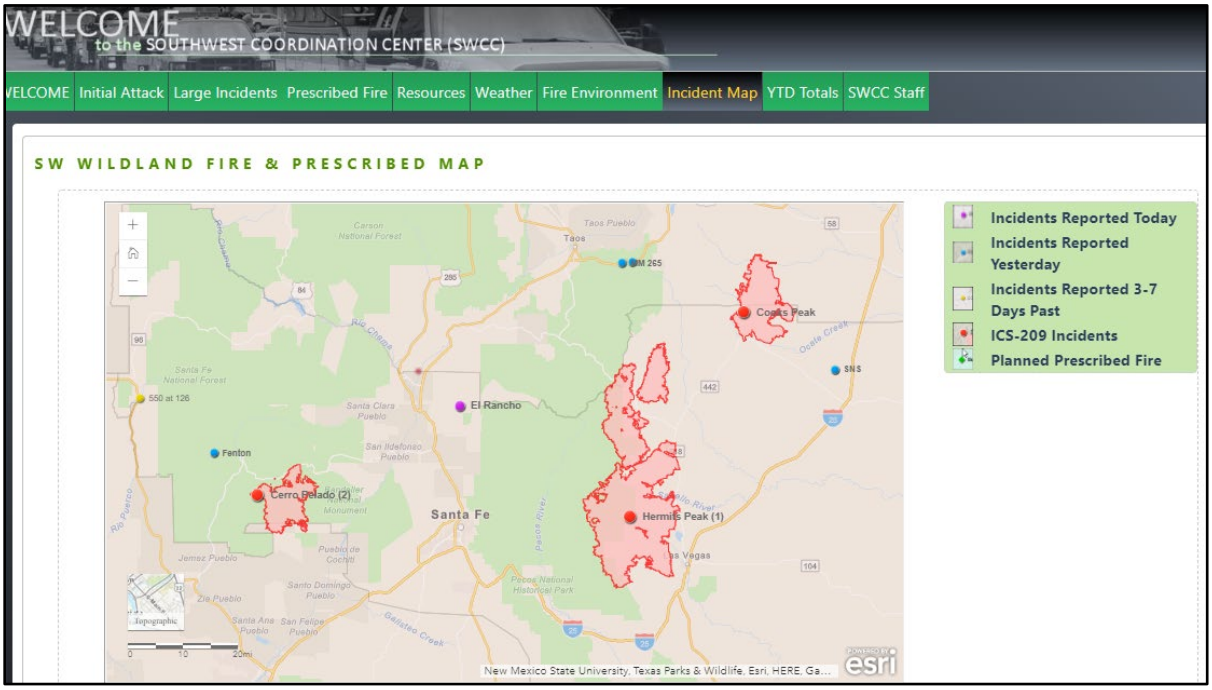
United States Department of Agriculture

Water and Climate Update

May 12, 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.

Large wildfires burn in New Mexico and Arizona

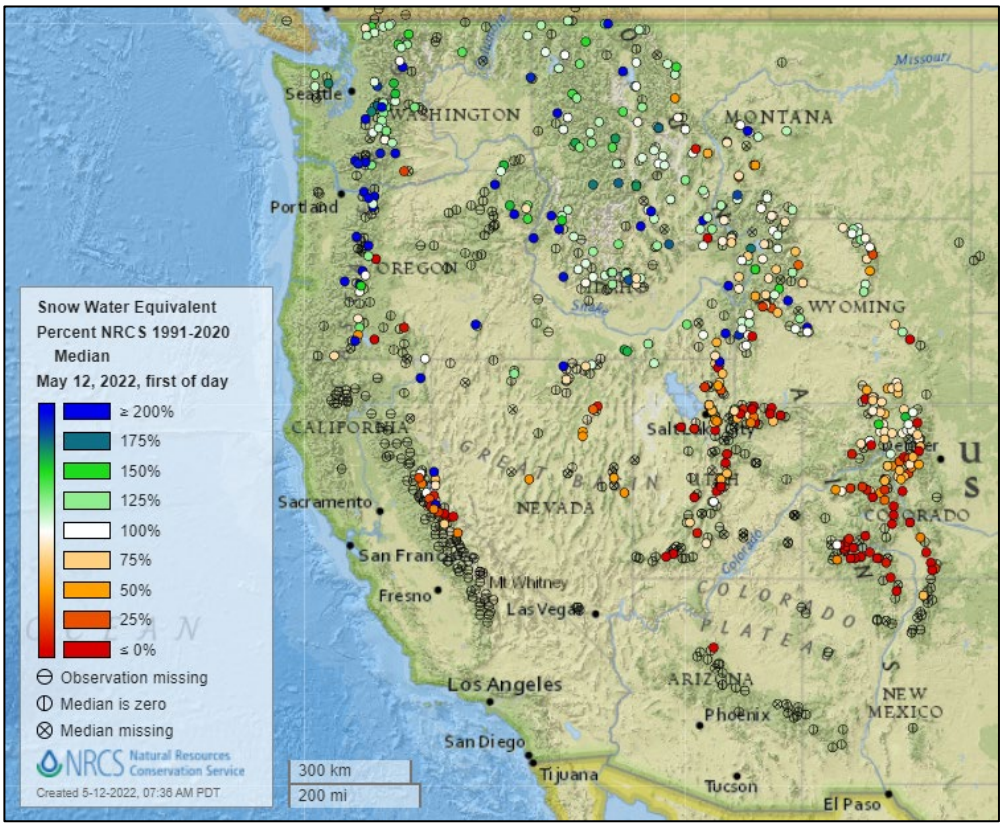


Several massive wildfires are burning in the Southwestern U.S. Currently, the largest fire is the Hermits Peak Fire in northern New Mexico, which has burned more than 259,000 acres so far and is only 29% contained with over 1,800 personnel assigned to the incident. Red flag warnings for strong wind and low humidity are creating dangerous fire conditions across the region. Nationally, there are nine active large wildfires with six located in the Southwest. The total area burned by wildfires so far in 2022 is 1.29 million acres.

Related:

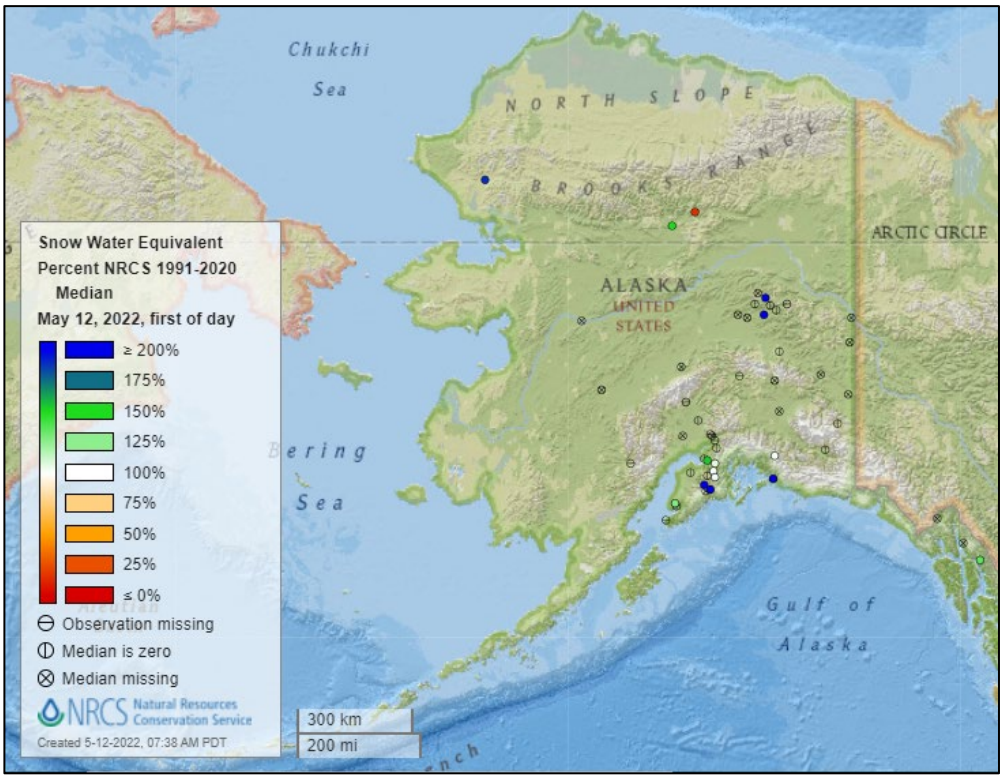
'No Good Place to Stop It': More People Flee New Mexico Wildfire – U.S. News & World Report
New Mexico wildfire surpasses 200,000 acres as weather worsens - NBC
Arizona wildfire updates: San Rafael Fire grew to over 11,600 acres, reached 12% containment – USA Today
Evacuations issued near Arizona-Mexico border as fire grows to 10,000 acres, no containment – KTAR (AZ)
New Mexico fire fight tops $65 million as wildfires march on – AP
New Mexico firefighting costs top $65 million as America's largest wildfire rages – USA Today
New Mexico firefighters beg holdouts to evacuate village – Reuters
Massive New Mexico wildfire leaps ahead with flying embers – KESQ News (CA)

Snow



[Snow water equivalent percent of median map]

