United States Department of Agriculture

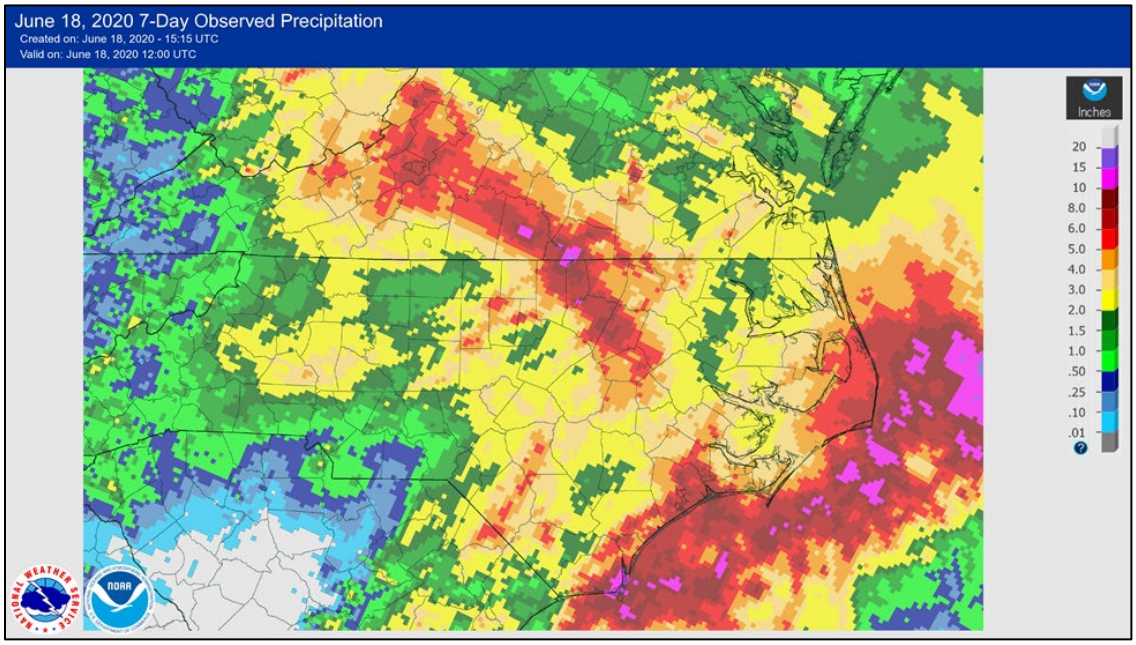
Water and Climate Update

June 18, 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 2
Temperature 6
Drought 8
Other Climatic and Water Supply Indicators 11
More Information 18

Heavy rain drenches North Carolina and Virginia



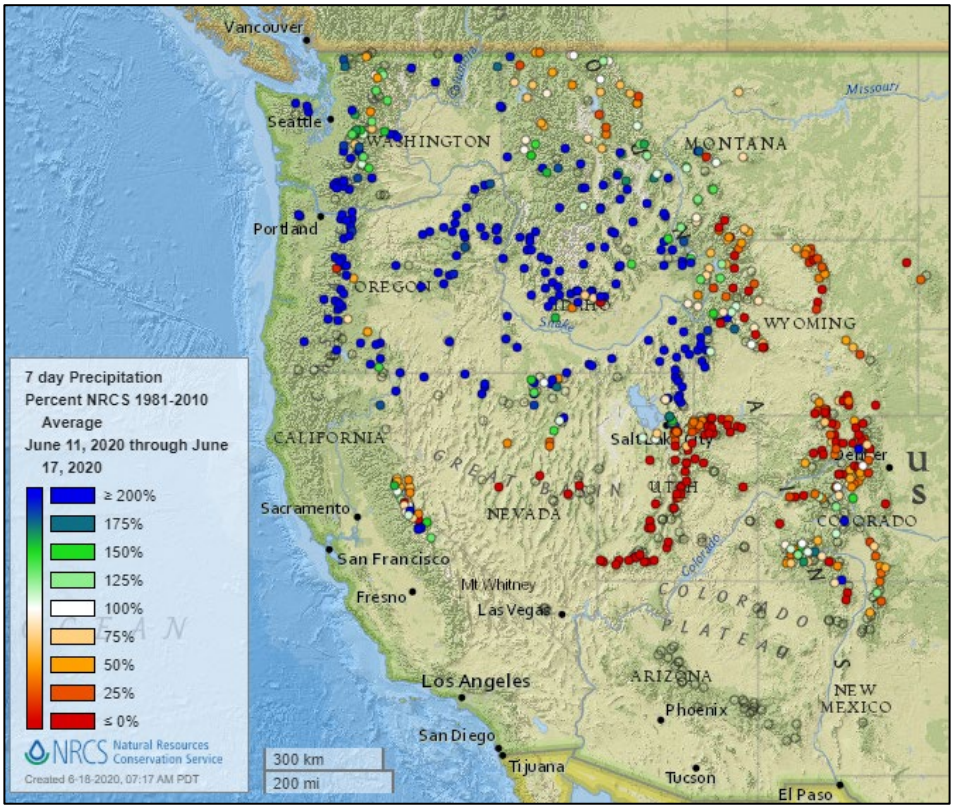
A stalled weather system delivered heavy rain over North Carolina and Virginia in the past few days. The 7-day total precipitation map from the National Weather Service shows the region-wide rain primarily from this storm. Ten to fifteen inches of rain have been reported in some areas. Flash flooding has impacted businesses, homes, crops, roads, and bridges. A mill dam built in 1887 failed, submerging a bridge in Vance County, N.C. This storm adds to the large rain totals from recent storms which have already saturated the area.

Related:

Southwest Virginia, Carolinas see downpour, flooding from stalled weather system - Washington Post
Flash Flooding Hits Parts of North Carolina, Prompts Rescues – U.S. News & World Report
Creeks swell, dam breaks in northeastern NC, flooding roads, businesses, homes – WRAL (NC)
Heavy rains bring flooding across Roanoke region – The Roanoke Times (VA)
Flash flooding hits parts of North Carolina, prompts rescues - Charlotte Observer (NC)
Flash flooding hits parts of North Carolina, prompts rescues – The Dispatch (NC)
Dam breaks, creeks swell after days of rain in Vance, Granville counties – WRAL (NC)

Precipitation

Last 7 Days, NRCS SNOTEL Network

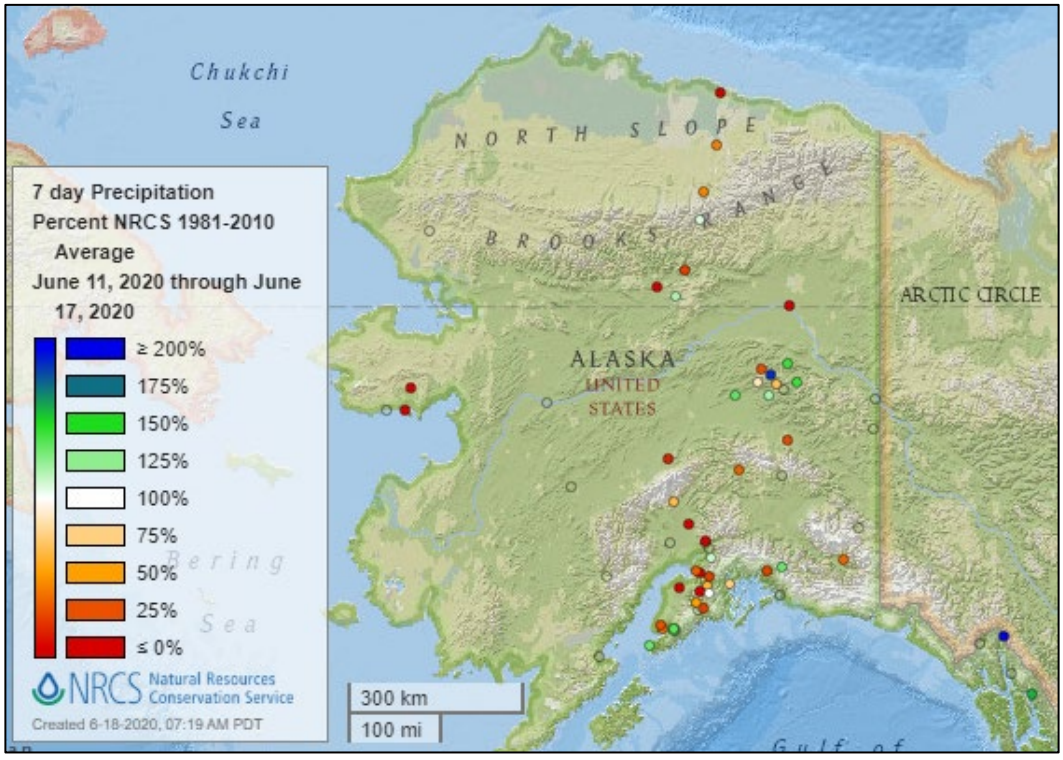


[7-day precipitation percent of average map]

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]

