Drought Information Statement for New Hampshire and Western Maine

December 4, 2025

Issued By: NWS Gray Maine

Contact Information: gyx.skywarn@noaa.gov

- 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.

- Maine and New Hampshire's drought is likely to persists over the winter with frozen soils hurting recovery

NOTE: Due to the change in season the Drought Information Statements will only be updated once a month unless significant changes occur. Weekly updates to the US Drought Monitor can be found at droughtmonitor.unl.edu

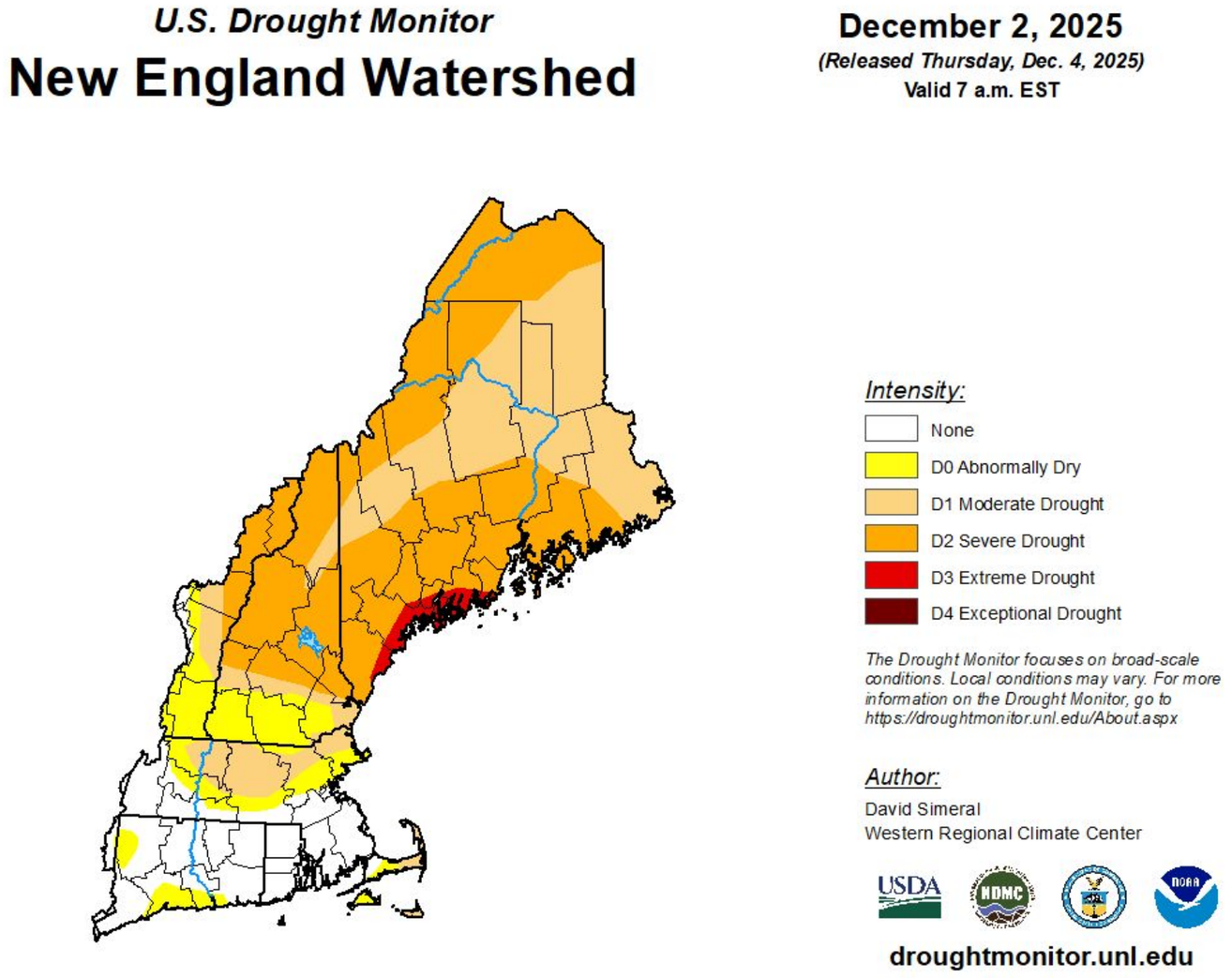
U.S. Drought Monitor

December 4, 2025
10:27 EST

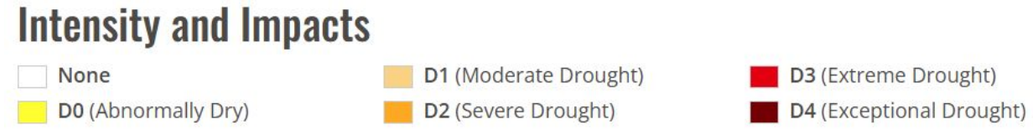
Link to the latest U.S. Drought Monitor for the Northeast

Drought intensity and Extent

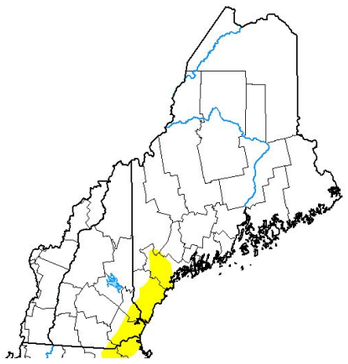
- **D3 (Extreme Drought):**
  - 0% of New Hampshire
  - 3% of Maine
- **D2 (Severe Drought)**:
  - 64% of New Hampshire
  - 57% of Maine
- **D1 (Moderate Drought)**:
  - 14% of New Hampshire
  - 40% of Maine
- **D0 (Abnormally Dry)**:
  - 22% of New Hampshire



2025 US Drought Monitor



July 29, 2025



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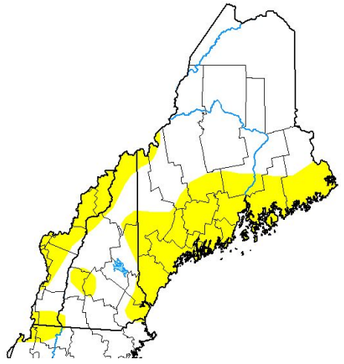

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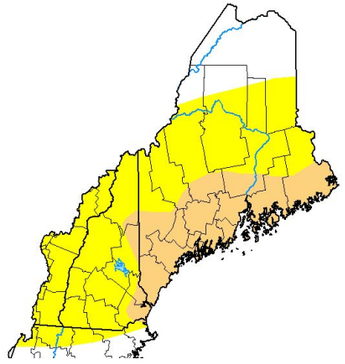

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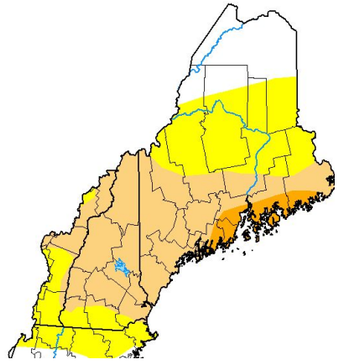

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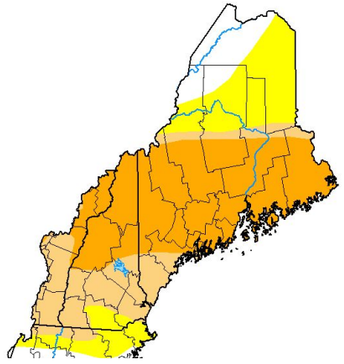

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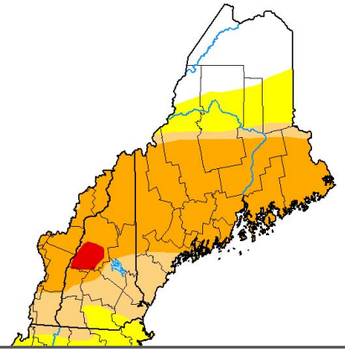

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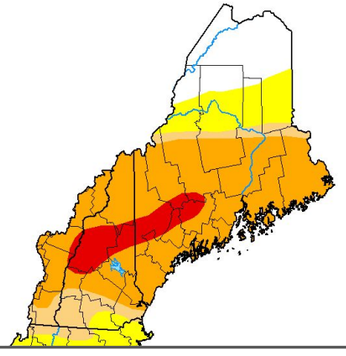

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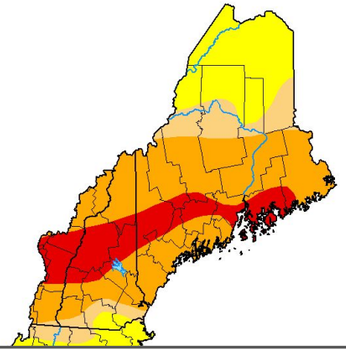

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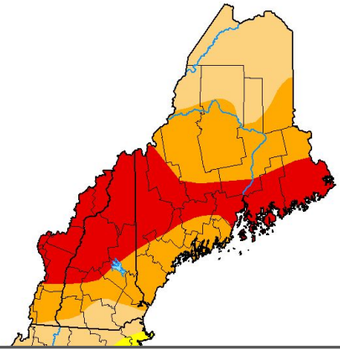

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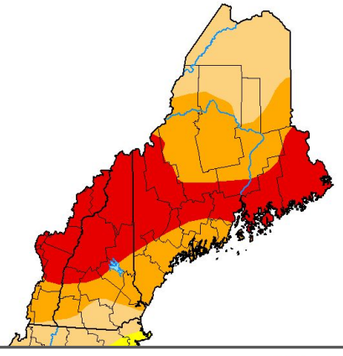

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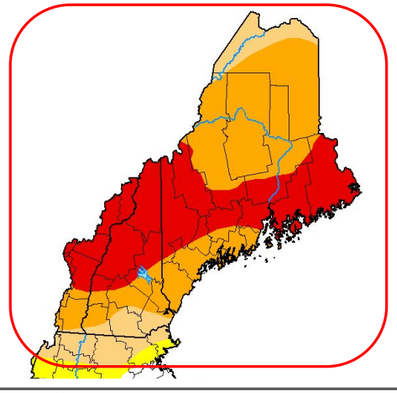

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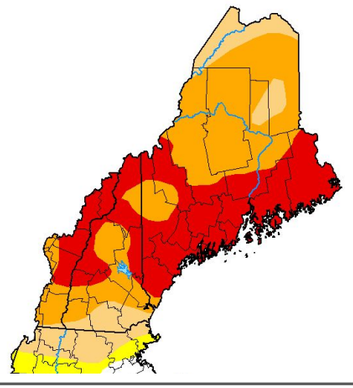
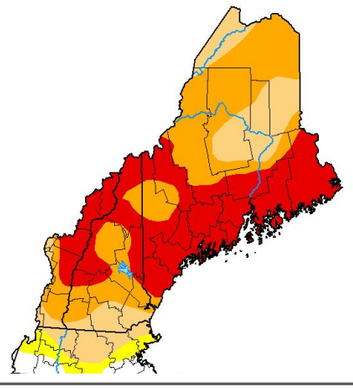


November 4, 2025



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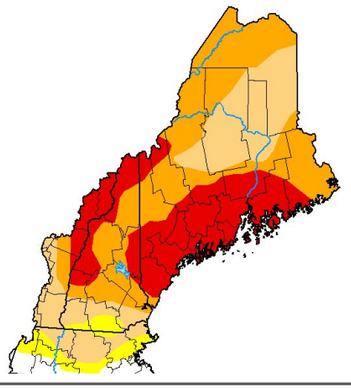

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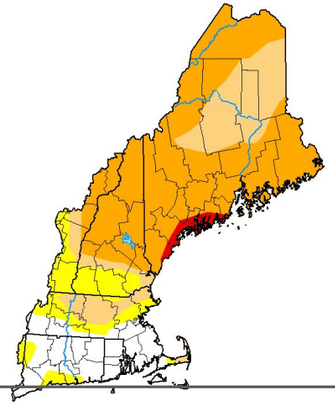
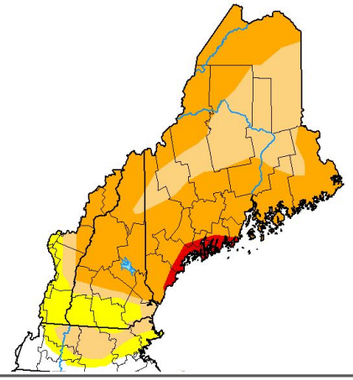


