



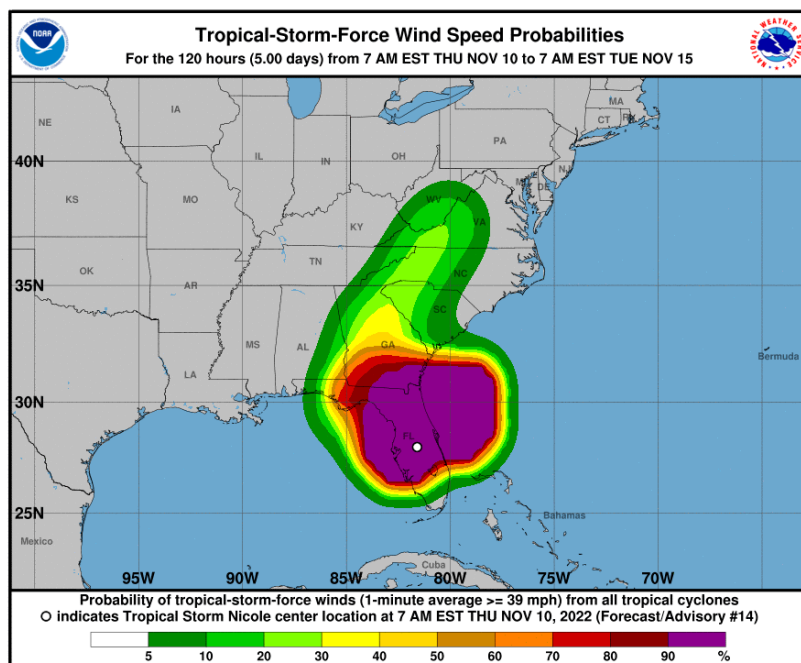
Water and Climate Update

November 10, 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
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Hurricane Nicole Makes Landfall in Southeast Florida

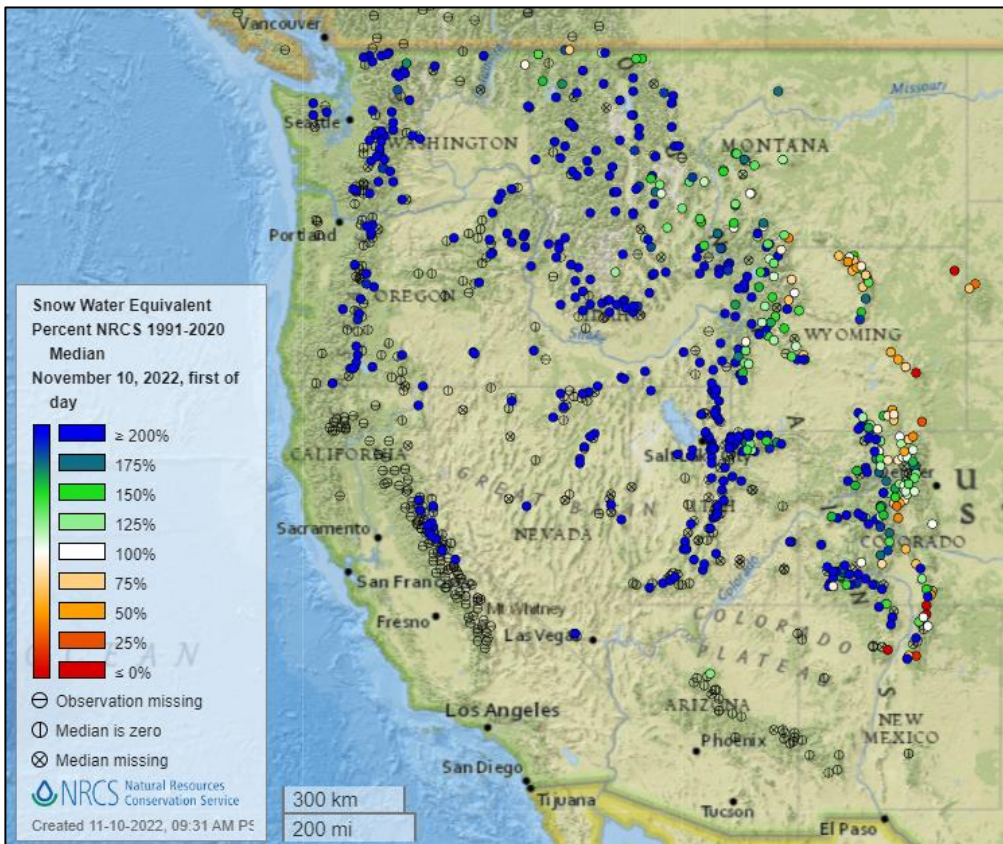


Hurricane Nicole came ashore early on November 10, just south of Vero Beach, Florida as a rare November hurricane with sustained winds of 75 mph. The storm strengthened to a hurricane just before landfall and weakened to a tropical storm soon after coming ashore. Nicole currently is moving across Florida as a tropical storm with gusty winds of 60 mph. The storm’s heavy rains, strong winds, and storm surge caused flooded streets, downed trees, damaged homes, and businesses, widespread power outages and eroded beaches in the area. The storm is projected to turn north into Georgia and the Carolinas in the coming days.

Related:

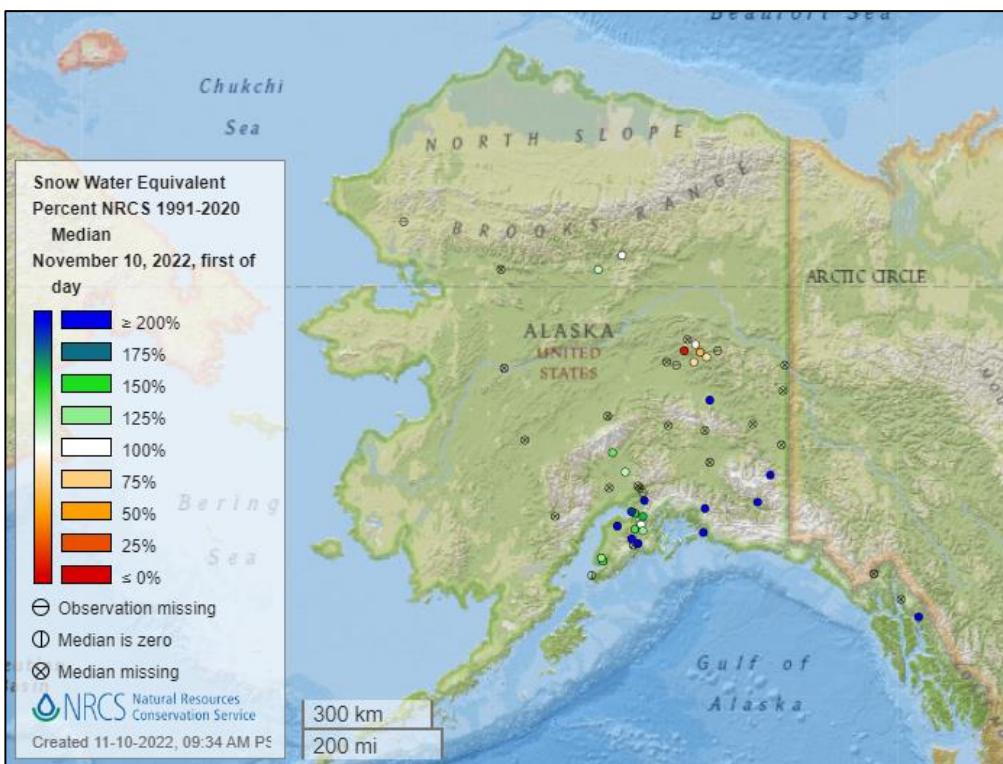
- [Hurricane Nicole weakens to tropical storm after making landfall in Florida](#) - Reuters
- [Hurricane Nicole Videos Show 'Unreal' Daytona Beach Destruction](#) – Newsweek
- [Nicole causes Florida power outages, flooding, wind damage as it moves north](#) – UPI
- [Hurricane Nicole live tracker: Charting the path of where the storm will hit next](#) – USA Today
- [Tropical Storm Nicole Hits Florida as a Rare November Hurricane](#) - Time
- [Roads on Verge of Collapsing as Tropical Storm Nicole Batters Florida](#) – Newsweek
- [NASA delays Artemis launch as Tropical Storm Nicole nears Florida](#) – NBC News
- [South Floridians prepare for Tropical Storm Nicole: 'It's going to be nasty here'](#) – Sun Sentinel (FL)
- [Florida airports and attractions closing as Tropical Storm Nicole approaches](#) - CNN

