

RI Drought Steering Committee NWS Update

Tuesday March 11th, 2025

*Prepared by: National Weather Service Boston/Norton,
MA*

Drought Indices from RI Water 2030



Boston/Norton MA

WEATHER FORECAST OFFICE

Rhode Island Water 2030 Part 3

State Guide Plan 721

Table 2, Rhode Island Drought Indices and Phases

| Drought Phase | Palmer Drought Index + | Crop Moisture Index | Precipitation + | Ground Water** + | Stream flow + | Reservoirs** |
|------------------|------------------------|---------------------------------|---|--|---|---|
| Normal | -1.0 to -1.99 | 0.0 to -1.0 | Slightly Dry | 1 month below normal 1 month below normal | 2 consecutive months below normal | Reservoir levels at or near normal for the time of year |
| Advisory | -2.0 to -2.99 | -1.0 to -1.9 Abnormally Dry | 2 month cumulative below 65% of normal | At least 2 out of 3 months below normal | 3 consecutive months below normal | Small index Reservoirs below normal |
| Watch | -3.0 to -3.99 | -2.0 to -2.9 Excessively Dry | 1 of the following criteria met: 3 month cum. <65% or 6 month cum. <70% or 12 month cum. <70% | 4-5 consecutive months below normal | At least 4 out of 5 consecutive months below normal | Medium index Reservoirs below normal |
| Warning | -4.0 and below | > -2.9 Severely Dry | 2 out of 3 of the above criteria met: 3 month cum. <65% and 6 month cum. <65% or 6 month cum. <65% and 12 month cum. <65% or 3 month cum. <65% and 12 month cum. <65% | 6-7 consecutive months below normal observation wells recording monthly record lows | At least 6 out of 7 consecutive months below normal | Large index reservoirs below normal |
| Emergency | -4.0 and below | > -2.9 Severely dry | Same criteria as Warning and Previous month was Warning or Emergency | >7 months below normal Observation wells recording monthly record lows | >7 months below normal | Continuation of previous month's conditions |