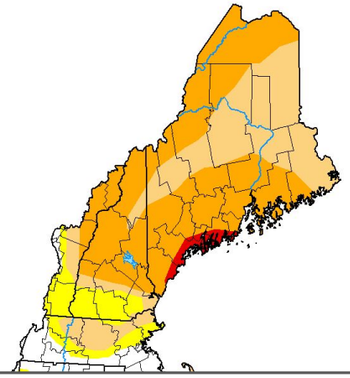
Drought “PEAK” 92% ME & 83% NH D2 or D3

2025 US Drought Monitor Continued

November 25, 2025



December 2, 2025



Intensity and Impacts

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)

Precipitation- 30 Day

December 4, 2025
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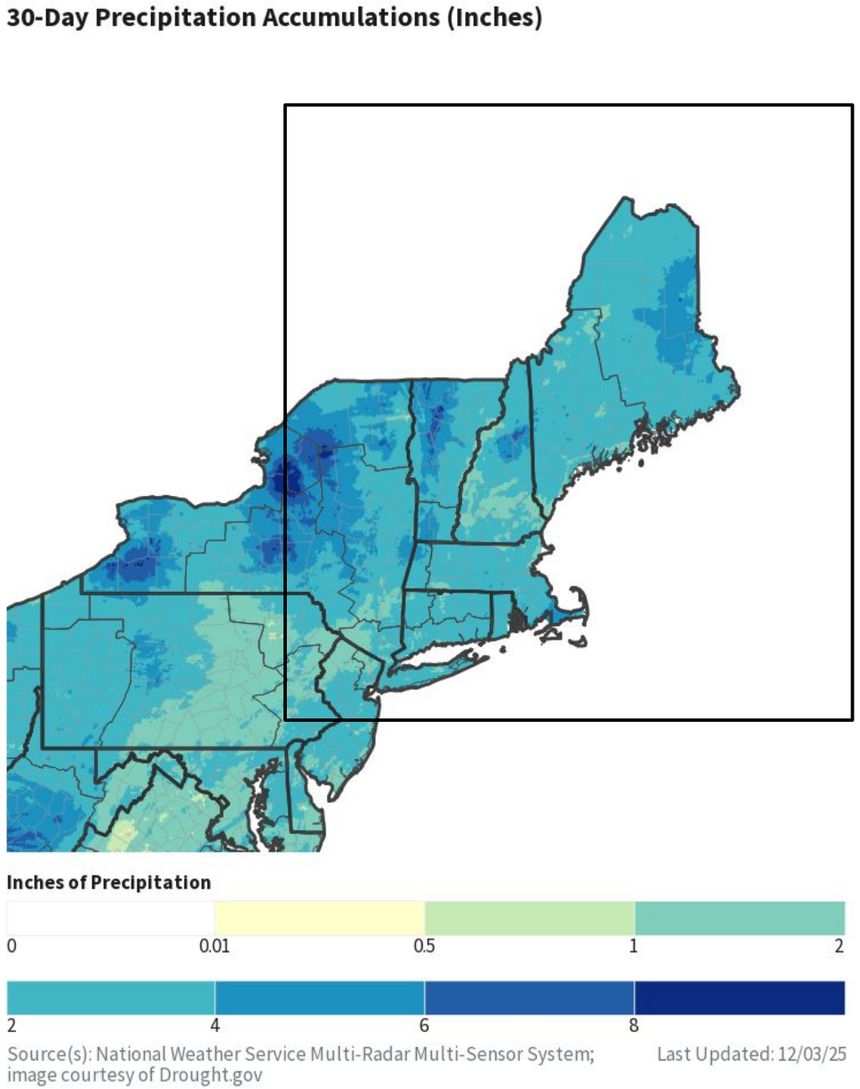
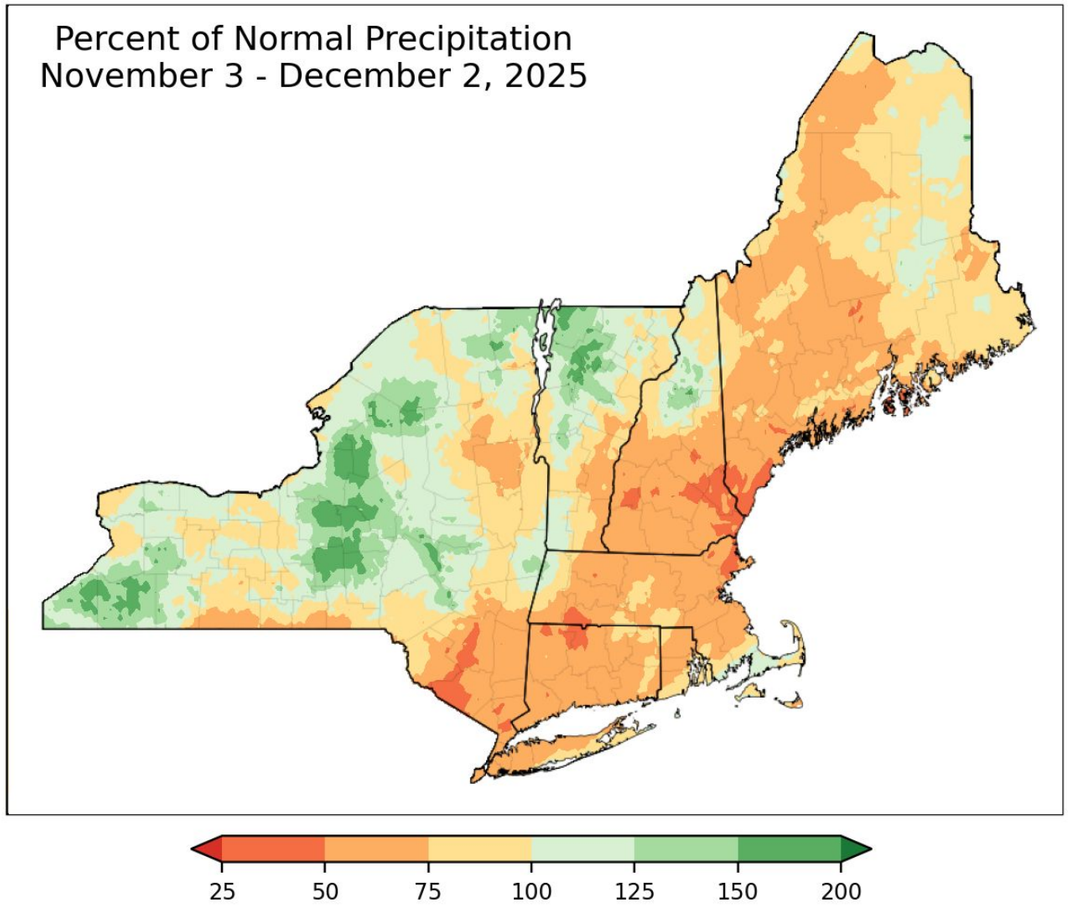
Precipitation totals remain below normal for much of the region, apart from upslope portions of the White Mountains and areas northward to the international boundary in NH.