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

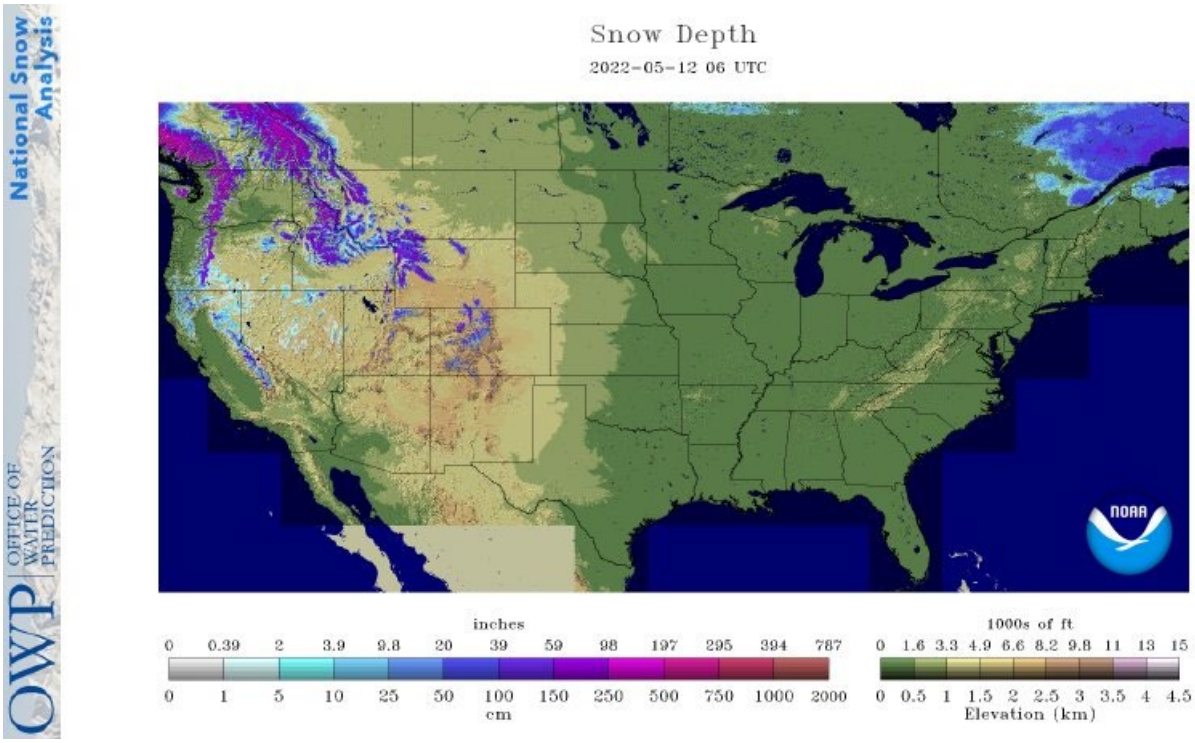


[Alaska snow water equivalent percent of median map]

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

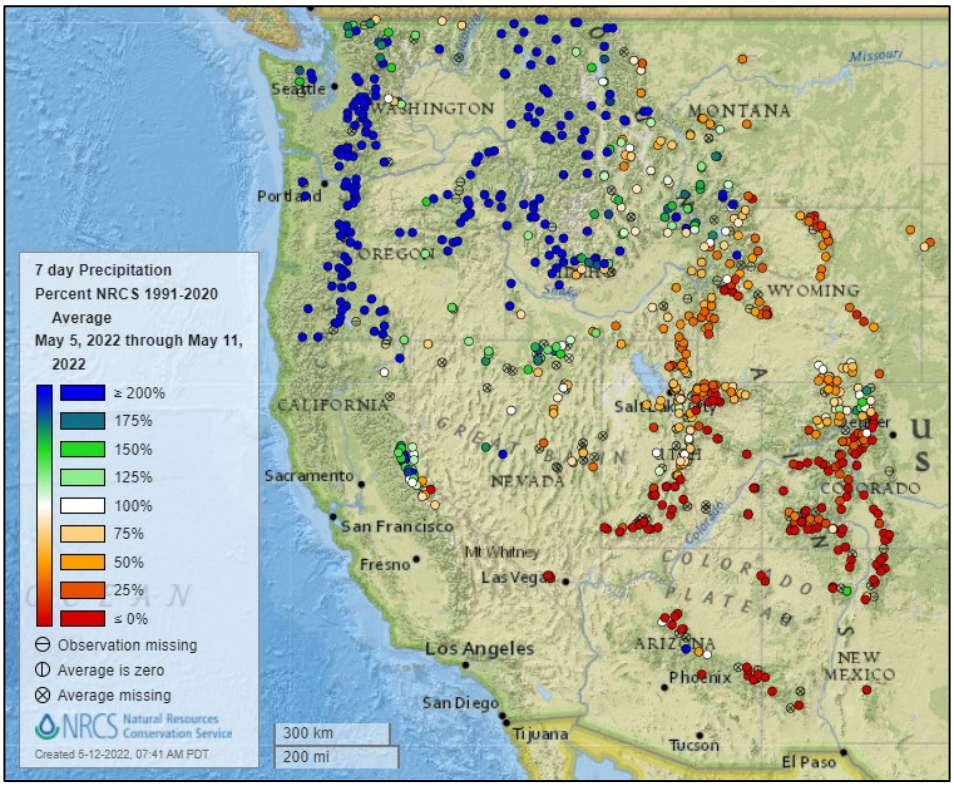
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

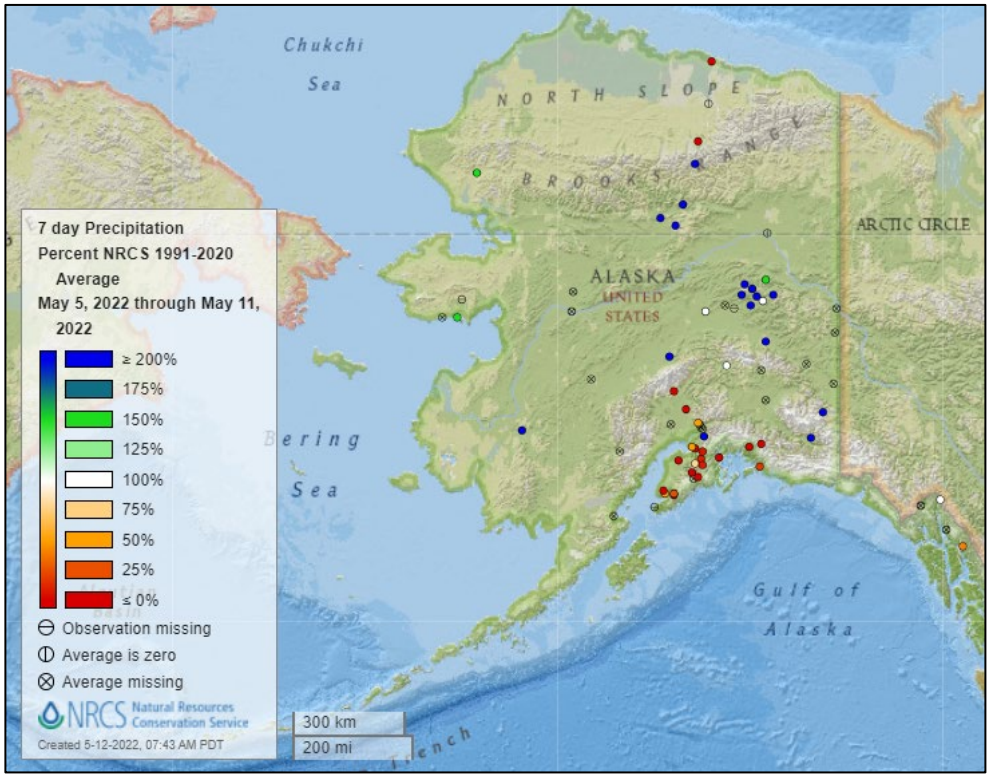


[7-day precipitation percent of average map]

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]

