

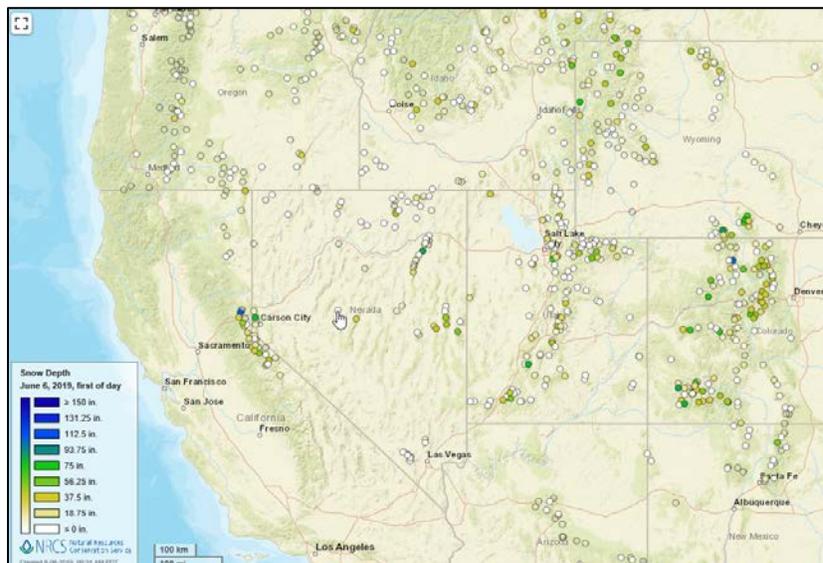
Water and Climate Update

June 6, 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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Cold, wet May leaves central West with deep snowpack



The cool and wet May has contributed to near record snowpack in the mountains from California to Colorado. Although many lower elevation SNOTEL stations have melted out, the middle and higher elevations have plenty of snow. Snowpack in many parts of this region increased during the month, with a delay in the normal decline in snow water equivalent. Ski areas in Colorado, Utah, and California have extended their season to take advantage of the deep snowpack. In addition, deep snow has delayed the opening of some mountain passes. These conditions increase local monitoring of flood risks, and make early summer recreation dangerous with extremely cold and fast water on rivers fed by mountain snow.

Related:

[Skiing in July, dangerous rivers, full reservoirs: What Sierra’s huge snowpack means for summer](#) – The Sacramento Bee (CA)

[As late-season wet weather hits Northern California, snowpack and reservoir levels soar](#) – The Fresno Bee (CA)

[California sees biggest June snowpack in nearly a decade thanks to spring storms](#) – LA Times (CA)

[Why Colorado’s snowpack numbers are so ridiculously off the charts](#) – The Denver Post (CO)

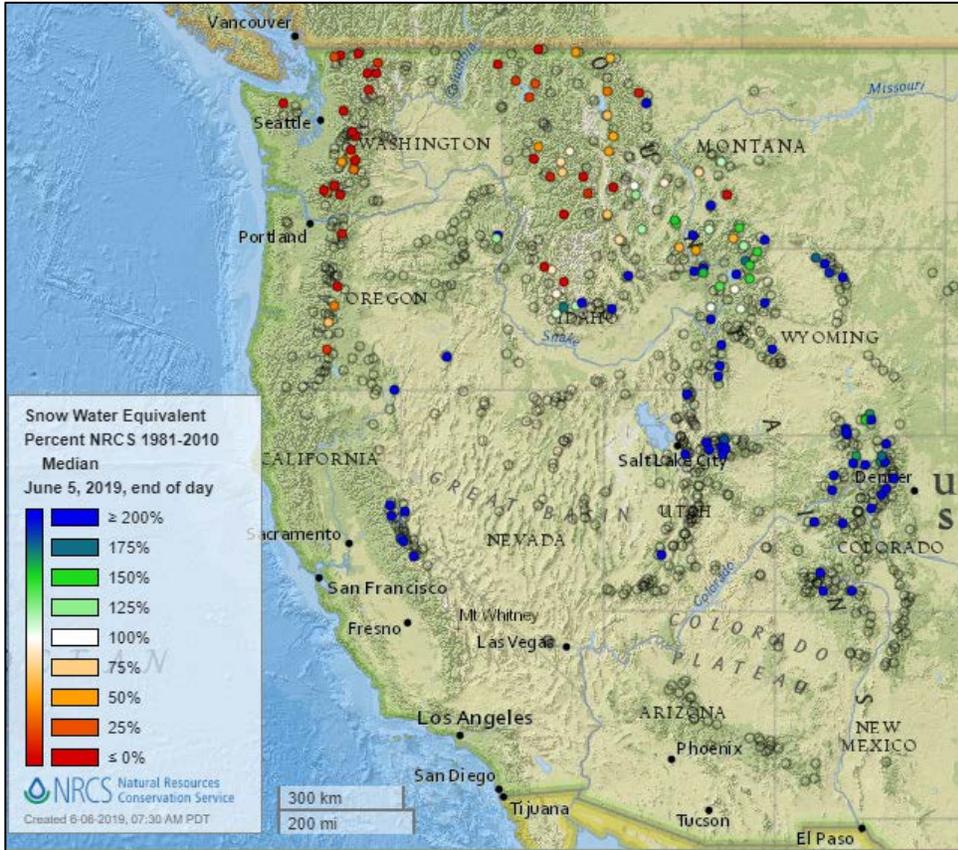
[Amid high snowpack, state forecasters are keeping eye on flood risk](#) – Vail Daily (CO)

[Flooding Concerns Come With Large Colorado Snowpack](#) – CBS Local (CO)

[Deep snowpack + forecast hot weather could = flooding in northern Utah](#) – The Salt Lake Tribune (UT)

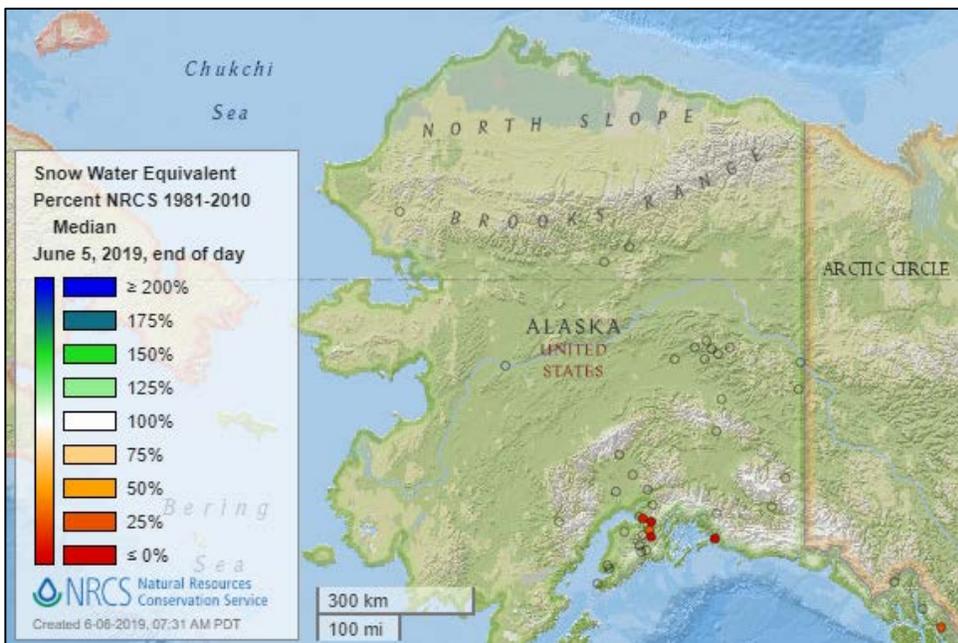
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

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

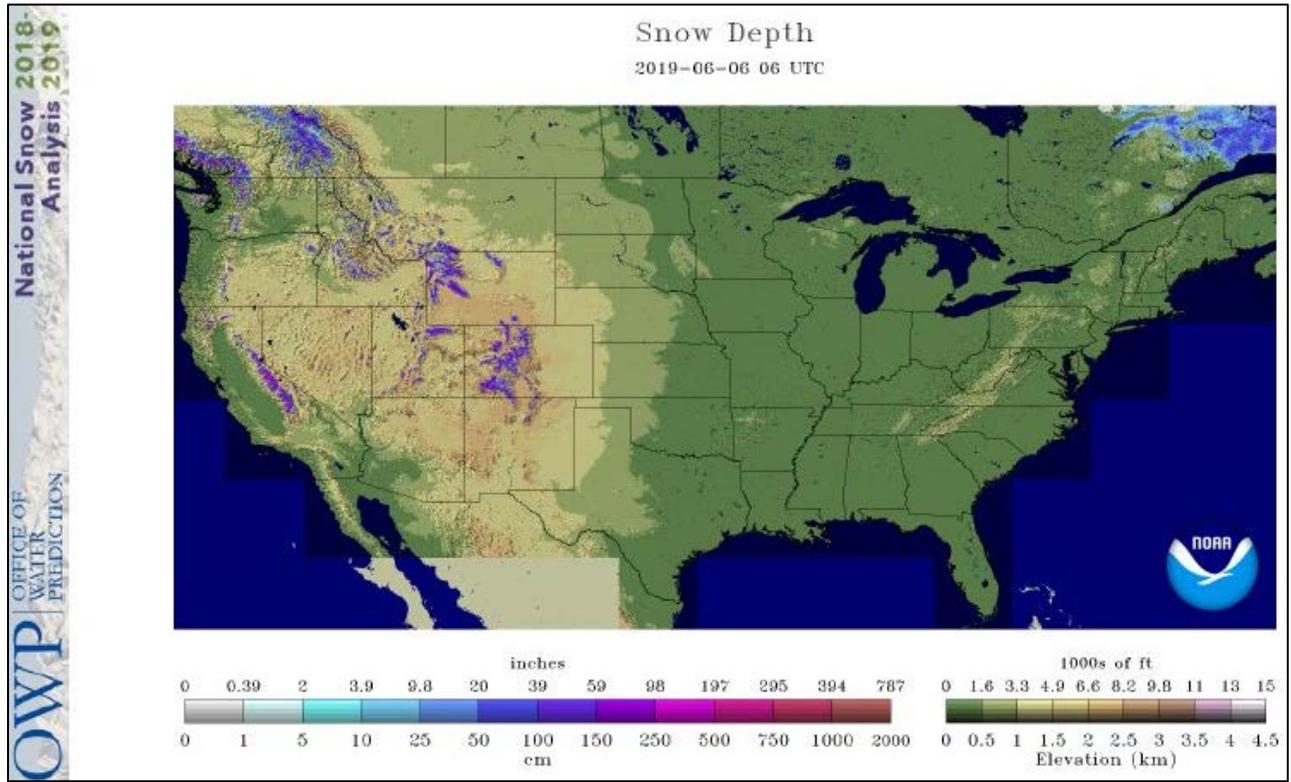


[Alaska snow water equivalent percent of median map](#)