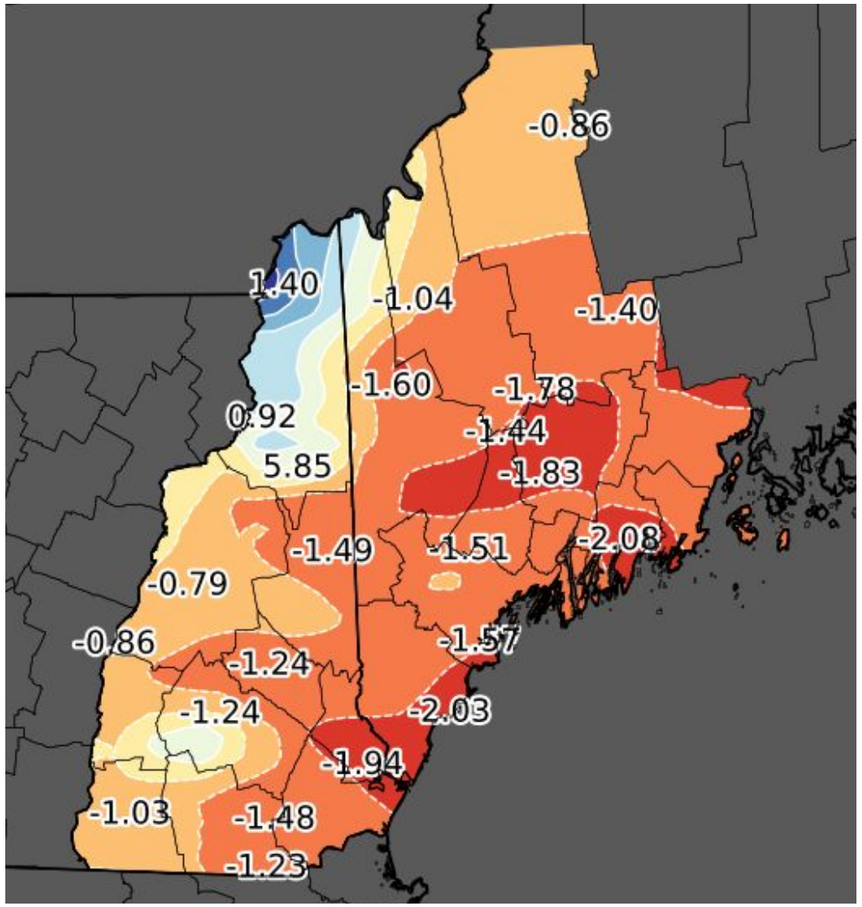




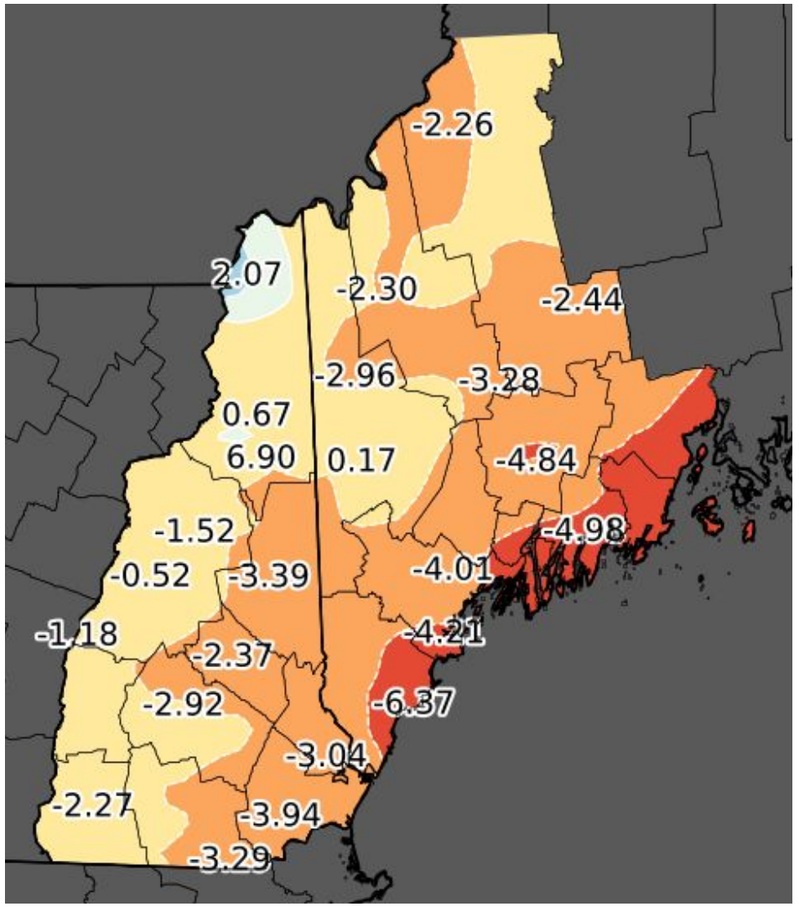
Precipitation Deficits

December 4, 2025
10:27 EST

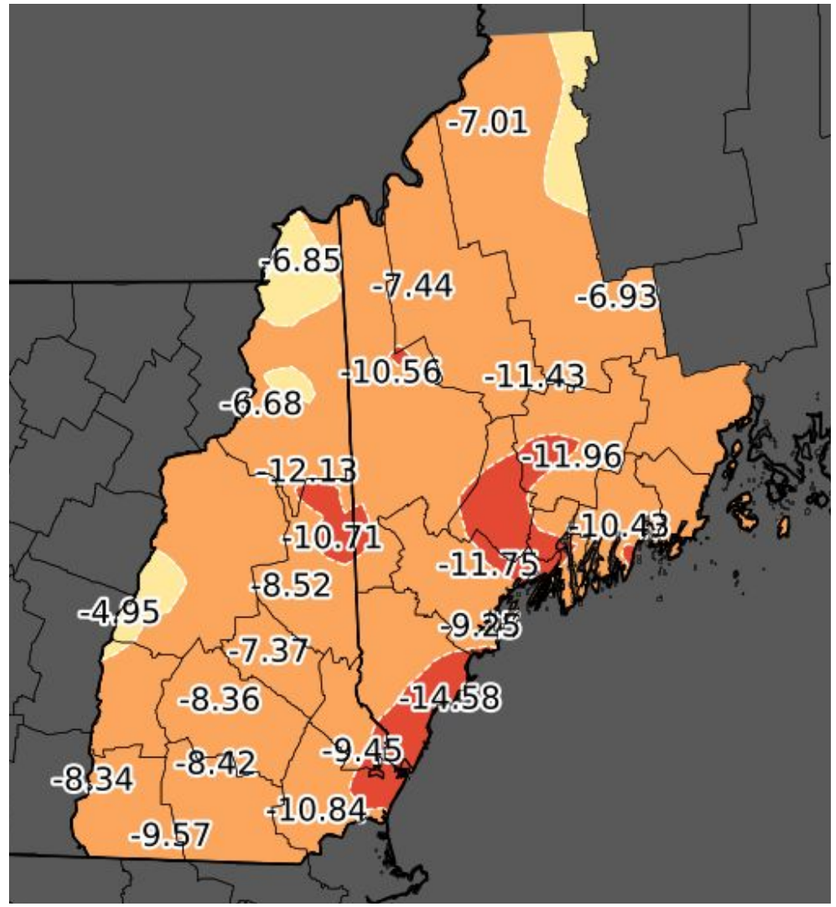
Ending December 3



30 Days



90 Days



Since June 1

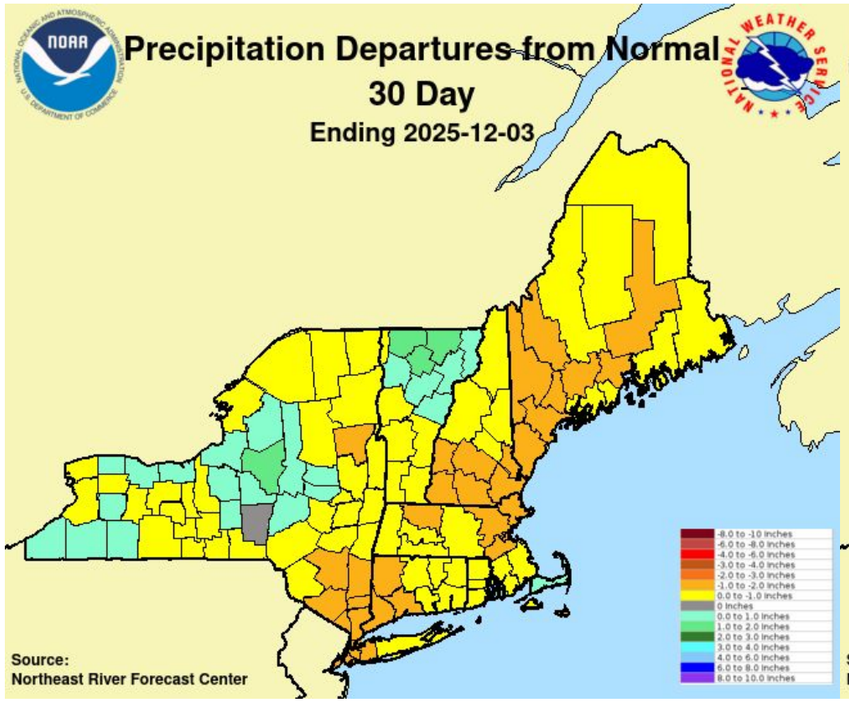
National Oceanic and Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Gray-Portland, ME

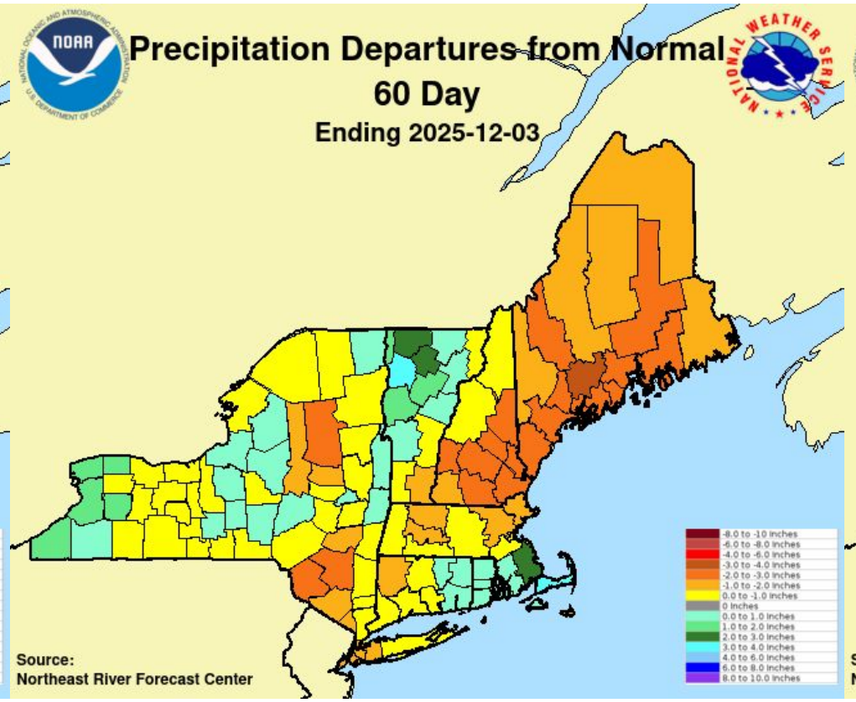
Precipitation Deficits- Regional View

December 4, 2025
10:27 EST

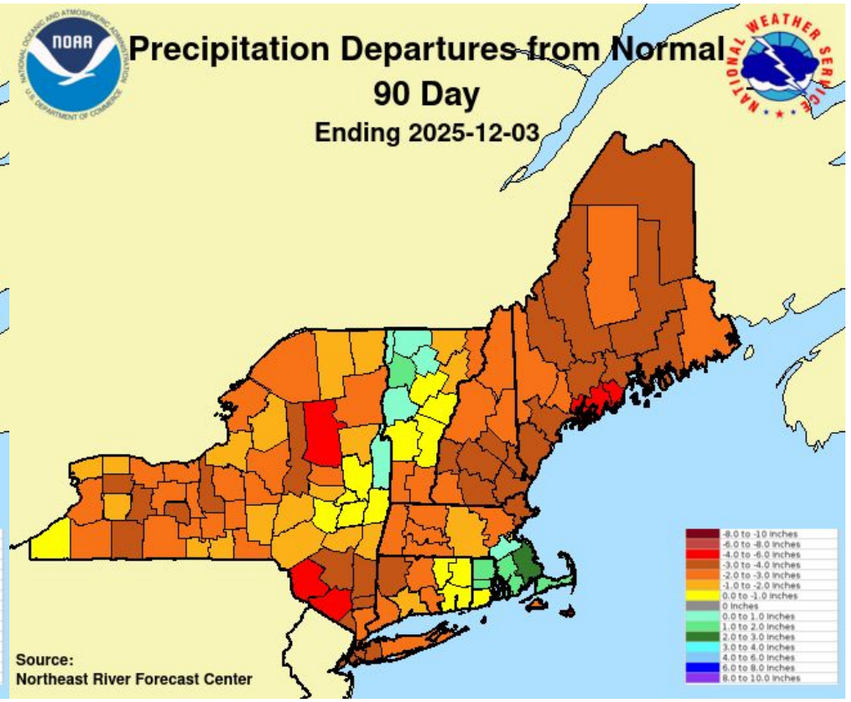
Maps of Departures from Normal by County



Local Departures 0-2”



Local Departures 1-6”



Local Departures 2-5”

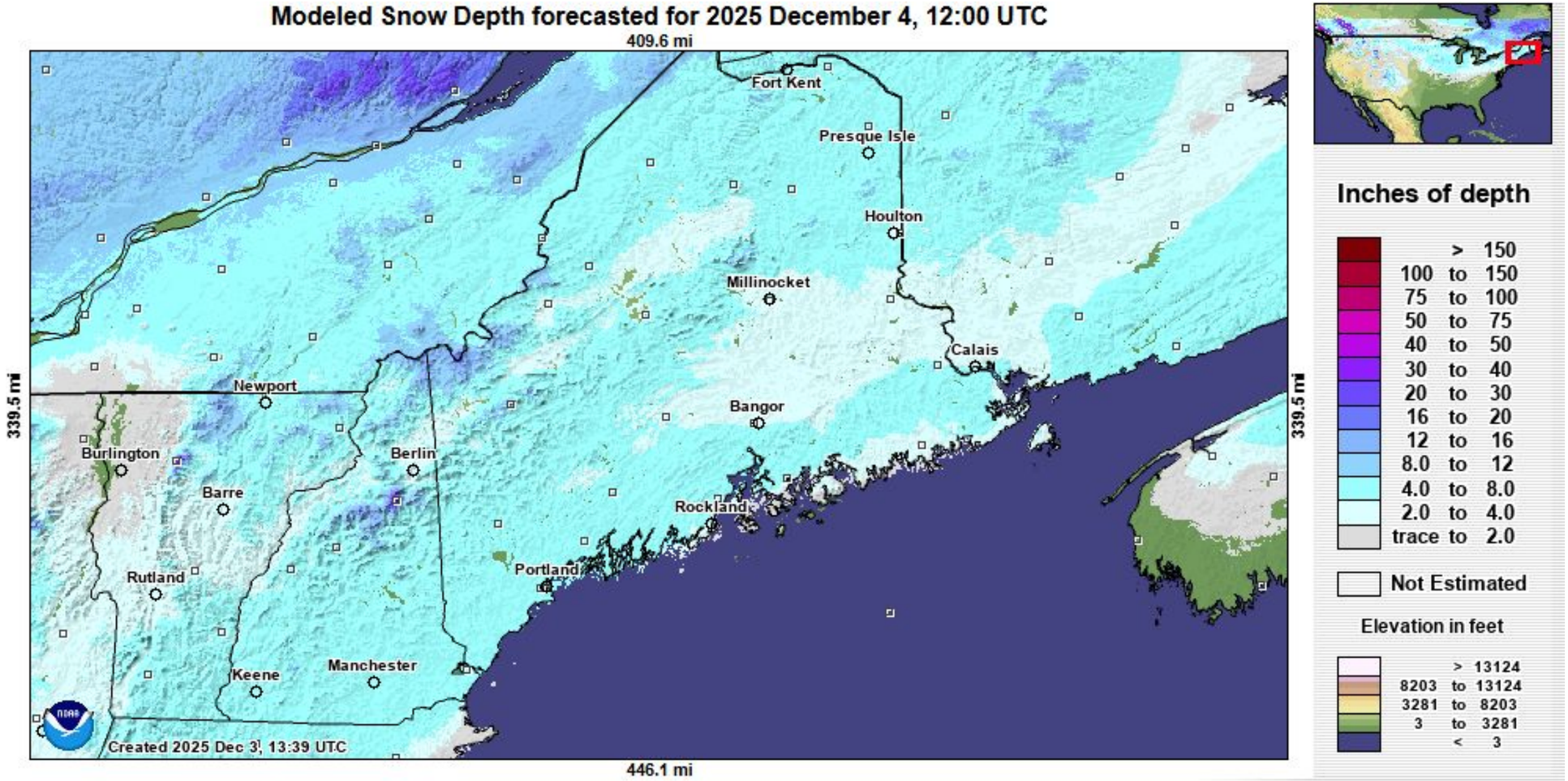
Snowpack

December 4, 2025
10:27 EST

NOAA's National Operational Hydrologic Remote Sensing Center Modeled Snow Depth

A widespread snow storm on December 2 brought measurable snowfall to the entire region.

