

Vermont Drought Task Force Presentation

NOAA/National Weather Service
WFO Burlington, Vermont

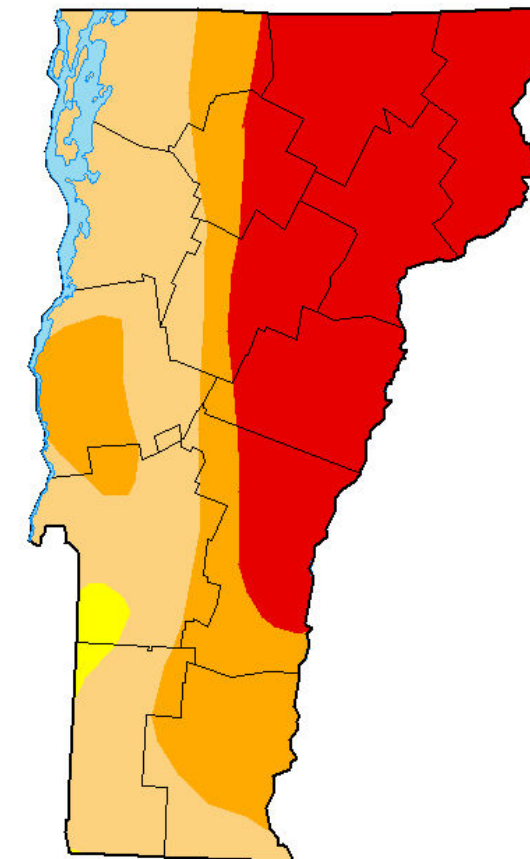
11/10/2025



[Weather.gov/Burlington](https://www.weather.gov/Burlington)

| Category | Description | Possible Impacts |
|----------|---------------------|--|
| D0 | Abnormally Dry | <p>Going into drought:</p> <ul style="list-style-type: none"> short-term dryness slowing planting, growth of crops or pastures <p>Coming out of drought:</p> <ul style="list-style-type: none"> some lingering water deficits pastures or crops not fully recovered |
| D1 | Moderate Drought | <ul style="list-style-type: none"> Some damage to crops, pastures Streams, reservoirs, or wells low, some water shortages developing or imminent Voluntary water-use restrictions requested |
| D2 | Severe Drought | <ul style="list-style-type: none"> Crop or pasture losses likely Water shortages common Water restrictions imposed |
| D3 | Extreme Drought | <ul style="list-style-type: none"> Major crop/pasture losses Widespread water shortages or restrictions |
| D4 | Exceptional Drought | <ul style="list-style-type: none"> Exceptional and widespread crop/pasture losses Shortages of water in reservoirs, streams, and wells creating water emergencies |

U.S. Drought Monitor Vermont



November 4, 2025
(Released Thursday, Nov. 6, 2025)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|-------|--------|--------|-------|-------|------|
| Current | 0.00 | 100.00 | 98.65 | 63.42 | 40.71 | 0.00 |
| Last Week 10-28-2025 | 0.00 | 100.00 | 100.00 | 87.99 | 46.87 | 0.00 |
| 3 Months Ago 08-05-2025 | 28.00 | 72.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year 01-07-2025 | 9.22 | 90.78 | 18.89 | 0.00 | 0.00 | 0.00 |
| Start of Water Year 09-30-2025 | 0.00 | 100.00 | 100.00 | 93.72 | 23.83 | 0.00 |
| One Year Ago 11-05-2024 | 36.00 | 64.00 | 25.19 | 0.00 | 0.00 | 0.00 |

Intensity:

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

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

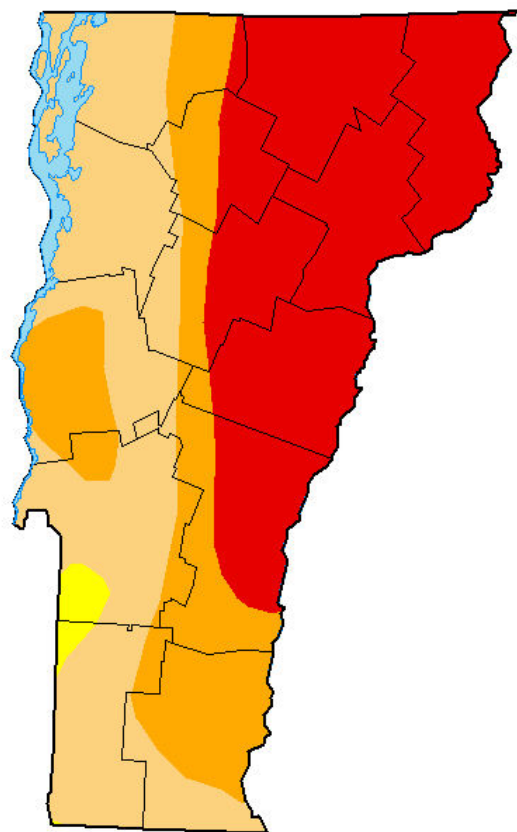
Richard Tinker
CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu

Latest Drought Monitor - Next Update Thursday

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Intensity:

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

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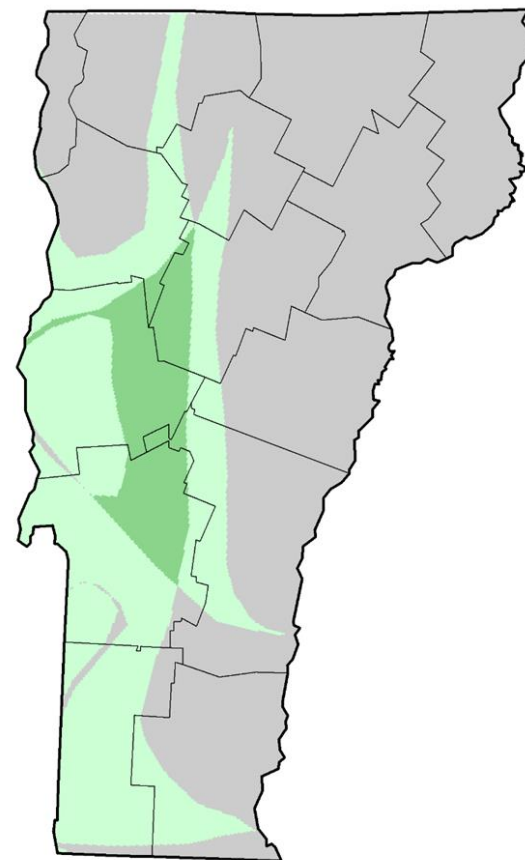
Author:

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U.S. Drought Monitor Class Change - Vermont 2 Week



November 4, 2025
compared to
October 21, 2025

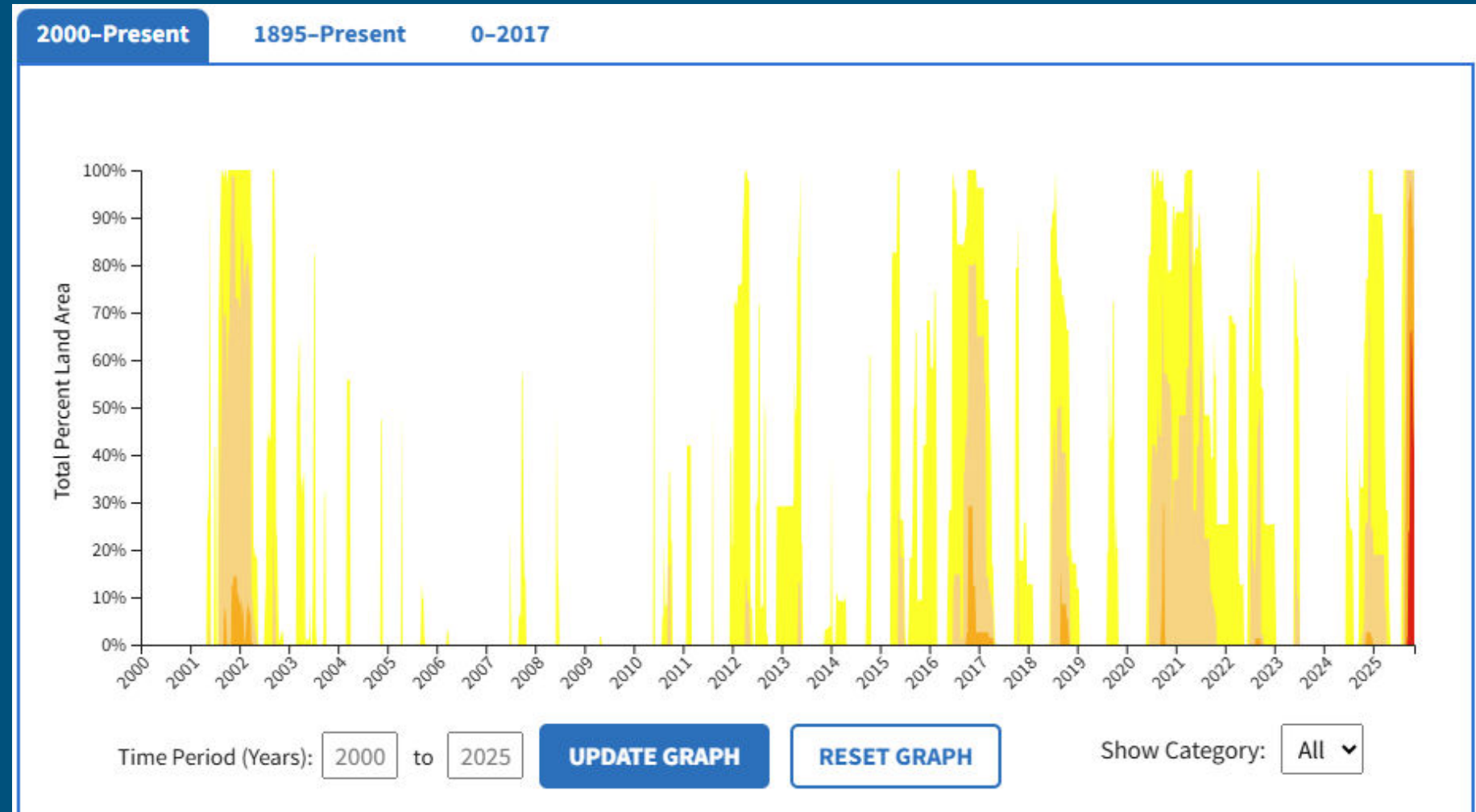
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- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

Recommended improvements in the Champlain Valley and along the spine of the western Greens accepted by the national USDM author (green shading on right).

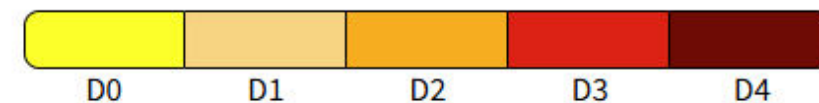
Drought History



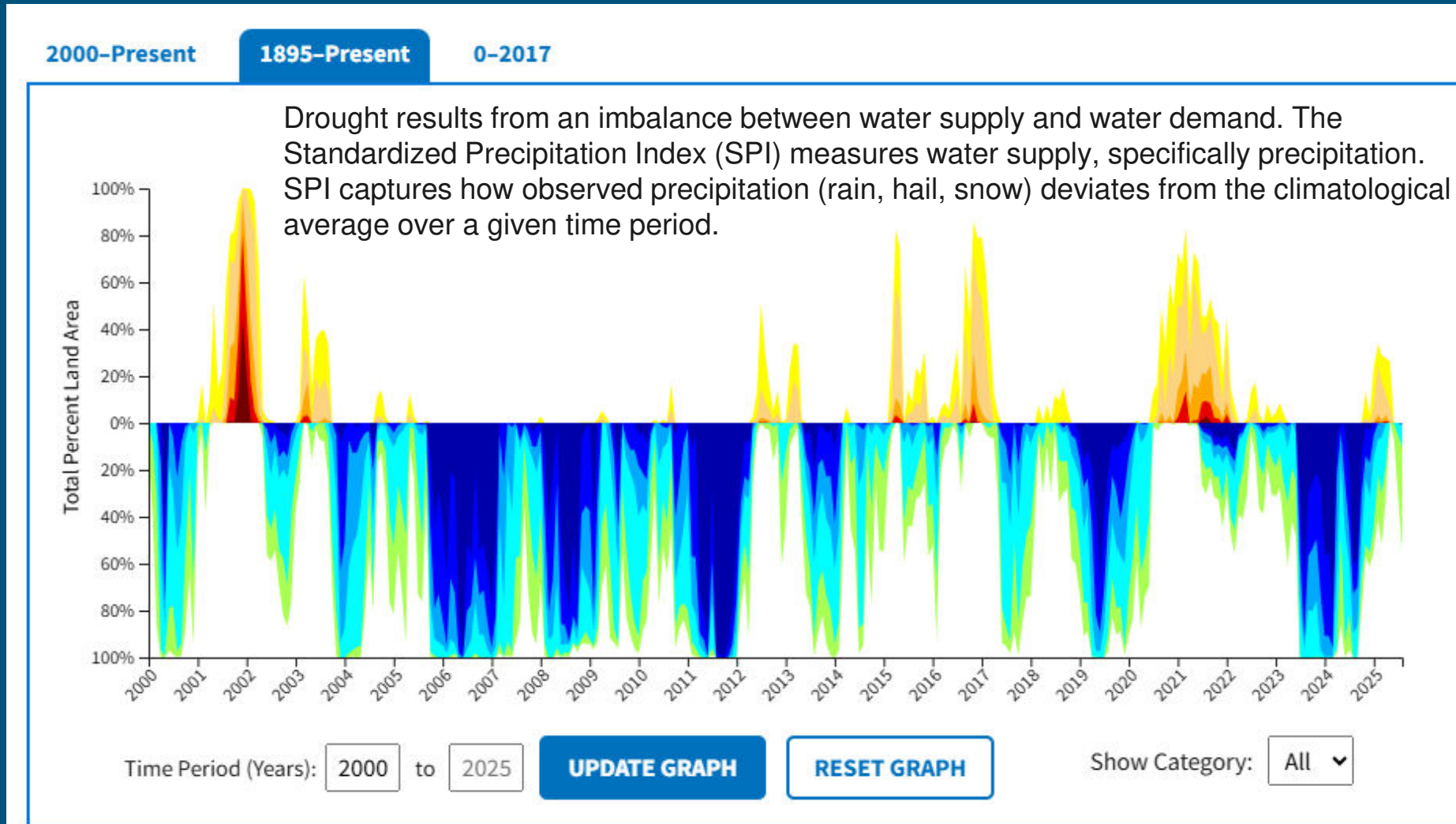
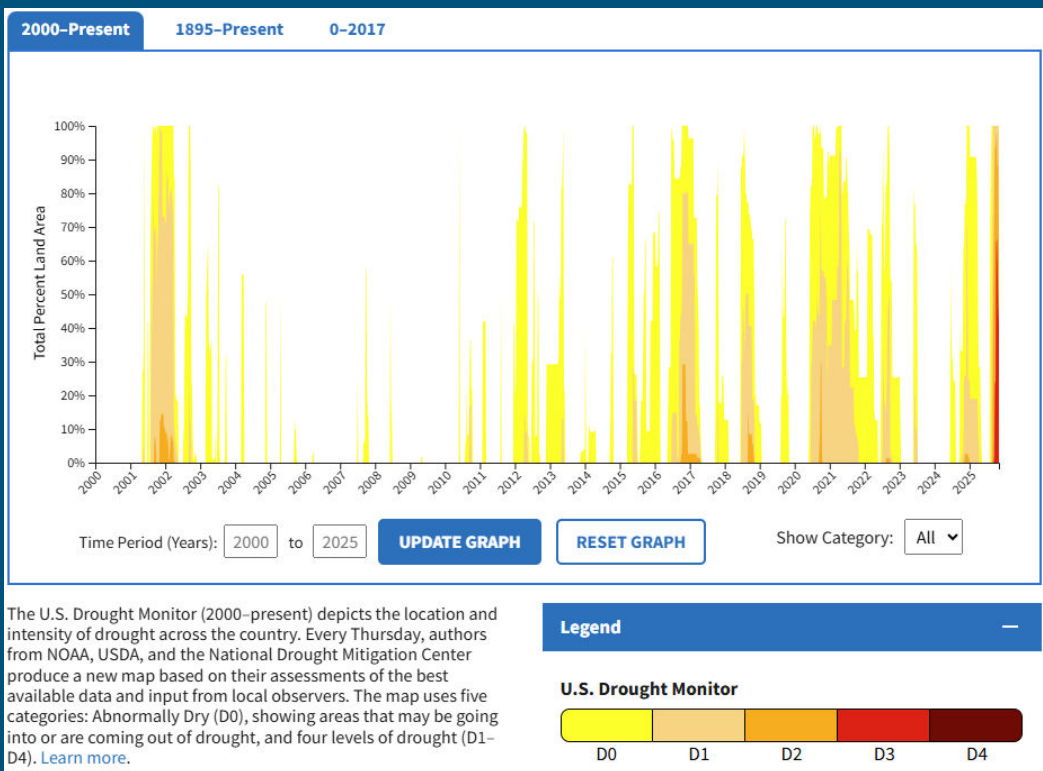
The U.S. Drought Monitor (2000–present) depicts the location and intensity of drought across the country. Every Thursday, authors from NOAA, USDA, and the National Drought Mitigation Center produce a new map based on their assessments of the best available data and input from local observers. The map uses five categories: Abnormally Dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought (D1–D4). [Learn more.](#)

