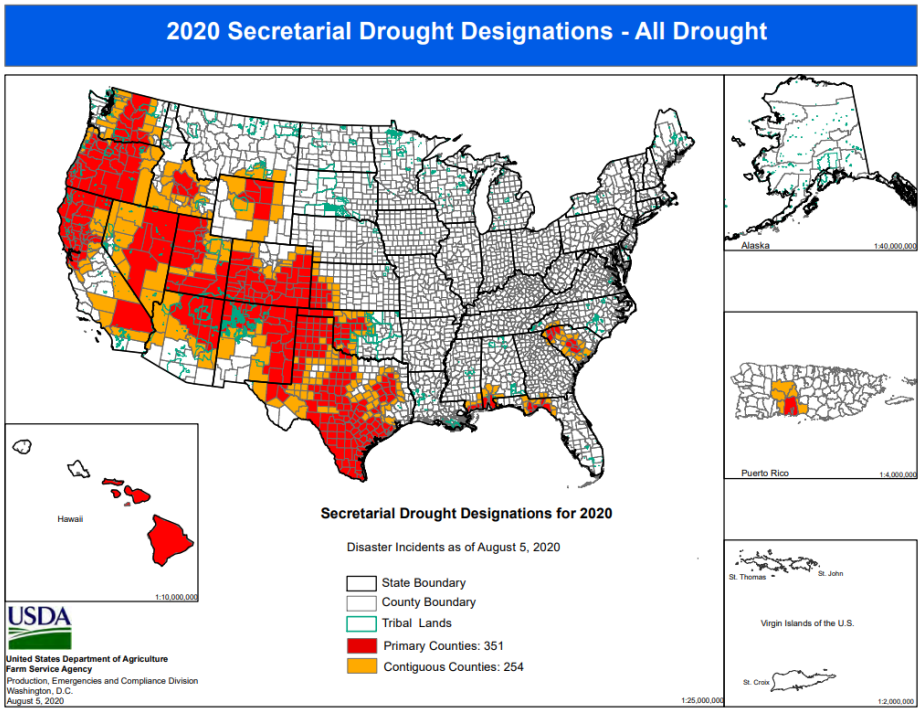
Changes in drought conditions over the last 12 months for the contiguous U.S.

Highlighted Drought Resources

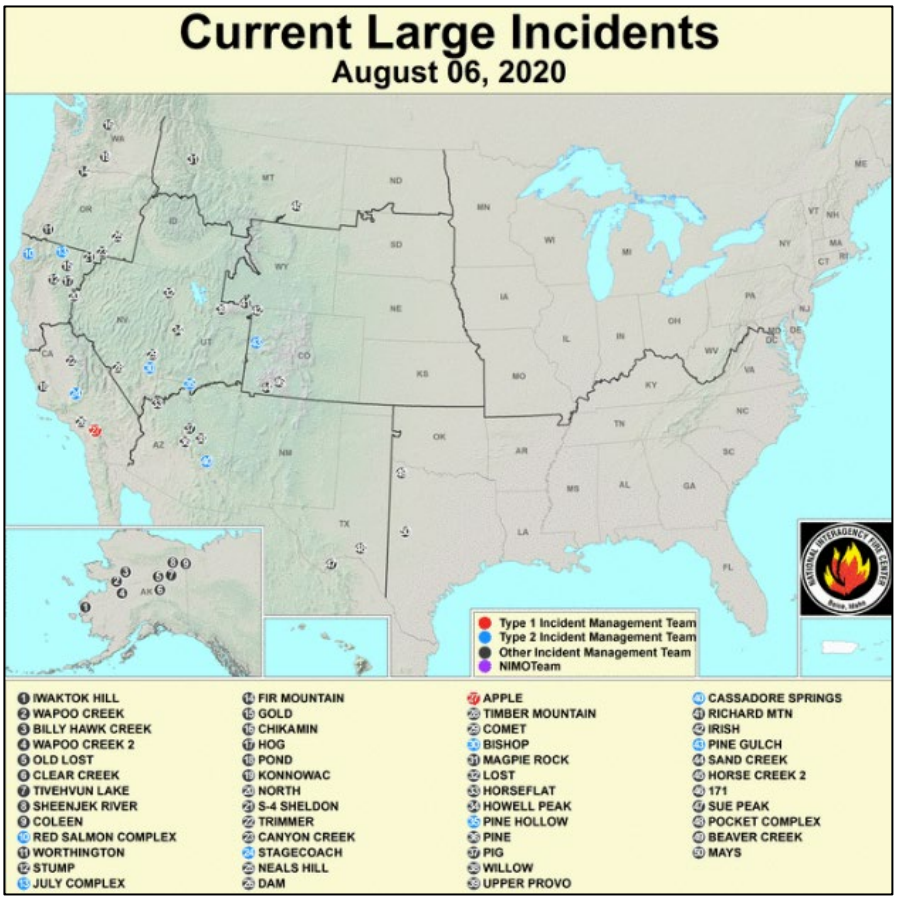
- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



