



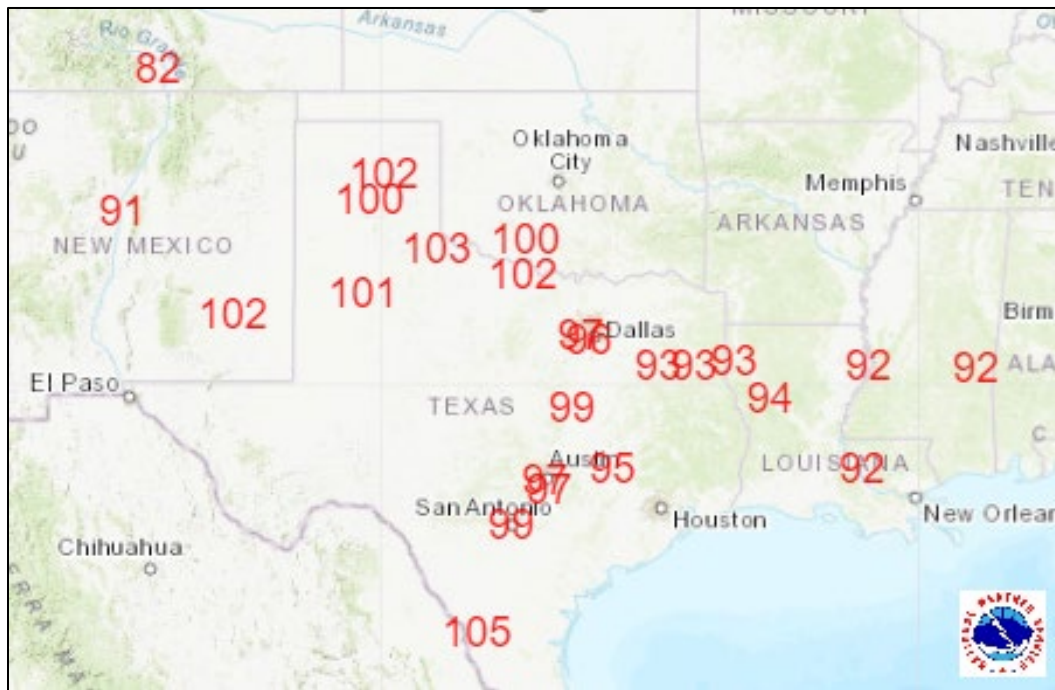
Water and Climate Update

May 19, 2022

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.

Snow	2	Drought	10
Precipitation	4	Other Climatic and Water Supply Indicators	14
Temperature.....	8	More Information	20

Record high temperatures reported in the Southern Plains

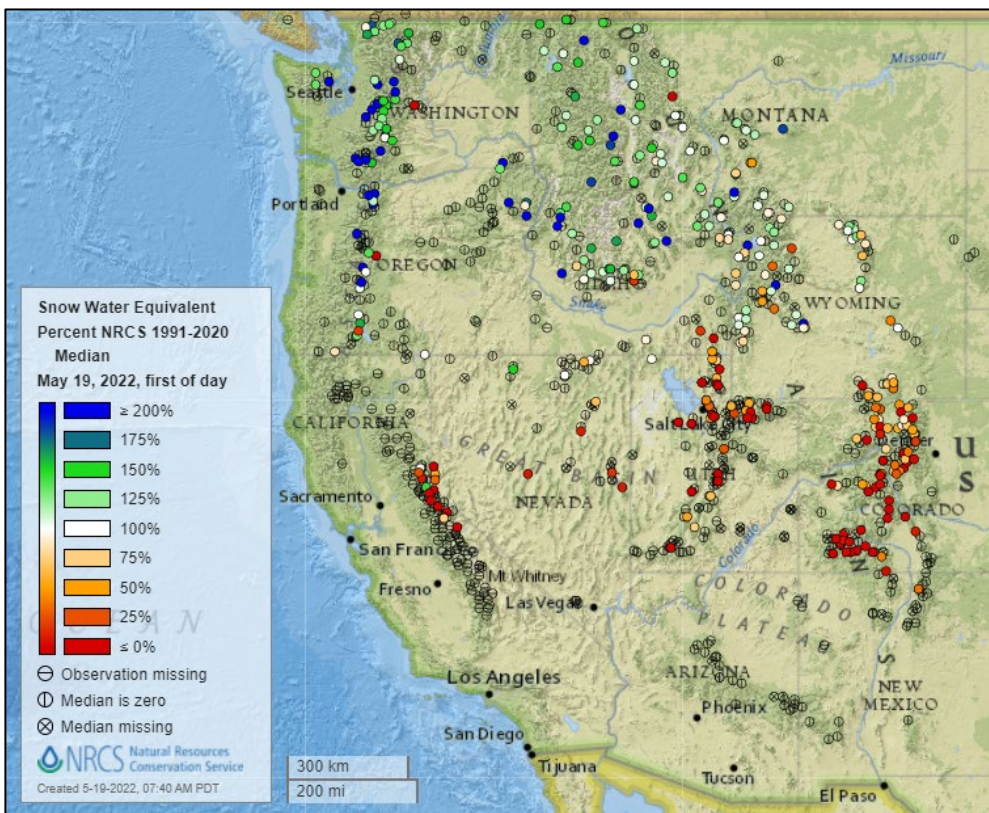


An early summer heat wave is baking the Southern Plains. Many record-breaking temperatures were reported across the region on May 17, with the highest new record reaching 105°F in southern Texas. The heat has continued, with triple-digit temperatures forecasted for much of central and southern Texas. The early season heat is also expected to impact the Southeast and central Plains, with 90-degree temperatures forecasted across the region.

Related:

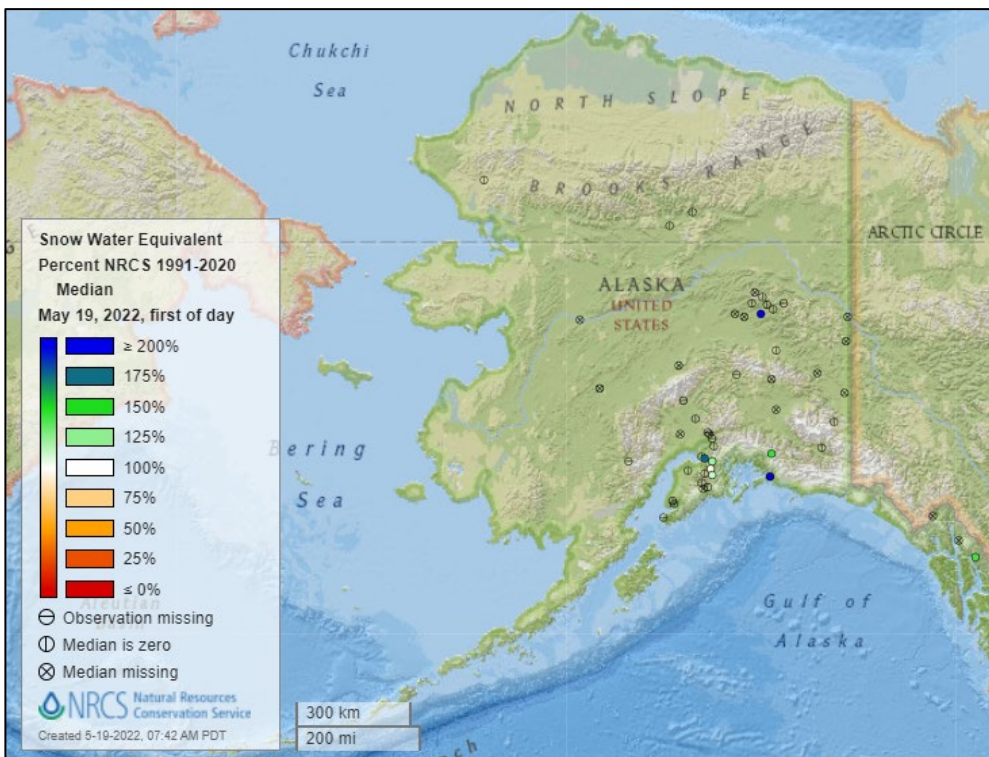
- [Sweltering summer heat in Texas to swell into eastern U.S.](#) – Washington Post
- [Fire weather worsens as heat wave spreads across southern US this week](#) - CNN
- [Record heat continues. break expected this weekend](#) – KABB San Antonio (TX)
- [Building heat to set records in southwestern, south-central US](#) – Yahoo News
- [Record Heat Expanding to the Southeast](#) – MSN
- [Record-Breaking Heat Today](#) – Oklahoma News
- [Why is it so hot already in Texas? Early heat wave is an ominous sign for summer](#) – Fort Worth Star-Telegram (TX)