Snow



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

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

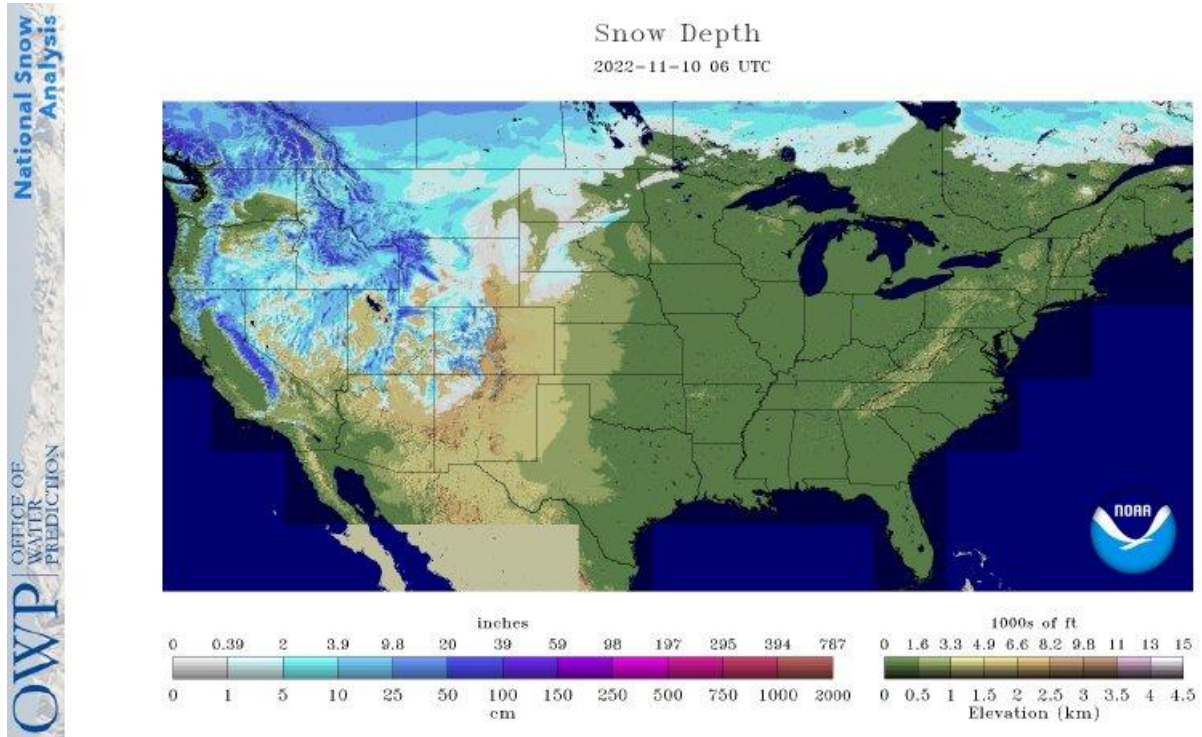


[Alaska snow water equivalent percent of median map](#)

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

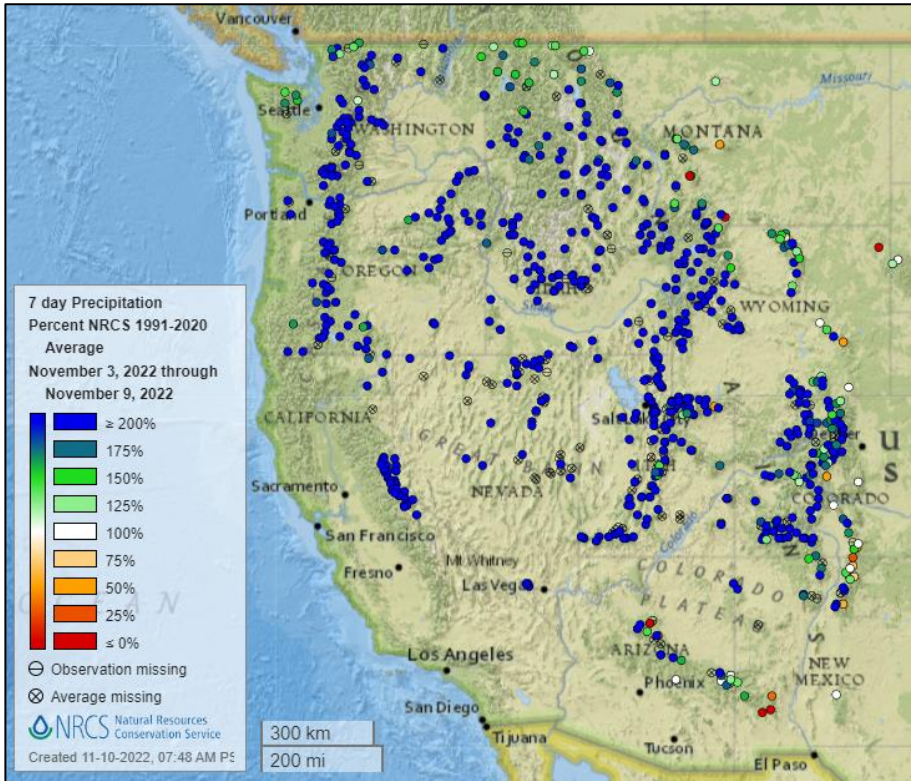
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA NWS National Operational Hydrologic Remote Sensing Center



Precipitation

Last 7 Days, NRCS SNOTEL Network

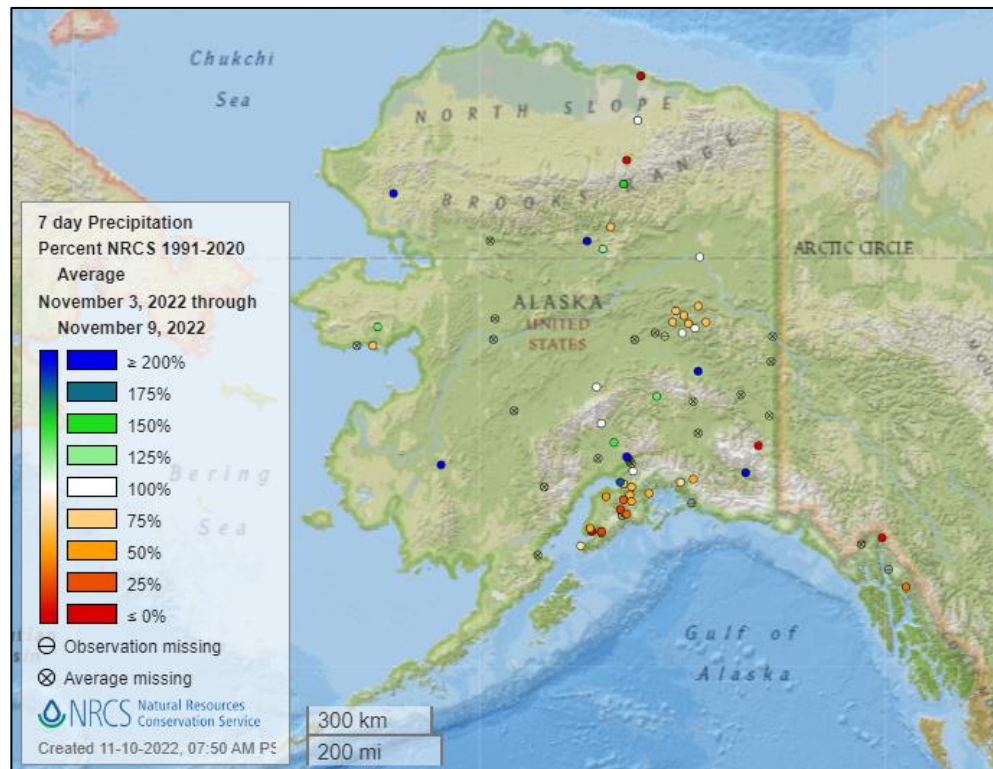


[7-day precipitation percent of average map](#)

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](#)



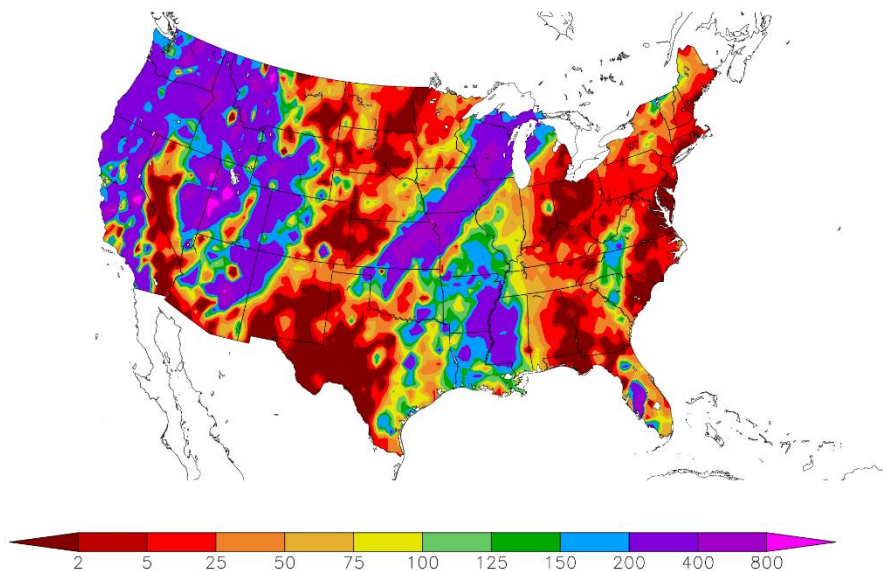
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
11/2/2022 – 11/8/2022



Generated 11/9/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

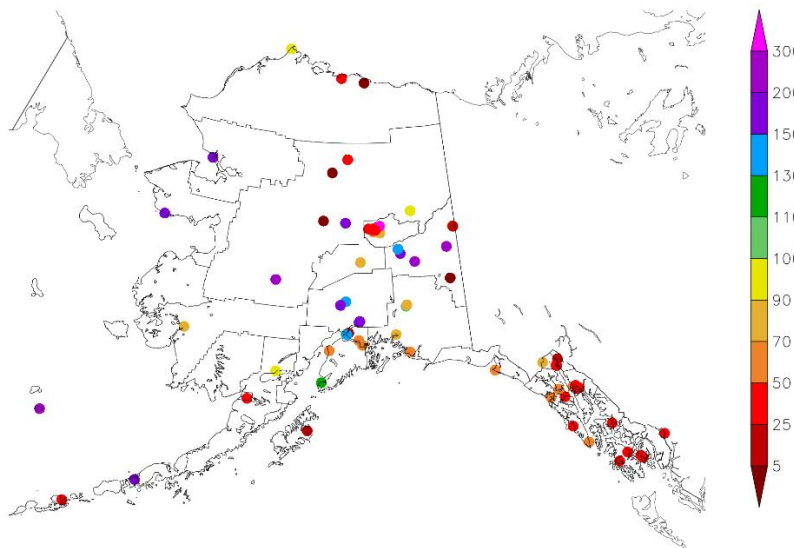
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for Alaska.