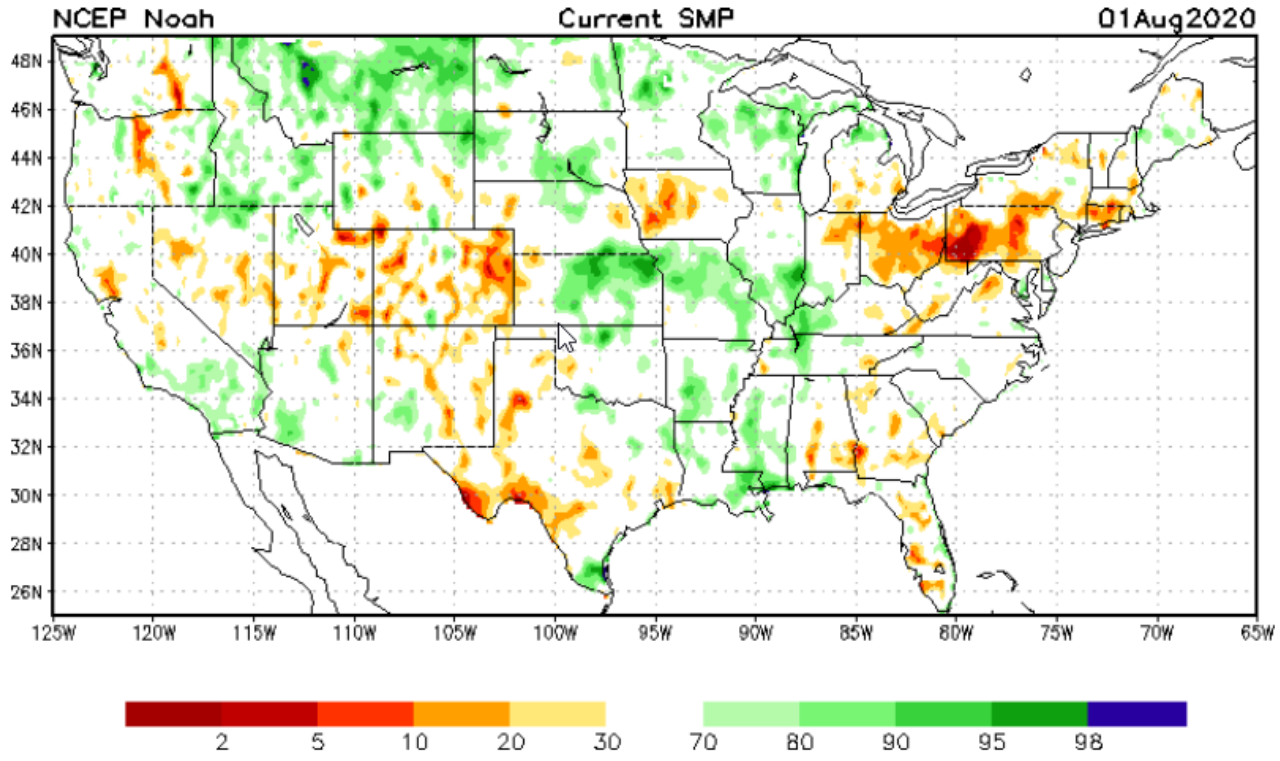
Highlighted Wildfire Resources

- National Interagency Fire Center
- InciWeb Incident Information System
- Significant Wildland Fire Potential Outlook