Legend

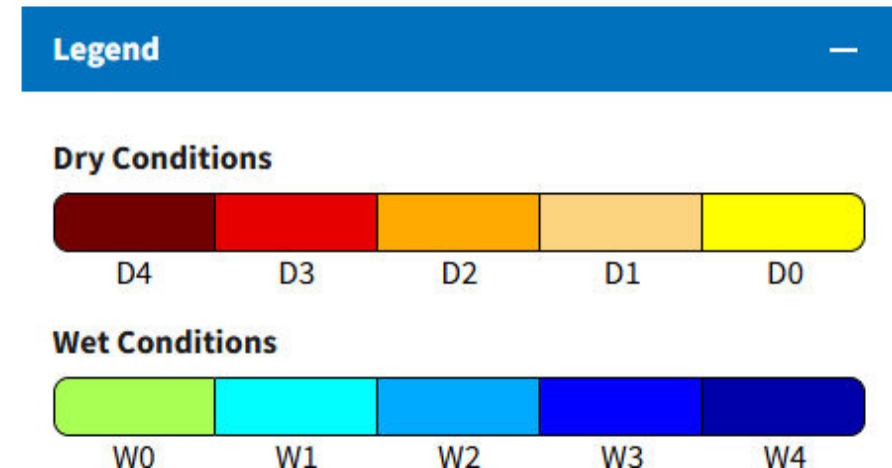
U.S. Drought Monitor



Drought History



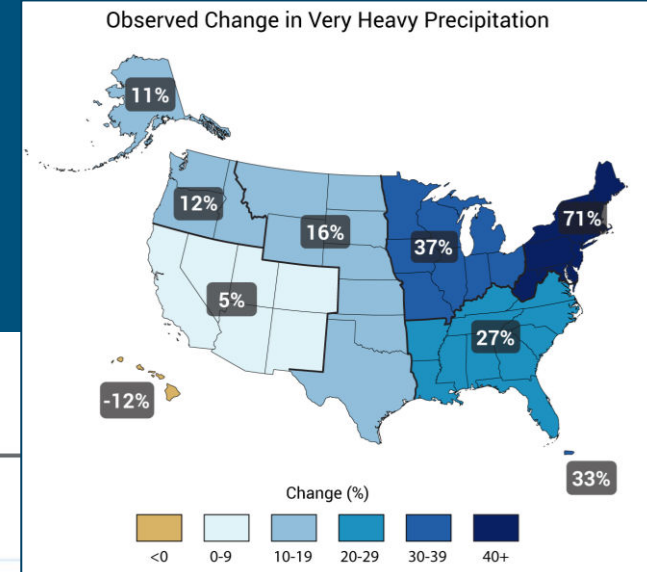
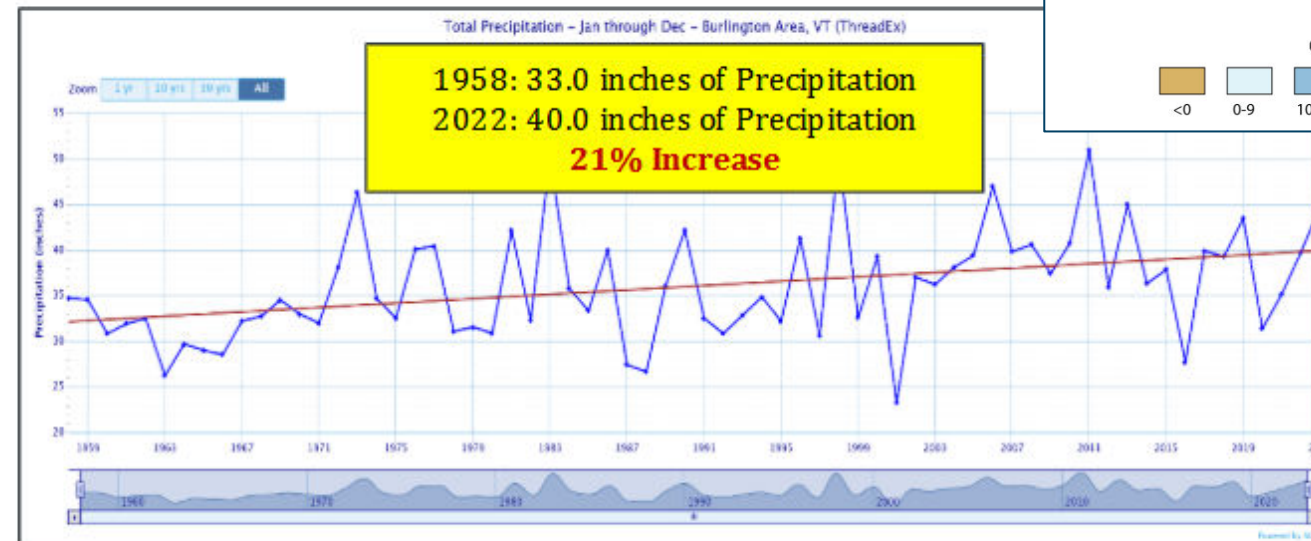
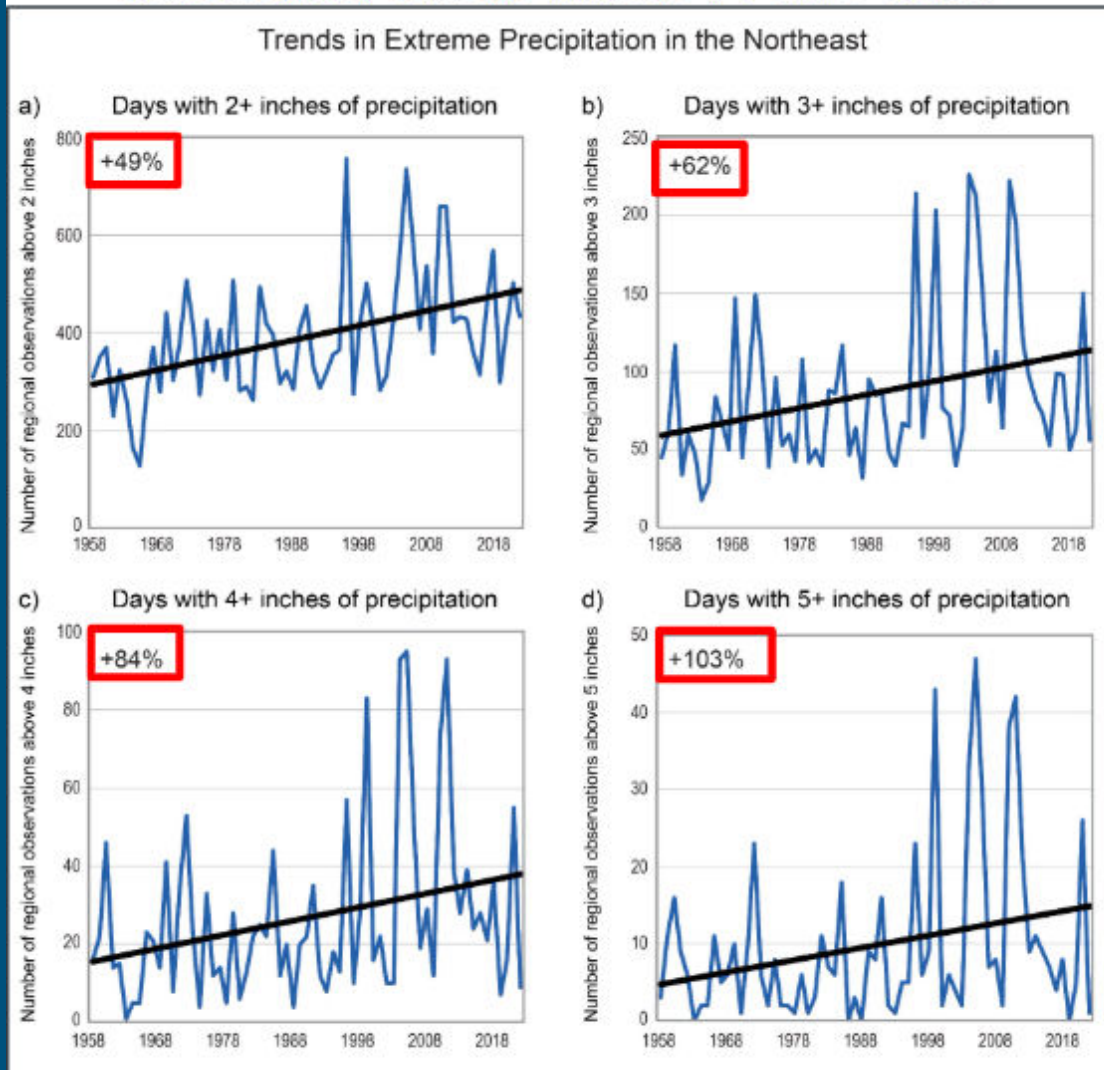
Drought results from an imbalance between water supply and water demand. The Standardized Precipitation Index (SPI) measures water supply, specifically precipitation. SPI captures how observed precipitation (rain, hail, snow) deviates from the climatological average over a given time period—in this case, over the 9 months leading up to the selected date. Red hues indicate drier conditions, while blue hues indicate wetter conditions. Data are available monthly from 1895–present. [Learn more.](#)



Changing Climate

Greater Frequency of Heavy Rainfall Events

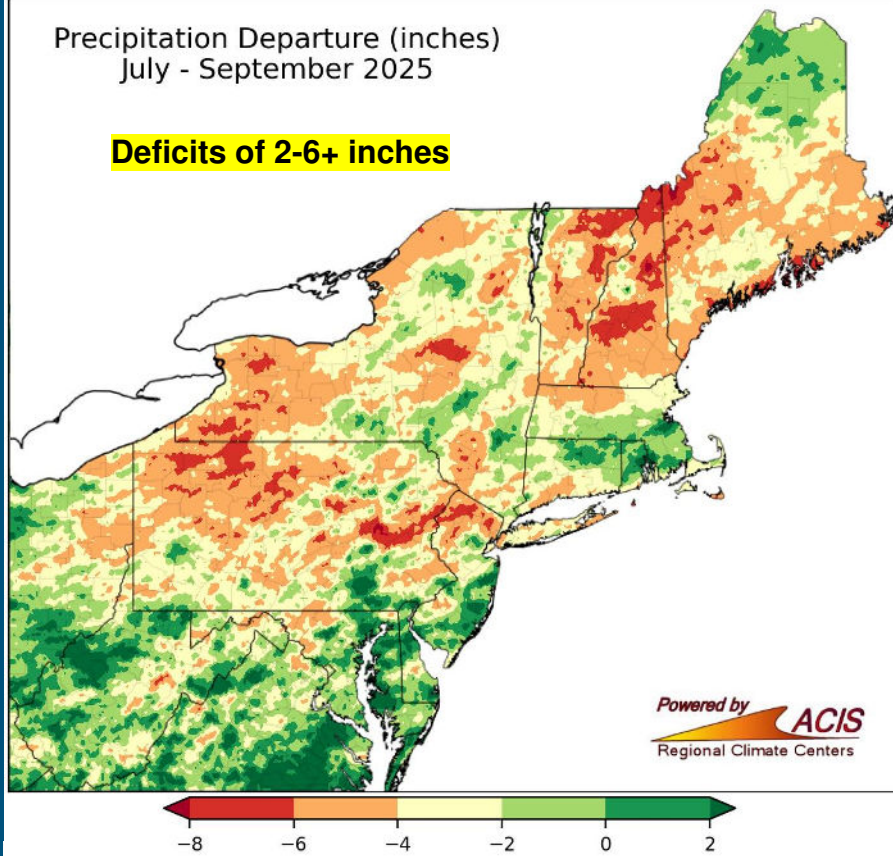
Trends in Extreme Precipitation in the Northeast on the Frequency of # Days with 2+, 3+, 4+ and 5+ inches.