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

Percent of Normal Precipitation (%)
11/2/2022 – 11/8/2022



Generated 11/9/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

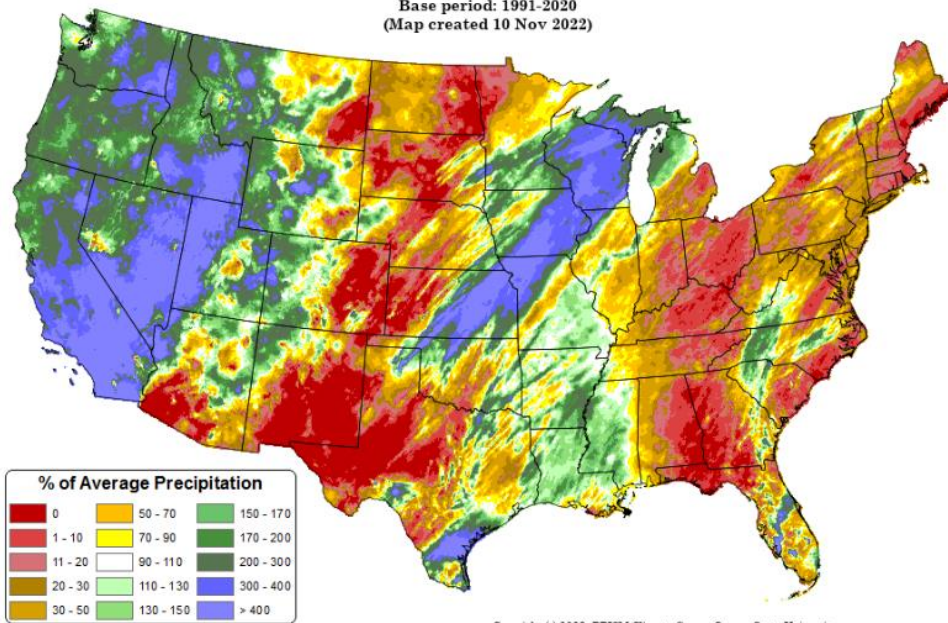
Total Precipitation Anomaly: 01 Nov 2022 - 09 Nov 2022

Period ending 7 AM EST 09 Nov 2022

Base period: 1991-2020

(Map created 10 Nov 2022)

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



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

Source: PRISM

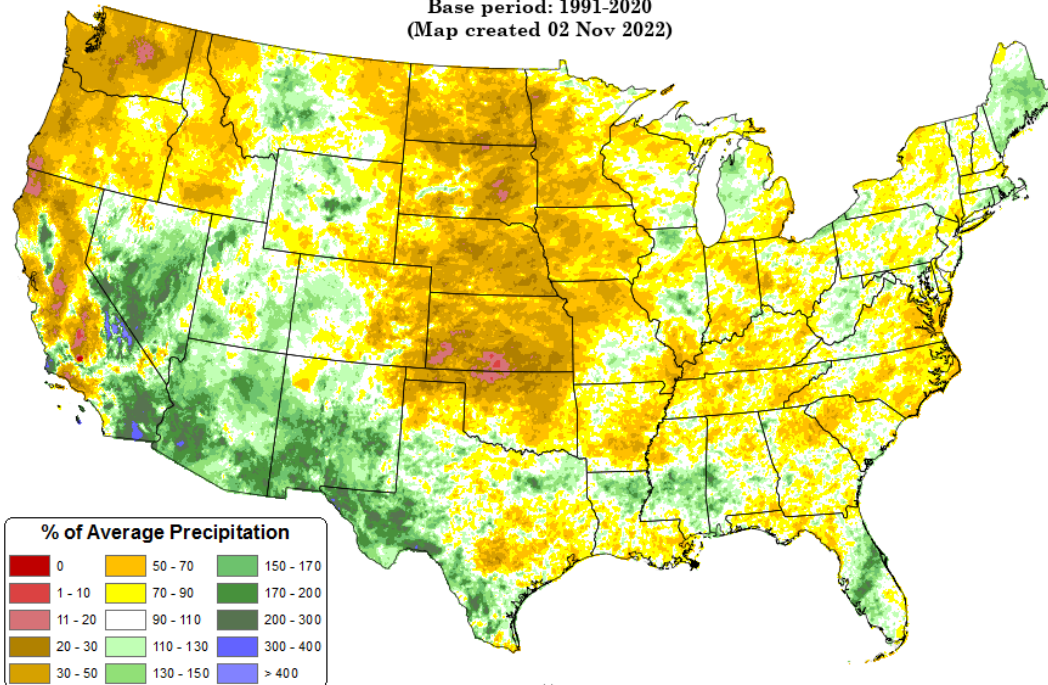
[August through October 2022 precipitation anomaly map](#)

Total Precipitation Anomaly: Aug 2022 - Oct 2022

Period ending 7 AM EST 31 Oct 2022

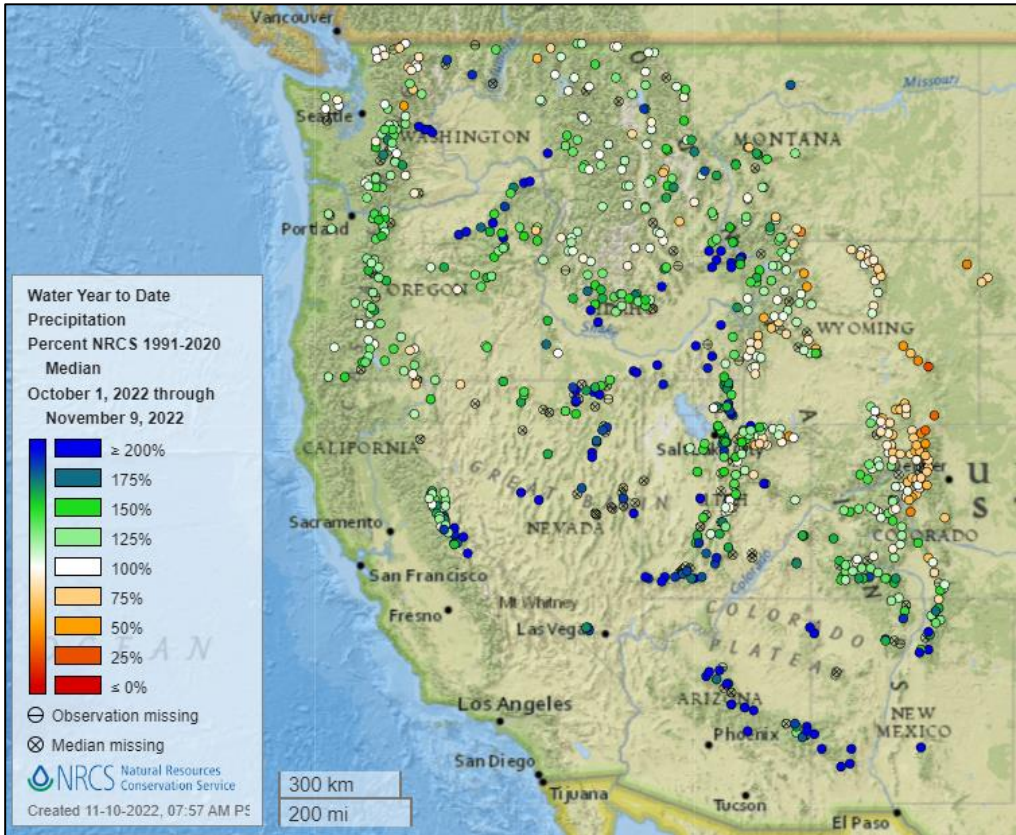
Base period: 1991-2020

(Map created 02 Nov 2022)



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Water Year-to-Date, NRCS SNOTEL Network

