



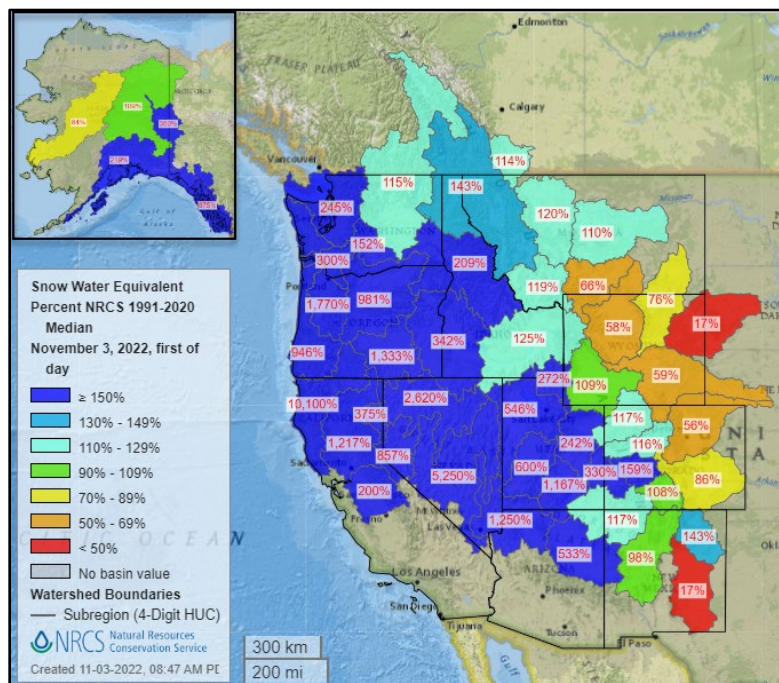
Water and Climate Update

November 03, 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

Above-median snowpack starts winter for most of the West

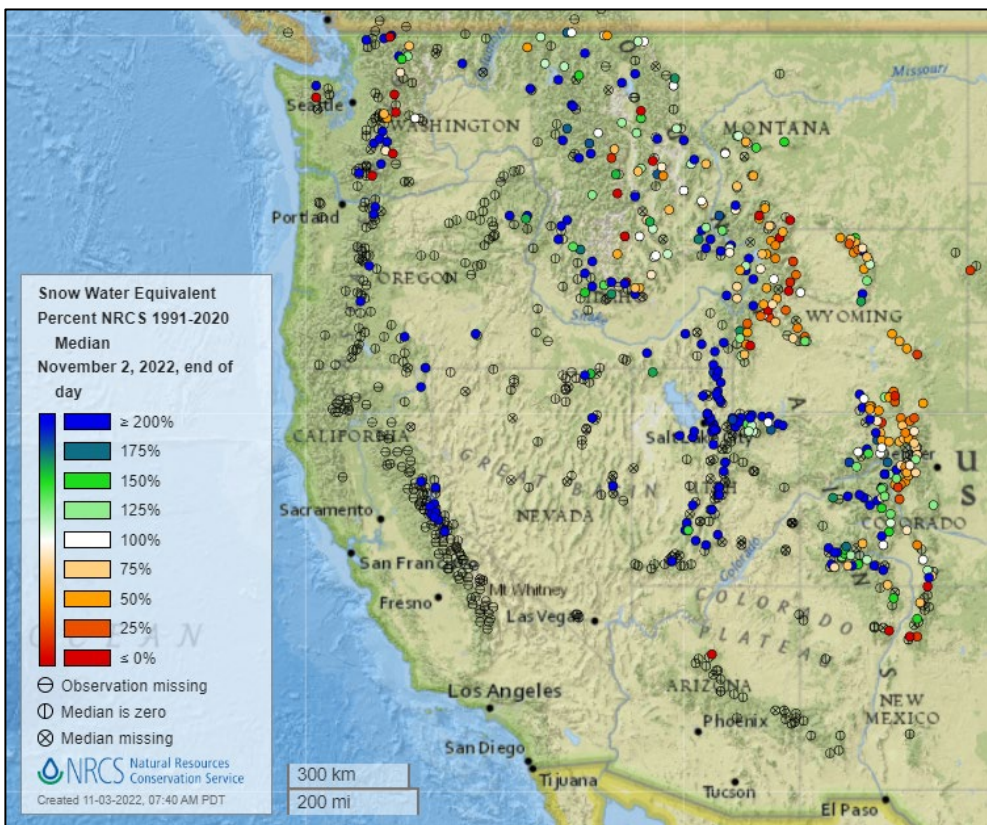


Heavy snow from a recent cold atmospheric river provided welcome moisture to the West. A series of storms have left the snowpack well above median in the Cascade Mountains, Sierra Nevada, the intermountain West, and southern Alaska. Farther east, in the Rocky Mountains, the snowpack ranges from above- to near-median conditions for this time of year. The central and southern east slope of the Rockies into the Black Hills have missed much of the snow so far. Though the snow water equivalent percentages are exceptionally high in some parts, the median values for this time of year are very small because it is early in the snowpack season. Additional strong storms with heavy snow are forecasted for this weekend, with expected totals of six inches in the southern Sierra and over three feet in the North Cascades.

Related:

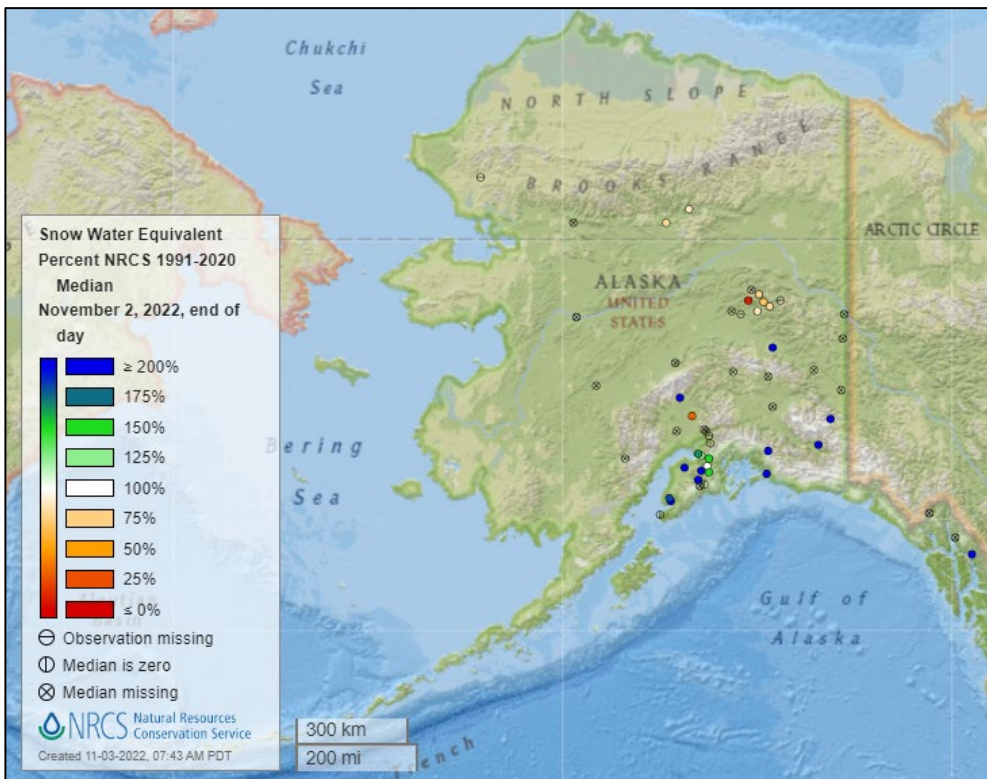
- [Sierra travelers hit with heavy snow and road closures](#) – CBS News
- [Storm system to bring snow to every Western state, tornado threat to South](#) - CNN
- [There’s a 100% chance of snow in Salt Lake City, weather service says](#) – The Salt Lake Tribune
- [Oregon weather: Heavy rain in valley, major snowfall on Cascade passes over weekend](#) – The Statesman Journal (OR)
- [Cold storm brings rain, snow, wind to California](#) – The San Diego Union-Tribune
- [Heavy snow headed for our mountains and possibly the valley floor](#) – KBOI (ID)
- [Heavy snow causes widespread power outages in the Flathead](#) – KPAX (MT)
- [Heavy rain, strong winds and freezing temps expected in Seattle area](#) – The Seattle Times (WA)

