

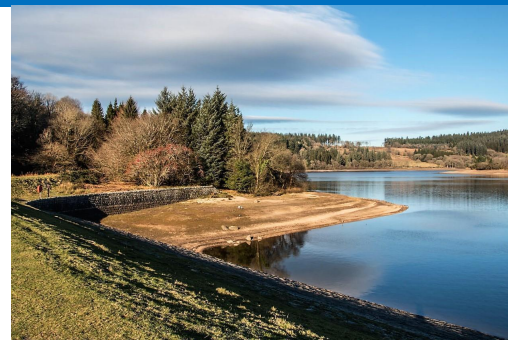


# Drought Information Statement for Southern New England

Current Status, Impacts, and Outlook: 12/14/2024

Issued By: NWS Boston/Norton, MA

Contact information: [box.webmaster@noaa.gov](mailto:box.webmaster@noaa.gov)

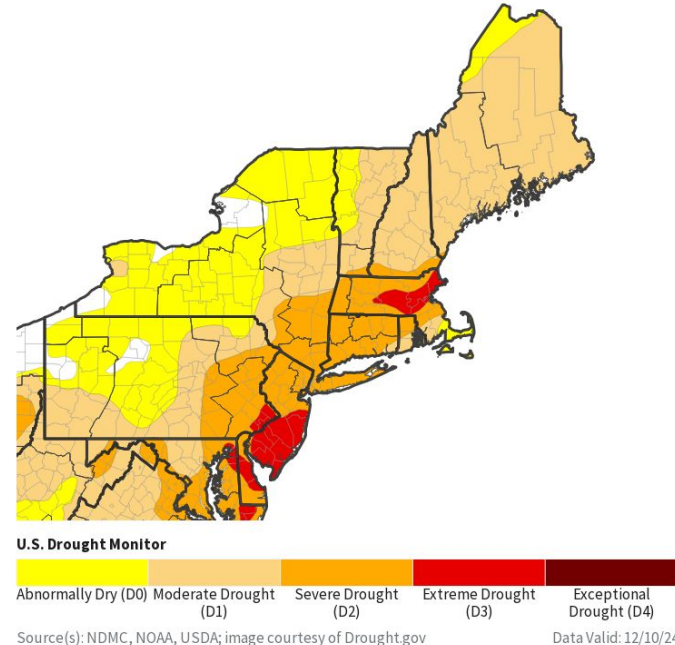


# U.S. Drought Monitor

## Latest U.S. Drought Monitor Map

- **Note:** Input for USDM update for 12/10/2024 was made prior to a substantial rainfall event on 12/11-12/12. Thus, latest USDM may not be fully representative of current conditions.
- **D3 Extreme Drought**
  - Portions of Essex, Middlesex, Norfolk, Plymouth, and Worcester counties in MA
- **D2 Severe Drought**
  - Northern RI
  - CT
  - Western MA, Northern border of MA
- **D1 Moderate Drought**
  - Southern RI
  - Portions of Bristol and Plymouth counties in MA
- **D0 Abnormally Dry**
  - Cape/Islands