Note: While accumulating snow is often a positive sign for areas experiencing drought, the stored water, measured as Snow Water Equivalent (SWE), does not provide an immediate benefit for drought recovery until it actually melts and begins to enter the wider water system.



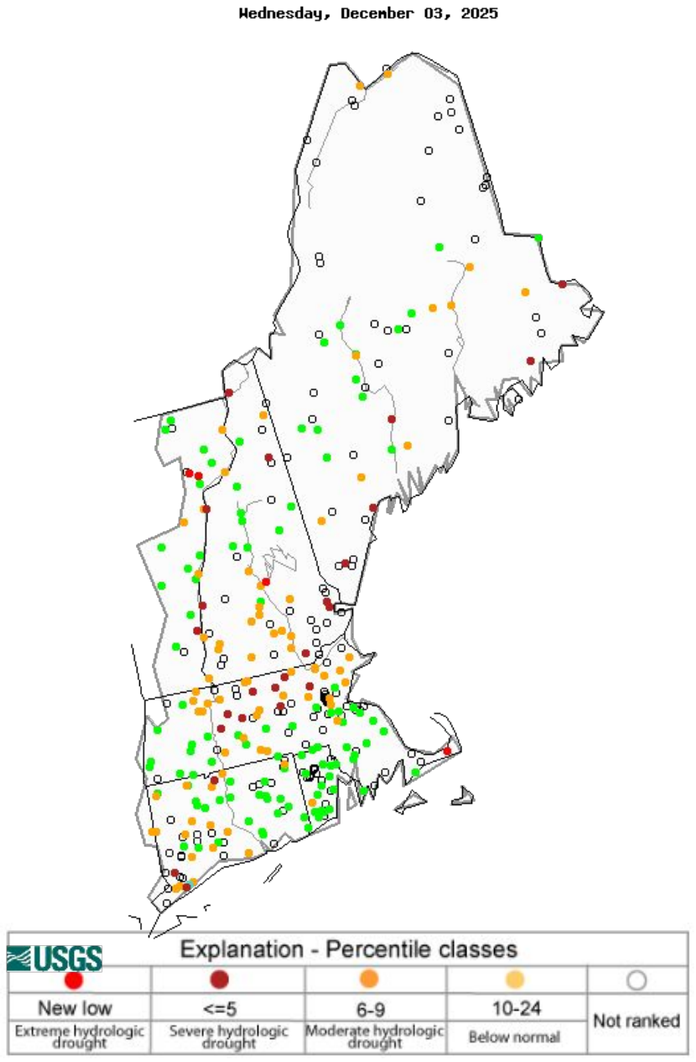
Link: https://www.nohrsc.noaa.gov/interactive/

Hydrologic Conditions and Impacts

December 4, 2025
10:27 EST

USGS Streamgage Information

- A lack of appreciable precipitation and runoff from snowmelt has led to a recession in streamflows for much of the region since mid-November
- Note: Many regulated lakes have recently undergone or are undergoing seasonal drawdowns, which temporarily increase flows



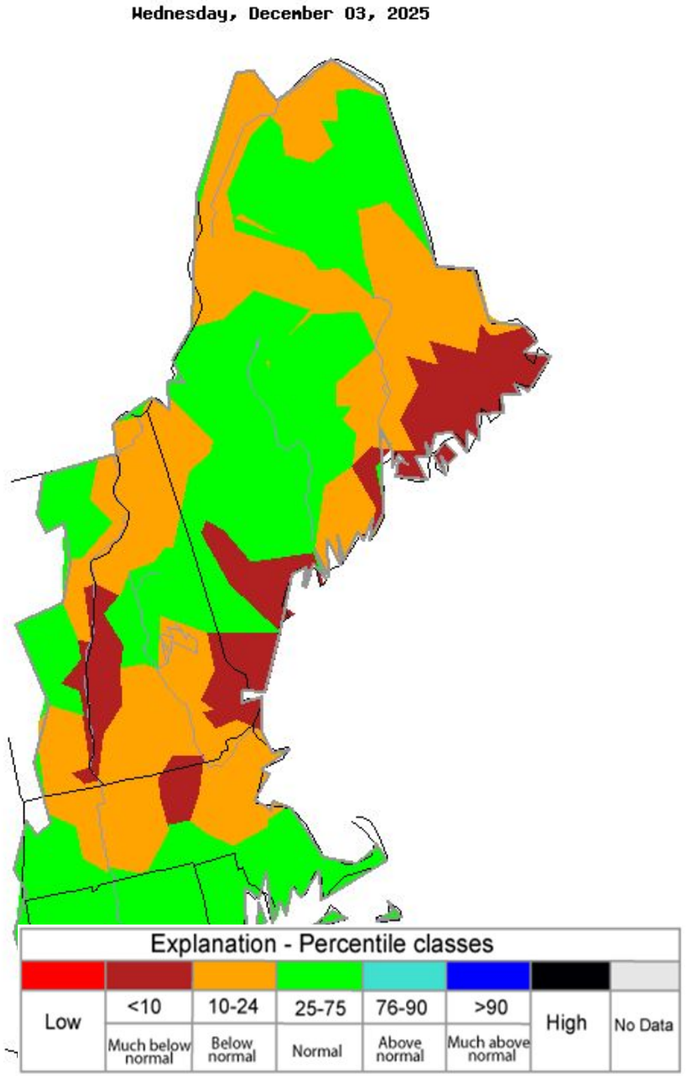


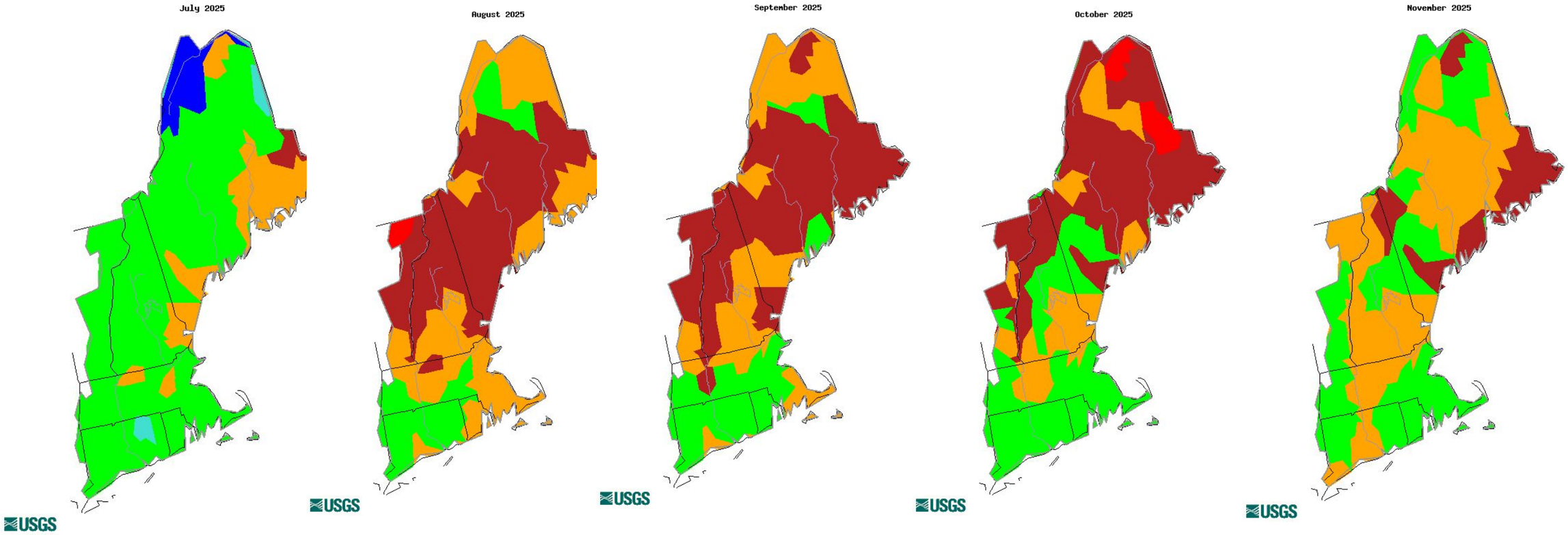
Image 1 (left): USGS 7-Day Streamflow based on the percentile of existing streamflow records on this day of the year.

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

USGS Monthly Streamflows

December 4, 2025
10:27 EST

USGS Streamgage Basin Average Streamflows



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Hydrologic Conditions and Impacts

December 4, 2025
10:27 EST

USGS Streamgage Information

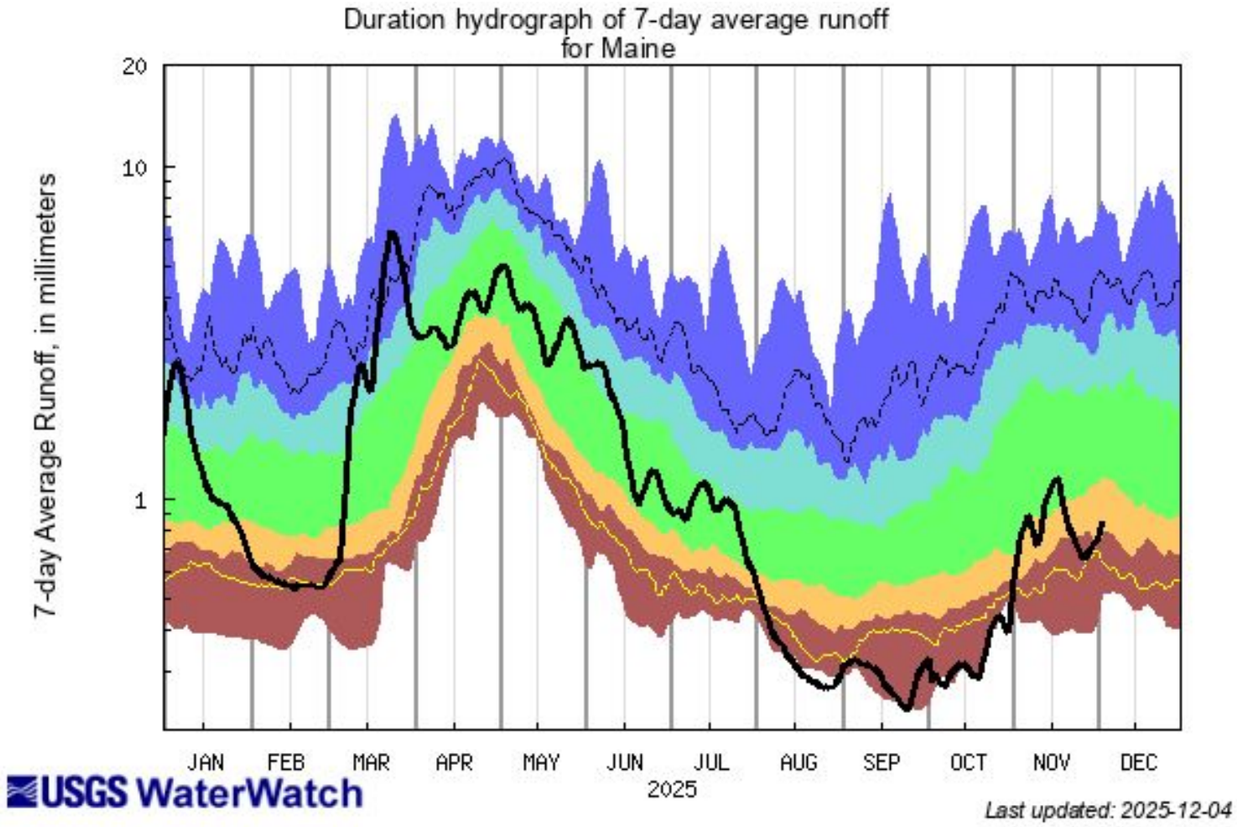


Image 1 (Left): USGS 7-Day Streamflow Runoff Duration Hydrograph for Maine based on the percentile of existing streamflow records on this day of the year.