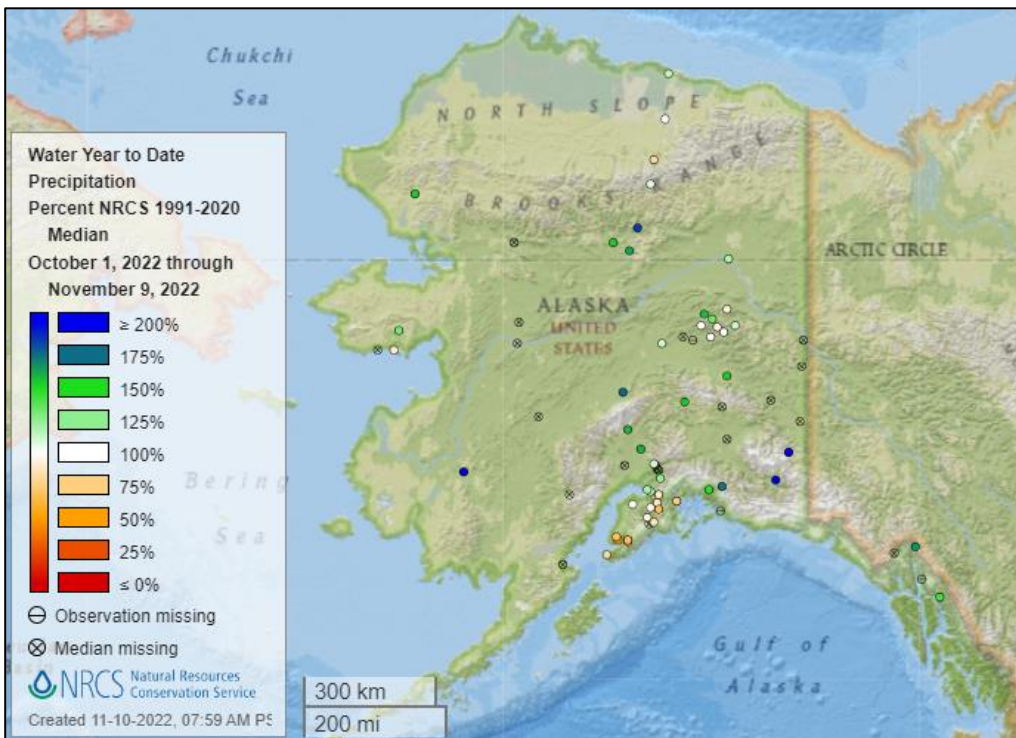


[2023 water year-to-date precipitation percent of median map](#)

See also:

[2023 water year-to-date precipitation percent of average map](#)

[2023 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2023 water year-to-date precipitation percent of median map](#)

See also:

[Alaska 2023 water year-to-date precipitation percent of average map](#)

[Alaska 2023 water year-to-date precipitation values \(inches\) map](#)

Temperature

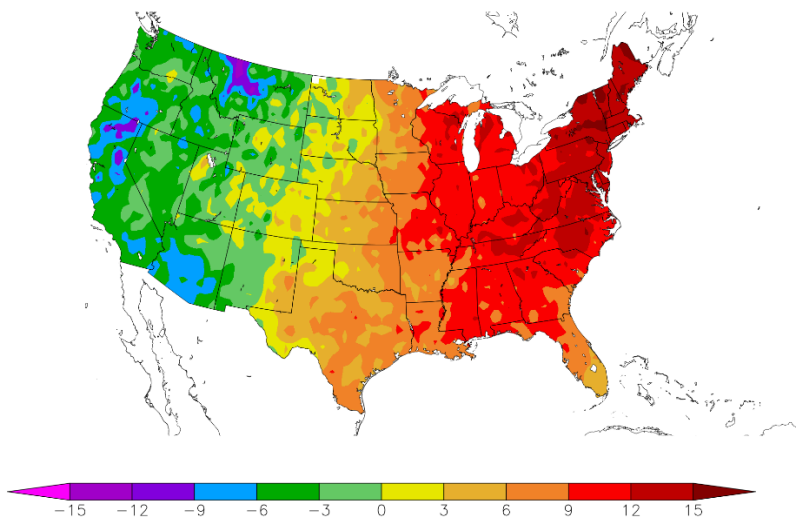
Last 7 Days, National Weather Service (NWS) Networks

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)
11/2/2022 – 11/8/2022



Generated 11/9/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

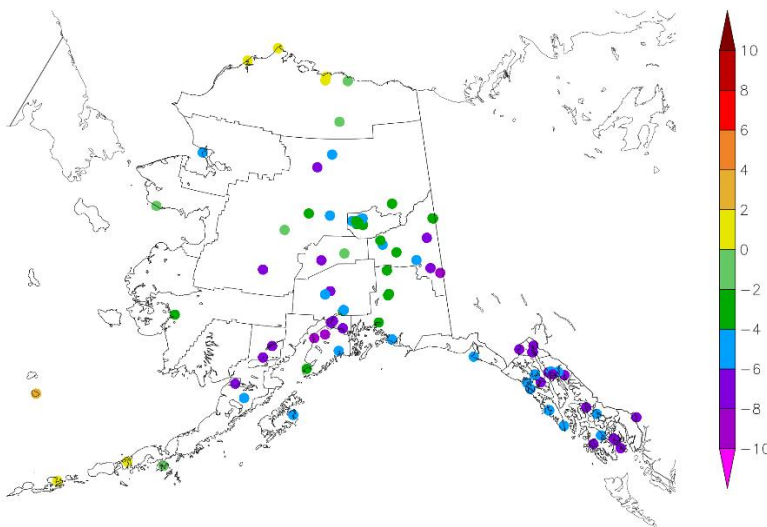
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
11/2/2022 – 11/8/2022



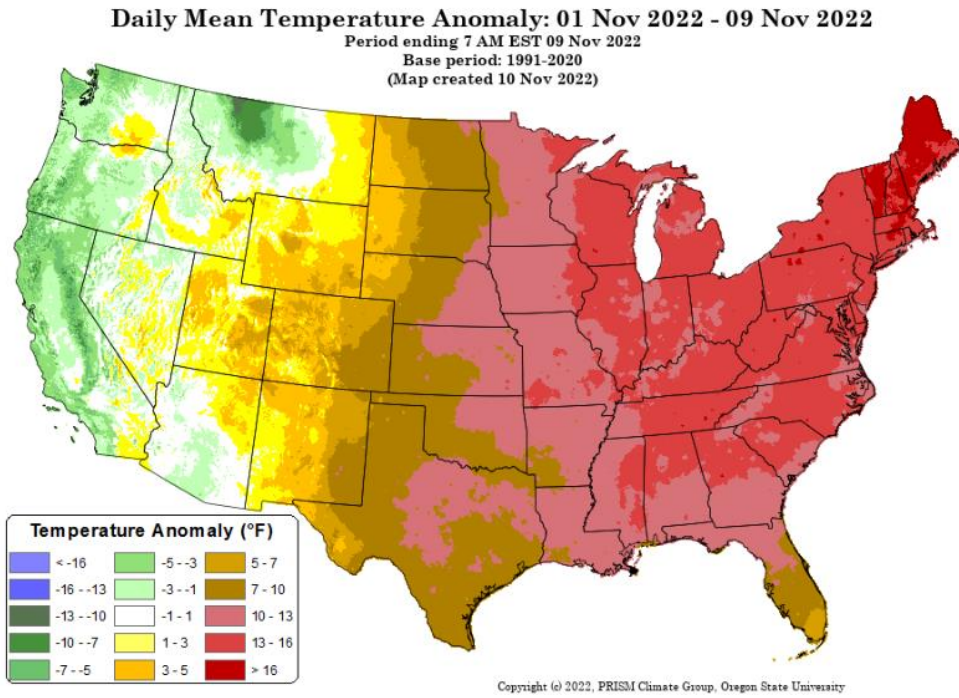
Generated 11/9/2022 at HPRCC using provisional data.

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

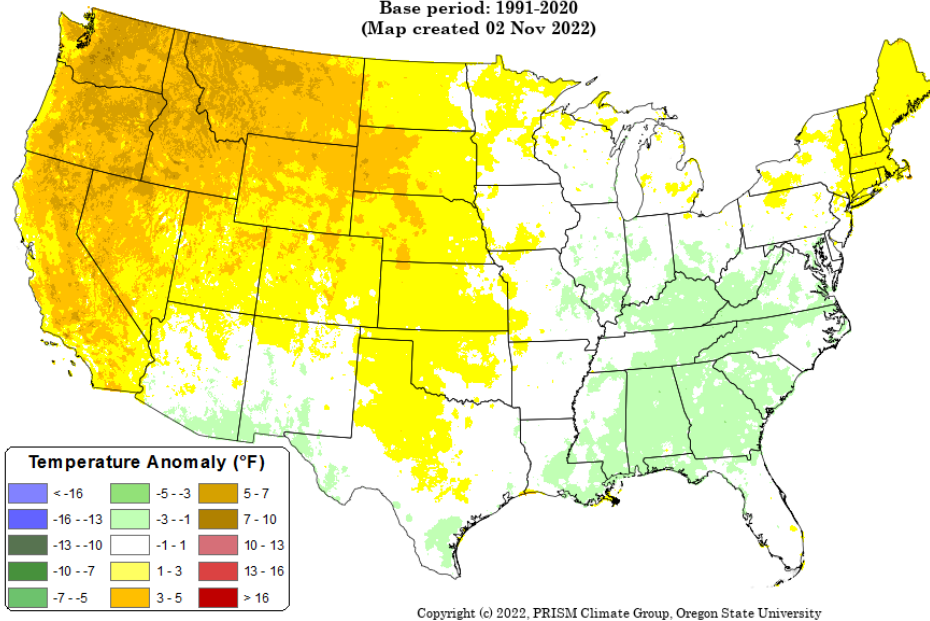
Daily Mean Temperature Anomaly: Aug 2022 - Oct 2022

Period ending 7 AM EST 31 Oct 2022

Base period: 1991-2020

(Map created 02 Nov 2022)

[August through October 2022 daily mean temperature anomaly map](#)



