

Drought Information Statement for New Hampshire and Western Maine October 30 2025

Issued By: NWS Gray Maine
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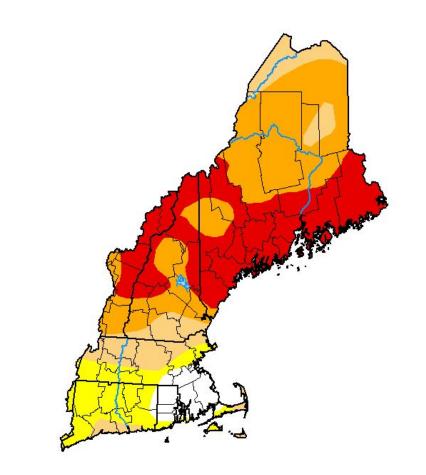
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.drought.gov/drought-status-updates/ for regional drought status updates.
- 100% of Maine and New Hampshire in Moderate Drought or worse (D1-D3)
- Long-awaited soaking rainfall brought short-term and incremental drought relief to the foothills and mountains region
- Below normal precipitation in Southern Maine resulted in drought expansion

Link to the <u>latest U.S. Drought Monitor</u> for the Northeast

Drought intensity and Extent

- - 38% of New Hampshire Central and Northern New Hampshire
 - 44% of Maine -Southern and Western Maine
- D2 (Severe Drought):
 - 45% of New Hampshire- Central
 - 47% of Maine- Interior and Coast and Central Highlands
- D1 (Moderate Drought):
 - 17% of New Hampshire-Southern
 - 10% of Maine- North Woods, Aroostook
- 100% of Maine and New Hampshire in Moderate Drought (D1) or worse Severity

U.S. Drought Monitor **New England Watershed**



October 28, 2025 (Released Thursday, Oct. 30, 2025) Valid 8 a.m. EDT



Image Caption: U.S. Drought Monitor valid October 21, 2025

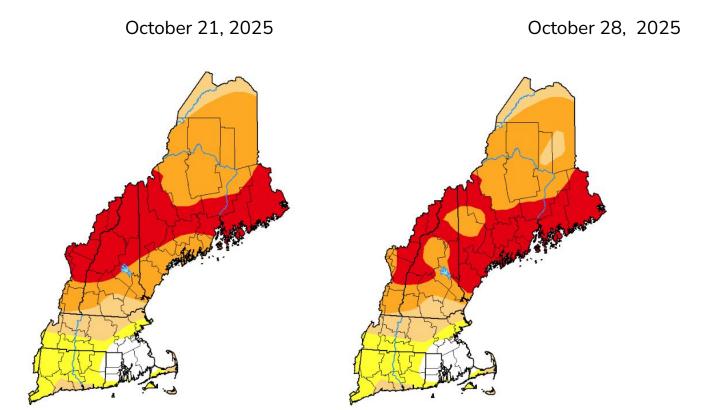




Link to the latest 1 week change map for New England

- One Week Drought Monitor Class Change

 - D3 Expansion across southern Maine Reduction of D3 across the Whites and Western Maine Mountains





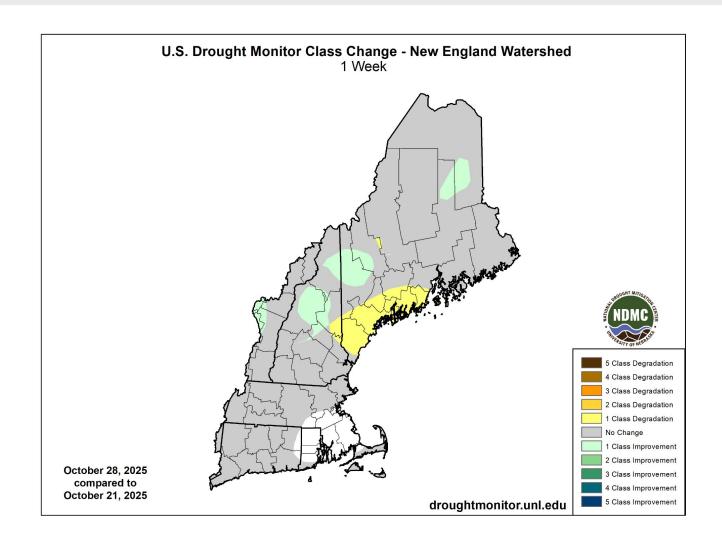
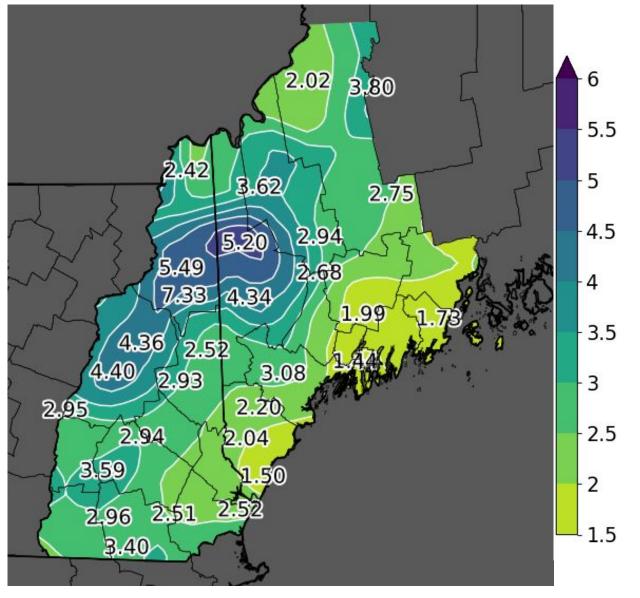


Image Caption: U.S. Drought Monitor 4-week change map valid October 21, 2025

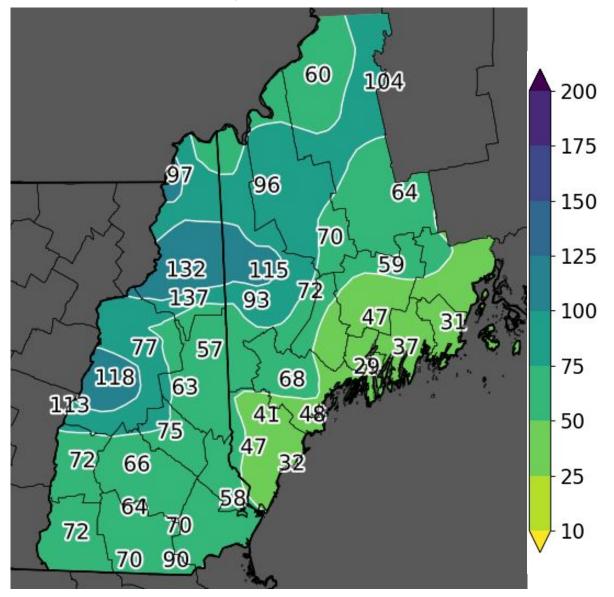


Near to above normal rainfall occurred across the White Mountains and foothills of the Western ME Mountains, elsewhere were generally below normal particularly along the southern ME coast.