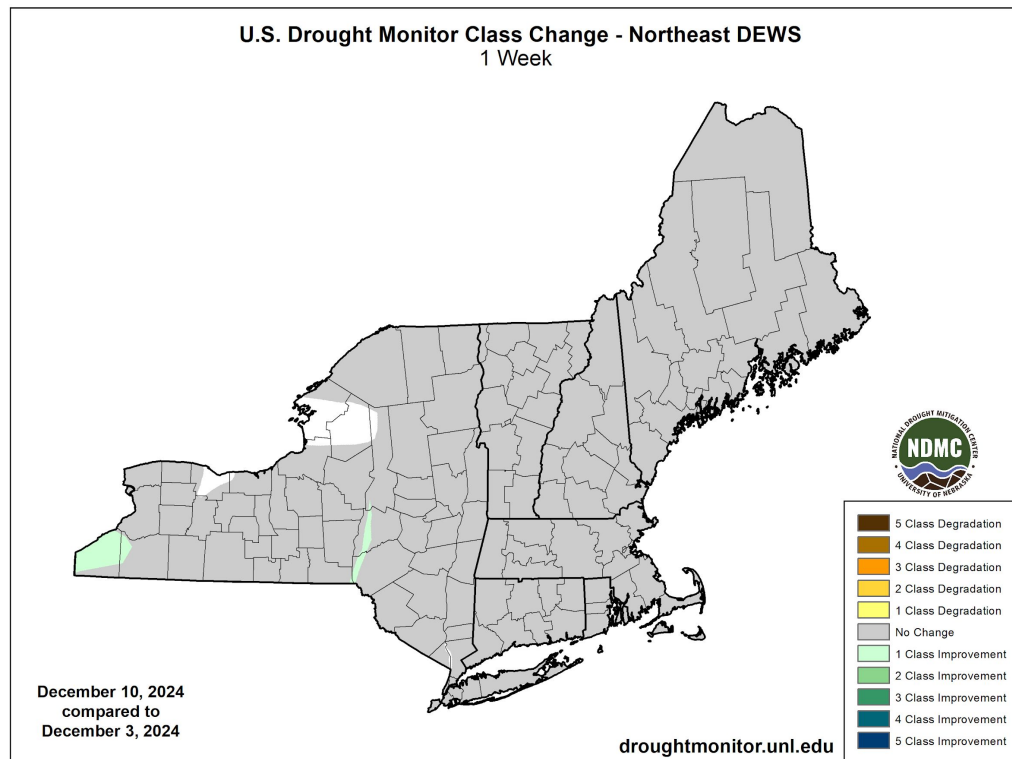
U.S. Drought Monitor



# Recent Change in Drought Intensity

## 1-Week Drought Monitor Class Change

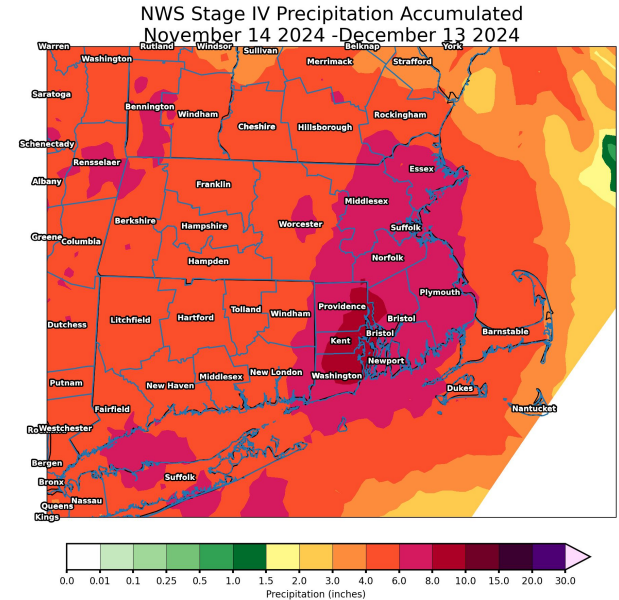
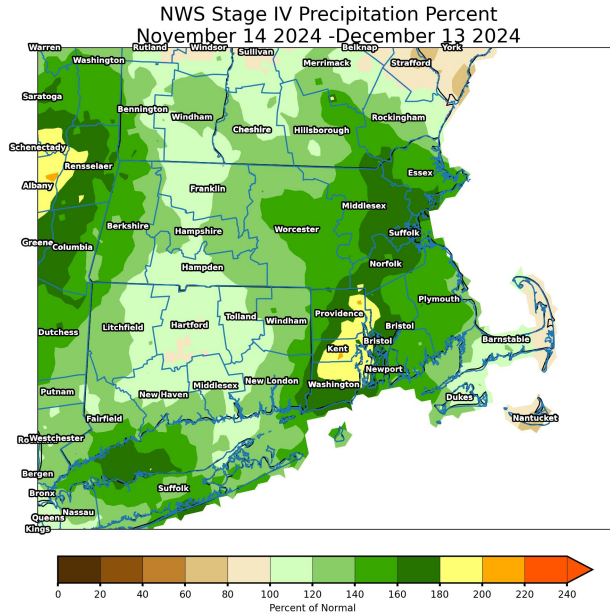
- **Drought Worsened:** No degradation
- **No Change:** No changes across the region
- **Drought Improved:** No improvements this week