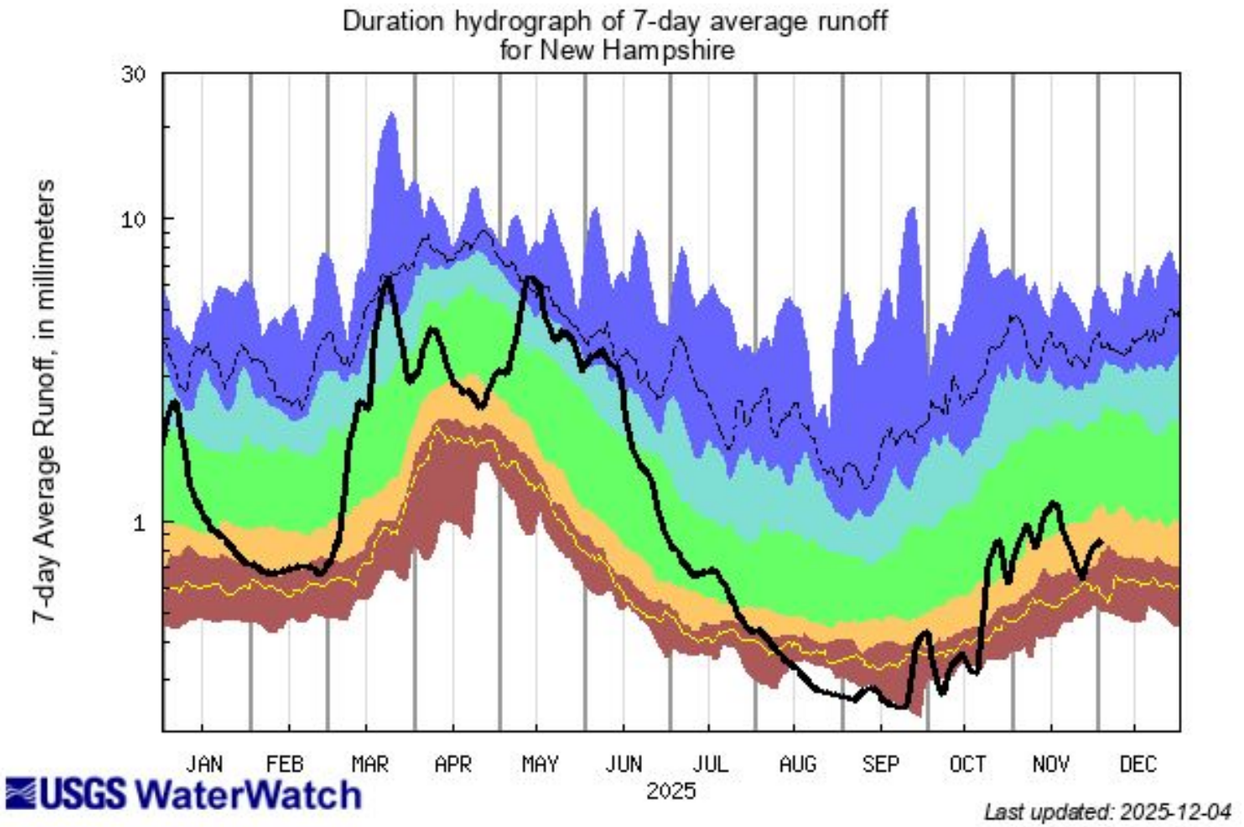


Image 2 (Right): USGS 7 day Runoff Duration Hydrograph for New Hampshire based on the percentile of existing streamflow records on this day of the year.

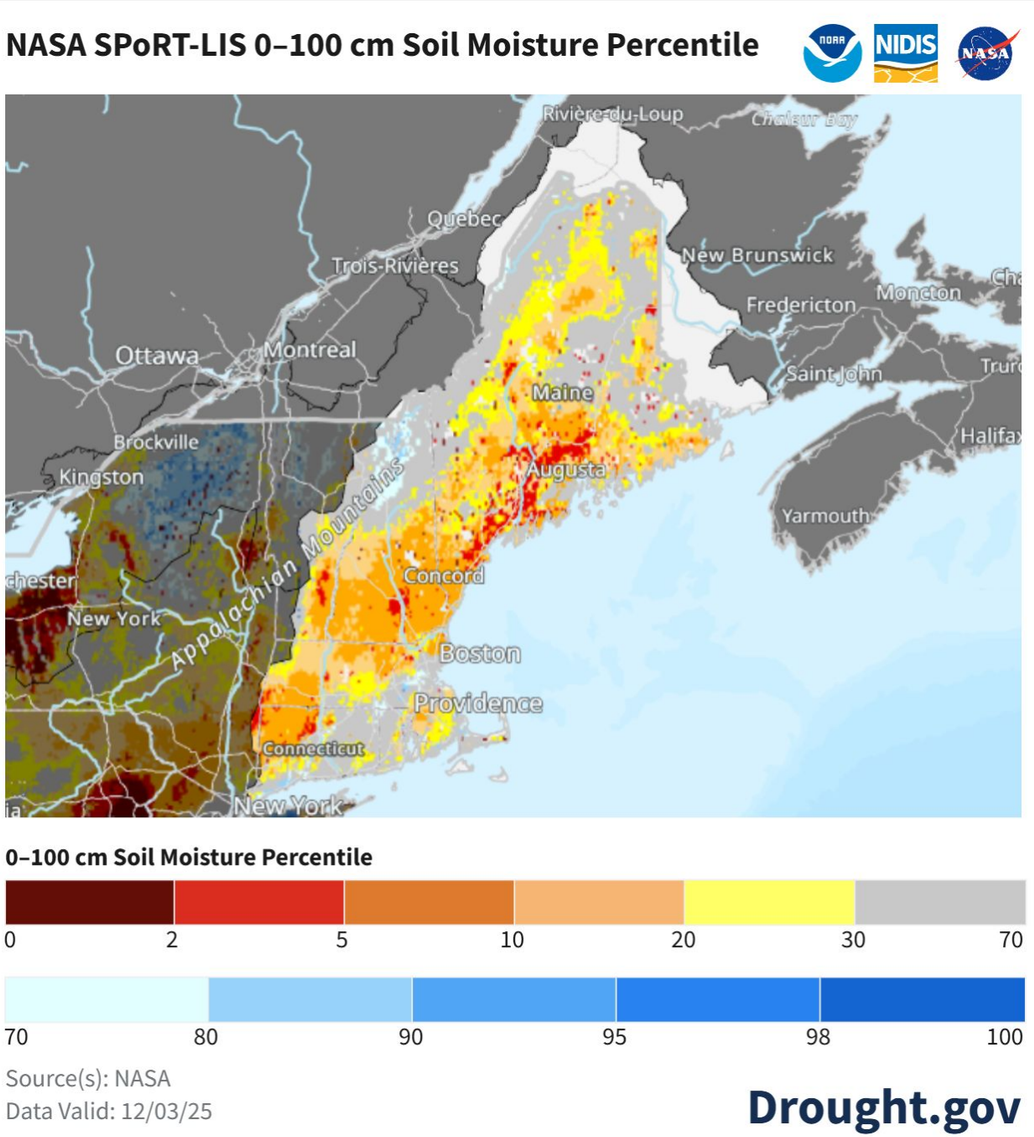
Soil Moisture

Satellite Based

December 4, 2025
10:27 EST

- Deeper soil moisture percentiles remain well below climatological normals, confirming that severe and extreme drought conditions remain
- Cold temperatures have frozen some topsoils, but deeper frost depths have yet to develop

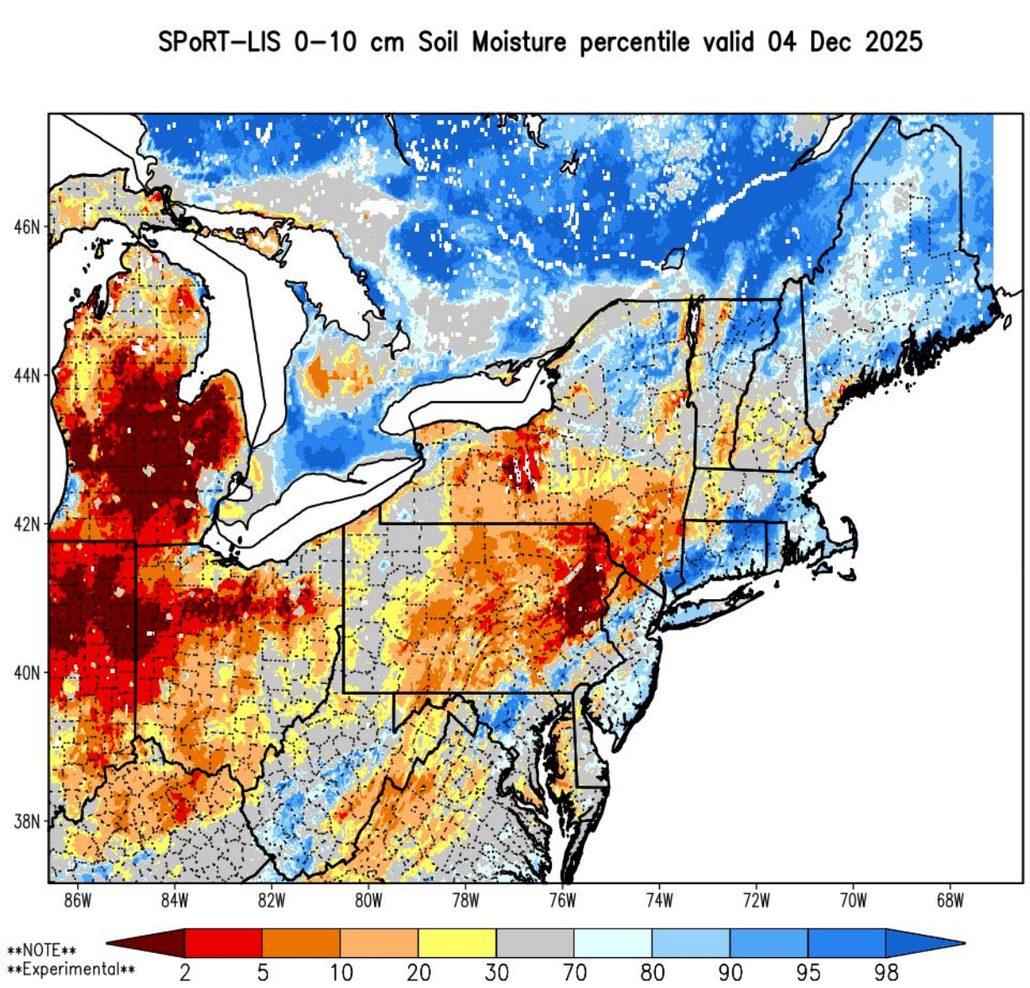
This map shows the moisture content of the top 1 meter of soil compared to historical conditions from 1981–2013, based on NASA's Short-term Prediction and Transition Center – Land Information System (SPoRT-LIS).