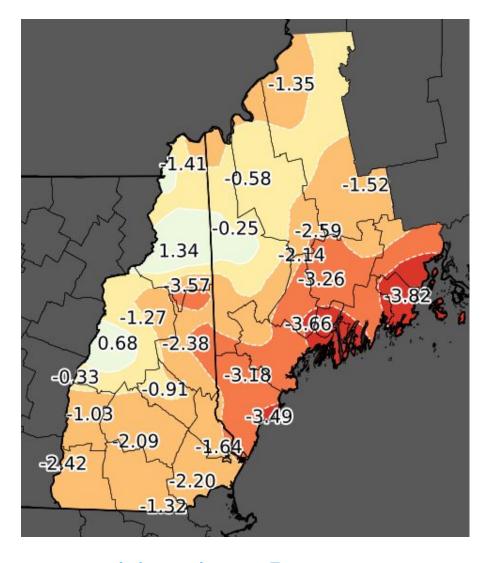
Month-to-Date Precipitation Ending October 30 2025

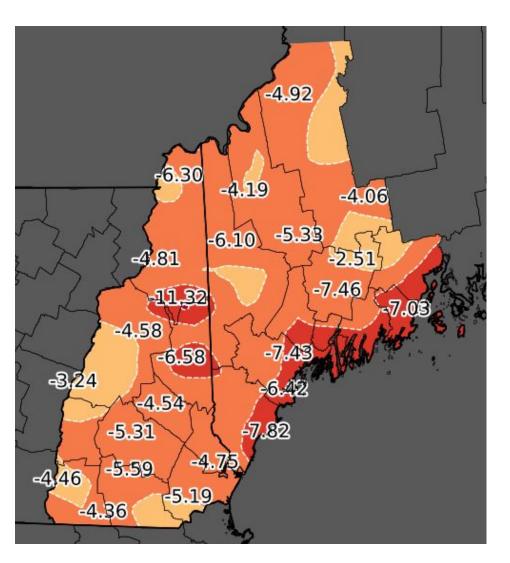


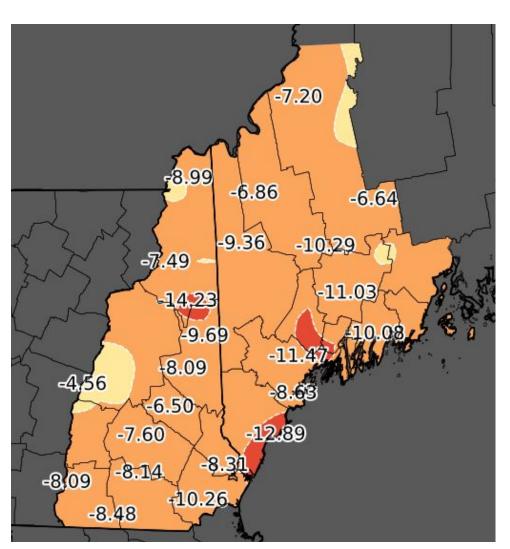
Month-to-Date Precipitation % of Normal Ending October 30 2025



Ending Oct 30







Month to Date

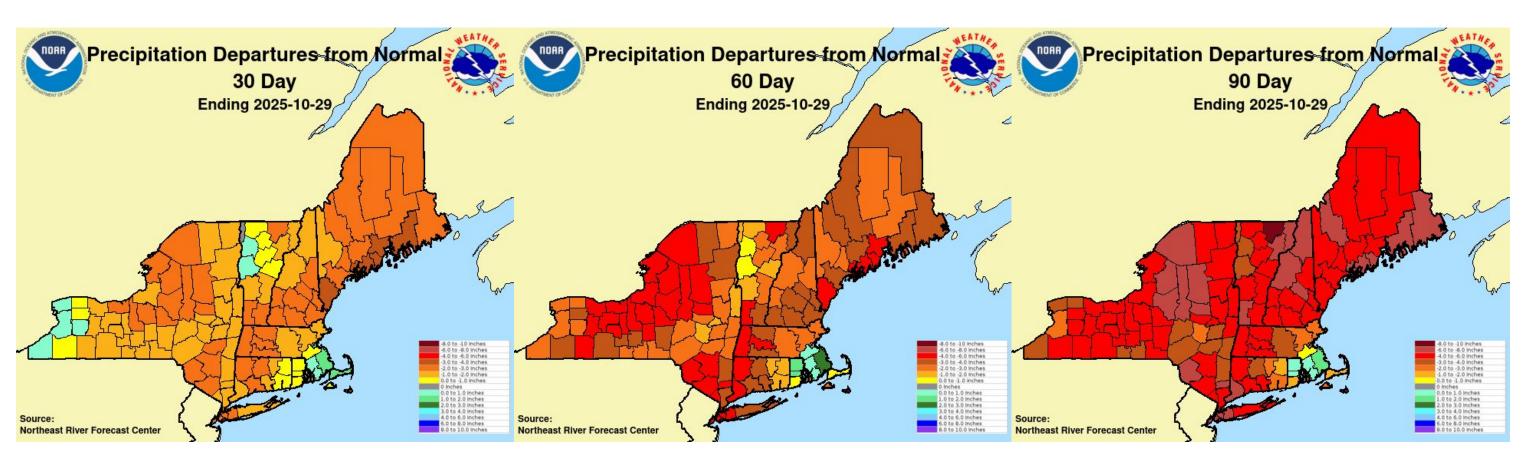
90 Days

Since June 1



Precipitation Deficits- Regional View

Maps of Departures from Normal by County



Local Departures 1-4"

Local Departures 3-8"

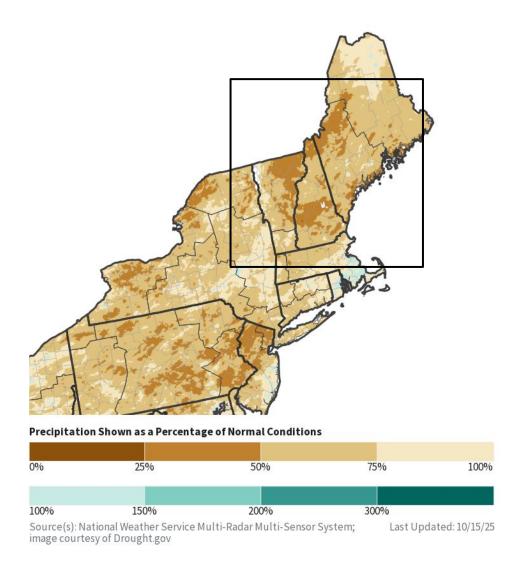
Local Departures 4-10"