Other Climatic and Water Supply Indicators

Soil Moisture

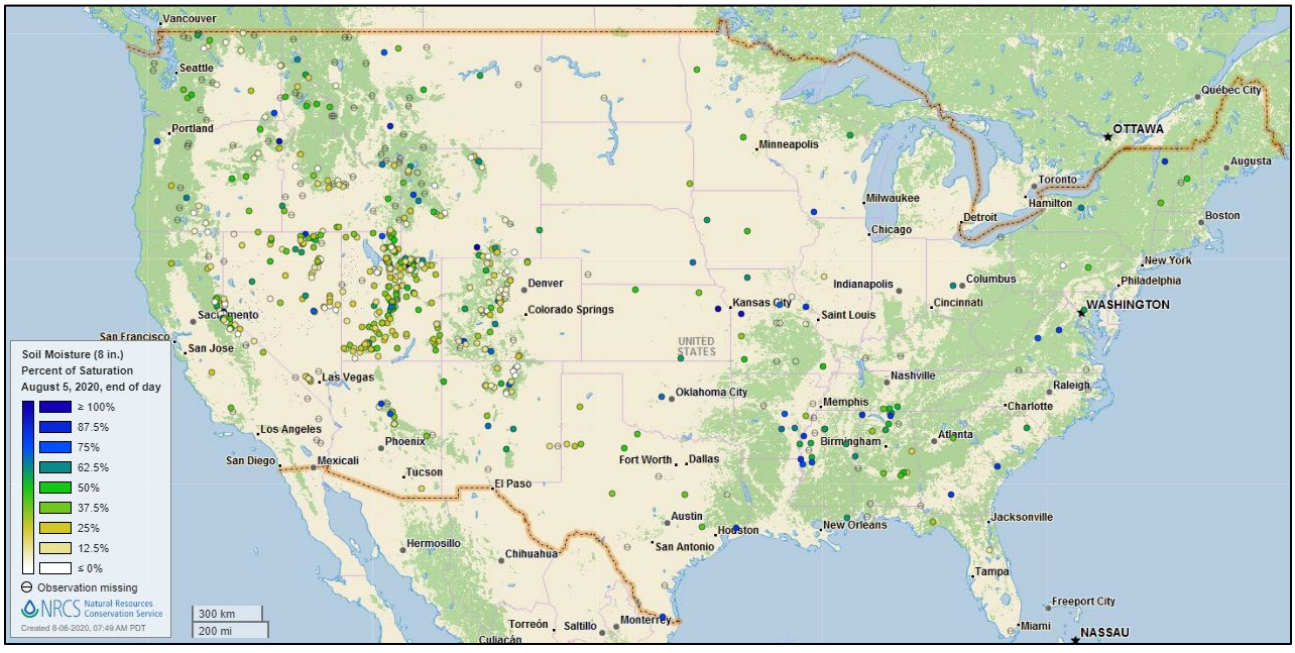
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of August 1, 2020