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

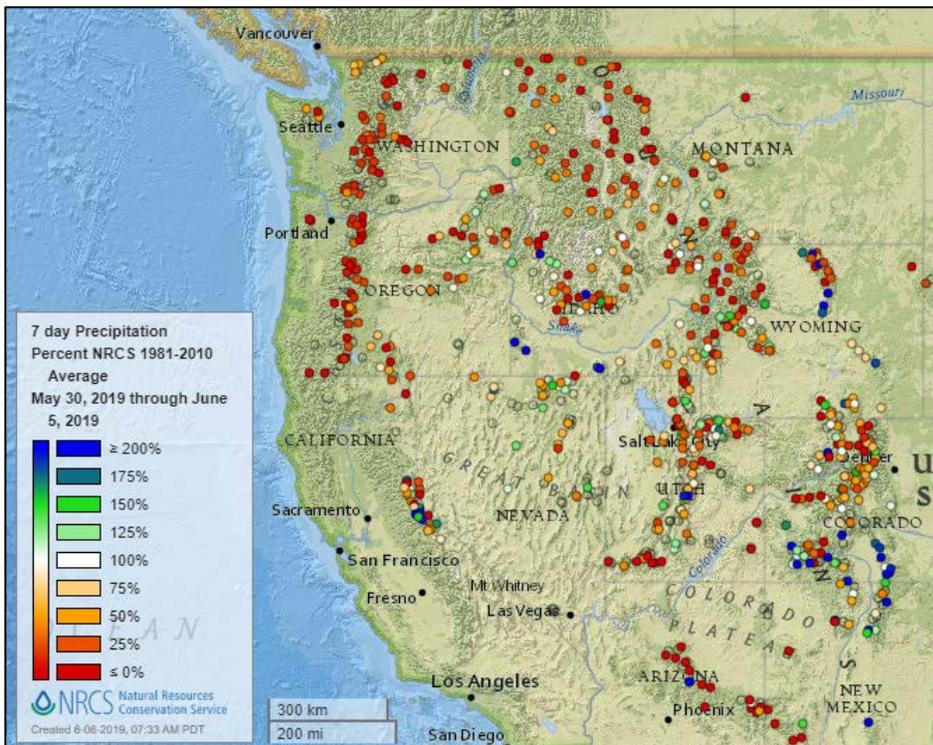
Current Snow Depth

Source: National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network

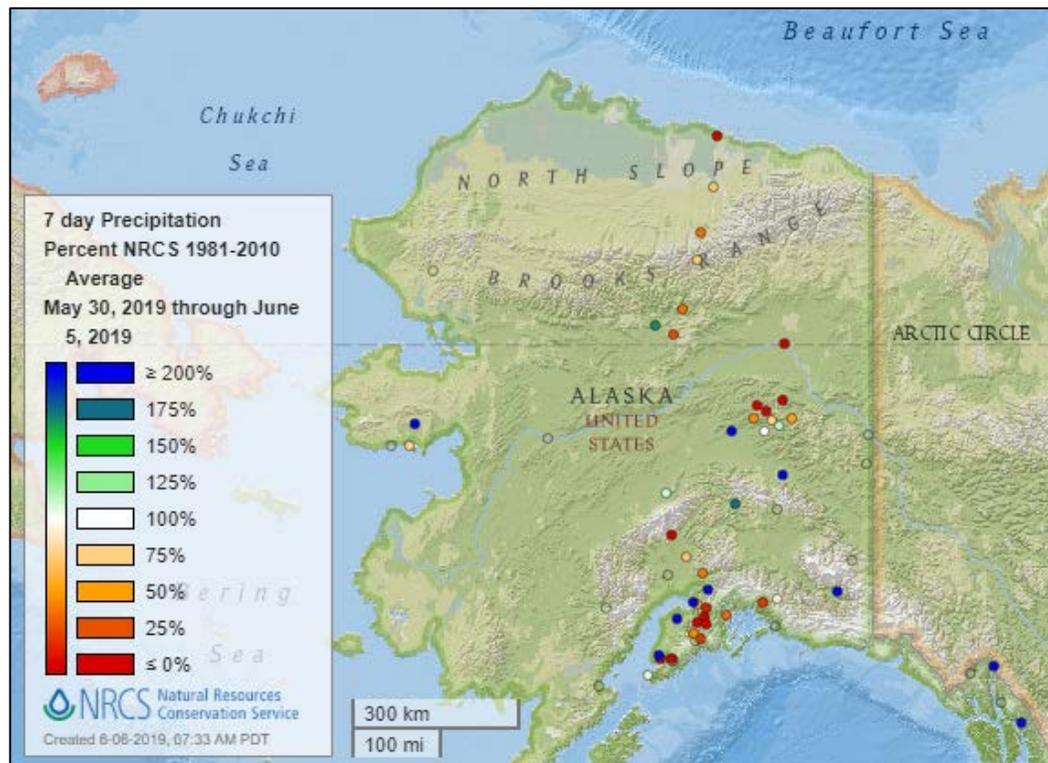


[7-day precipitation percent of average map](#)

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](#)



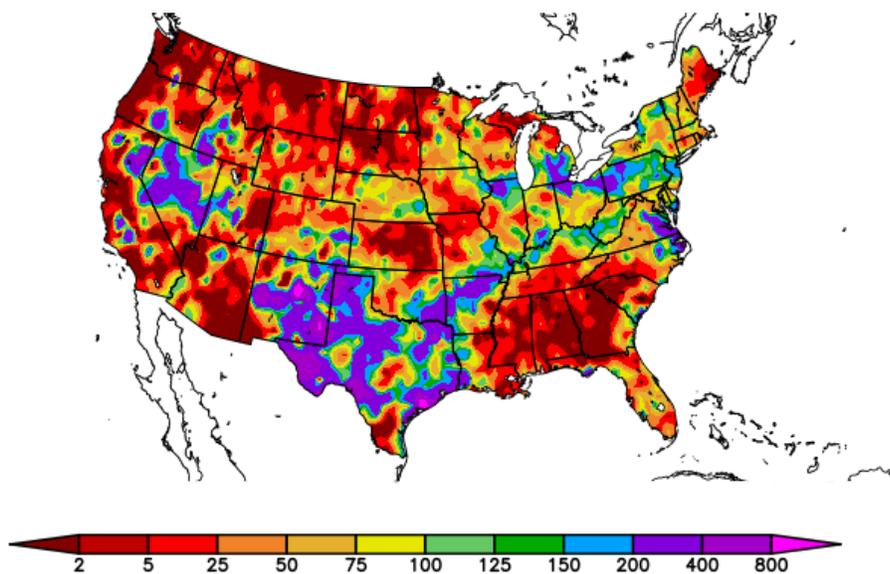
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
5/30/2019 – 6/5/2019



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

NOAA Regional Climate Centers

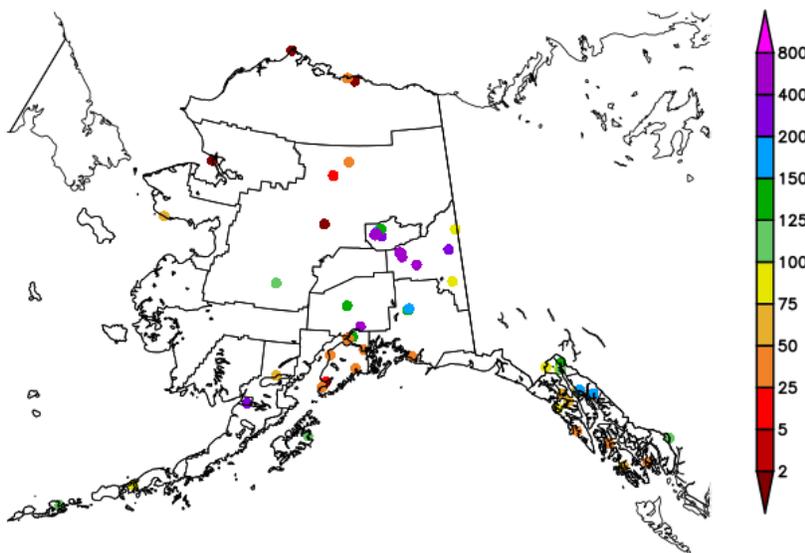
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
5/30/2019 – 6/5/2019