Drought

[U.S. Drought Monitor](#)

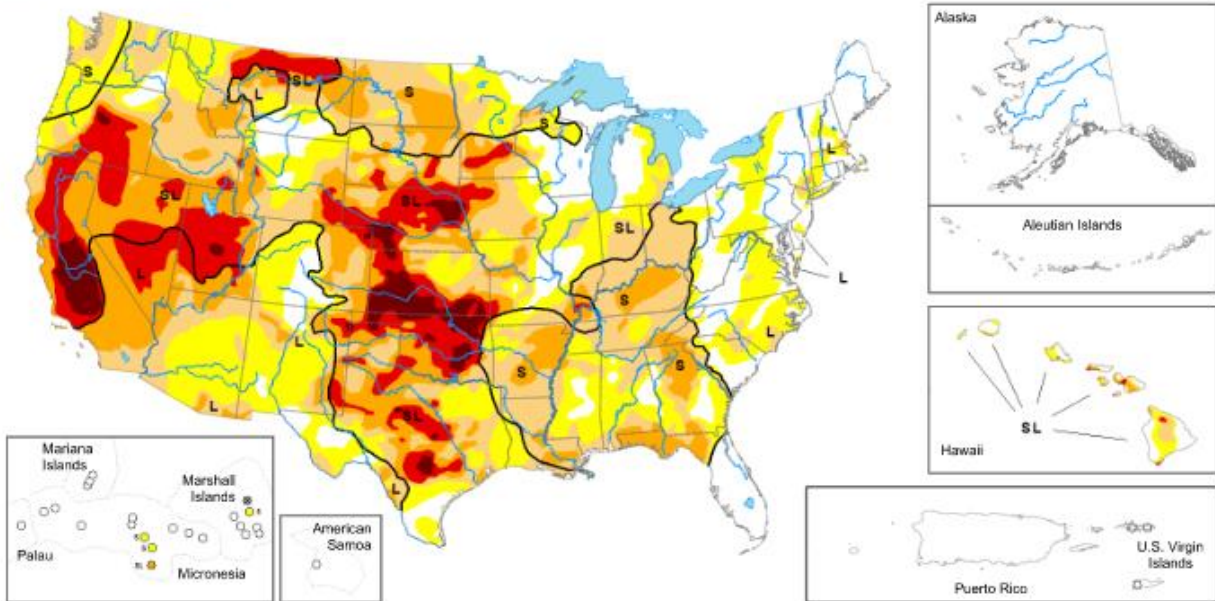
Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA

Map released: November 10, 2022

Data valid: November 8, 2022



*United States and Puerto Rico Author(s):
Brian Fuchs, National Drought Mitigation Center*

*Pacific Islands and Virgin Islands Author(s):
Brad Rippey, U.S. Department of Agriculture*

View grayscale version of the map

The data cutoff for Drought Monitor maps is each Tuesday at 7 a.m. EST. The maps, which are based on analysis of the data, are released each Thursday at 8:30 a.m. Eastern Time.

Intensity and Impacts



- Delineates dominant impacts
 S - Short-term impacts, typically less than 6 months (agriculture, grasslands)
 L - Long-term impacts, typically greater than 6 months (hydrology, ecology)
 SL - Short- and long-term impacts

Current [National Drought Summary](#), November 08, 2022

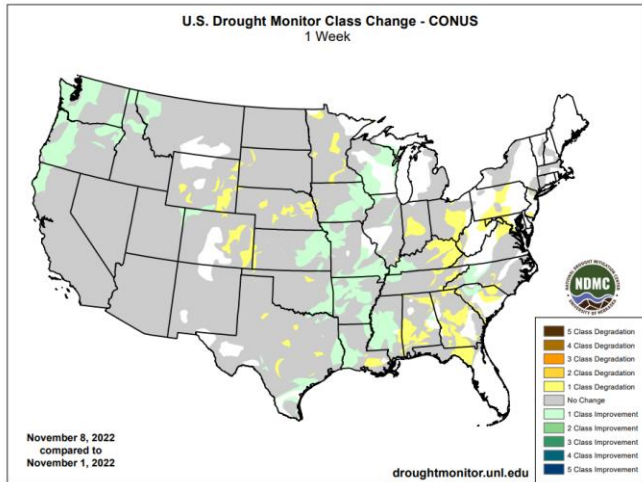
Source: National Drought Mitigation Center

“This week continued with another active weather pattern over portions of the Pacific Northwest as well as into the central Plains and Midwest. With widespread heavy rain from Kansas into Wisconsin as well as portions of the lower Mississippi River valley, some areas recorded significant precipitation during the period. Temperatures over the eastern half of the country were above normal, some significantly, while most of the West was cooler than normal. A continued wet pattern over the Pacific Northwest as well as portions of the Midwest has allowed for continued improvement to drought intensities, especially in areas that are receiving abundant precipitation. Dryness continues to build over eastern portions of the Midwest and into the Southeast as well as along the Gulf Coast.”

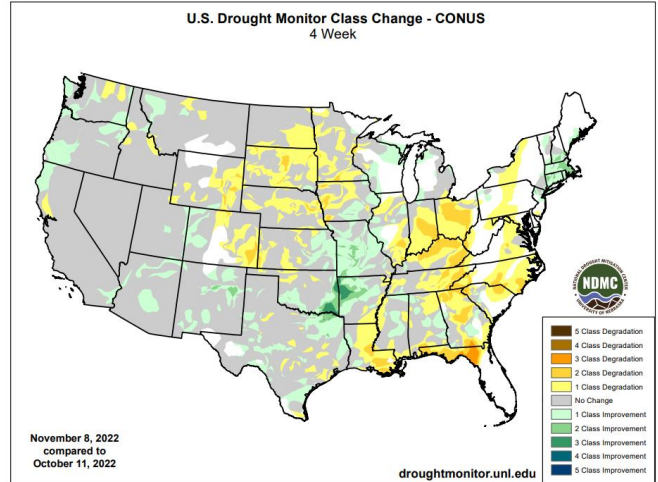
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

