

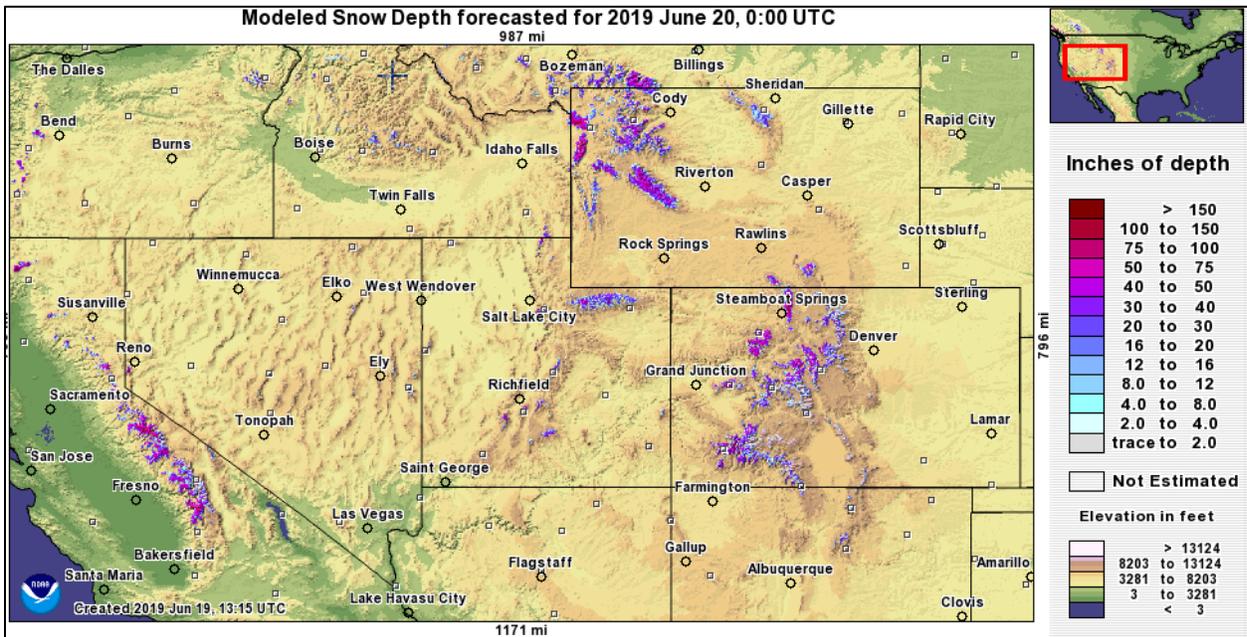
Water and Climate Update

June 20, 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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Precipitation	4	Short- and Long-Range Outlooks.....	18
Temperature.....	8	More Information	20
Drought	10		

Large snowpack in the West lingers into summer



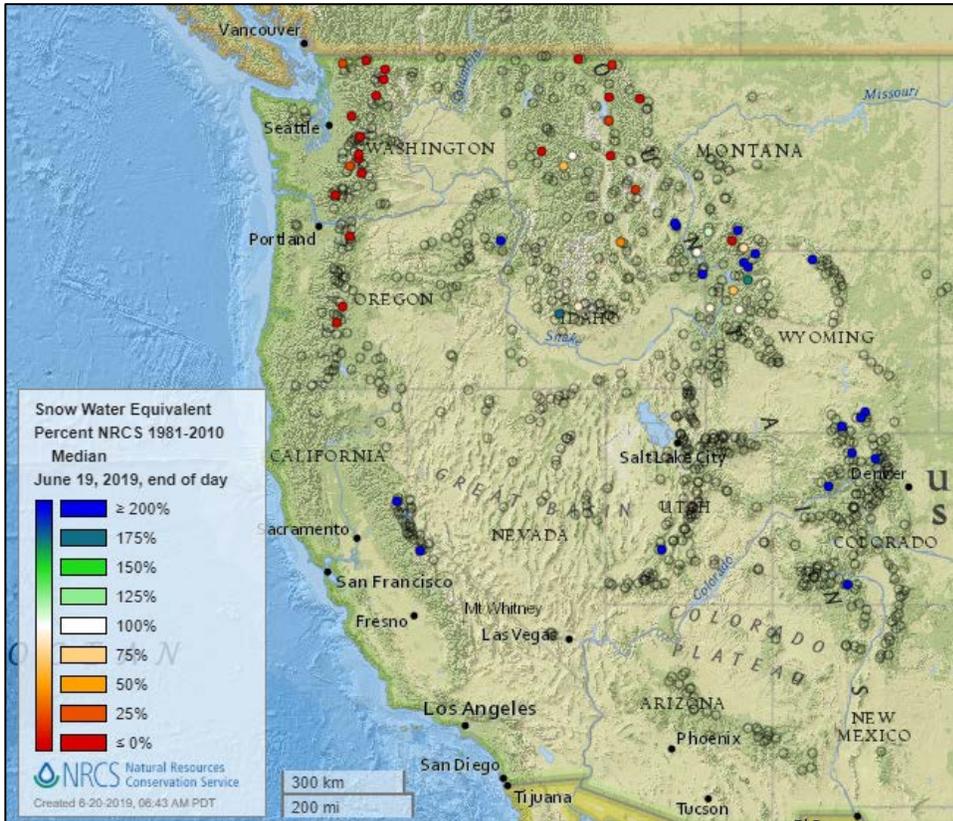
The snowpack across the middle section of the West is well above normal for mid-June. Across this area the snow is the highest it has been in years in many locations. California snowpack is 120% of normal statewide, whereas Colorado has 751% of normal snowpack. The snowpack grew in these areas in May. In Colorado, Utah, Nevada, and California, the snowpack is significant enough to keep ski areas open until mid to late summer and rivers full of rapidly-flowing meltwater. Water supplies in these states are forecast to meet water demands this year.

Related:

- [Colorado snowpack is at 751 percent. But the images truly tell the story.](#) – Denver Post (CO)
- [Colorado snowpack at its highest level since 2011](#) – KUSA (CO)
- [Utah's snowpack has grown, many reservoirs across the state are full](#) – Daily Herald (UT)
- [California's Sierra Nevada Snowpack Remains Significantly Above Average, and That's Mostly Good News](#) (The Weather Channel)
- [Wet California winter is a boon for skiers and water supply. But it brings a threat: wildfires.](#) The Washington Post

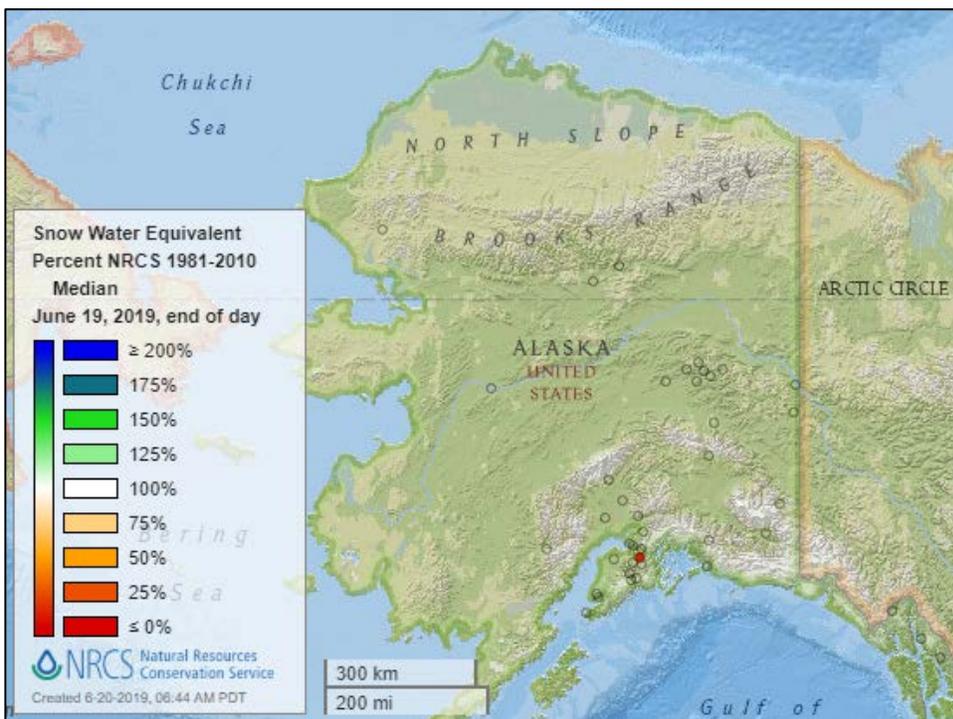
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map](#)

See also:
[Snow water equivalent values \(inches\) map](#)

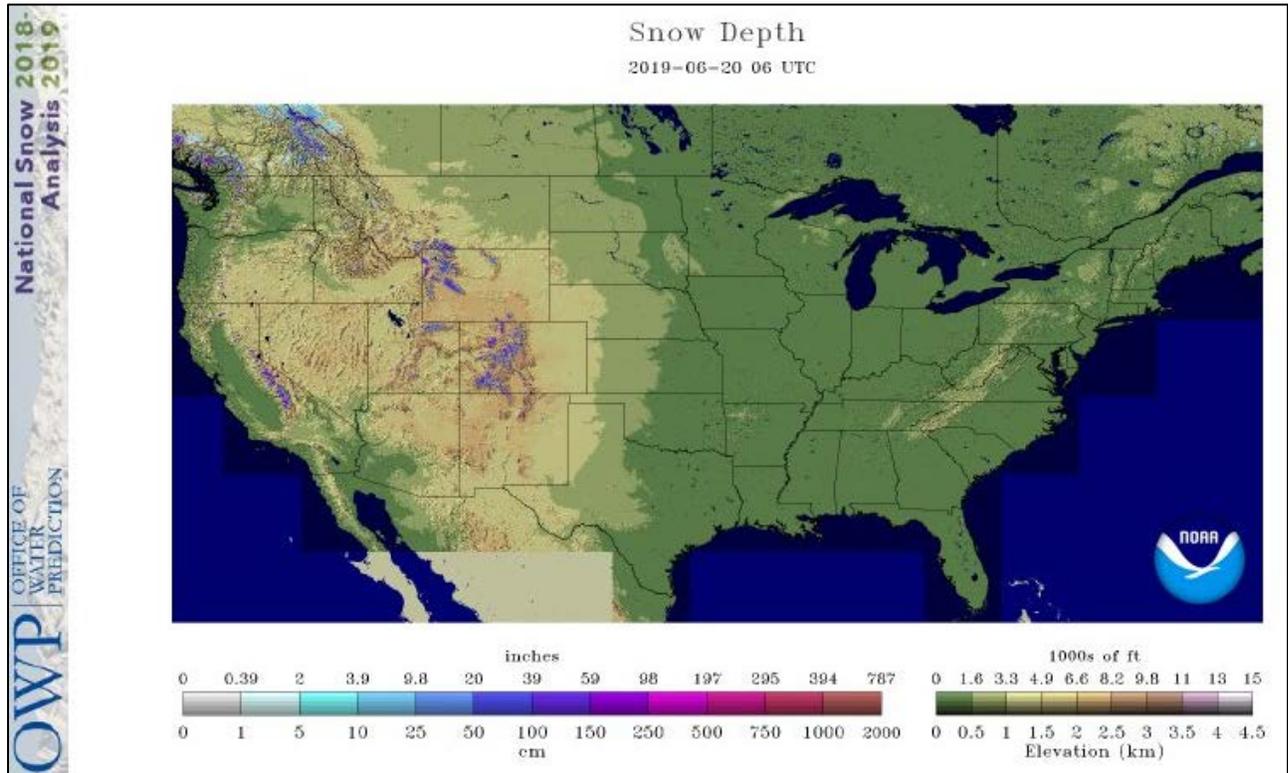


[Alaska snow water equivalent percent of median map](#)