# Observed Precipitation

## Main Takeaways

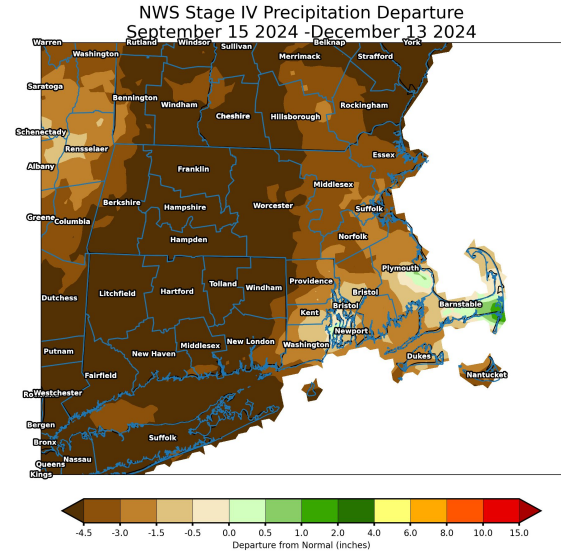
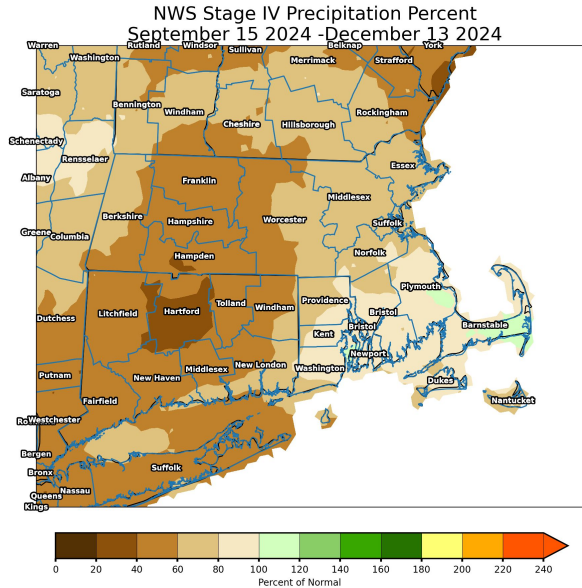
- 30 day rainfall accumulations ranging from 4 to 8 inches
- Majority of southern New England has only received 100 to 150 percent of normal precipitation over the last 30 days
- Rhode Island has Received nearly 200 percent of normal precip over the last 30 days
- Outer Cape and Nantucket slightly below normal



# 3 Month Departures and Percent of Normal

## Main Takeaways

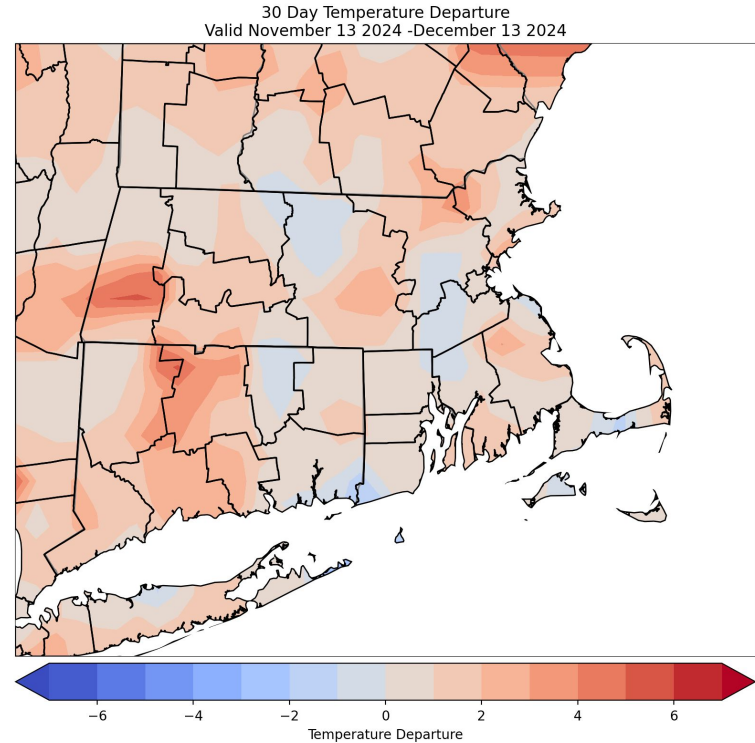
- 90 day precipitation departures are 4.5 inches or more below normal across western MA and most of CT
- 90 day accumulations only fall in the 40 to 60 percent of normal range across western MA and CT
- Eastern MA and RI 90 day accumulations are generally in the 60 to 100 percent of normal range



# Observed Temperature

## Main Takeaways

- Temperatures have been within 2 degrees of normal over the last 30 days





# Summary of Impacts

## Hydrologic Impacts

- Recent heavy precipitation has allowed streamflow levels to climb to near to above normal ranges
- Groundwater levels still below normal, but may show some recharge in the near-future with recent precipitation

## Agricultural Impacts

- There are no known impacts at this time

## Fire Hazard Impacts

- None at this time

## State Drought Declarations

- MA declared critical drought for all of MA except The Cape/Islands which was declared mild drought on December 6th
- Visit <https://www.mass.gov/info-details/drought-status> for more information
- CT declared a Stage 2 Drought Advisory for all of CT on November 9th
- RI issued a state wide Drought Advisory on December 4th. Details can be found in [this press release](#).