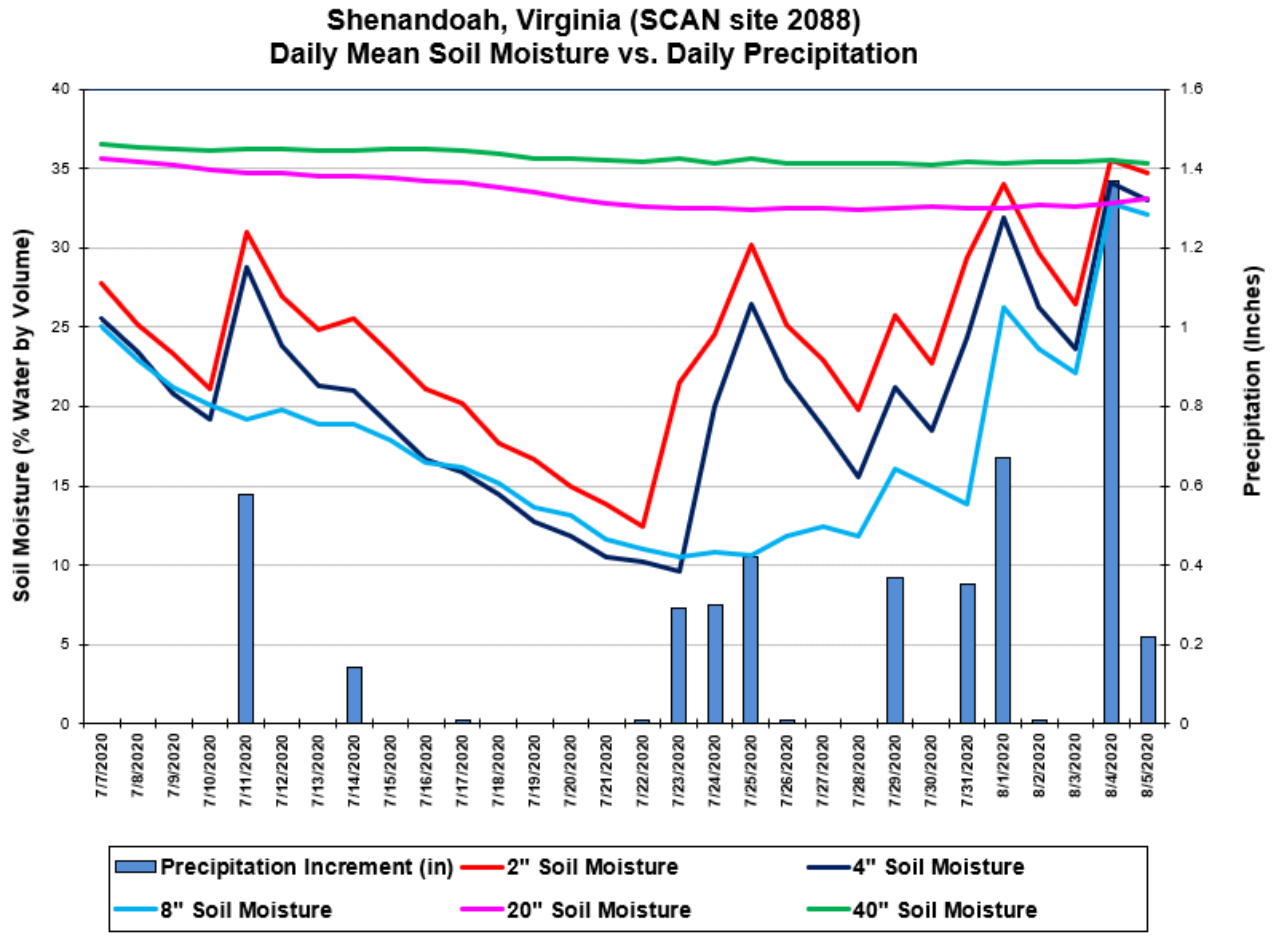
Soil Moisture Percent of Saturation

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



Soil Moisture Data

Source: NRCS Soil Climate Analysis Network (SCAN)