Snow



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

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

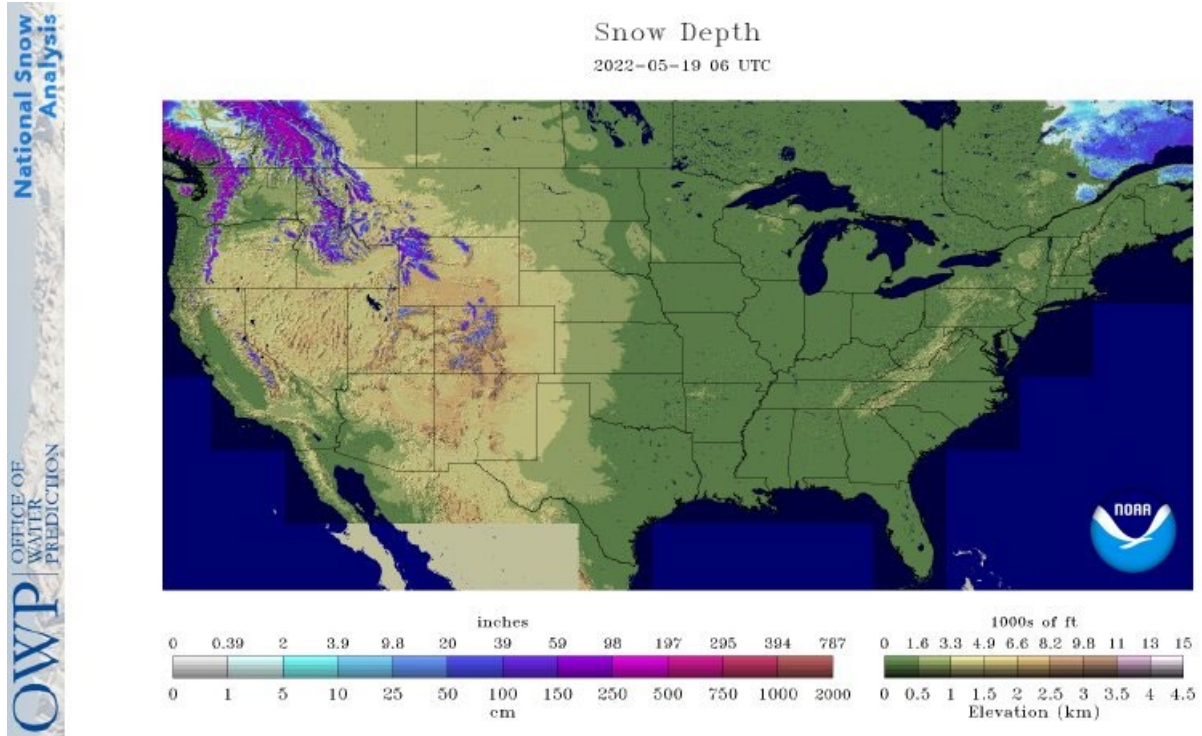


[Alaska snow water equivalent percent of median map](#)

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

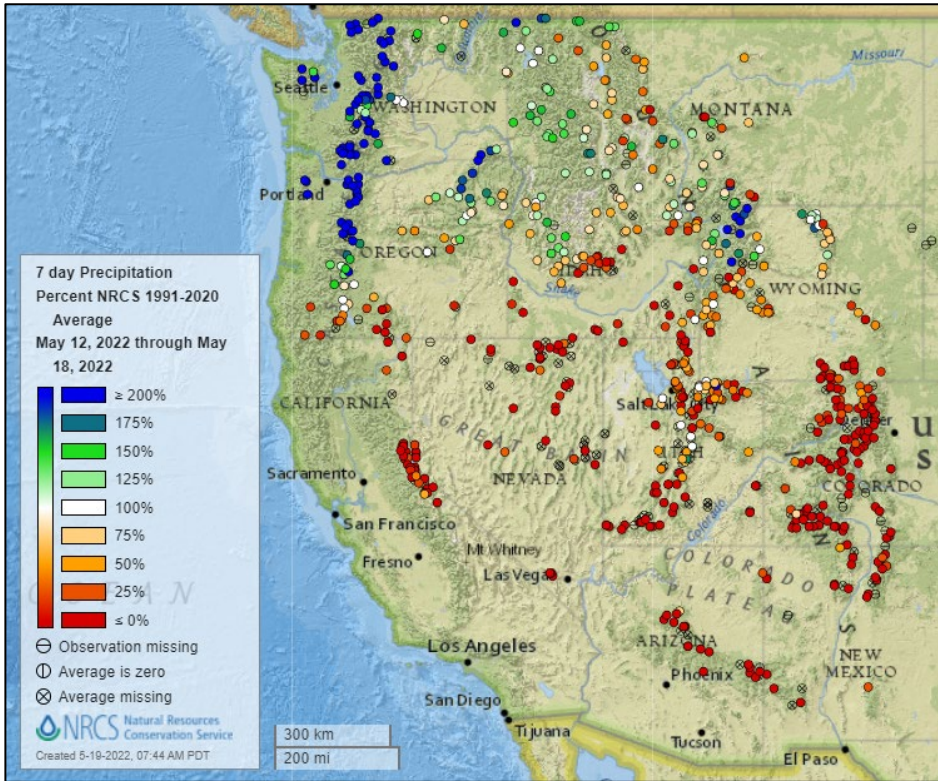
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

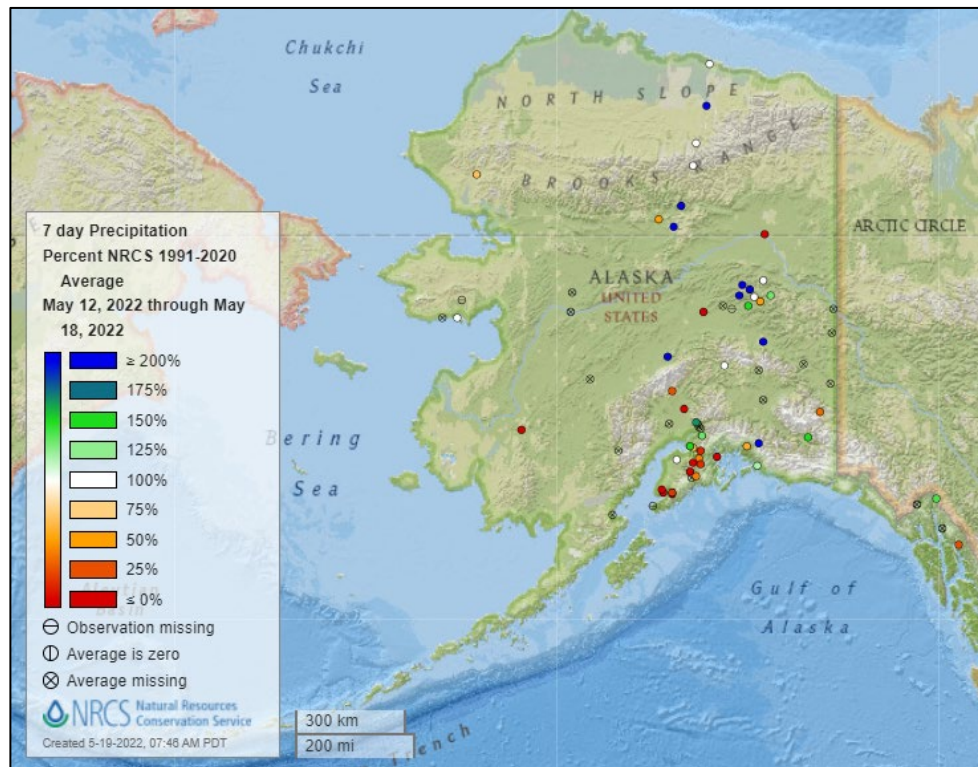


[7-day precipitation percent of average map](#)

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](#)



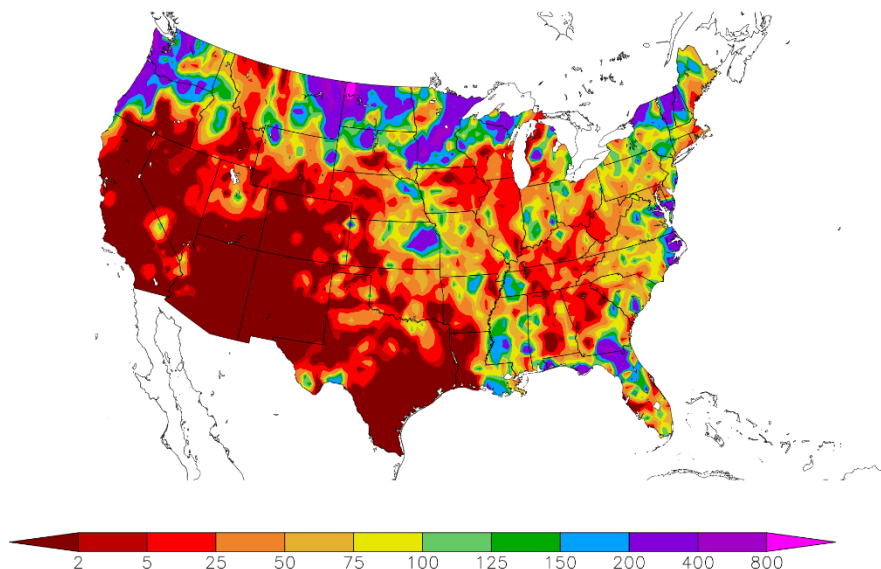
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
5/12/2022 – 5/18/2022



Generated 5/19/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

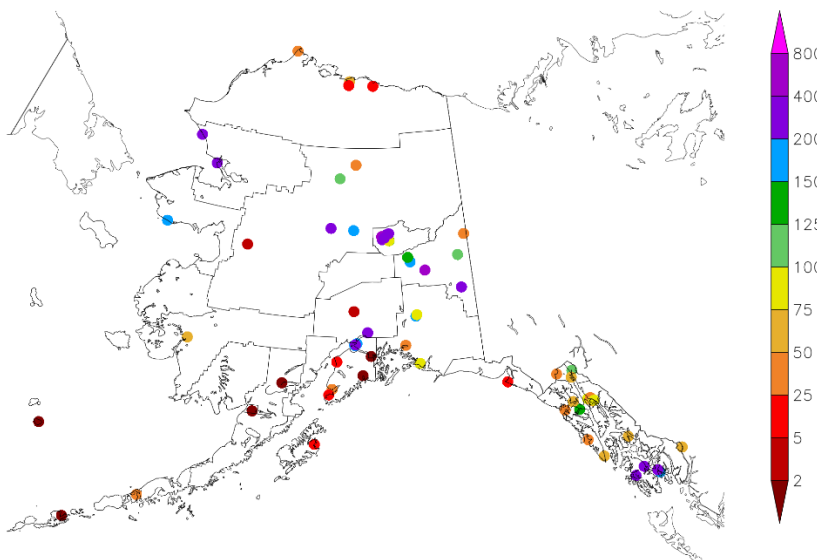
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
5/12/2022 – 5/18/2022