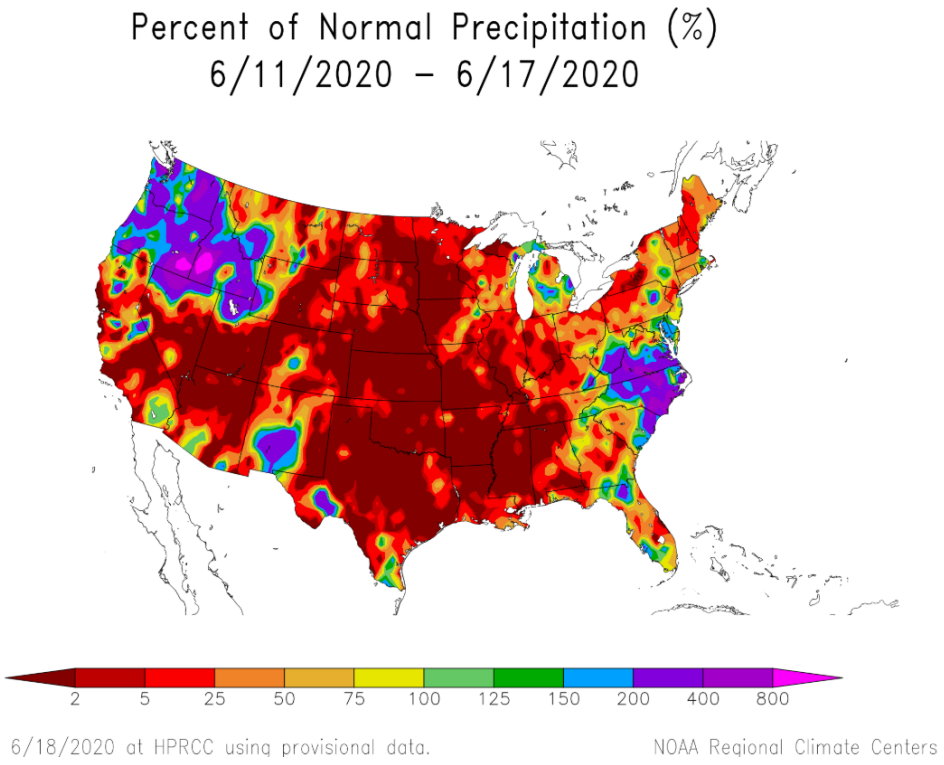


Last 7 Days, National Weather Service (NWS) Networks

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]

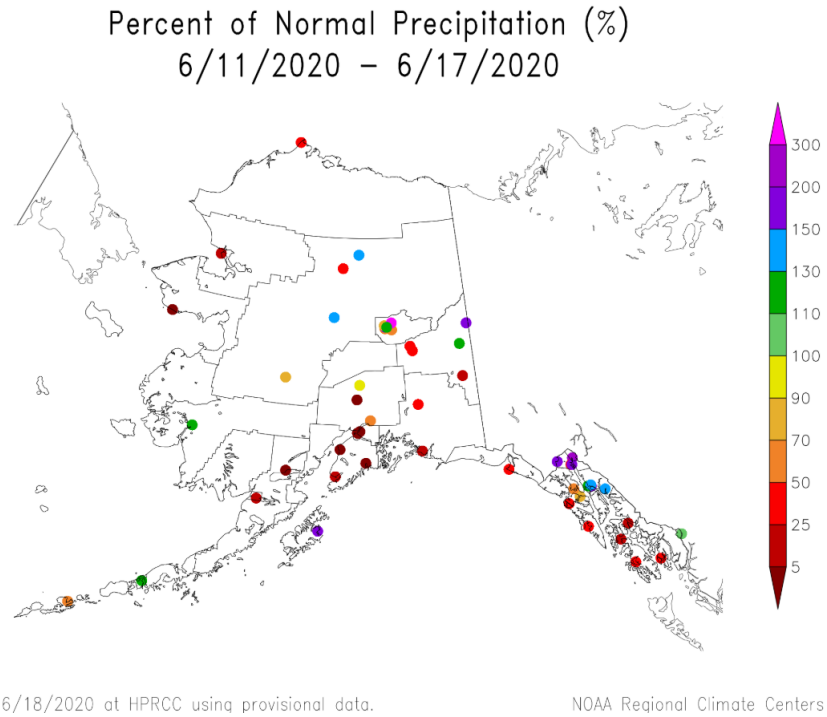


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

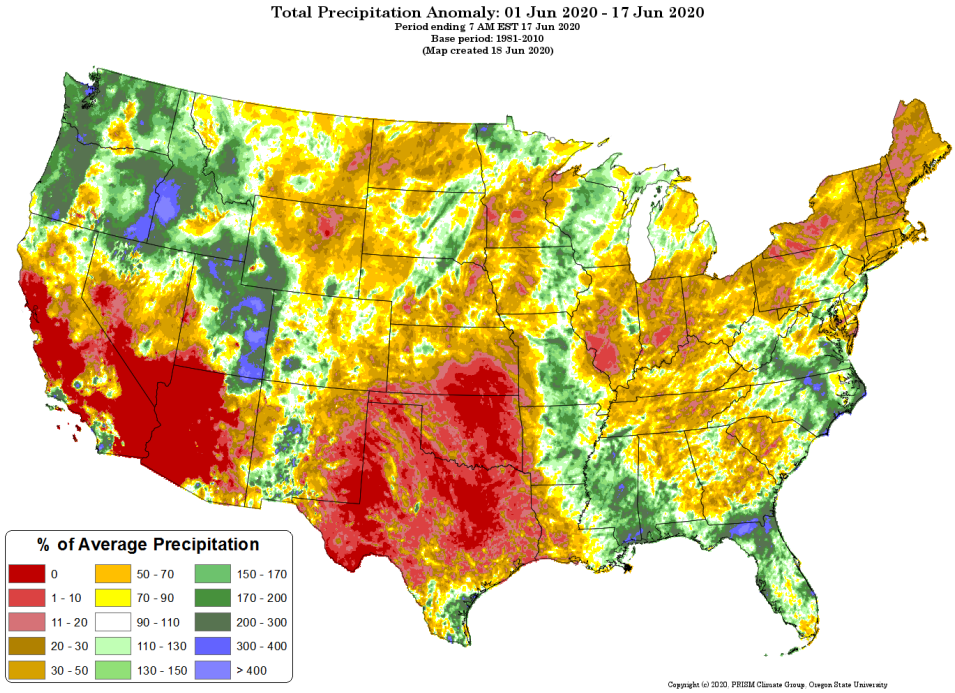
[7-day precipitation anomaly map] for Alaska.

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



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

Source: PRISM

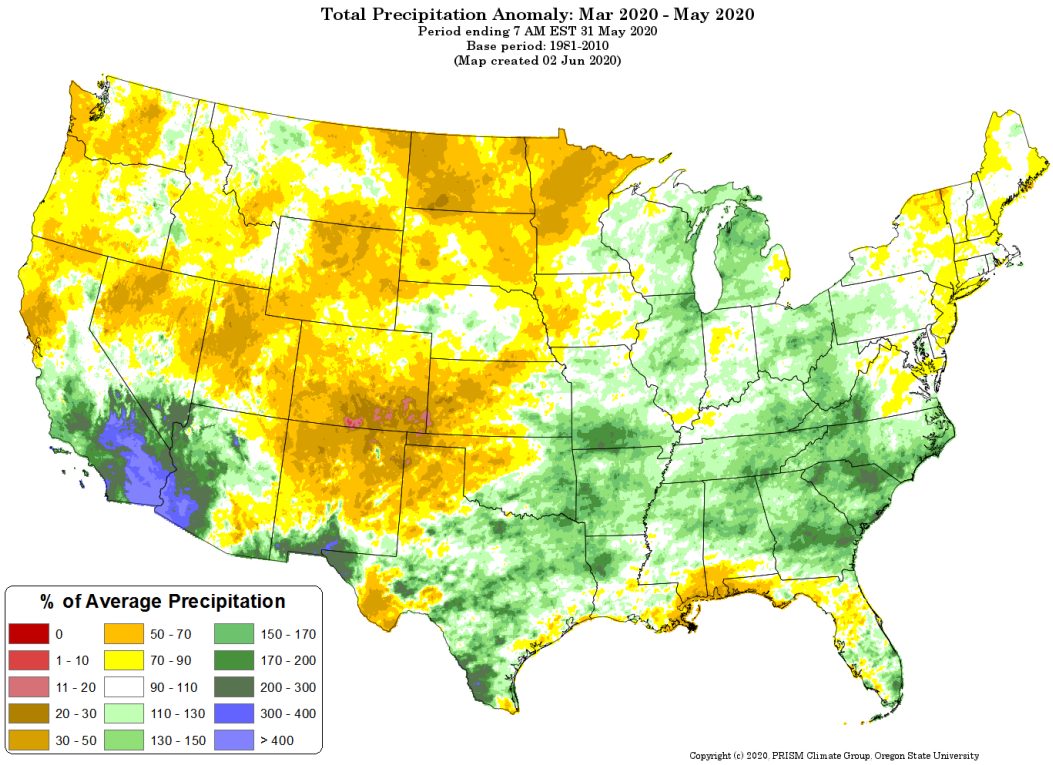


[Month-to-date national total precipitation percent of average map]