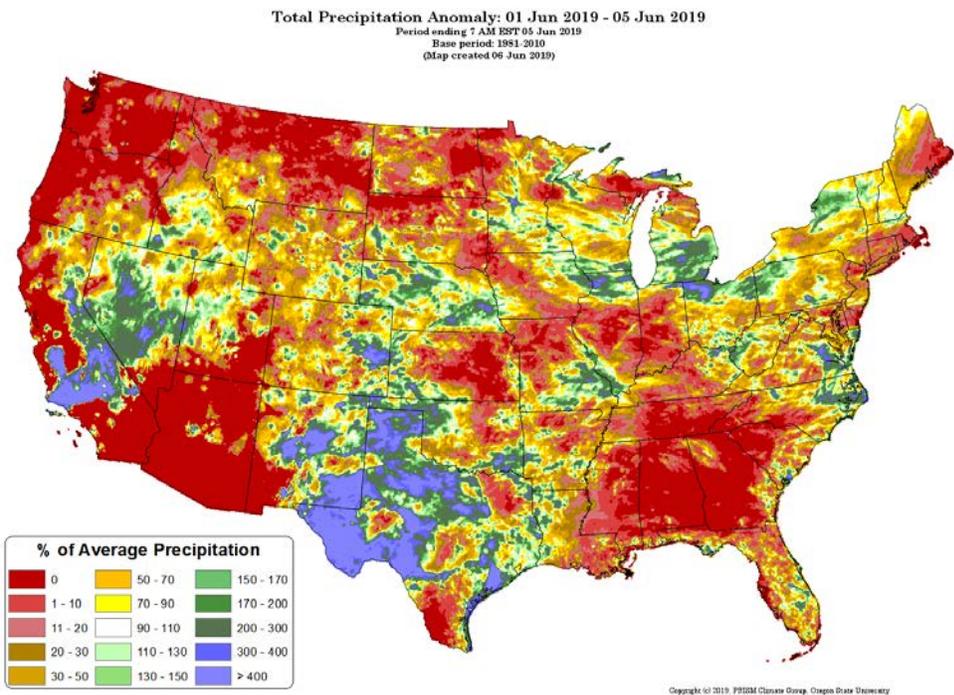


Generated 6/6/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

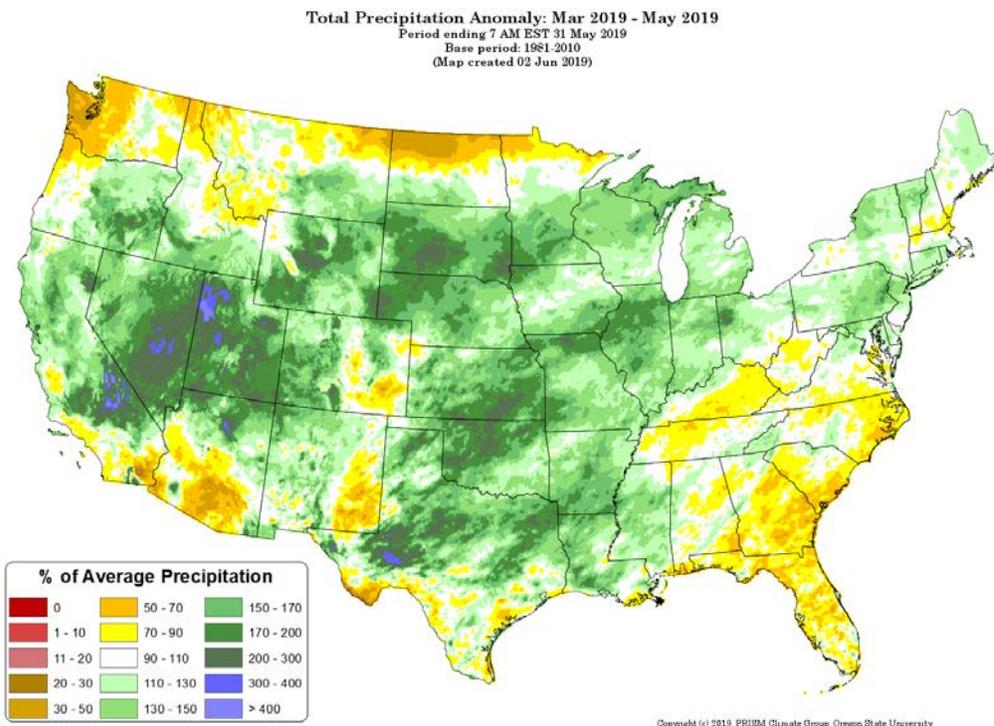


[Month-to-date national total precipitation percent of average map](#)

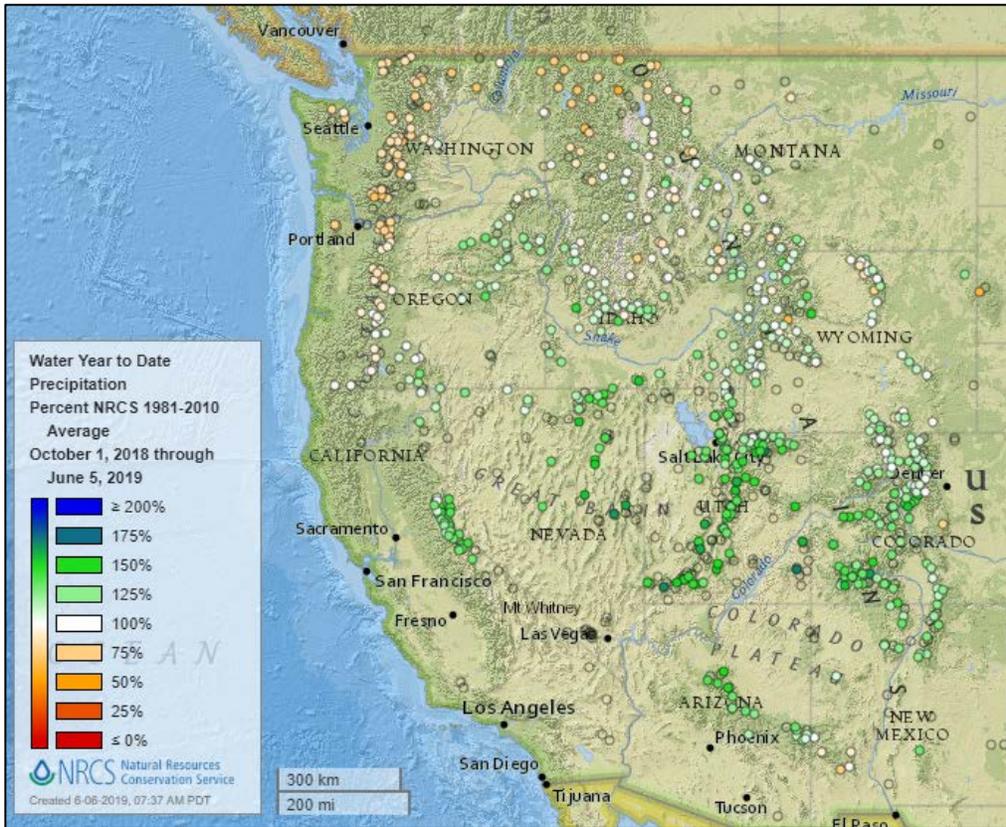
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

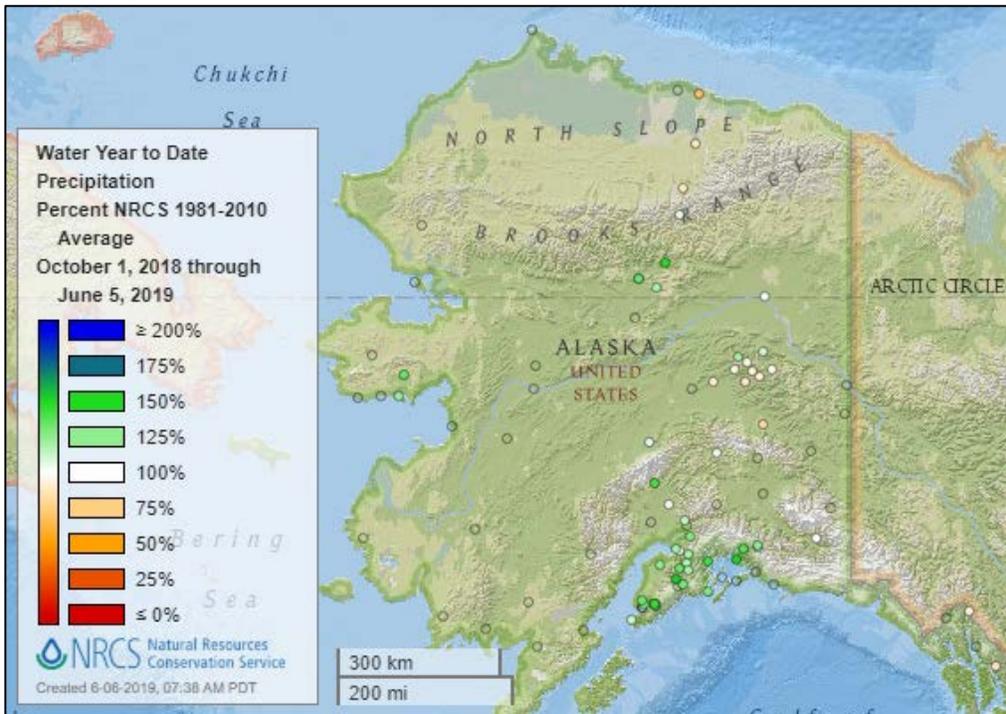


Water Year-to-Date, NRCS SNOTEL Network



[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

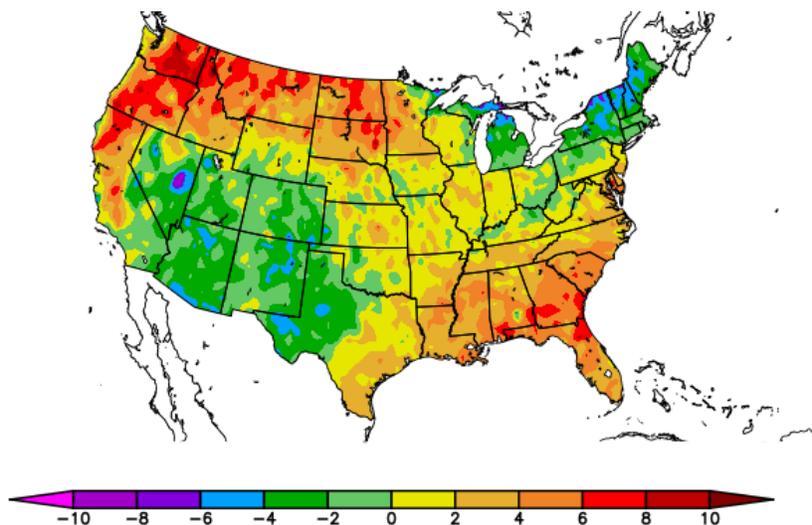
Last 7 Days, National Weather Service (NWS) Networks