## Mitigation actions

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

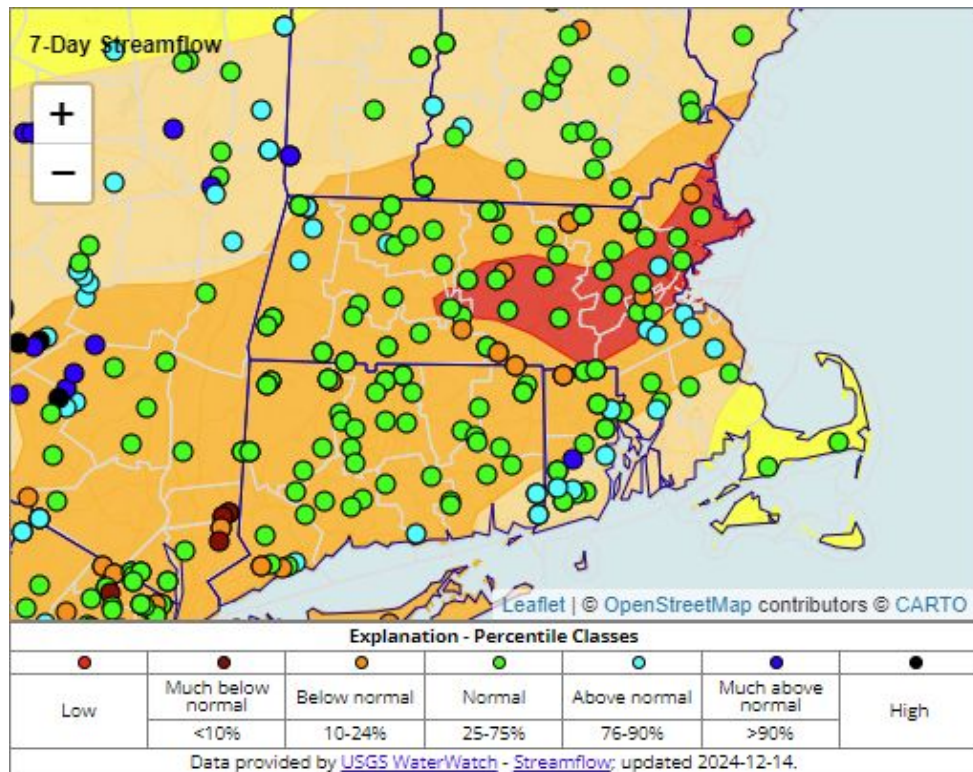


# Hydrologic Conditions

## 7-Day Streamflow Percentile

### Main Takeaways

- 7 day streamflow levels mainly in the normal range with a few gauges in the below normal range, and a few gauges in the above normal range.