Returning to Normal

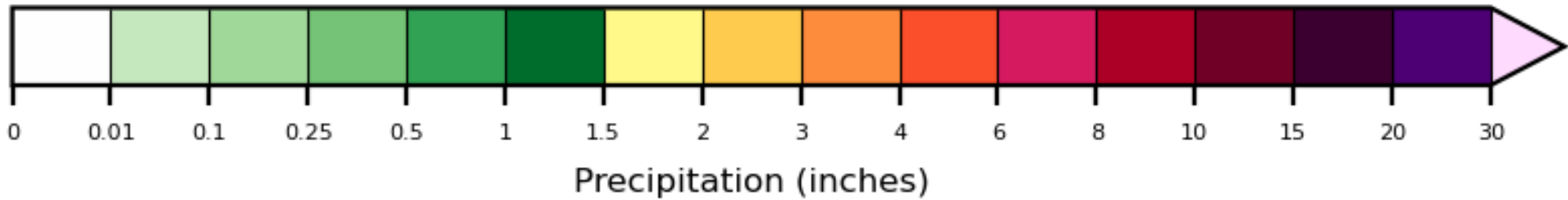
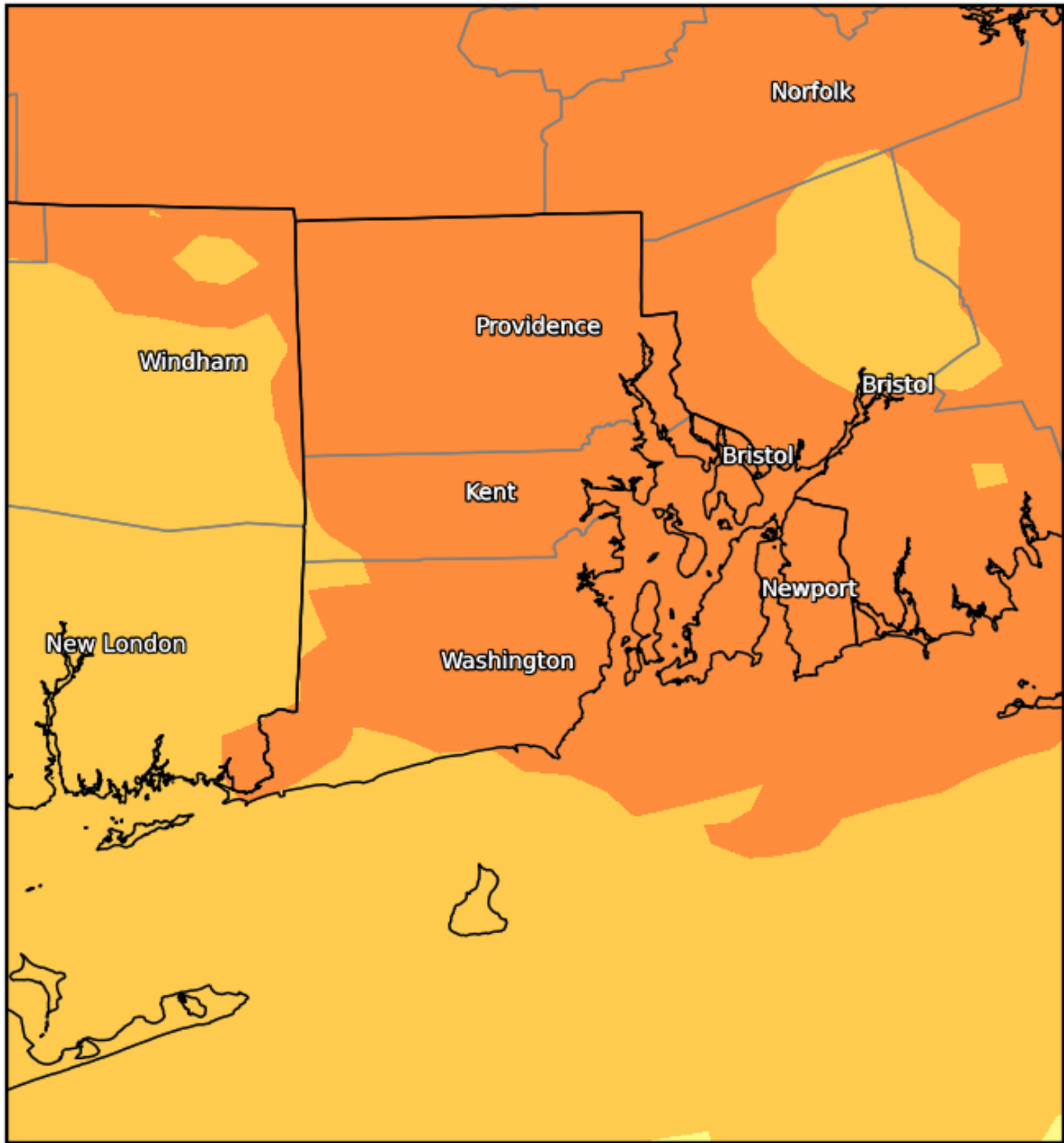
| Current Drought Phase | Next Drought Phase | Reduce Drought Phase by one category |
|-----------------------|---|---|
| Emergency | Emergency-continued below normal conditions | Groundwater levels at or above normal and no precipitation deficit for past 3 months; and/or water resource problems which prompted the emergency have abated |
| Warning | Emergency-worsening conditions or continued below normal conditions | 2 consecutive months of groundwater levels at or above normal and near normal precipitation for past 6 months |
| Watch | Warning-worsening conditions Watch continued below normal | 2 consecutive months of groundwater levels at or above normal and near normal precipitation for past 6 months |
| Advisory | Watch-worsening conditions | 2 consecutive months of groundwater levels at or above normal and near normal precipitation for past 3 months |