- Annual Precipitation has increased 10-25% from 1960-2020, yet the frequency of days with Intense rainfall has increased ~50-100% during the same time period.
- Therefore, the number of Intense Precipitation events are increasing faster than the Total Annual Precipitation.
- **Meaning that the northeast (including VT) are experiencing more intense rainfall days that are separated by longer periods of drier days.**
- **Impacts: More flash flooding, flooding events as well as an increase in abnormally dry periods, including Moderate to Severe drought.**

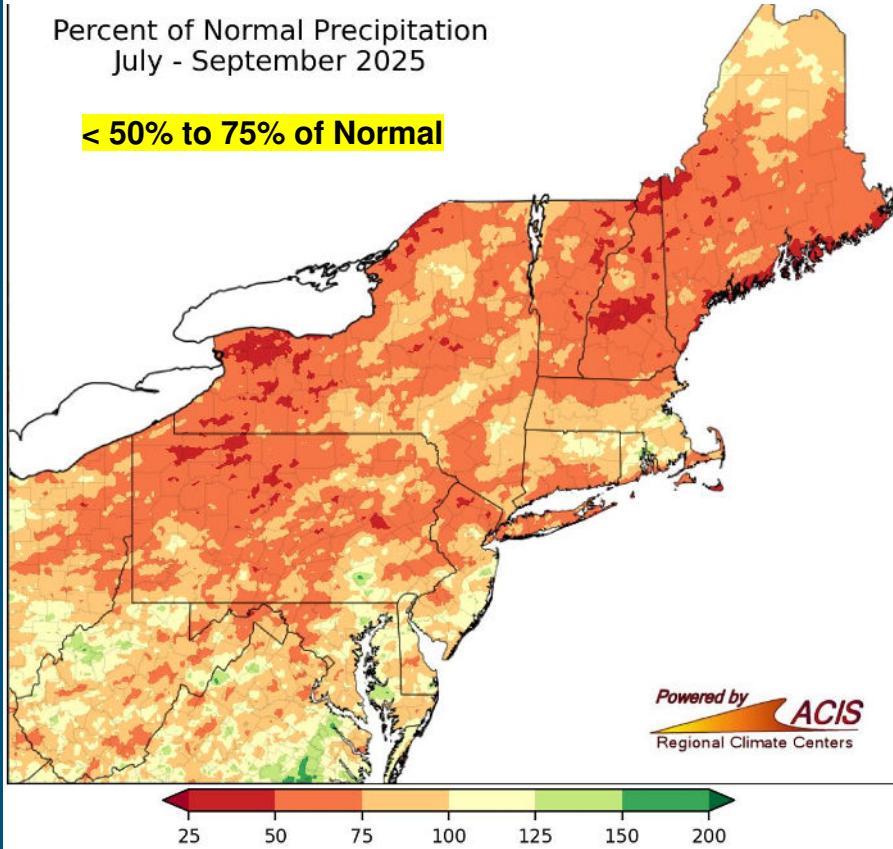
Precipitation Departure (inches)
July - September 2025

Deficits of 2-6+ inches



Percent of Normal Precipitation
July - September 2025

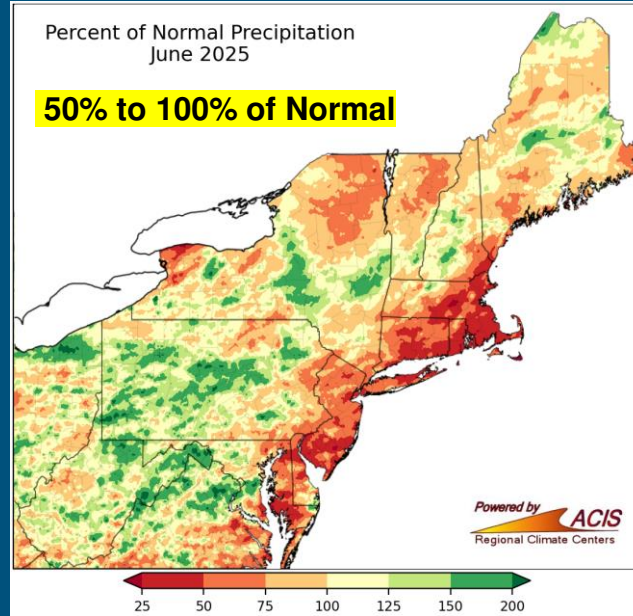
< 50% to 75% of Normal



How'd we get here?

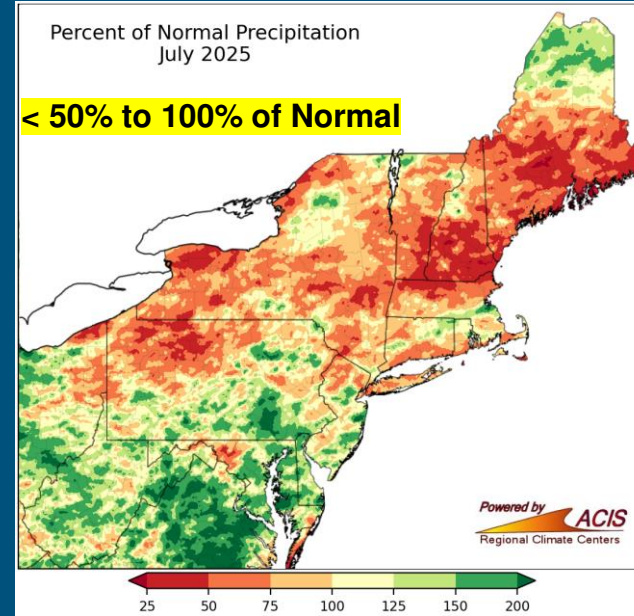
Percent of Normal Precipitation
June 2025

50% to 100% of Normal



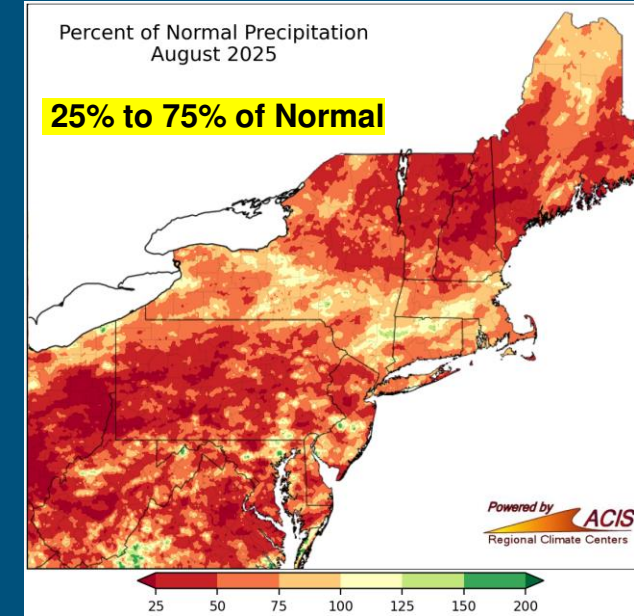
Percent of Normal Precipitation
July 2025

< 50% to 100% of Normal



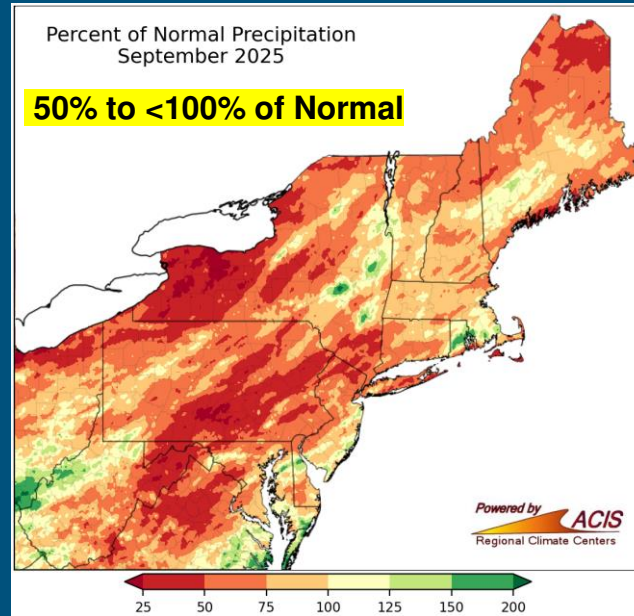
Percent of Normal Precipitation
August 2025

25% to 75% of Normal



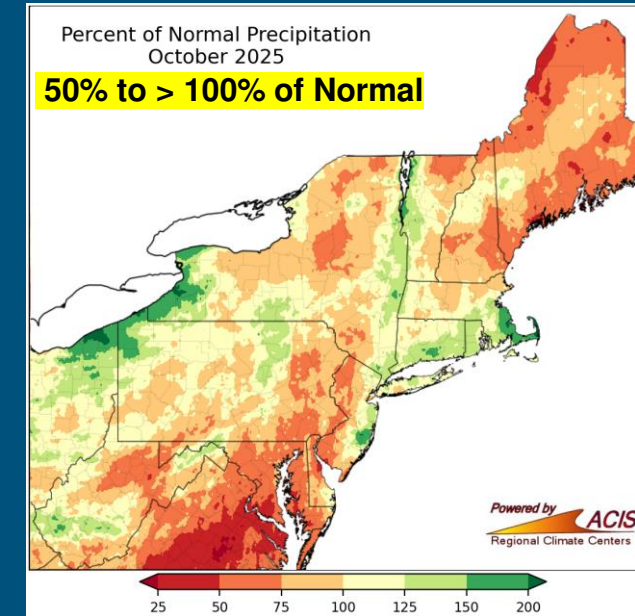
Percent of Normal Precipitation
September 2025

50% to <100% of Normal

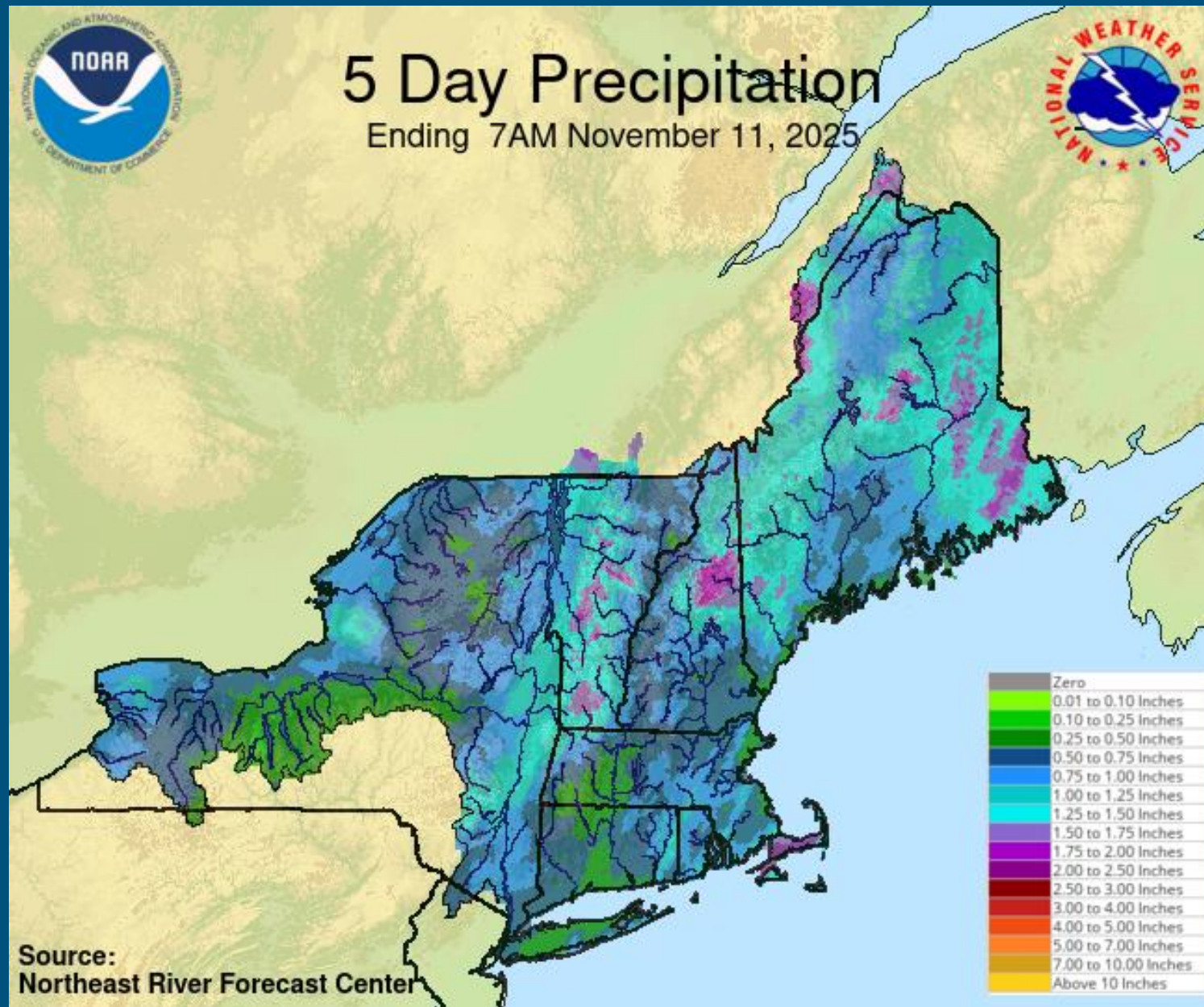


Percent of Normal Precipitation
October 2025

50% to > 100% of Normal



Observed Storm Total Precipitation from 11/06-11/10

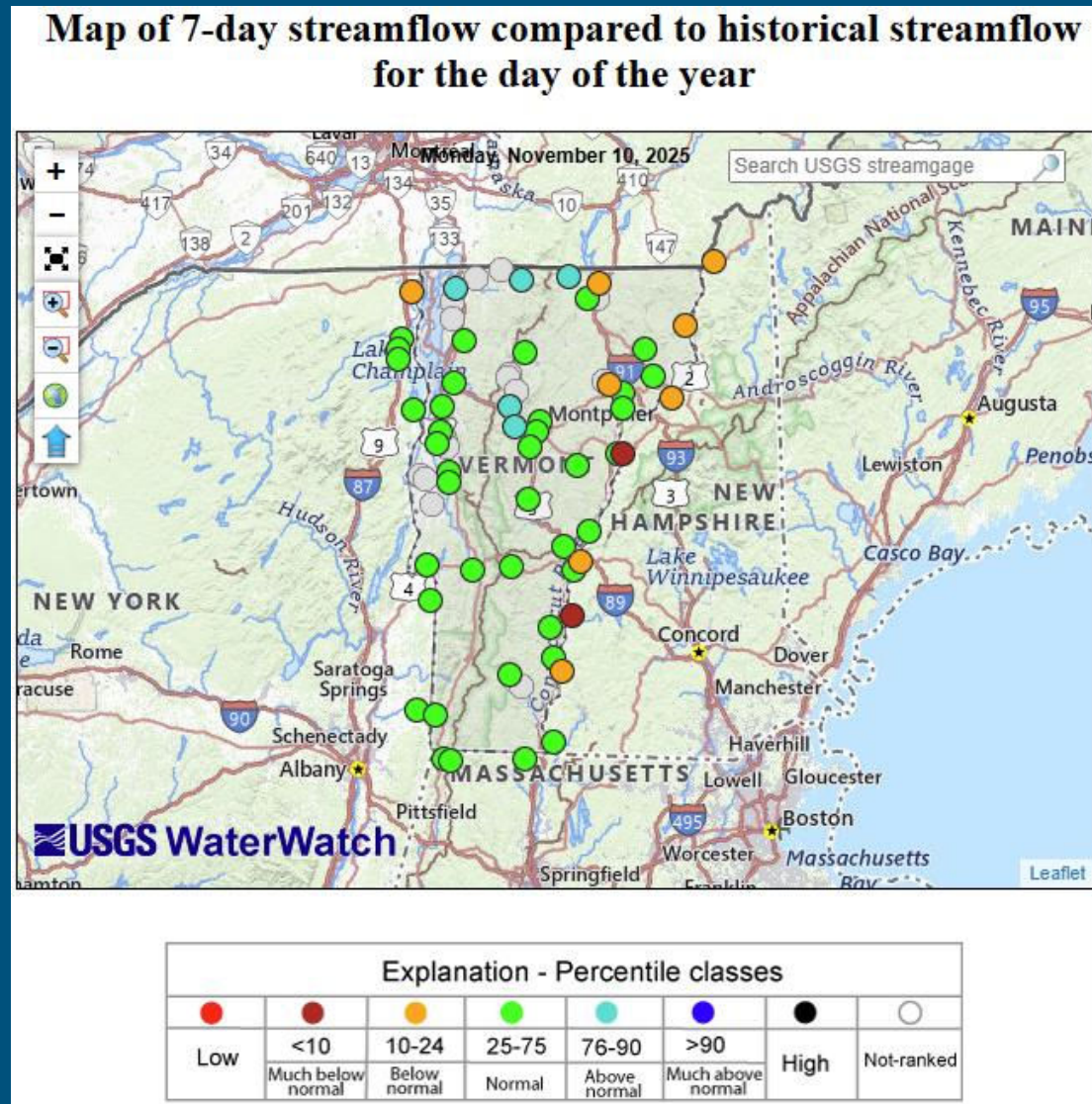


- The area has seen several rounds of rain/snow over the last week.
- Totals are highest in the northern Champlain Valley.
- Lesser totals in southern the Northeast Kingdom into parts of Orange and Windsor Counties.