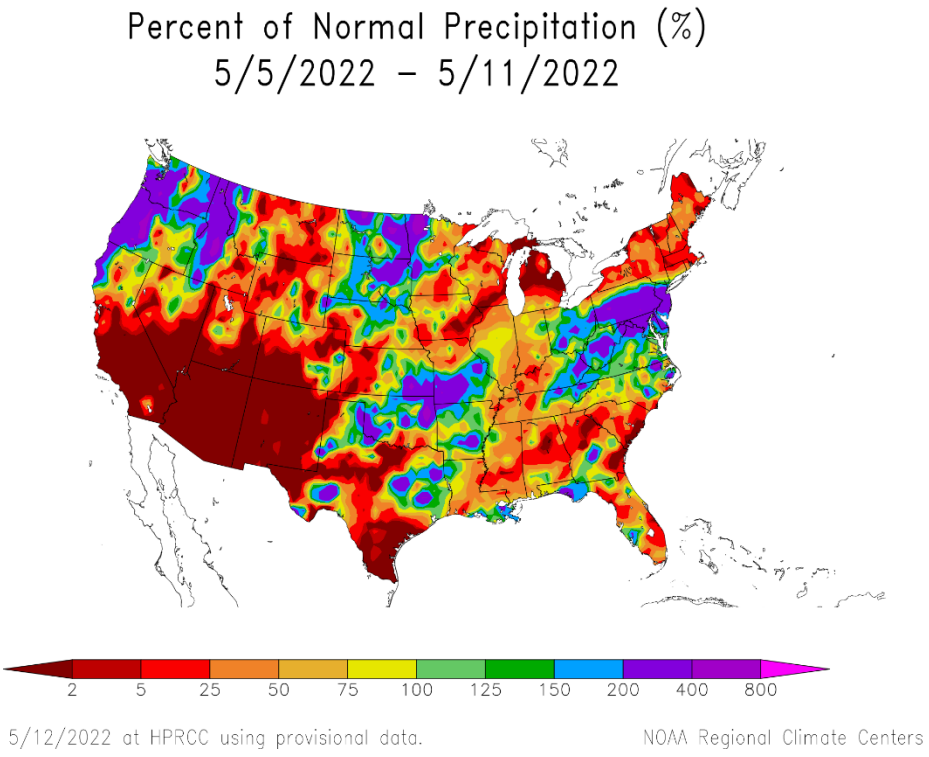


Last 7 Days, National Weather Service (NWS) Networks

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

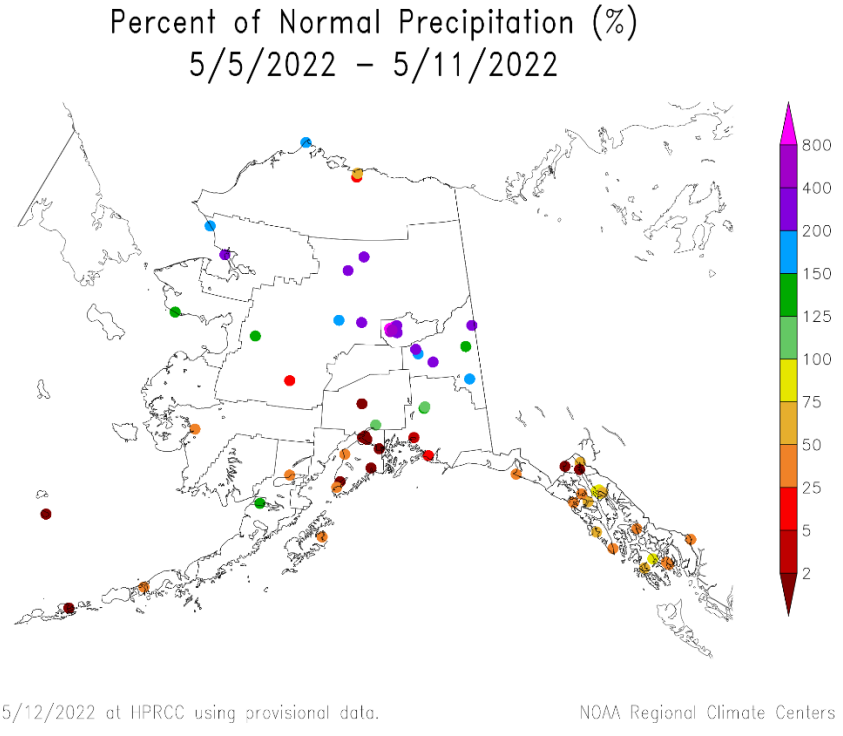


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

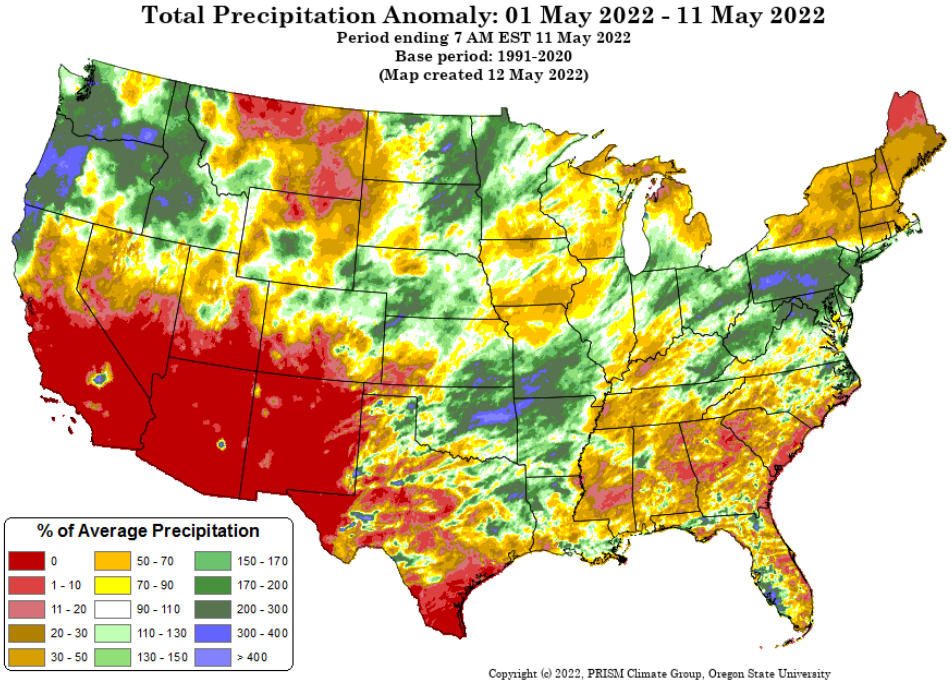
7-day precipitation anomaly map for Alaska.

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



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

Source: PRISM

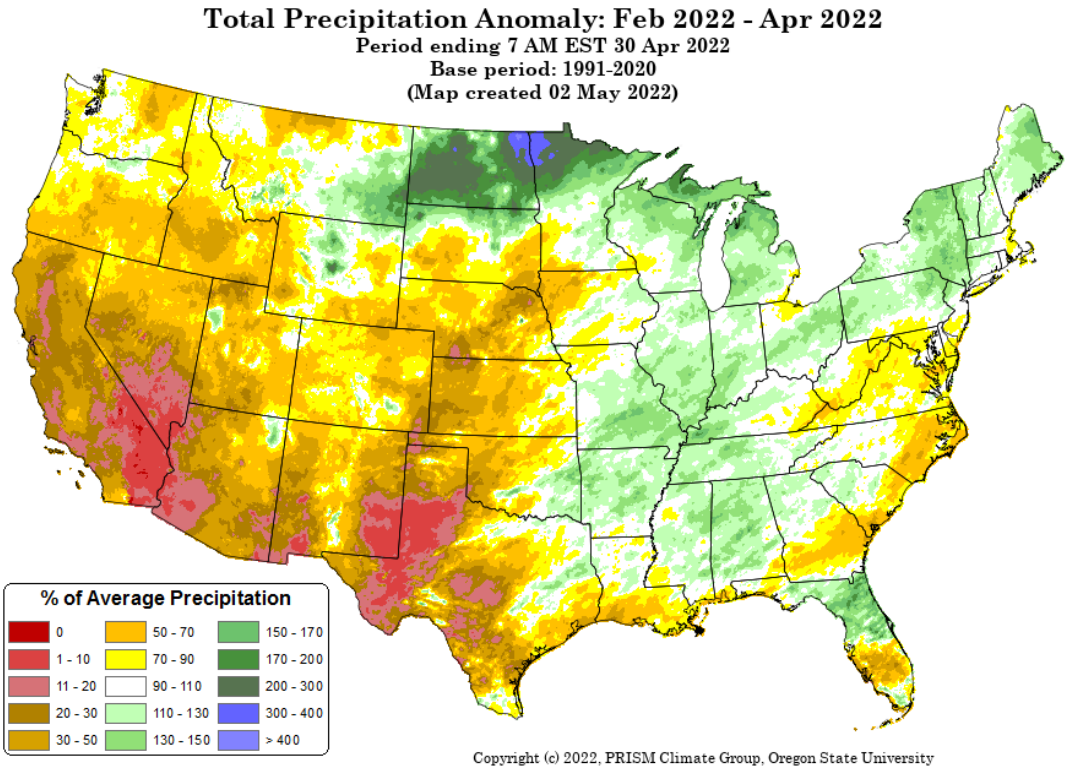


Month-to-date national total precipitation anomaly map

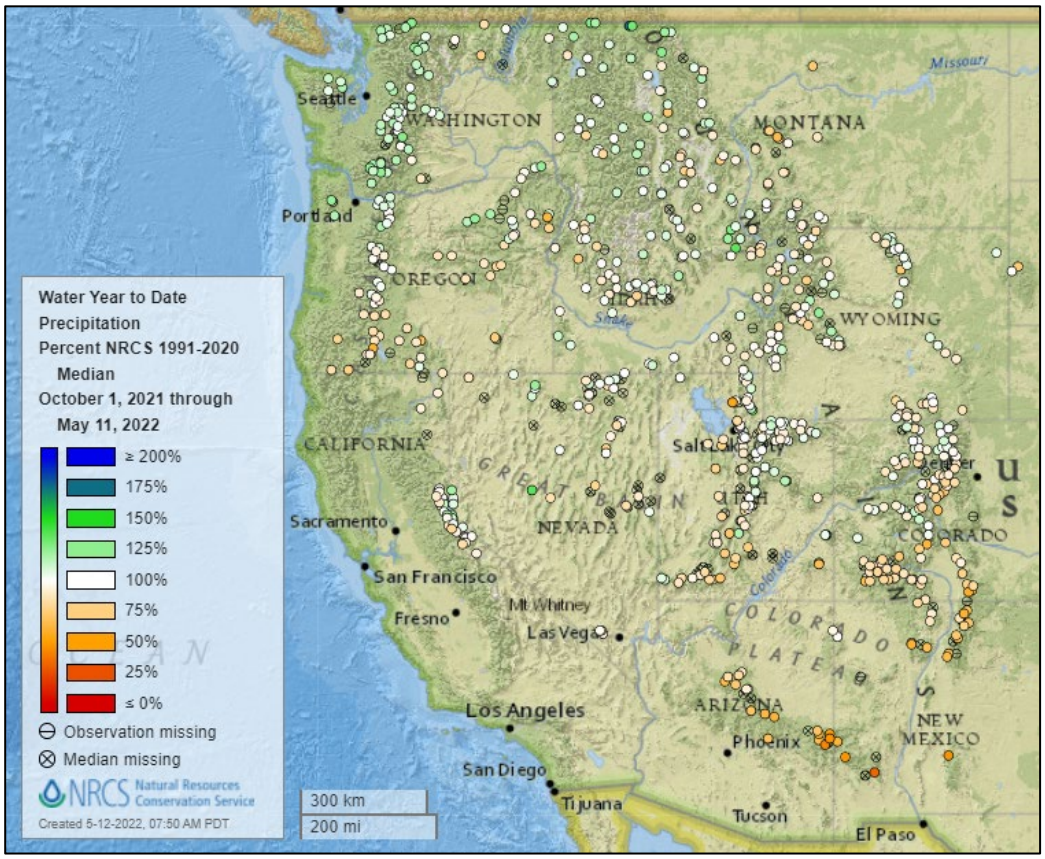
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

February through April 2022 precipitation anomaly map



Water Year-to-Date, NRCS SNOTEL Network

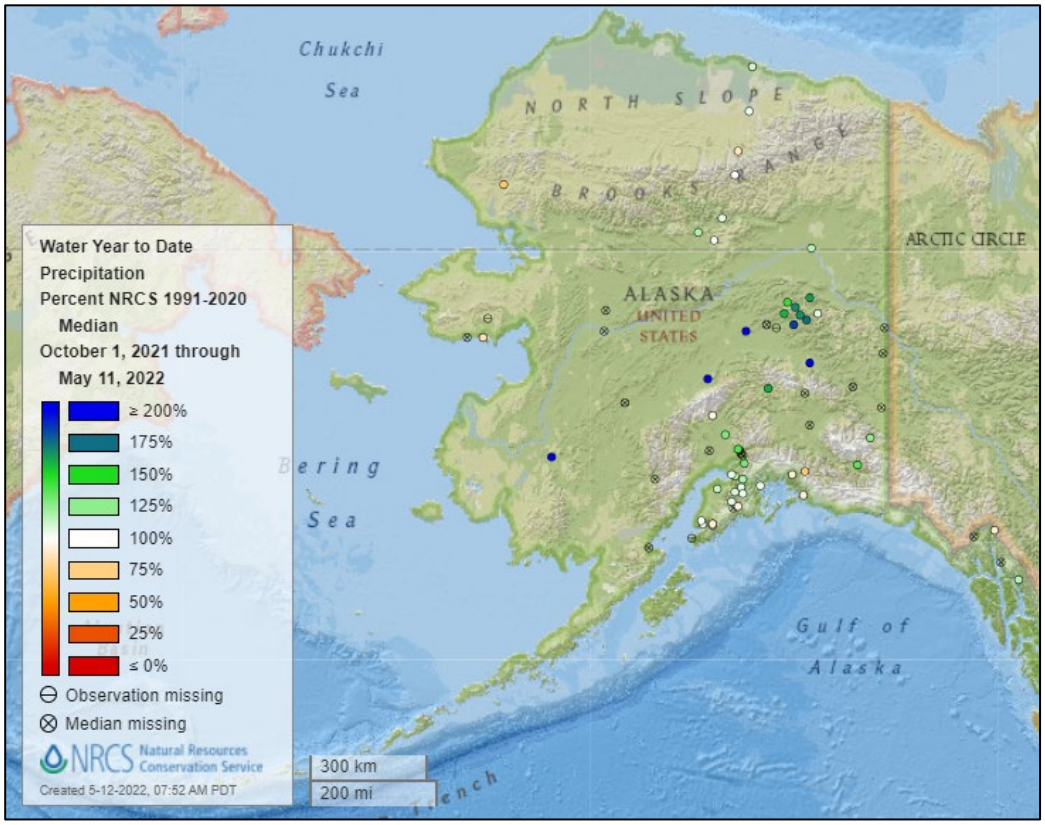


[2022 water year-to-date precipitation percent of median map]