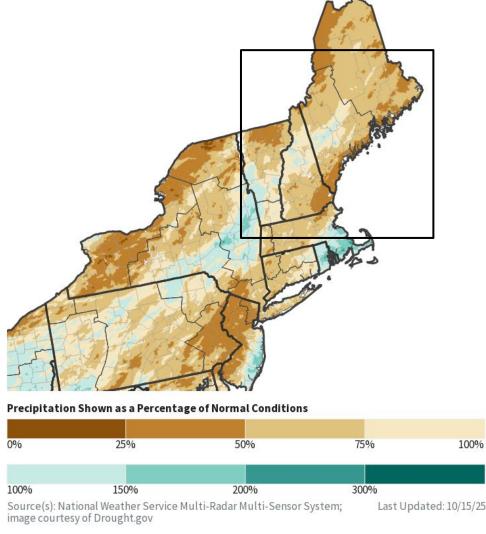
Precipitation % of Normal

- Precipitation anomalies
 were near normal for the
 White Mountains Region
 and parts of the Foothills
 of the Western Maine
 Mountains, but generally
 below normal for the rest
 of the region through
 October 30
- The last 90 days have been around 50% of normal or less

90-Day Percent of Normal Precipitation



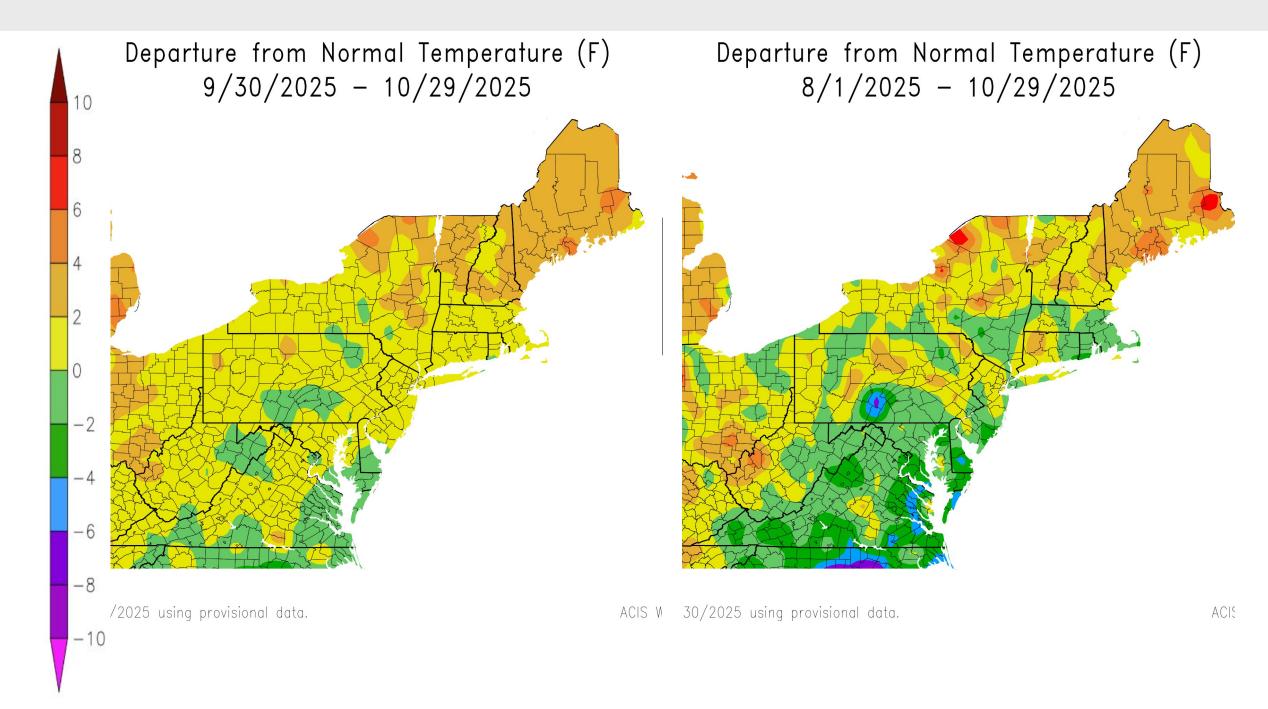
30-Day Percent of Normal Precipitation



Temperature Anomalies

30 and 90 Day temperature anomalies all indicated above normal temperatures across both Maine and New Hampshire.

The above normal temperatures were the main drivers for excessive evaporation, a primary driver for the drought.

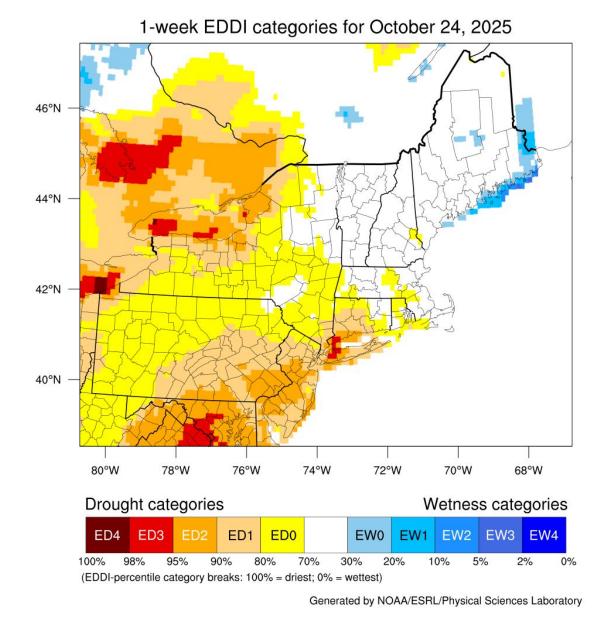


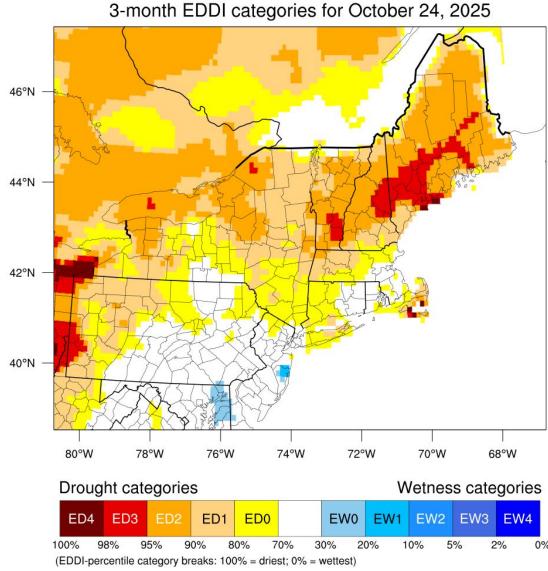


Evaporative Demand Drought Index (EDDI)

Evaporation rates dropped off in late October due to cooler temperatures and wetter conditions.