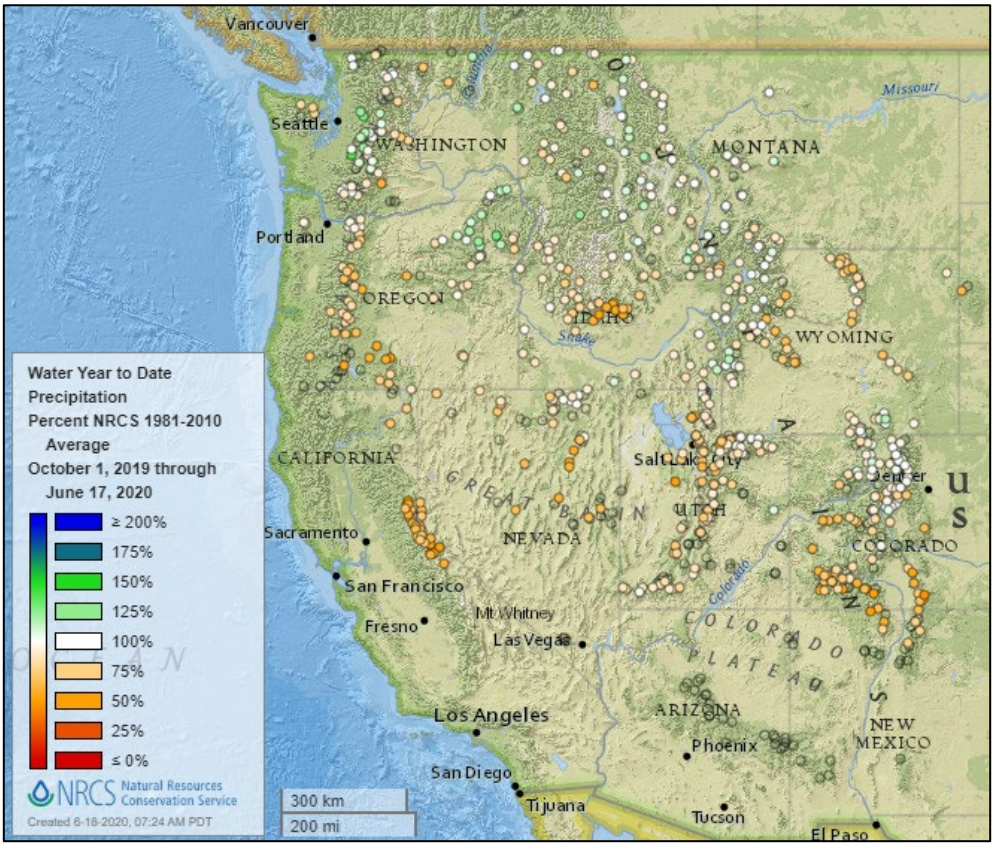
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[March through May precipitation percent of average map]

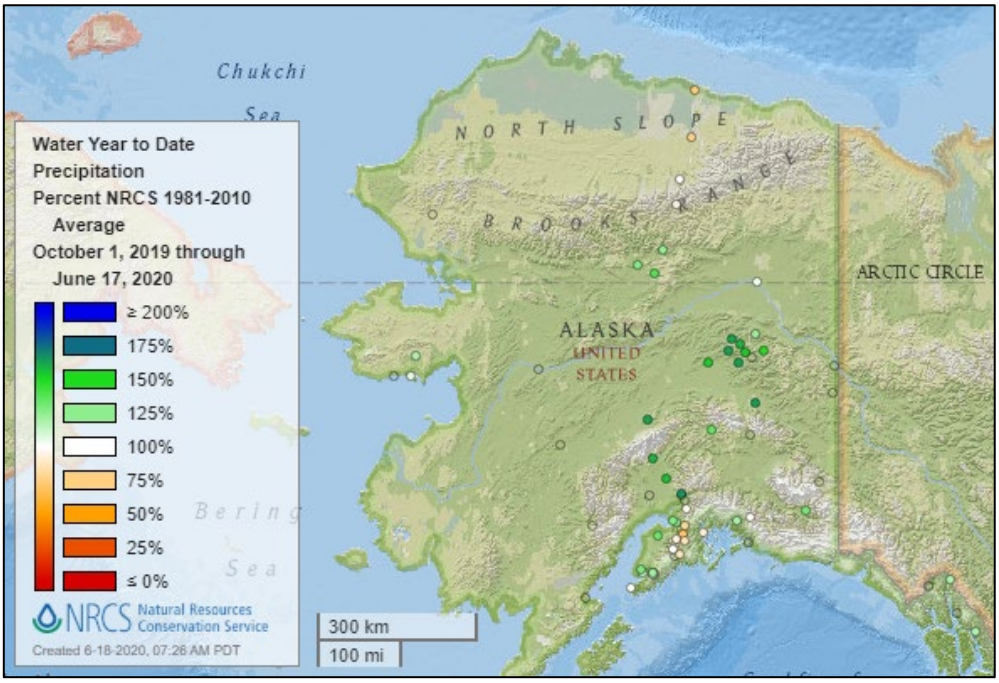


Water Year-to-Date, NRCS SNOTEL Network



[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]

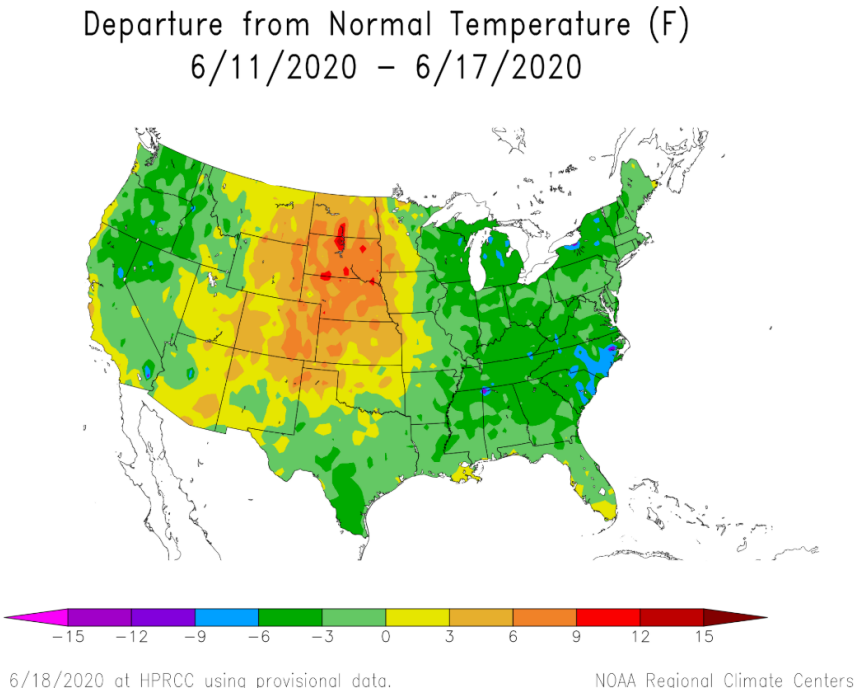
See also: [Alaska 2020 water year-to-date precipitation values (inches) map]

Temperature

Last 7 Days, National Weather Service (NWS) Networks
Source: Regional Climate Centers

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

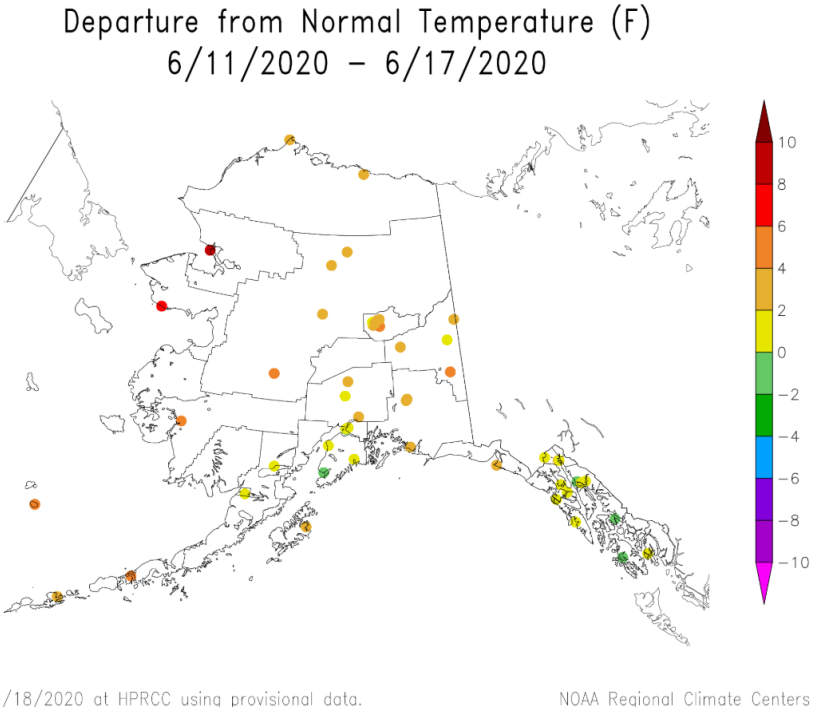
See also: [7-day temperature (° F) map]



Last 7 Days, National Weather Service (NWS) Networks
Source: Regional Climate Centers

[7-day temperature anomaly map] for Alaska.