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]

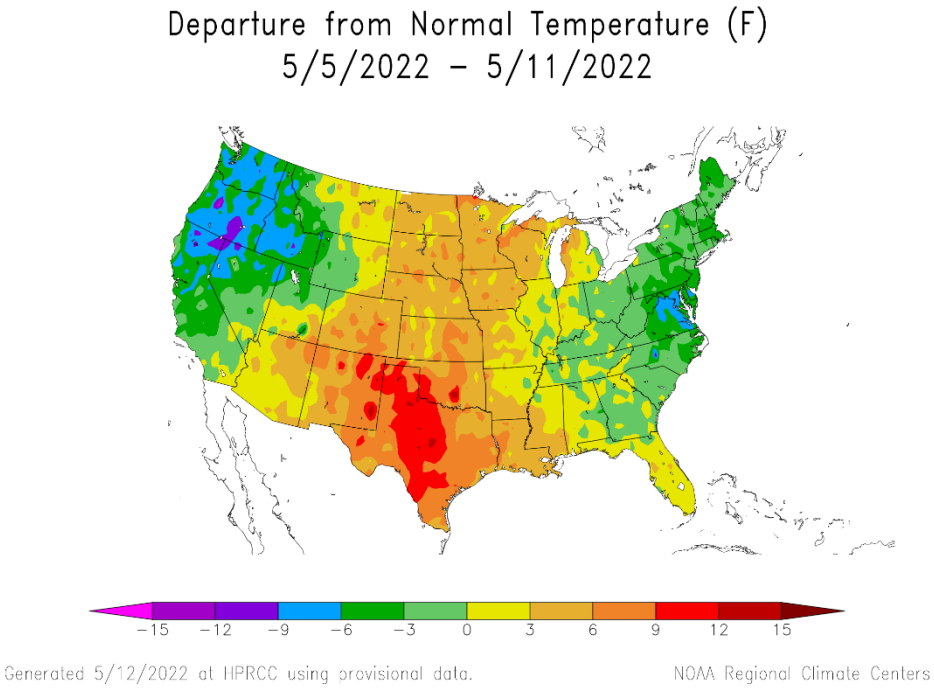
Temperature

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

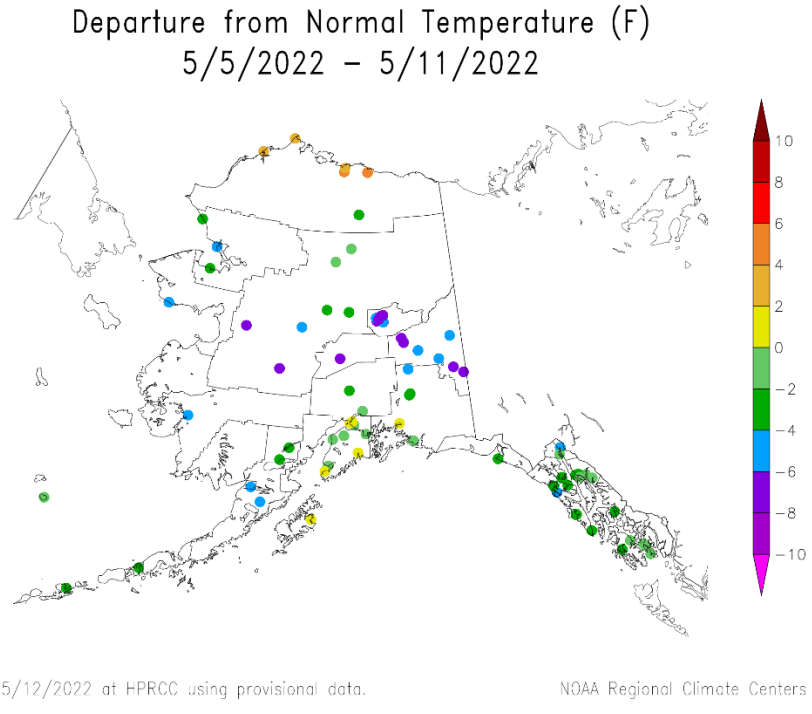


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

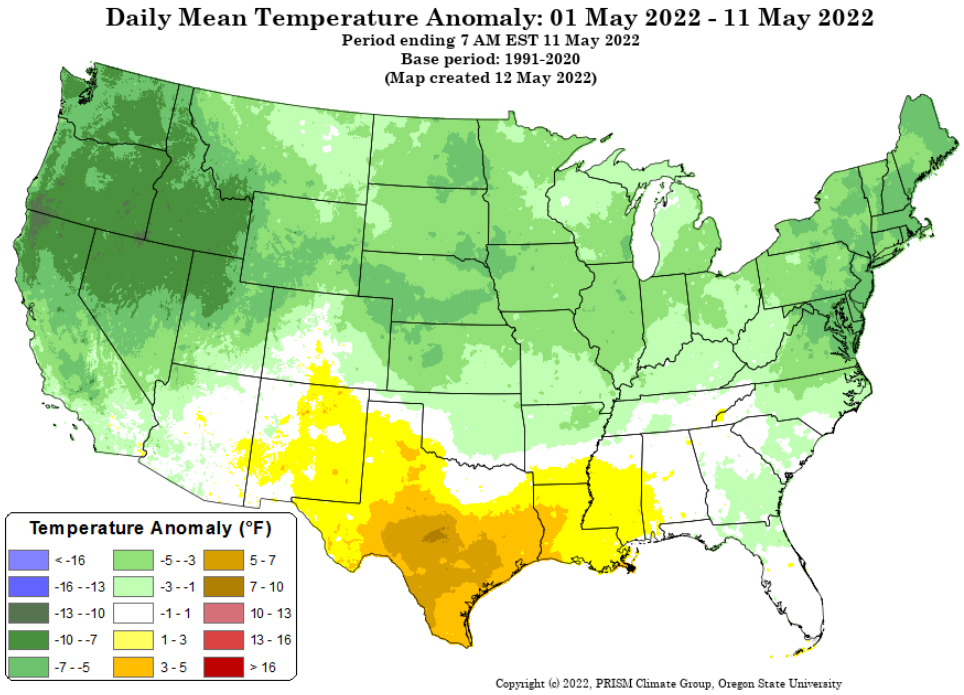
See also: 7-day temperature (° F) map



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

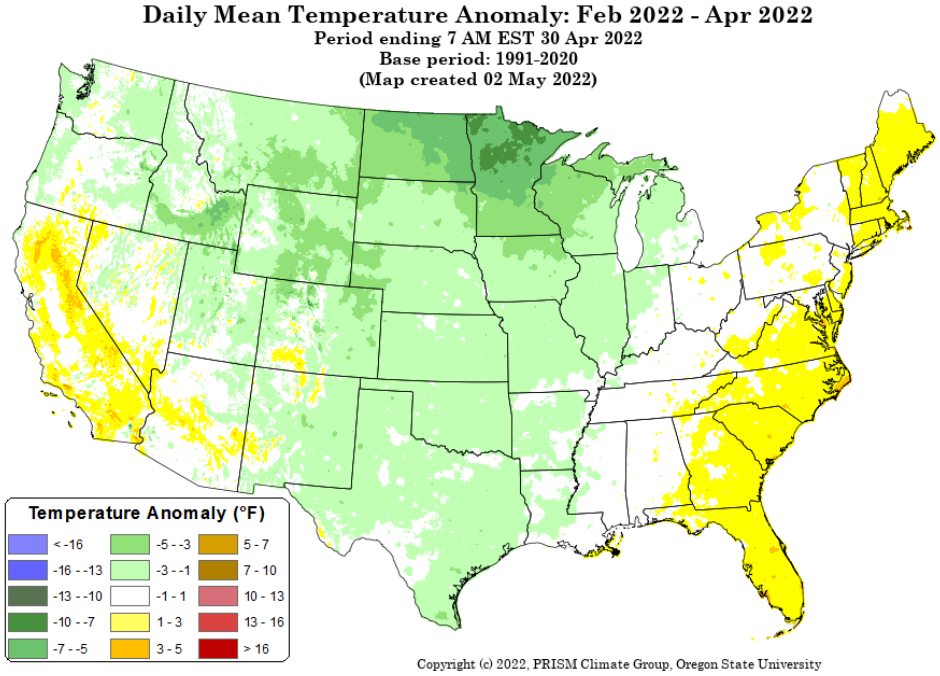
Source: PRISM

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



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

Source: PRISM

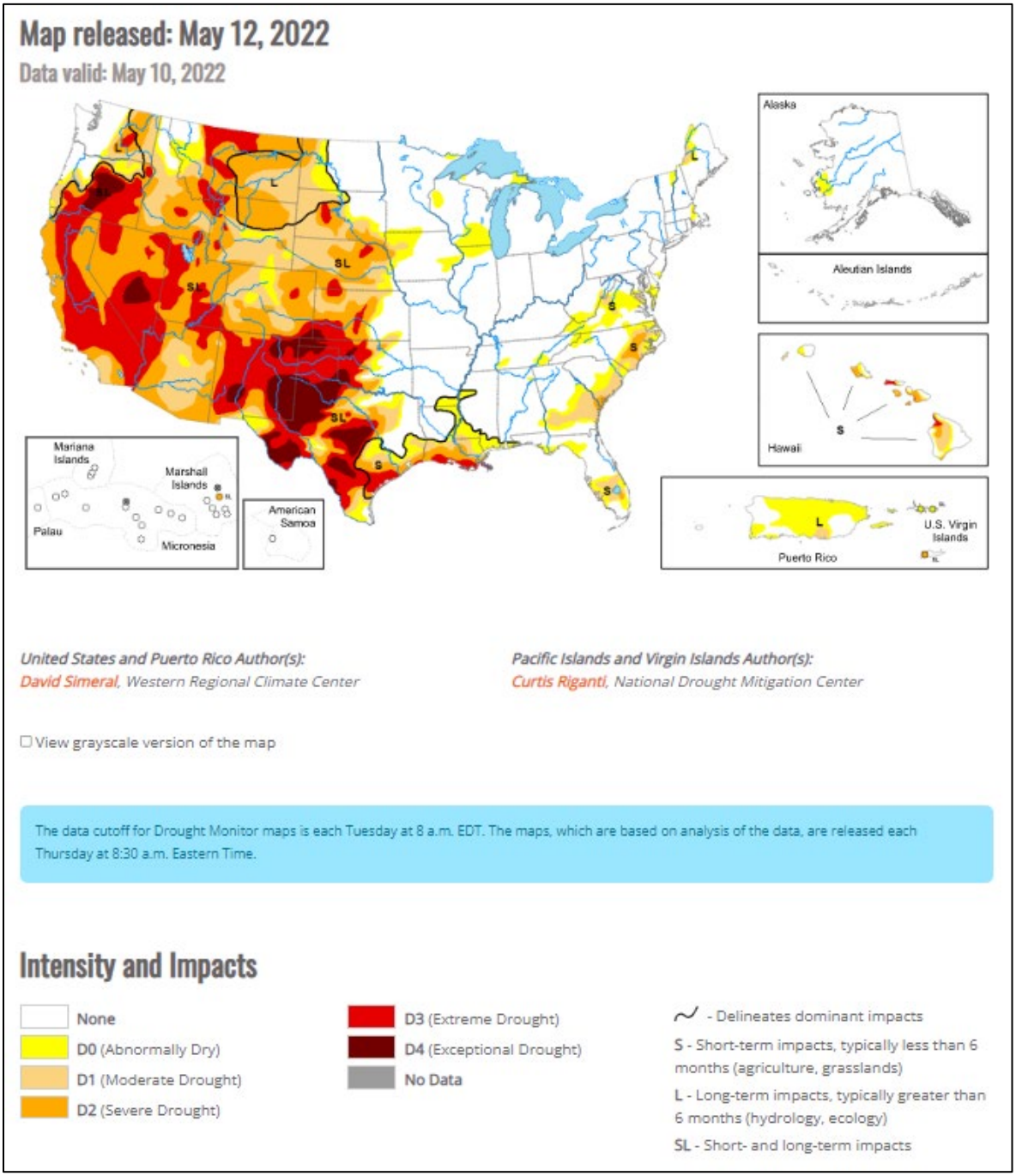


[February through April 2022 daily mean temperature anomaly map]

Drought

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

U.S. Drought Portal
Source: NOAA



Current National Drought Summary, May 12, 2022

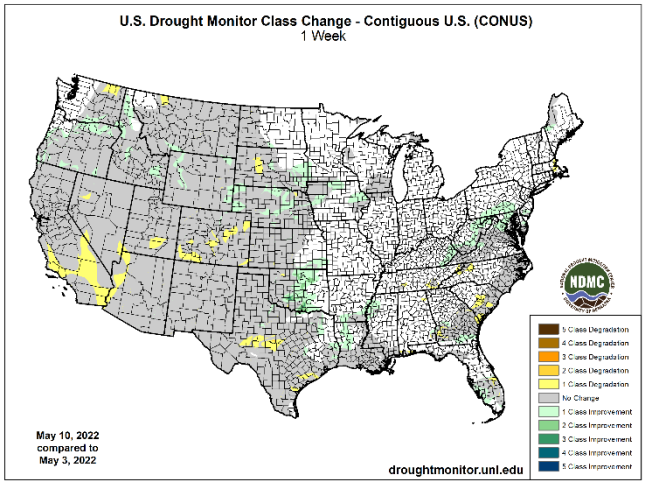
Source: National Drought Mitigation Center

“This U.S. Drought Monitor (USDM) week saw continued improvements on the map across the Pacific Northwest and the northern Plains in response to another round of unsettled weather during the past week. In the Pacific Northwest, Northern California, and the northern half of the Intermountain West, a series of disturbances starting last weekend brought cold temperatures and significant snowfall accumulations to the higher elevations of the Cascades, Klamath Mountains, Sierra Nevada, ranges of the northern Great Basin, and the Northern Rockies. Storm totals ranged from 6 to 18+ inches, providing a much-needed boost to mountain snowpack levels. In addition to the late-season snowfall, temperatures plummeted well below normal levels. Minimum temperatures dipped into the teens in the Sierra Nevada as well as across areas of the Intermountain West including Peter Sinks, Utah (Bear River Mountains of northern Utah), which registered the national low of 7 deg F on May 11, according to the National