Snow



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

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

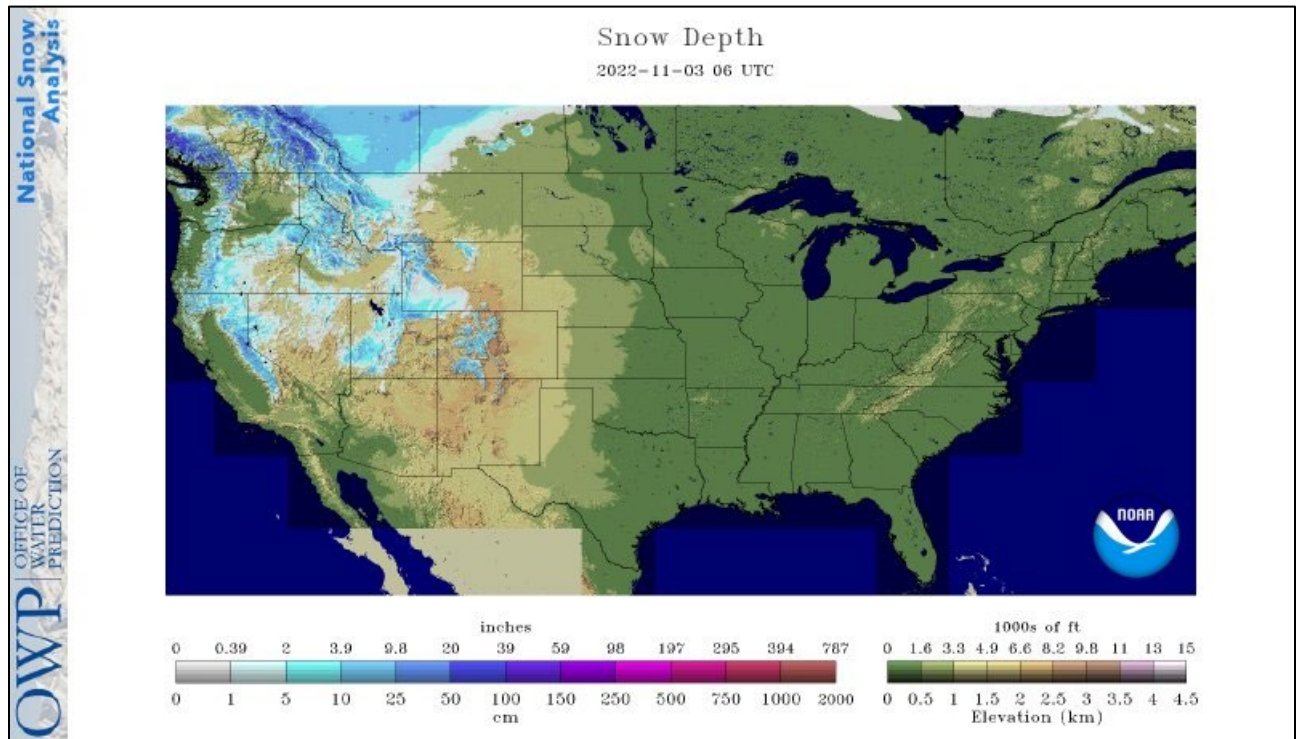


[Alaska snow water equivalent percent of median map](#)

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

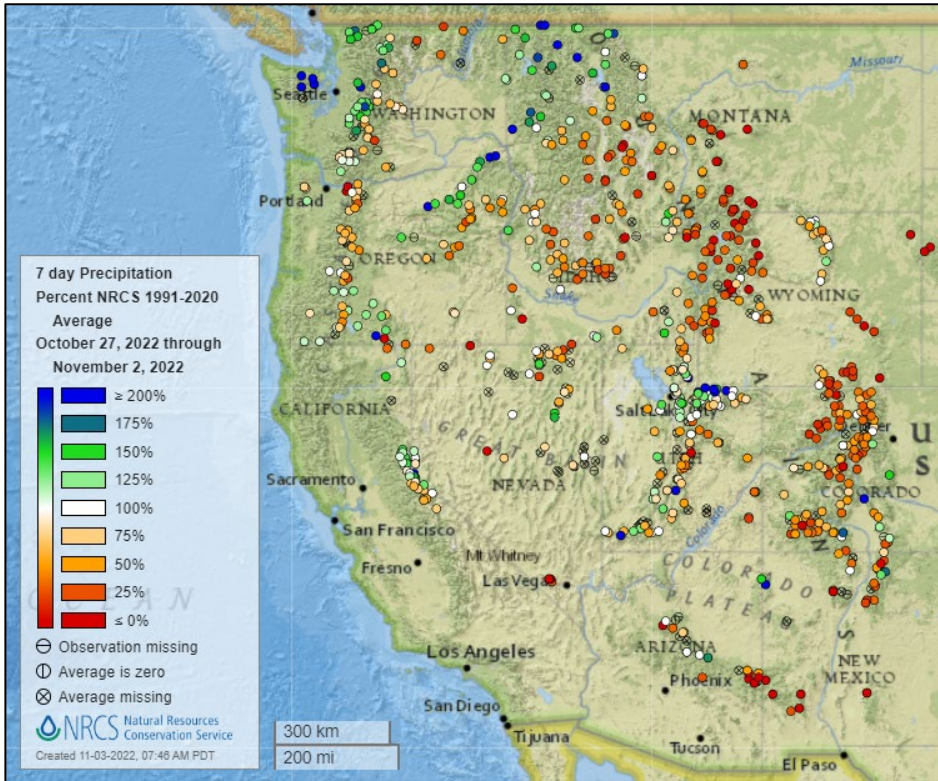
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

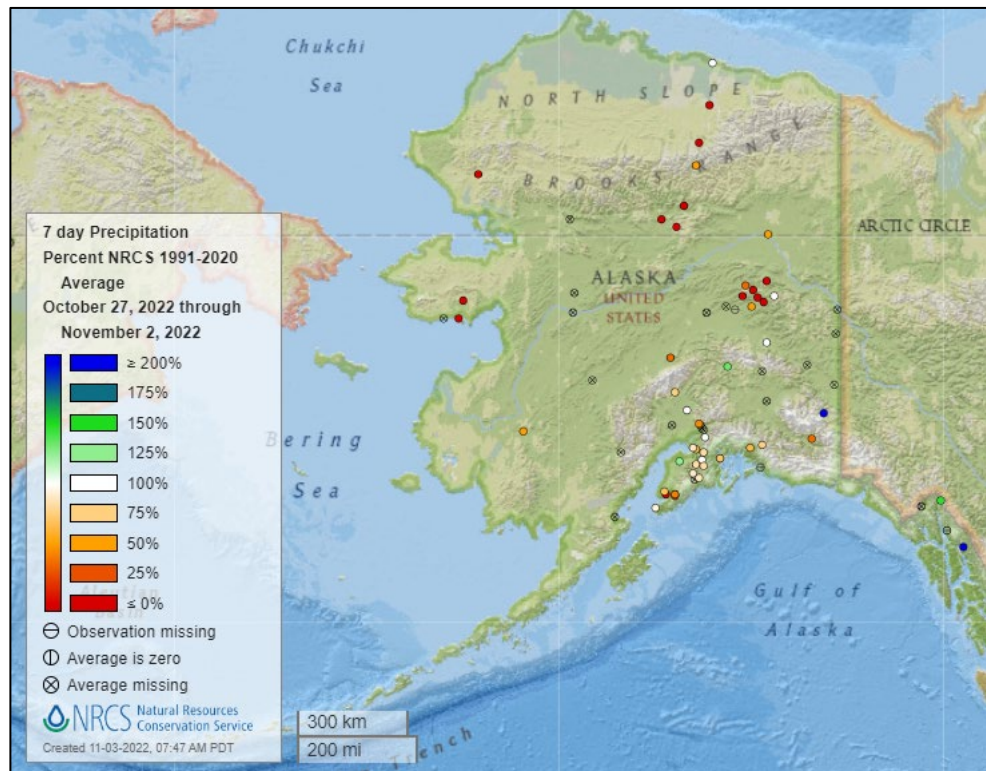


[7-day precipitation percent of average map](#)

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](#)



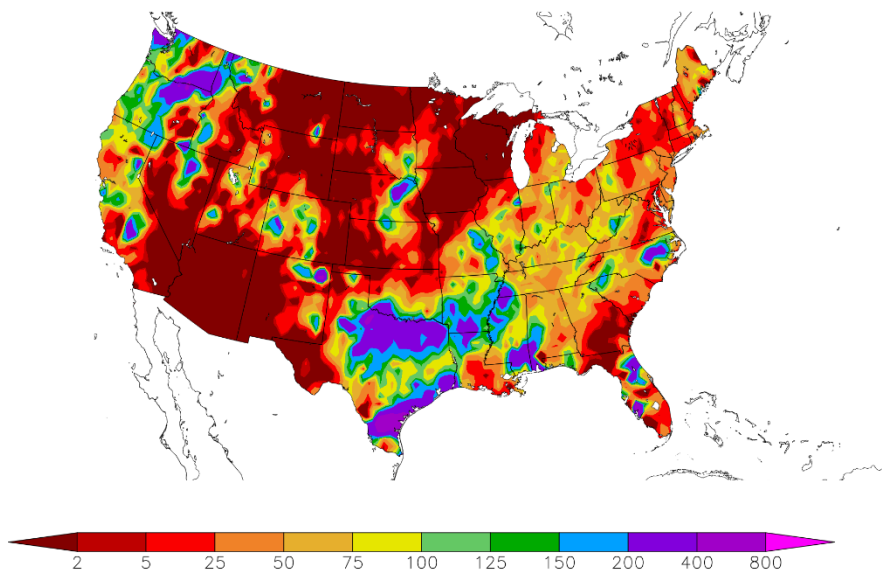
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
10/27/2022 – 11/2/2022



Generated 11/3/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

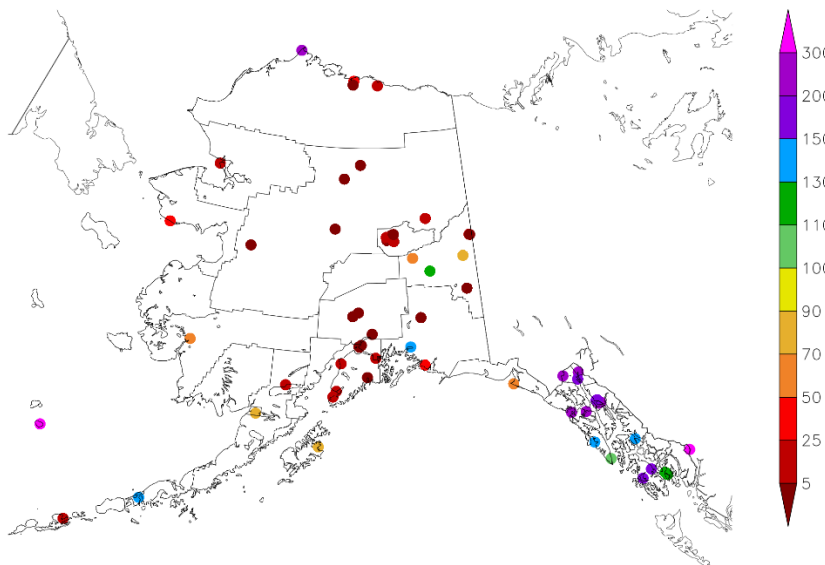
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
10/27/2022 – 11/2/2022