Soil Moisture

Satellite Based

December 4, 2025
10:27 EST



Surface topsoil (left) moisture levels have rebounded due to reduced vegetation demand, but deeper soil moisture deficits (right) remain

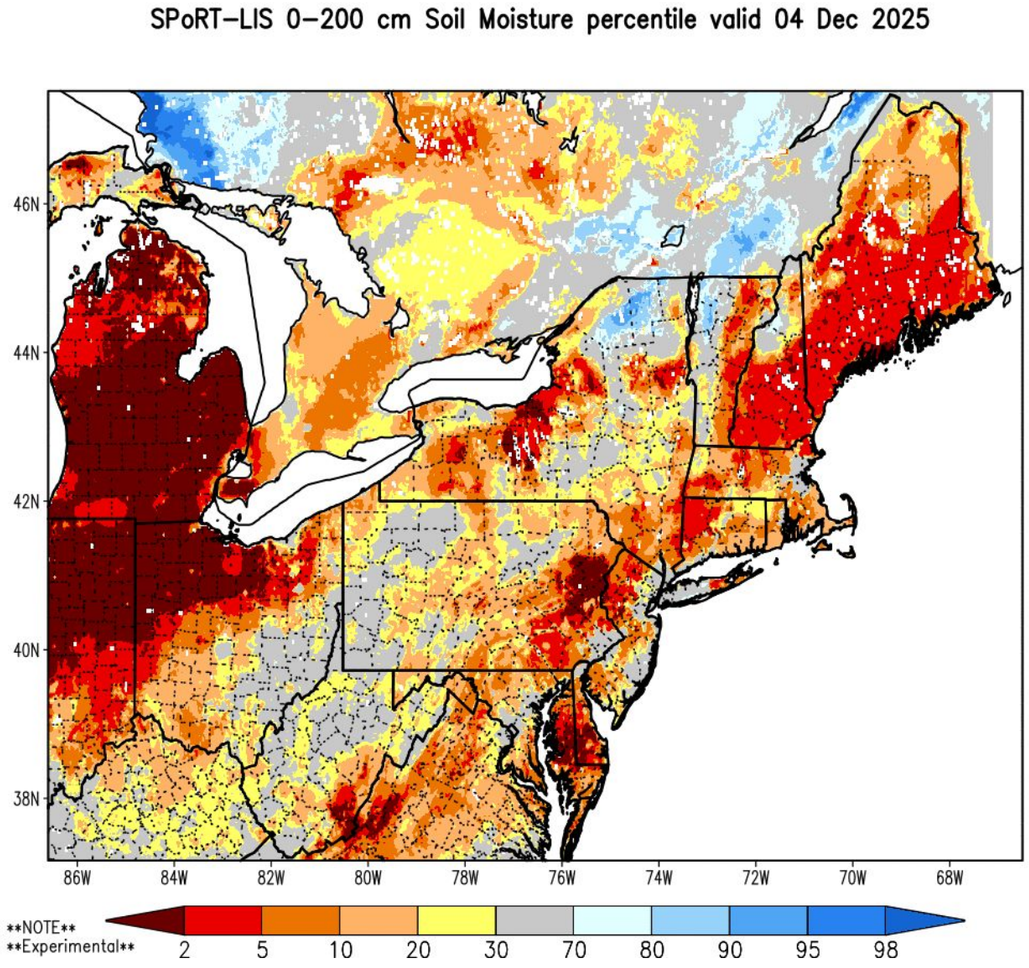
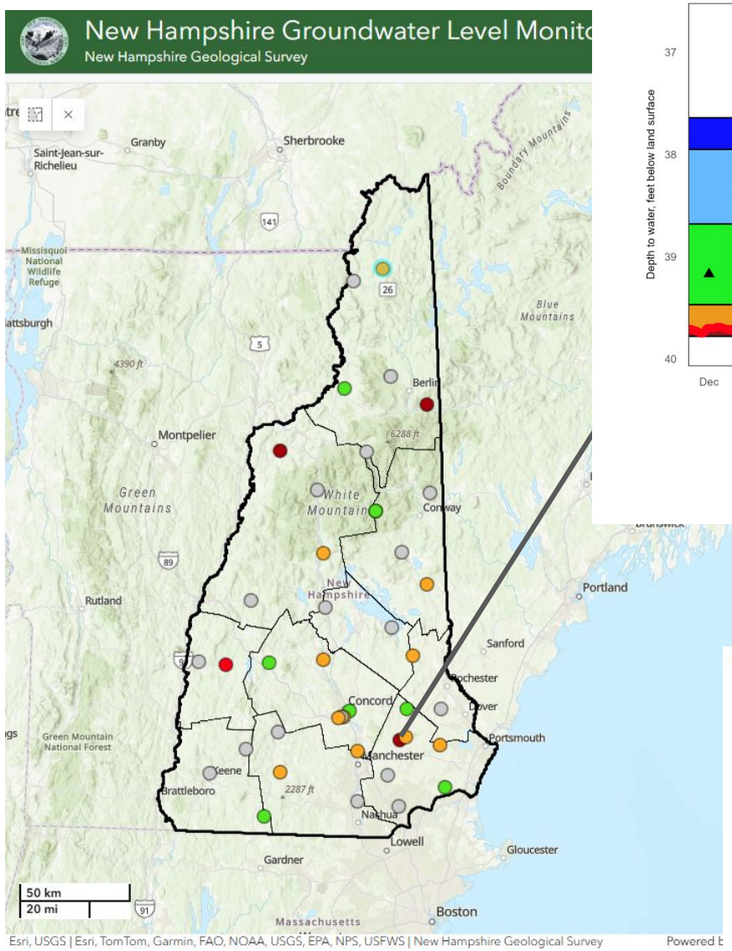


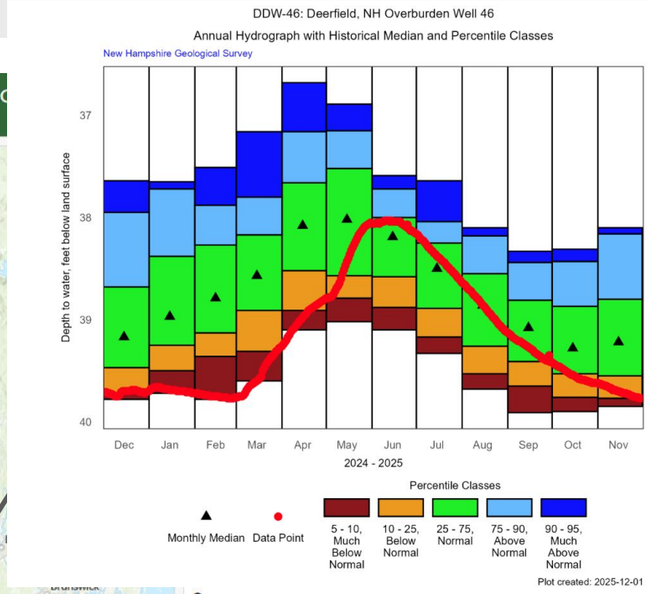
Image: NASA SPoRT-LIS 0-10 cm percentiles soil moisture (top soils)

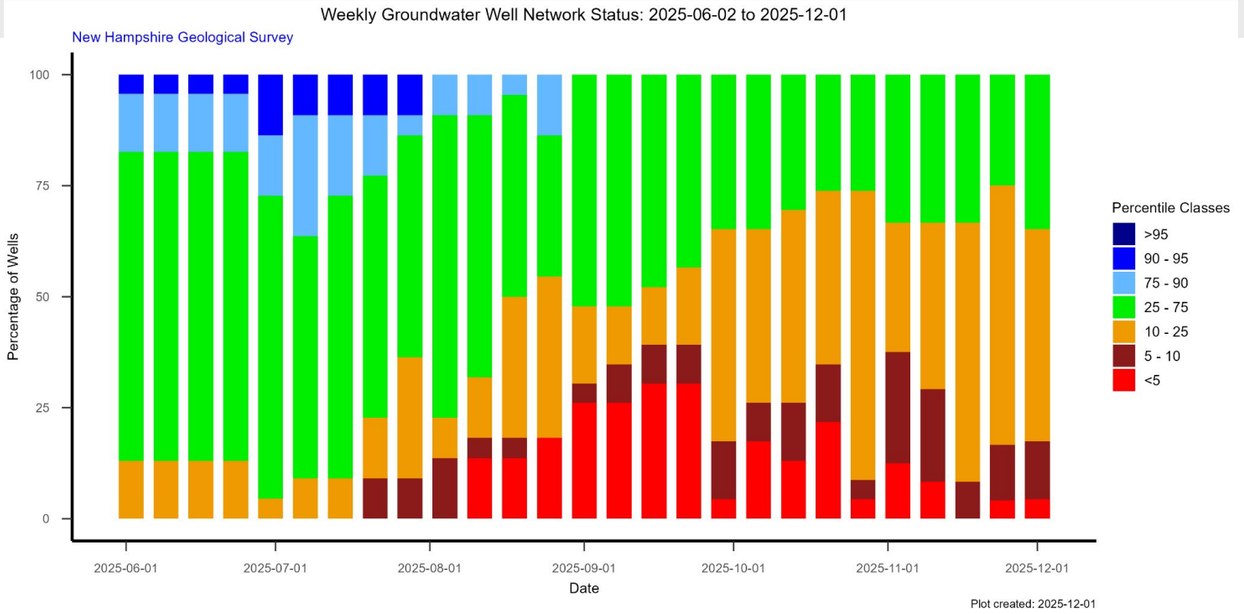
Image: NASA SPoRT-LIS 0-200 cm soil moisture percentiles (0-6ft)

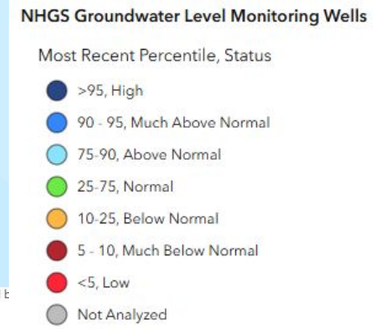
Groundwater Levels- New Hampshire

December 4, 2025
10:27 EST









Groundwater levels have shown a seasonal “bounce” with some improvements across the state. Overall aquifers remain below normal to much below normal for the majority of the wells.