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)
5/30/2019 – 6/5/2019



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

NOAA Regional Climate Centers

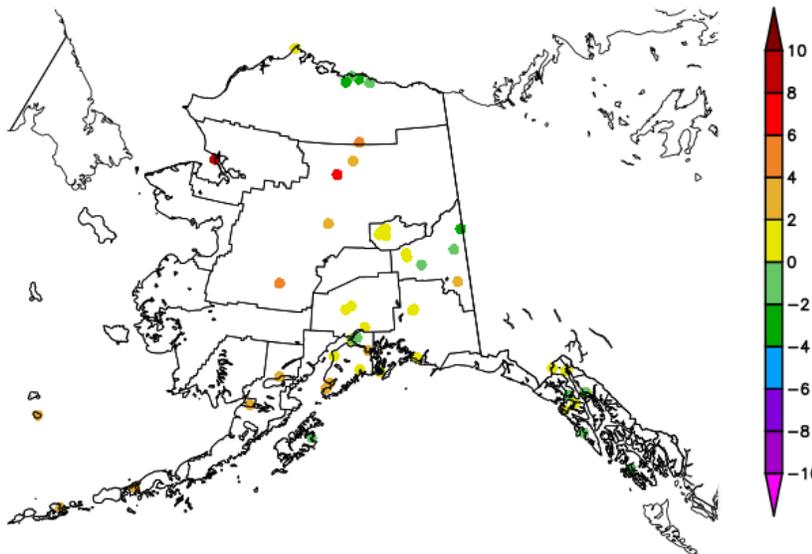
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
5/30/2019 – 6/5/2019



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

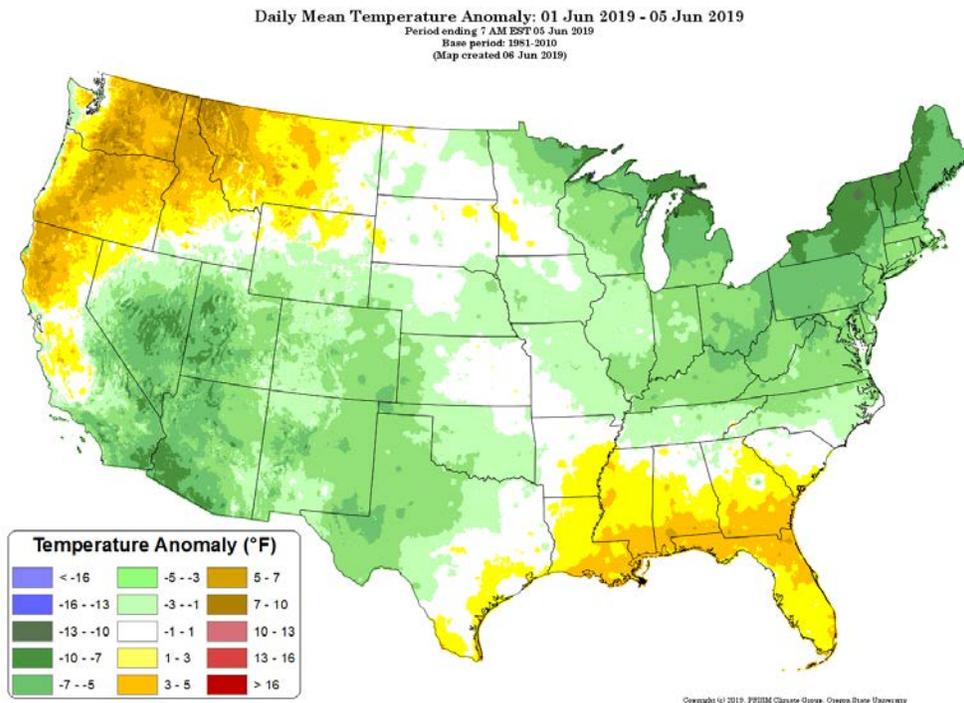
NOAA Regional Climate Centers

Water and Climate Update

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

Source: PRISM

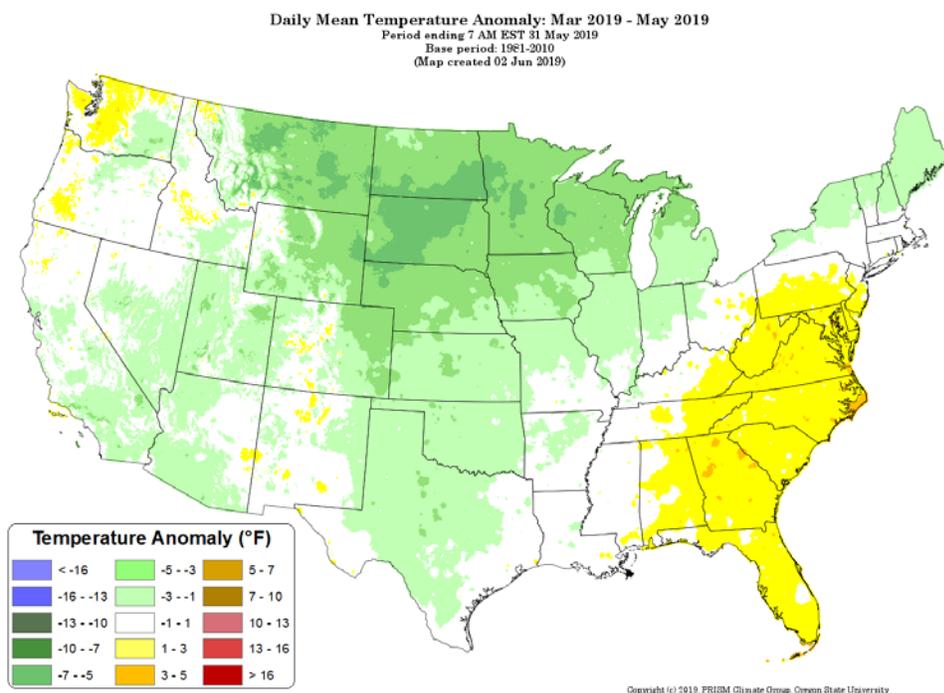
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



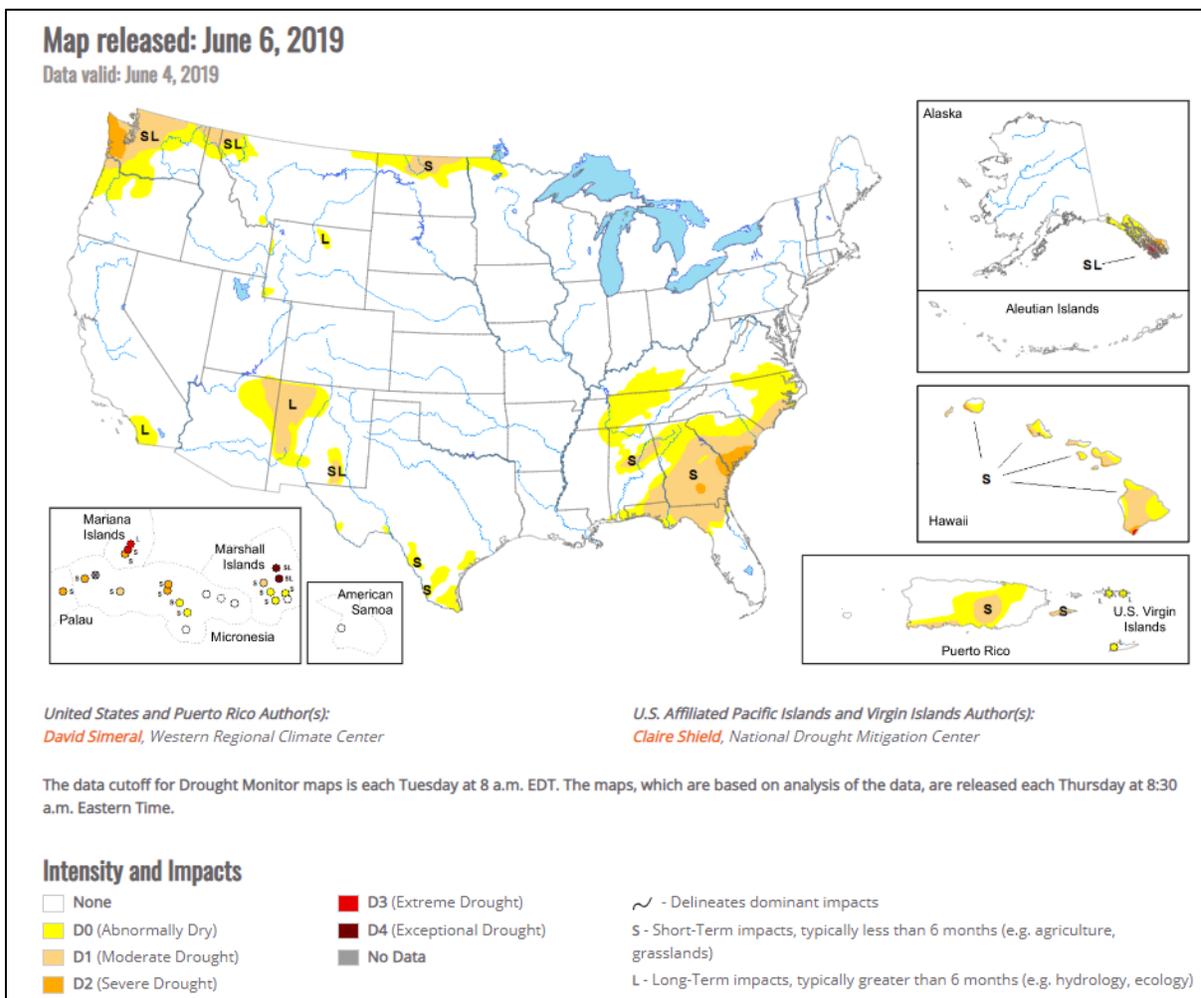
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), June 6, 2019

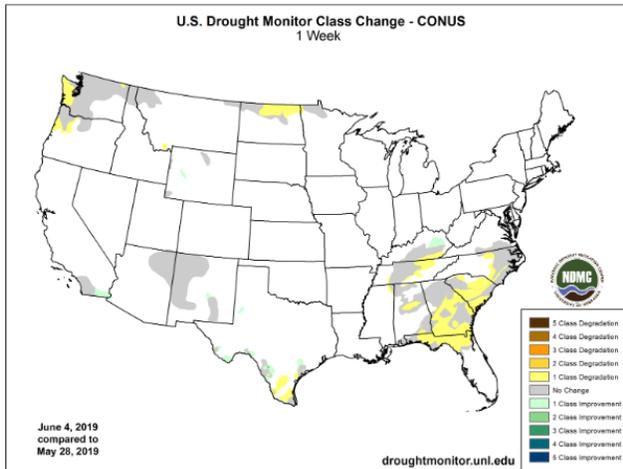
Source: National Drought Mitigation Center

“This U.S. Drought Monitor week saw further deterioration in drought-related conditions across portions of the Southeast and lower Mid-Atlantic where persistent hot and dry weather stressed dryland crops, depleted soil moisture, and reduced streamflow activity. Some relief may be on the way during the next week, however, as heavy rains are expected to impact the region. In the South, beneficial rains helped alleviate small areas of drought in the Trans Pecos region of Texas while areas of Abnormally Dry (D0) were introduced on the map across Tennessee in response to short-term dryness and hot temperatures. In the Midwest, severe weather outbreaks and areas experiencing flooding continued to impact parts of the region. According to NOAA’s National Center for Environmental Information (NCEI), several states in the Midwest including Iowa and Minnesota experienced their wettest 12-month period (May 2018–April 2019) on record. In the High Plains, dry conditions during the past month led to introduction of areas of moderate drought in north-central North Dakota. Out West, drought conditions intensified in western Washington where streamflow conditions are well below normal levels after a shallow snowpack this past winter.”