Weather Service Weather Prediction Center. In Northern California, recent storms and cooler temperatures helped to temporarily delay further deterioration of the already shallow snowpack, which was only 22% of normal statewide on May 11. In the Southwest, unseasonably warm, dry, and windy conditions exacerbated fire-weather conditions where nine large fires are currently impacting the region, including the Hermits Peak Fire which has scorched ~204,000 acres (43% contained) in the southern Sangre de Cristo Range, northeast of Santa Fe, New Mexico. In the northern and central Plains, isolated showers, and thunderstorm activity led to continued modest improvements in drought-related conditions. Meanwhile, in the southern Plains and Texas, the first heat wave of the season brought 90 to 110+ deg F temperatures to the region as well as periods of critical fire-weather conditions. In eastern portions of the southern Plains, isolated heavy rainfall accumulations (3 to 8+ inches) helped to ease drought conditions. However, drought-stricken areas of western Kansas and Oklahoma largely missed out on recent storm events. In the Midwest, light to moderate rainfall accumulations (1 to 5 inches) were observed in the southern and western portion of the region this week with most of the region remaining drought-free. In the Mid-Atlantic, rainfall accumulations ranging from 2 to 4 inches across areas of Pennsylvania, Maryland, northern Virginia, and West Virginia boosted area streamflows and helped to improve drought-related conditions on the map. In the Southeast, short-term dryness during the past 30 to 90 days led to minor degradations in the Lower Savannah River Basin along the Georgia-South Carolina border, while another round of isolated storms in southern Florida led to improvements in drought-affected areas.”

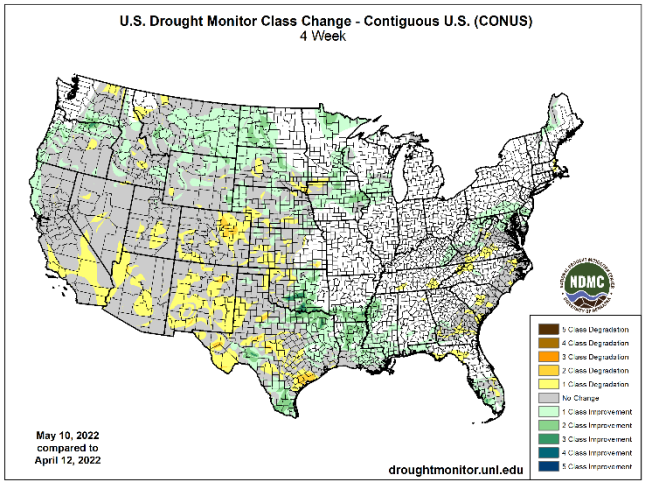
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