See also:
[Alaska snow water equivalent values \(inches\) map](#)

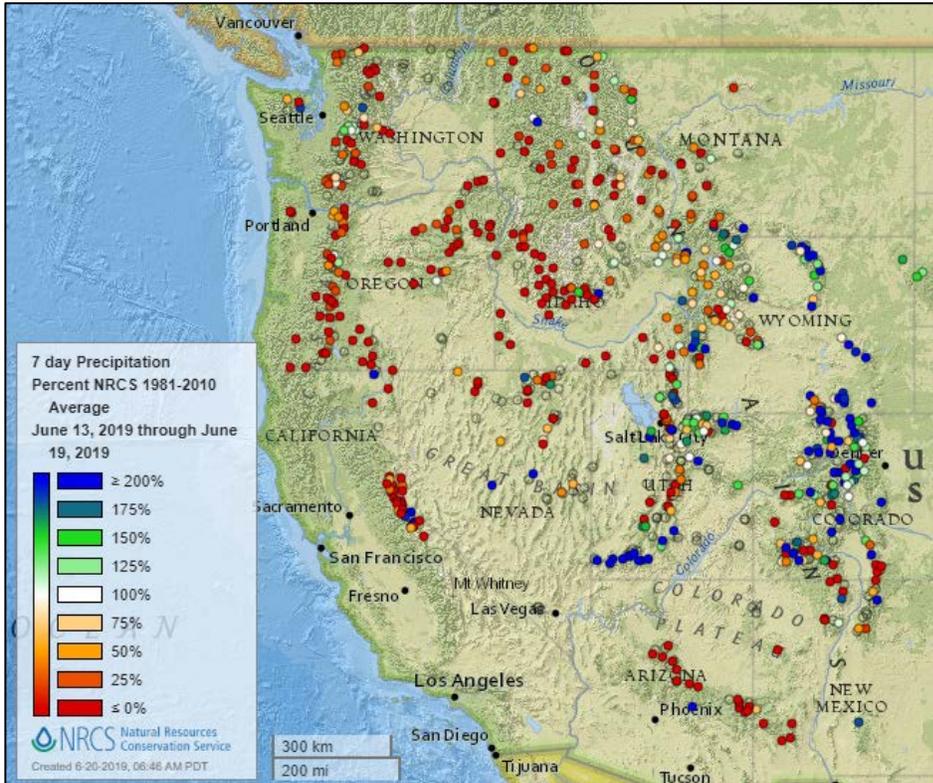
Current Snow Depth

Source: National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network

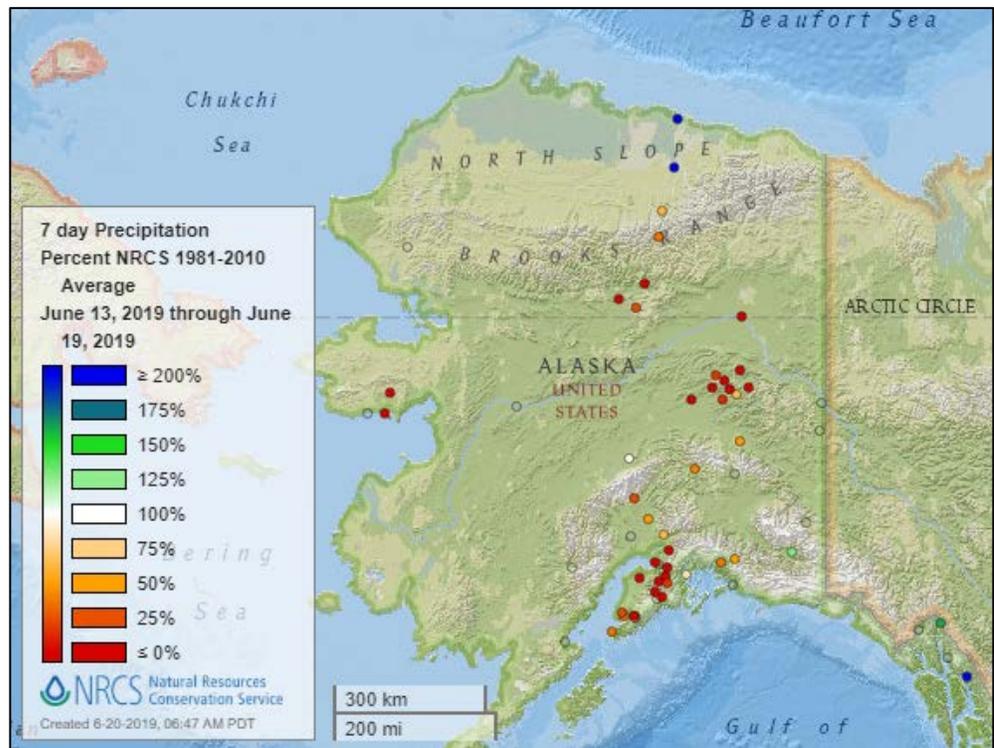


[7-day precipitation percent of average map](#)

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](#)



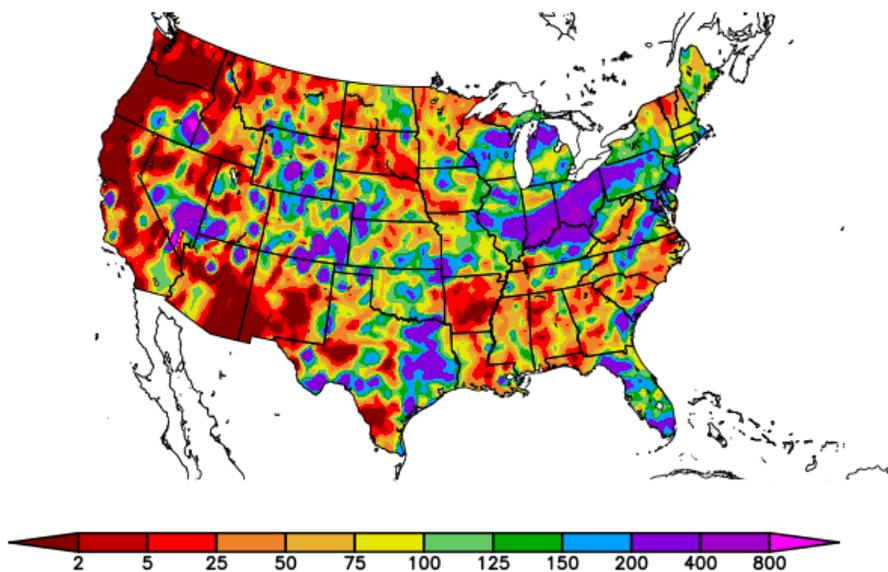
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
6/12/2019 – 6/18/2019



Generated 6/19/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

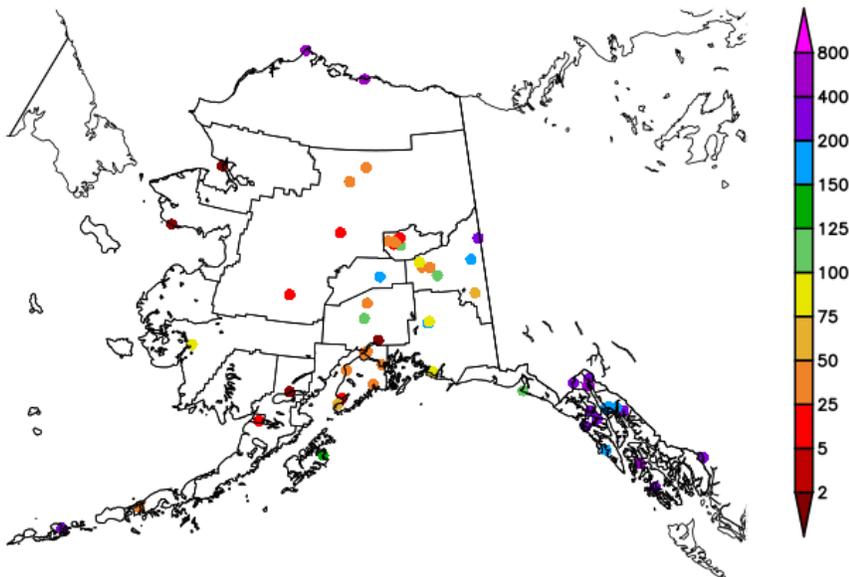
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
6/12/2019 – 6/18/2019