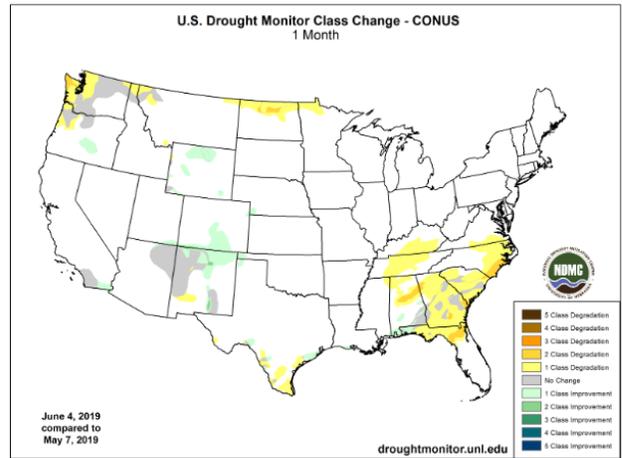
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

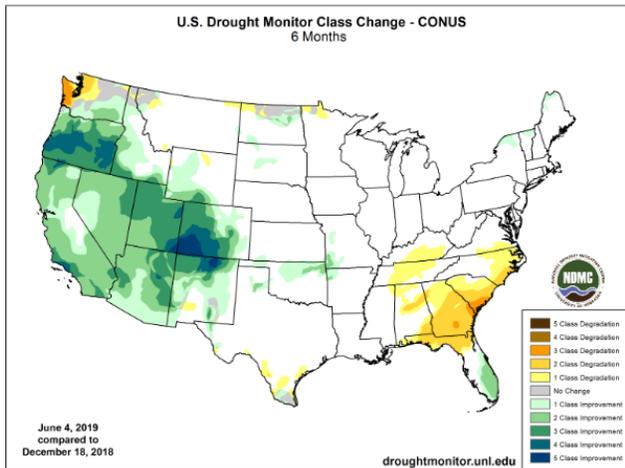
1 Week



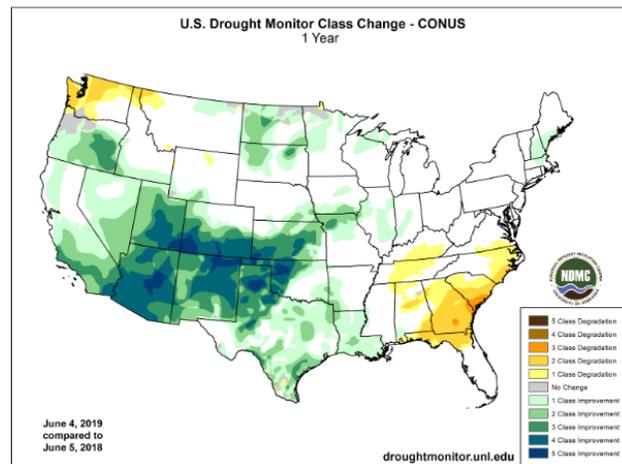
1 Month



6 Months



1 Year



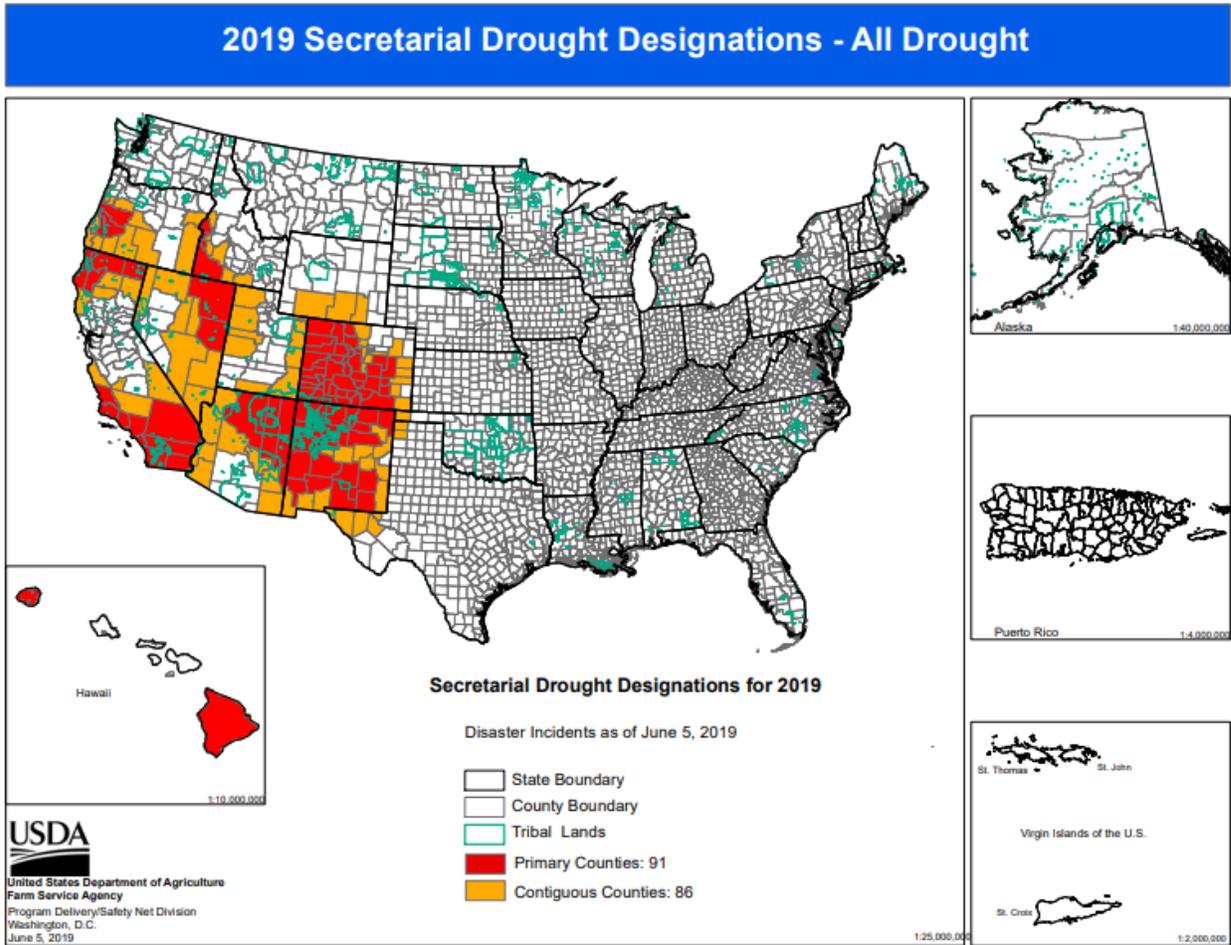
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