Generated 11/3/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

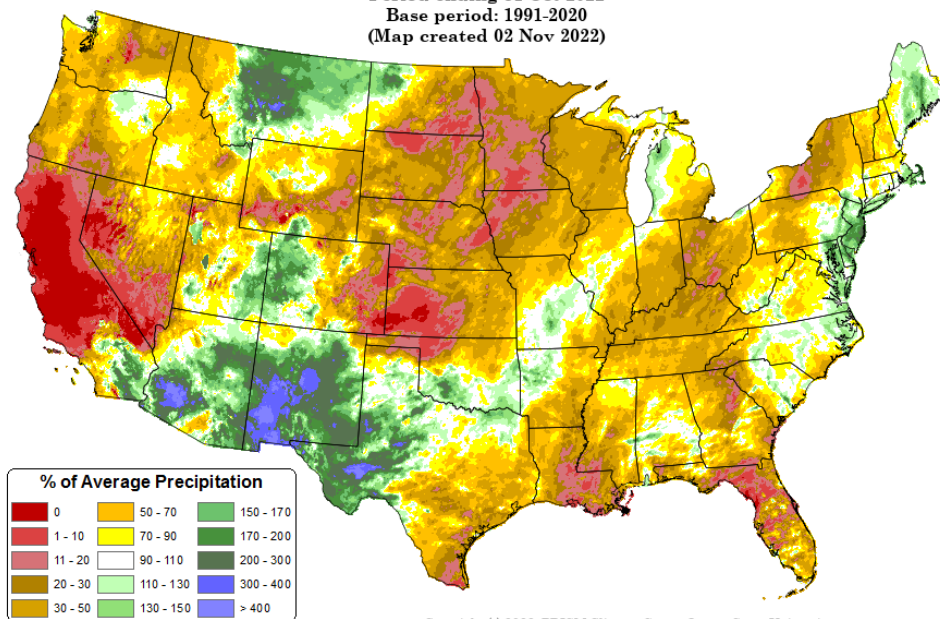
Total Precipitation Anomaly: Oct 2022

Period ending 31 Oct 2022

Base period: 1991-2020

(Map created 02 Nov 2022)

[Monthly national total precipitation anomaly map](#)



Copyright (c) 2022, PRISM Climate Group, Oregon State University

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

Source: PRISM

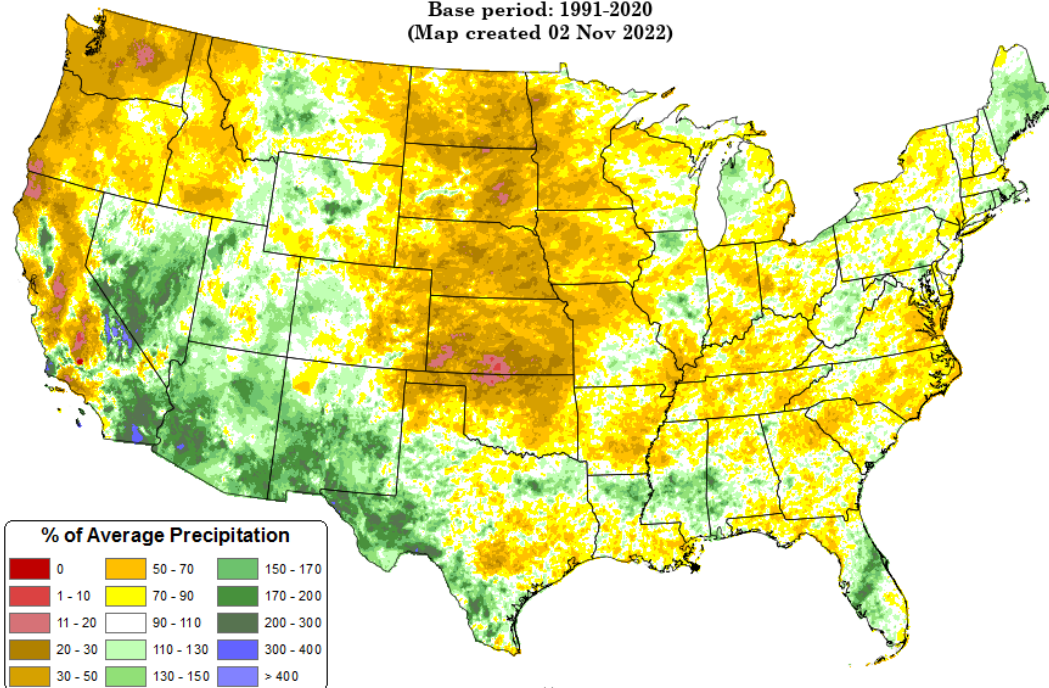
[August through October 2022 precipitation anomaly map](#)

Total Precipitation Anomaly: Aug 2022 - Oct 2022

Period ending 7 AM EST 31 Oct 2022

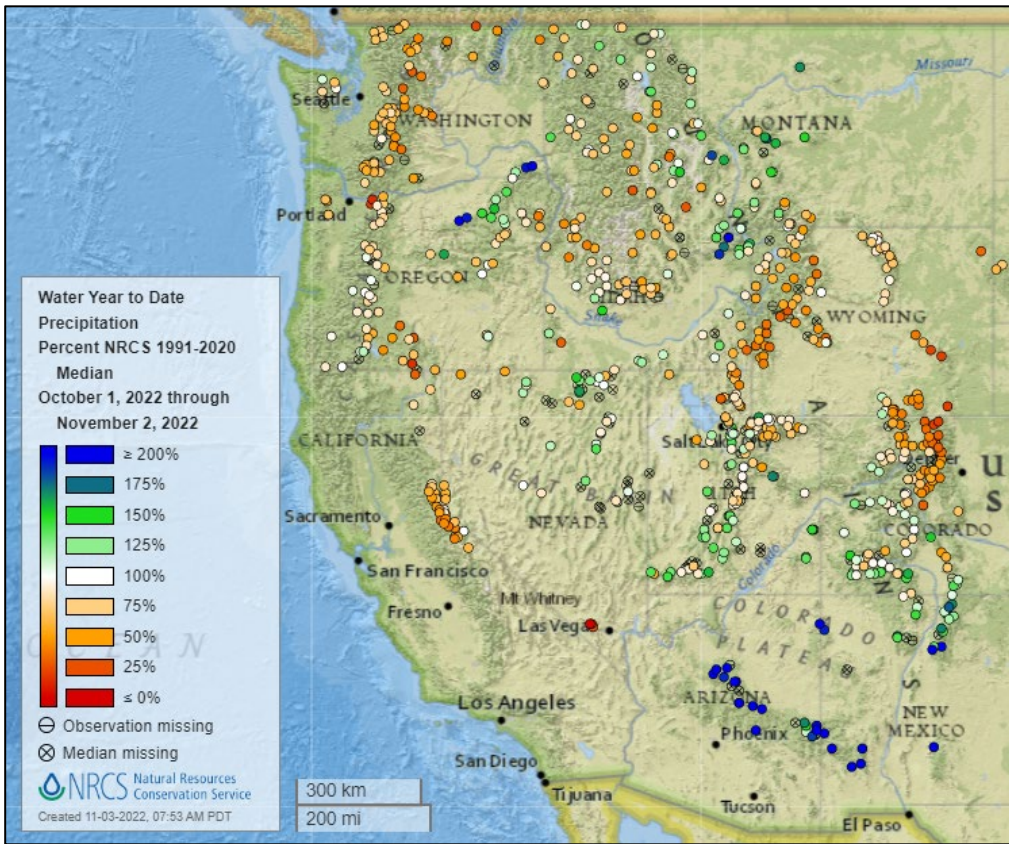
Base period: 1991-2020

(Map created 02 Nov 2022)



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Water Year-to-Date, NRCS SNOTEL Network