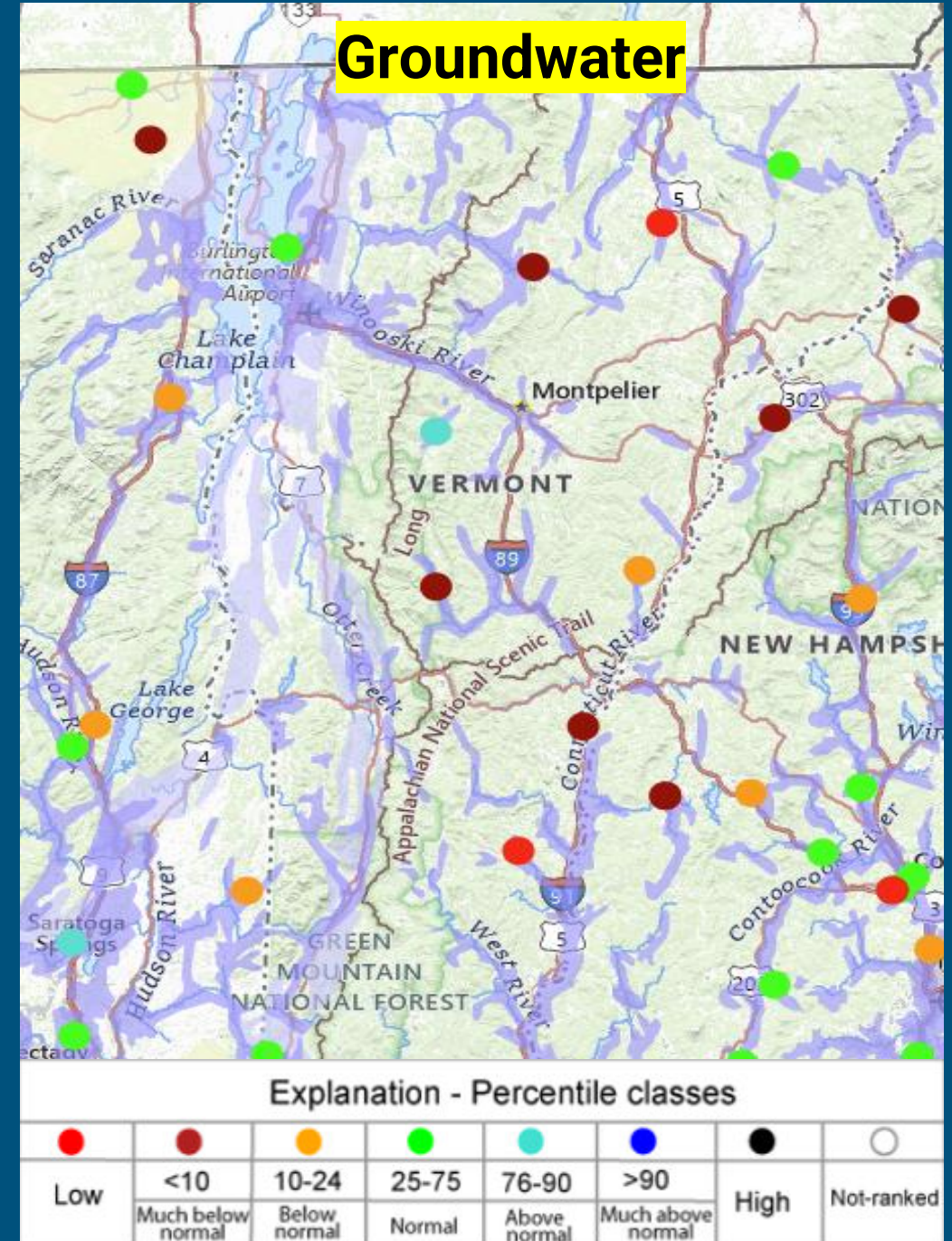
Current Streamflow and Groundwater (USGS)

- Streamflows have largely returned to normal levels.
- Groundwater levels remain mixed but generally below normal, indicative of longer term drought.

Streamflow

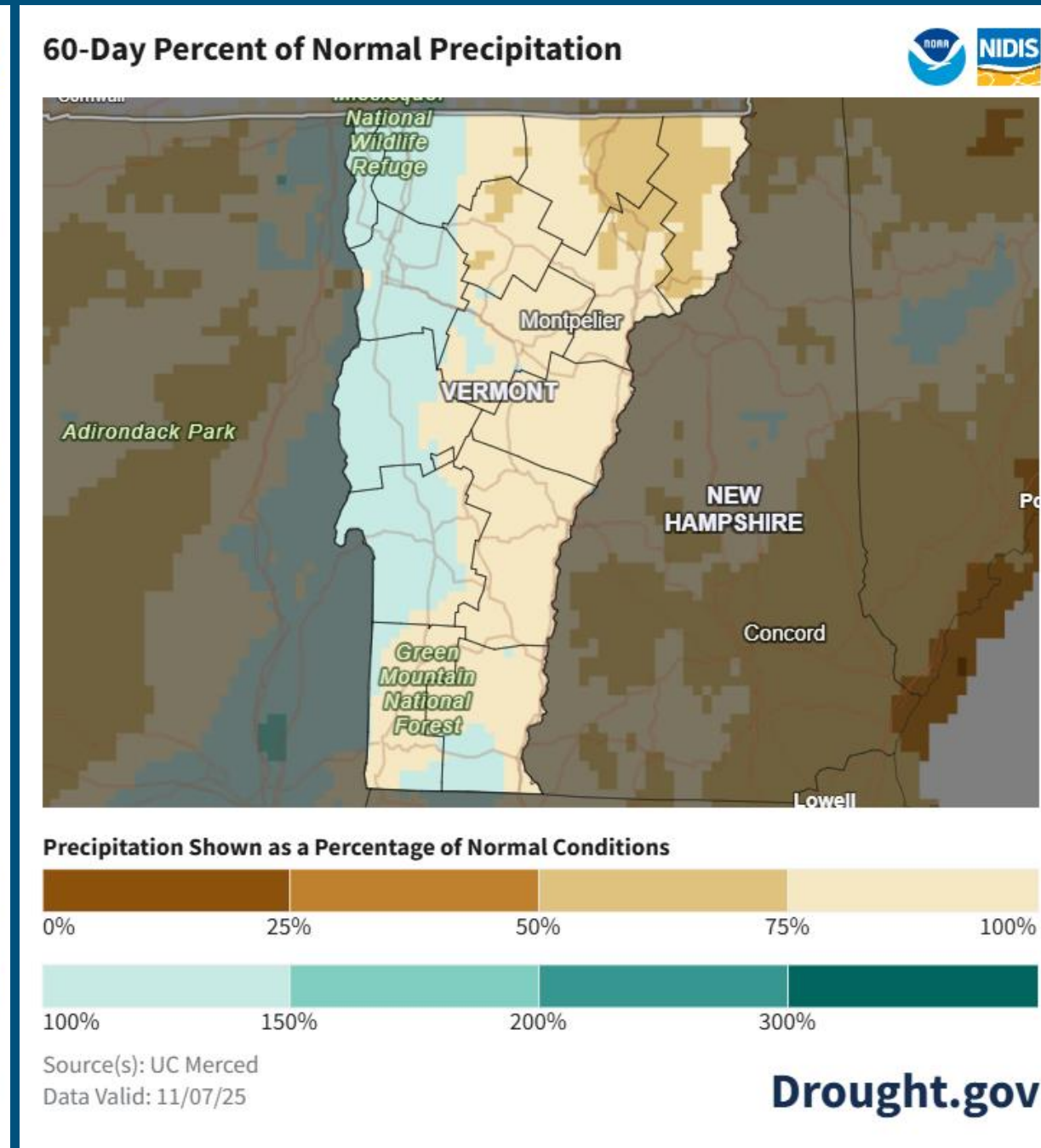
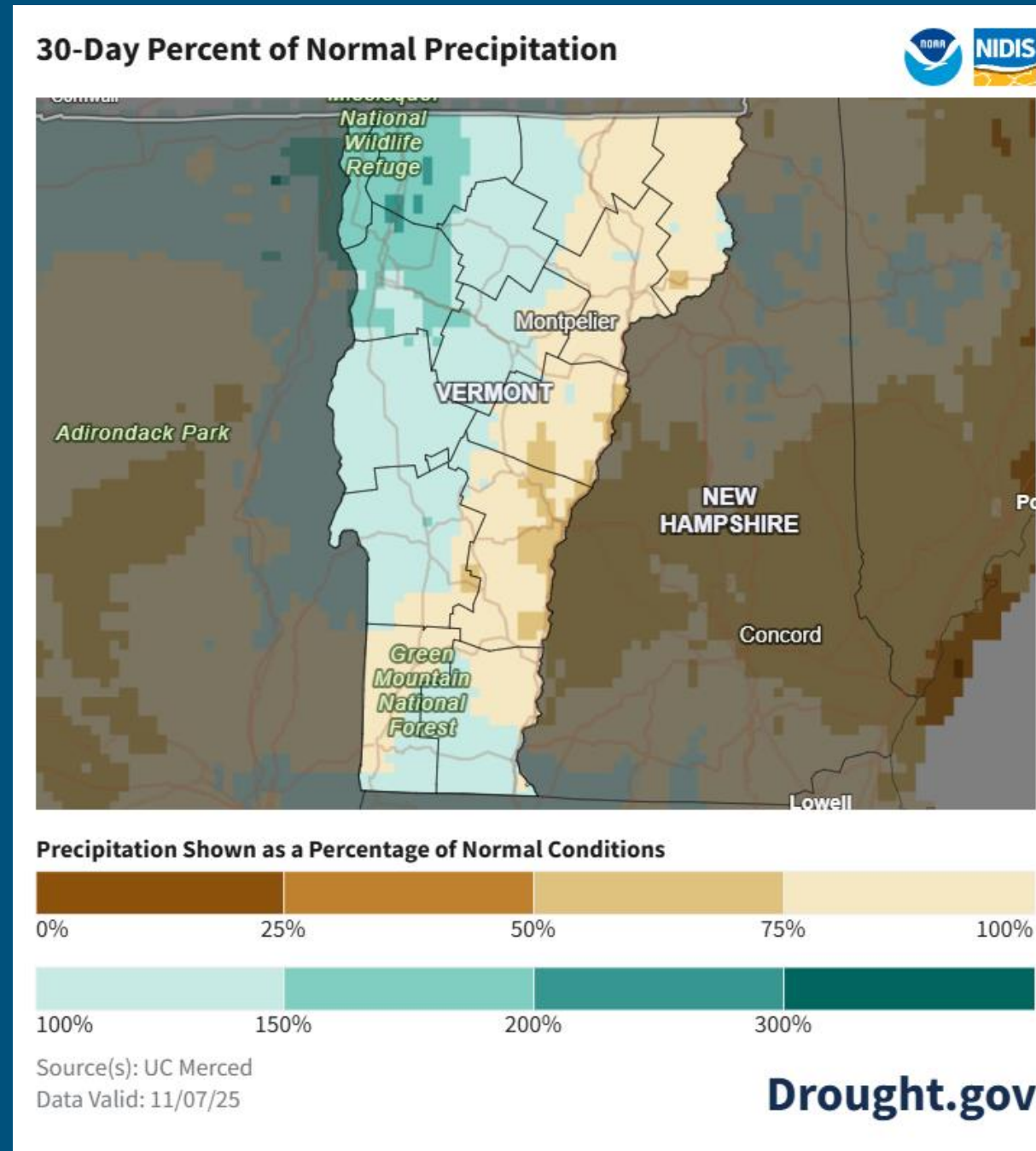


Groundwater

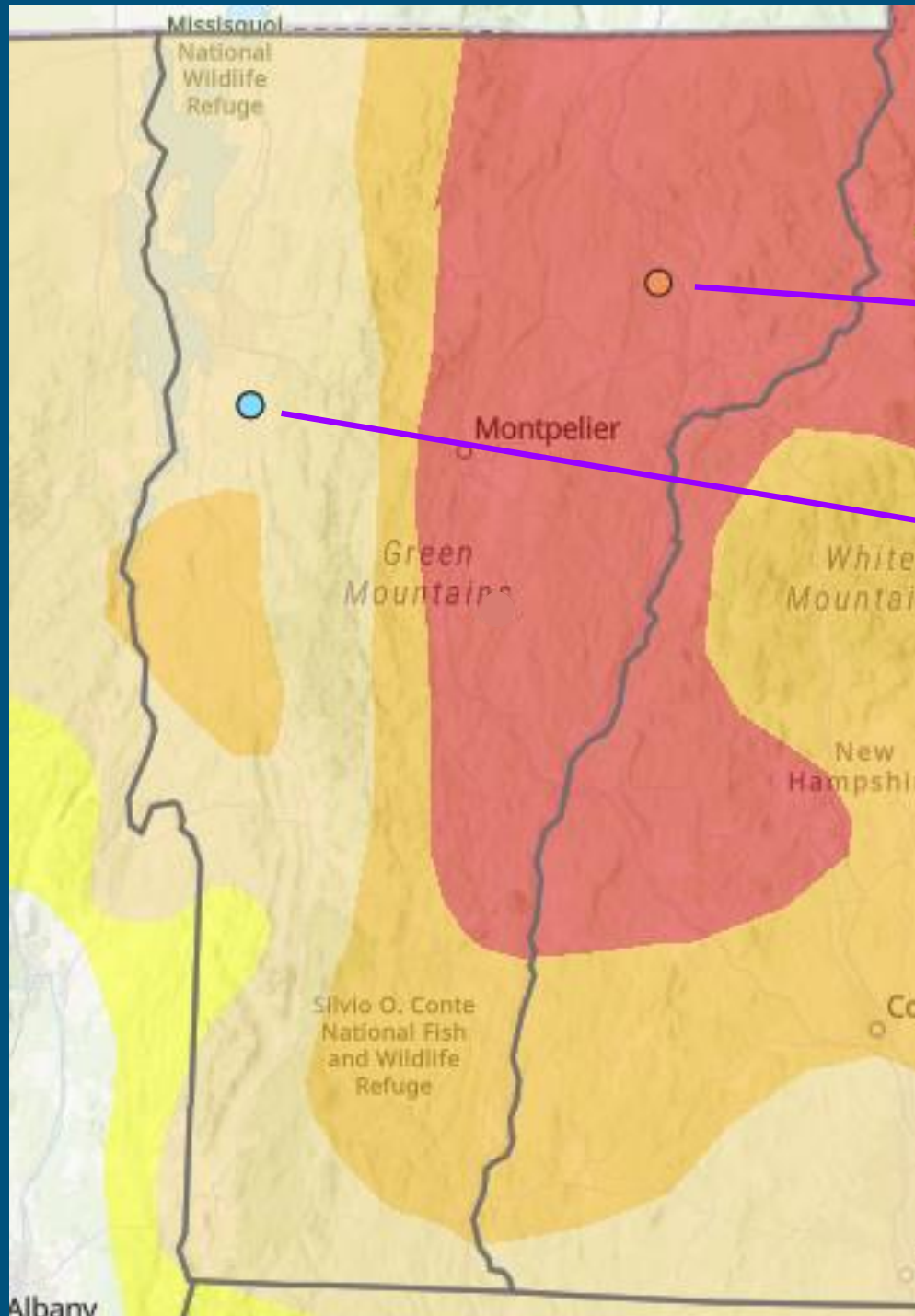


Percent of Normal Precipitation- As of 11/07

- Greatest 30 and 60 day negative departures remain across the Northeast Kingdom.
- Large improvements have been seen across most of western Vermont.
- Burlington had its 4th wettest October on record.