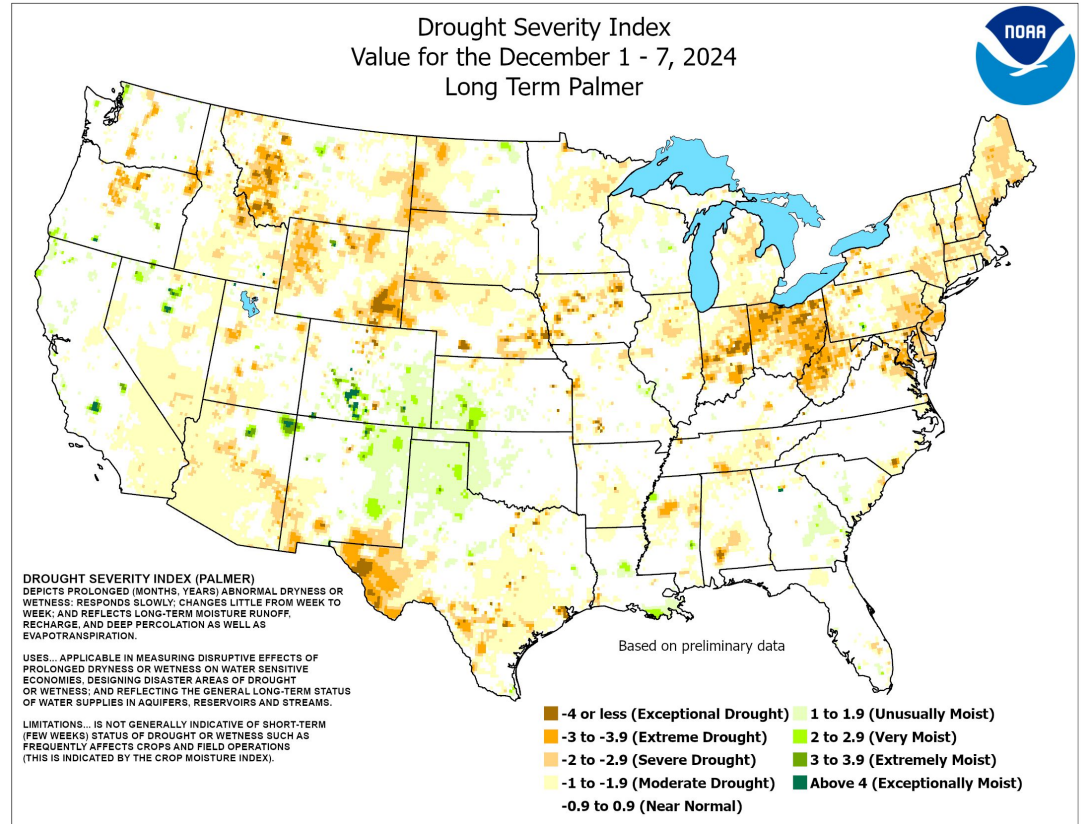


# Agricultural Impacts

## Palmer Drought Severity Index

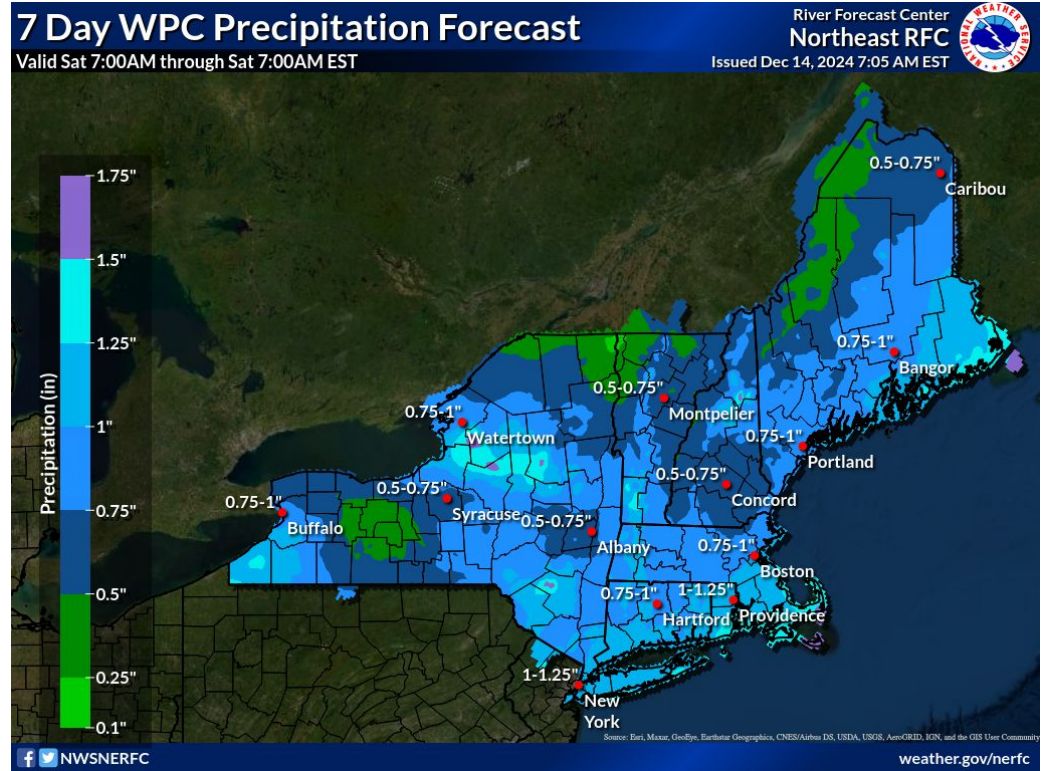
### Main Takeaways

- Most of MA ranging from PDSI between -1 and -2.9 highlighting continued longer term dryness in the state
- Most of RI still considered to be in the normal range (-0.9 to 0.9) thanks to a wet end to the summer.
- This product does not capture short-term dry trends and changes slowly from week to week



# Seven Day Precipitation Forecast

- Next 7 days:
  - Wet forecast for next 7 days with 0.75 to 1.5 inches of new liquid precipitation expected for southern New England



# 6-10 Day Outlook

## Temperature and Precipitation Outlook

### Main Takeaways

- Leaning below normal temperatures for days 6 through 10 (12/19-12/23)
- Leaning above normal precipitation for days 6 through 10 (12/19-12/23)

### Possible Impact

Precipitation deficits may improve depending on the amount of precipitation received