Cumulative EDDI over the last few months were a primary catalyst in the 2025 drought



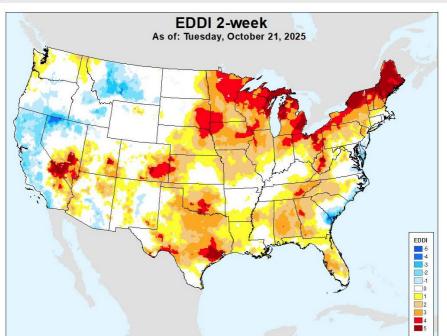


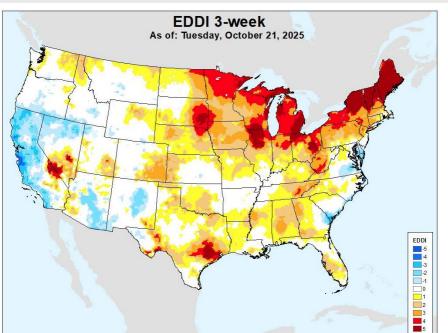
Generated by NOAA/ESRL/Physical Sciences Laboratory

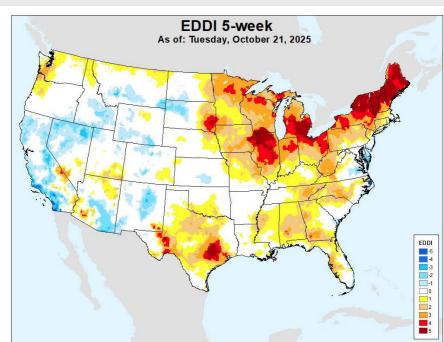


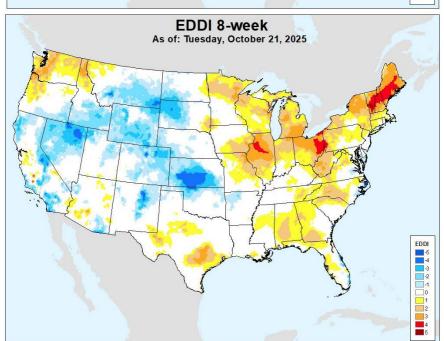


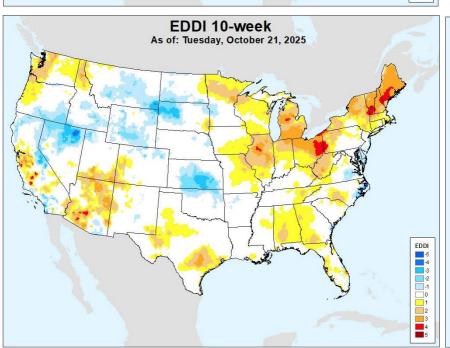
Evaporative Demand Drought Index (EDDI)

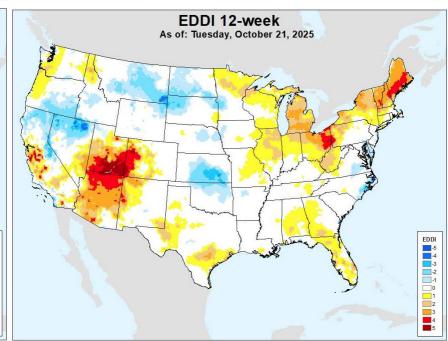














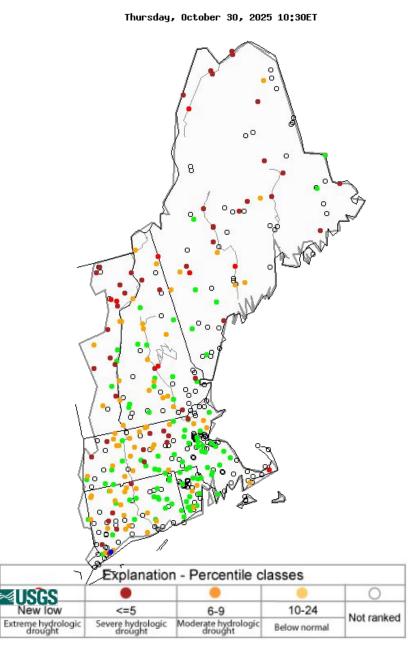
Hydrologic Conditions and Impacts

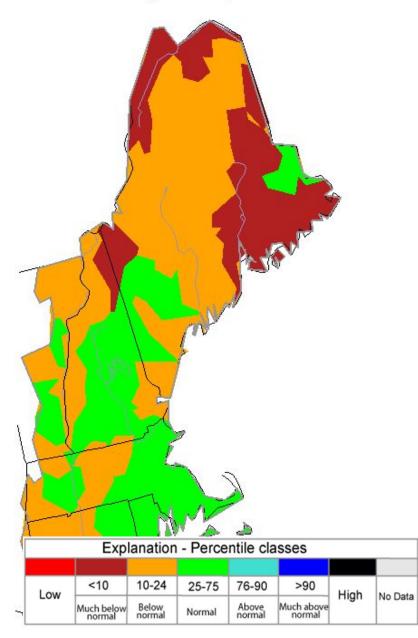
USGS Streamgage Information

- Below to much-below normal streamflows remain common across most of Maine and New Hampshire
- Small streams, especially in hilly terrain rebounded to near normal flows due to rainfall in late October

Image 1 (left): USGS 7-Day Streamflow based on the percentile of existing streamflow records on this day of the year.

Image 2 (right): USGS 7 day average streamflow HUC map.





Hednesday, October 29, 2025



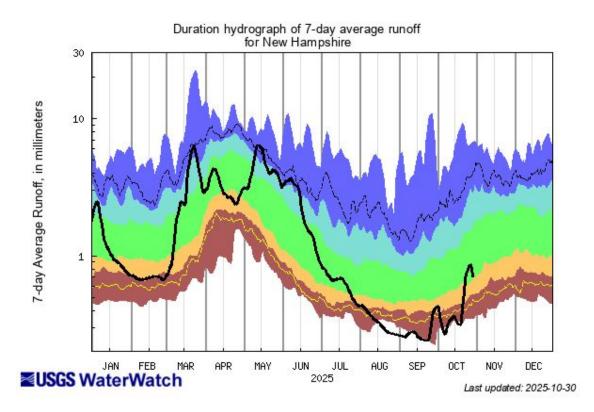


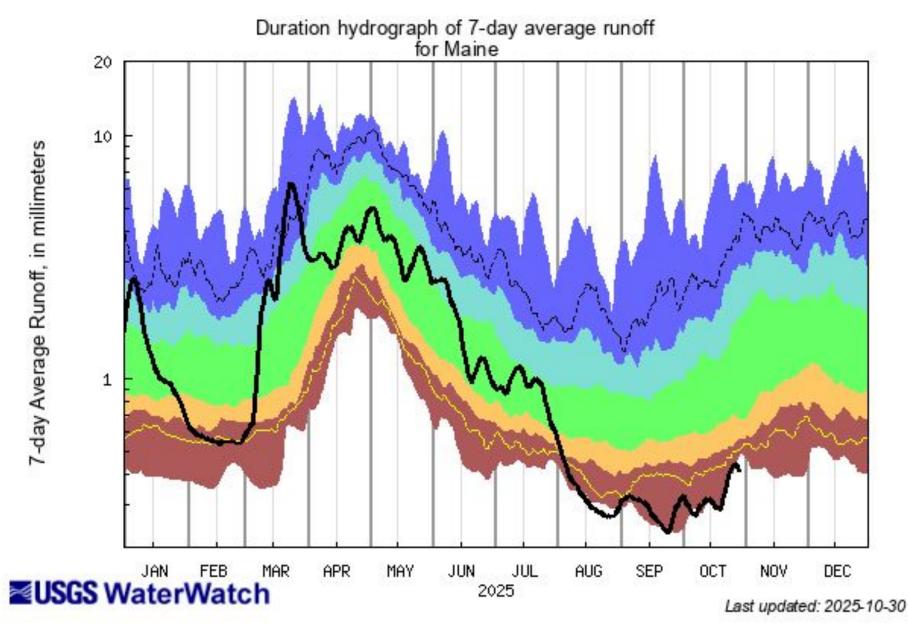
Hydrologic Conditions and Impacts

USGS Streamgage Information

Image 1 (Right): USGS 7-Day Streamflow Runoff Duration Hydrograph for Maine based on the percentile of existing streamflow records on this day of the year.