Generated 5/19/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

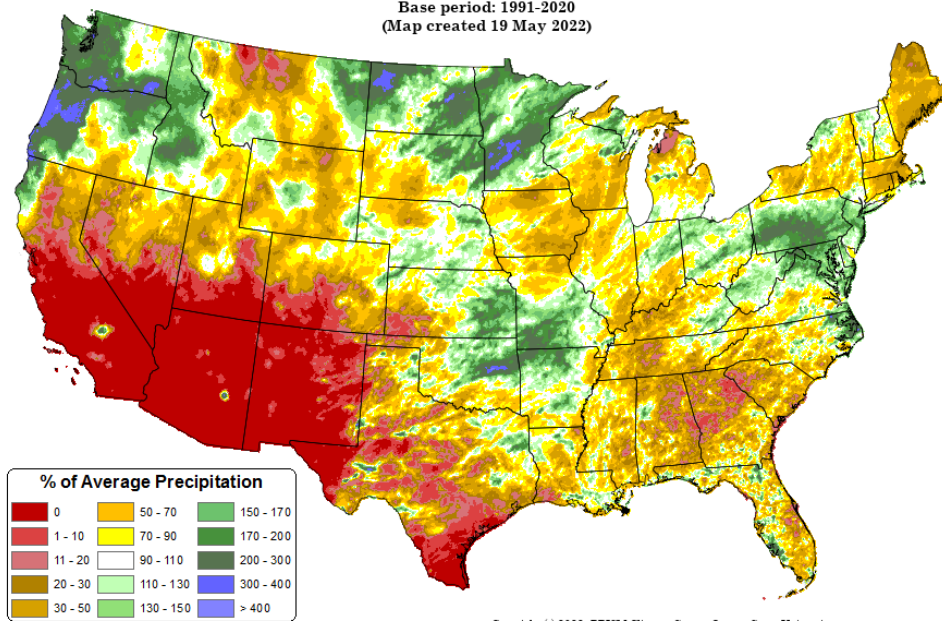
Total Precipitation Anomaly: 01 May 2022 - 18 May 2022

Period ending 7 AM EST 18 May 2022

Base period: 1991-2020

(Map created 19 May 2022)

[Month-to-date national total precipitation anomaly map](#)



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

Source: PRISM

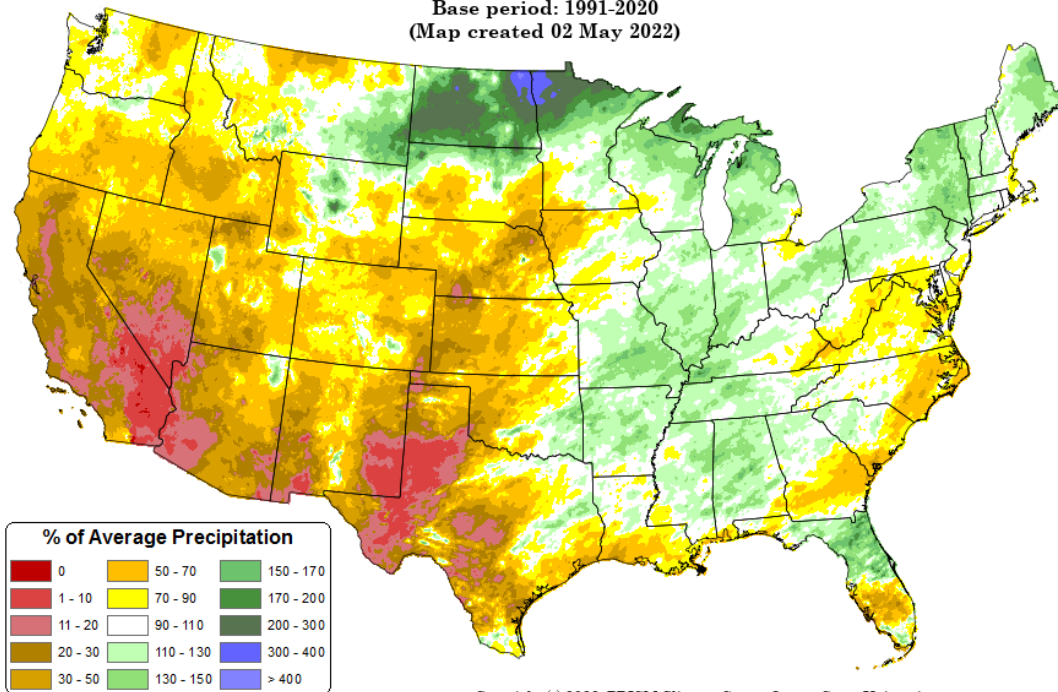
[February through April 2022 precipitation anomaly map](#)

Total Precipitation Anomaly: Feb 2022 - Apr 2022

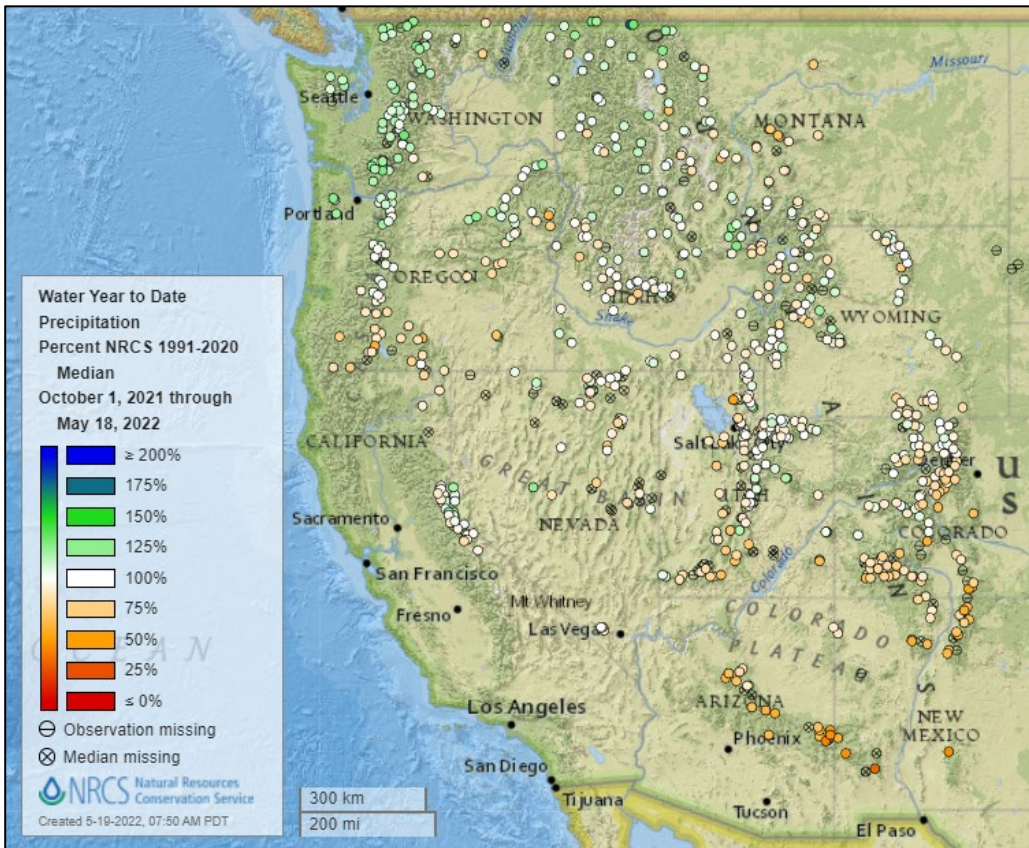
Period ending 7 AM EST 30 Apr 2022

Base period: 1991-2020

(Map created 02 May 2022)



Water Year-to-Date, NRCS SNOTEL Network

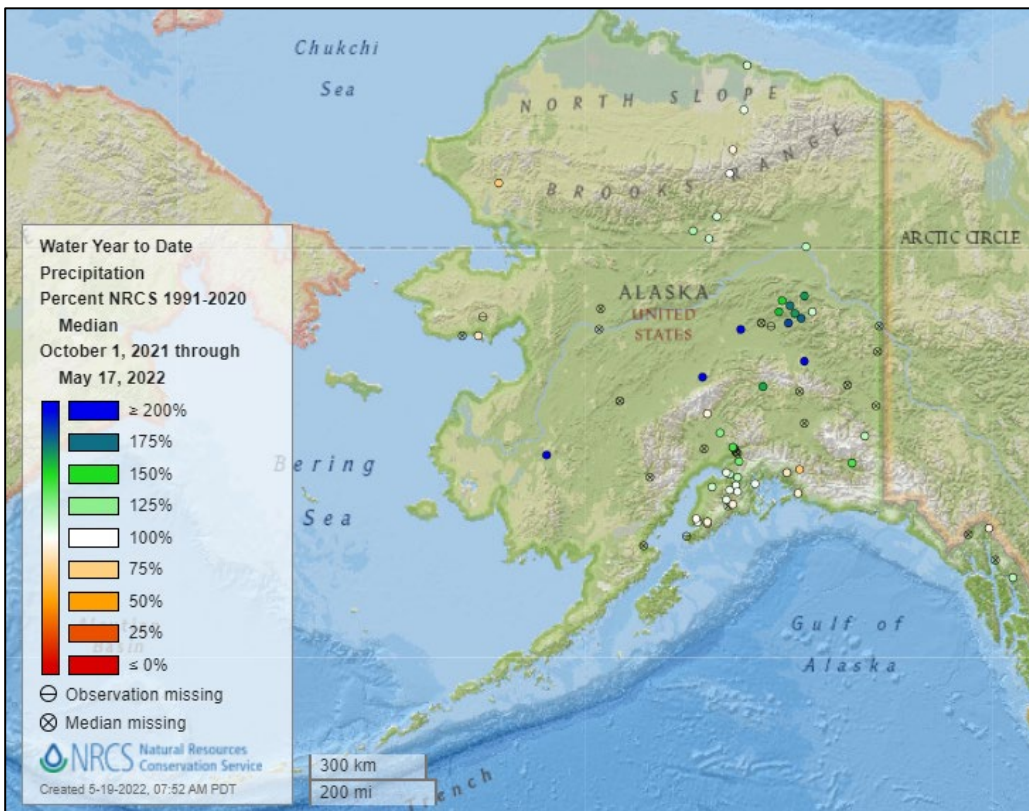


[2022 water year-to-date precipitation percent of median map](#)