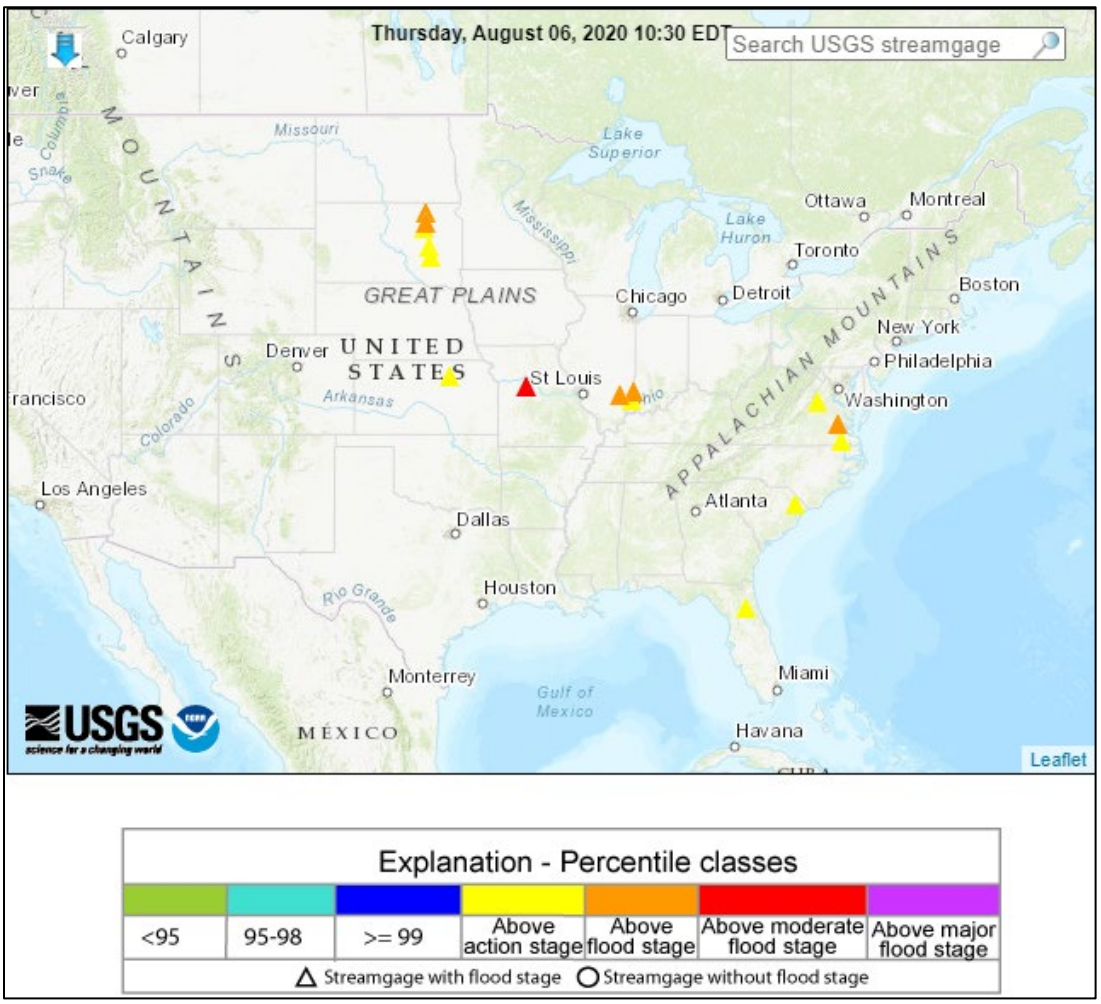
This chart shows the soil moisture and precipitation for the last 30 days at the Shenandoah SCAN site in Virginia. Several precipitation events throughout the 30 days resulted in increased soil moisture at the -2", -4", and -8" sensor depths. Accumulated precipitation for the period was 4.75".