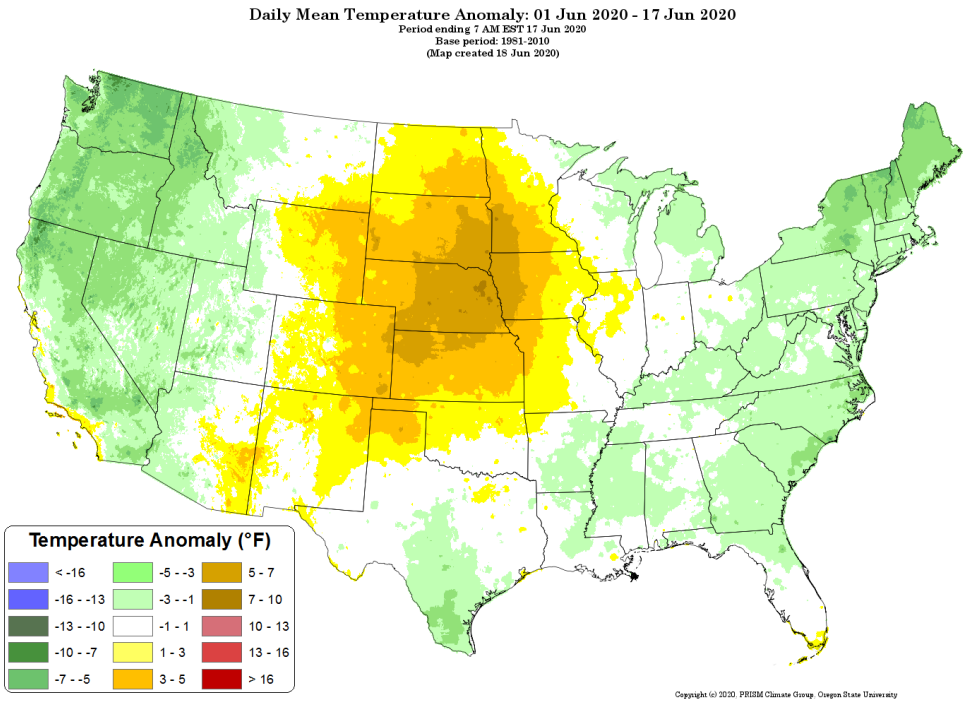
See also: [7-day temperature (° F) map]



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

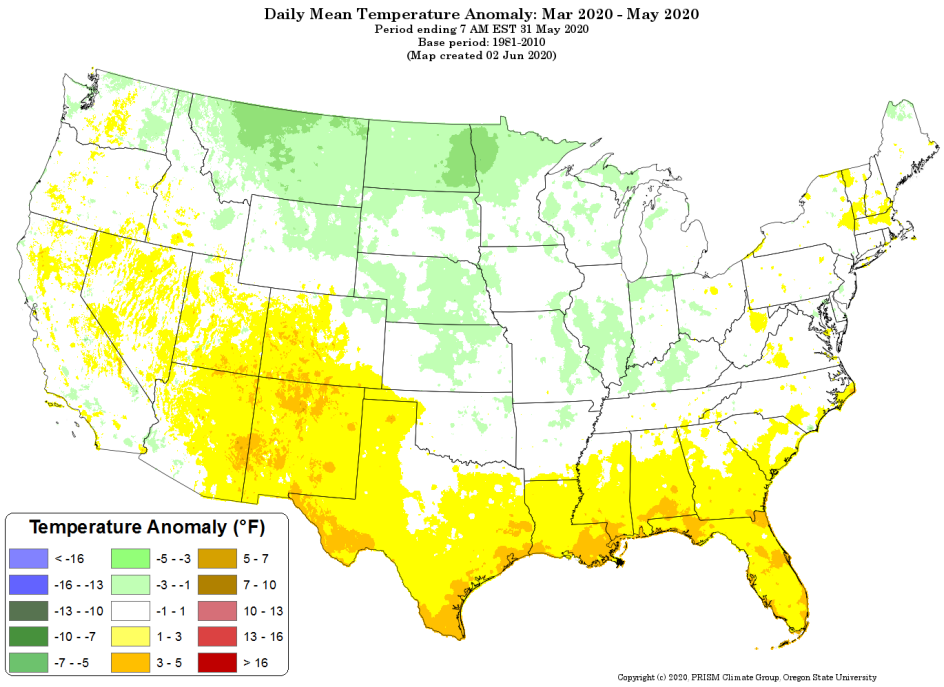
Source: PRISM

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



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

Source: PRISM

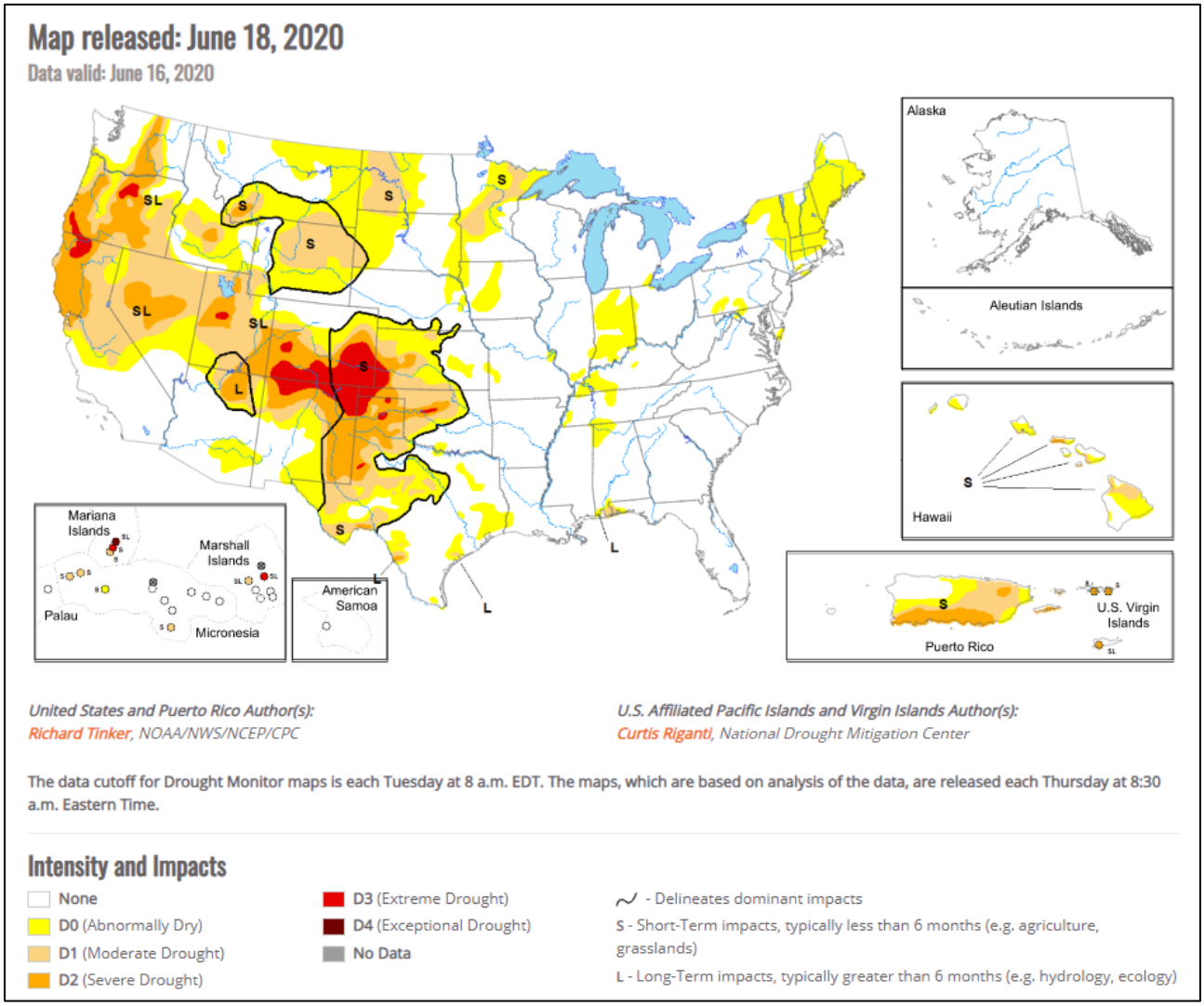


[March through May 2020 daily mean temperature anomaly map]

Drought

U.S. Drought Monitor
Source: National Drought Mitigation Center

U.S. Drought Portal
Source: NOAA



Current National Drought Summary, June 18, 2020

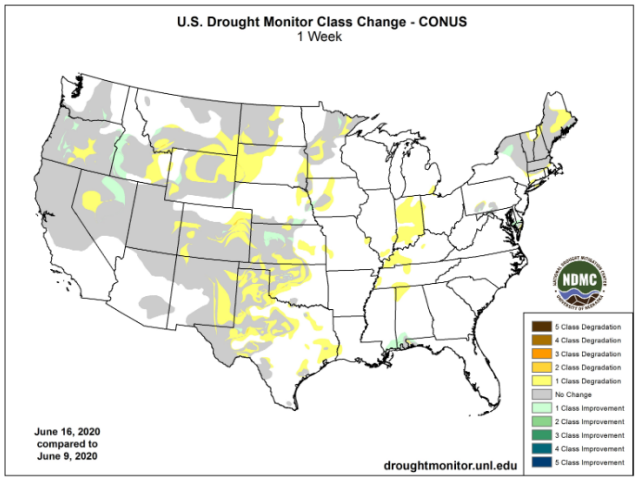
Source: National Drought Mitigation Center

“Significant rainfall missed most areas of dryness and drought across the contiguous 48 states, with improvements limited to part of the northern Intermountain West, central Kansas, and a few isolated spots in both Oregon and upstate New York. Elsewhere, dry conditions persisted or intensified. In particular, abnormally hot weather, low humidity, and gusty winds have led to rapidly-intensifying dryness across the Plains States. Extreme drought expanded in northern New Mexico, part of central and western Oklahoma, eastern Colorado, and western Kansas while broad areas of abnormal dryness and some moderate drought were introduced farther north.”