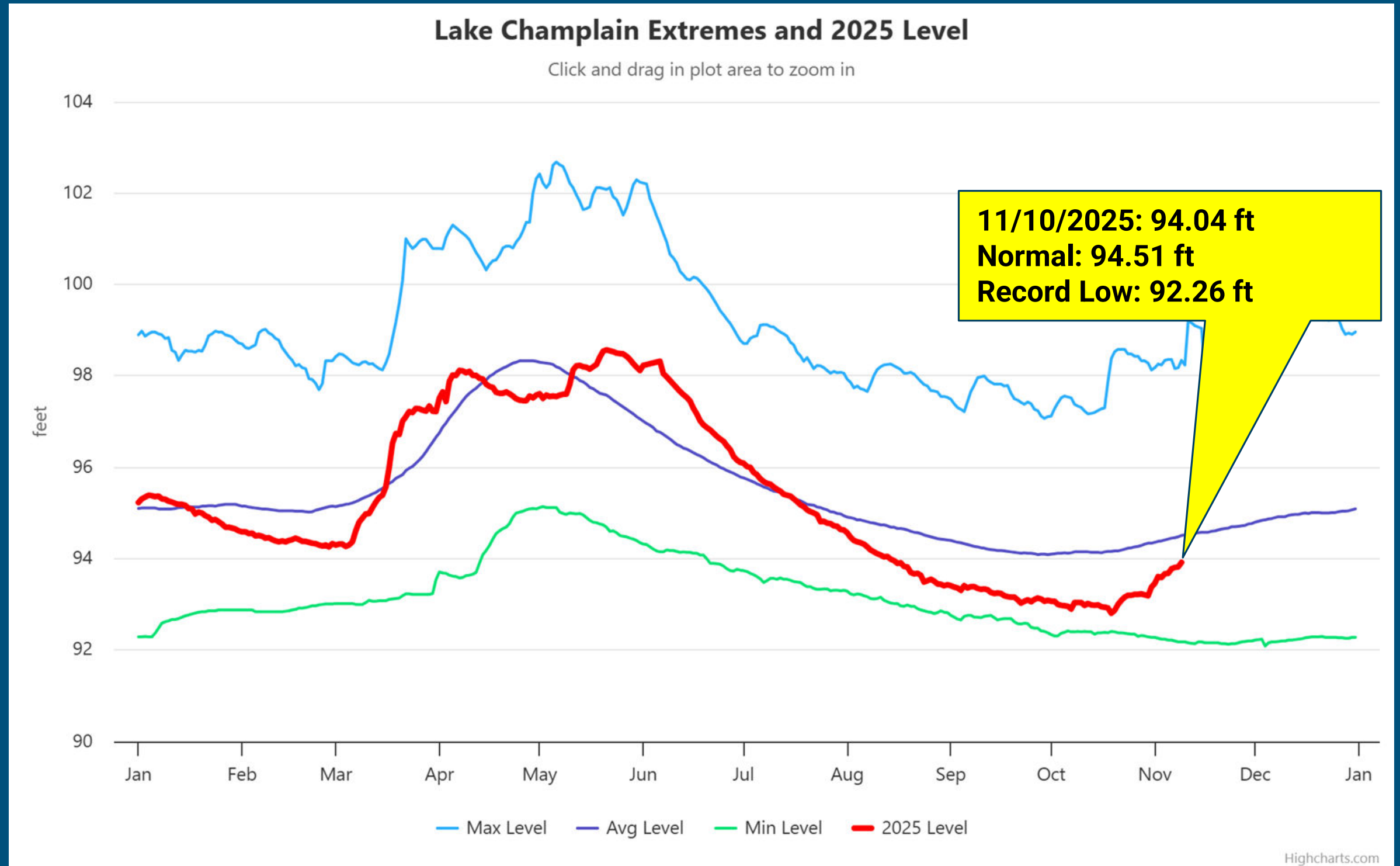
CMOR Reports - As of 11/09



- 2 reports over the past week.
- Date (11/3): Mildly Dry conditions reported.
- Date (11/09): Mildly Wet Conditions reported. Moisture is sticking around with moist ground and forest understory due to cloud cover.

Lake Champlain levels and climatology

- Significant recharge in lake level continues.



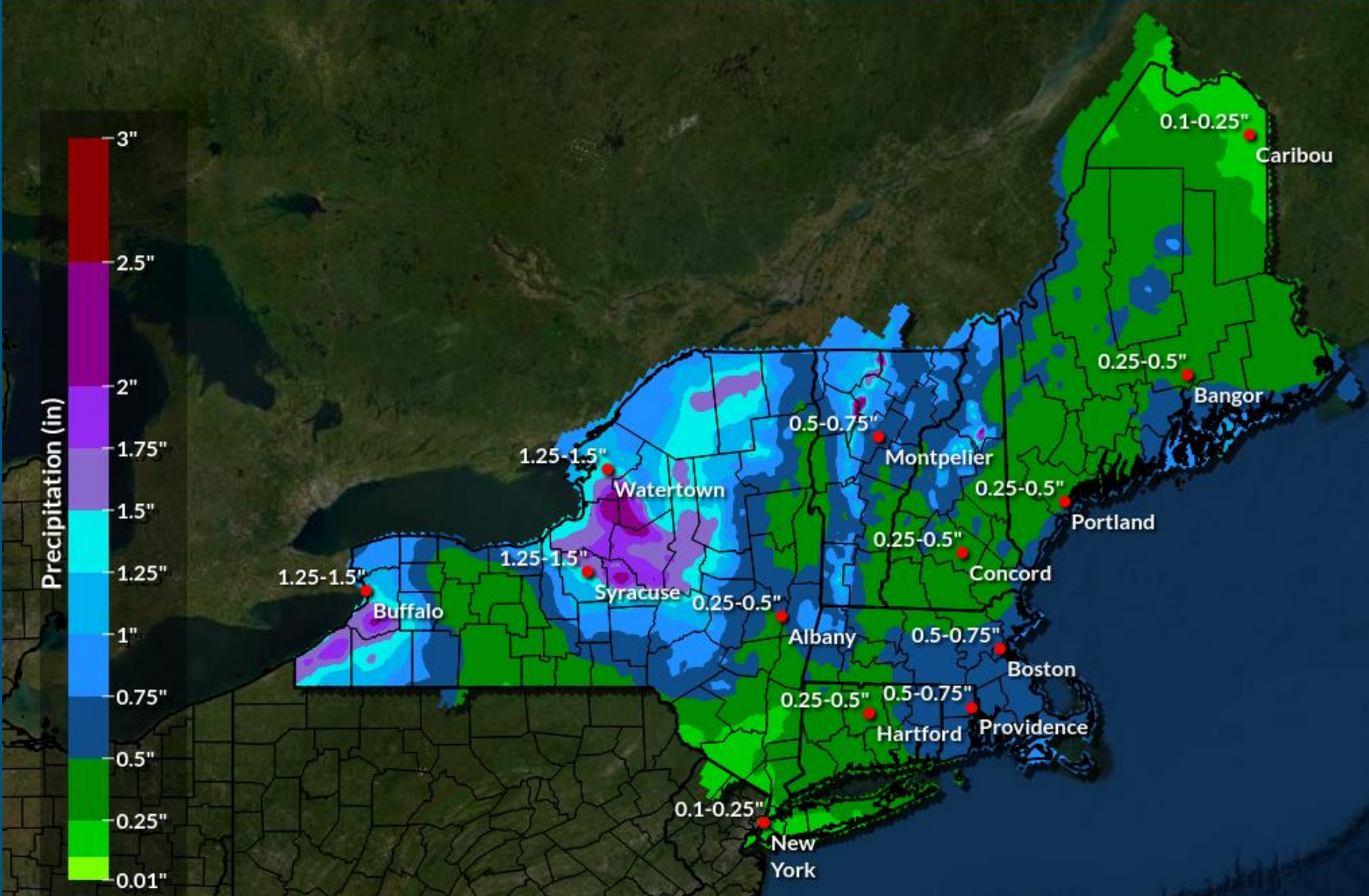
Forecast Rainfall

7 Day WPC Precipitation Forecast

Valid Tue 7:00PM through Tue 7:00PM EST

River Forecast Center
Northeast RFC

Issued Nov 11, 2025 7:05 PM EST



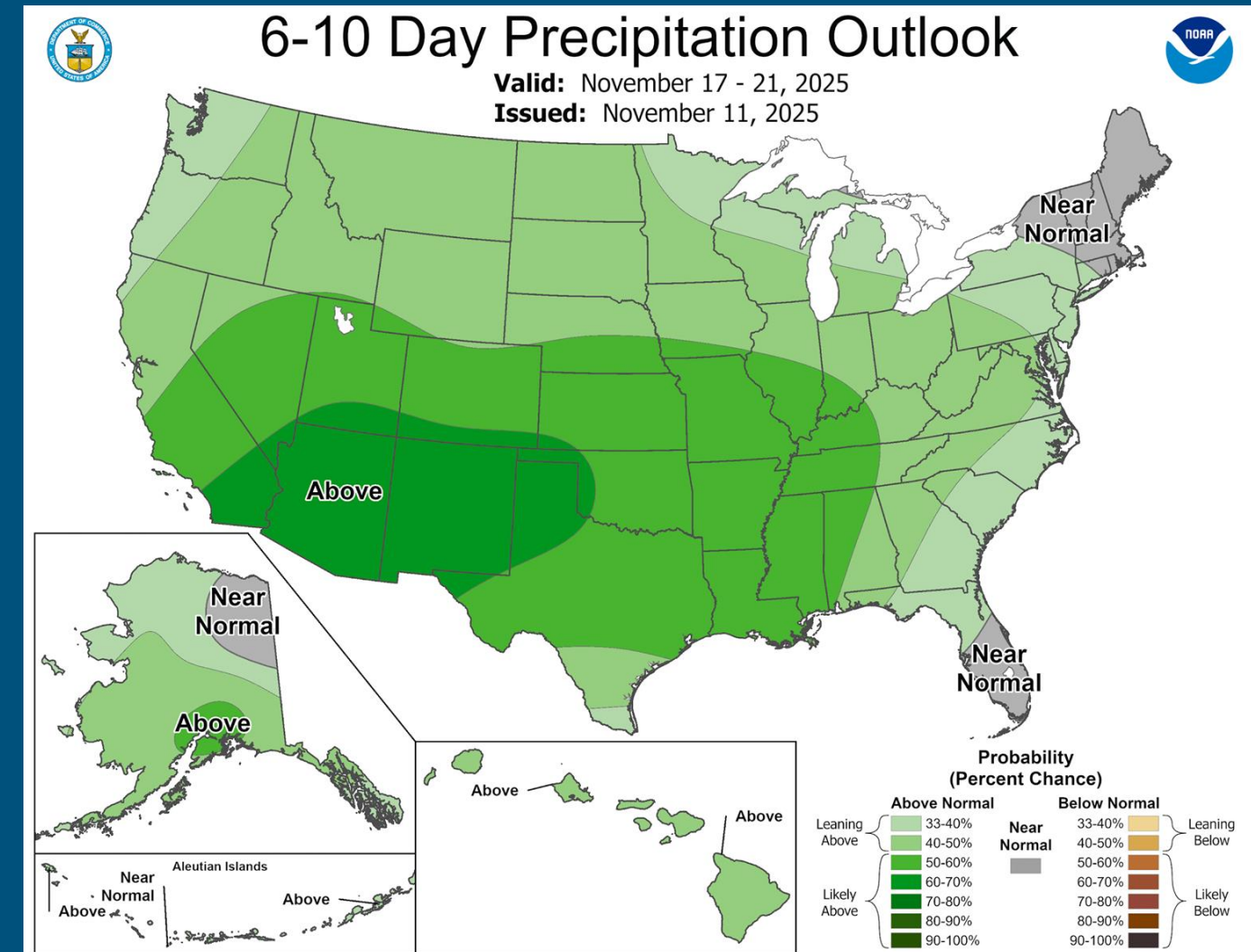
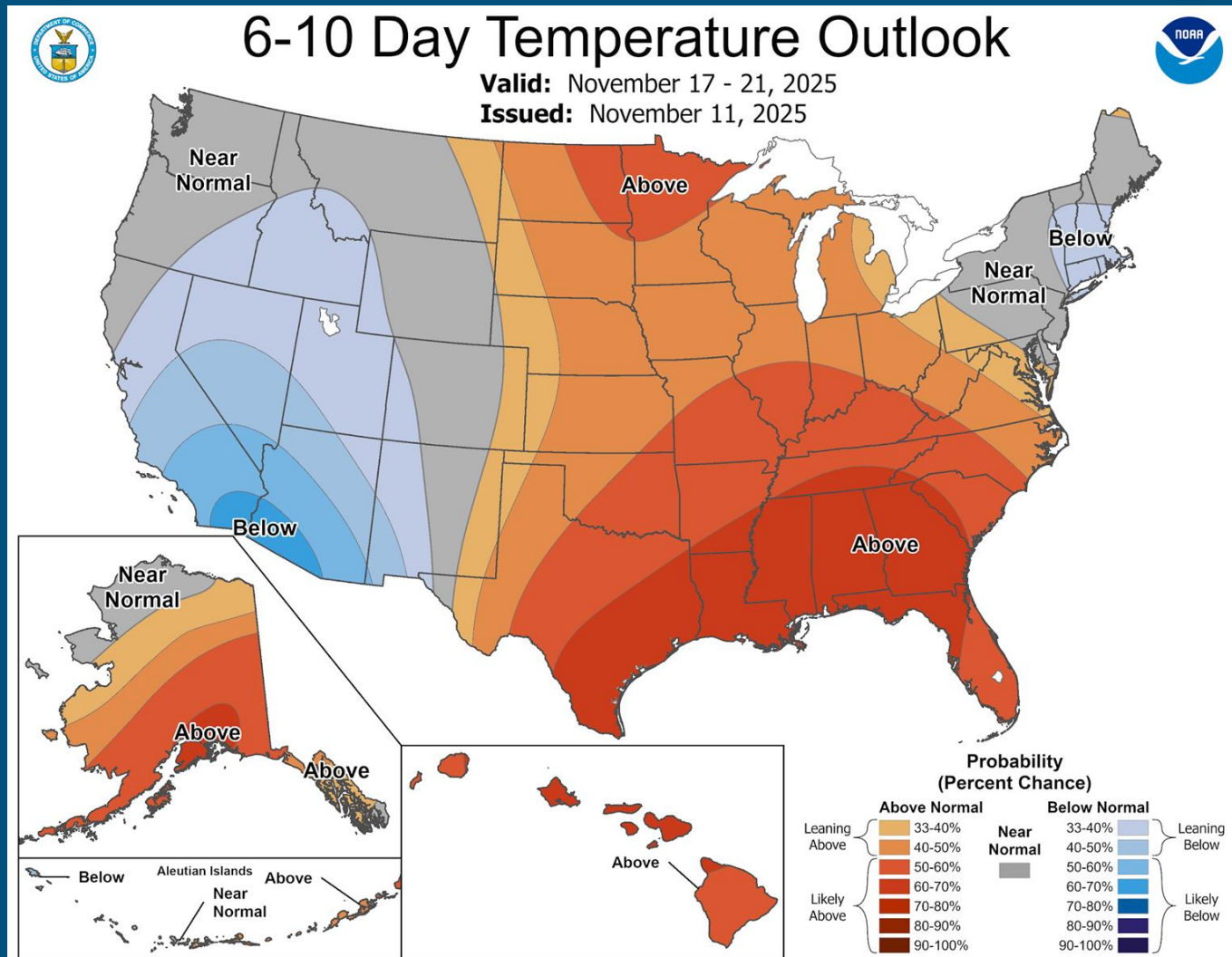
- Persistent upslope rain/snow showers are expected through the next 7 days.
- General forecast totals of 0.25 to 0.75 inches expected with favorable higher terrain totals > 1 inch.