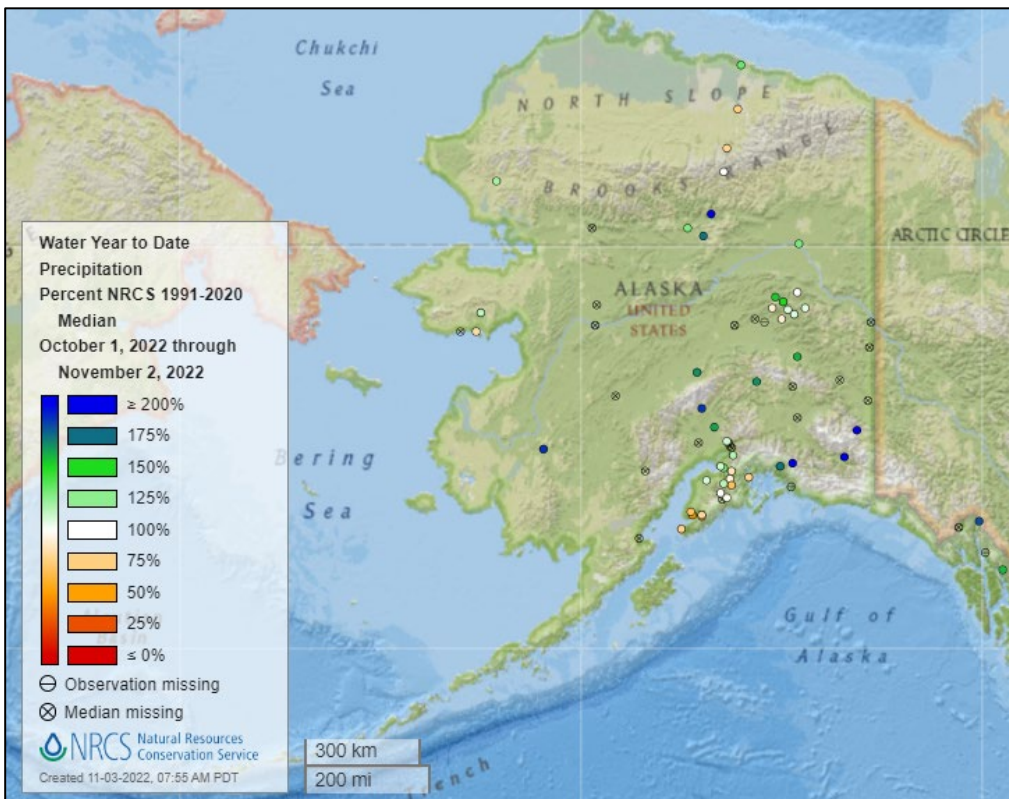


[2023 water year-to-date precipitation percent of median map](#)

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

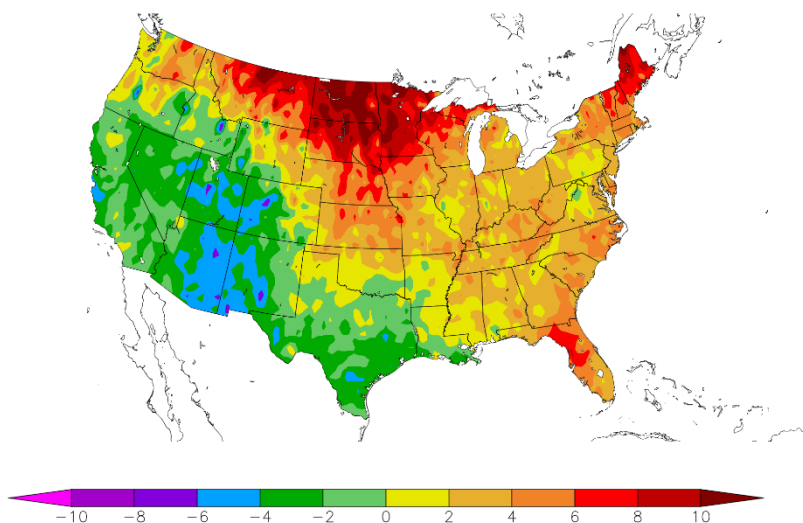
Last 7 Days, National Weather Service (NWS) Networks

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)
10/27/2022 – 11/2/2022



Generated 11/3/2022 at IPRCC using provisional data.

NOAA Regional Climate Centers

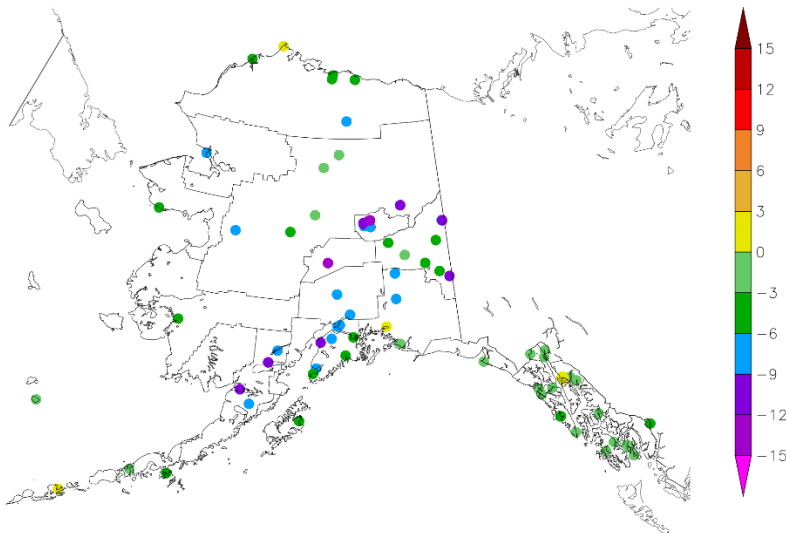
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
10/27/2022 – 11/2/2022



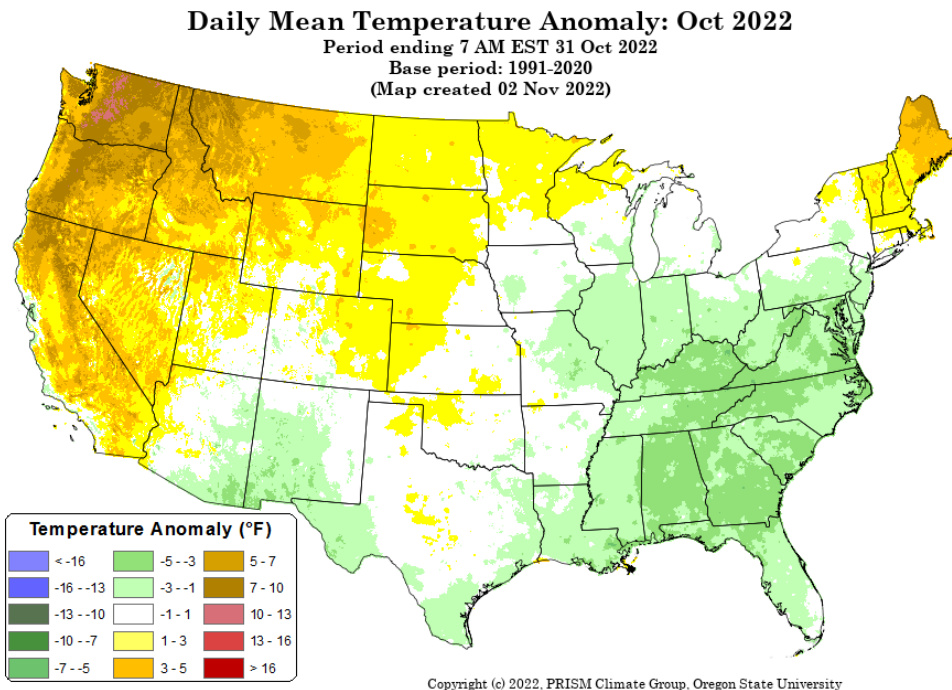
Generated 11/3/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[Monthly national daily mean temperature anomaly map](#)

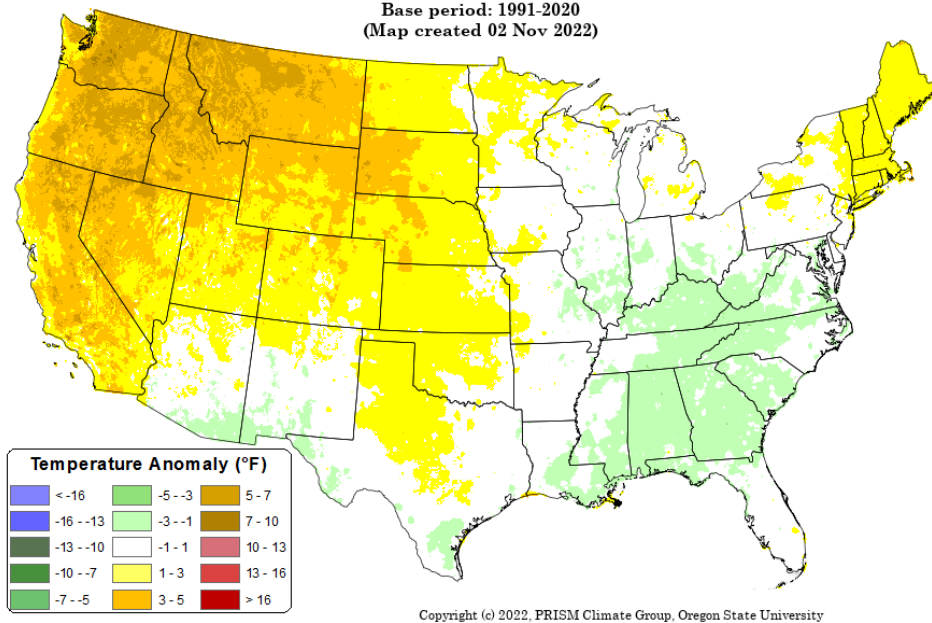


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

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](#)