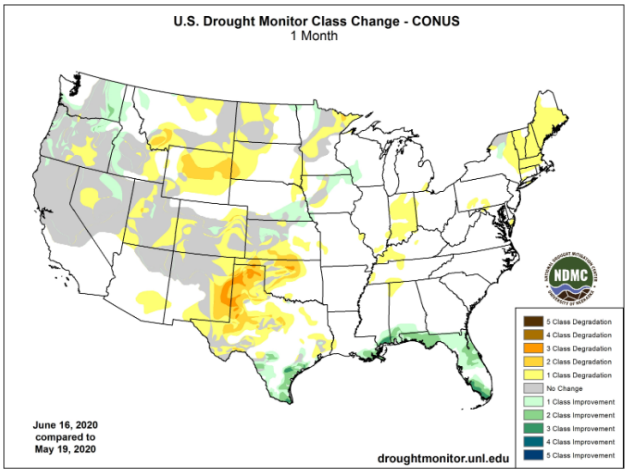
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

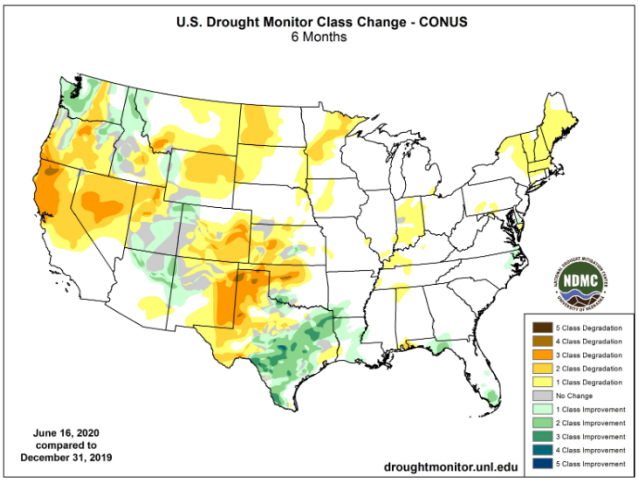
1 Week



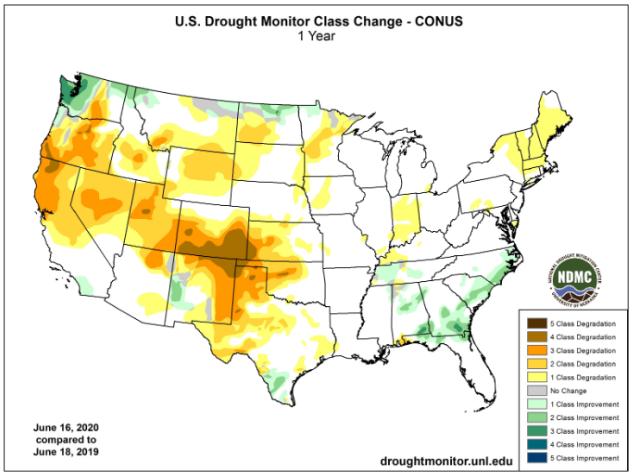
1 Month



6 Months



1 Year



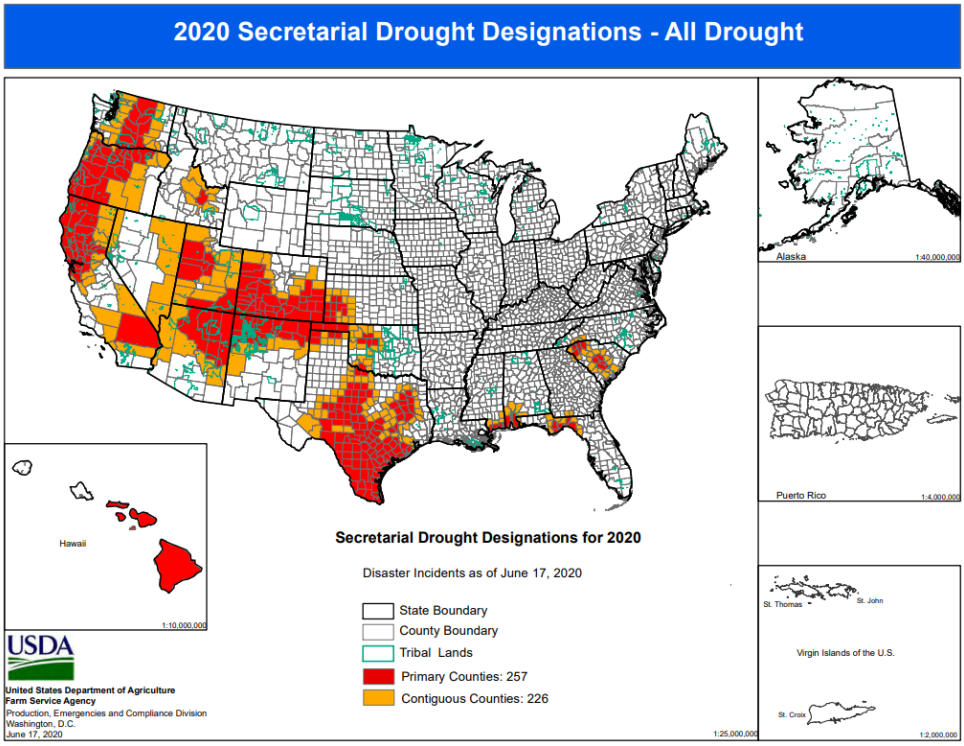
Changes in drought conditions over the last 12 months for the contiguous U.S.

Highlighted Drought Resources

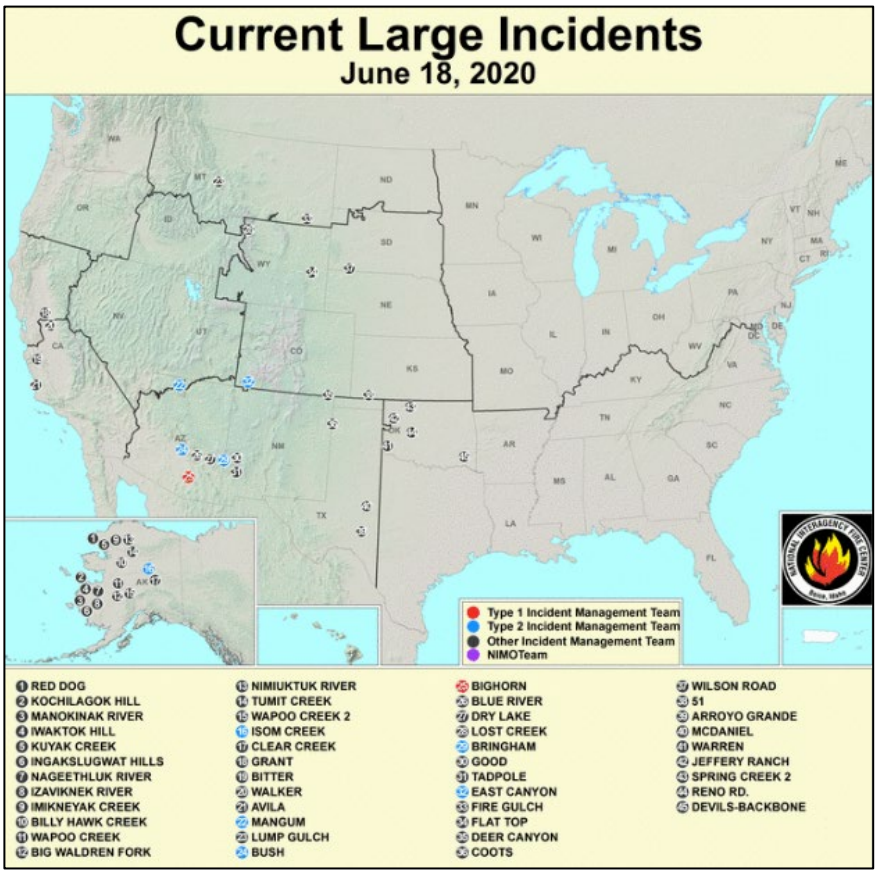
- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



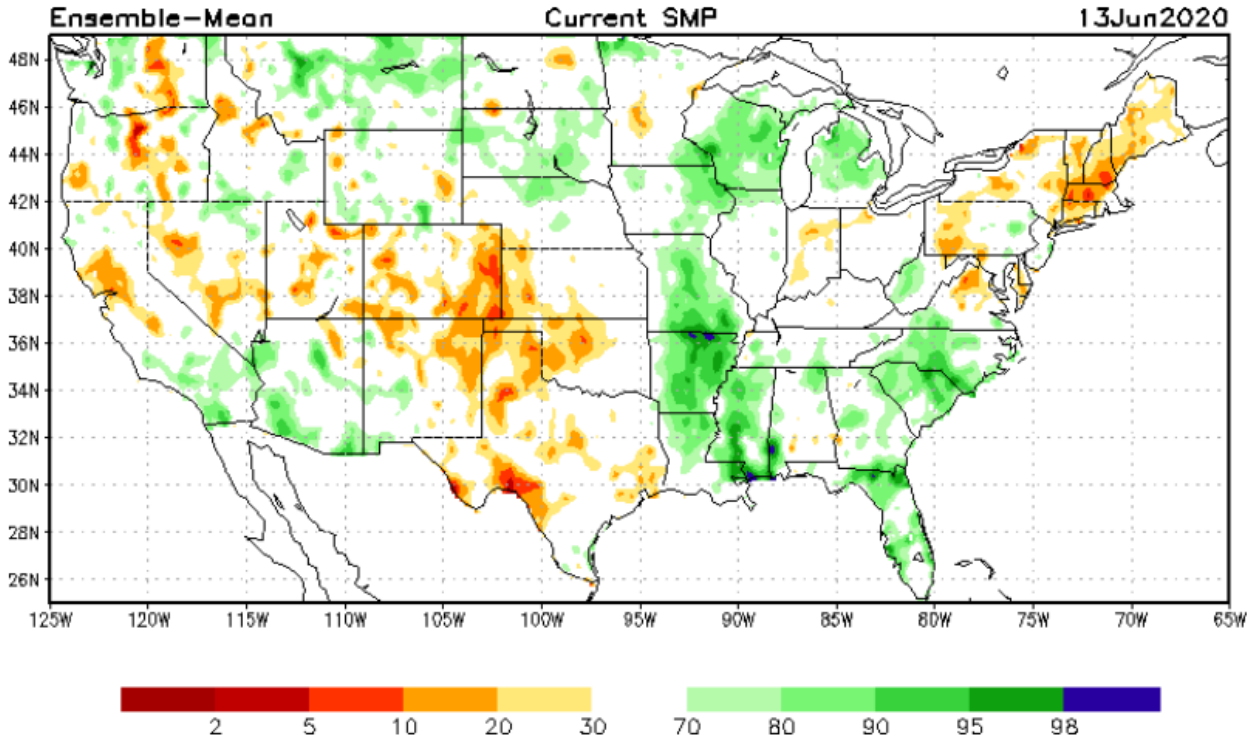
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