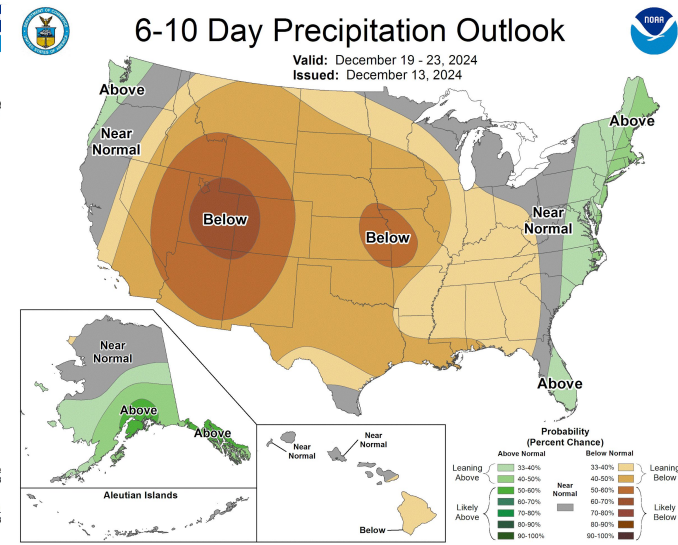
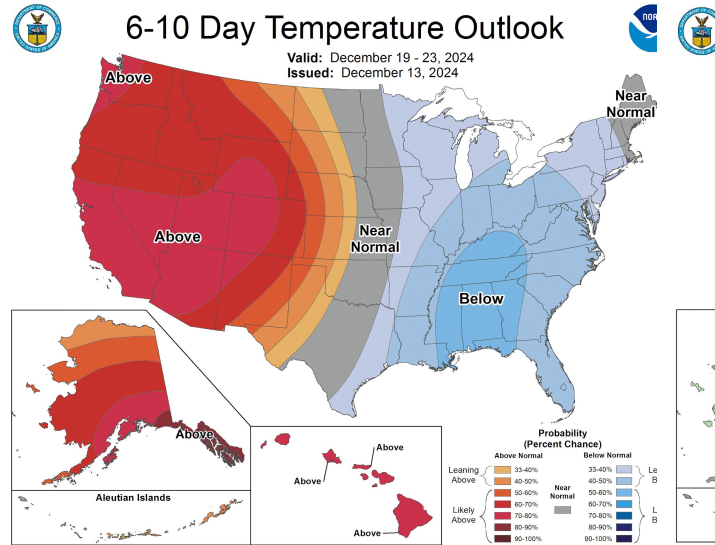


Image Captions:  
Left - [Climate Prediction Center 6-10 Day Temperature Outlook](#).  
Right - [Climate Prediction Center 6-10 Day Precipitation Outlook](#).  
Valid December 19-23.

# 8-14 Day Outlook

## Temperature and Precipitation Outlook

### Main Takeaways

- Near normal temperatures for days 8-14 (12/21-12/27)
- Leaning below normal precipitation for days 8-14 (12-21-12/27)

### Possible Impact

Precipitation deficits and drought conditions may worsen with no substantial precipitation

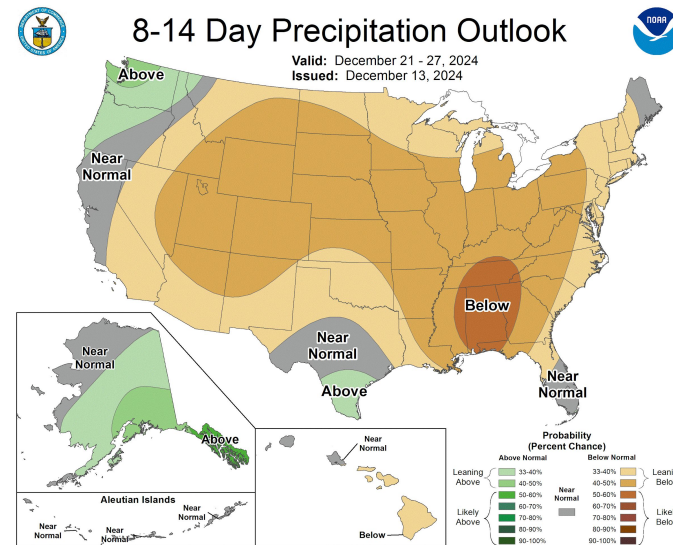
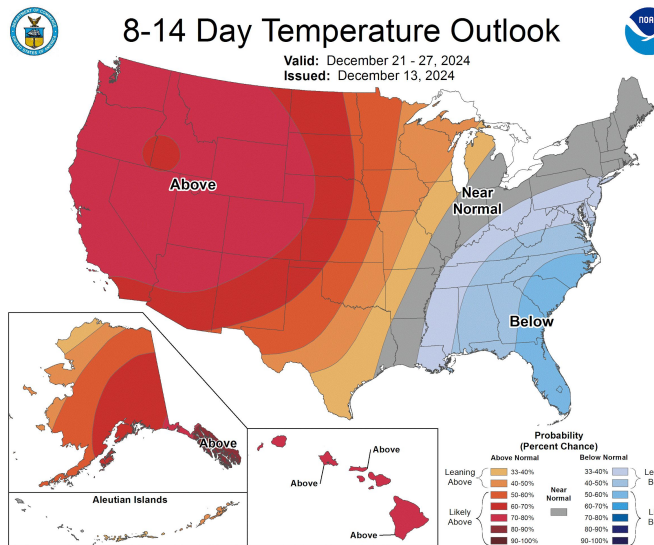