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

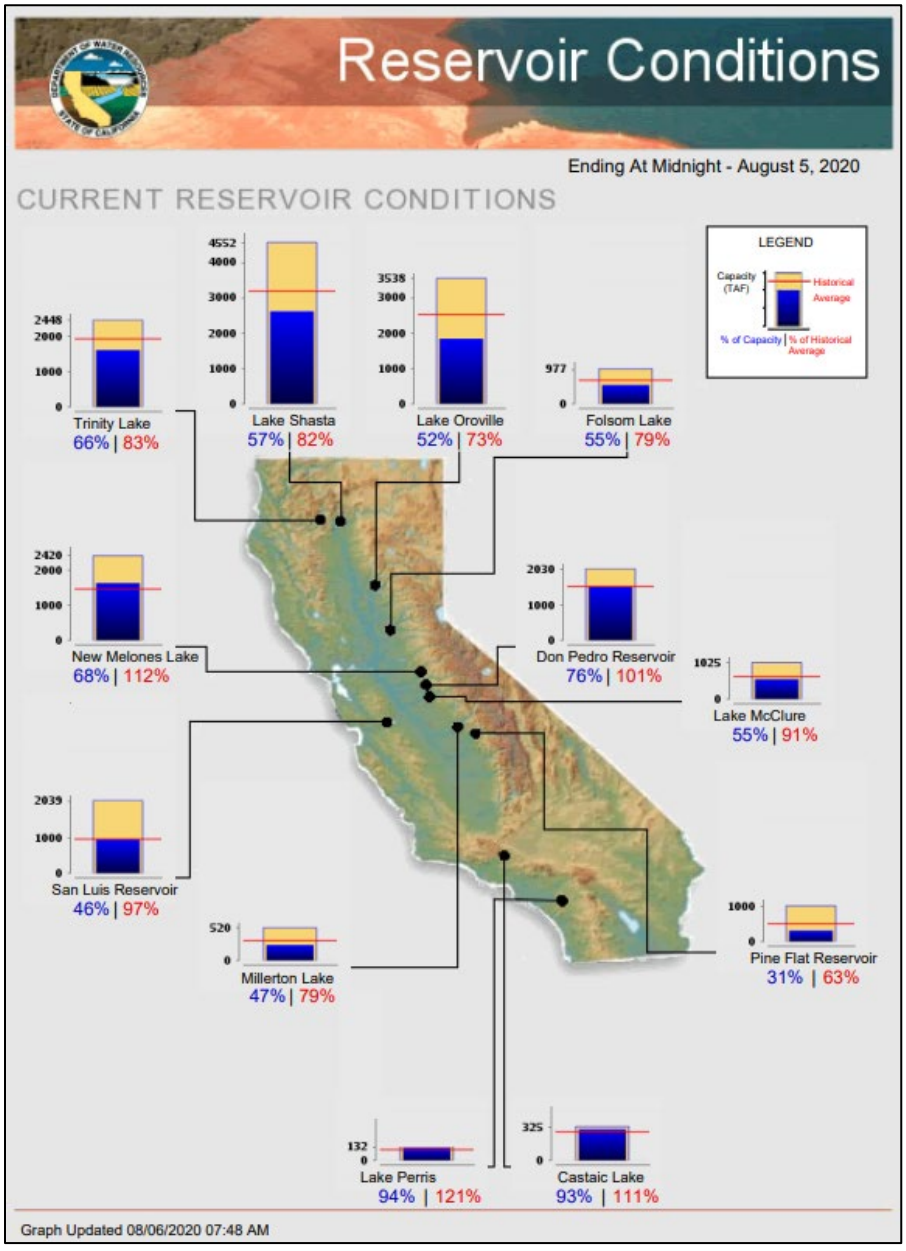
Source: U.S. Geological Survey



[WaterWatch: Streamflow., drought, flood, and runoff conditions]

Reservoir Storage

Current California Reservoir Conditions
Source: California Department of Water Resources



Current California Reservoir Conditions

Hydromet Teacup Reservoir Depictions
Source: U.S. Bureau of Reclamation

- Upper Colorado
- Pacific Northwest/Snake/Columbia
- Sevier River Water, Utah
- Upper Missouri, Kansas, Oklahoma, Texas