See also:

[2022 water year-to-date precipitation percent of average map](#)

[2022 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2022 water year-to-date precipitation percent of median map](#)

See also:

[Alaska 2022 water year-to-date precipitation percent of average map](#)

[Alaska 2022 water year-to-date precipitation values \(inches\) map](#)

Temperature

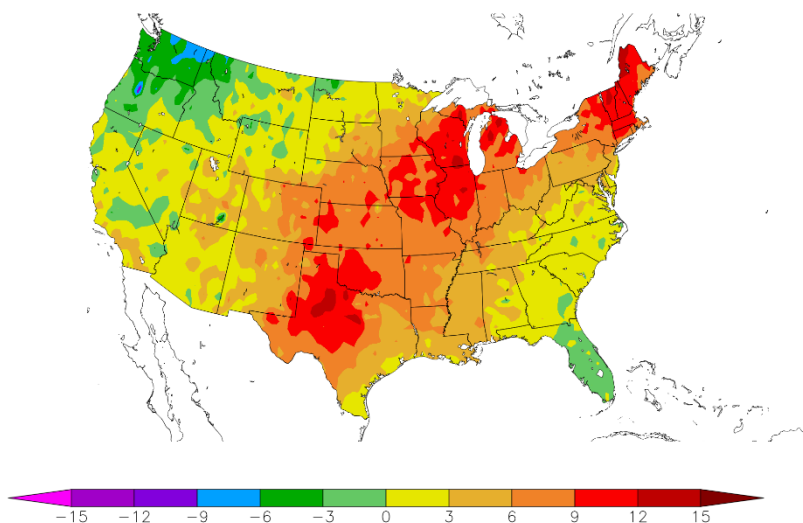
Last 7 Days, National Weather Service (NWS) Networks

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)
5/12/2022 – 5/18/2022



Generated 5/19/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

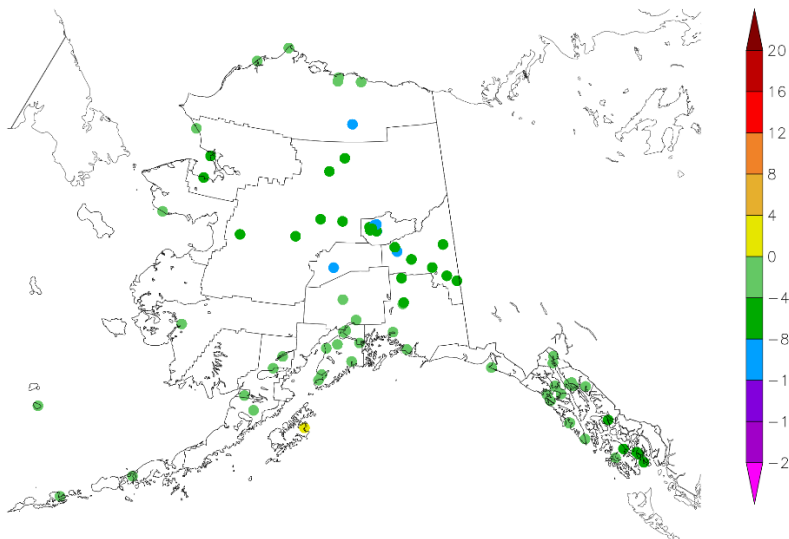
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
5/12/2022 – 5/18/2022



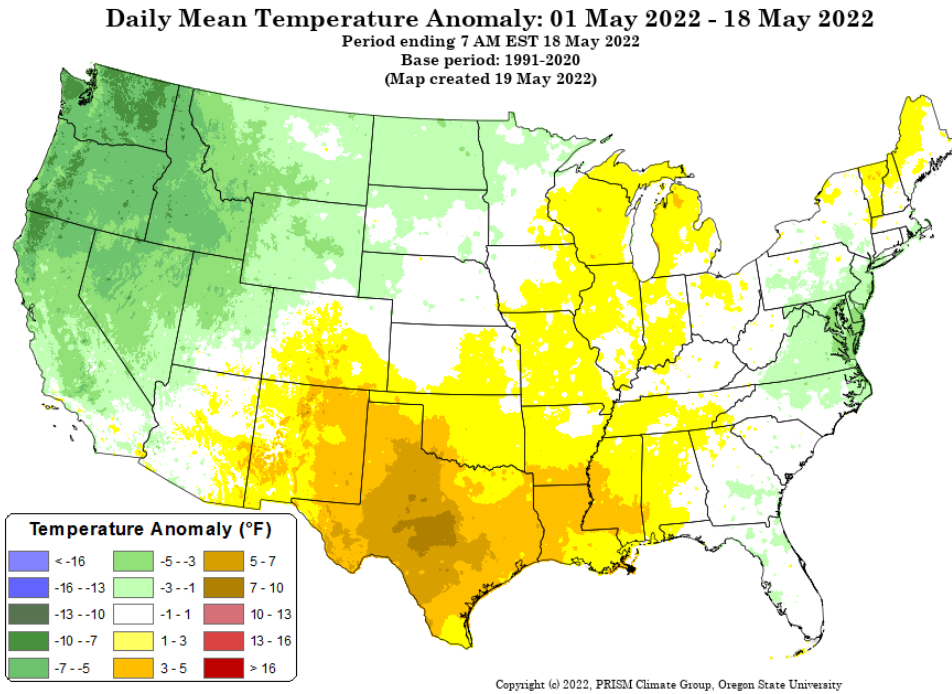
Generated 5/19/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

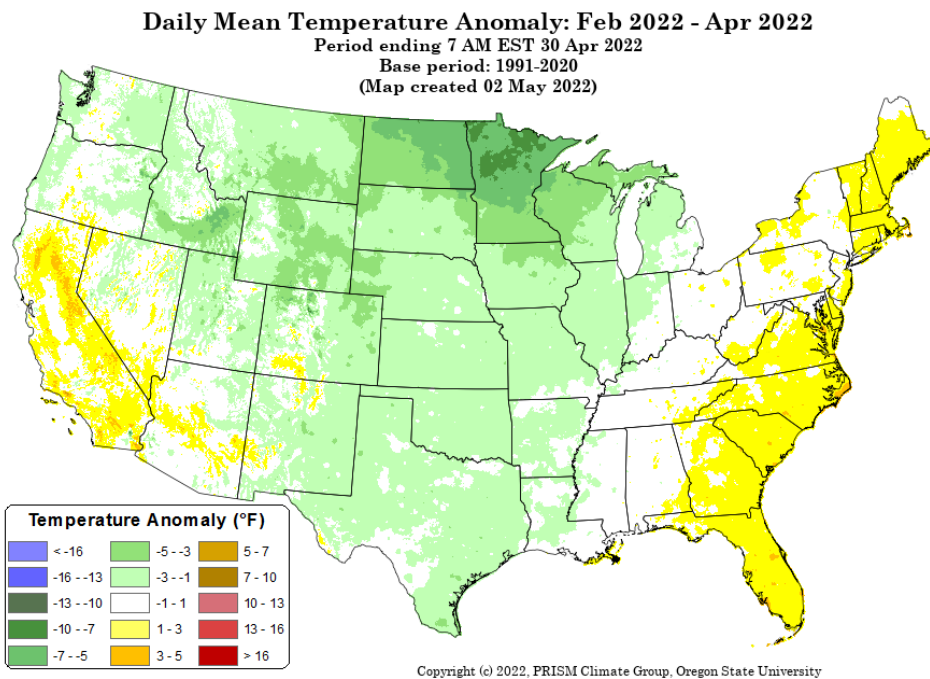
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[February through April 2022 daily mean temperature anomaly map](#)