Generated 6/19/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

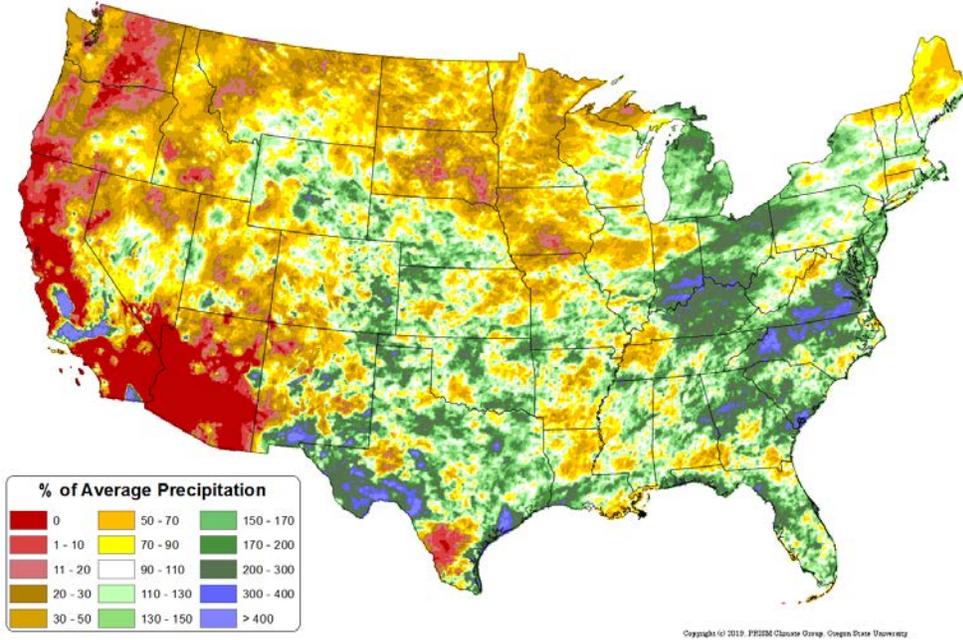
Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Jun 2019 - 19 Jun 2019
Period ending 7 AM EST 19 Jun 2019
Base period: 1981-2010
(Map created 20 Jun 2019)

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

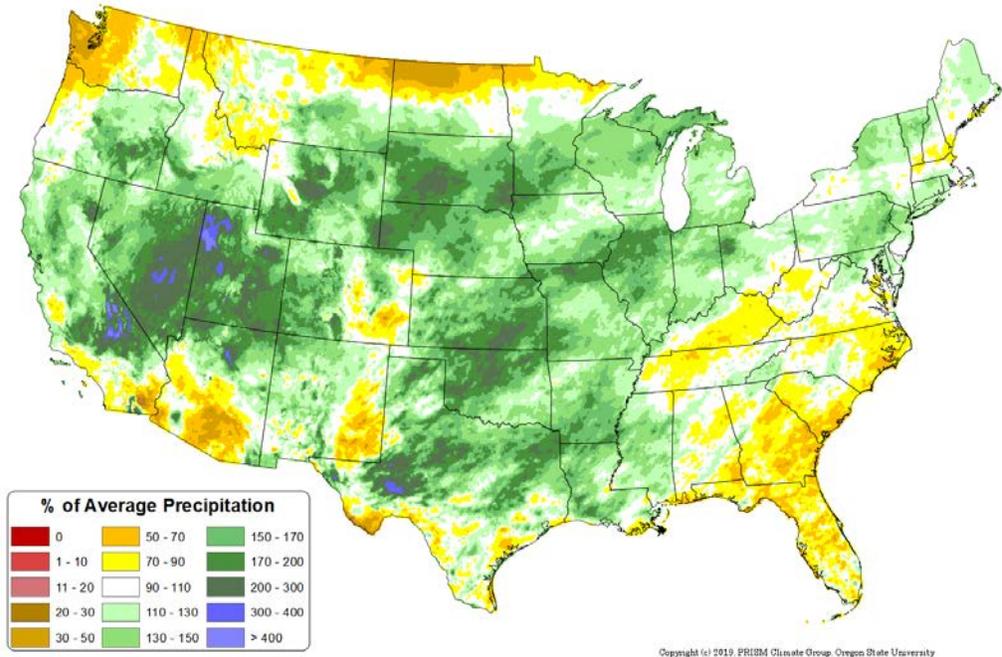


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

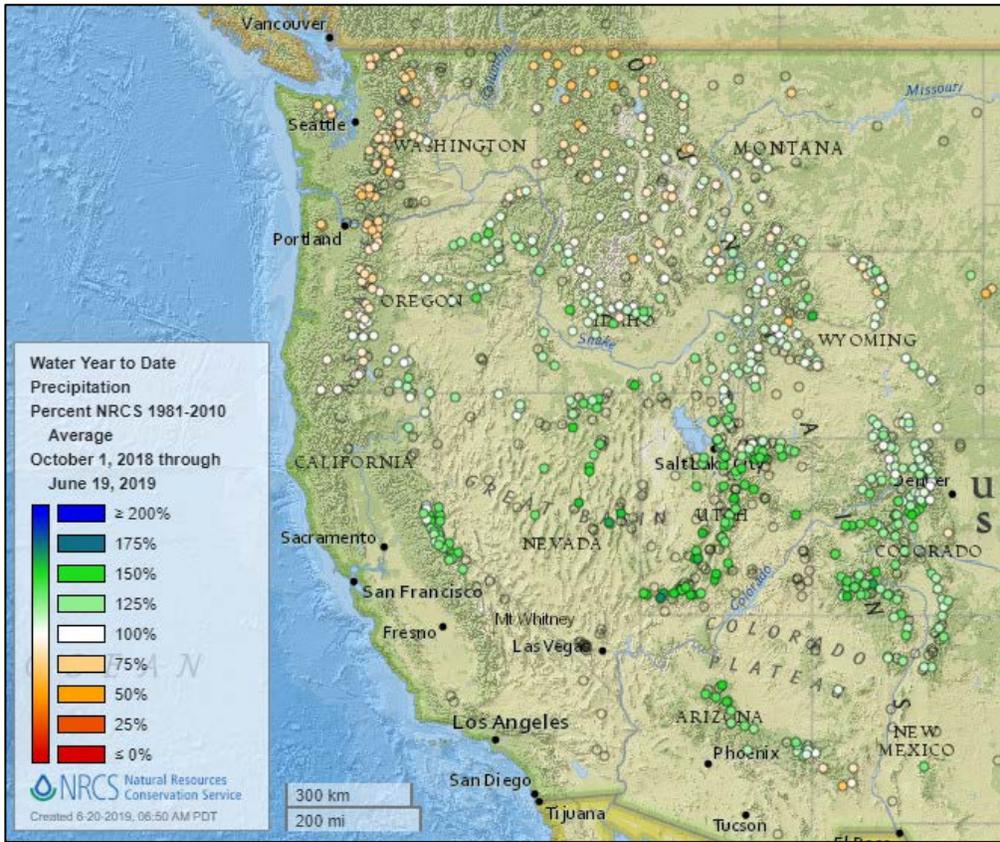
Source: PRISM

[March through May 2019 total precipitation percent of average map](#)

Total Precipitation Anomaly: Mar 2019 - May 2019
Period ending 7 AM EST 31 May 2019
Base period: 1981-2010
(Map created 02 Jun 2019)

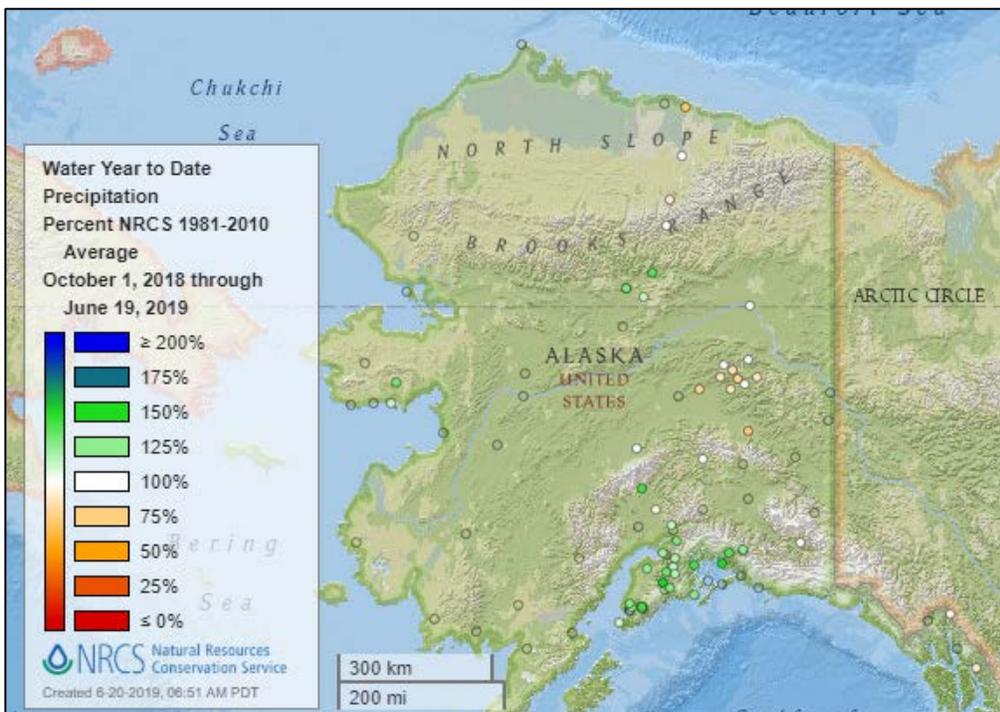


Water Year-to-Date, NRCS SNOTEL Network



[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

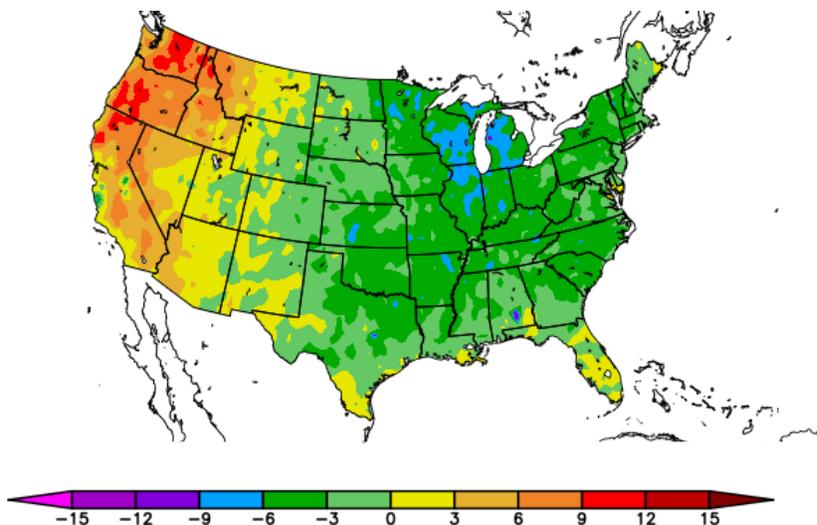
Last 7 Days, National Weather Service (NWS) Networks