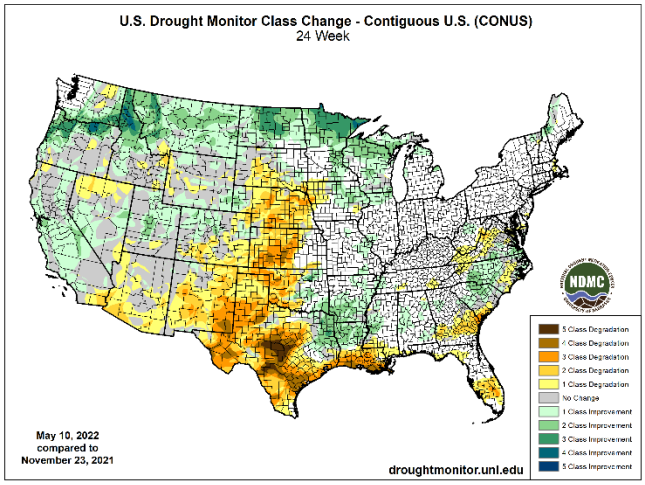
1 Week



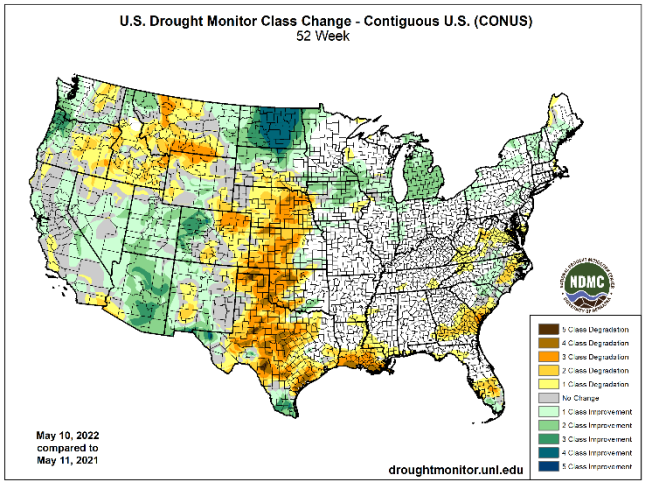
1 Month



6 Months



1 Year



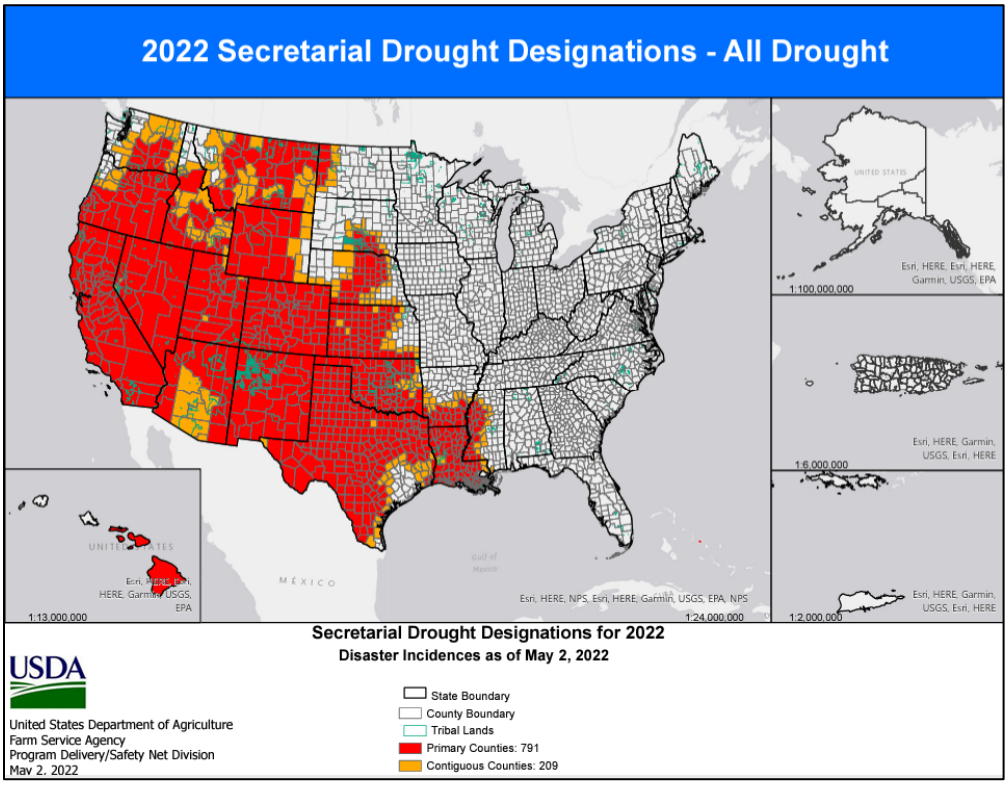
Changes in drought conditions over the last 12 months for the contiguous U.S.

Highlighted Drought Resources

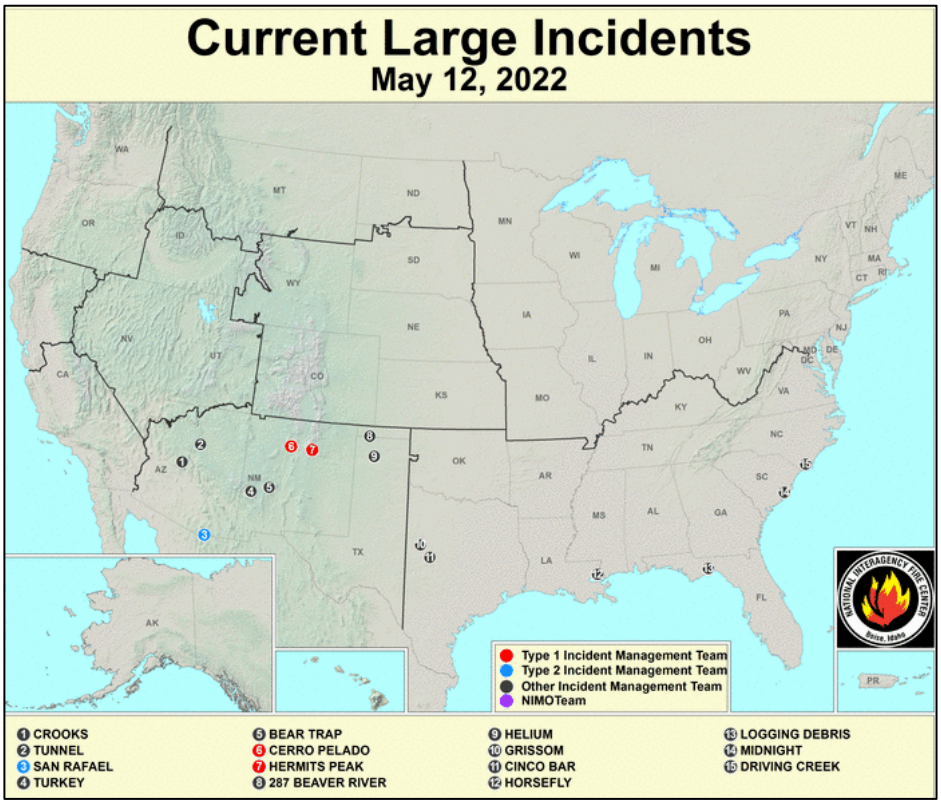
- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



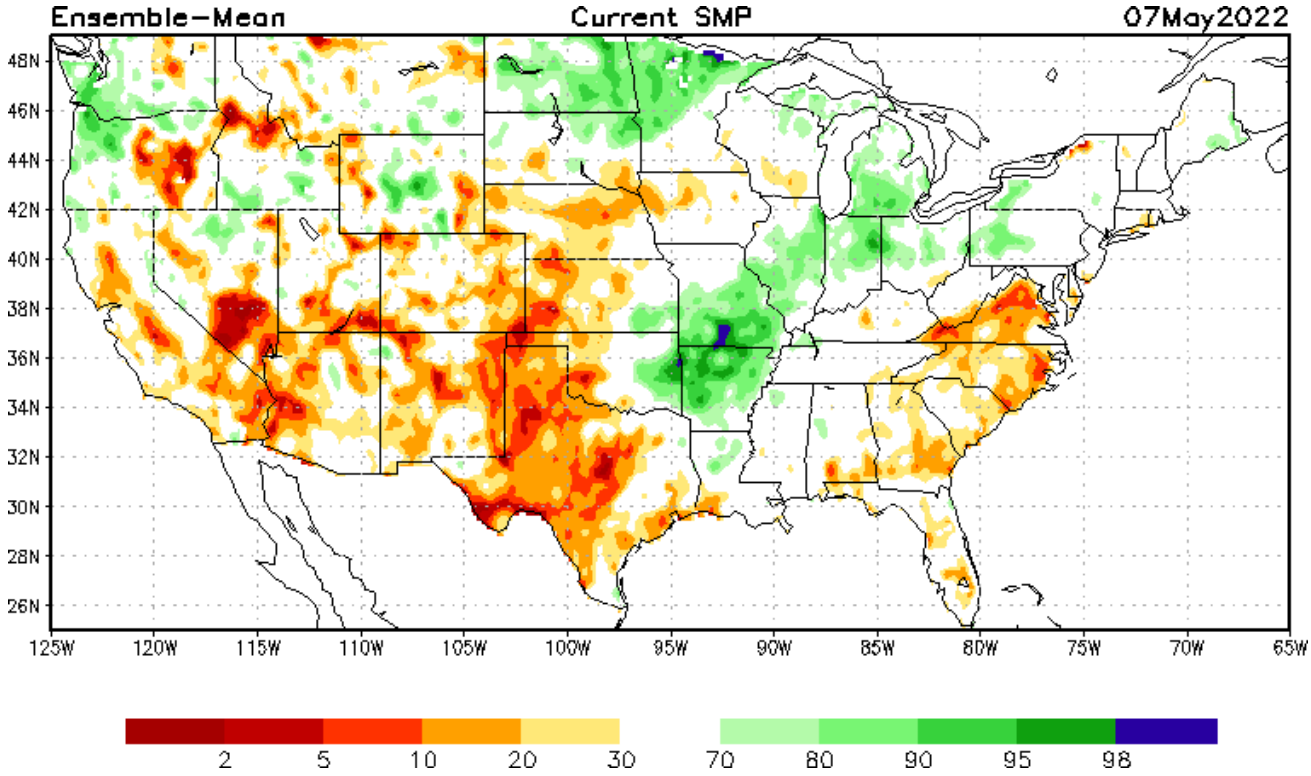
Highlighted Wildfire Resources

- 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

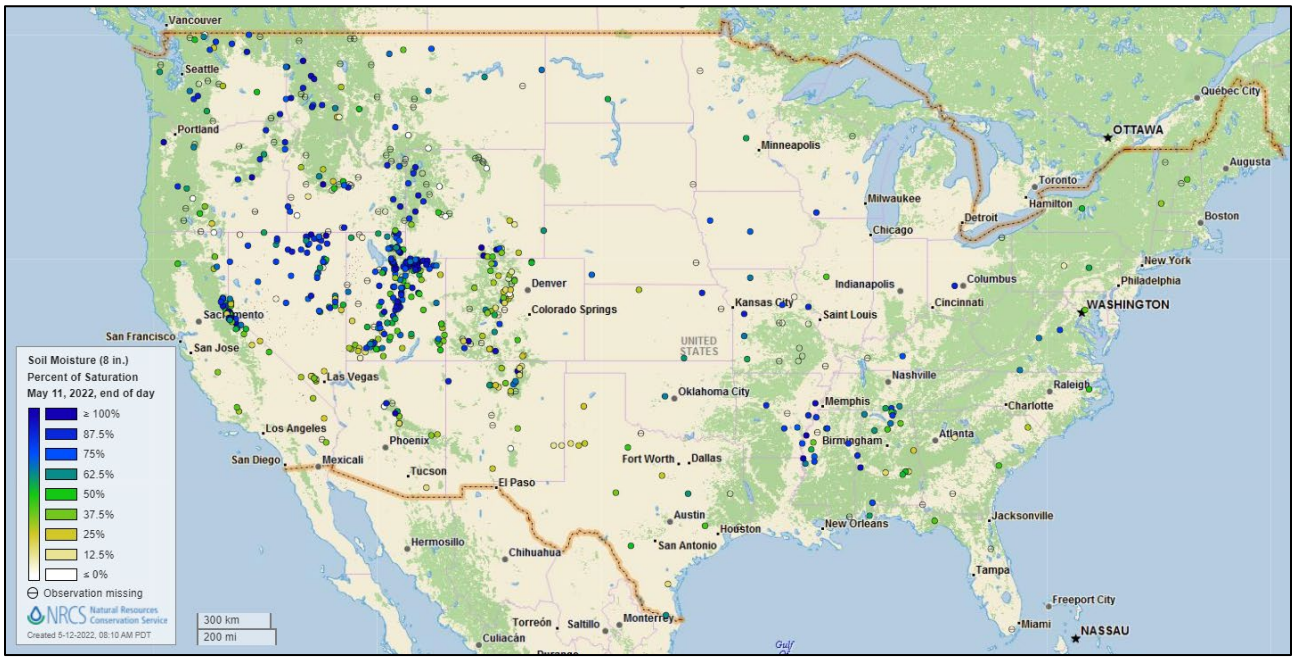


Modeled soil moisture percentiles as of May 07, 2022

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)