November Monthly
Normals: 2.50 - 3.50 inches
Weekly Normal:
0.66 - 1 inch

6-10 Day Outlooks: November 17-21, 2025

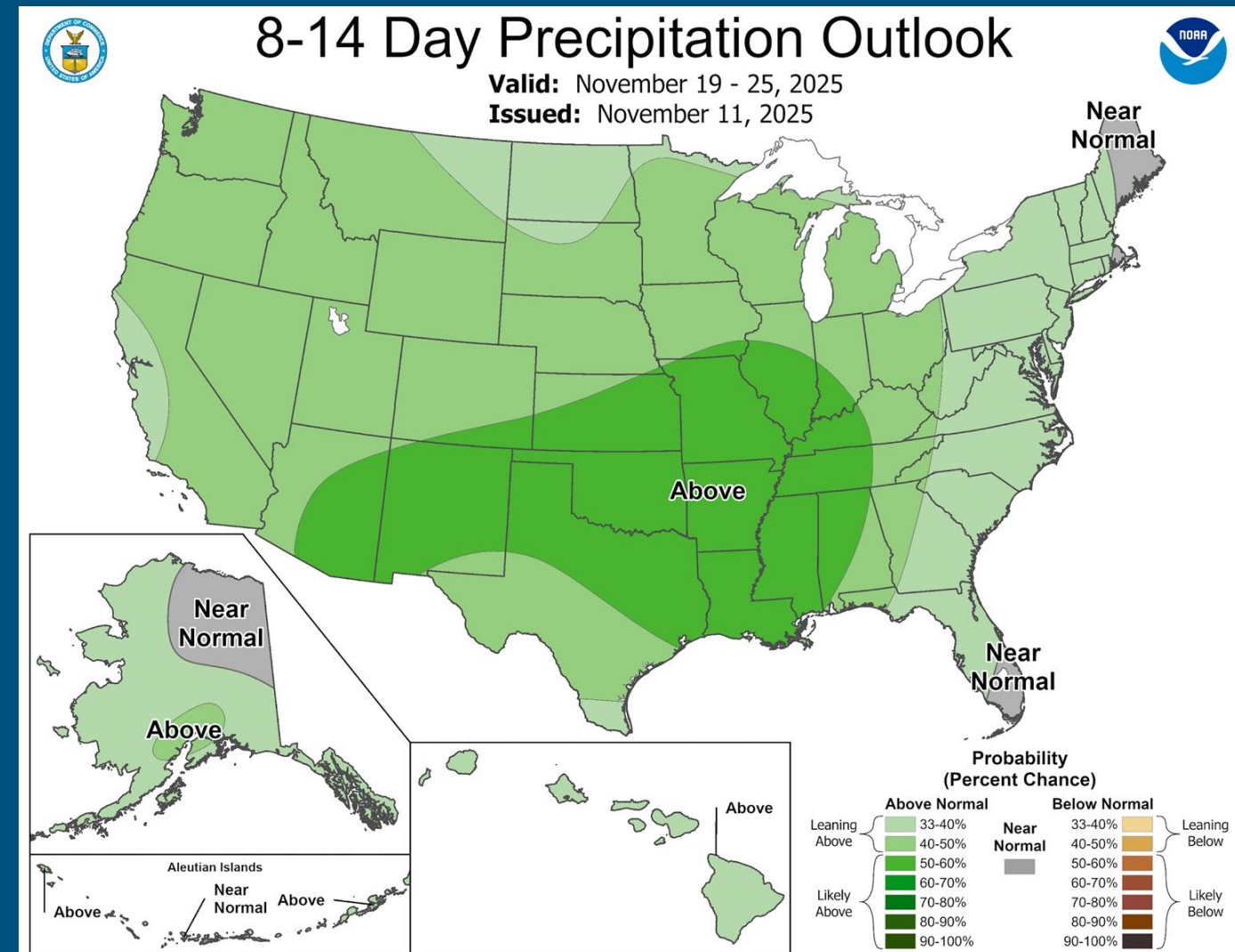
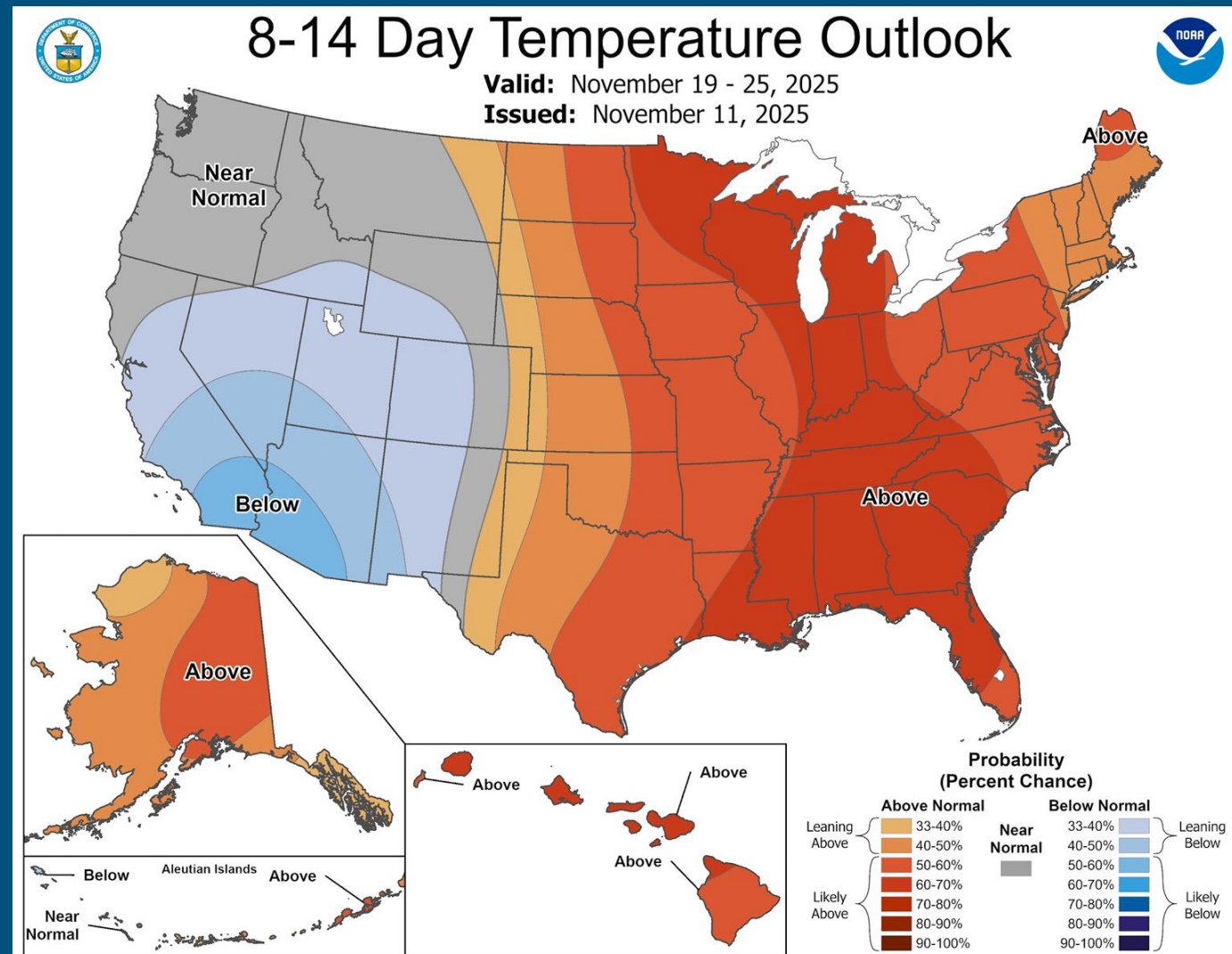
TEMPERATURE: **Below Normal (33-40%)**

PRECIPITATION: **Above Normal (33-40%)**



8-14 Day Outlooks: Nov 19-25, 2025

TEMPERATURE: Above Normal (33-40%)
PRECIPITATION: Near to Above Normal (33-40%)