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)
6/12/2019 – 6/18/2019



Generated 6/19/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

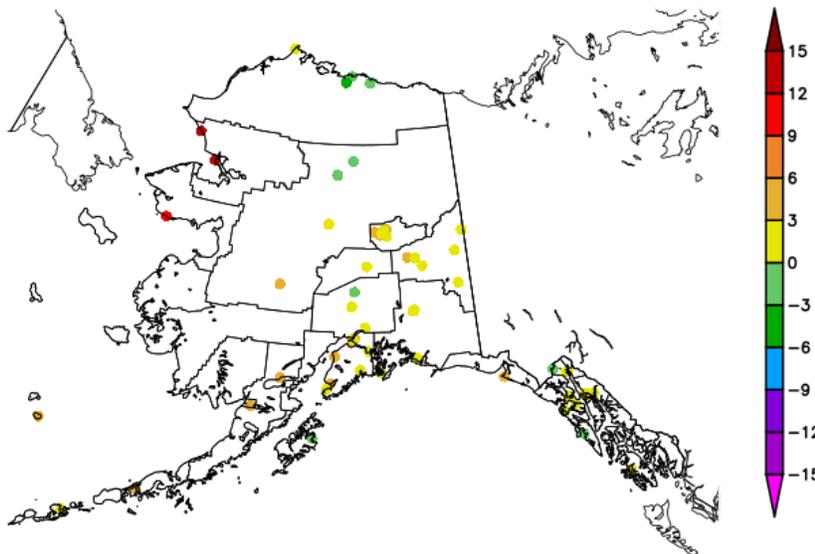
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
6/12/2019 – 6/18/2019



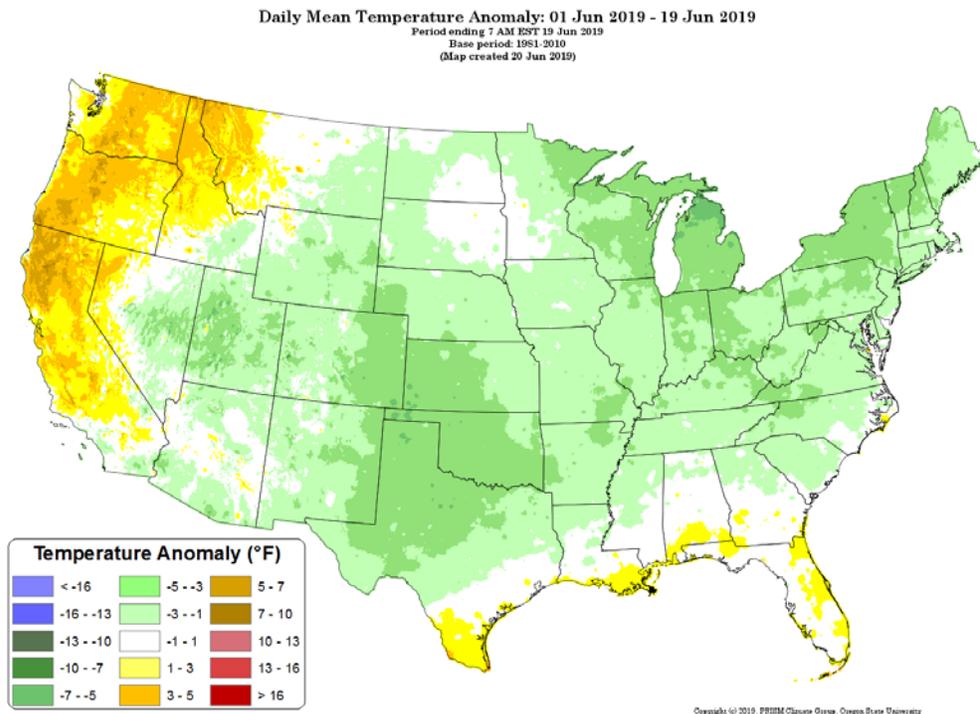
Generated 6/19/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

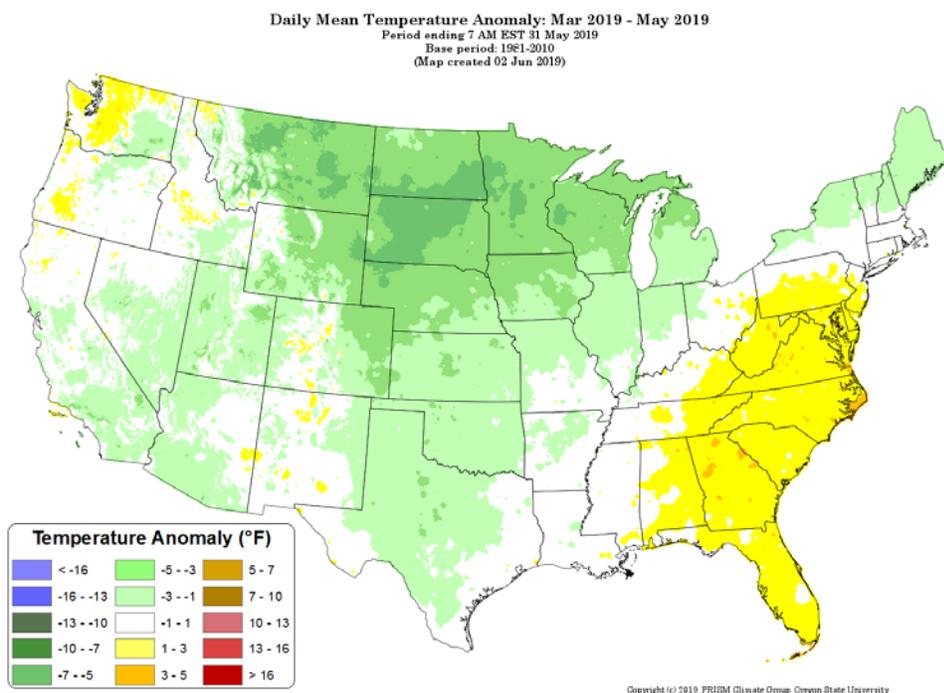
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[March through May 2019 daily mean temperature anomaly map](#)



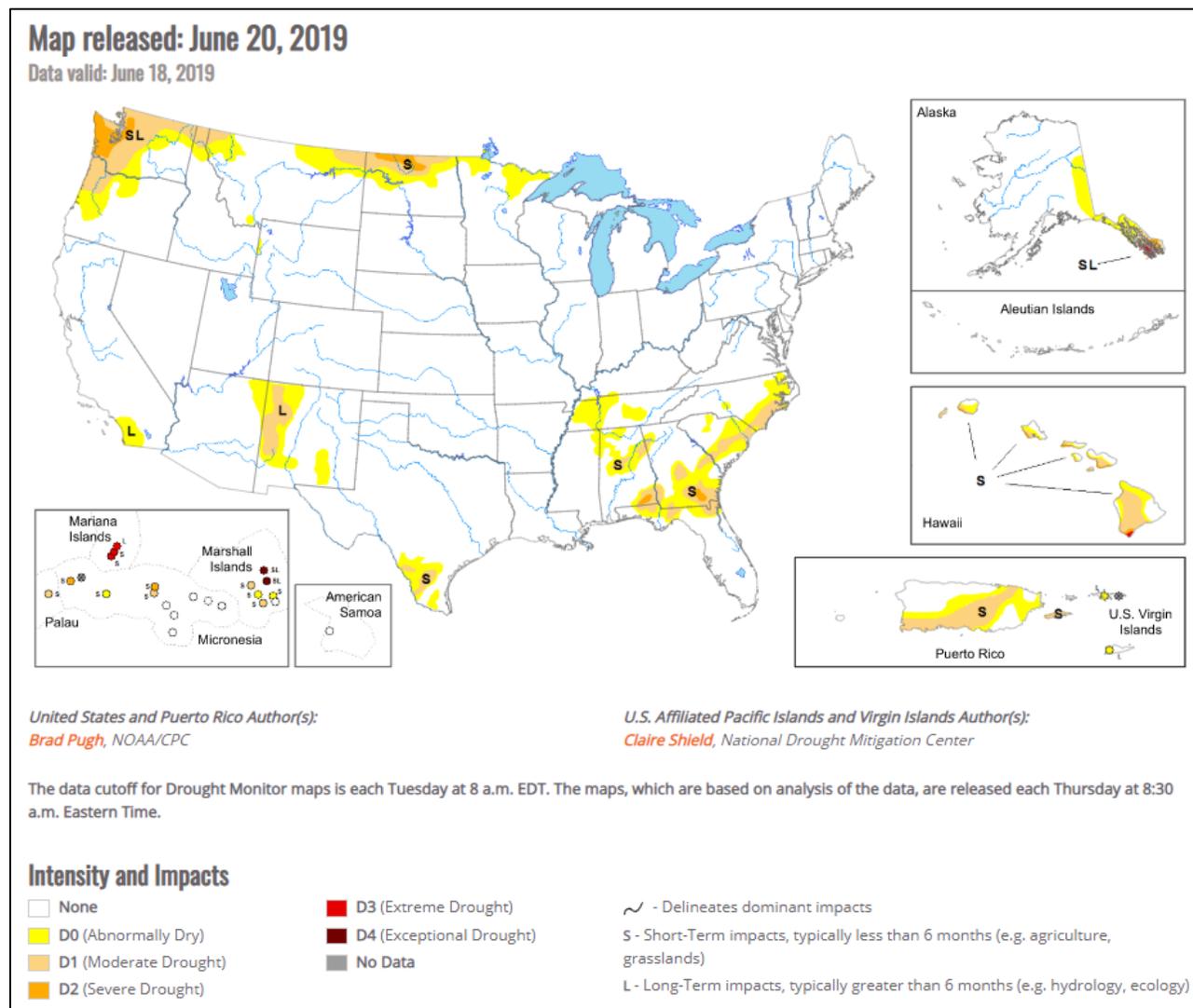
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



[Current National Drought Summary, June 20, 2019](#)

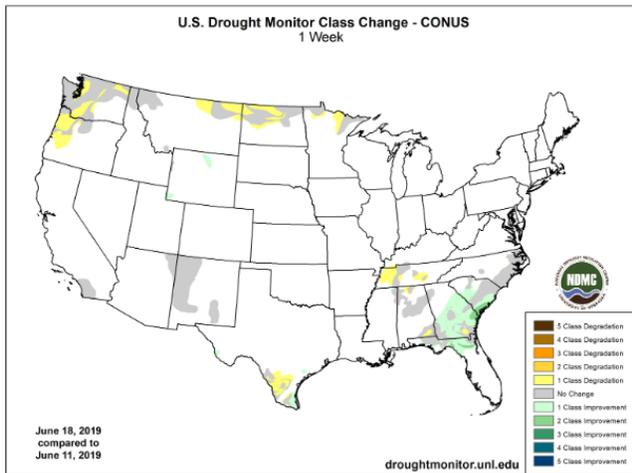
Source: National Drought Mitigation Center

“A stationary front was a focus for frequent showers and thunderstorms with locally heavy rainfall from eastern South Carolina south to the Big Bend of Florida from June 11 to 14. The heavier rainfall resulted in short-term rainfall surpluses and drought elimination to parts of the Coastal Plain of Georgia and South Carolina. Another cold front progressed slowly south and east across the Great Plains, Corn Belt, and Mississippi Valley from June 14 to 16 before becoming stationary. Locally heavy rain (more than 2 inches) and hundreds of severe weather reports were common across the central and southern Great Plains, middle to upper Mississippi Valley, and Ohio Valley during mid-June. Excessively wet conditions continue to slow the emergence of corn and soybeans across the Corn Belt. Meanwhile, drought intensified across northern North Dakota due to a lack of rainfall since April. A strong ridge of high pressure resulted in dry weather and record high temperatures (June 11 and 12) across the Pacific Northwest where drought is also intensifying. Suppressed rainfall continues to affect parts of Puerto Rico.”