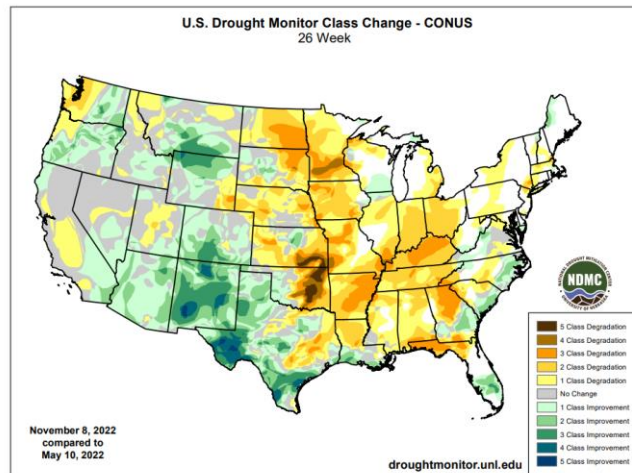
1 Week



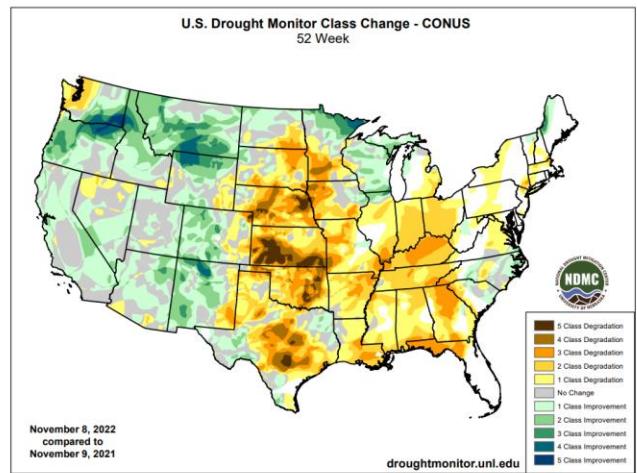
1 Month



6 Months



1 Year



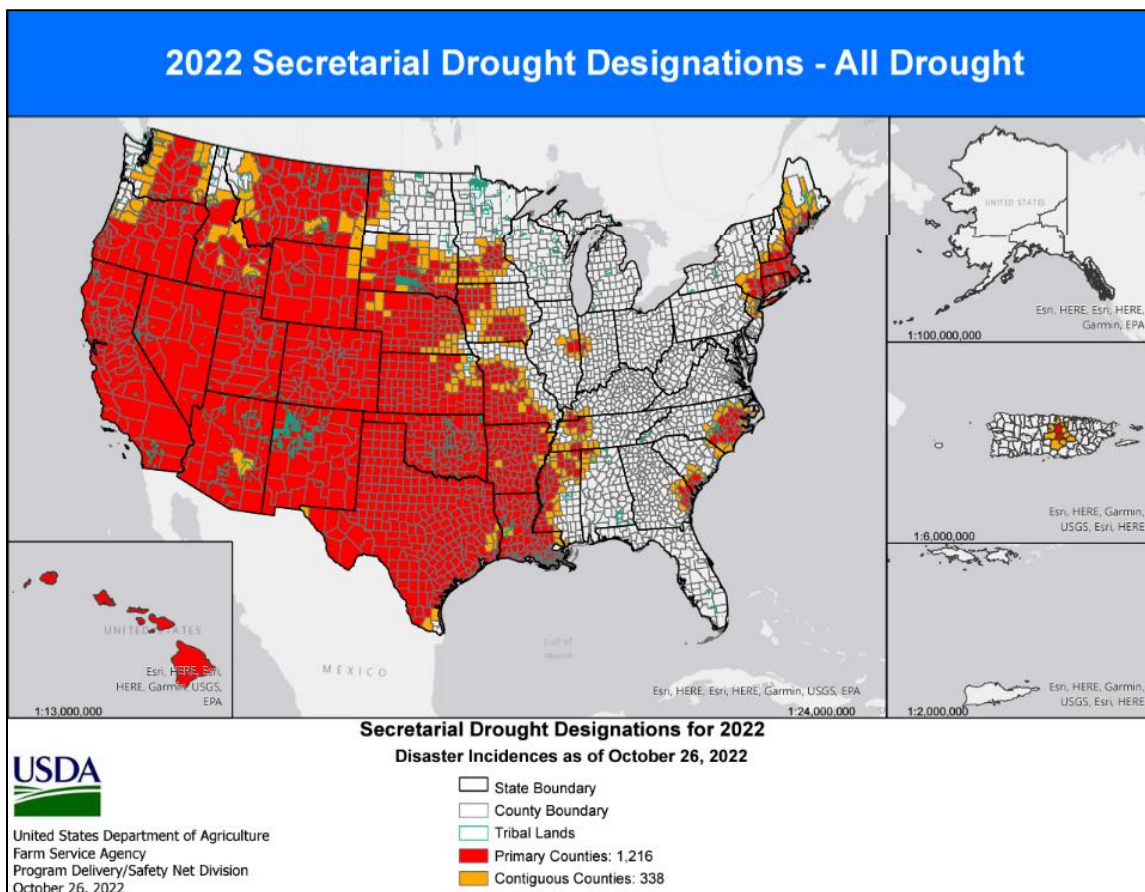
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

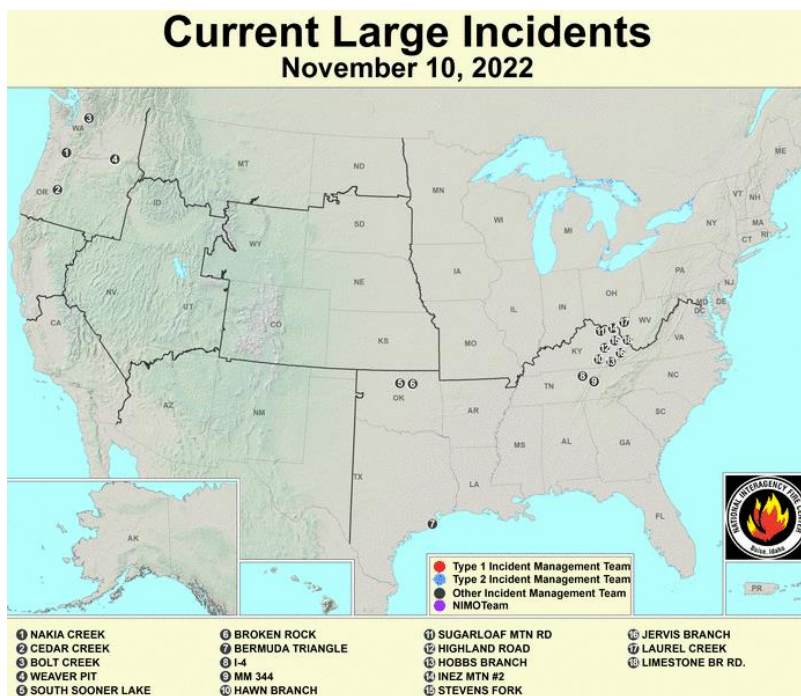
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