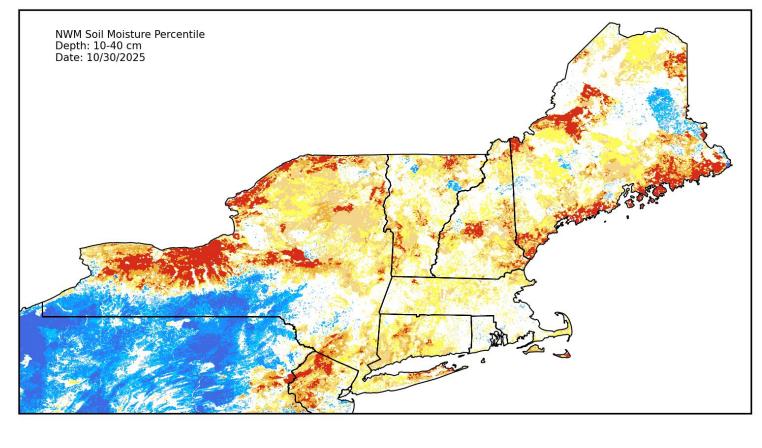
Image 2 (Bottom): USGS 7 day Runoff Duration Hydrograph for New Hampshire based on the percentile of existing streamflow records on this day of the year.

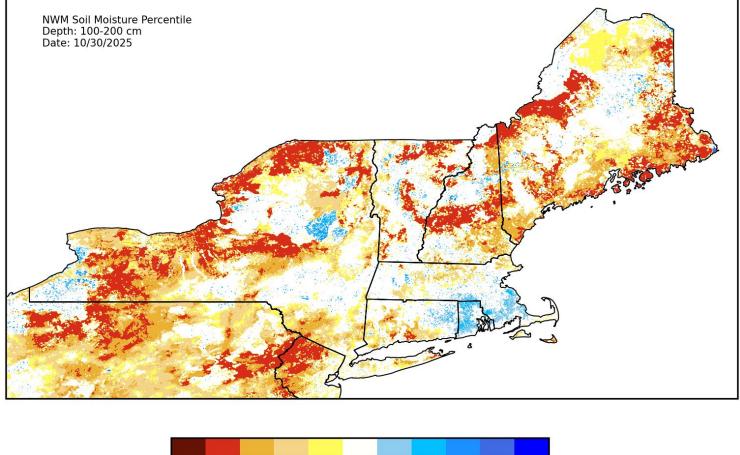


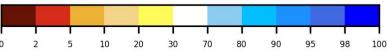


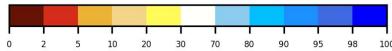


National Water Model Soil Moisture Estimates









(Left) NWM Soil Moisture Map indicating the moisture content of 4-16 inches of soil compared to historical conditions based on NOAA's National Water Model.

(Right) NWM Soil Moisture Map indicating the moisture content of the 40-79 inches of soil compared to historical conditions based on NOAA's National Water Model.





Satellite Based

- Deeper soil moisture percentiles remain well below climatological normals, confirming the severe and extreme drought conditions
- Some improvement was made in the hardest hit D3 region in the western Maine Mountains and White Mountain ranges

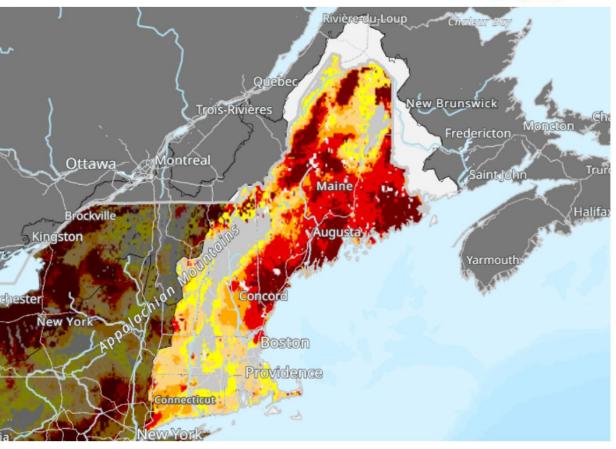
This map shows the moisture content of the top 1 meter of soil compared to historical conditions from 1981–2013, based on NASA's Short-term Prediction and Transition Center – Land Information System (SPoRT-LIS).

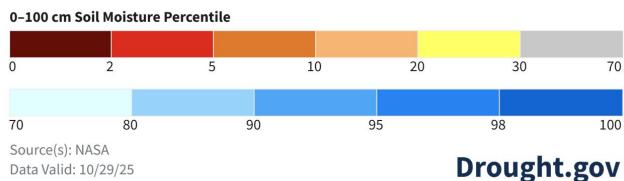
NASA SPORT-LIS 0-100 cm Soil Moisture Percentile