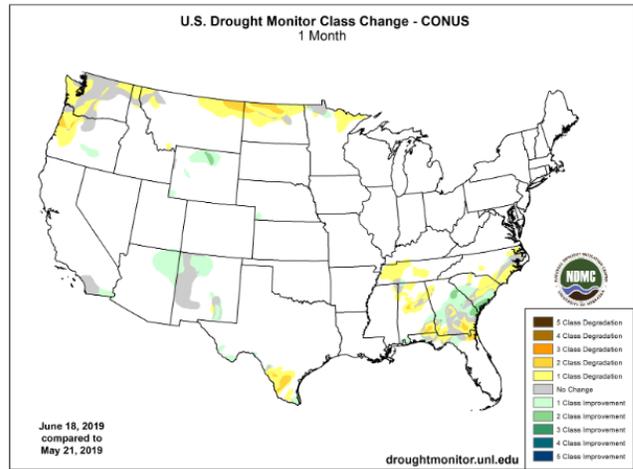
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

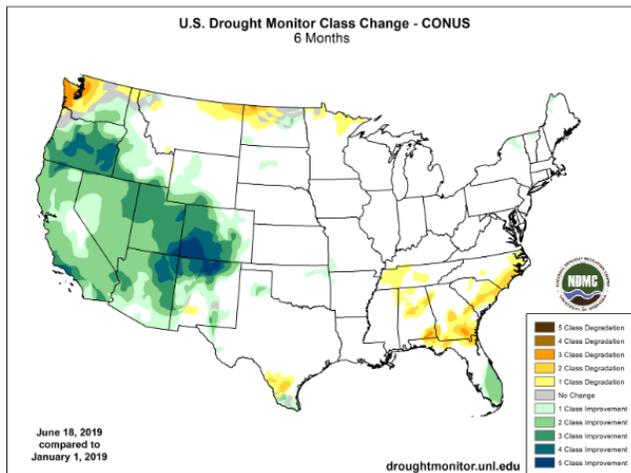
1 Week



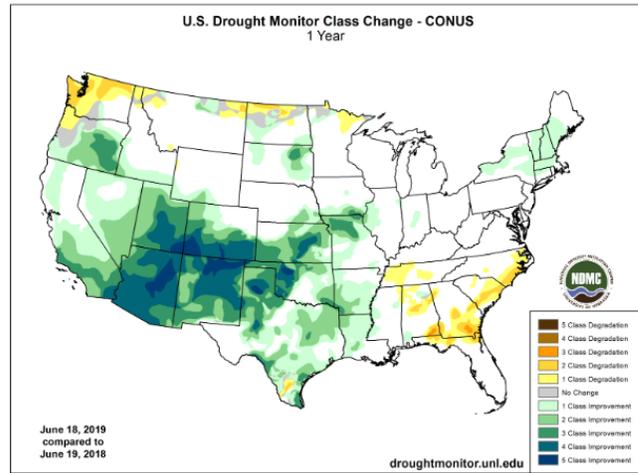
1 Month



6 Months



1 Year



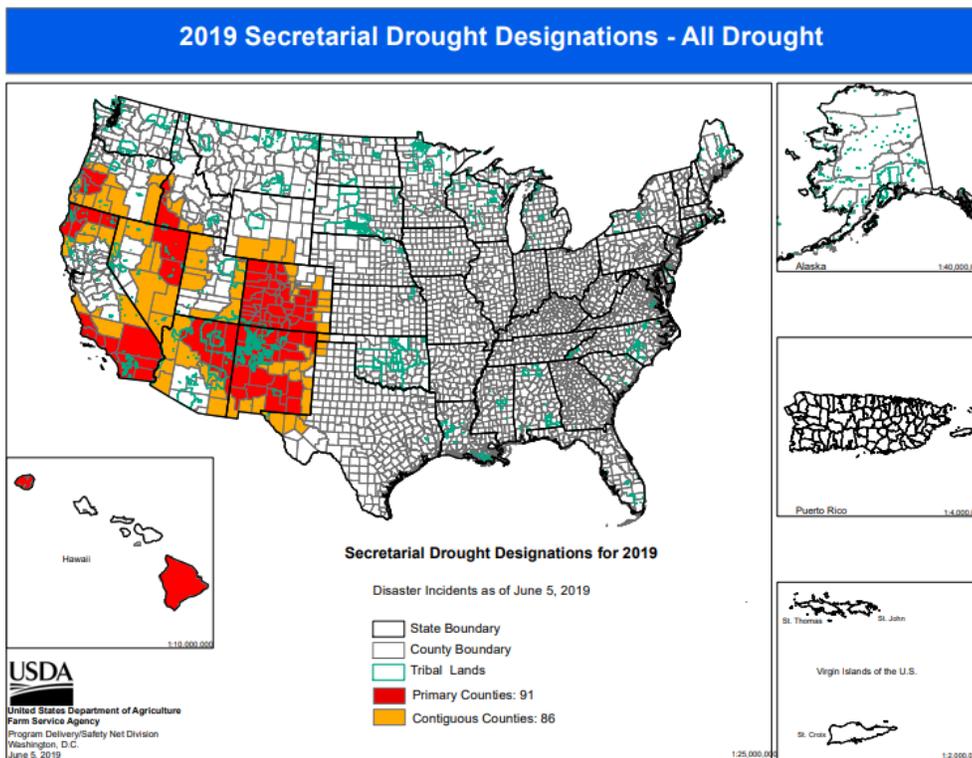
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

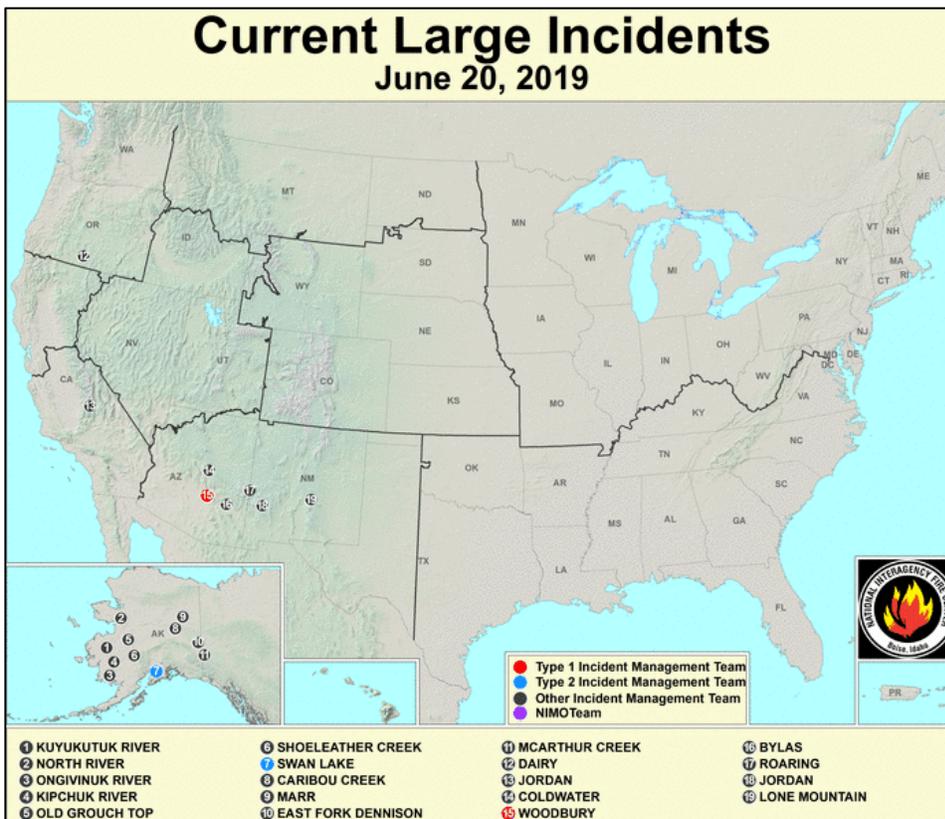
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial [Drought Designations](#)

Source: USDA Farm Service Agency



Wildfires: [USDA Forest Service Active Fire Mapping](#)



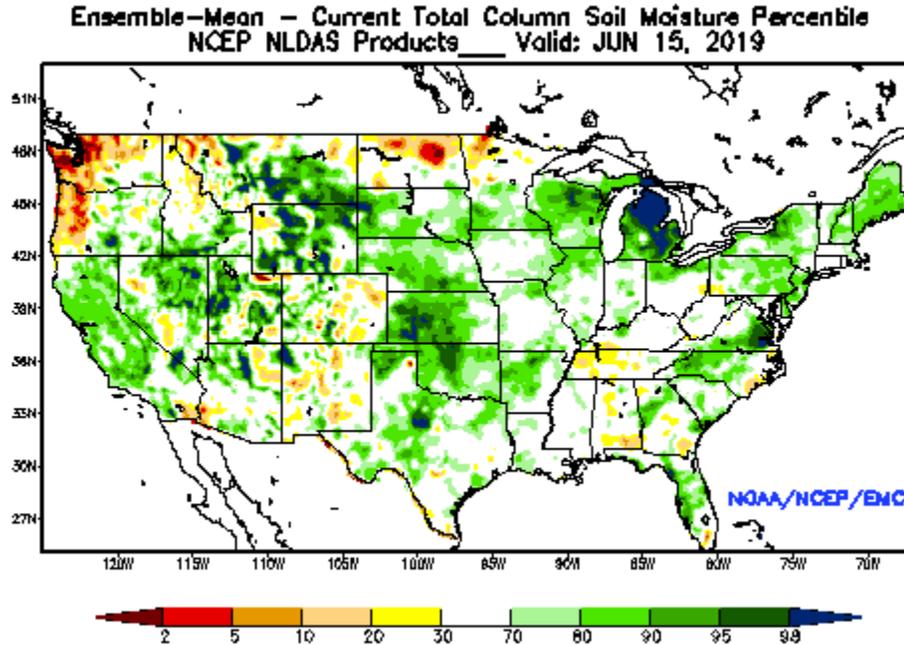
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