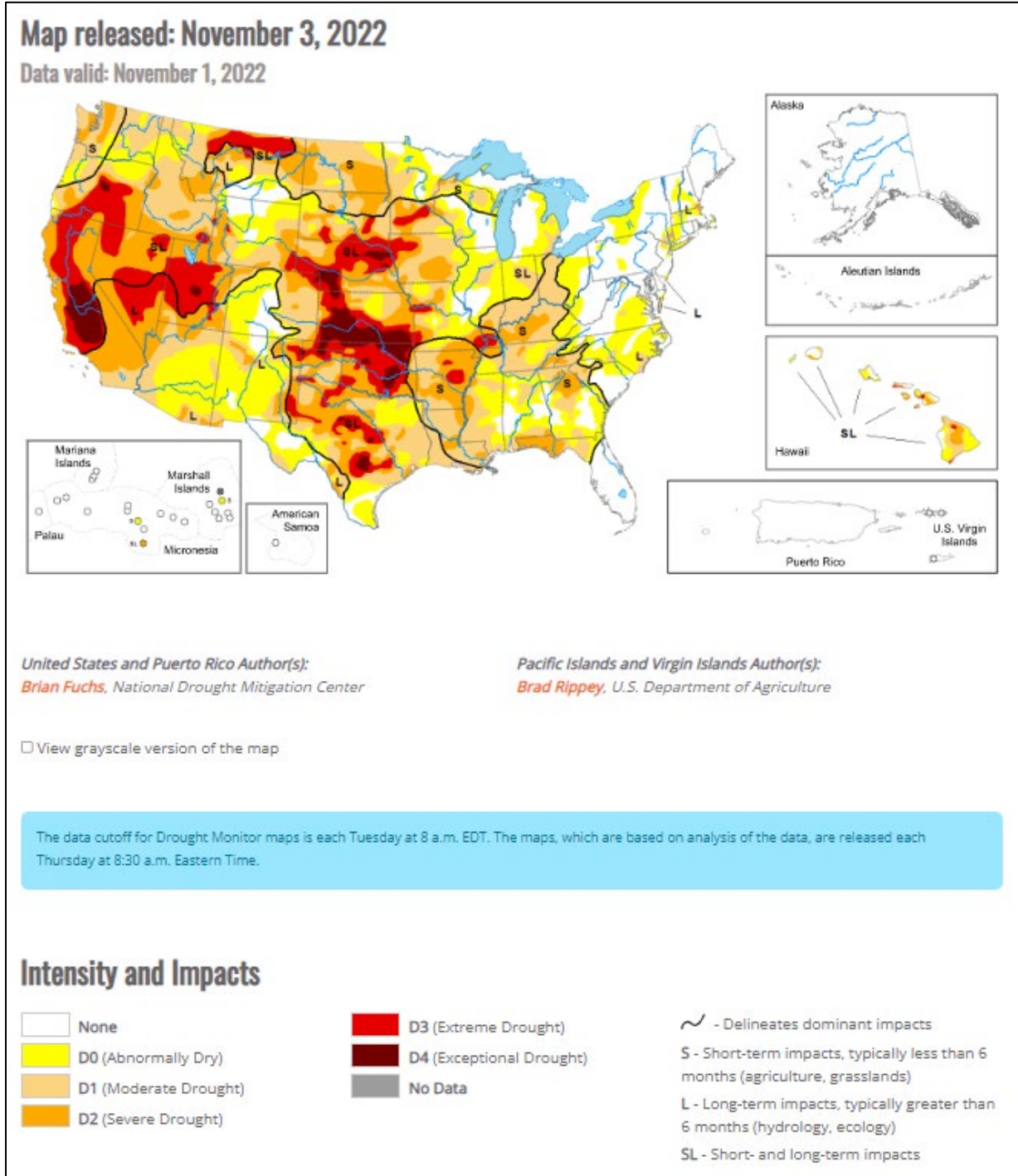
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), November 01, 2022

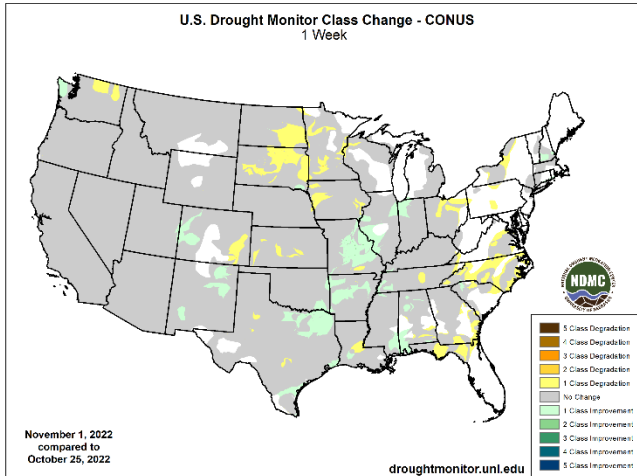
Source: National Drought Mitigation Center

“An active weather pattern over the Midwest to southern Plains brought the most precipitation to those areas this week. Warm and dry conditions dominated the northern Plains and the upper Midwest where some areas are experiencing “flash drought” conditions that are not as common this time of year. Dryness over the Southeast is starting to impact more of the region while an active pattern has started over portions of the Pacific Northwest, bringing some moisture over the western portions of the region. Temperatures were coolest over the West and southern Plains and warmest over the northern Plains and into New England.”

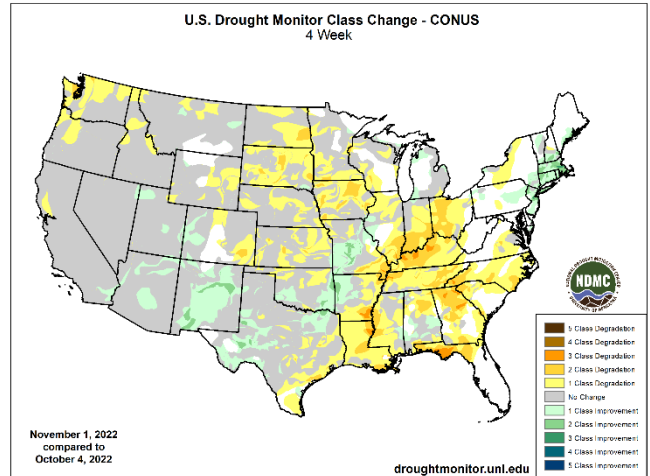
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

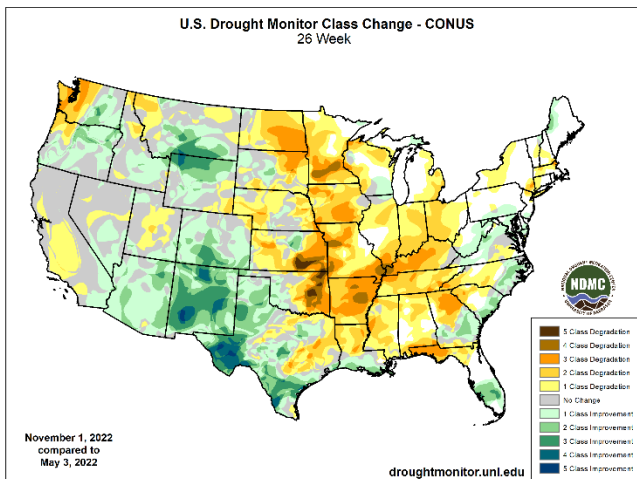
1 Week



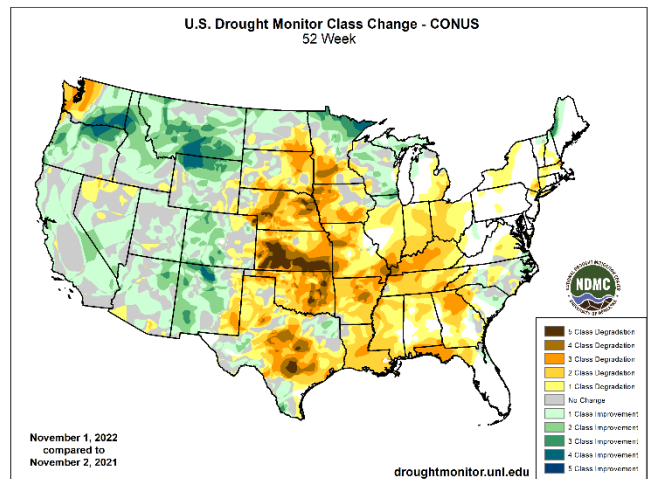
1 Month



6 Months



1 Year



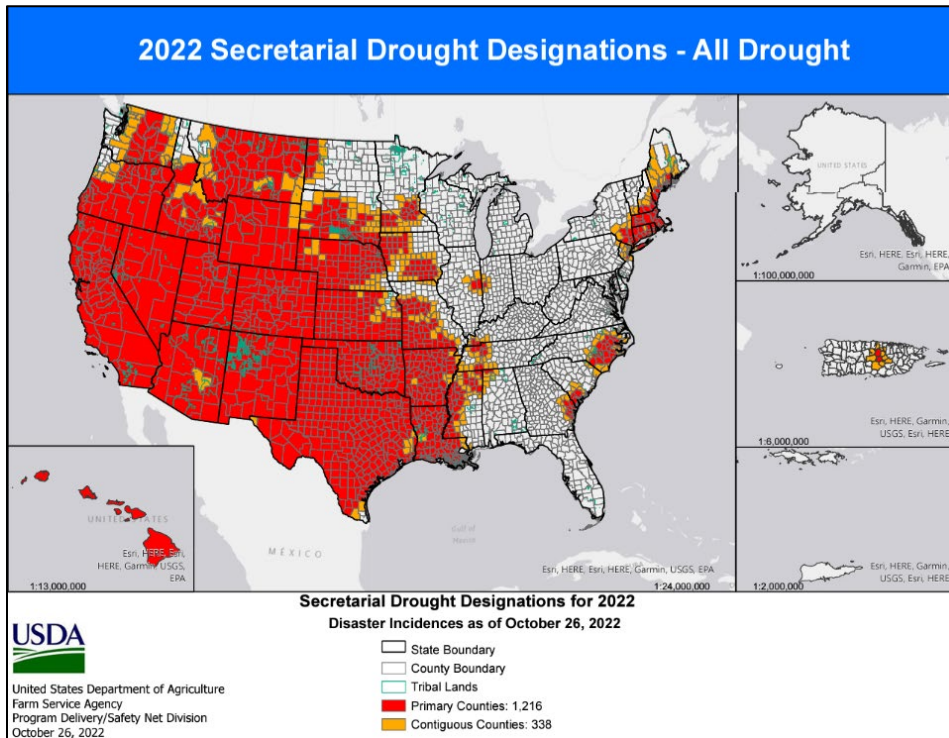
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