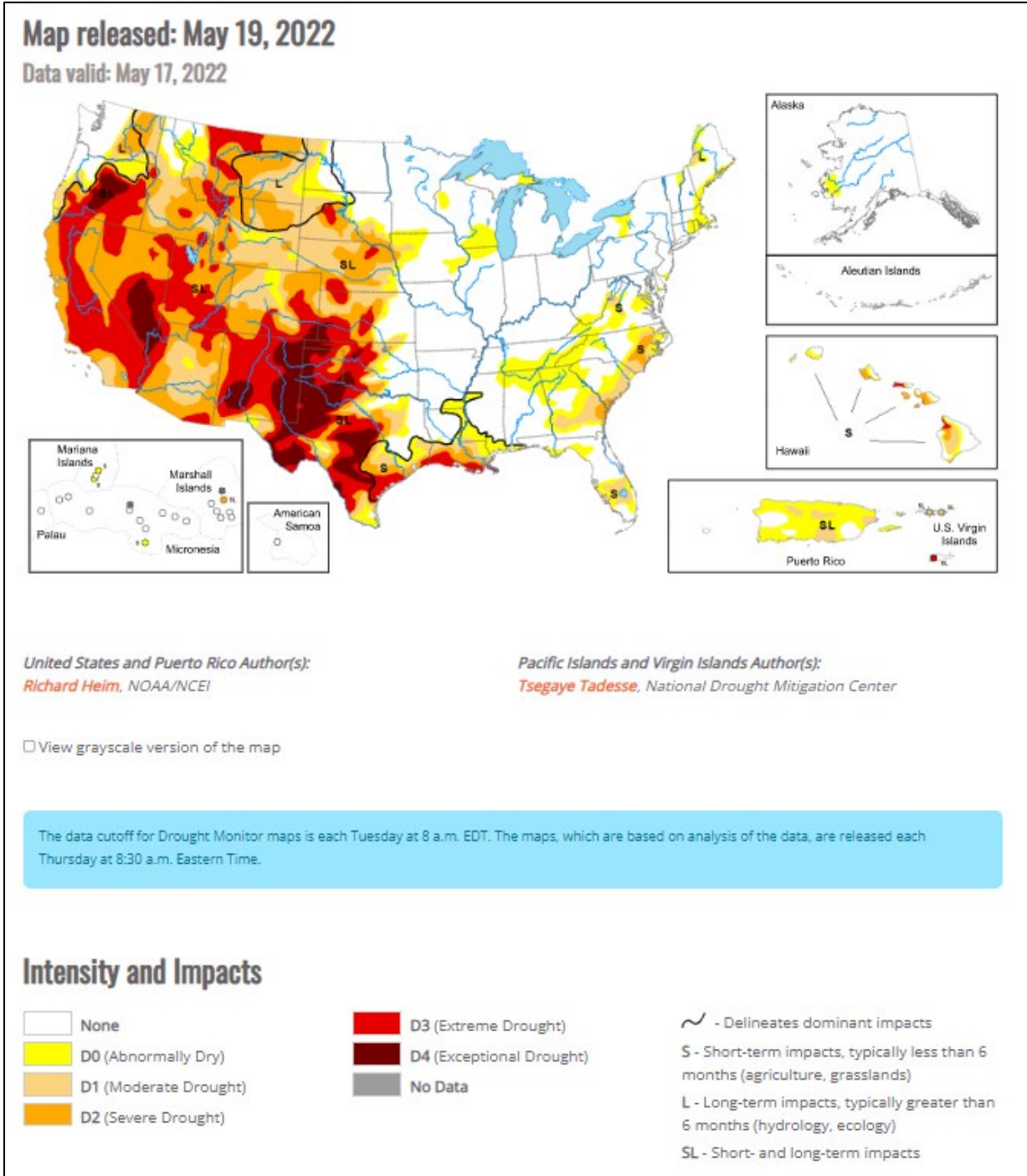
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), May 19, 2022

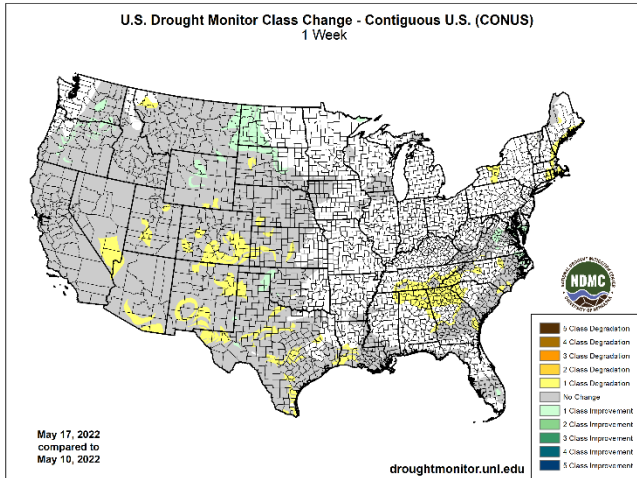
Source: National Drought Mitigation Center

“In the upper levels of the atmosphere, a strong ridge of high pressure dominated the contiguous U.S. (CONUS), from the southern Plains to Northeast, at the beginning of this U.S. Drought Monitor (USDM) week, while an upper-level trough dominated the West. The trough moved east as the week progressed, dragging a surface low pressure system and cold fronts across the northern Plains to Great Lakes, while another upper-level low moved over the Southeast and weakened. Weekly temperatures averaged much warmer than normal beneath the ridge and cooler than normal in the West beneath the trough. The fronts, lows, and upper-level troughs brought above-normal precipitation to parts of the Pacific Northwest, northern Plains to western Great Lakes, and spotty areas in the South, New England, and along the Atlantic Coast. The week was drier than normal across the rest of the CONUS. The continued lack of precipitation further dried soils, lowered stream levels, and stressed crops and other vegetation, while the excessively warm temperatures increased evapotranspiration and added to the stress. Drought or abnormal dryness contracted where precipitation was above normal, especially in the Northwest, northern Plains, and Mid-Atlantic. Drought or abnormal dryness expanded or intensified where it continued dry, especially in the Southwest, southern to central Plains, Southeast, and parts of the Northeast.”

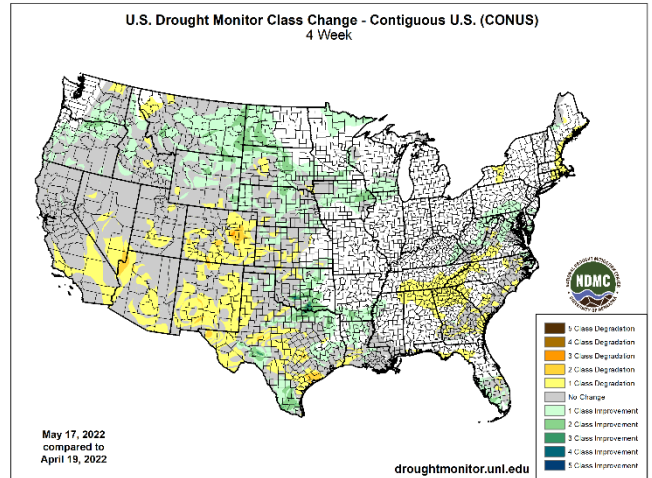
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

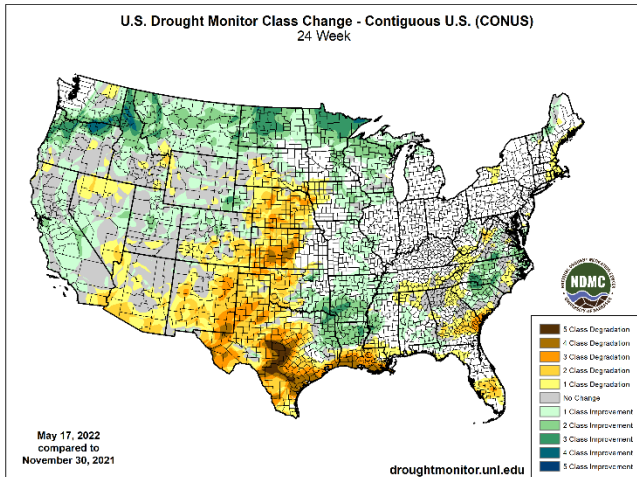
1 Week



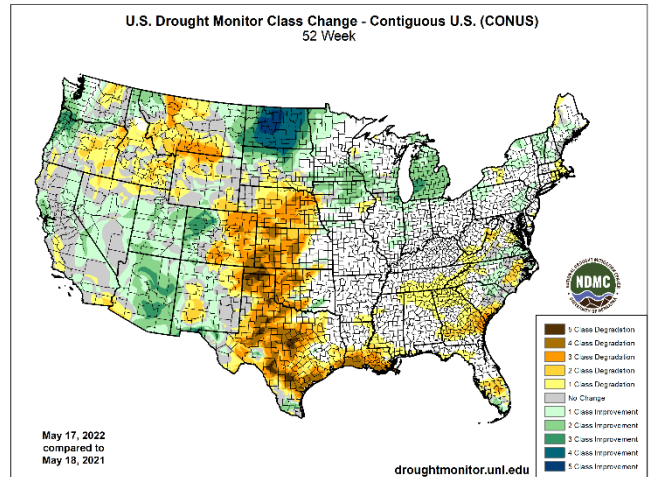
1 Month



6 Months



1 Year



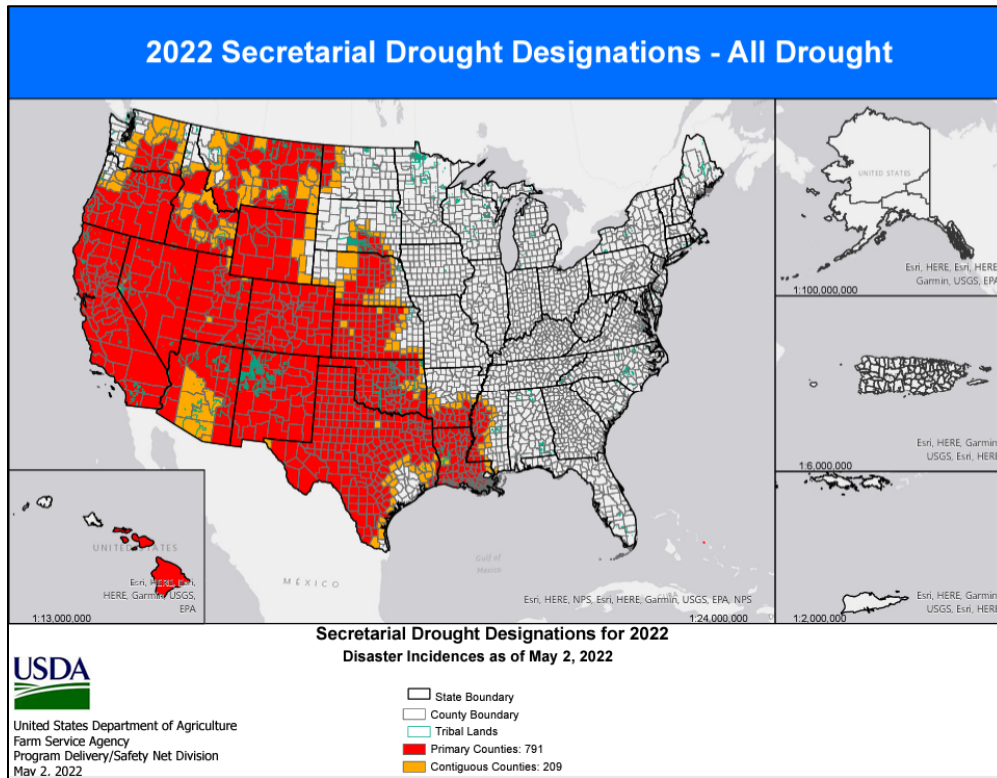
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