Image Captions:

Left - [Climate Prediction Center 8-14 Day Temperature Outlook](#),  
Right - [Climate Prediction Center 8-14 Day Precipitation Outlook](#)

Valid December 21-27

# Weeks 3-4 Outlook

## Temperature and Precipitation Outlook

### Main Takeaways

- Equal chances for above/below normal precipitation during mid to late December

### Possible Impact

Low confidence in any drought improvement through early-January

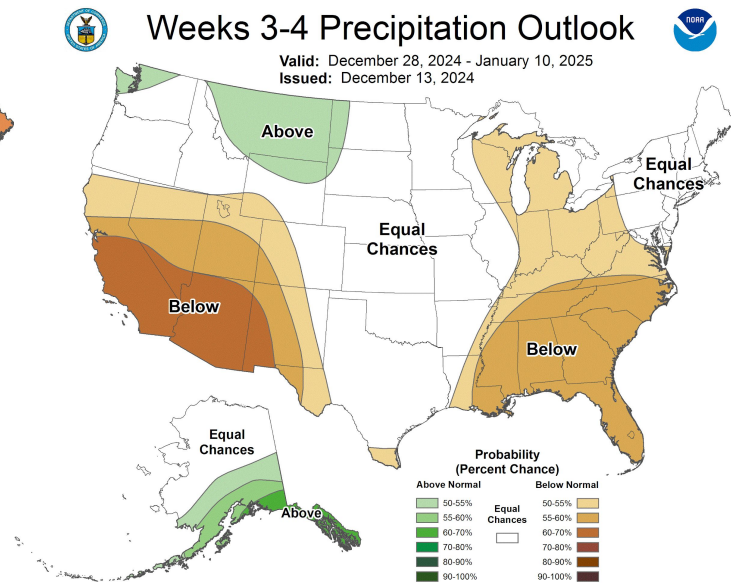
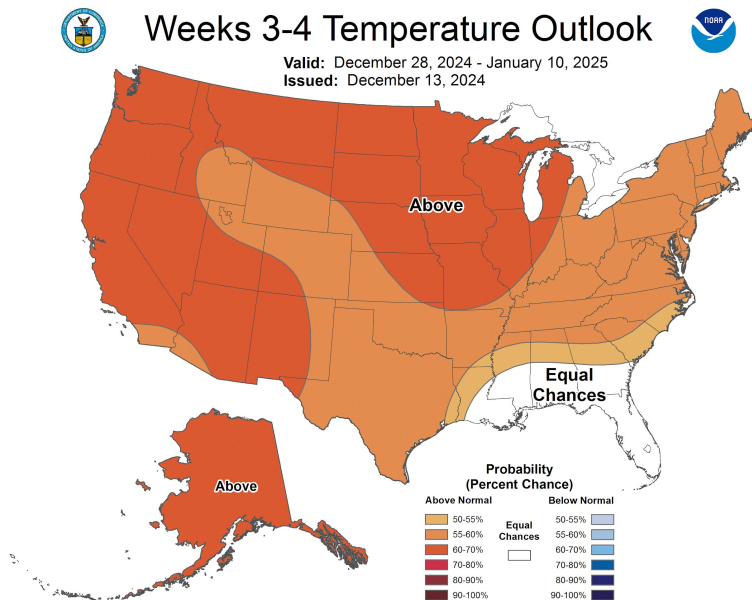


Image Captions:

Left - [Climate Prediction Center Weeks 3-4 Temperature Outlook.](#)  
Right - [Climate Prediction Center Weeks 3-4 Precipitation Outlook.](#)

Valid December 28- January 10

# Seasonal Climate Outlook

## Seasonal Temperature and Precipitation Outlook

### Main Takeaways

- Higher chances for above normal average temperatures for the Northeast between Jan-Mar
- Equal chances for above/below normal precipitation between Jan-Mar