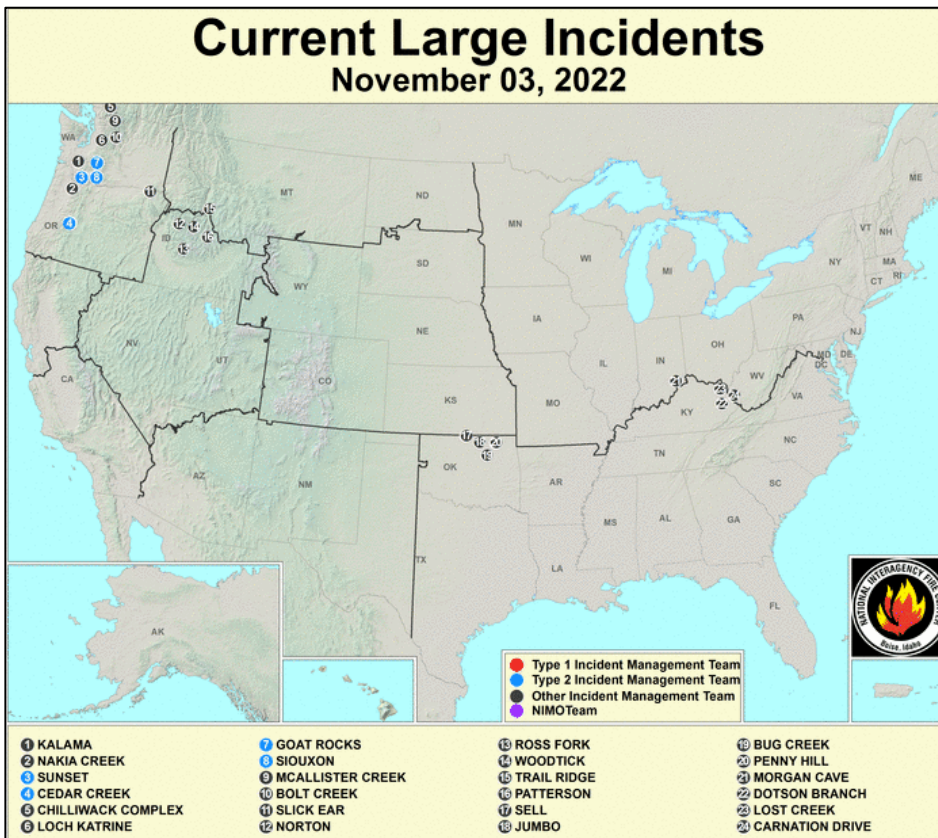
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



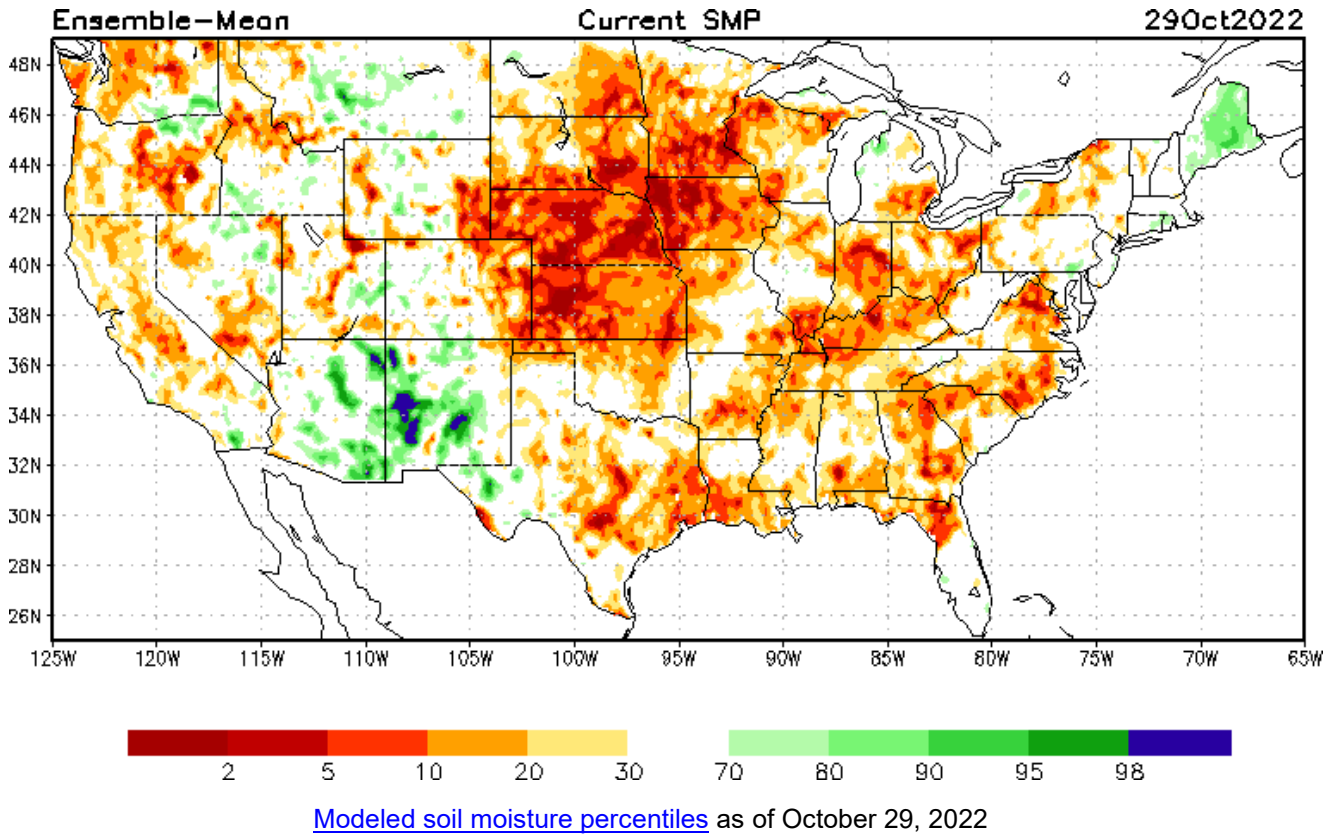
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

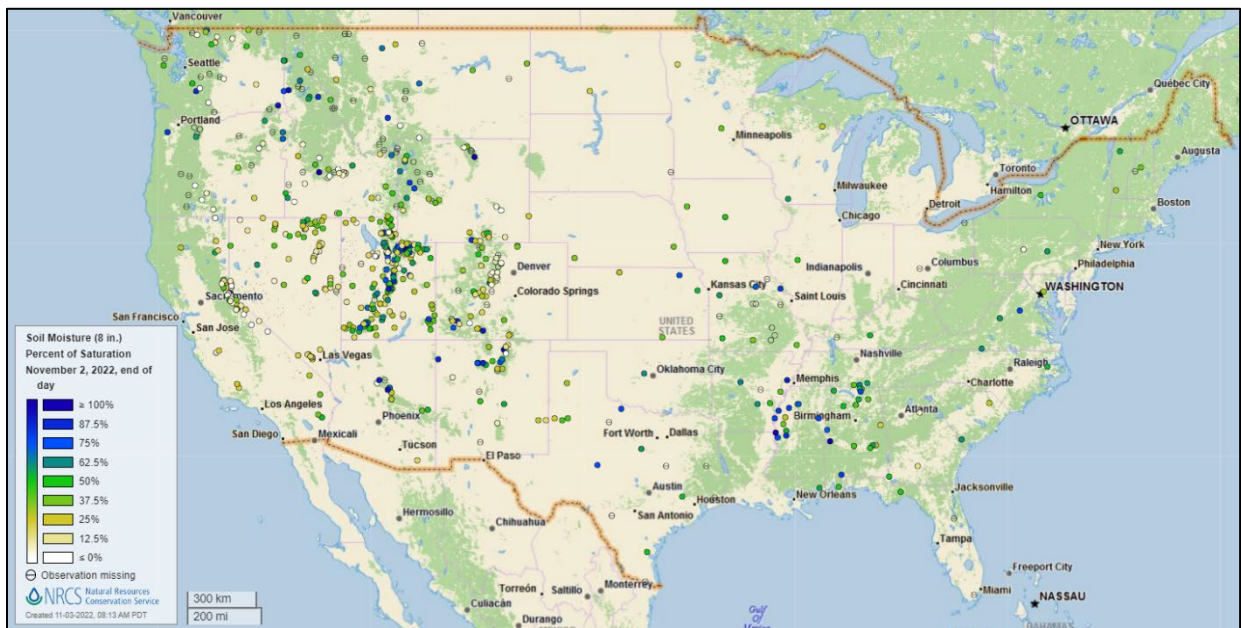
Source: NOAA National Centers for Environmental Prediction