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

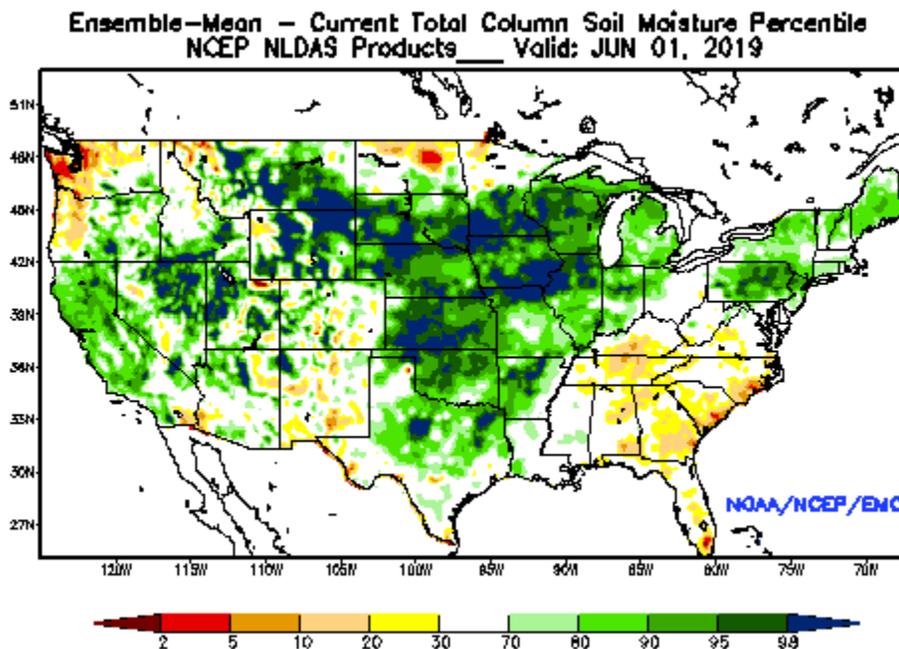
Source: USDA Farm Service Agency



Other Climatic and Water Supply Indicators

Soil Moisture

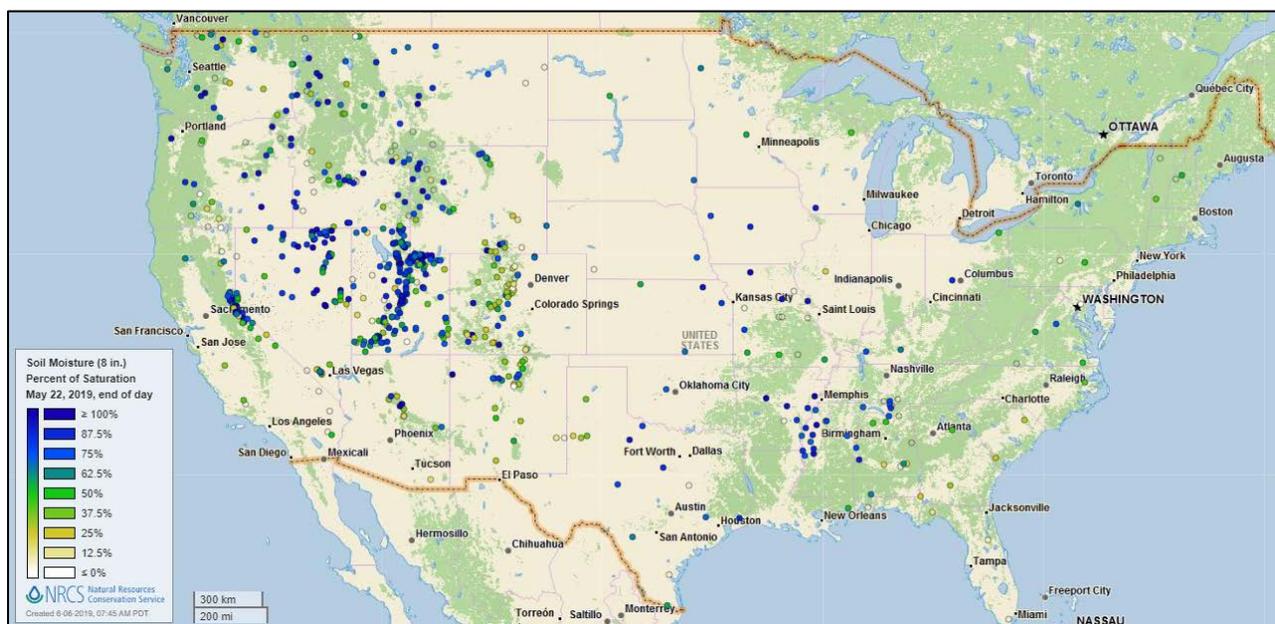
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of June 1, 2019

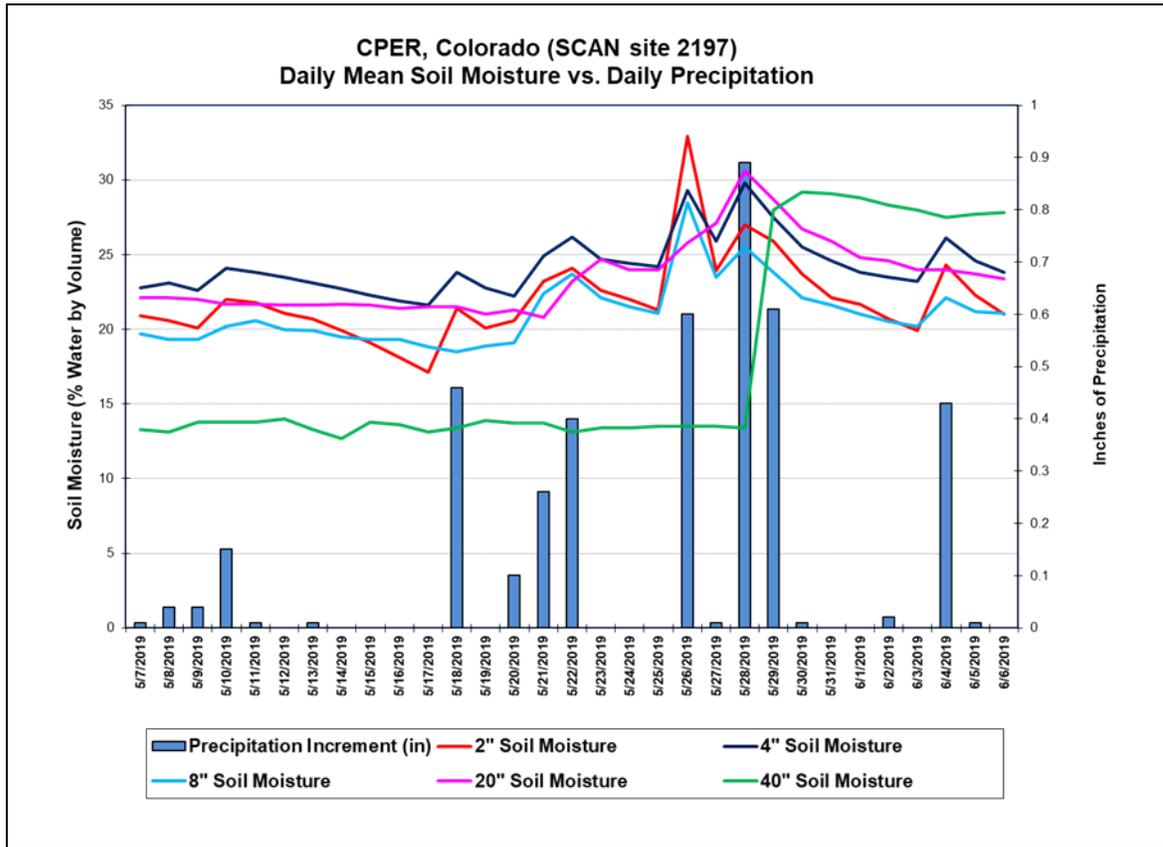
Soil Moisture Percent of Saturation

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 [CPER SCAN site 2197](#) in Colorado. From May 26-29, heavy precipitation increased soil moisture at all sensor depths, with a large increase at the 40-inch sensor. On June 4, the accumulated precipitation totaled 0.43 inches followed by an increase in soil moisture at the 2-, 4-, and 8-inch sensor levels.

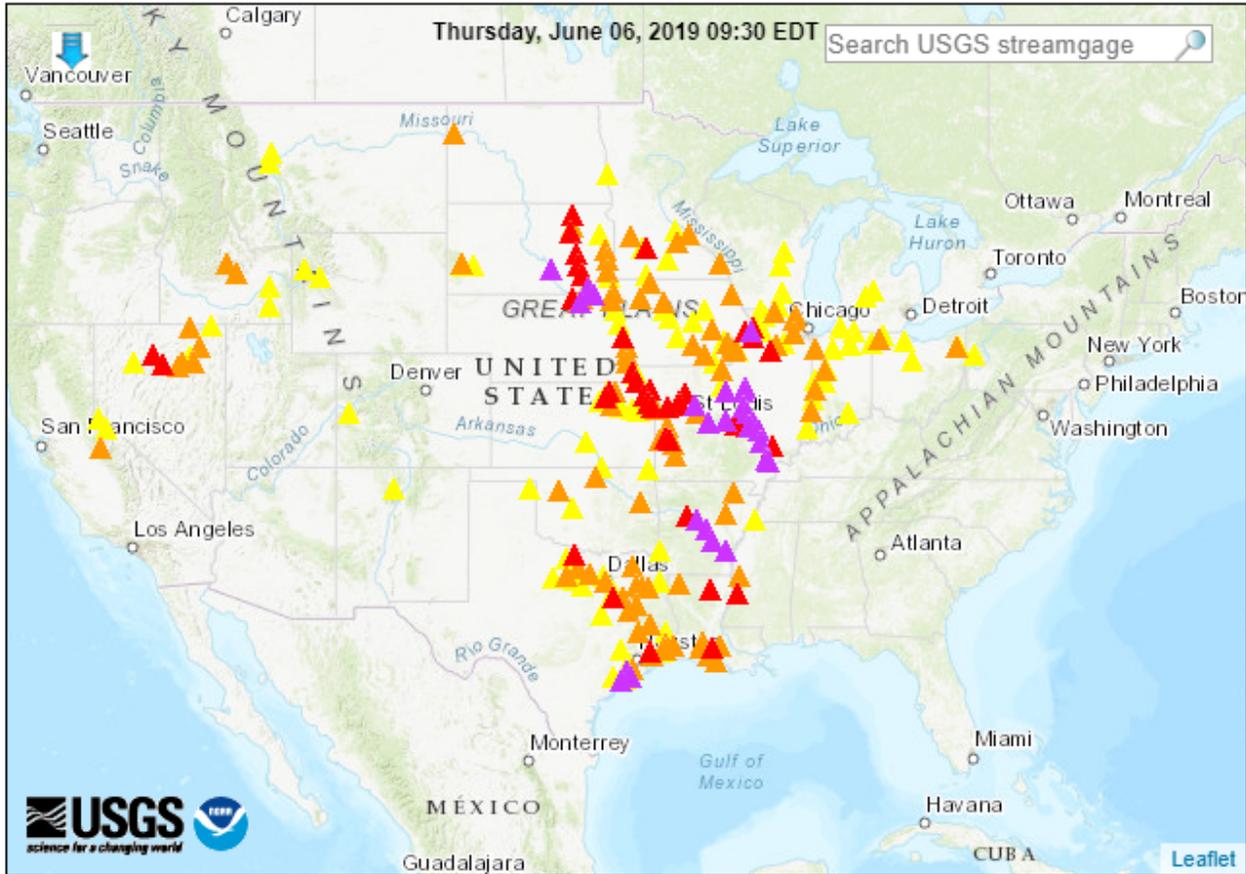
Soil Moisture Data Portals

- [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
 (26 in major flood, 40 in moderate flood, 87 in minor flood, 87 in near flood)