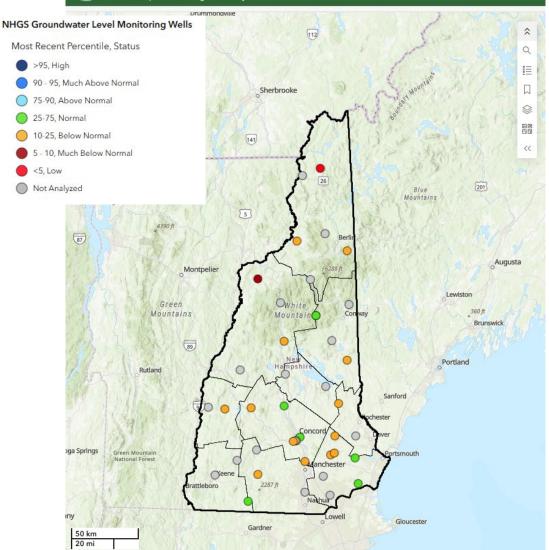






Groundwater Levels

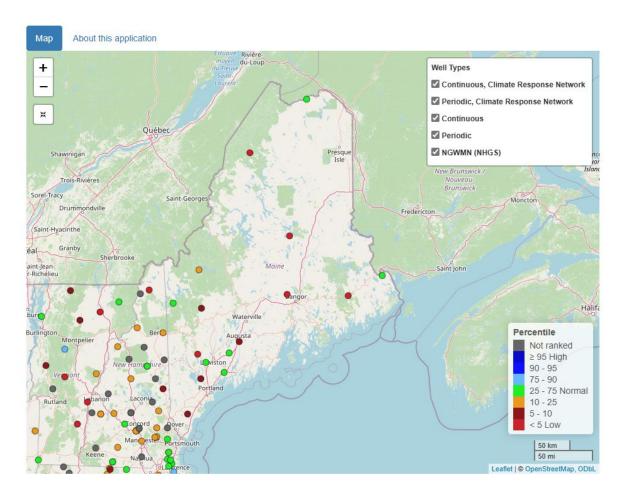






Groundwater Levels in New England

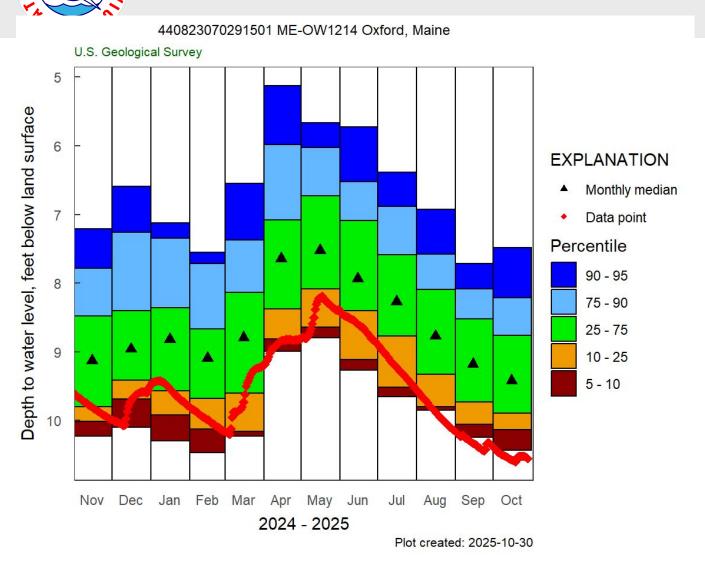
Recent conditions relative to historical monthly statistics

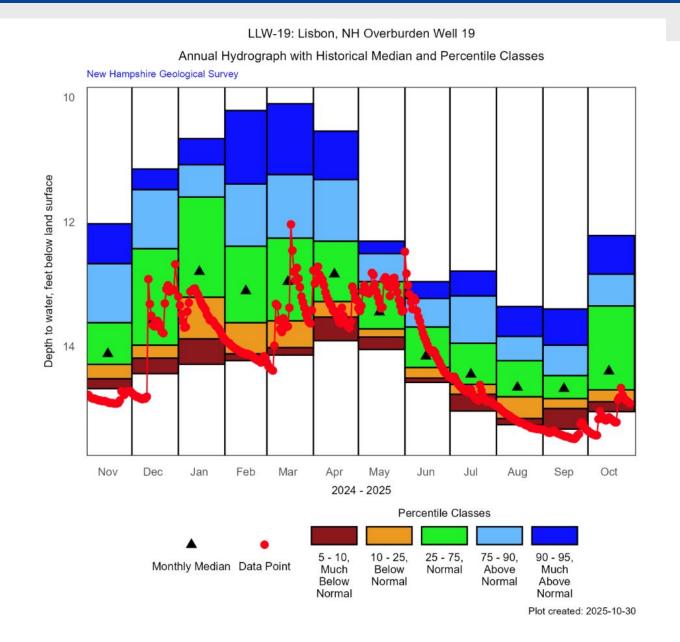


Several groundwater monitoring wells are Below to Much Below Normal per NH Groundwater monitoring dashboard (https://nhdes.maps.arcgis.com/apps/dashboards/6b333fa640994c17a31993a9e5298043) and the USGS Groundwater Levels (https://newengland.water.usgs.gov/web_app/GWW/GWW.html) in New England dashboard.



Groundwater Impacts



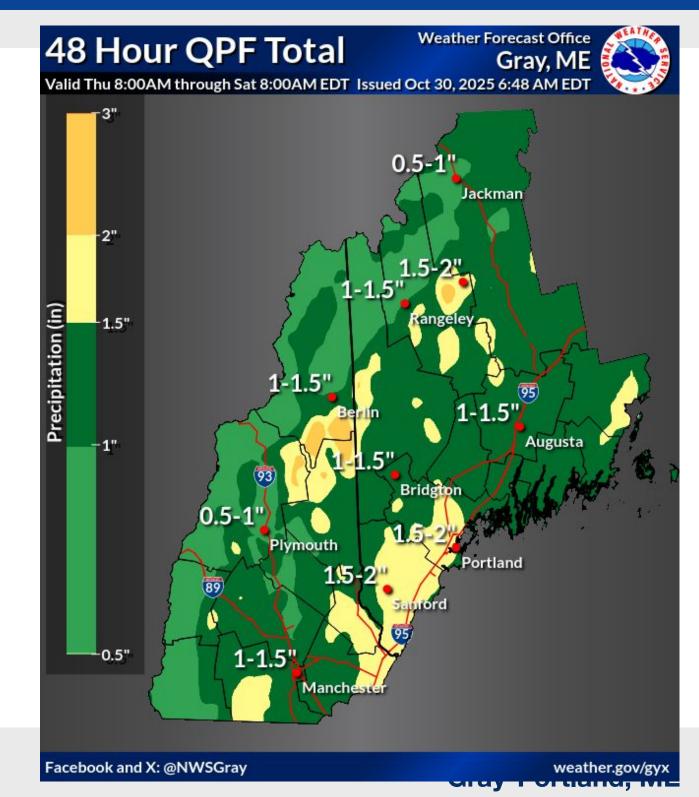


Above are two real-time wells observations (red dots) with climatology percentiles in the background. (Left) A USGS groundwater well in Oxford Maine with a period of record from 1980. (Right) Groundwater well from Lisbon New Hampshire in Grafton County from 2006.





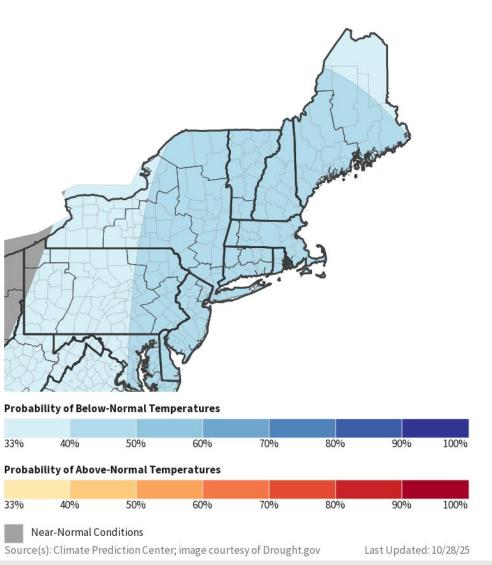
- Heavy rainfall expected Oct 30-31 with amounts between 1-2", locally higher (Storm total estimate image on the right)
- A generally active pattern sets up for next week, with multiple opportunities for accumulating precipitation.
- No significant rainfall totals are expected, but the cumulative totals could reach a half inch or more particularly in the mountains
- Note some of the precipitation may fall as snow