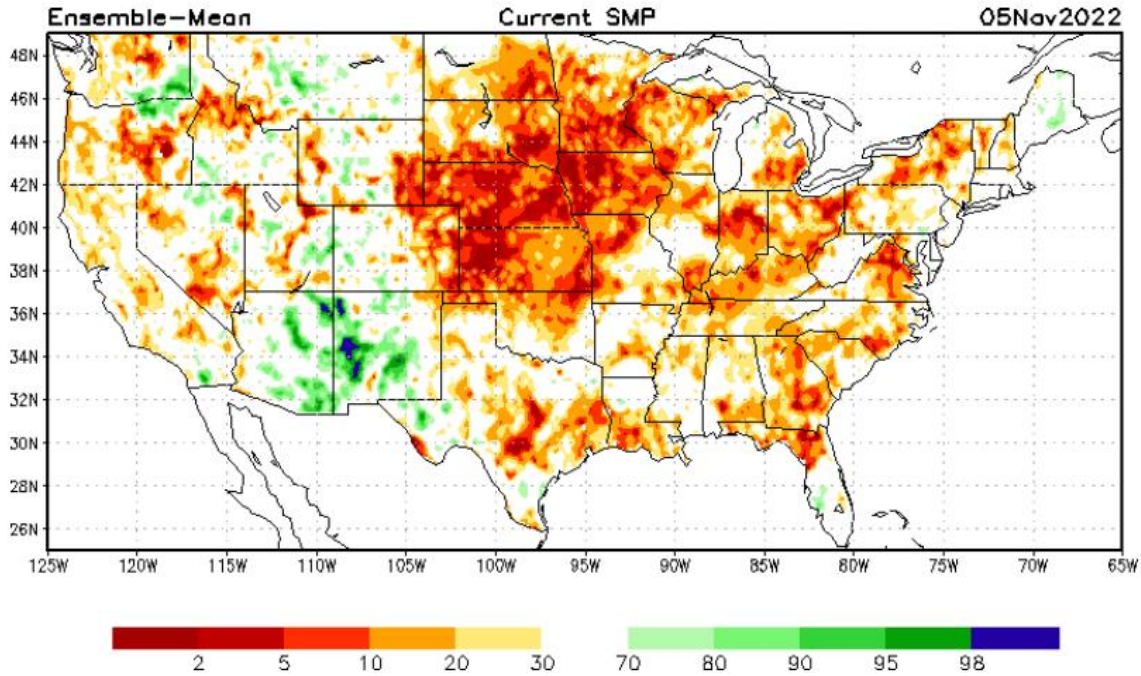
Highlighted Wildfire Resources

- [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

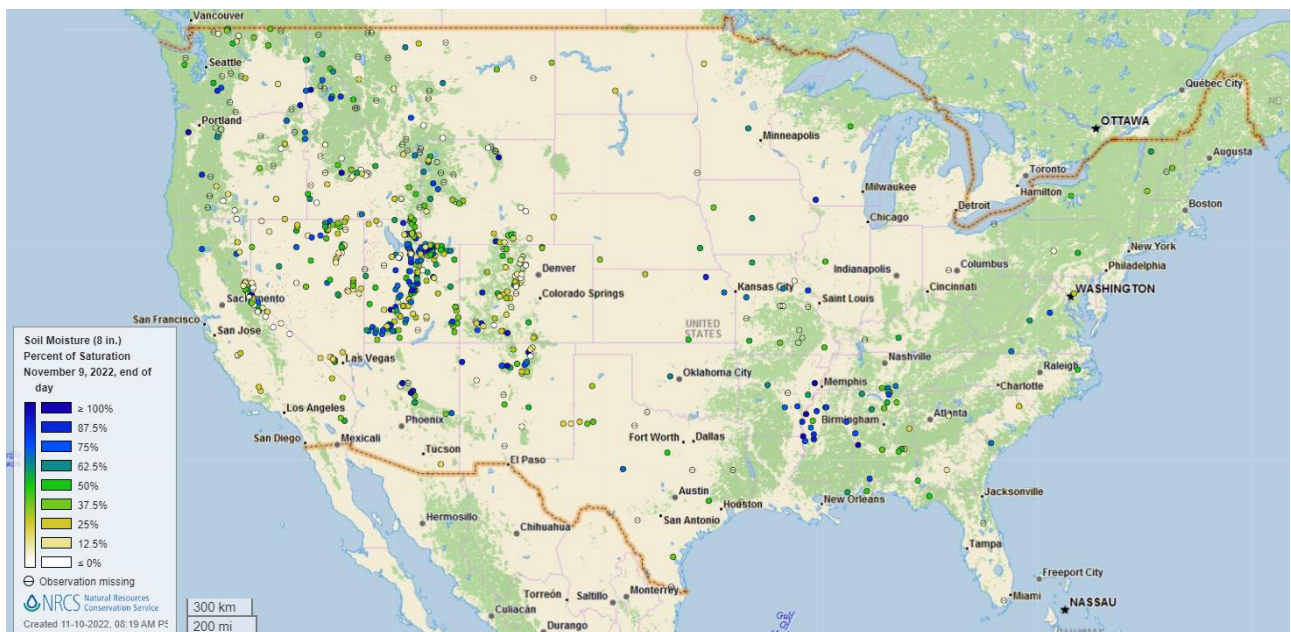


[Modeled soil moisture percentiles](#) as of October 29, 2022

Soil Moisture Percent of Saturation

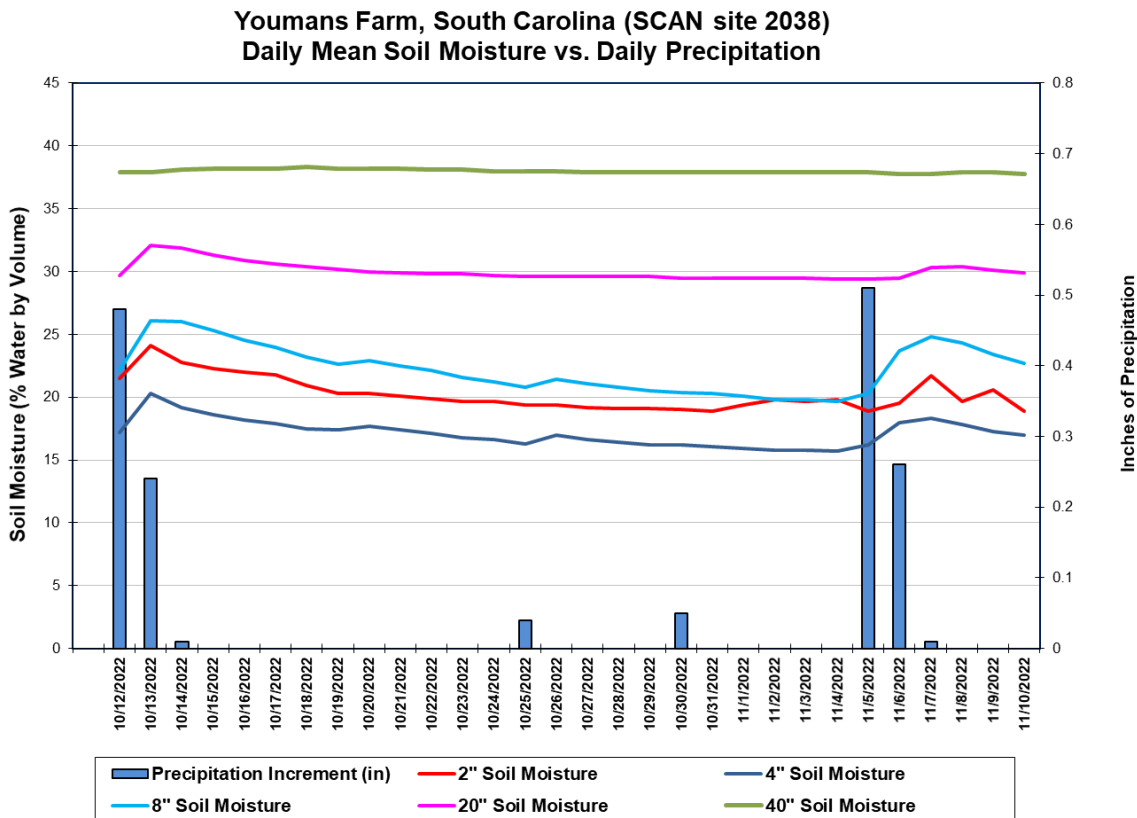
Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)

[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 [Youmans Farm](#) SCAN site in South Carolina. The largest precipitation events in the period, on October 12-14 and November 5-7, resulted in an increase in soil moisture reported by all sensors. Total precipitation for the period was 1.60 inches.

Soil Moisture Data Portals

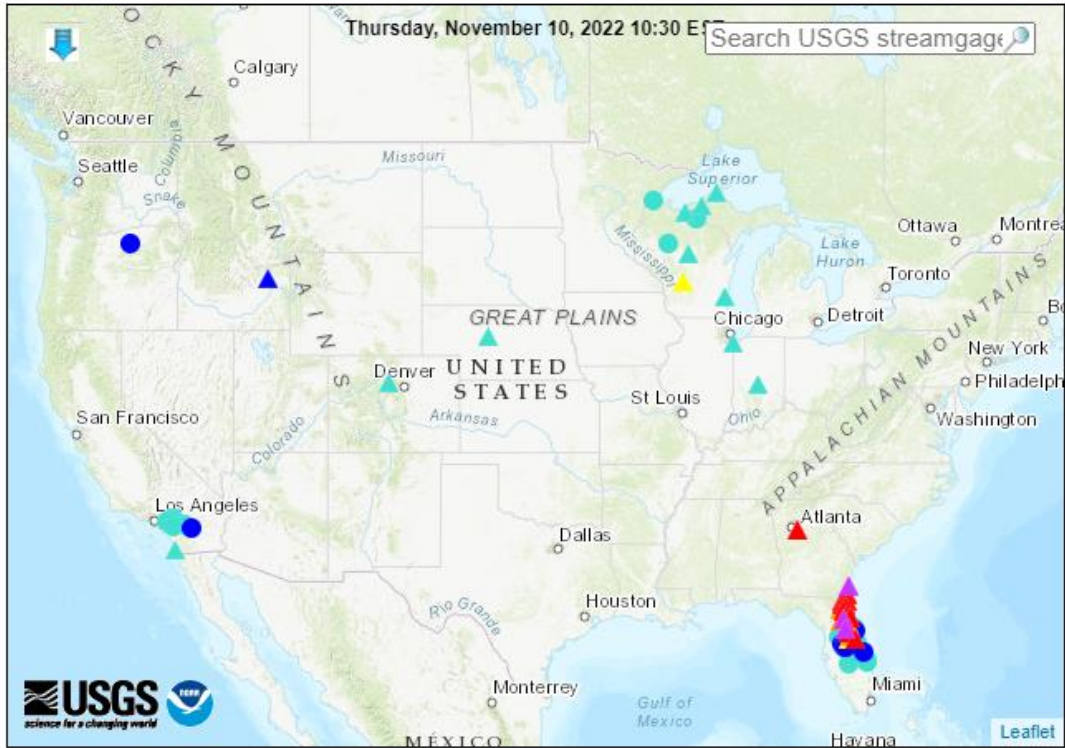
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

Streamflow, Drought, Flood, and Runoff

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

Map of flood and high flow conditions

(28 in floods [major: 5, moderate: 16, minor: 7], 2 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](#)

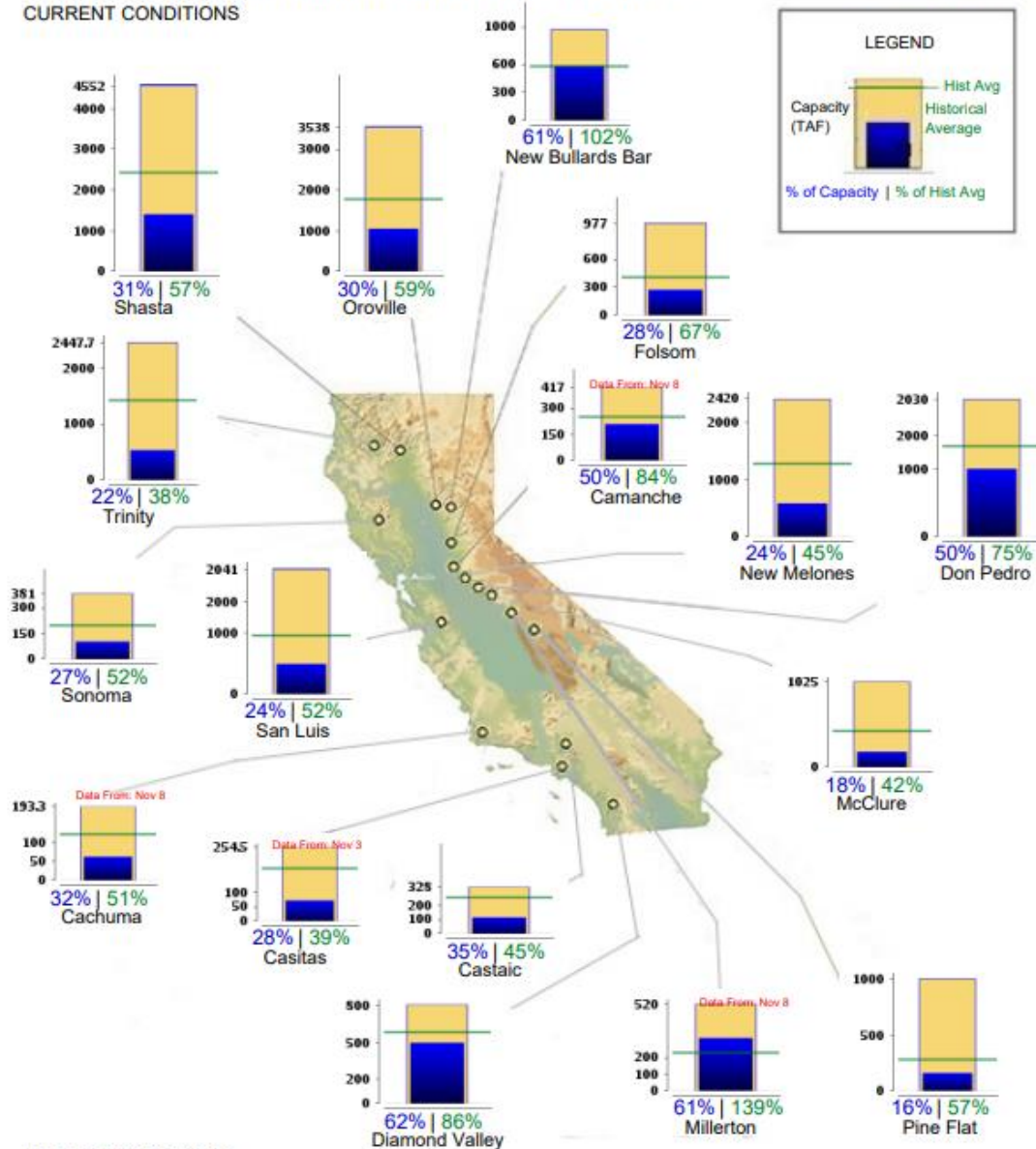
Current California Reservoir Conditions

Source: California Department of Water Resources



CALIFORNIA MAJOR WATER SUPPLY RESERVOIRS CURRENT CONDITIONS

Midnight - November 9, 2022



[Current California Reservoir Conditions](#)