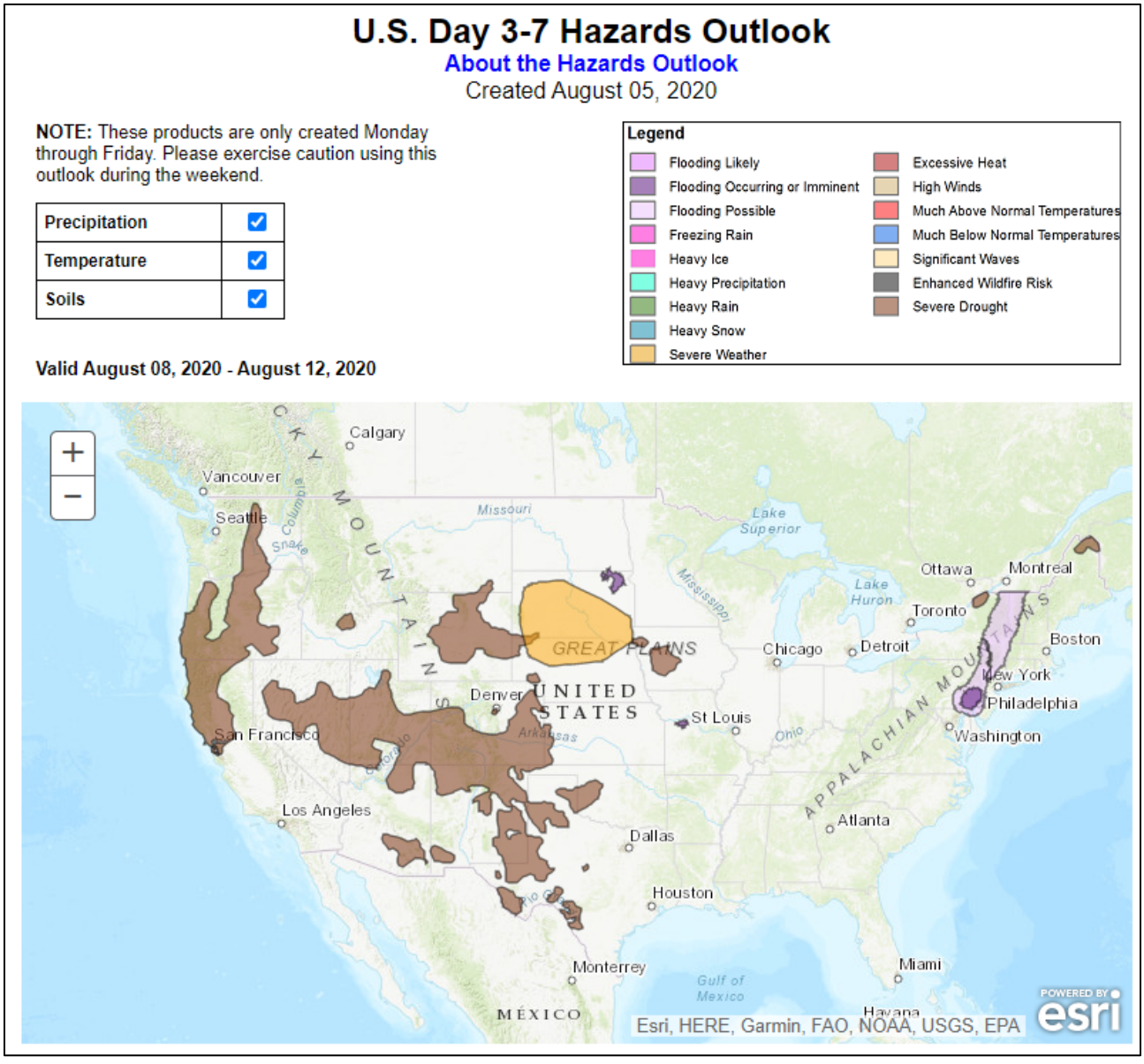
Agricultural Weather Highlights

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

National Outlook, Thursday, August 6, 2020: **"**Disorganized showers and thunderstorms will continue during the next several days from the Plains to the East Coast. Some of the highest rainfall totals, locally 1 to 3 inches, should occur in the upper Great Lakes region and the middle and southern Atlantic States. Meanwhile, most areas west of the Rockies will continue to experience dry weather, despite a Northwestern cooling trend. Farther east, the cool weather pattern that has been in place across the Midwest will be replaced by warmer conditions. Elsewhere, heat will briefly affect the nation's mid-section, followed by a late-week surge of cooler air across the northern and central Plains. The NWS 6- to 10-day outlook for August 11 – 15 calls for the likelihood of near- or below-normal temperatures in California, the Great Basin, and the Northwest, while hotter-than-normal weather will cover the remainder of the country. Meanwhile, below-normal rainfall in southern Florida and from the Four Corners States to the central and southern Plains should contrast with wetter-than-normal conditions in the Pacific Northwest and across much of the eastern half of the U.S."

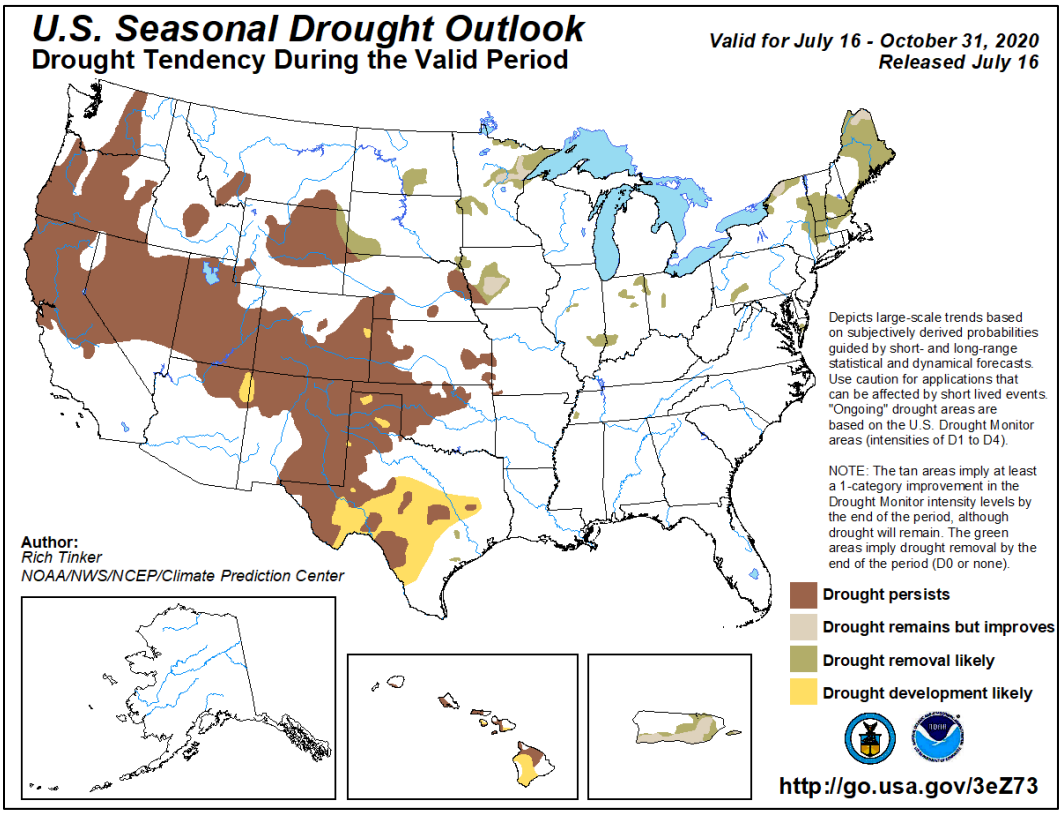
Weather Hazards Outlook: August 8 - 12, 2020