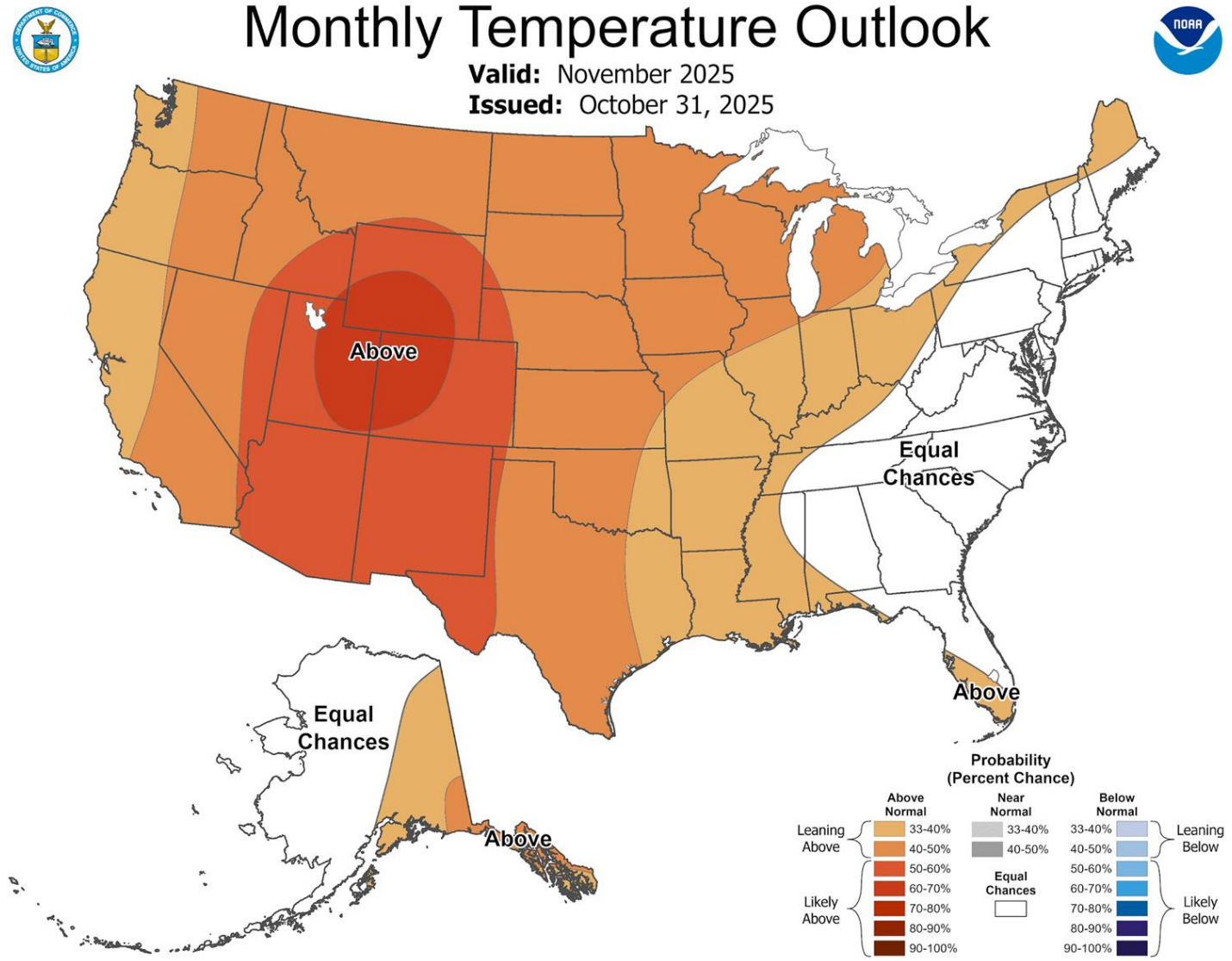
Monthly Outlooks: November 2025

TEMPERATURE: Normal to **slightly above normal (33-40%)** as a whole

PRECIPITATION: **Slightly above normal as a whole (33-40%)**

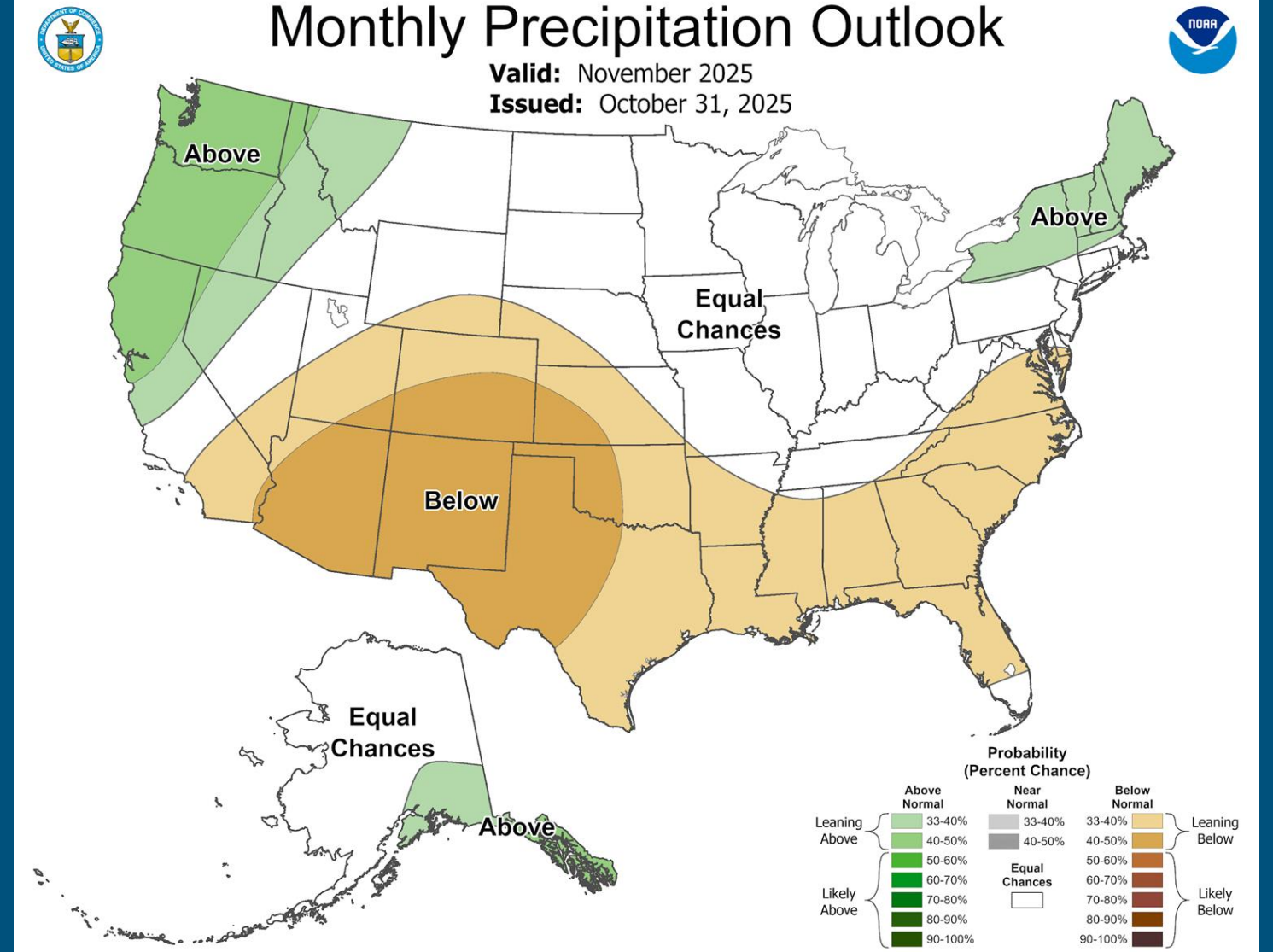
Monthly Temperature Outlook

Valid: November 2025
Issued: October 31, 2025

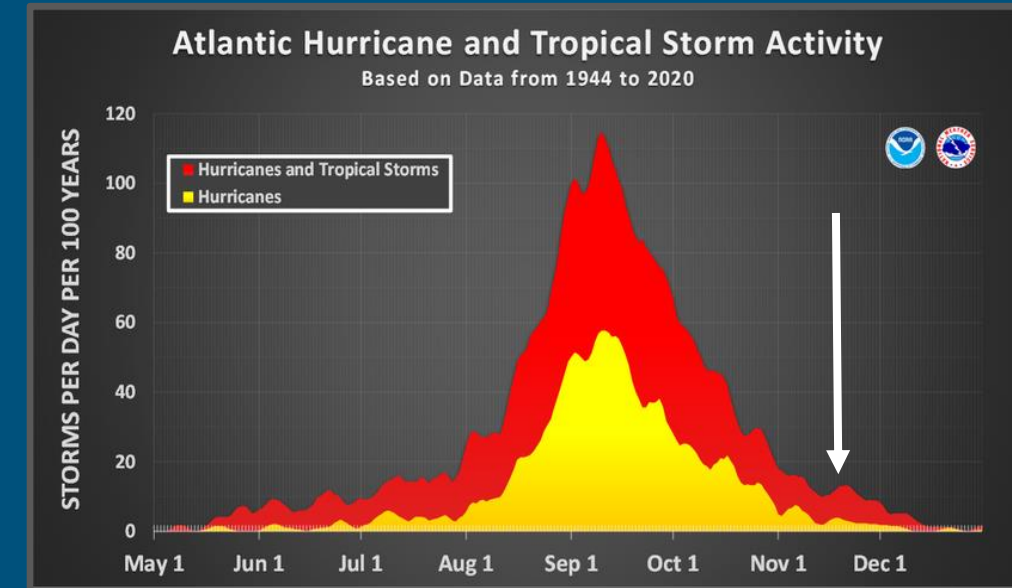
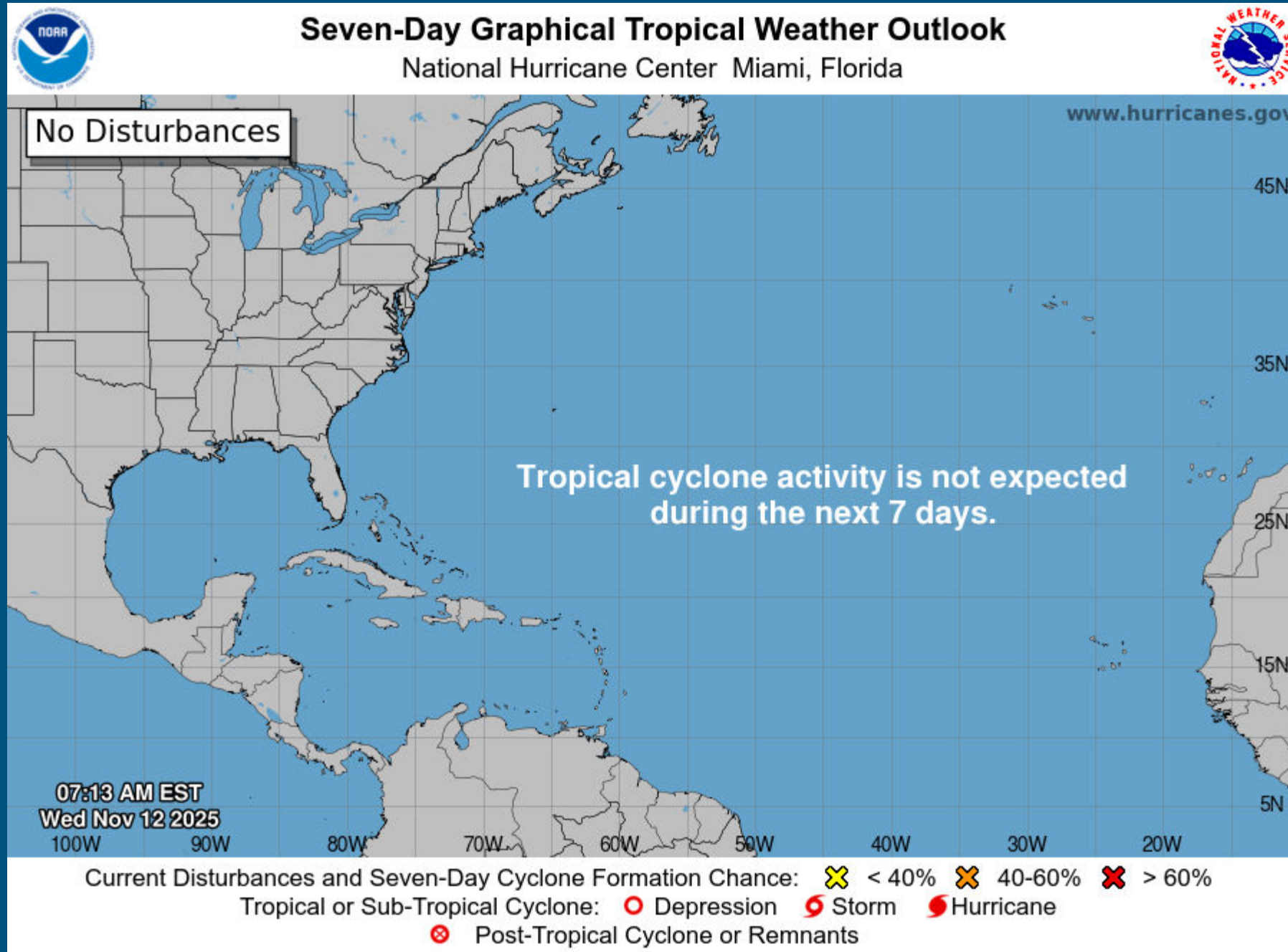


Monthly Precipitation Outlook

Valid: November 2025
Issued: October 31, 2025

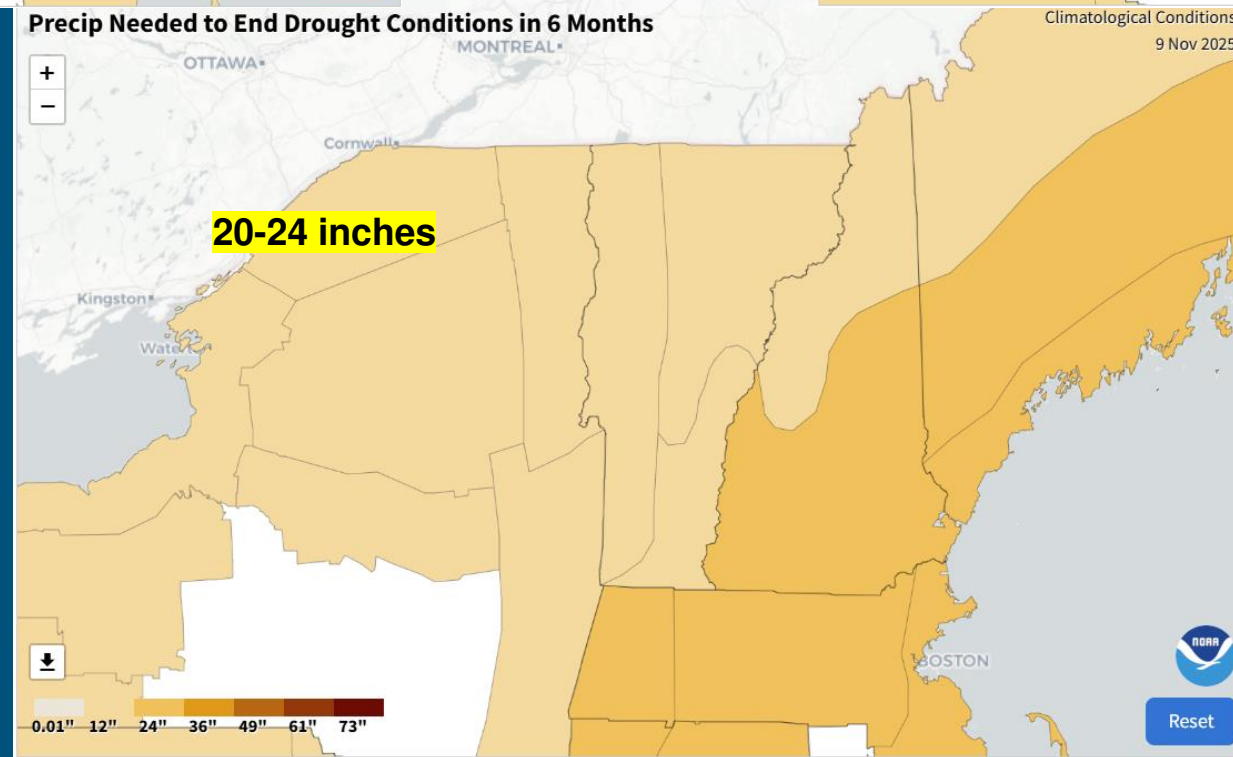
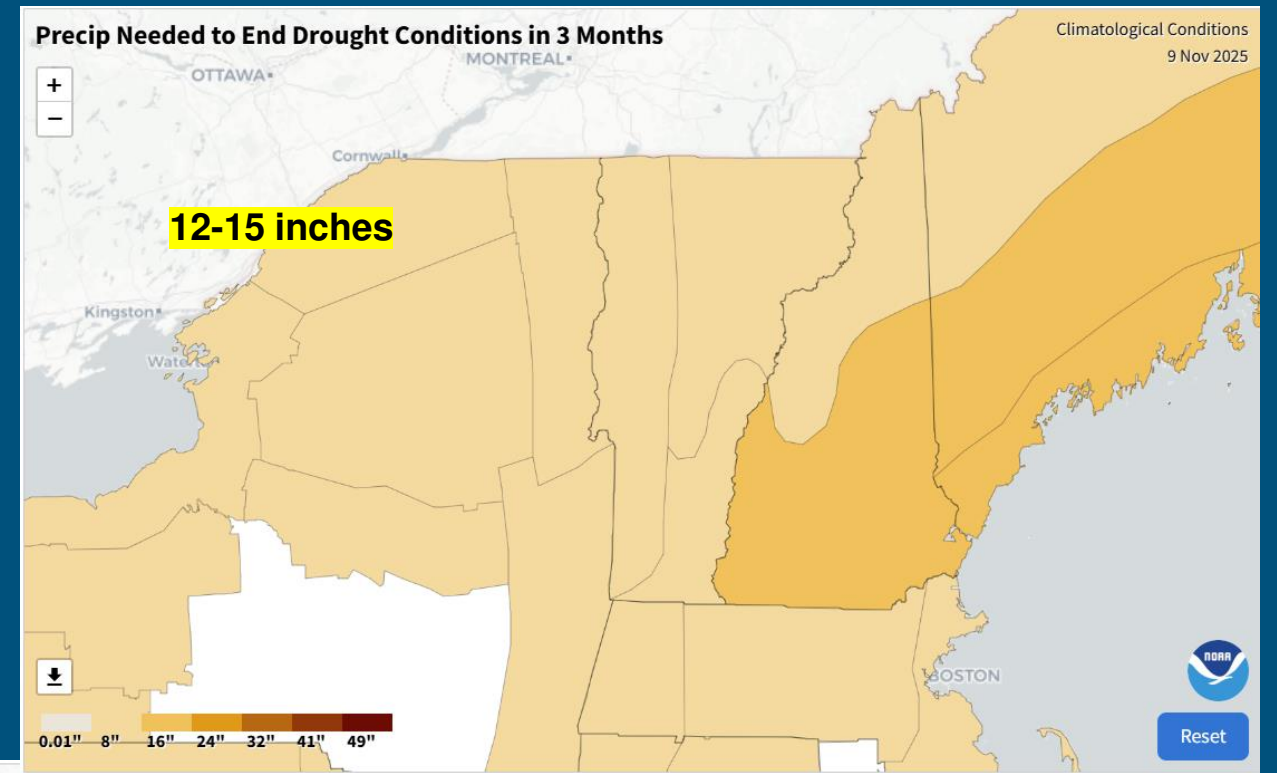
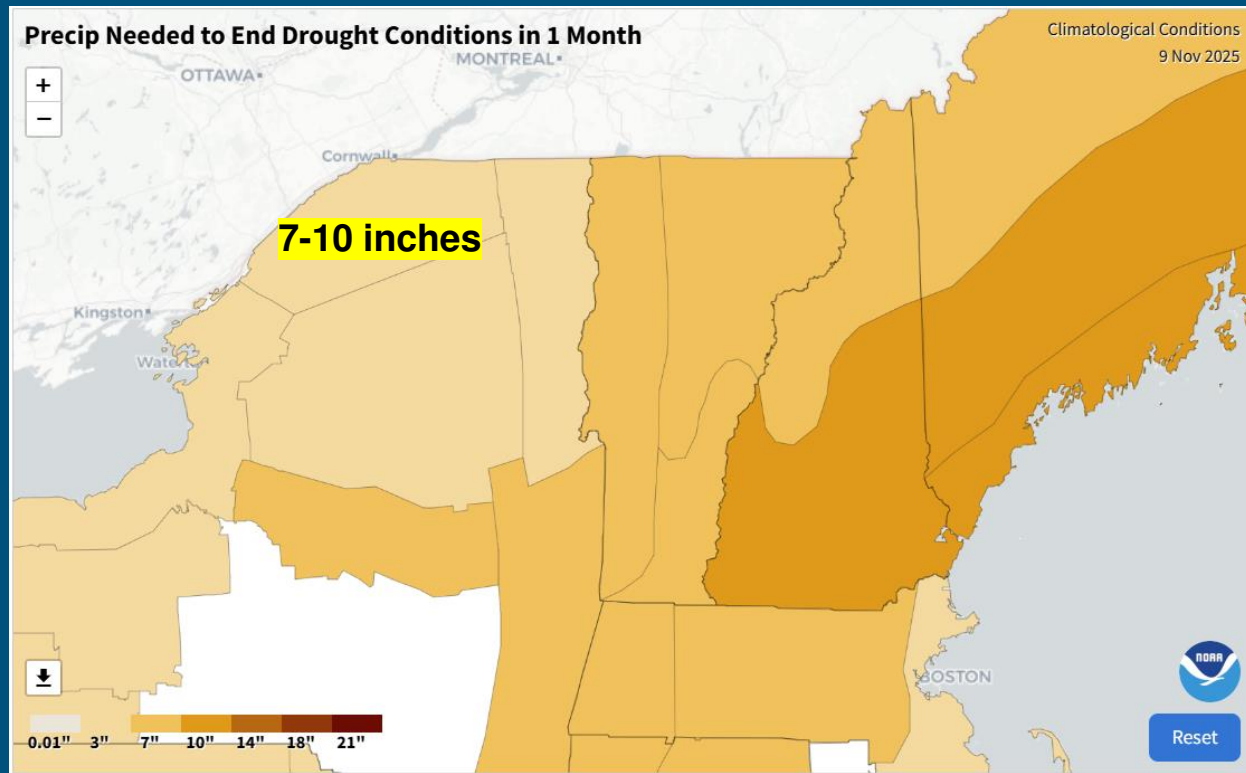


What Can Break a Drought? -> A T.S.