Soil Moisture Percent of Saturation

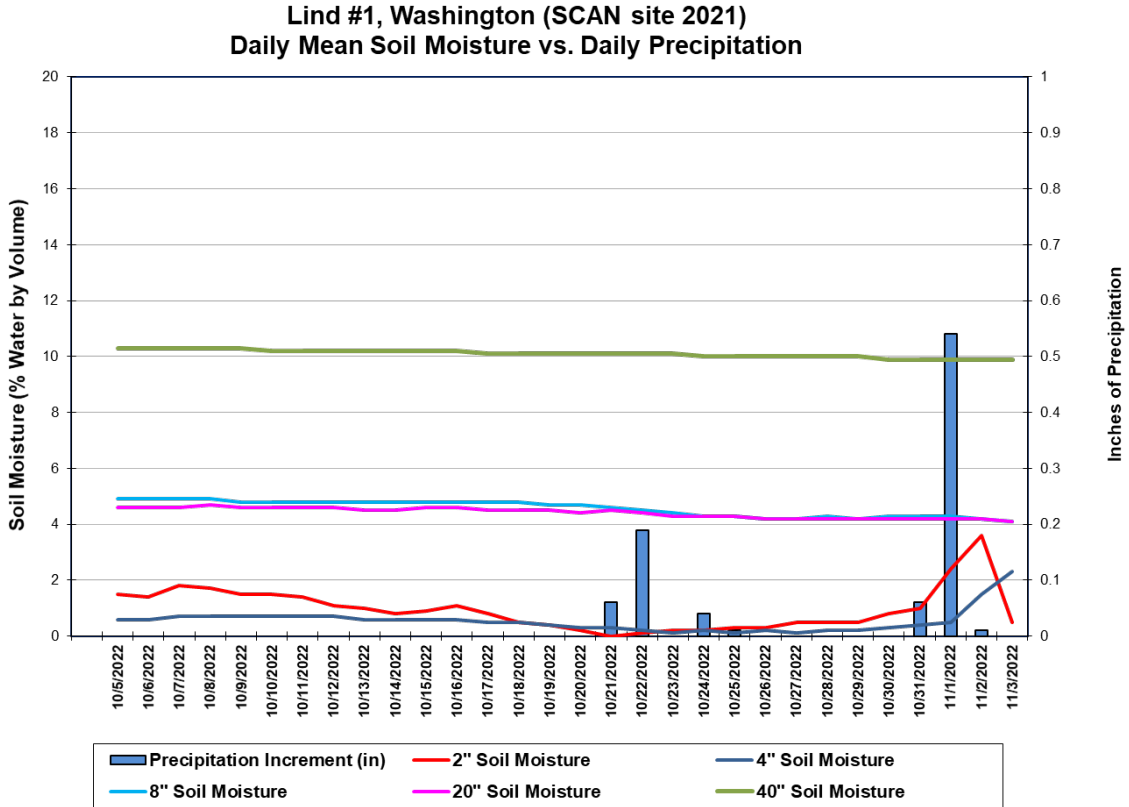
Source: NRCS SNOTEL and [Soil Climate Analysis Network \(SCAN\)](#)

[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 [Lind #1](#) SCAN site in Washington. The precipitation received during the period resulted in an increase in soil moisture reported by the -2 and -4-inch sensors. Total precipitation for the period was 0.91 inches.

Soil Moisture Data Portals

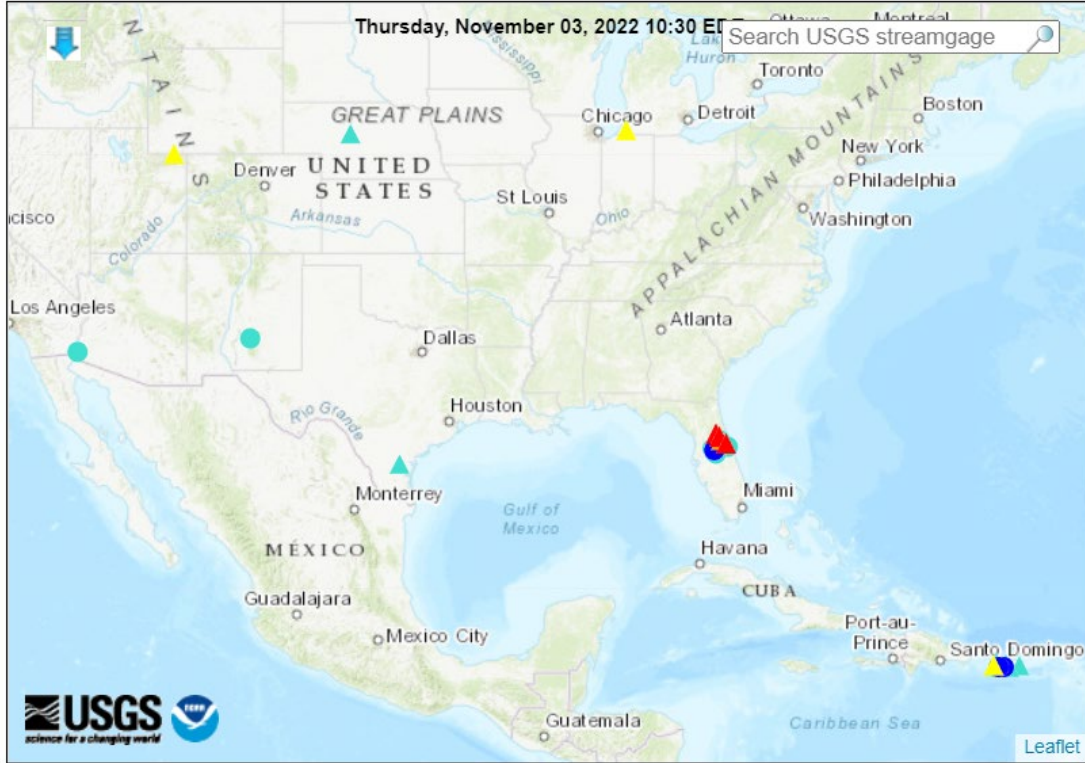
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

Streamflow, Drought, Flood, and Runoff

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

Map of flood and high flow conditions

(4 in floods [moderate: 3, minor: 1], 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

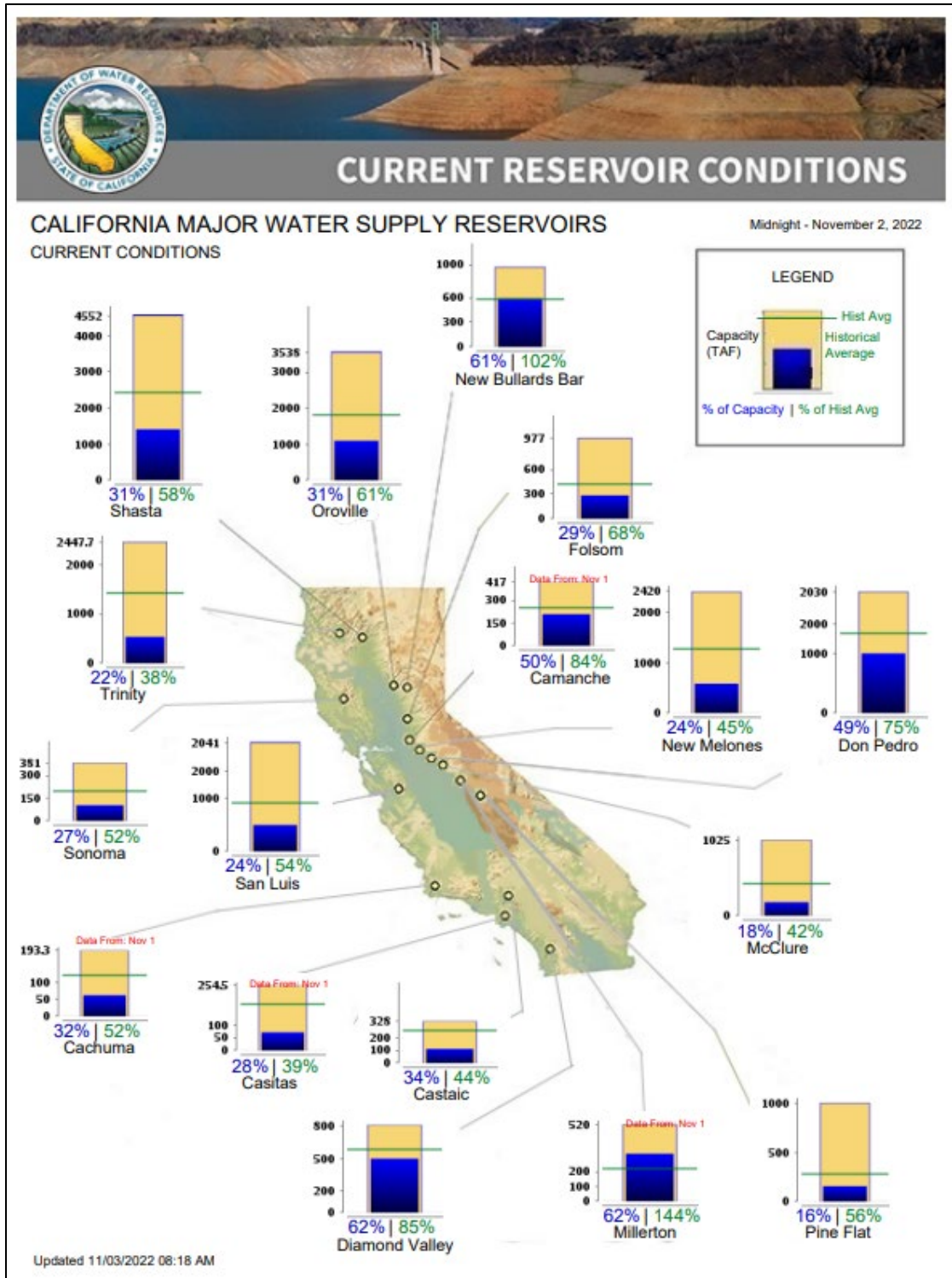
Hydromet Teacup Reservoir Depictions

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



[Current California Reservoir Conditions](#)