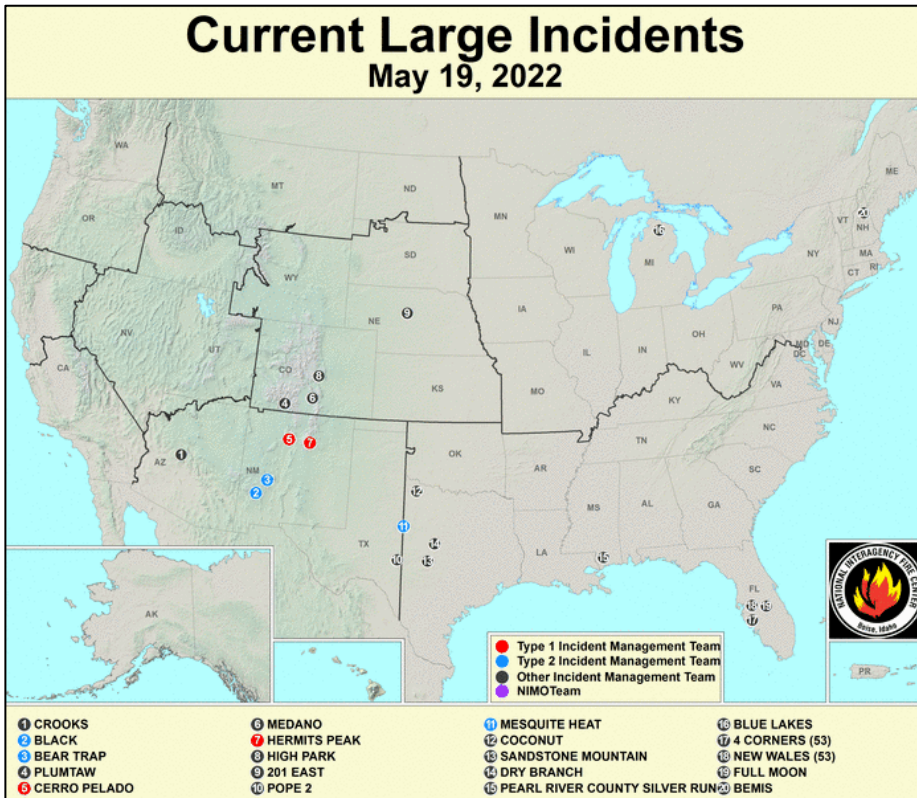
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