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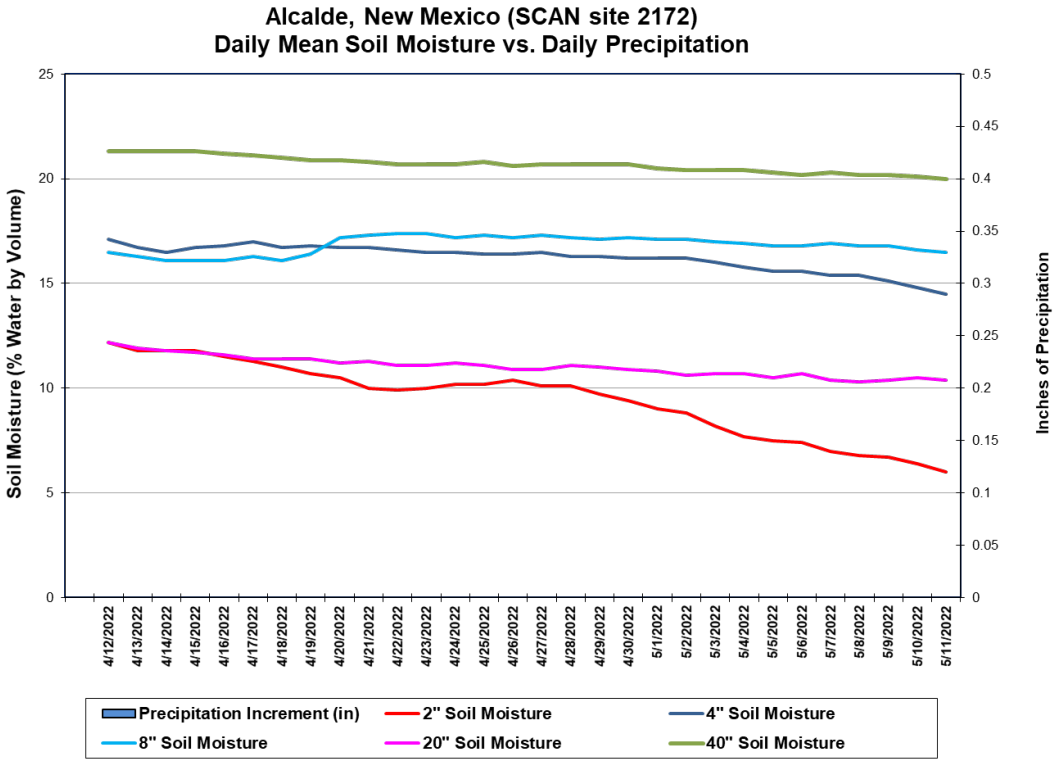


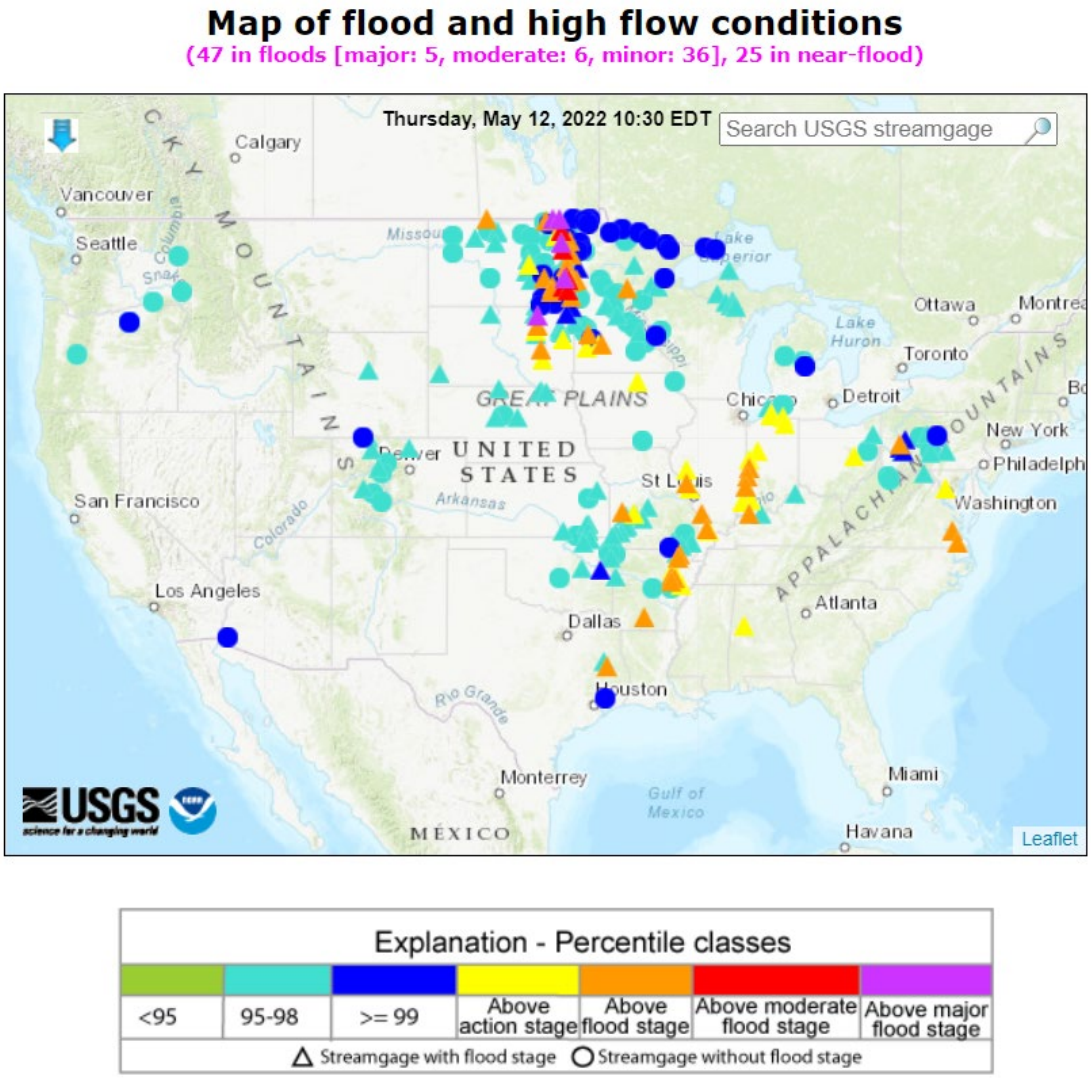
This chart shows the precipitation and soil moisture for the last 30 days at the Alcalde SCAN site in north central New Mexico. All soil sensors indicate a decline in soil moisture over the past 30 days due to the lack of precipitation. The last time the site received any precipitation was 0.07 inches on April 1.

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]



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

Reservoir Storage

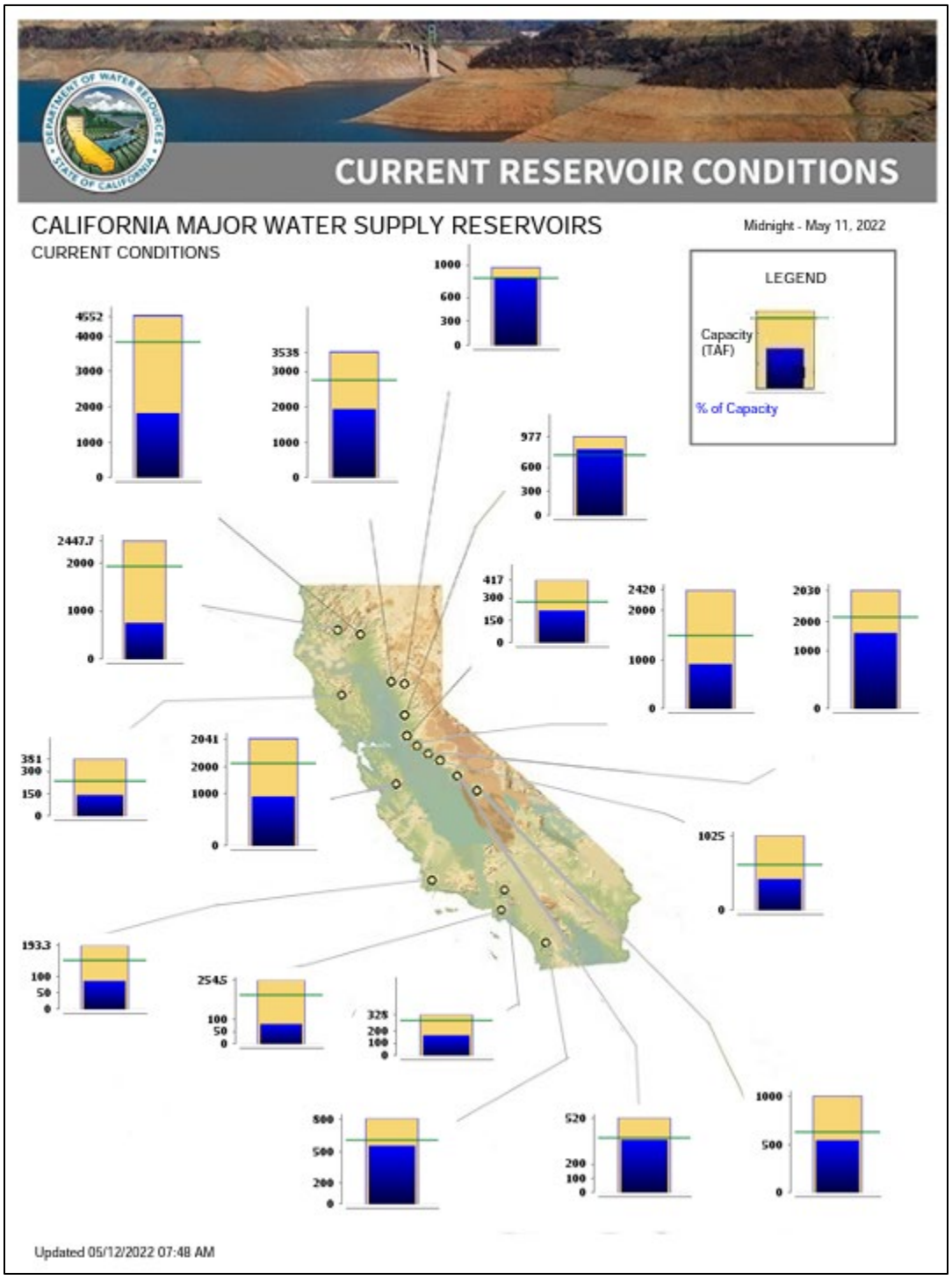
Hydromet Teacup Reservoir Depictions

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 12, 2022: **"**Hot weather that has been affecting much of the central U.S. will retreat southward. However, during the weekend and early next week, Southern heat will expand and intensify, stretching from the Desert Southwest to the southern Atlantic Coast. Triple-digit heat (high temperatures of 100°F or greater) will develop in the Desert Southwest and return by Sunday and Monday across parts of Texas and eastern New Mexico. Mostly dry weather will accompany the heat, with little or no rain expected during the next 5 days from California to Texas. In contrast, generally cool weather and periodic showers will stretch from the Pacific Northwest into the upper Midwest. Elsewhere, a low-pressure system over the western Atlantic Ocean will drift southwestward, with late-week showers and breezy conditions expected in the southern Atlantic States. The NWS 6- to 10-day outlook for May 16 – 20 calls for the likelihood of near- or above-normal temperatures and near- or below-normal rainfall across most of the country. Cooler-than-normal conditions will be confined to the Great Lakes region and the Pacific Northwest, while wetter-than-normal weather should be limited to portions of the Pacific Northwest and northern Plains."