Source: NOAA Weather Prediction Center



Seasonal Drought Outlook: July 16 – October 31, 2020

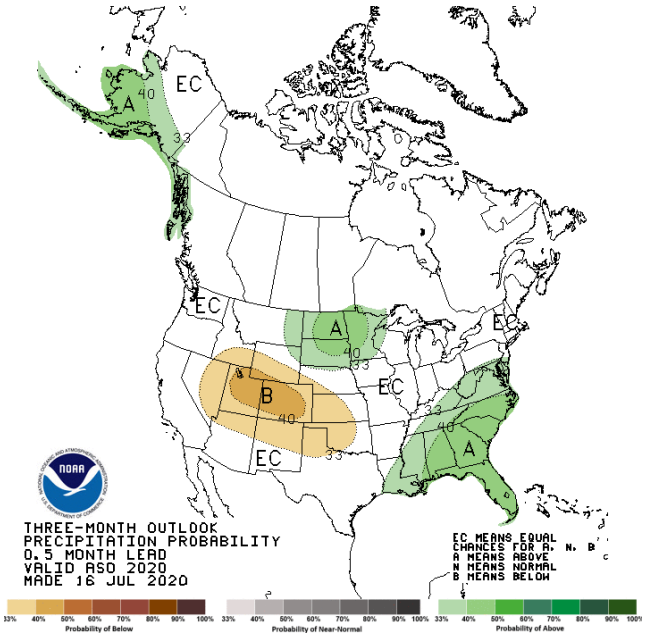
Source: National Weather Service



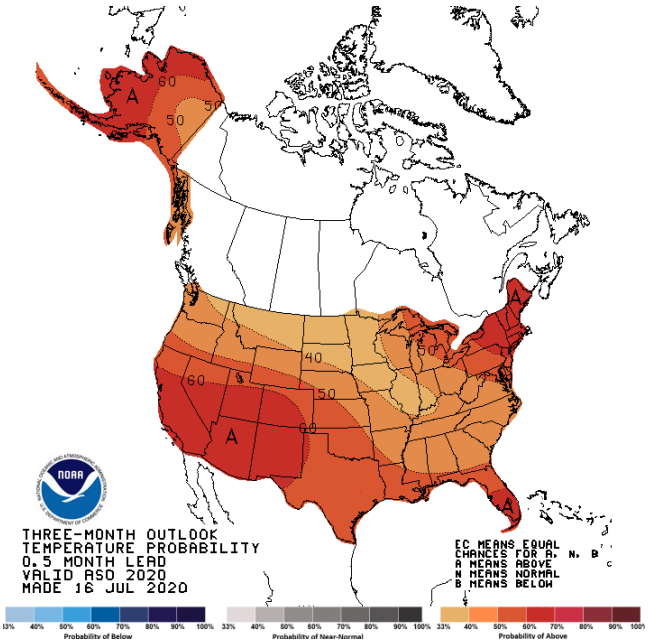
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



August-September-October (ASO) 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.