Agricultural Weather Highlights

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

National Outlook, Thursday, November 10, 2022: “Tropical Storm Nicole will gradually turn northward and further weaken, reaching New England on Saturday as a post-tropical or extratropical cyclone. Coastal impacts will gradually diminish, although the Atlantic Seaboard will continue to experience large waves and heavy surf. Additional precipitation associated with Nicole could reach 2 to 4 inches or more, with heavy rain extending as far inland as the Appalachians. Meanwhile, an early-season winter storm will wind down by tonight across the north-central U.S., although cold weather will expand in the storm’s wake. During the next several days, sub-zero temperatures will affect the northern Plains, while weekend freezes should reach as far south as the Gulf Coast States, including parts of Louisiana, Mississippi, and Alabama. Early next week, a chilly rain may develop across the South, with some frozen or freezing precipitation possible on the southern Plains. The NWS 6- to 10-day outlook for November 15 – 19 calls for below-normal temperatures and near- or below-normal precipitation across most of the country. Warmer-than-normal weather will be confined to the southern tip of Florida, while wetter-than-normal conditions should be limited to portions of the Rockies and adjacent High Plains, as well as an area stretching from the Gulf Coast into the southern Atlantic States.”

Weather Hazards Outlook: [November 12 – 16, 2022](#)

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

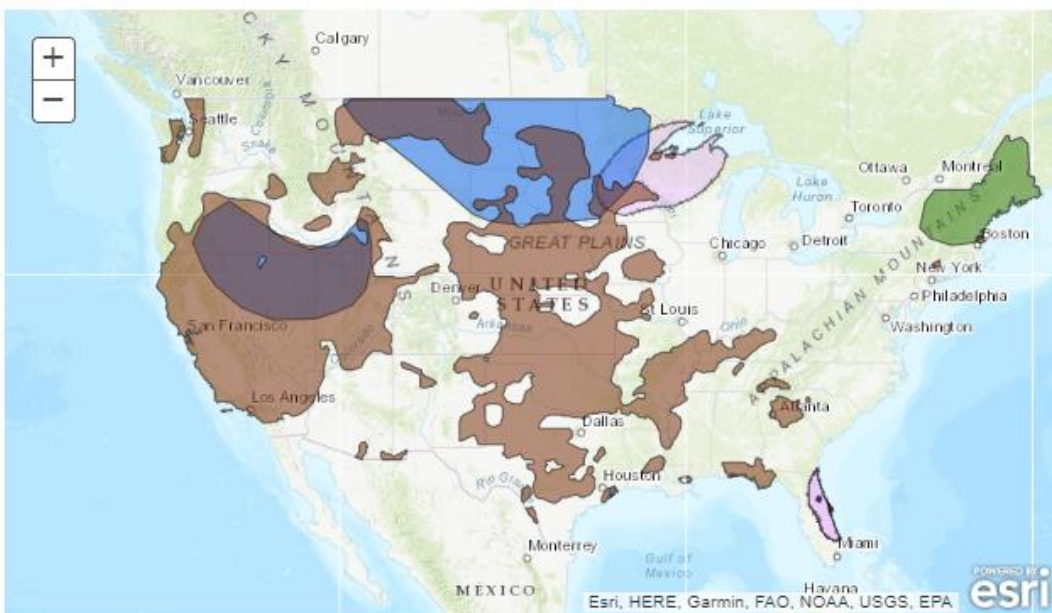
Created November 09, 2022

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 November 12, 2022 - November 16, 2022

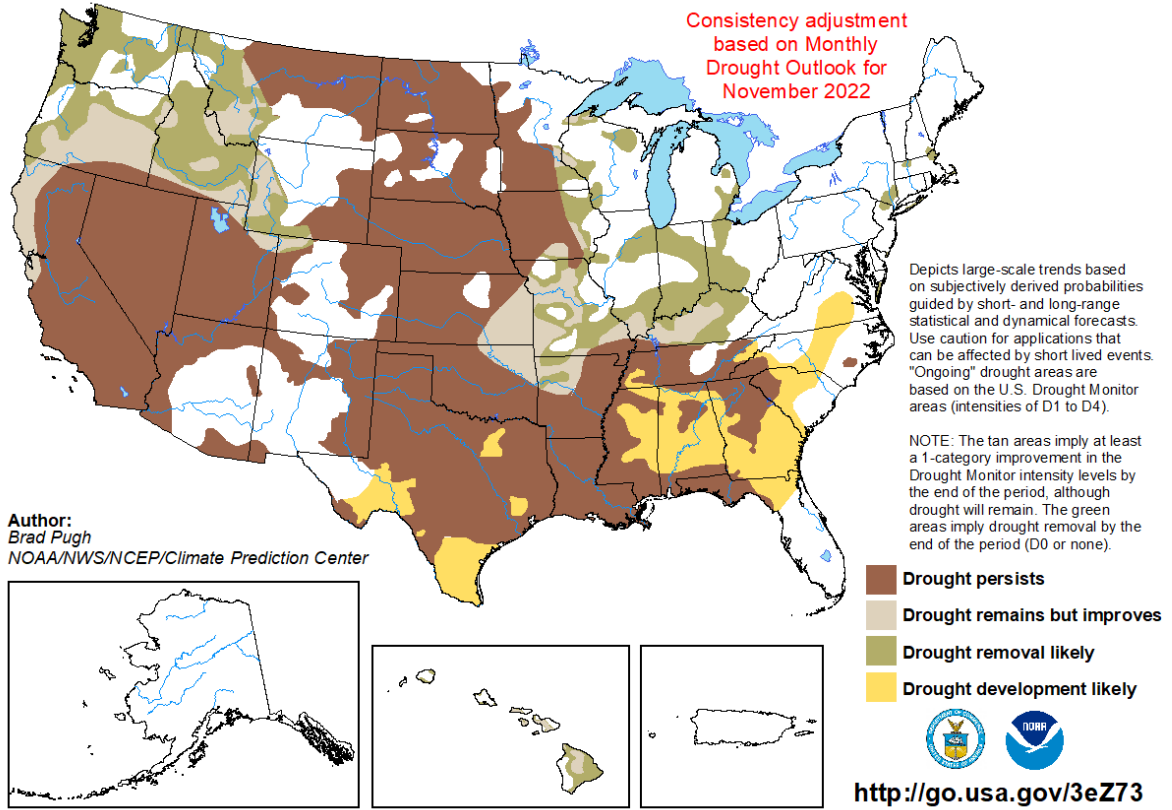


Seasonal Drought Outlook: [November 01, 2022 – January 31, 2023](#)

Source: National Weather Service

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

Valid for November 1, 2022 - January 31, 2023
Released October 31, 2022

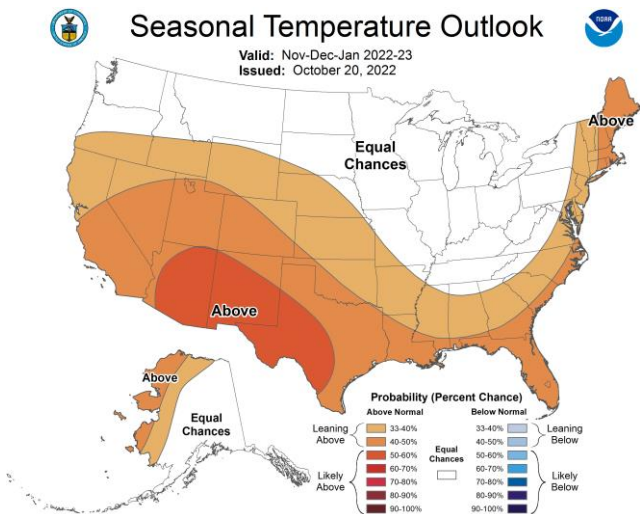
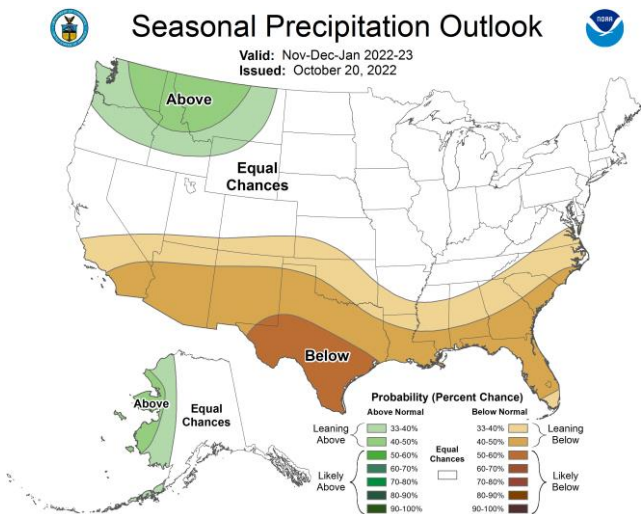


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[November-December-January 2022-2023 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](#).