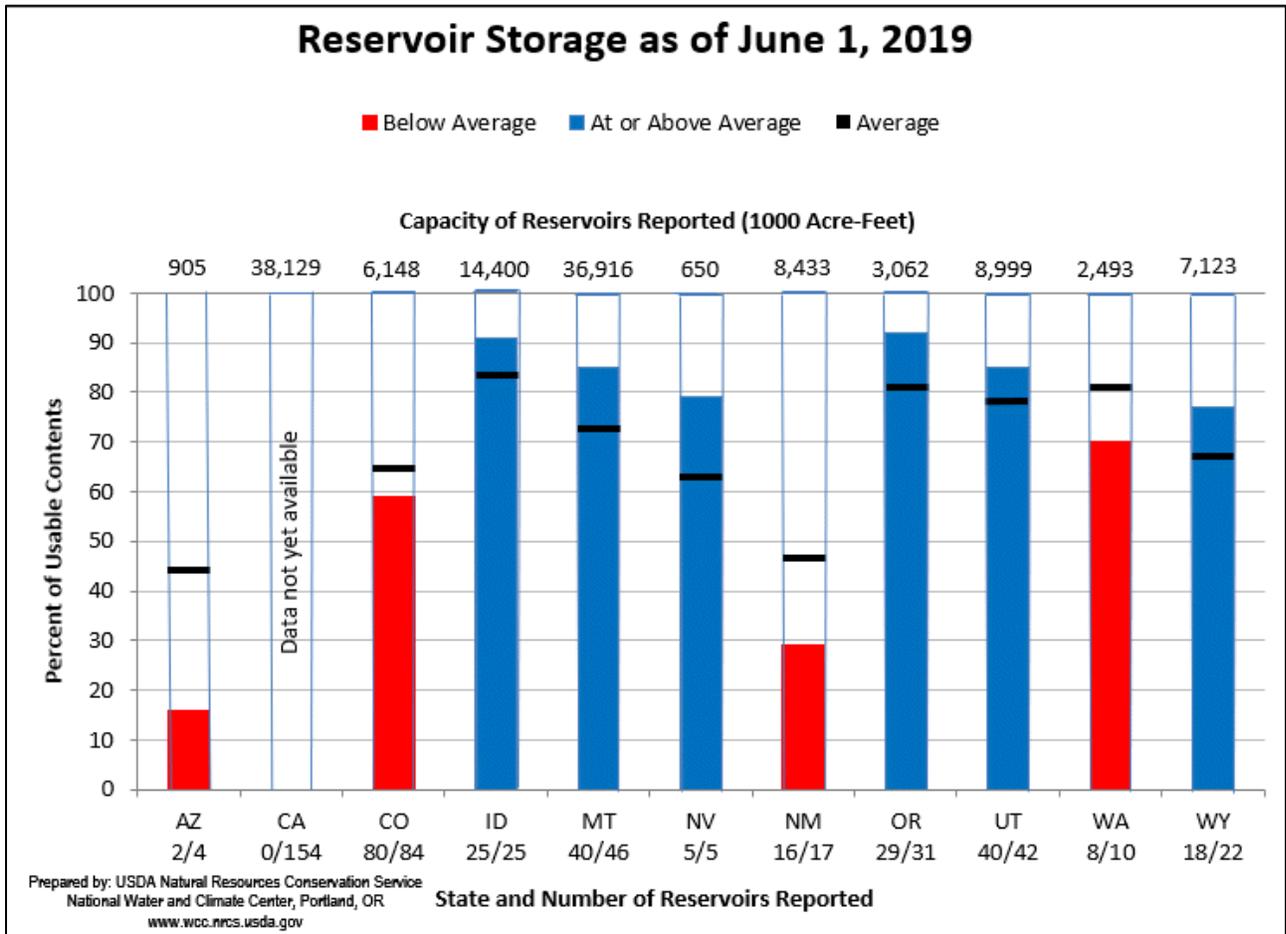
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage			○ Streamgage without flood stage			

[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](#)