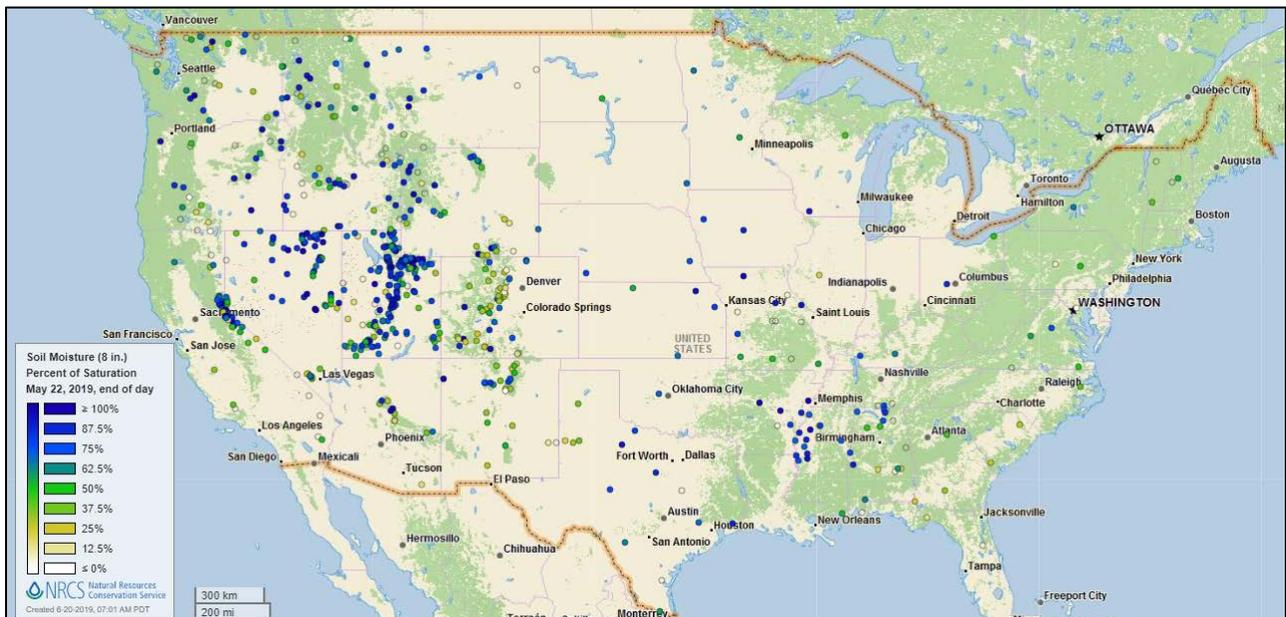
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of June 15, 2019

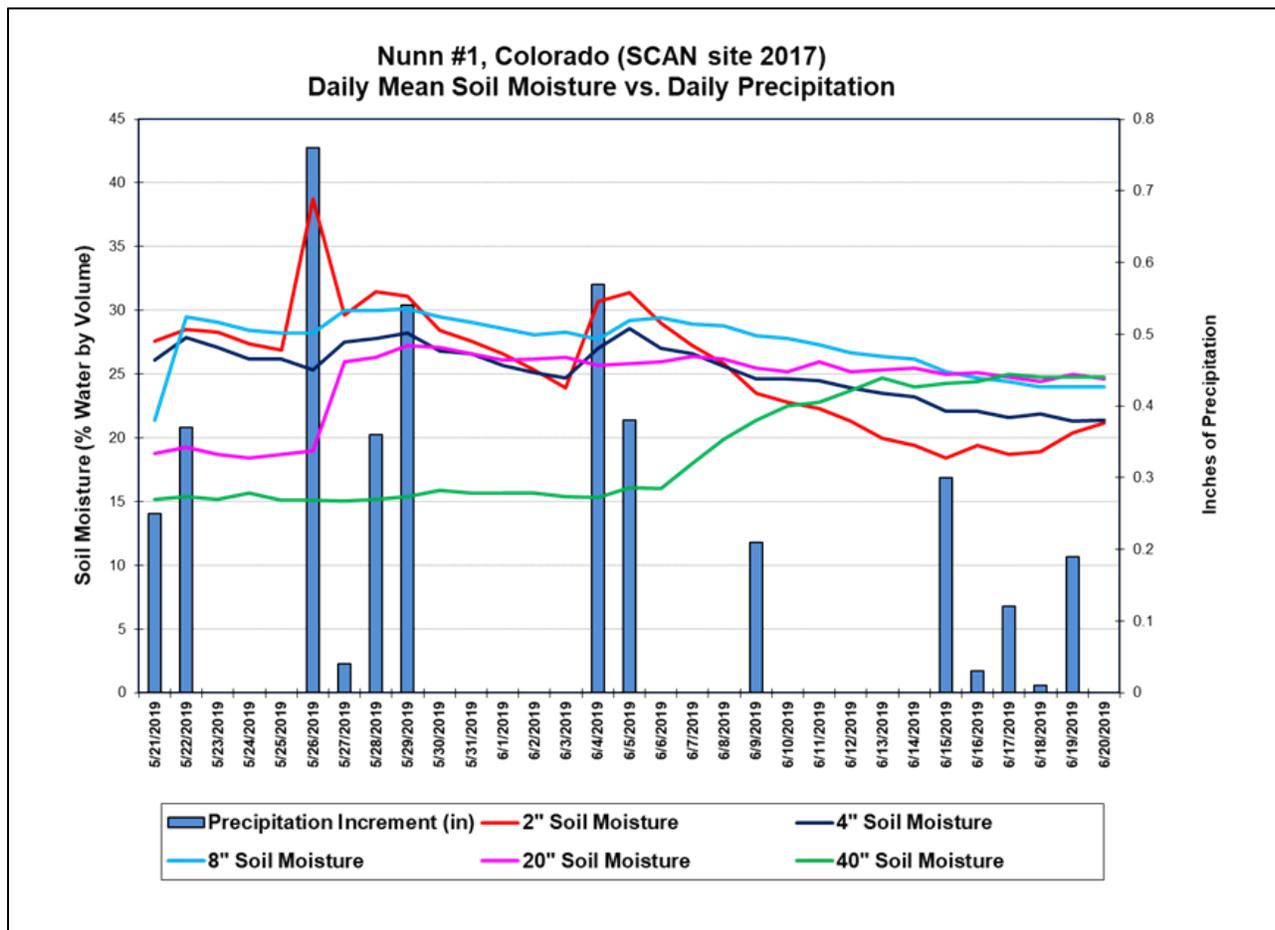
Soil Moisture Percent of Saturation

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



Soil Moisture Data

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



This graph shows the soil moisture and precipitation for the last 30 days at the [Nunn #1 SCAN site 2017](#) in Colorado. Precipitation between May 26-29 and June 4-5 increased soil moisture at all sensor levels, with the -40" sensor showing a slow and steady increase for many days after, as the moisture reached this depth. Precipitation in the last week has shown an increase at the -2" sensor.

Soil Moisture Data Portals

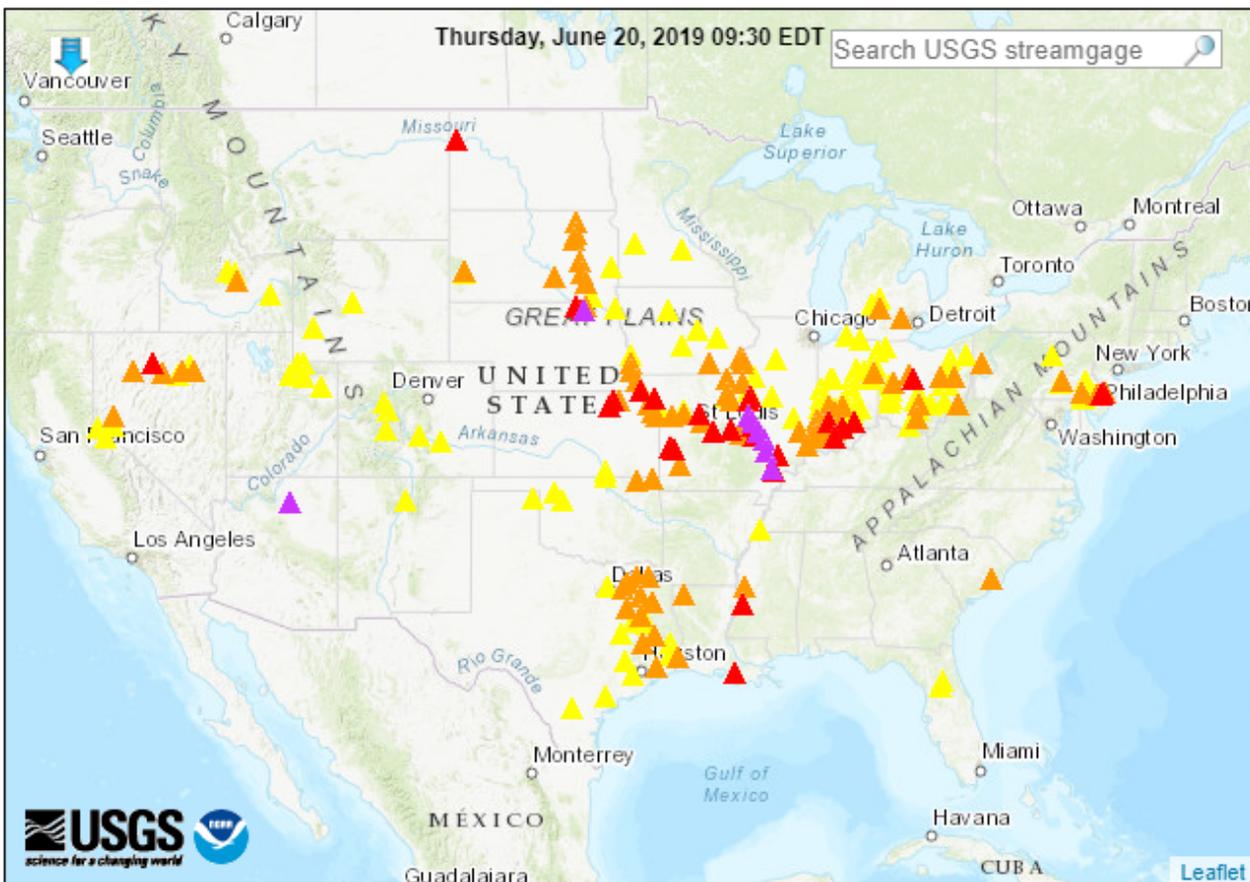
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(8 in major flood, 28 in moderate flood, 83 in minor flood, 113 in near flood)