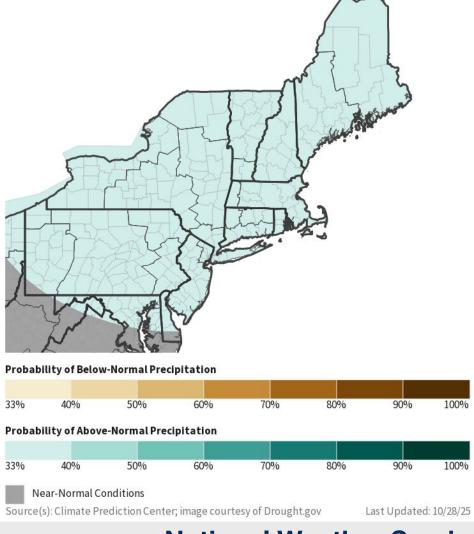


- A 33-40% chance of above normal precipitation
- 40-50% chance of below normal temperatures

6-10 Day Temperature Outlook for November 3, 2025-November 7, 2025



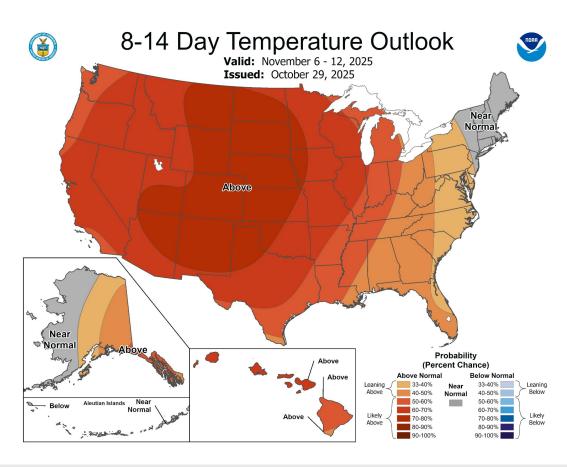
6-10 Day Precipitation Outlook for November 3, 2025-November 7, 2025

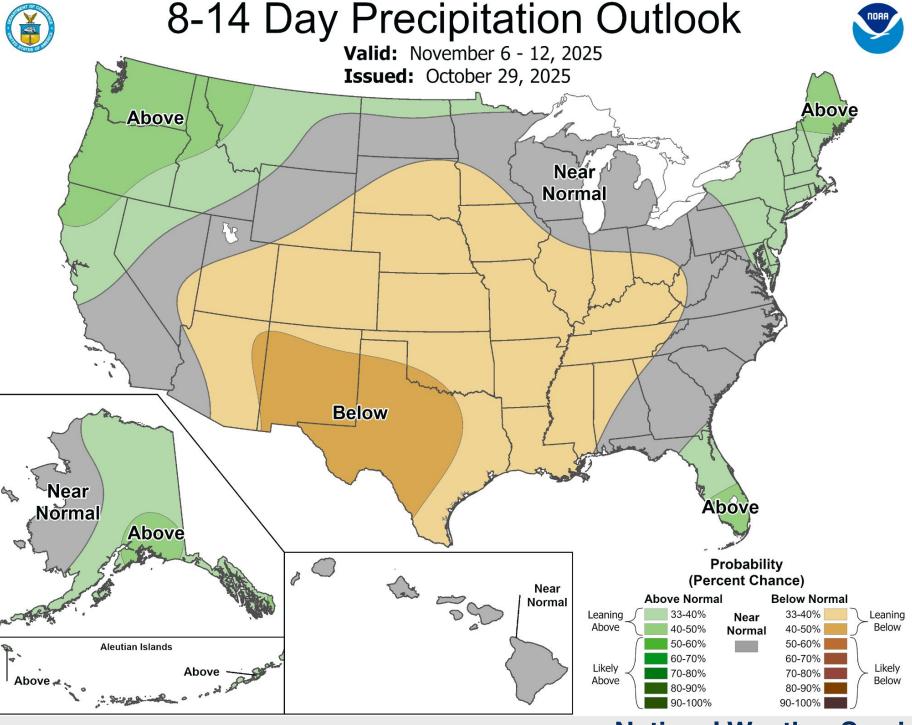




8-14 Day Outlooks

 Climate prediction center outlooks favor above normal precipitation and near normal temperatures in early November

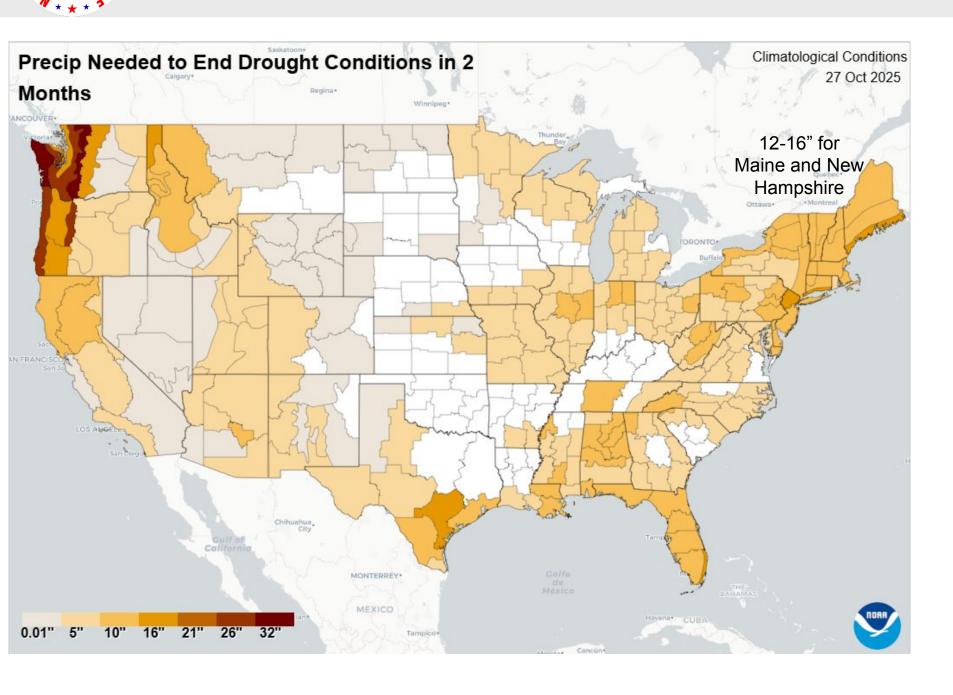






National Weather Service Gray-Portland, ME

Rainfall needed to "end the drought"



- 125-150% of normal precipitation over the next 2 months is needed to ameliorate drought conditions <u>before the</u> ground freezes
 - Once frozen, precipitation that would normally replenish groundwater won't soaking in, leaving wells and aquifers with little recovery until the spring thaw
- Steady, light-rain events with high absorption rates are ideal
- 4-8" of above normal or extra rainfall is needed to see full recovery
- Ground frost in ME and NH can start as early as mid November in the North and higher elevations, and mid to late December in southern areas on average, with long cold snaps often necessary to make depths over 4"