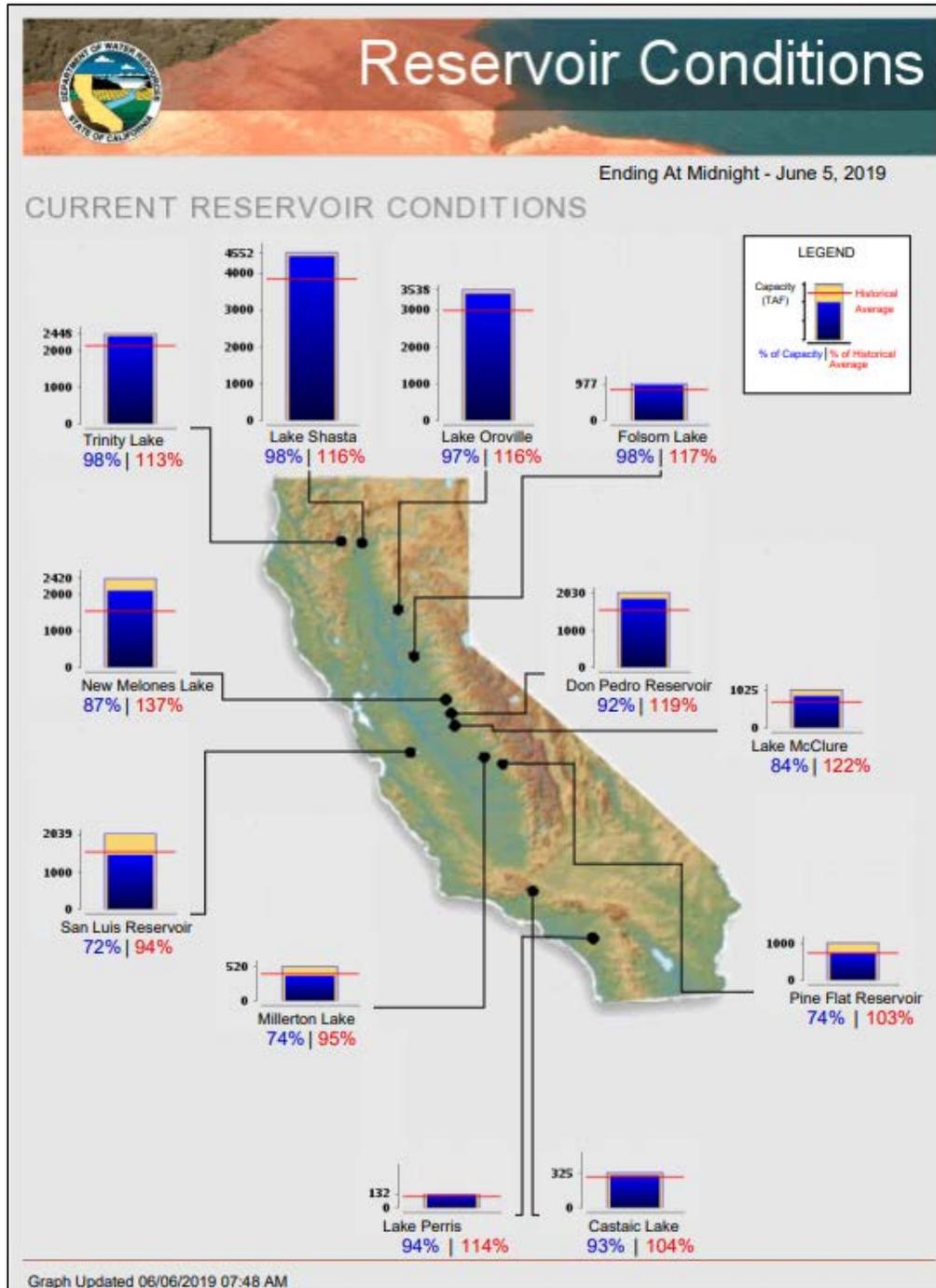
Hydromet Tea Cup Reservoir Depictions

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

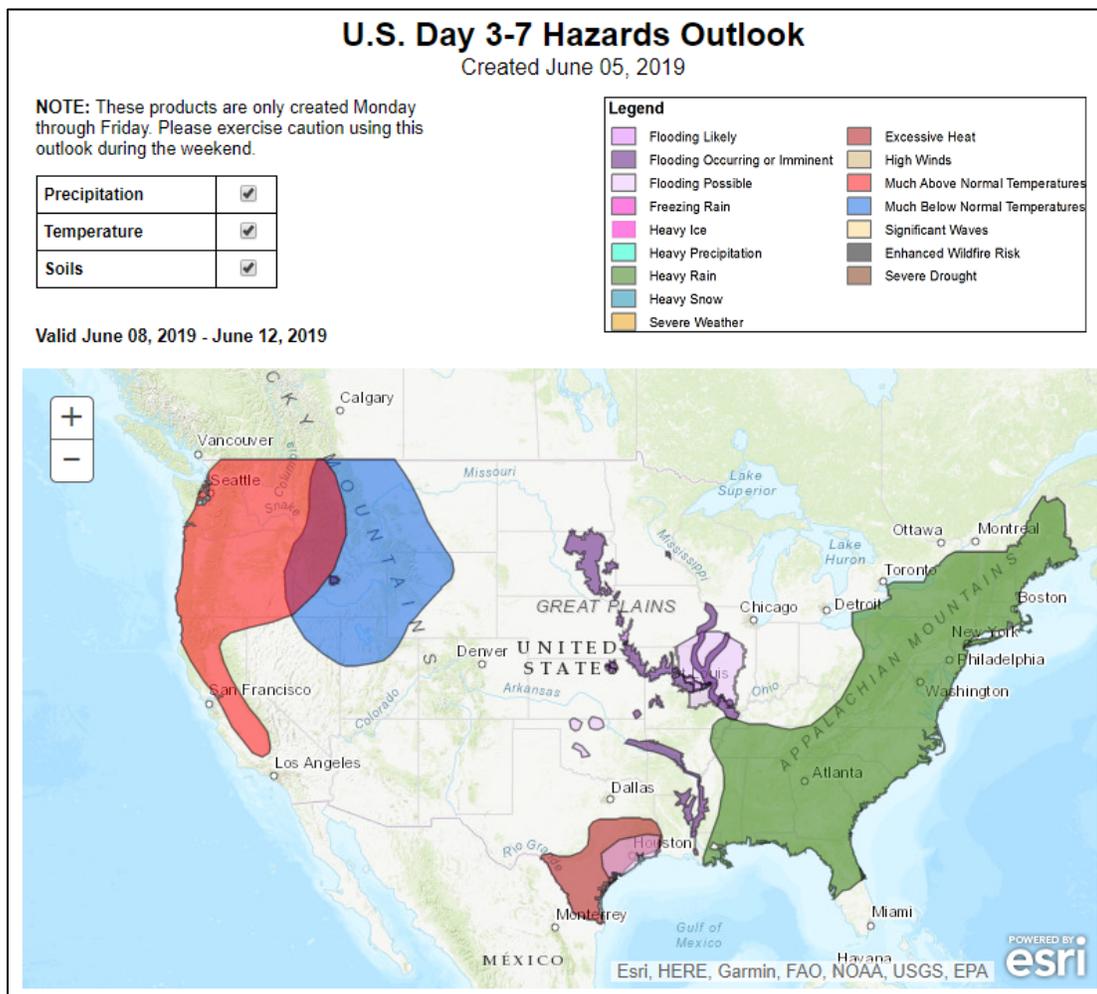
Agricultural Weather Highlights

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

National Outlook, Thursday, June 6, 2019: “Abundant tropical moisture over the Southeast will result in several more days of locally heavy showers, with 5-day rainfall totals of 2 to 8 inches or more possible. The rain could aggravate flooding in the lower half of the Mississippi Valley but should result in Southeastern drought relief. Meanwhile, shower activity will subside for a few days in much of the Midwest. Late in the week and during the weekend, a strong surge of cool air—preceded and accompanied by showers and thunderstorms—will arrive in the Northwest before spreading across the Plains and Midwest. By early next week, heat will begin to build across the Far West. The NWS 6- to 10-day outlook for June 11 – 15 calls for the likelihood of below-normal temperatures in most areas from the Plains to the East Coast, while warmer-than-normal weather will prevail across Florida’s peninsula and in the West. Meanwhile, below normal rainfall in the middle and lower Mississippi Valley and from the Pacific Northwest to the northern Plains will contrast with wetter-than-normal conditions in the Atlantic Coast States and central and southern sections of the Rockies and High Plains.”

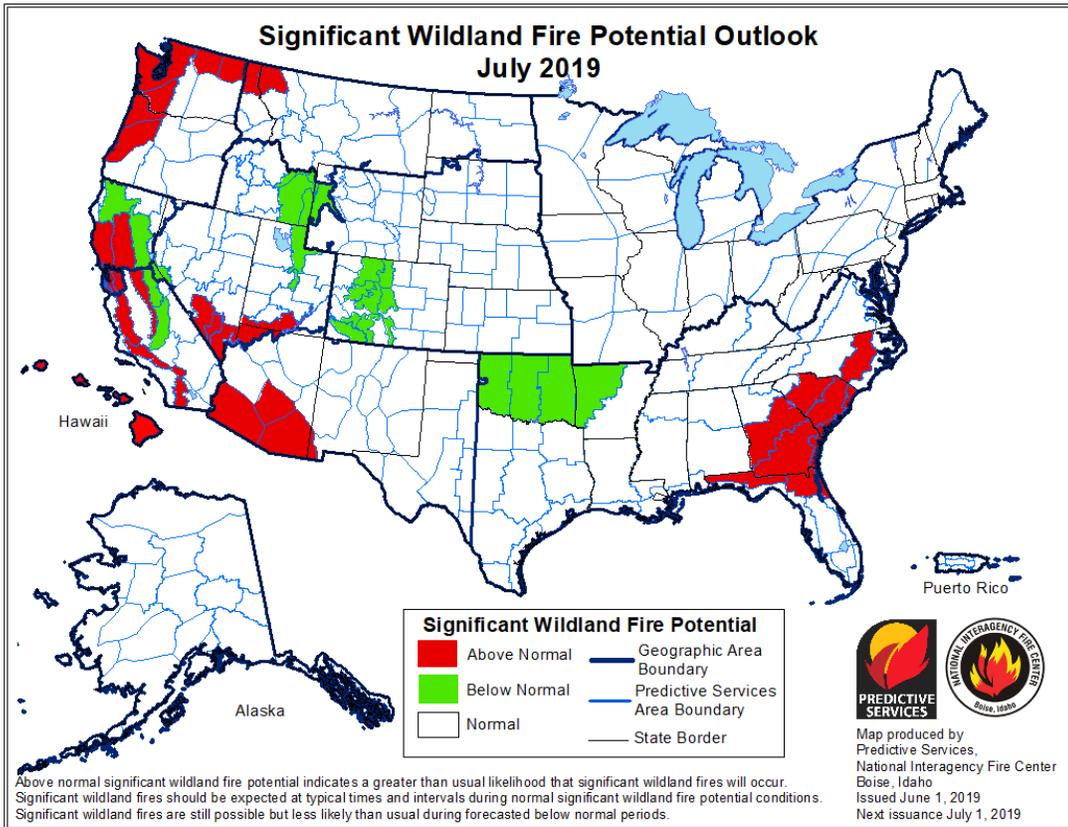
Weather Hazards Outlook: [June 8 – June 12, 2019](#)

Source: NOAA Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

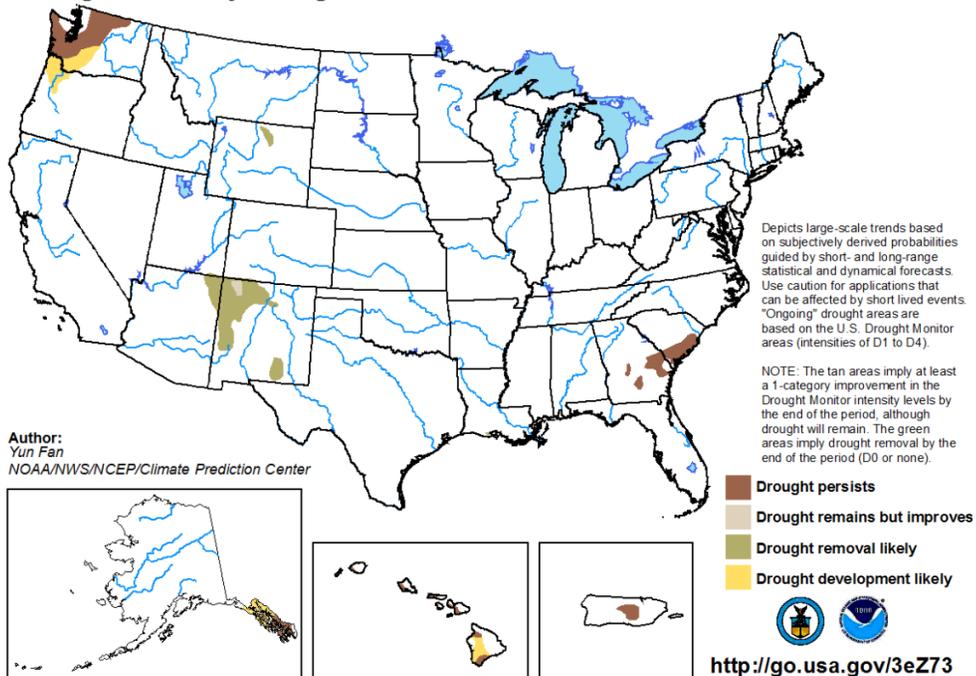


Seasonal Drought Outlook: [May 16 – August 31, 2019](#)

Source: National Weather Service

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

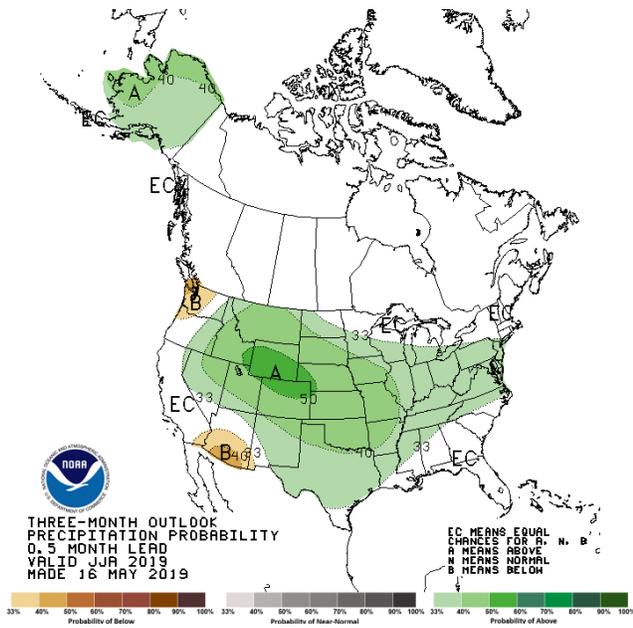
Valid for May 16 - August 31, 2019
Released May 16



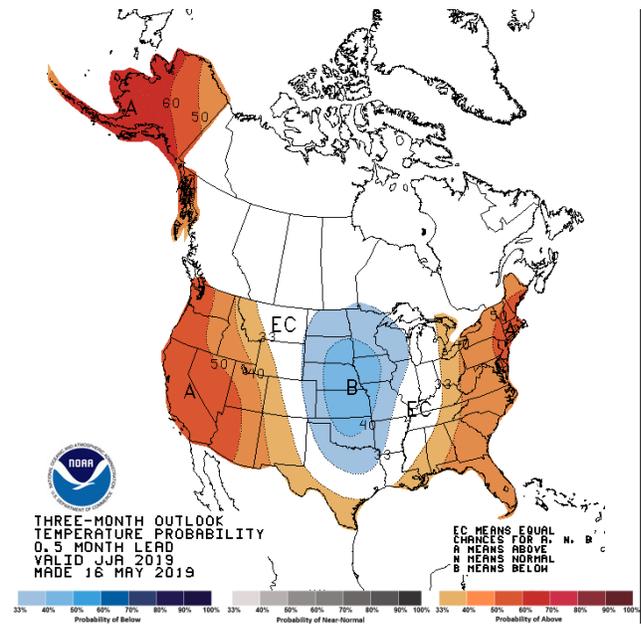
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[June-July-August \(JJA\) 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](#).