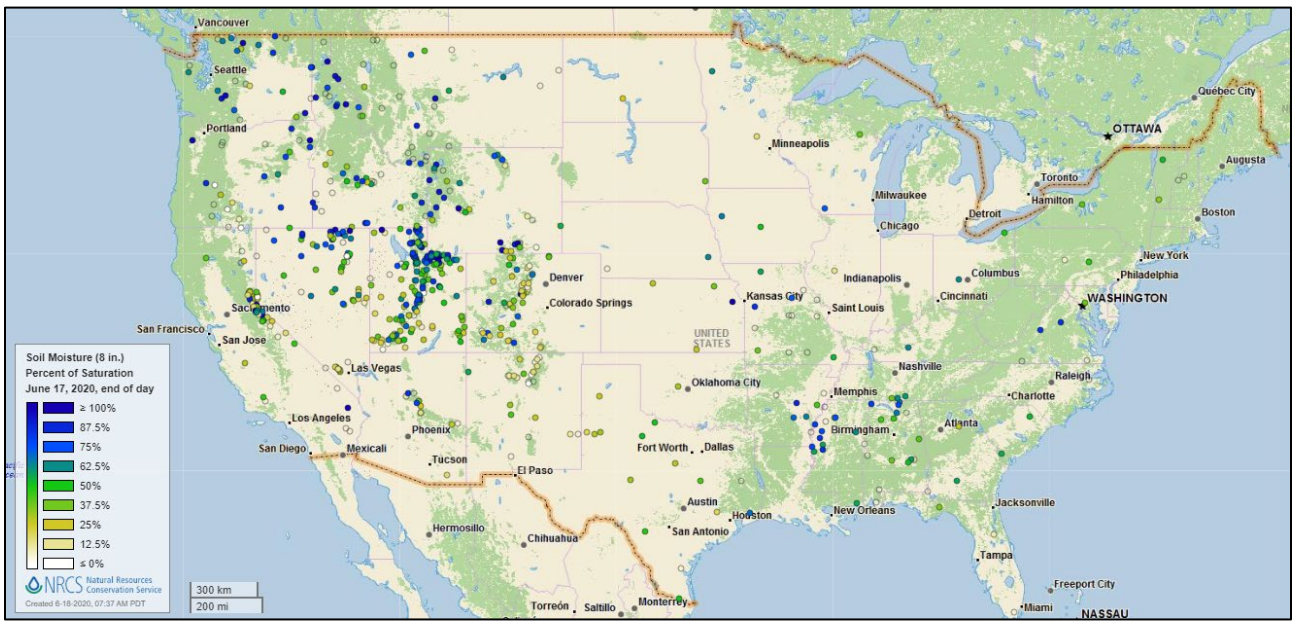
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of June 13, 2020

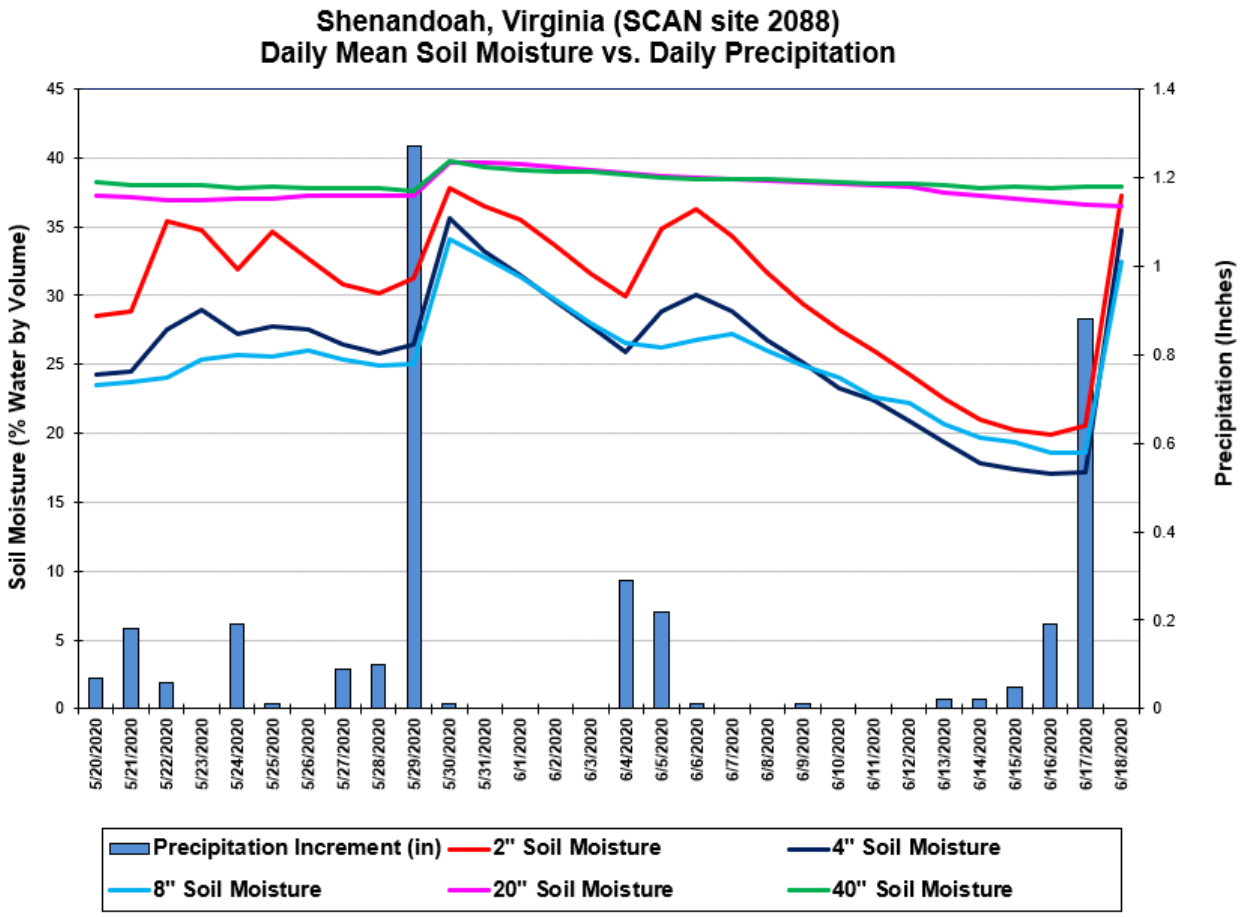
Soil Moisture Percent of Saturation

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



Soil Moisture Data

Source: NRCS Soil Climate Analysis Network (SCAN)



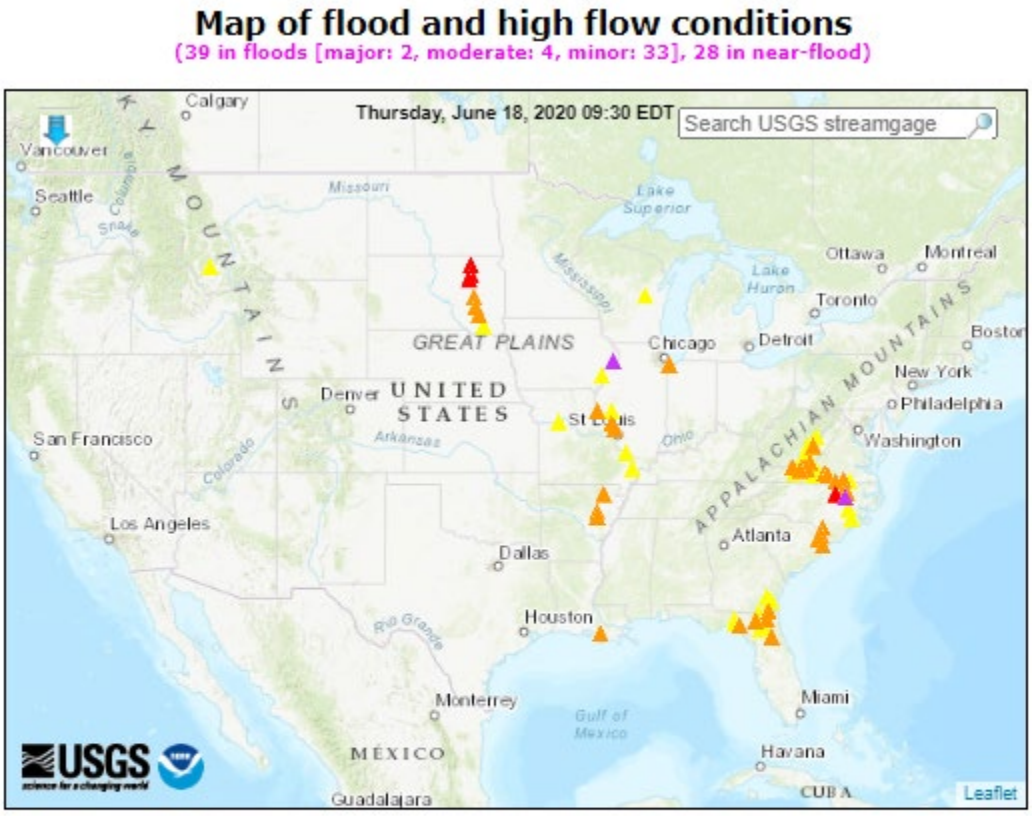
This chart shows the soil moisture and precipitation for the last 30 days at the Shenandoah SCAN site in Virginia. Precipitation on May 29 resulted in increased soil moisture at all sensor depths. Recent precipitation increased soil moisture at the -2", -4", and -8" sensors.