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

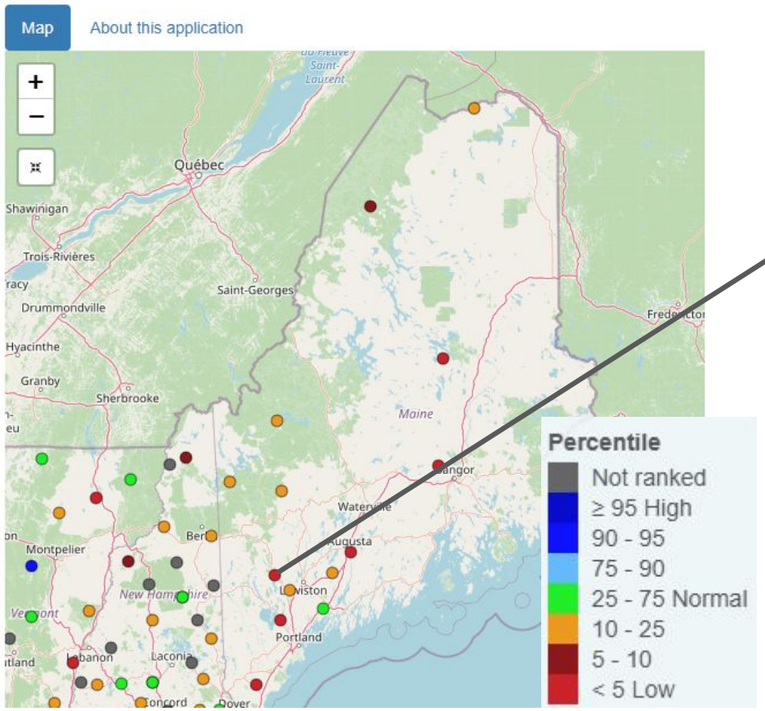
Groundwater Impacts

December 4, 2025
10:27 EST

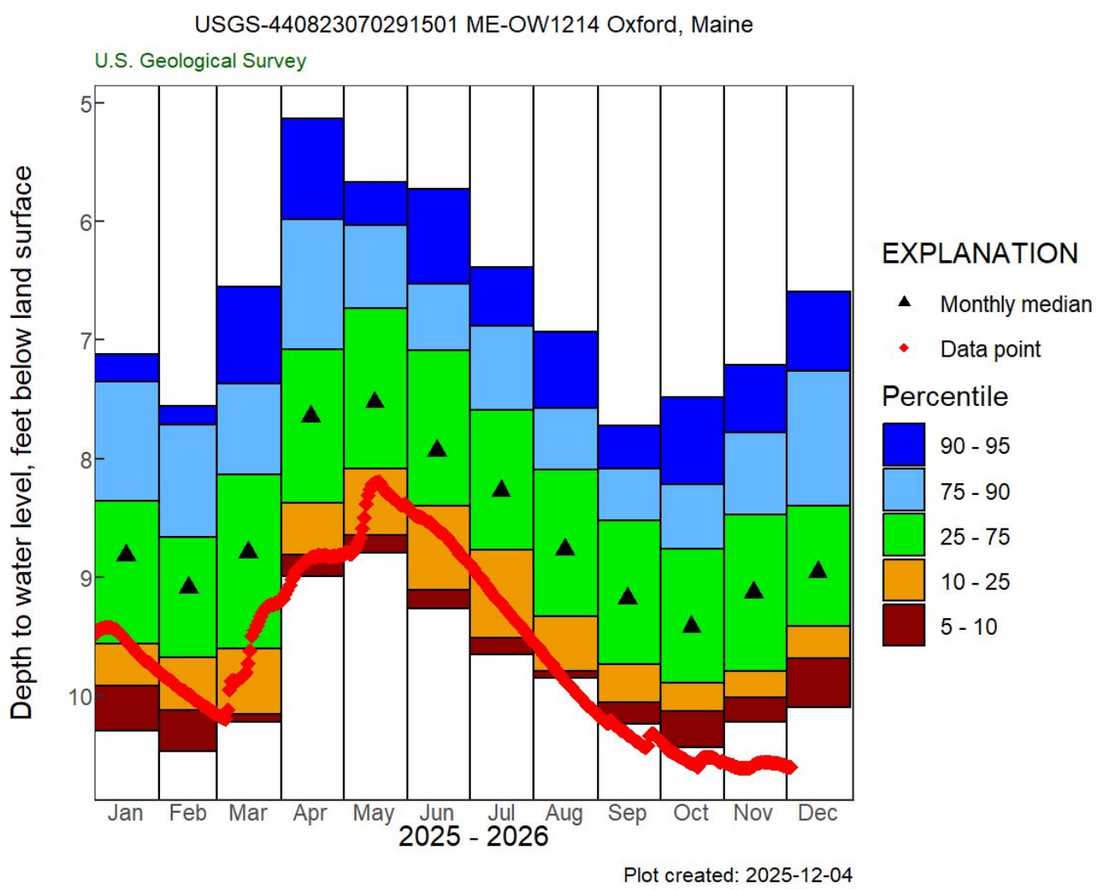
USGS science for a changing world

Groundwater Levels in New Englanc

Recent conditions relative to historical monthly statistics



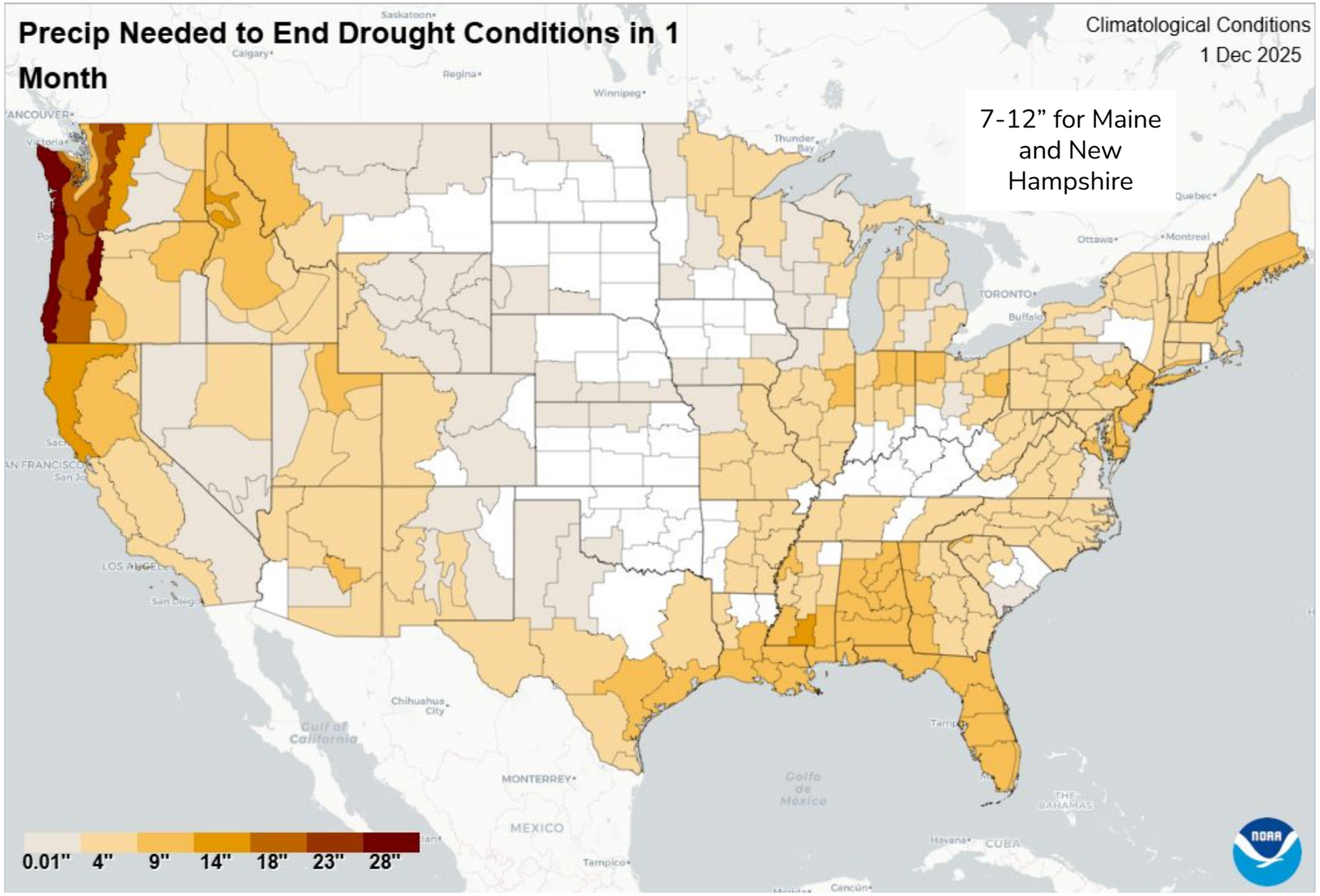
USGS Groundwater Levels (https://newengland.water.usgs.gov/web_app/GWW/GWW.html) in New England dashboard.



Above is a real-time well observation from a USGS groundwater well in Oxford Maine with a period of record from 1980.
Note: Lowest approved groundwater level: **10.77 feet on 2002-02-10**

Rainfall needed to “end the drought”

December 4, 2025
10:27 EST



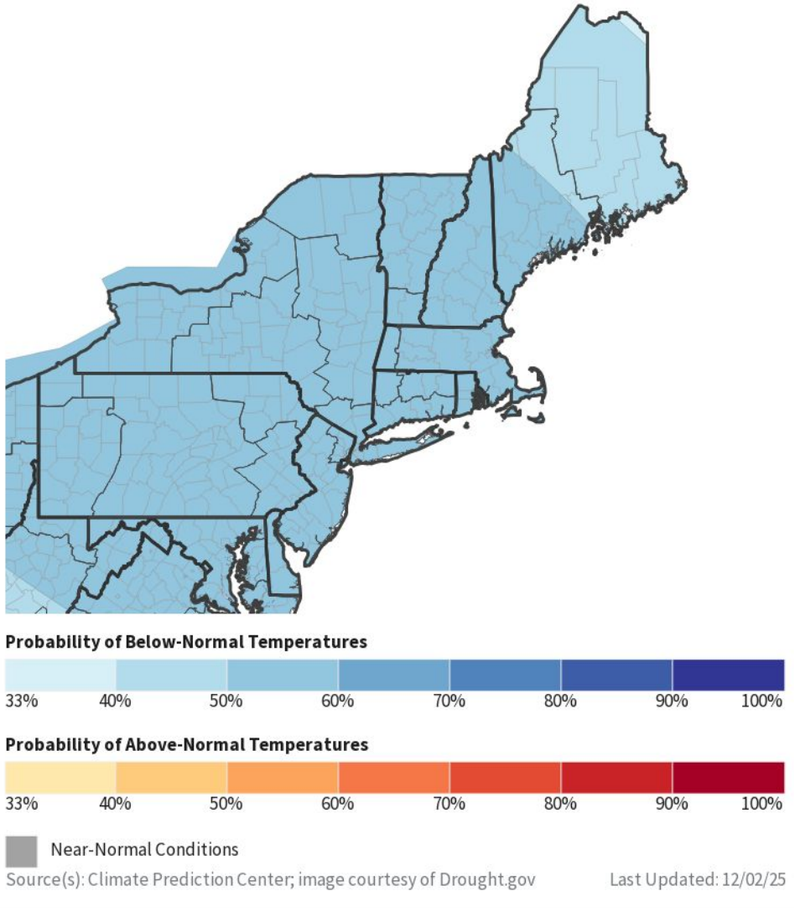
- 200-250% of normal precipitation over the next month is needed to ameliorate drought conditions before the ground freezes

8-14 Day Outlooks

December 4, 2025
10:27 EST

- 40-50% chance of below normal temperatures through mid December
- Precipitation chances are near normal

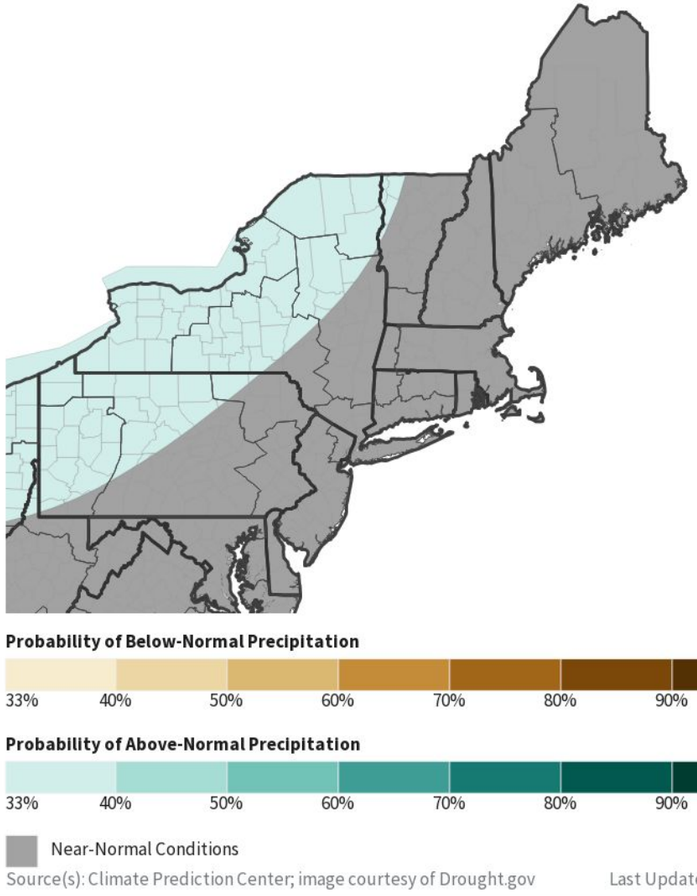
8-14 Day Temperature Outlook for December 10, 2025-December 16, 2025



Source(s): Climate Prediction Center; image courtesy of Drought.gov

Last Updated: 12/02/25

8-14 Day Precipitation Outlook for December 10, 2025-December 16, 2025



Source(s): Climate Prediction Center; image courtesy of Drought.gov

Last Updated: 12/02/25

Winter Outlook

December 4, 2025
10:27 EST

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 with a transition to ENSO-neutral most likely in January-March 2026

This leads to a split storm track over New England and frequent but brief intrusions of Arctic air, and an active storm track through the Ohio Valley