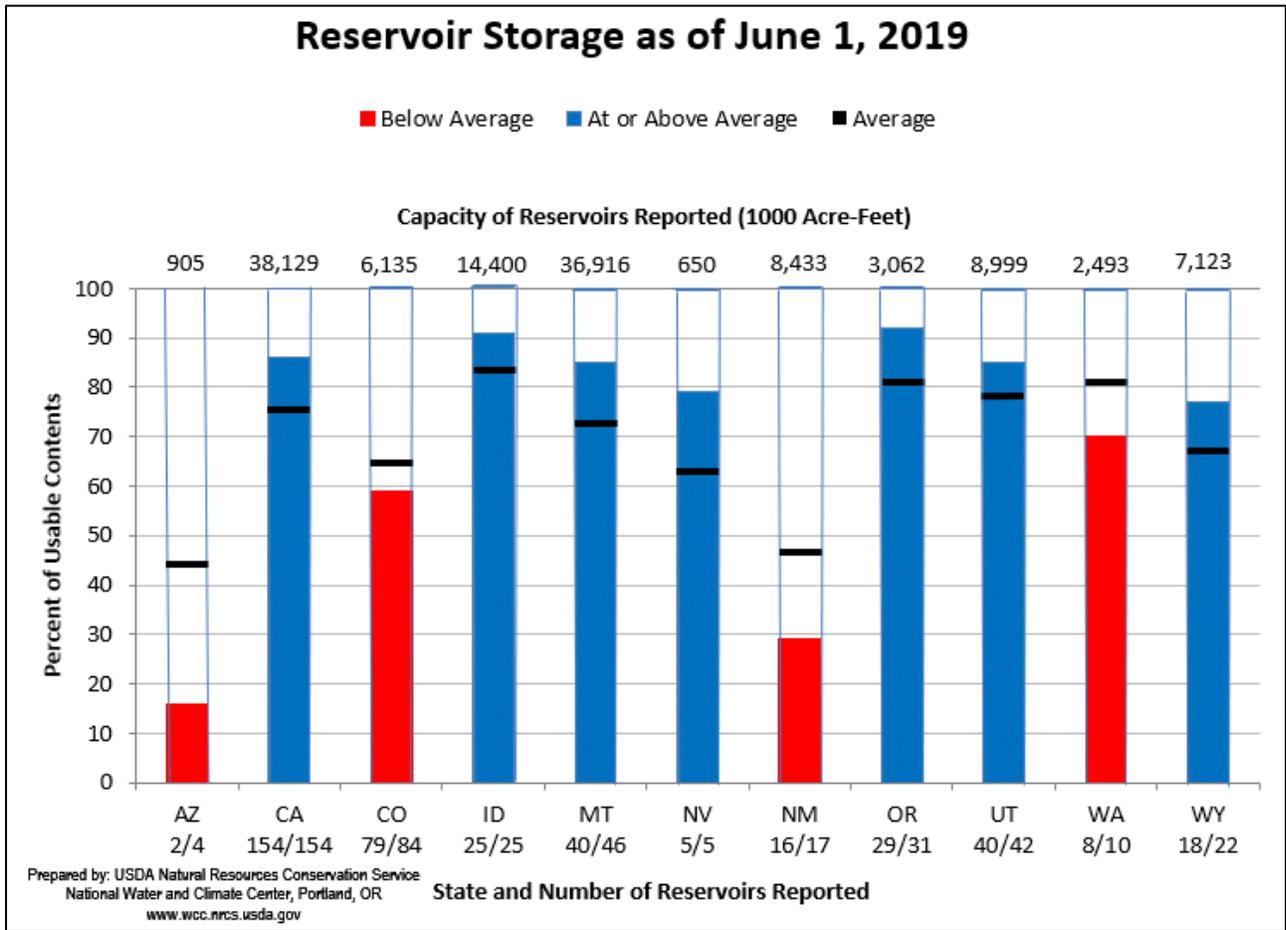
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage			○ Streamgage without flood stage			

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

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



June 1, 2019 Reservoir Storage: [Chart](#) | [Dataset](#)