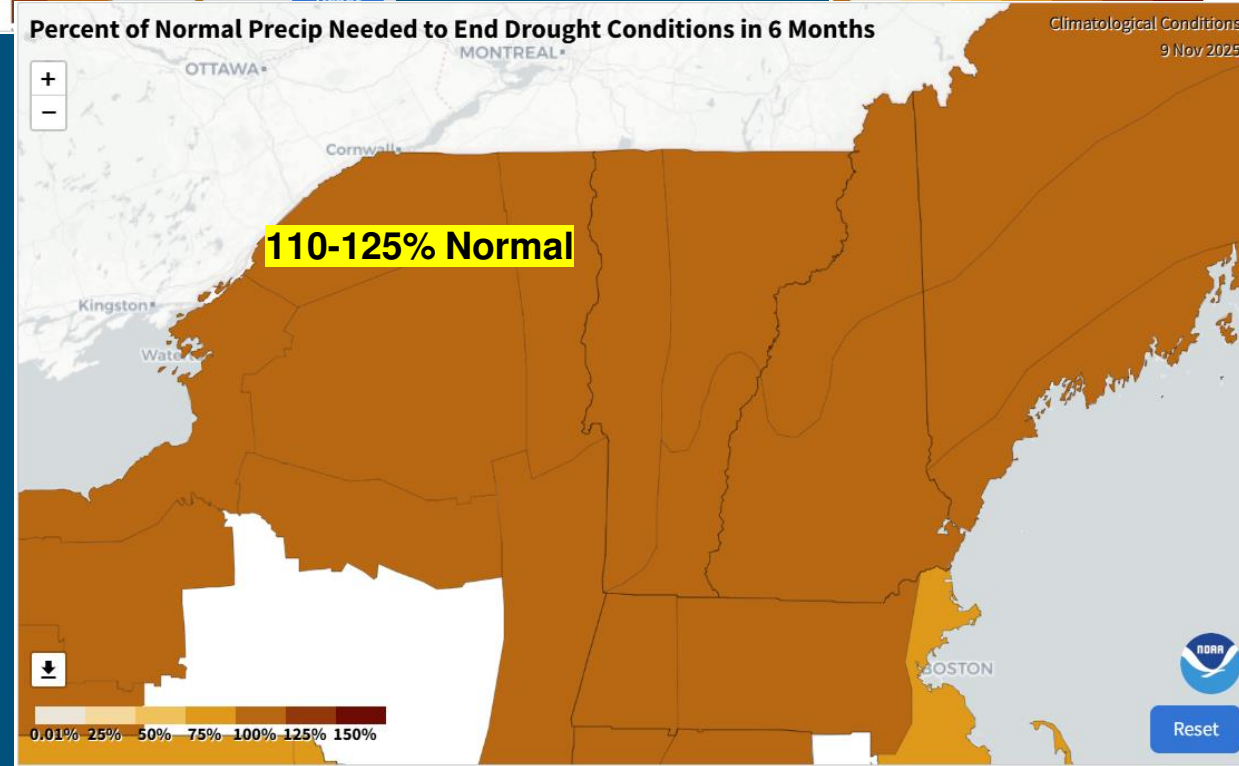
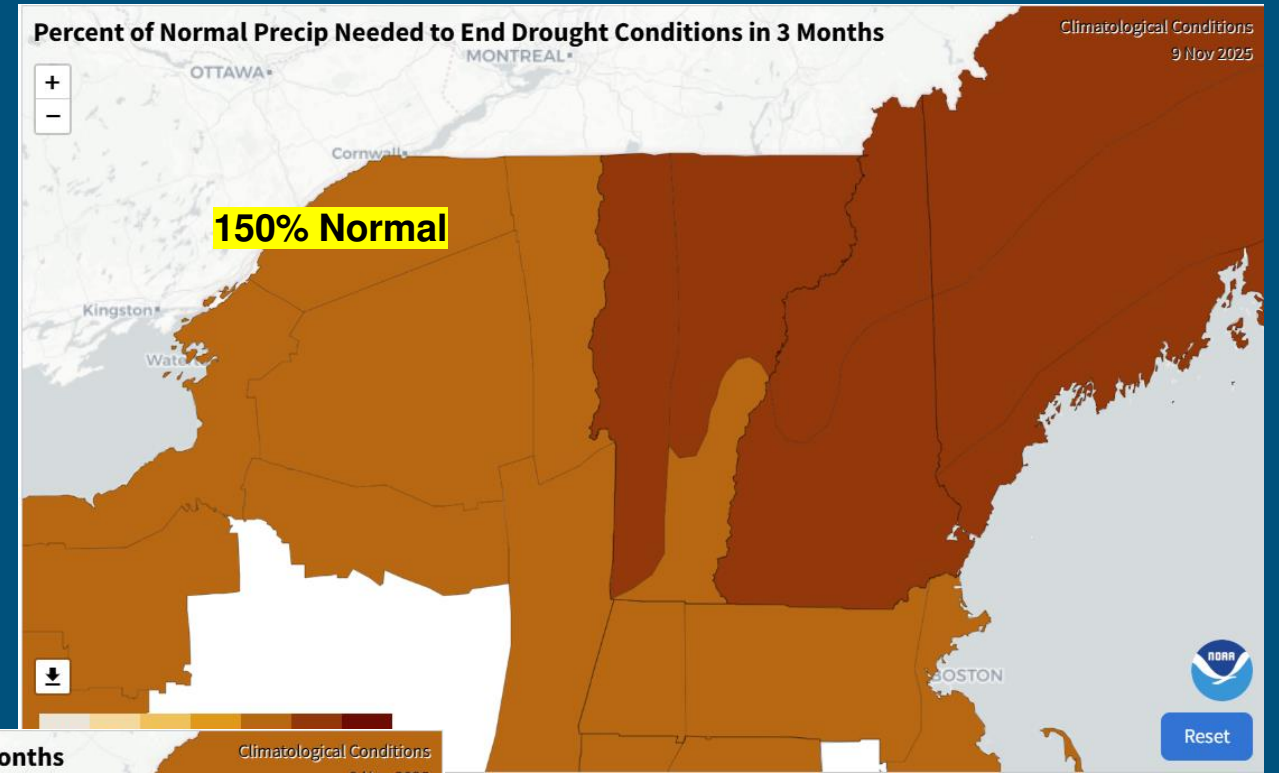
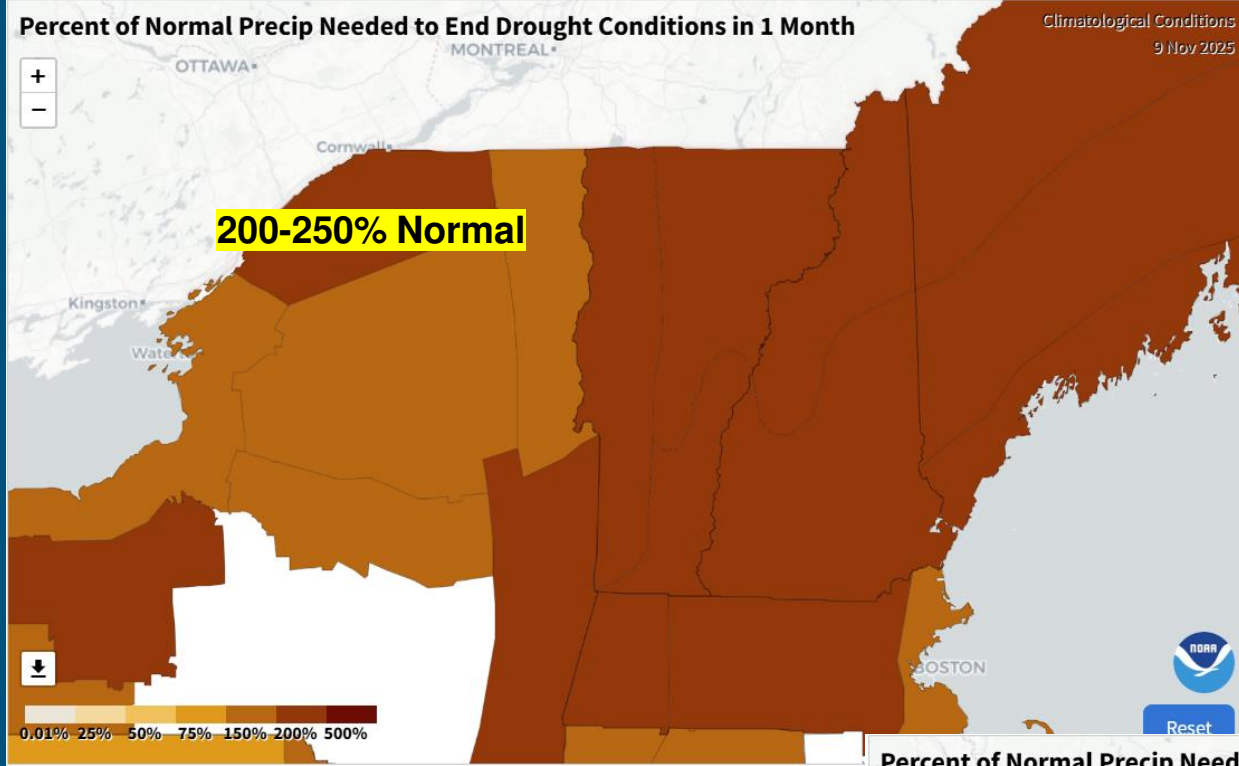


- No tropical activity expected over the next 7 days.
- We are now well past the climatological peak for tropical storm activity.

How much precipitation is needed?



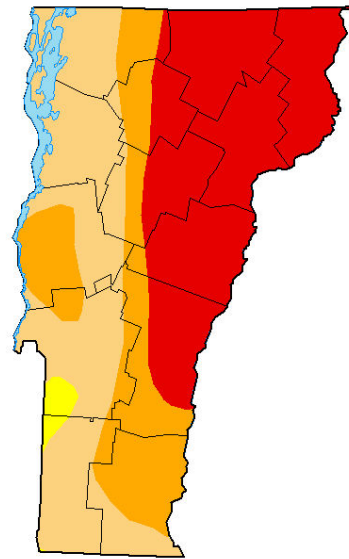
How much precipitation is needed?



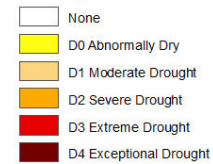
Summary

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Intensity:



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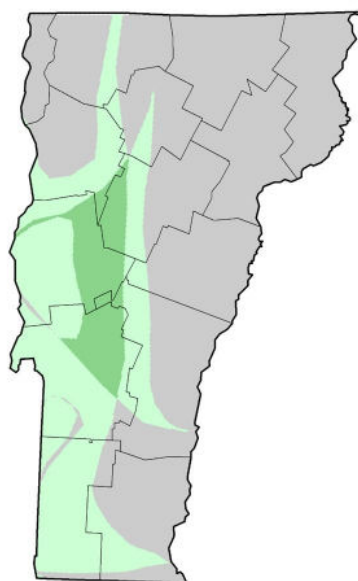
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U.S. Drought Monitor Class Change - Vermont 2 Week



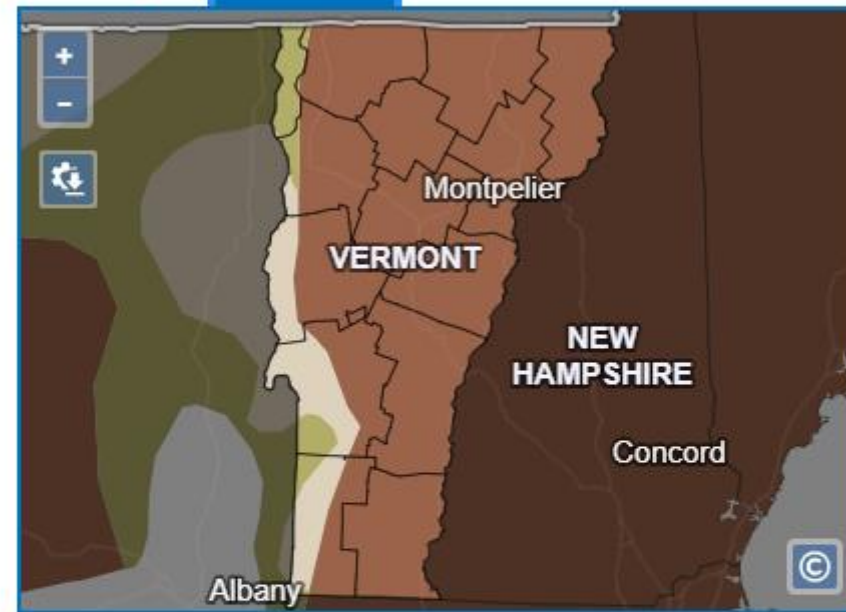
November 4, 2025
compared to
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Drought Outlooks for Vermont

Monthly

Seasonal



Legend

Drought Is Predicted To...



- There have been some noticeable improvements during the past 2-4 weeks, especially in the Champlain Valley and western slopes.
- Not much, if any improvement for eastern VT, especially NE VT.
- Further drought improvement is possible next week given wet pattern.
- Improvement needs to be prior/after frozen ground to help ground water.

Thank You