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

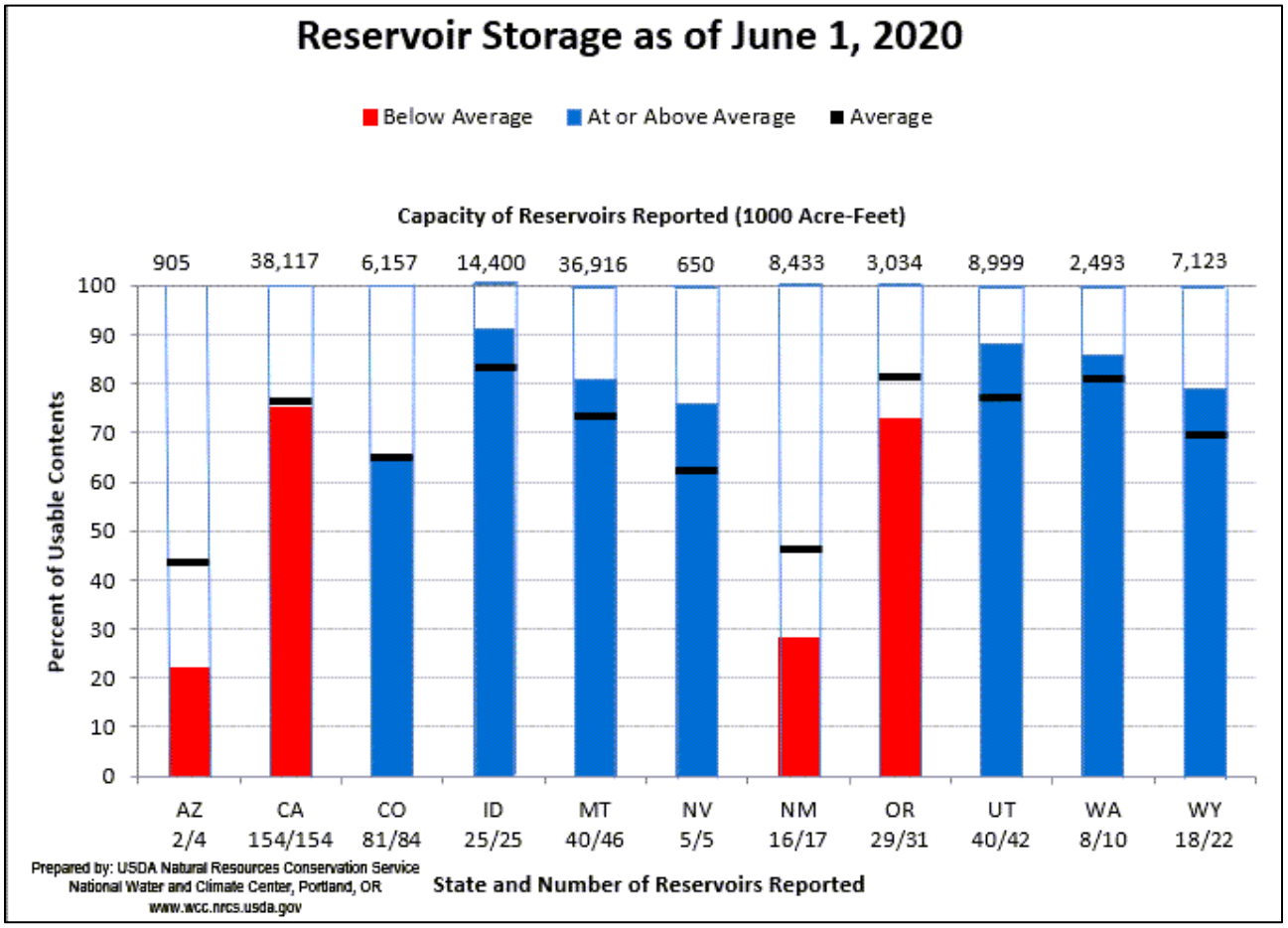


Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage ○ Streamgage without flood stage						