Agricultural Weather Highlights

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

National Outlook, Thursday, November 03, 2022: “Multiple storms entering the Northwest will maintain unsettled conditions across much of the country during the next several days. The initial system will take a southerly track, reaching the southern half of the Plains on Friday before lifting northward across the upper Great Lakes region during the weekend. Storm-total rainfall could reach 1 to 3 inches in the upper Midwest—and along the trailing cold front as it sweeps from eastern Texas into the lower Mississippi Valley. Subsequent storms will primarily affect the northwestern and north-central U.S., with 5-day precipitation totals of 5 inches or more expected in parts of the Pacific Northwest. Meanwhile, cold air will become deeply entrenched across the northern Plains and Northwest, with sub-zero readings possible early next week across the western half of Montana and neighboring areas. Early next week, rain showers and gusty winds may begin to overspread the southern Atlantic States. Elsewhere, only light precipitation will fall during the next 5 days across the High Plains and much of the eastern U.S. The NWS 6- to 10-day outlook for November 8 – 12 calls for the likelihood of above-normal temperatures along and east of a line from eastern New Mexico to Minnesota, while cooler-than-normal conditions will cover an area stretching from the Pacific Coast to the northern Plains. Meanwhile, near- or above-normal precipitation across most of the country should contrast with drier-than-normal conditions in the lower half of the Mississippi Valley.”

Weather Hazards Outlook: [November 05 – 09, 2022](#)

Source: NOAA Weather Prediction Center




U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

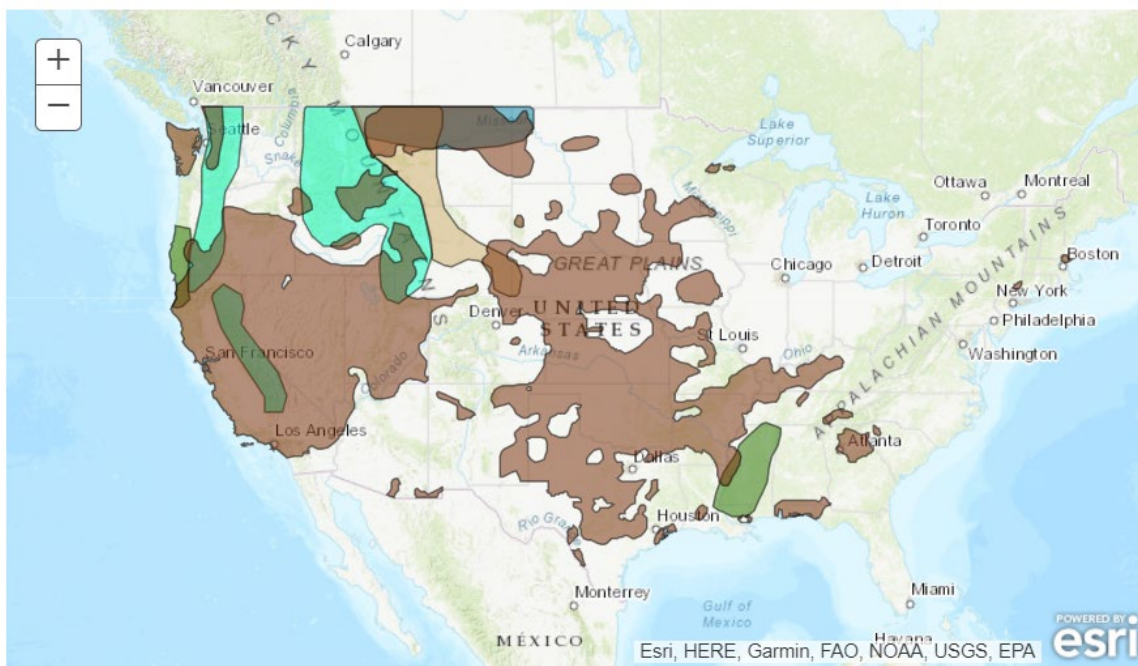
Created November 02, 2022

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 05, 2022 - November 09, 2022

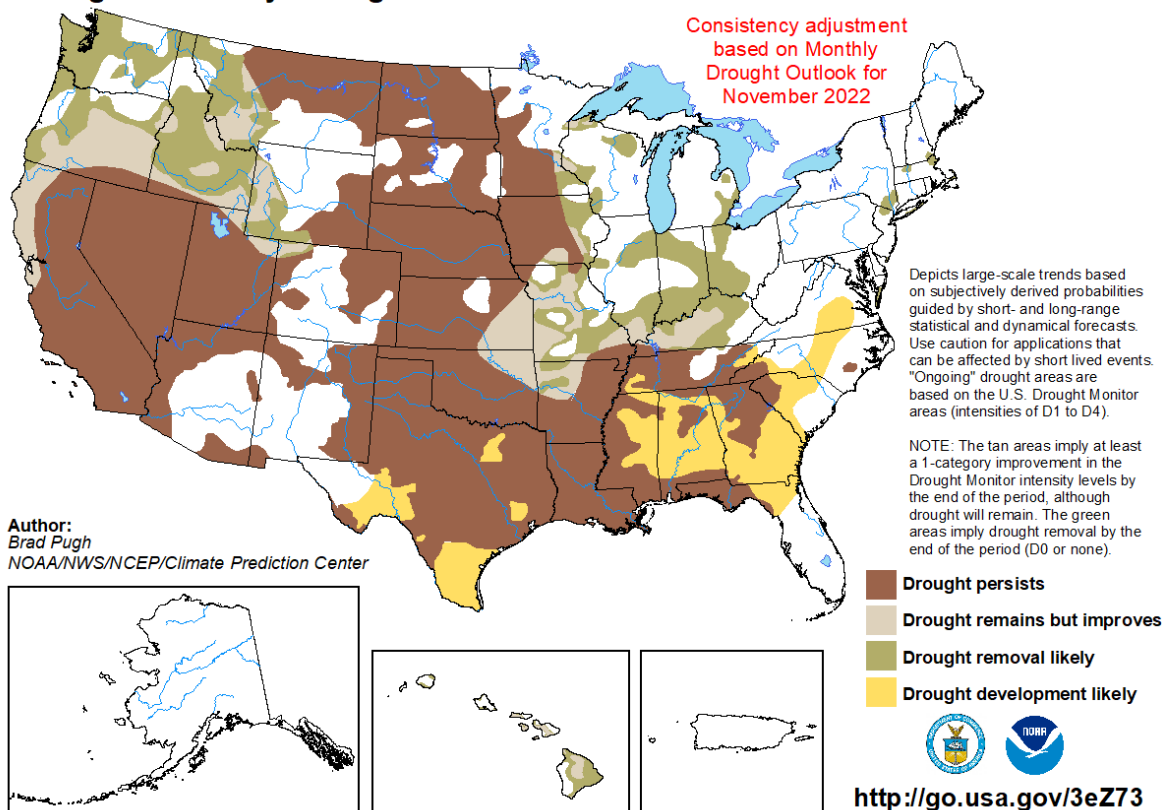


Seasonal Drought Outlook: [November 01, 2022 – January 31, 2023](#)

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

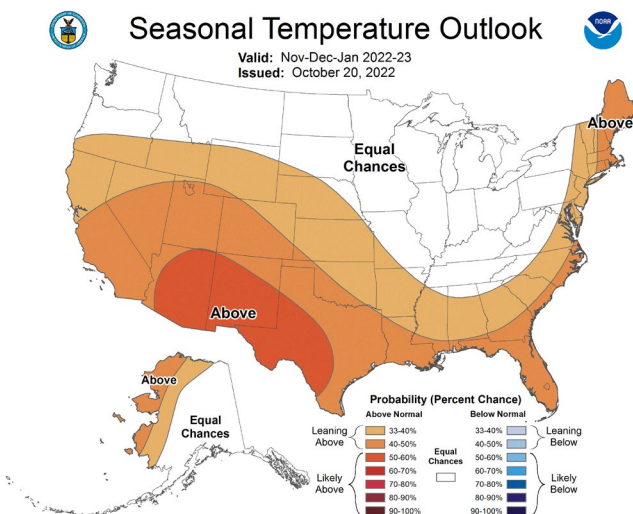
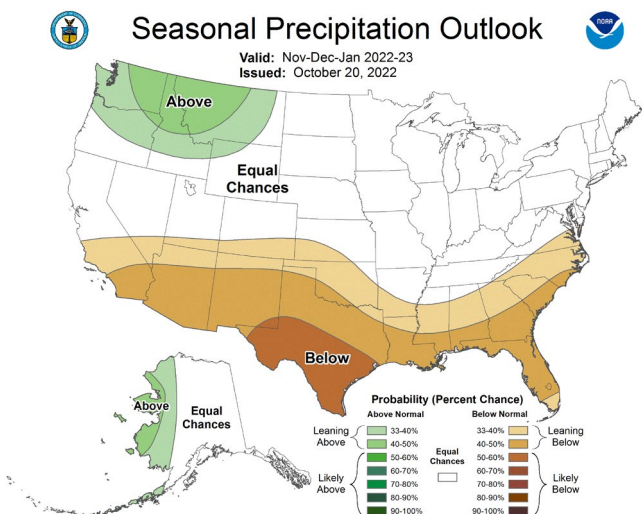


Climate Prediction Center 3-Month Outlook

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](#).