Weather Hazards Outlook: May 14 – 18, 2022

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

About the Hazards Outlook

Created May 11, 2022

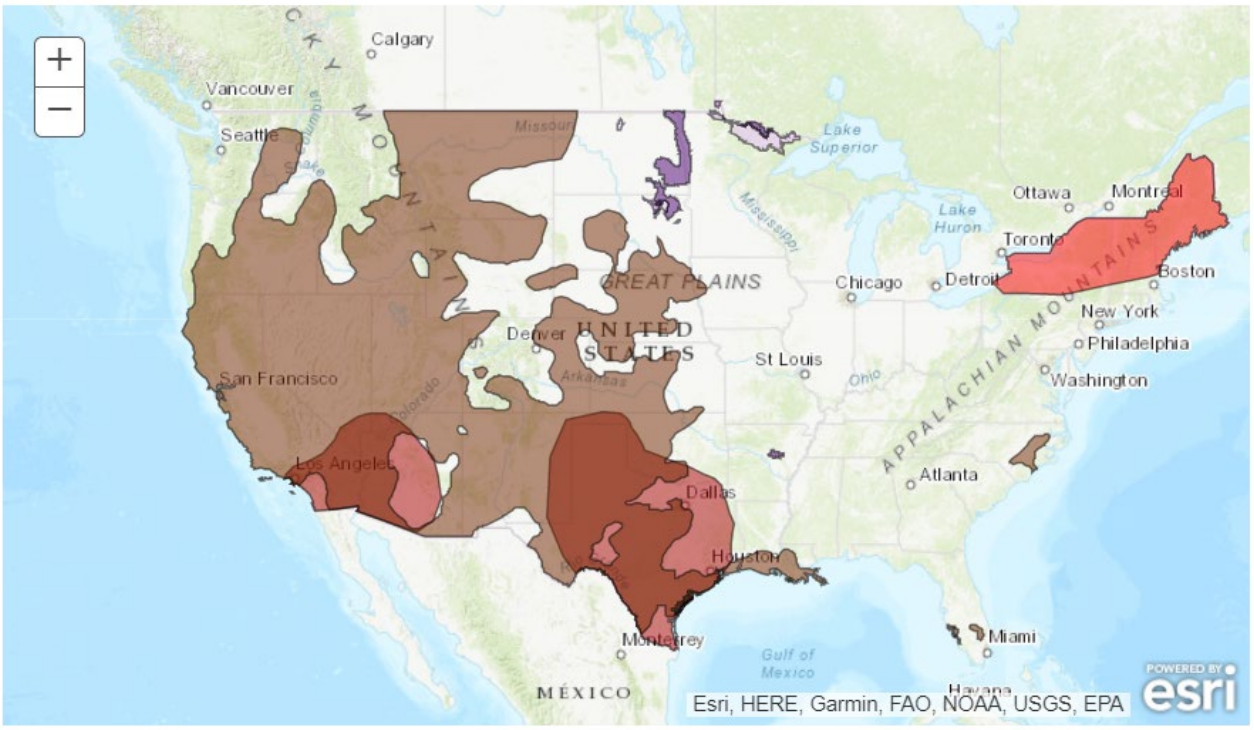
NOTE: These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

Precipitation	☑
Temperature	☑
Soils	☑

Valid May 14, 2022 - May 18, 2022

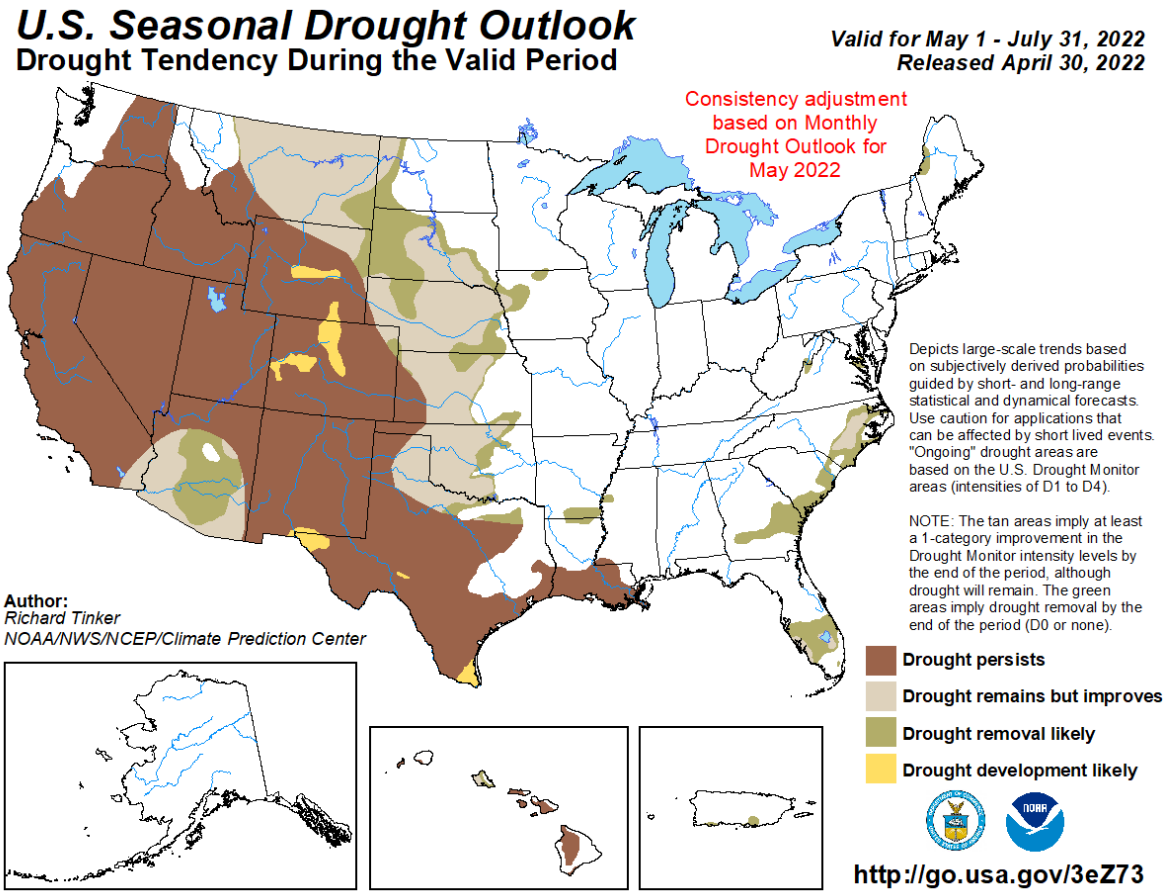
Legend

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



Seasonal Drought Outlook: May 01 – July 31, 2022

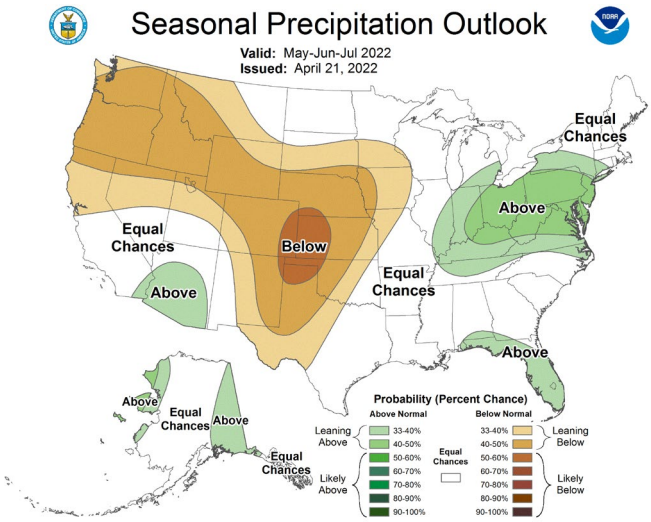
Source: National Weather Service



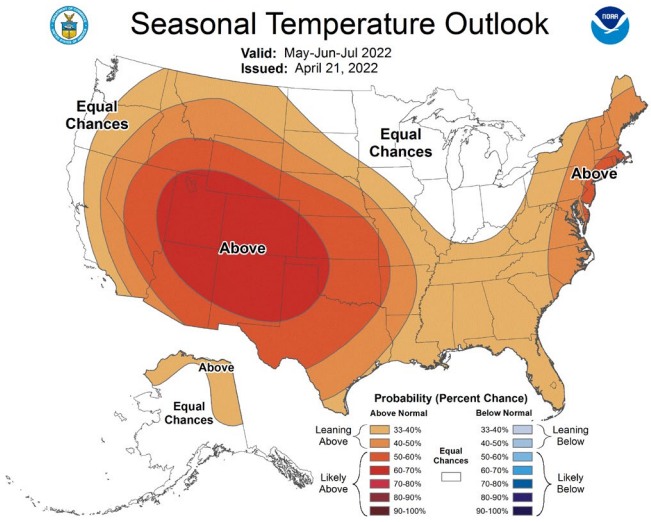
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



May-June-July 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.