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

Reservoir Storage

Western States Reservoir Storage
Source: NRCS National Water and Climate Center

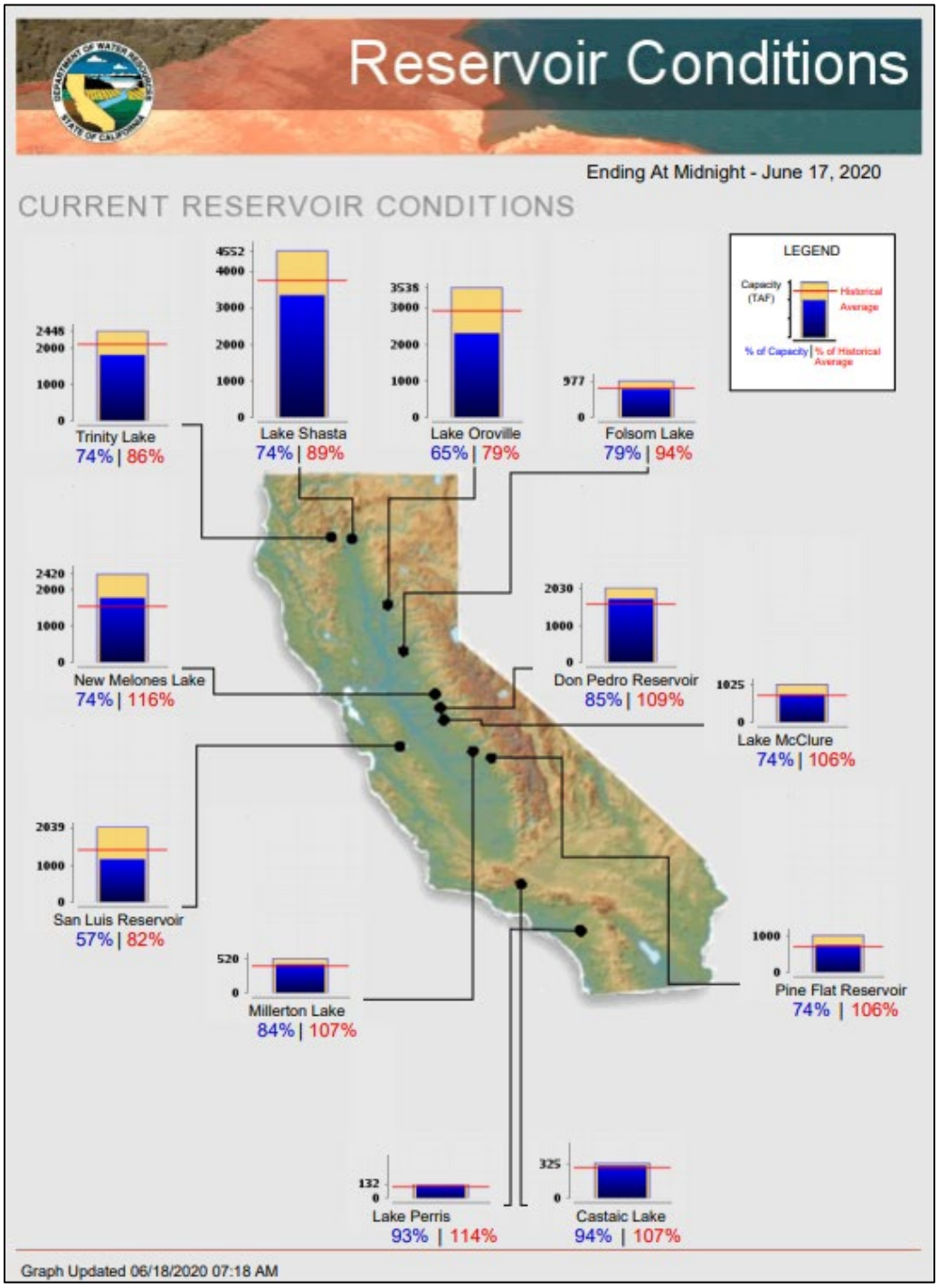


June 1, 2020 Reservoir Storage: Chart | Dataset

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

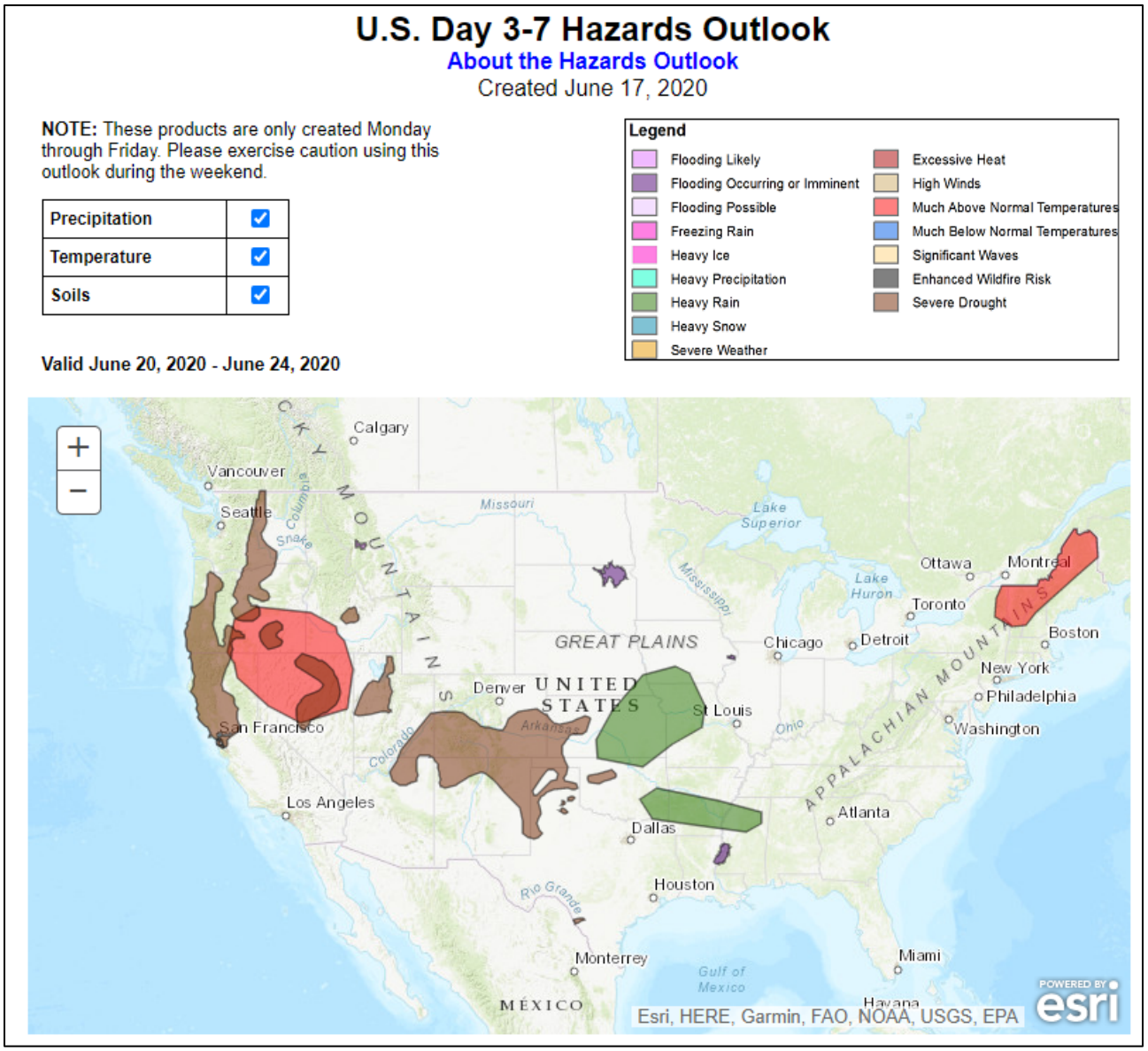
Agricultural Weather Highlights

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

National Outlook, Thursday, June 18, 2020: **“**During the next several days, anomalous heat will become established across the Northeast and from the Pacific Coast to the Rio Grande Valley. In contrast, cool air will continue to settle across much of the Plains and Midwest. As a cooler pattern develops across the nation’s mid-section, widespread showers and thunderstorms will occur—totaling 1 to 3 inches or more—rom the southern Plains into the upper Midwest. Elsewhere, dry weather will prevail in California, the Great Basin, and the Desert Southwest, while showers will linger in the mid-Atlantic and environs. Additionally, locally heavy showers should affect southern Florida. The NWS 6- to 10-day outlook for June 23 – 27 calls for the likelihood of below normal temperatures in the Midwest, while hotter-than-normal weather will prevail in the Atlantic Coast States and along and west of a line from Montana to Texas. Meanwhile, near- or above-normal rainfall across much of the country should contrast with drier-than-normal conditions in a few areas, including southern Florida, the Four Corners region, and across the nation’s northern tier from the Pacific Northwest to Minnesota.”

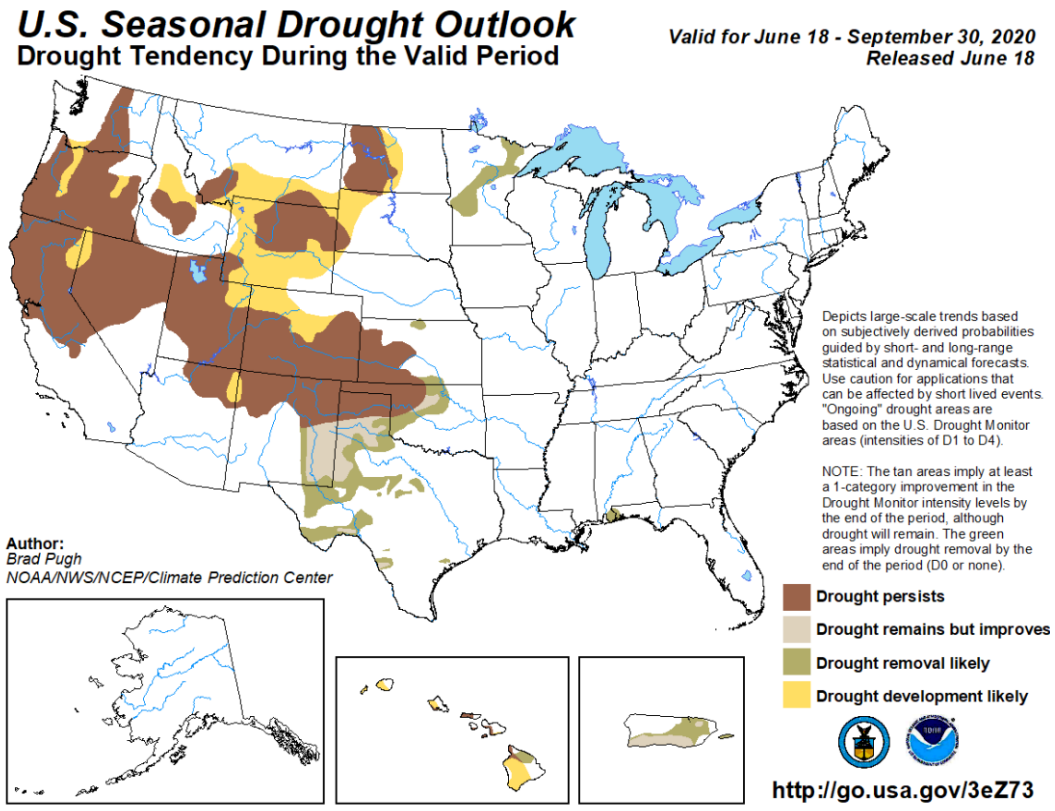
Weather Hazards Outlook: June 20 – 24, 2020

Source: NOAA Weather Prediction Center



Seasonal Drought Outlook: June 18 – September 30, 2020

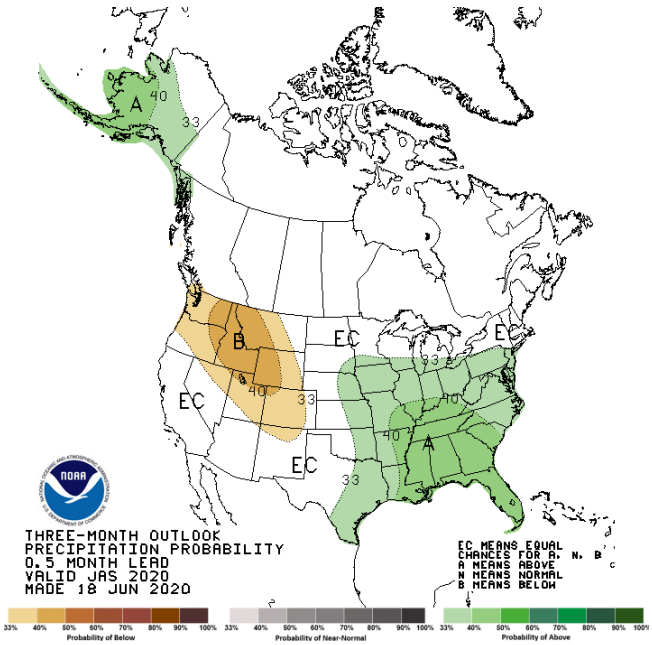
Source: National Weather Service



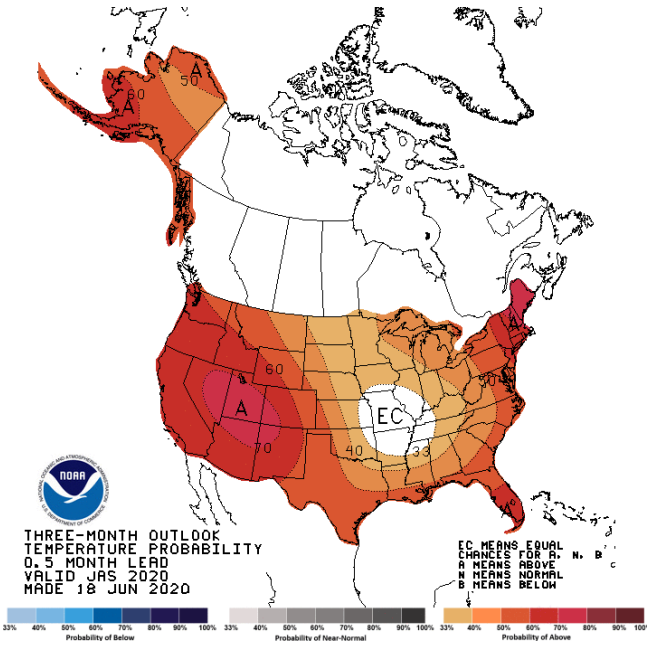
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



July-August=September (JAS) 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.