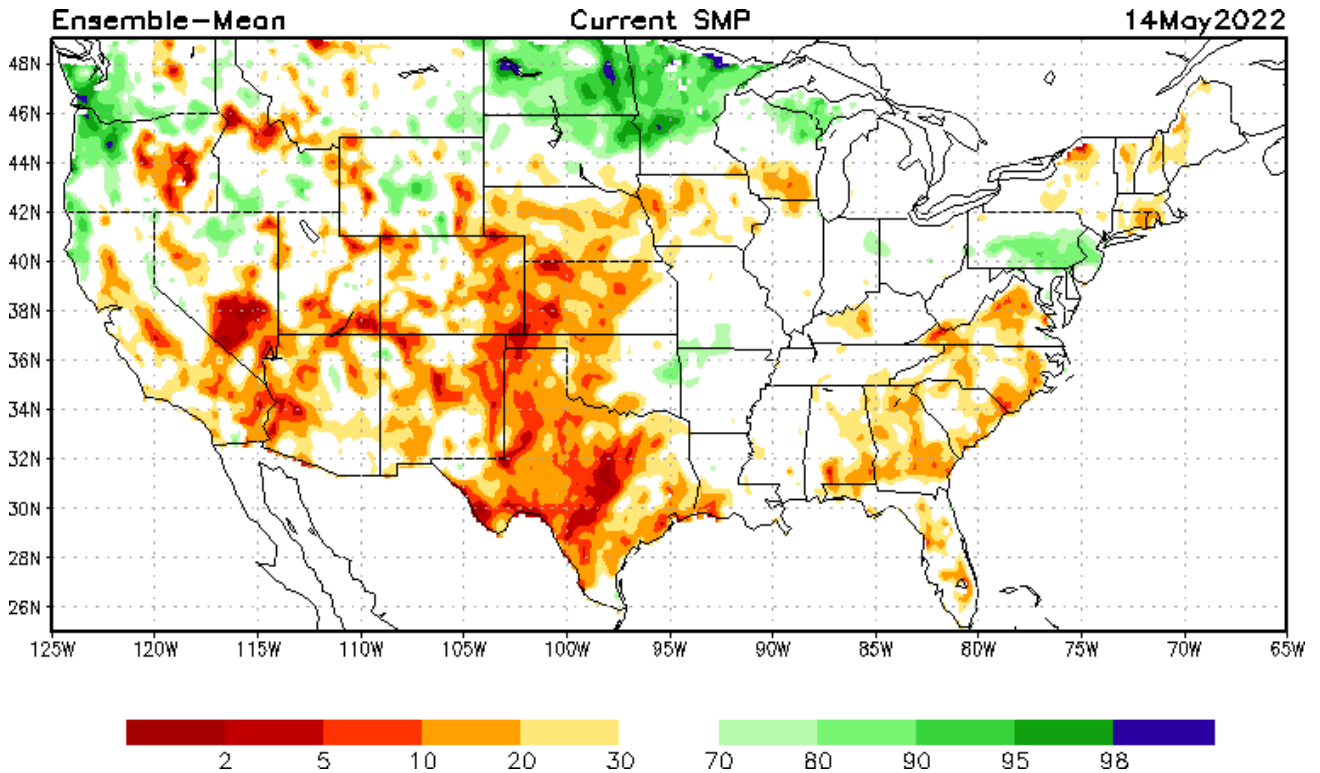
Highlighted Wildfire Resources

- [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

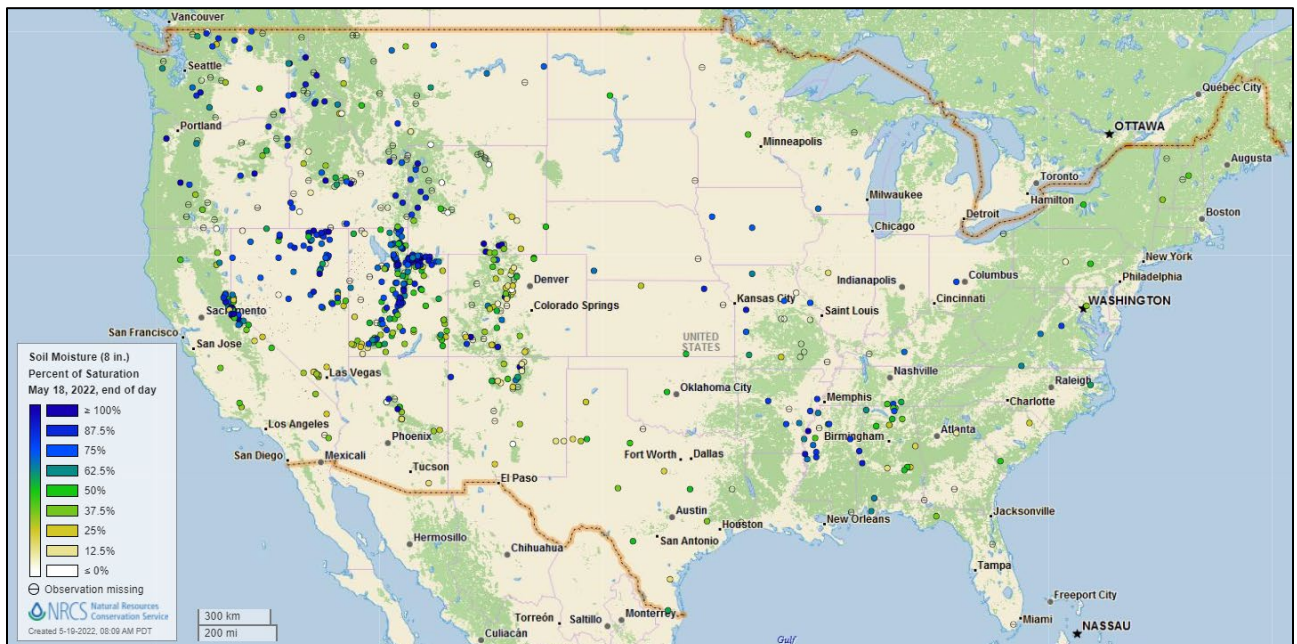


[Modeled soil moisture percentiles](#) as of May 14, 2022

Soil Moisture Percent of Saturation

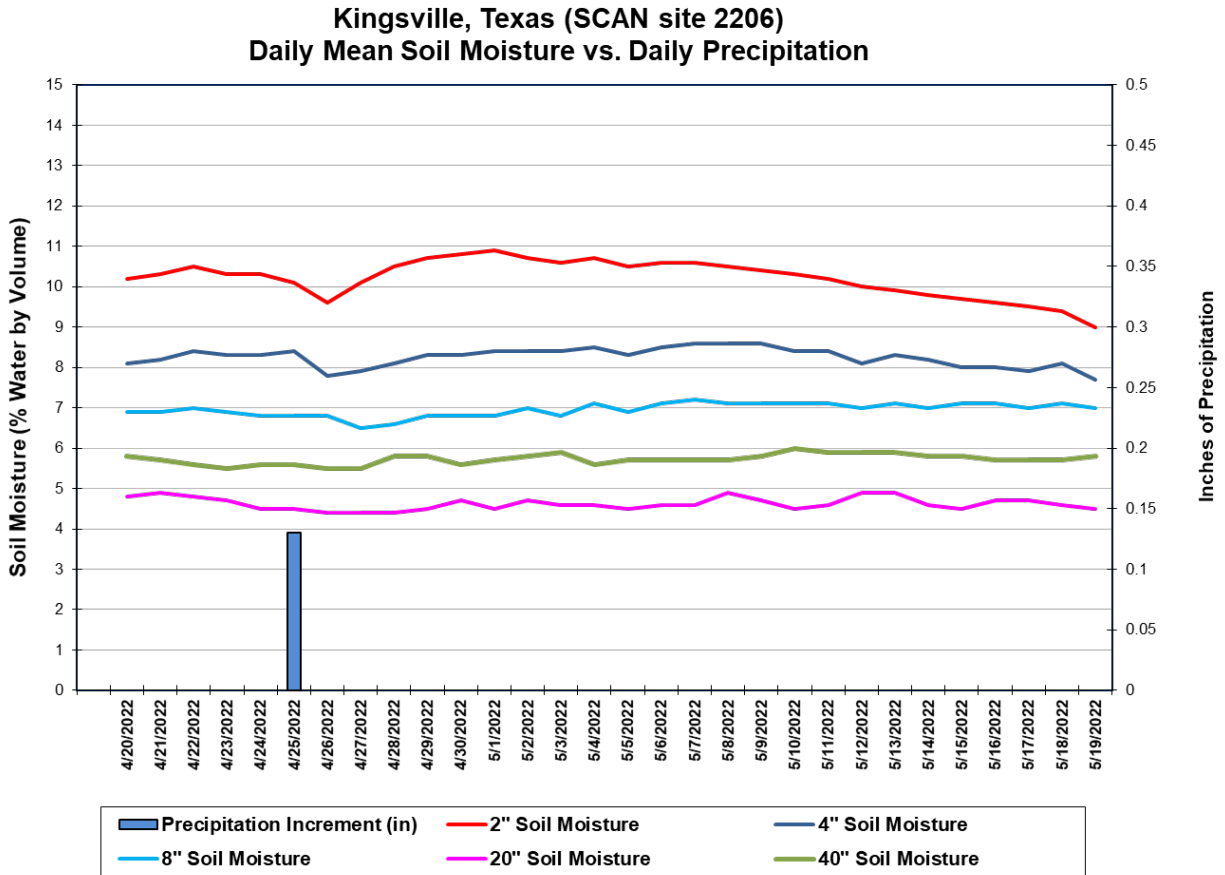
Source: NRCS SNOTEL and [Soil Climate Analysis Network \(SCAN\)](#)

[U.S. soil moisture map at 8-inch depth:](#)



Soil Moisture

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



This chart shows the precipitation and soil moisture for the last 30 days at the [Kingsville](#) SCAN site in Texas. The only precipitation received during the period was 0.13 inches on April 25, causing a slight increase in soil moisture at the -2-inch sensor depth. Soil sensors at all depths currently are reporting soil moisture levels of less than 10% water by volume.

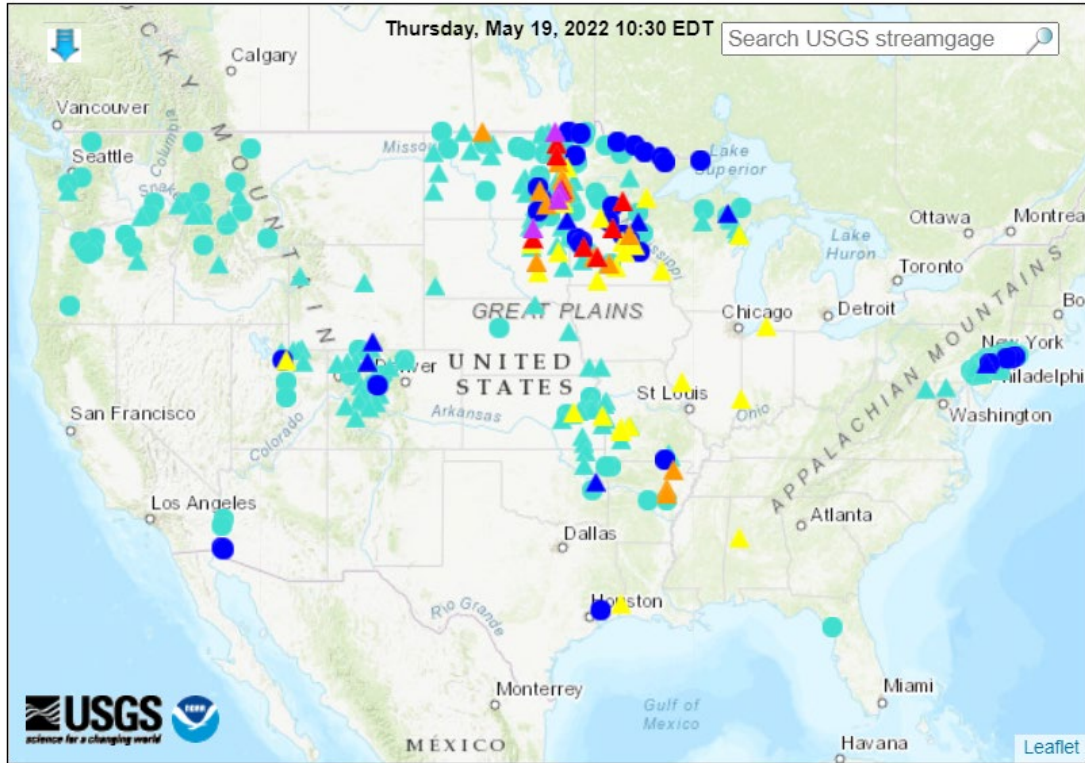
Soil Moisture Data Portals

- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey [WaterWatch Streamflow Map](#)

Map of flood and high flow conditions
(27 in floods [major: 4, moderate: 8, minor: 15], 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

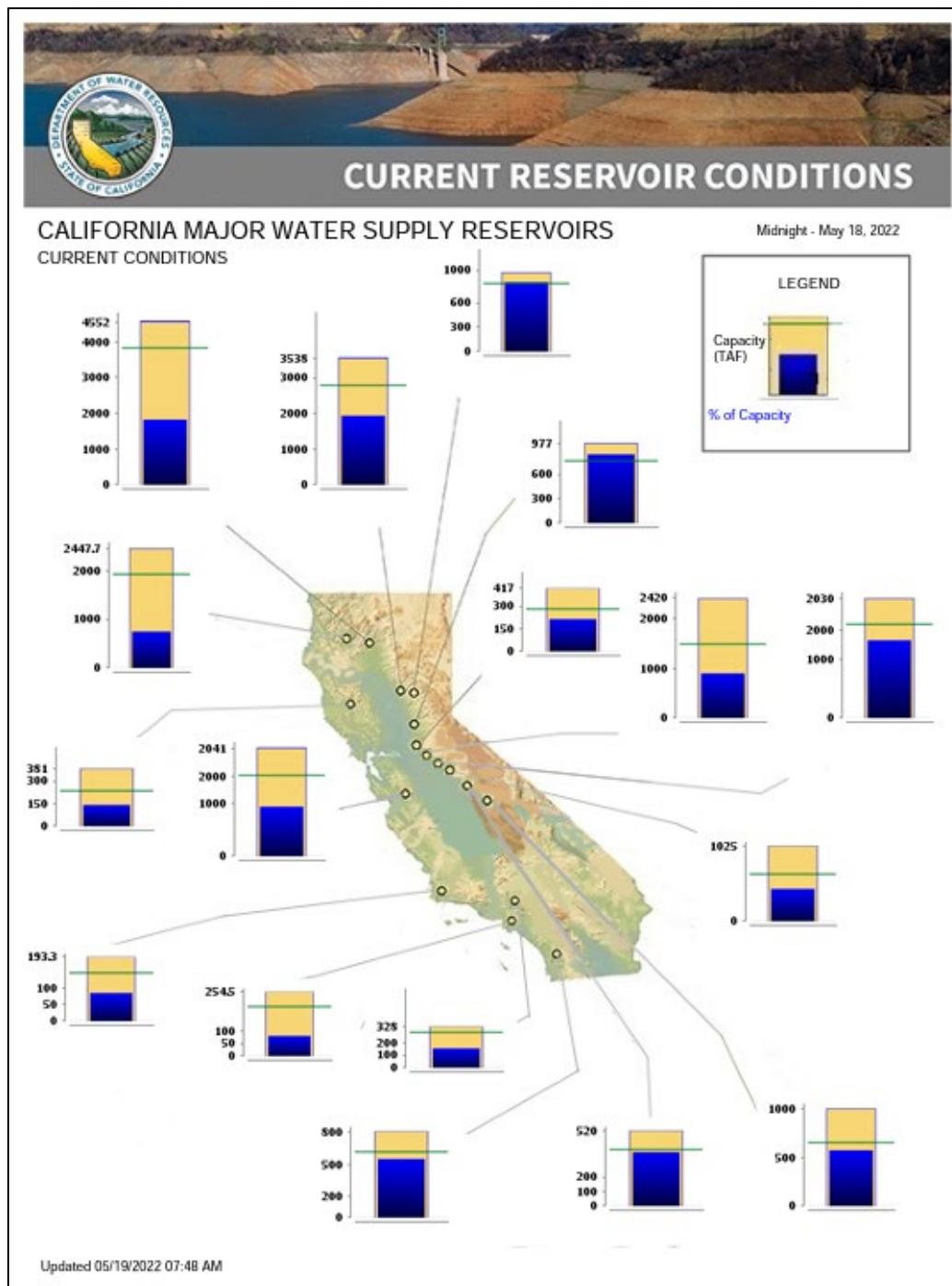
Hydromet Teacup Reservoir Depictions

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, May 19, 2022: “Weekend heat will shift into the eastern U.S., where temperatures could reach 100°F as far north as the middle Atlantic States. By late Sunday, a cold front will sweep away the Eastern heat, preceded and accompanied by showers and thunderstorms. Showers will linger across the South, with some much-needed rain possibly developing early next week across the southern Plains. Except in the Northeast, 5-day rainfall could total 1 to 3 inches or more along and east of a line from Texas to Wisconsin. In contrast, dry weather will prevail into next week from California to the Four Corners region. Elsewhere, cool air will continue to expand across the North, with late-week frost across the interior Northwest spreading into parts of the northern Plains and upper Midwest during the weekend. Markedly cooler air will also cover the remainder of the Plains and Midwest. The NWS 6- to 10-day outlook for May 24 – 28 calls for near- or above-normal temperatures across most of the country, with the greatest likelihood of hot weather covering California and the eastern Gulf Coast region. Cooler-than-normal conditions will be confined to parts of the Northwest and upper Midwest. Meanwhile, above-normal precipitation in the Northwest and much of the eastern half of the U.S. should contrast with drier-than-normal weather from California to the central and southern High Plains.”