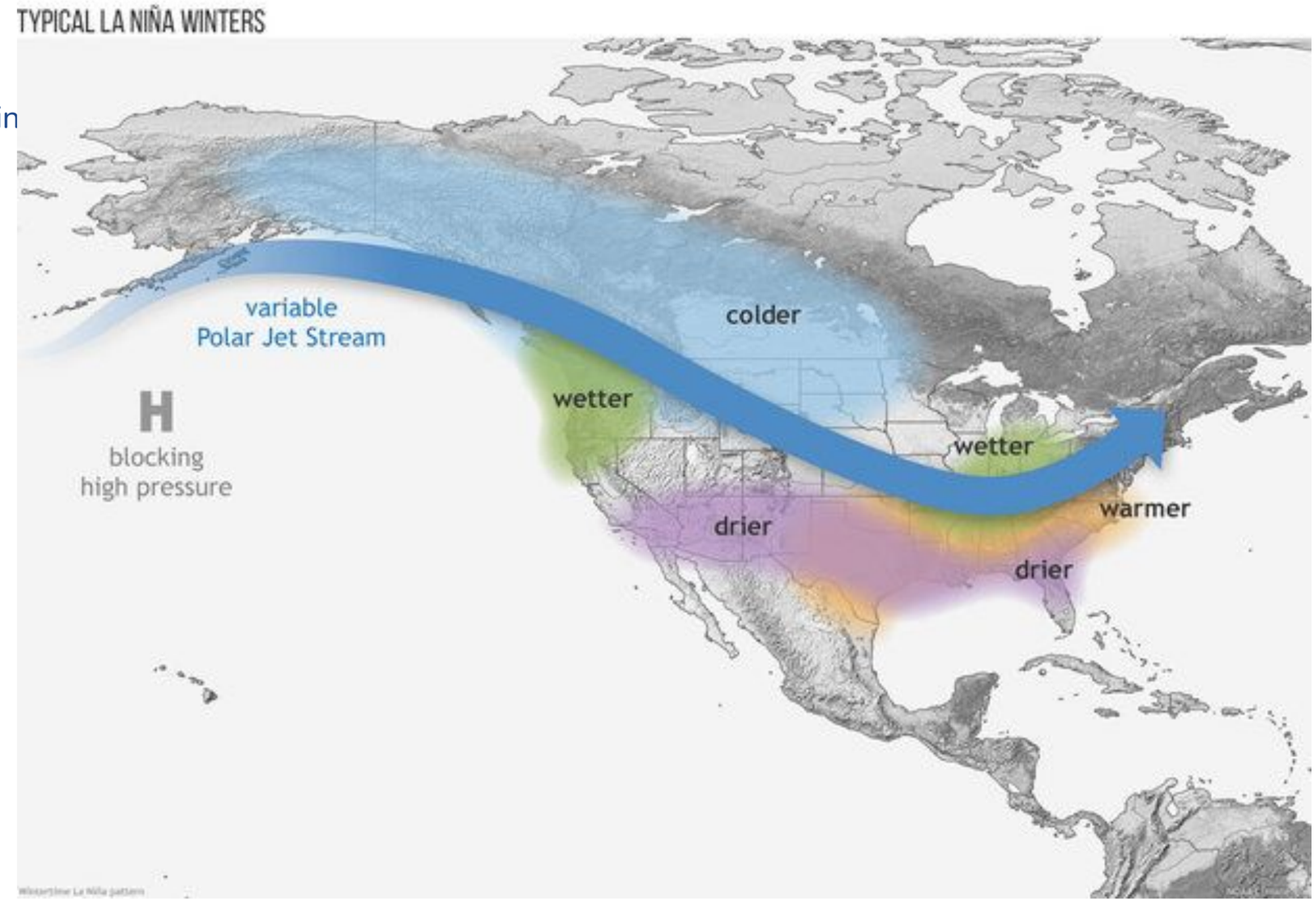
Past La Nina years have resulted in:

- 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



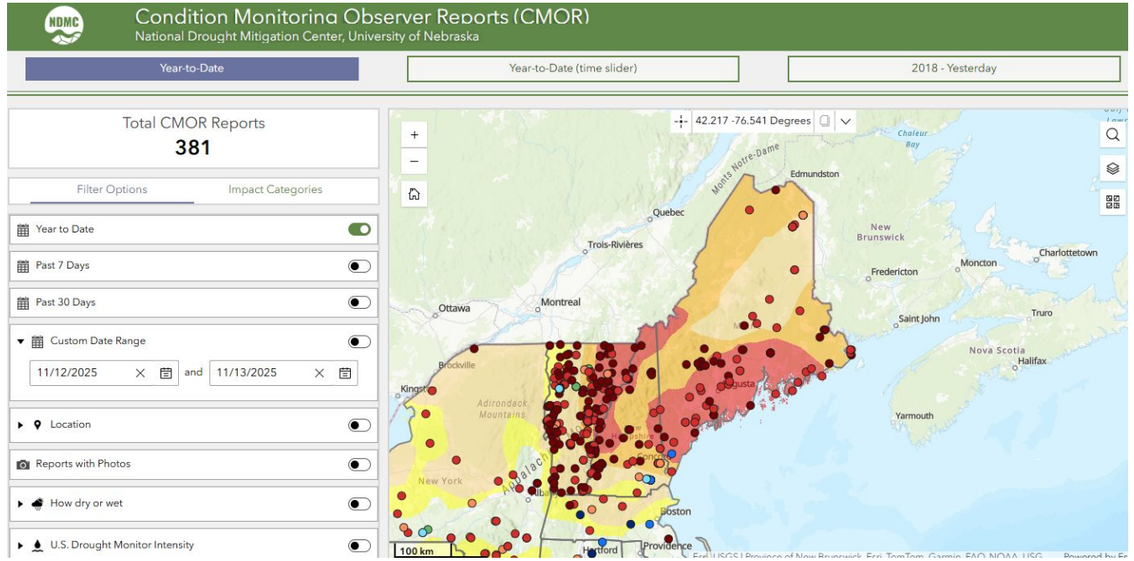
Summary of Impacts

December 4, 2025
10:27 EST

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

Winter Hydrologic Impacts

- With well drillers in high demand and soils freezing soon, a primary concern is that some households may not have any water going into winter. State agencies advised against drinking water from roadside springs as an alternate source, which can be hazardous to public health.
- The availability of adequate winter feed for livestock due to poor summer pasture conditions and low hay yields is still a concern.
- The impact of the summer and fall drought on fruit trees and berries may linger into the next growing season. Dry ground may also impact field preparations next year.



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

Summary of Impacts

December 4, 2025
10:27 EST

Groundwater Impacts

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

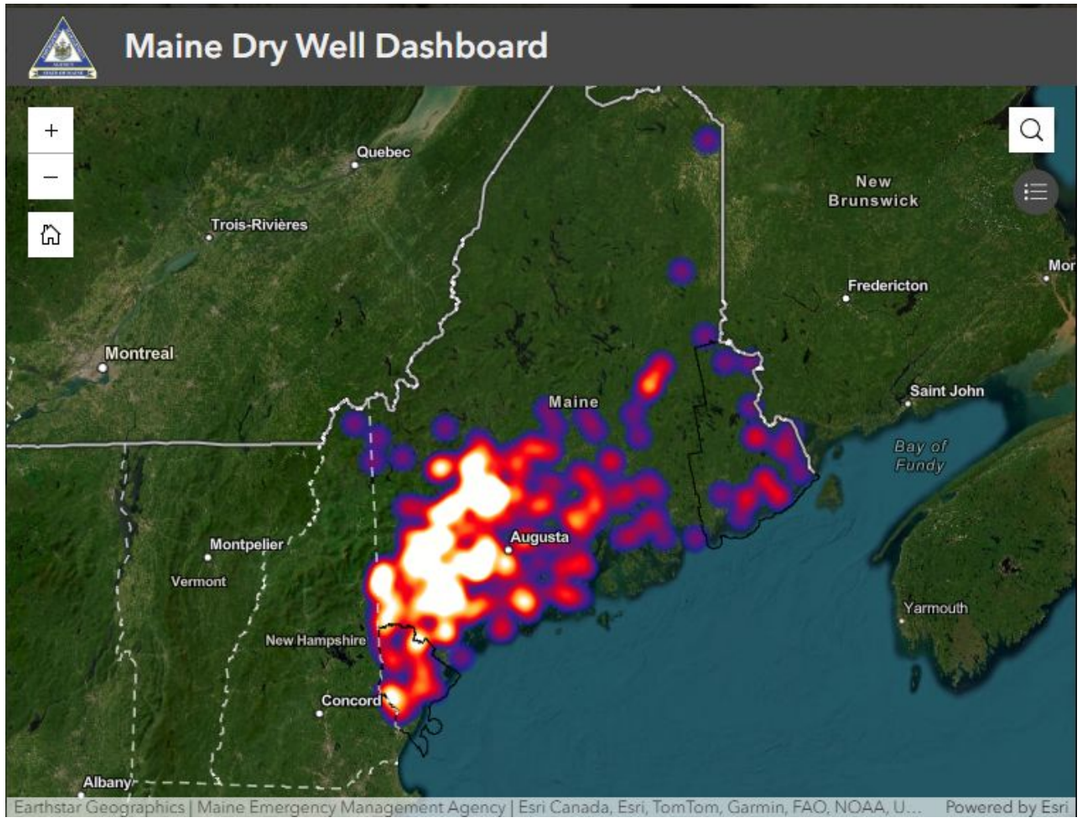
Click on your respective state for a link to report a dry well

Maine Dry Well Survey

New Hampshire Dry Well Survey

People should continue the habits they picked up during the recent summer drought, such as:

- Taking shorter showers
- Limiting car washes
- It also suggests waiting until loads are full before using laundry machines and dishwashers, turning off the faucet when brushing your teeth and installing low-flow faucets.



Maine Dry Well Dashboard screen capture taken December 1, 2025 depicting 534 dry well reports distributed across the state, a jump of over 2 dozen since the beginning of November.

Winter Drought Considerations

December 4, 2025
10:27 AM

Overview: Maine and New Hampshire's drought is likely to persists over the winter with frozen soils hurting recovery.

- Recharging soil moisture before freeze-up is critical so it can be locked-in and saved for spring
- There is some potential for rainfall as an active pattern through mid December favors mixed precipitation events tracking into the region
- If the snowpack in December remains or grows, it can act as an insulator, limiting deeper frost depths
- Once the ground freezes, water infiltration becomes difficult regardless of winter rainfall or snowmelt
- Winter is the driest time of the year since cold air cannot hold as much moisture as warm air
- Monthly precipitation averages drop below 3 inches for both January and February

Looking ahead to Spring:

- A snowpack through winter is crucial to act as a natural water reservoir, as spring snowmelt helps recharge soil and aquifers.
- Below-normal snowfall could extend the drought and impact agriculture in 2026.
  - The timing and rate of snowmelt will be vital to sustaining base flow in rivers and lakes the next warm season
  - Even an active flood season can be insufficient to fully recharge aquifers in severe drought conditions

Main Takeaways

December 4, 2025
10:27 EST

- Widespread Moderate to Severe Drought continues across Maine and New Hampshire, due primarily to significant groundwater deficits
- Recent precipitation events and limited vegetation demands have improved soil moisture, but it's insufficient for water to seep several feet down into well systems
- **In total, 7-12”** of liquid precipitation is needed before deep ground frost develops to alleviate the drought, roughly 200-250% of normal for the remainder of December
- Alleviating drought conditions during the winter months is challenging due to less precipitation and frozen ground conditions
- Residents are encouraged to conserve water this winter as the colder months will make it even more difficult for wells to be replenished
- The Climate Prediction Center says La Niña is favored to continue into the Northern Hemisphere winter, with a transition to ENSO-neutral most likely in January-March 2026
    - Analog years point to a volatile pattern with periods of wild temperature swings and an active storm track
- The outcome of December’s rainfall and the upcoming snowfall this winter will be key to mitigating the long-term impacts of this drought

Contact Information

December 4, 2025
10:27 EST

Briefing Webpage

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

Disclaimer

➔ Updates to the Drought Information Statement will be made monthly unless significant changes necessitate more frequent updates.
- ◆ Weekly updates to the US Drought Monitor can be found at droughtmonitor.unl.edu
- ◆ Drought conditions are less variable in the winter season due to dormant vegetation and frozen ground conditions.

Contact Information

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