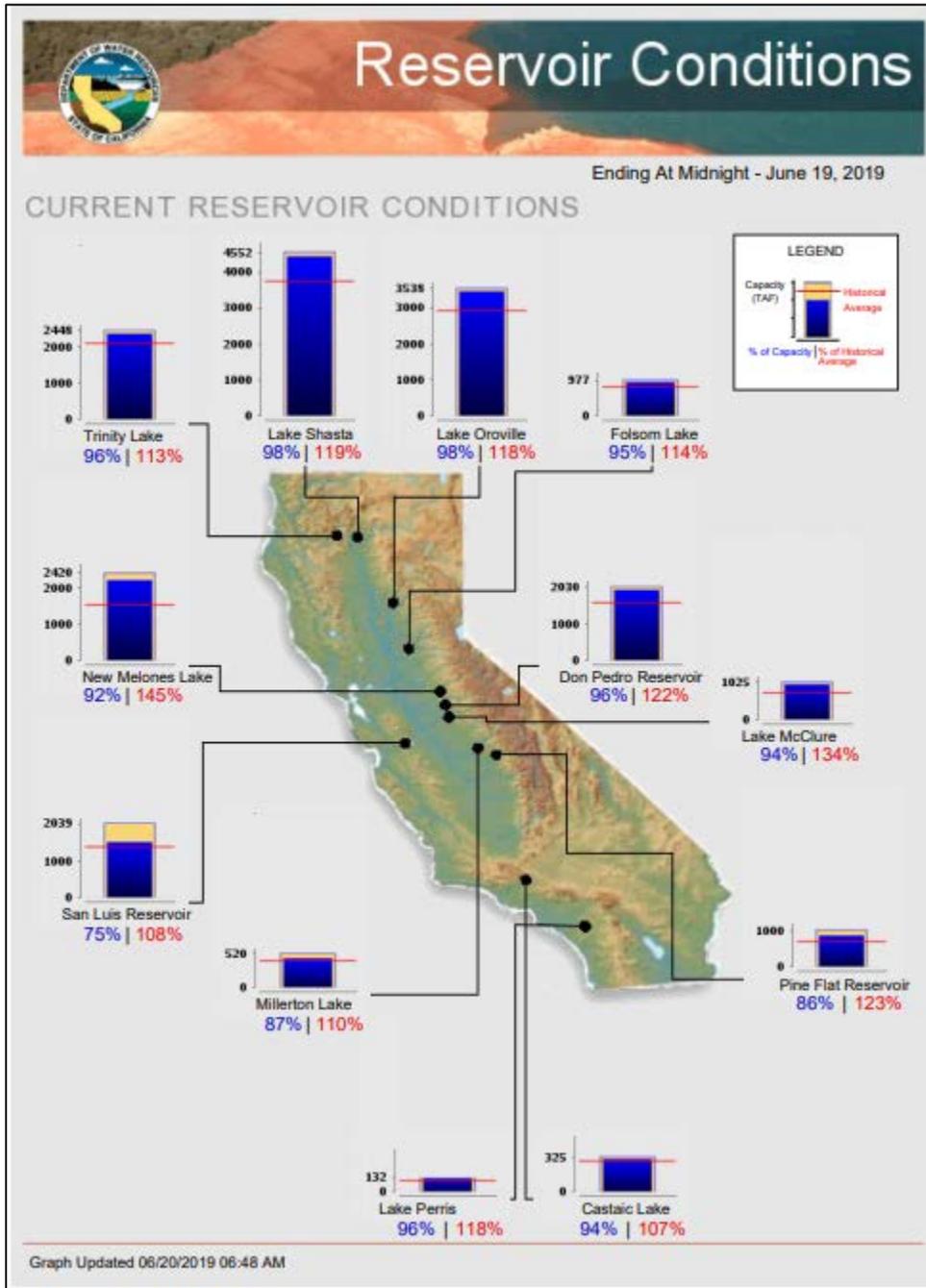
Hydromet Tea Cup Reservoir Depictions

Source: U.S. Bureau of Reclamation

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

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

Short- and Long-Range Outlooks

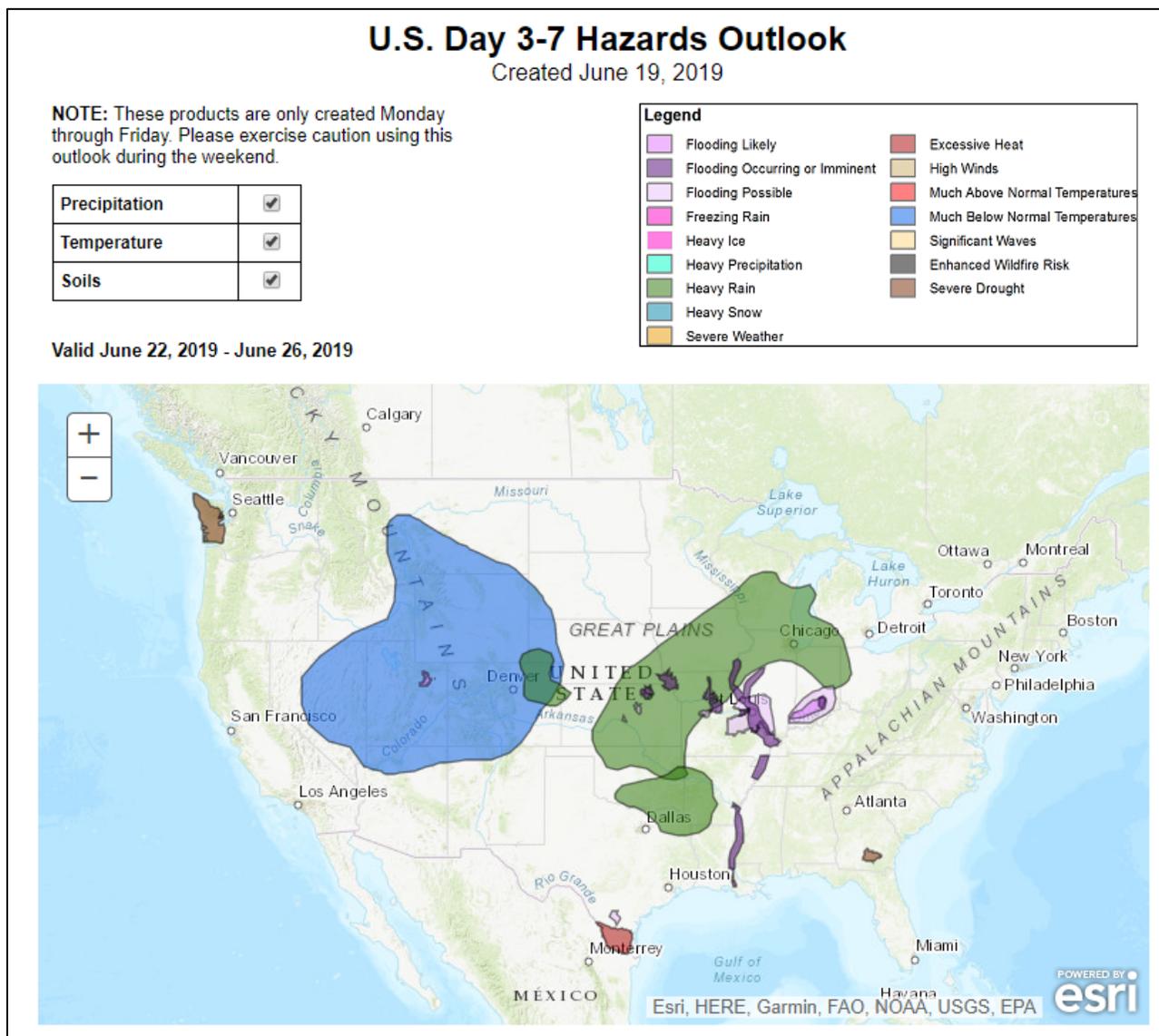
Agricultural Weather Highlights

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

National Outlook, Thursday, June 20, 2019: “Locally heavy showers in the eastern U.S. will end by Friday, but a pair of low-pressure systems will maintain unsettled conditions across large sections of the Plains and Midwest through the weekend. Heavy showers will linger across the Great Lakes region into early next week. Five-day rainfall totals should total 1 to 3 inches or more across much of the Plains, Midwest, and Northeast. In contrast, mostly dry weather will prevail in California, the Great Basin, and the Desert Southwest, while only light showers will affect the Pacific Northwest. A surge of cool air, currently arriving in the Northwest, will engulf the Rockies, Plains, and upper Midwest during the weekend. The NWS 6- to 10-day outlook for June 25 – 29 calls for below-normal temperatures in the West, while hotter-than-normal conditions will cover most areas from the Plains to the East Coast. Meanwhile, near- or above-normal rainfall across most of the country will contrast with drier-than-normal weather in southern sections of Florida and Texas and from the Four Corners States to the central High Plains.”

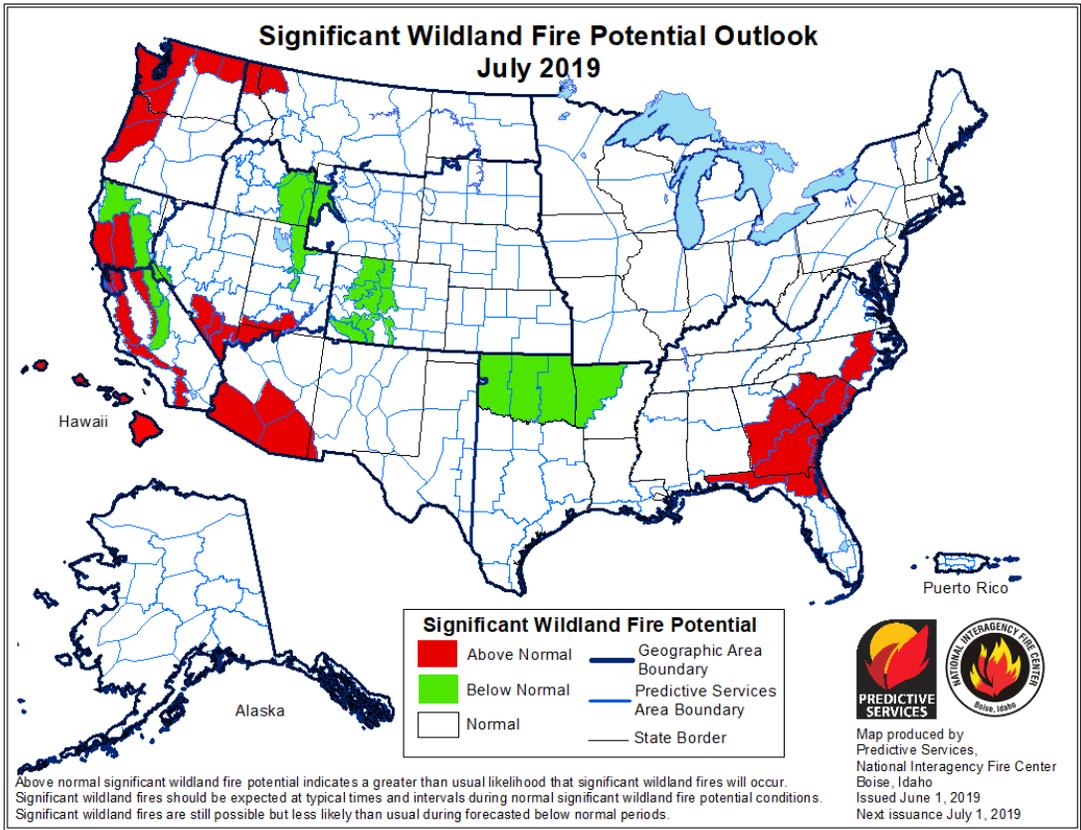
Weather Hazards Outlook: [June 22 – June 26, 2019](#)

Source: NOAA Climate Prediction Center



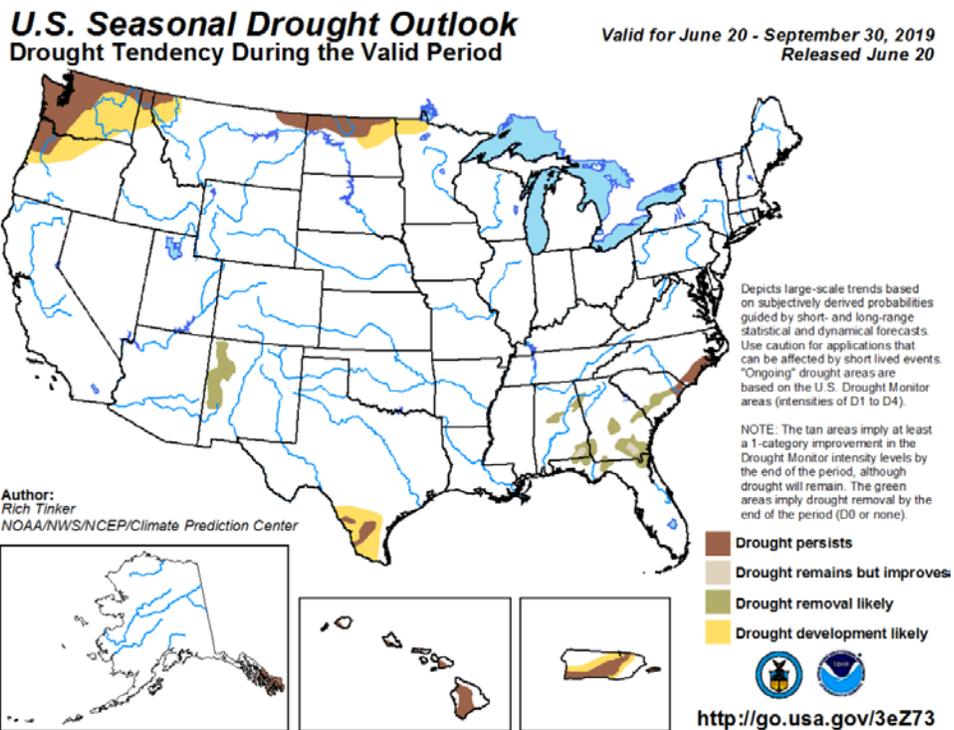
Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center



Seasonal Drought Outlook: June 20 – September 30, 2019

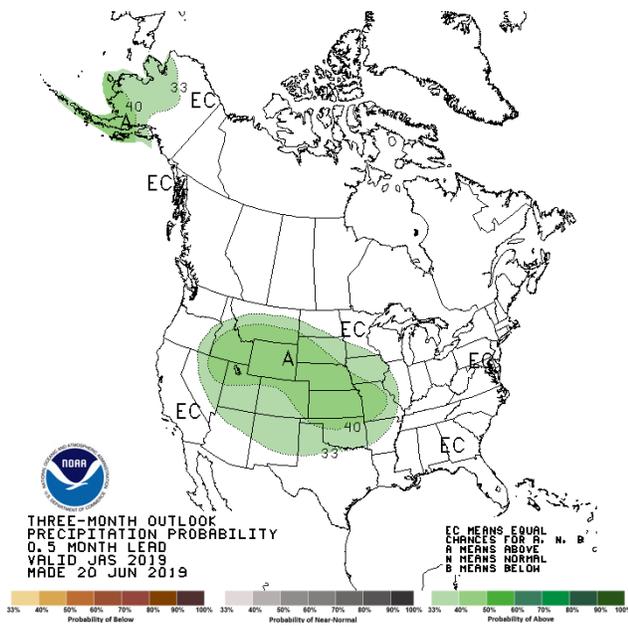
Source: National Weather Service



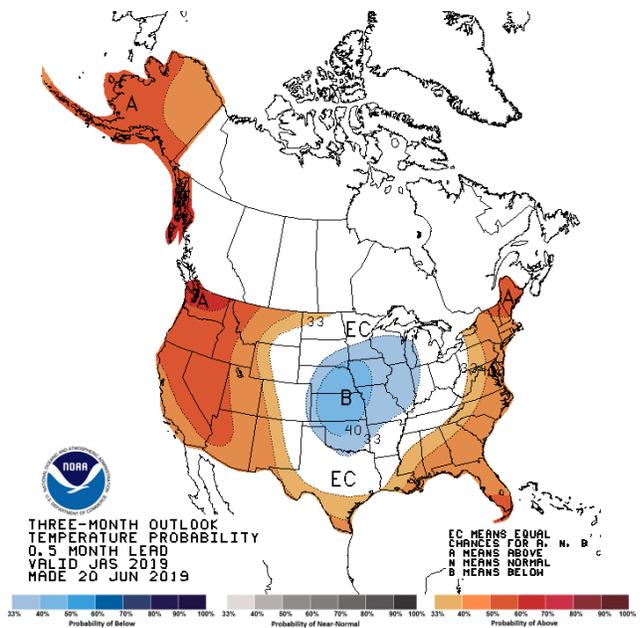
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[July-August-September \(JAS\) 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](#).