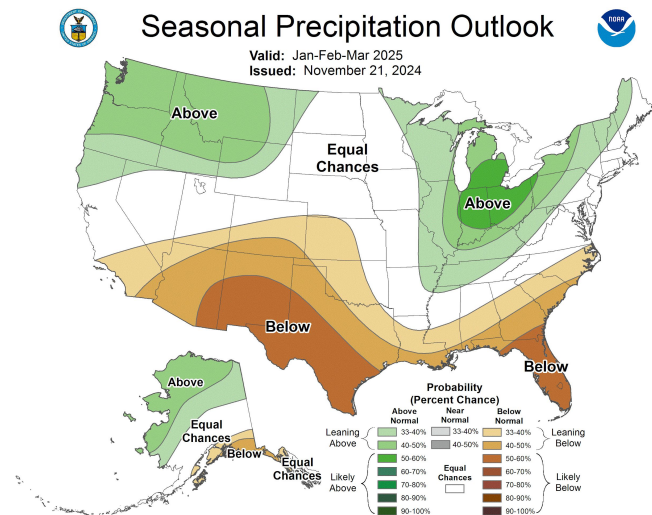
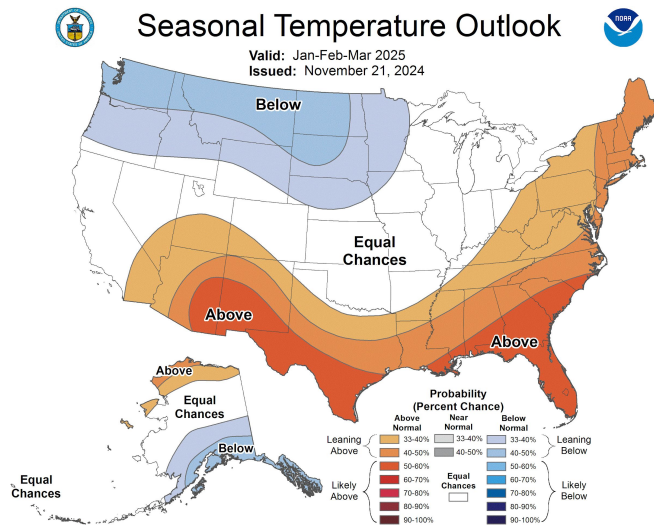


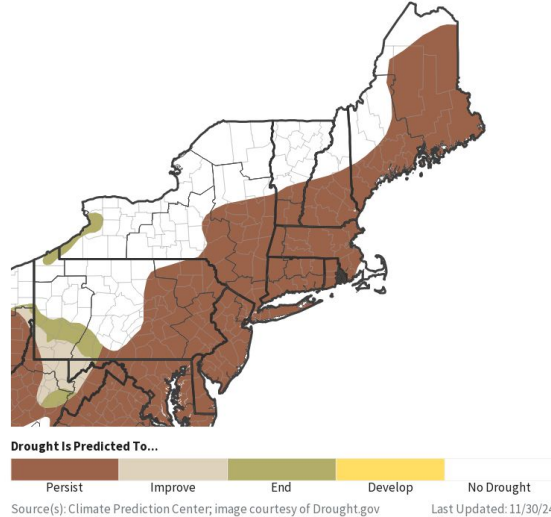
Image Captions:  
Left - [Climate Prediction Center Seasonal Temperature Outlook](#).  
Right - [Climate Prediction Center Seasonal Precipitation Outlook](#).  
Valid 01 to 03 2025.

# Drought Outlook

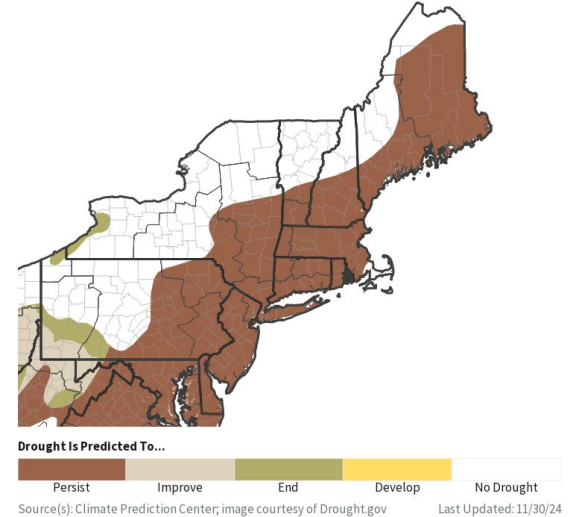
## Main Takeaways

- 1 month outlook calls for drought conditions to persist through the end of December
- 3 month outlook calls for drought persisting through the end of February

**1-Month Drought Outlook for December 1, 2024–December 31, 2024**



**Seasonal (3-Month) Drought Outlook for November 30, 2024–February 28, 2025**





# More Information

## Connecticut

- [Connecticut Drought Information Center](#)

## Massachusetts

- [Massachusetts Drought Management Task Force](#)

## Rhode Island

- [Rhode Island Water Resources Board](#)