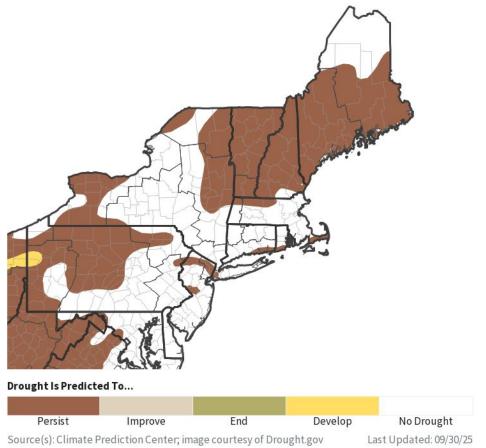


Drought Outlook

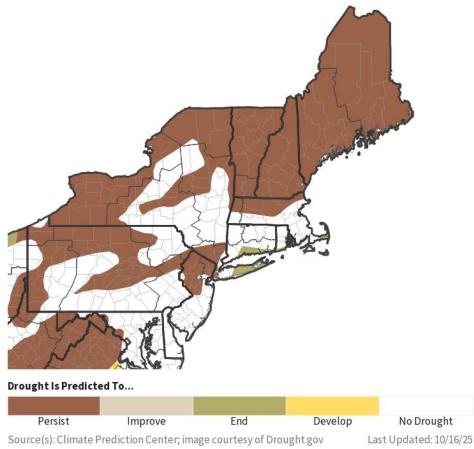
The latest monthly and seasonal outlooks can be found on the CPC homepage

- Persisting: Climate prediction center drought outlooks favor drought persistence through January
- It is likely that precipitation will fall short of eliminating drought conditions prior to the winter freeze
- The region is likely to maintain some state of drought through winter

1-Month Drought Outlook for October 1, 2025-October 31, 2025



Seasonal (3-Month) Drought Outlook for October 16, 2025-January 31, 2026



Links to the latest:

Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook

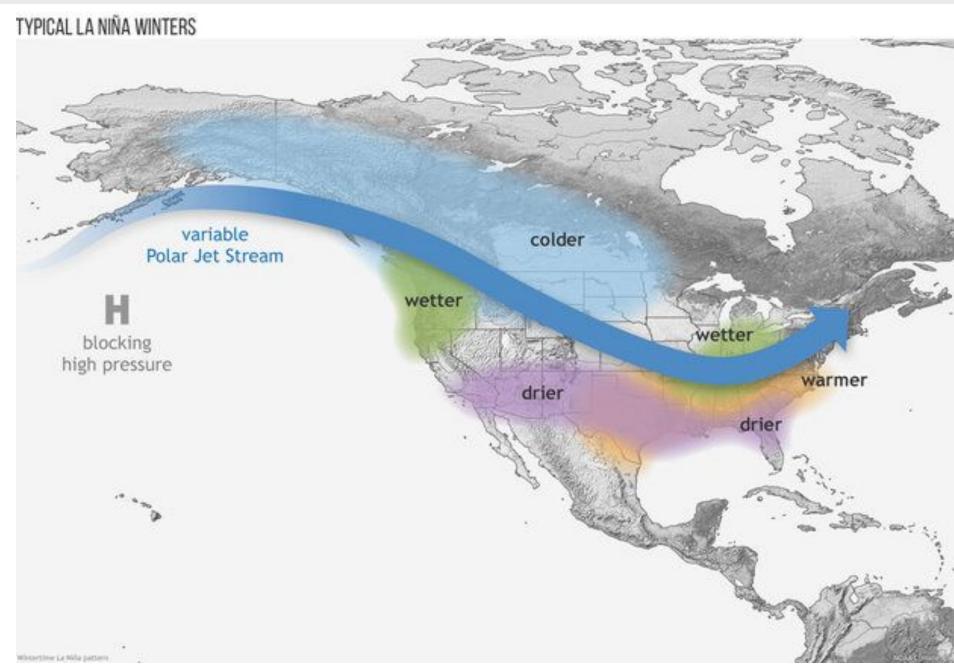


Winter Outlook

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Persisting: Climate prediction center is predicting an emerging La Nina to influence the upcoming winter patterns
- This leads to a split storm track over New England
- Past La Nina years have resulted in:
 - Both above and below normal precipitation and snowpacks
 - Often wild temperature swings, though often winters averaged near normal
- Other global indicators suggest some similarities between this year and 2017-2018
 - Active year for nor'easters
- Large temperature swings
 Links to the latest:

Climate Prediction Center Monthly Drought Outlook
Climate Prediction Center Seasonal Drought Outlook





Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

Groundwater Impacts

• New dry wells are reported across both Maine and New Hampshire as groundwater levels decline despite slight rebounds from recent rains.

Click on your respective state for a link to report a dry well

New Hampshire Dry Well Survey

Maine Dry Well Survey

The Drinking Water Program strongly discourages homeowners from introducing water into their wells for 3 reasons:

- It's illegal unless specifically allowed in the statute.
- The well is dry because the water table is below the well screen. Any introduced water will dissipate out into the aquifer.
- The delivered water may contaminate the aquifer with bacteria or other potential pathogens. For example, once iron bacteria is introduced into a well, it's difficult (if not impossible) to remove, clogs the well screen, and turns the water reddish-brown.





Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

Hydrologic Impacts

- Most smaller, unregulated rivers and streams have responded to recent heavy rainfall with near normal streamflow, though
 they are expected to recede to below normal to much below normal flows without additional rainfall in the coming days
- Small to medium sized reservoirs remain below long term averages with some at daily record low levels
- Several lakes including Lake, Lake Winnipesaukee, and Newfound Lake, are near or at daily record low levels

Other Impacts

• Water management, agricultural, fisheries, and forestry impacts have been reported. Reach out to the various representatives from those sectors for more information regarding specific impacts.

Mitigation actions

• Please refer to your municipality and/or water provider for mitigation information

Have a drought impact to report?

go.unl.edu/cmor_drought



Main Takeaways

- Widespread Moderate to Extreme Drought holds across Maine and New Hampshire, with 100% of each state experiencing D1-D3 drought conditions
- Recent soaking rain events have brought short-term relief. While still not enough to erase months of dry conditions, soil moisture levels have started to show improvement, and streams are flowing again in the mountain regions
- Multiple sustained light to moderate rain events are needed to overcome the drought
- In total, 12-16" of liquid precipitation is needed before the freeze. This is roughly 125-150% of normal for November and December
- The severity of the drought suggests some degree of long-term drought conditions are likely to persist into the 2025-26 winter
- Upcoming widespread rain events are likely to bring added incremental relief, some minor improvements are possible with next week's USDM





Contact Information



Briefing Webpage

www.weather.gov/gyx/EMhome
https://www.weather.gov/gyx/drought



Disclaimer

- → Information contained in this briefing is time-sensitive
- → Do Not Use After: November 5, 2025



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