Weather Hazards Outlook: [May 21 – 25, 2022](#)

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

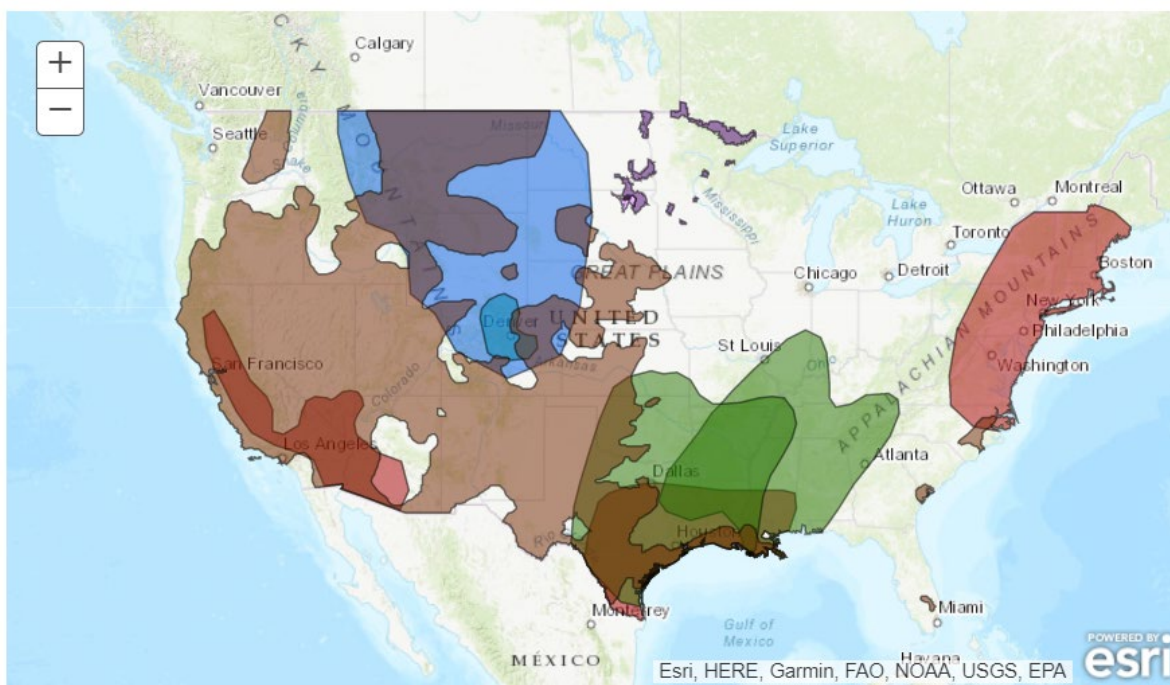
Created May 18, 2022

NOTE: These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

Precipitation	<input checked="" type="checkbox"/>
Temperature	<input checked="" type="checkbox"/>
Soils	<input checked="" type="checkbox"/>

Legend			
	Flooding Likely		Excessive Heat
	Flooding Occurring or Imminent		High Winds
	Flooding Possible		Much Above Normal Temperatures
	Freezing Rain		Much Below Normal Temperatures
	Heavy Ice		Significant Waves
	Heavy Precipitation		Enhanced Wildfire Risk
	Heavy Rain		Severe Drought
	Heavy Snow		
	Severe Weather		

Valid May 21, 2022 - May 25, 2022

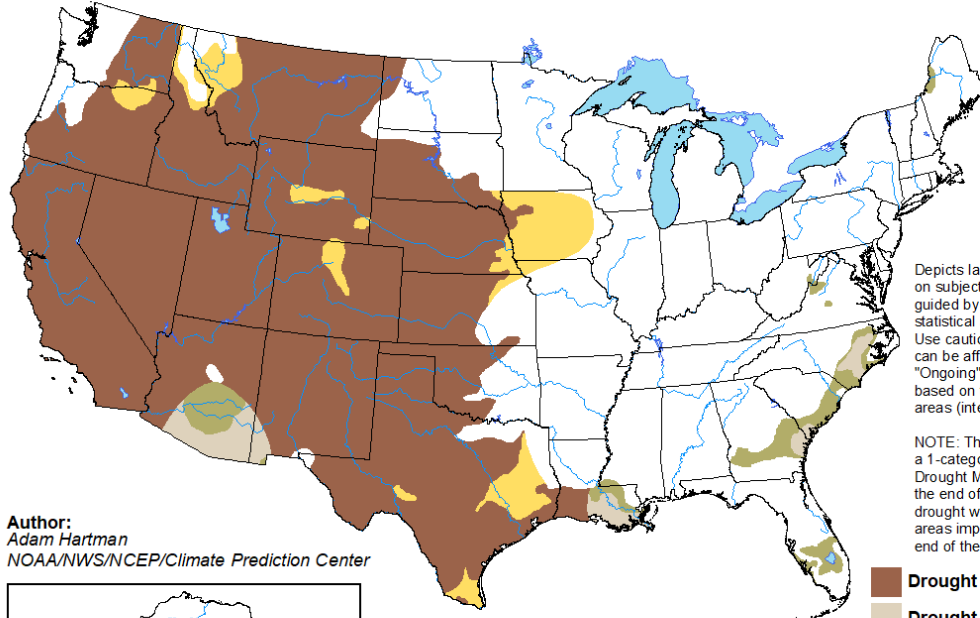


Seasonal Drought Outlook: [May 19 – August 31, 2022](#)

Source: National Weather Service

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

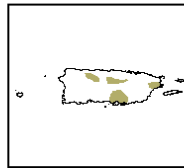
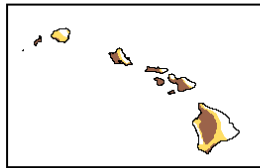
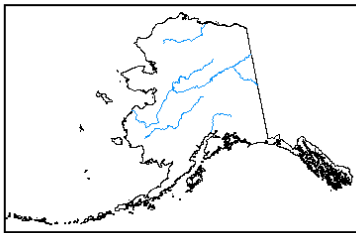
Valid for May 19 - August 31, 2022
Released May 19



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Adam Hartman
NOAA/NWS/NCEP/Climate Prediction Center



- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



<http://go.usa.gov/3eZ73>

Climate Prediction Center 3-Month Outlook

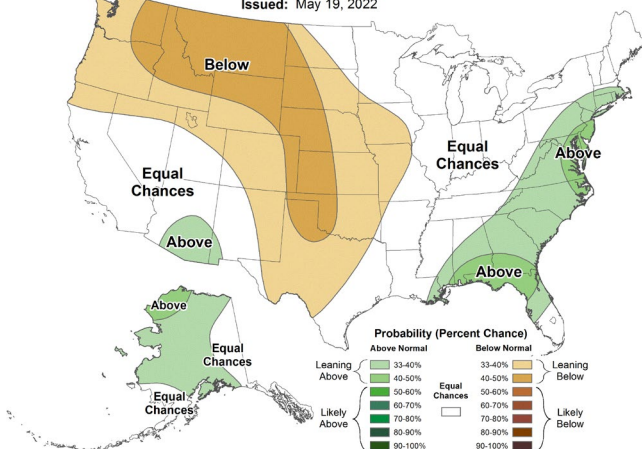
Source: National Weather Service

Precipitation

Temperature

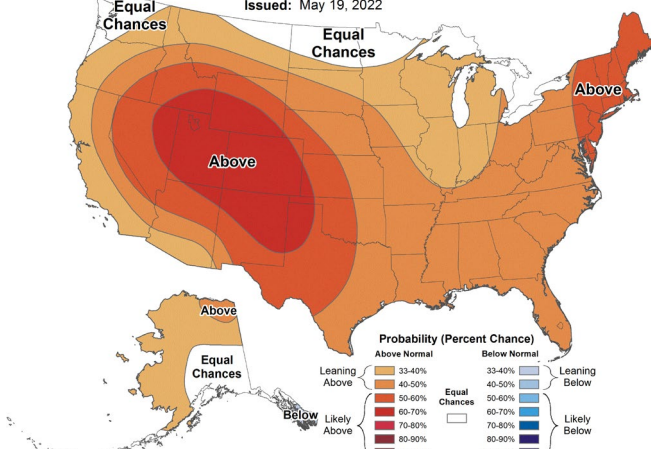
Seasonal Precipitation Outlook

Valid: Jun-Jul-Aug 2022
Issued: May 19, 2022



Seasonal Temperature Outlook

Valid: Jun-Jul-Aug 2022
Issued: May 19, 2022



[June-July-August 2022 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](#).