February 2025 Rainfall and Departure

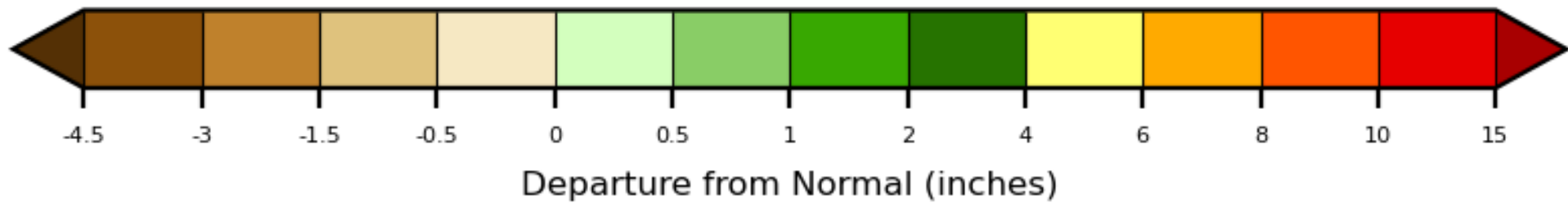
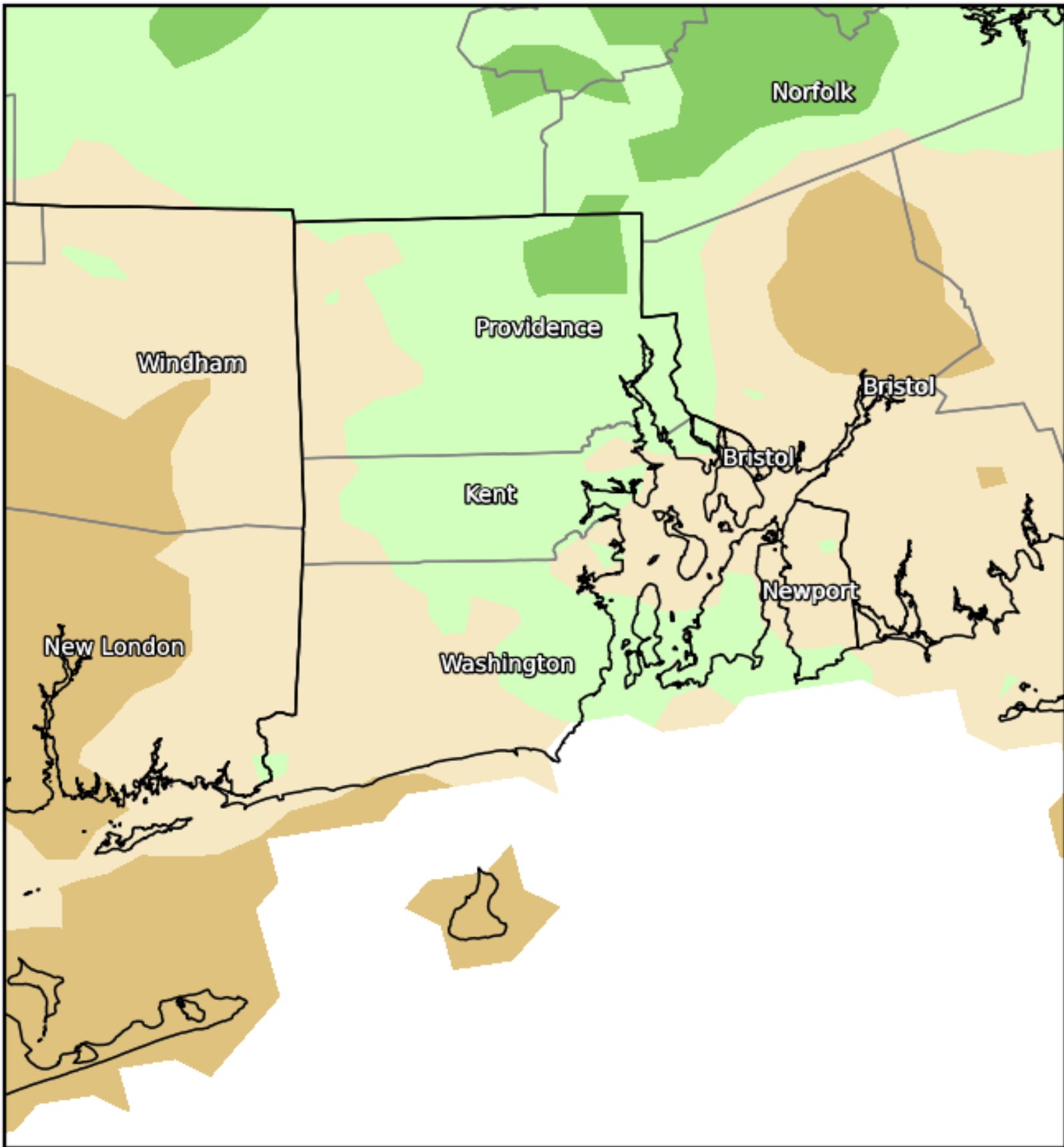


Boston/Norton MA
WEATHER FORECAST OFFICE

Accumulated Precipitation (inches)
February 01, 2025 to February 28, 2025



Precipitation Departure from Normal (inches)
February 01, 2025 to February 28, 2025



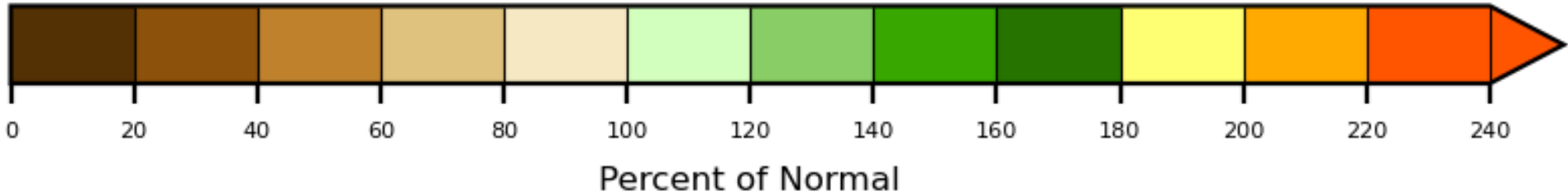
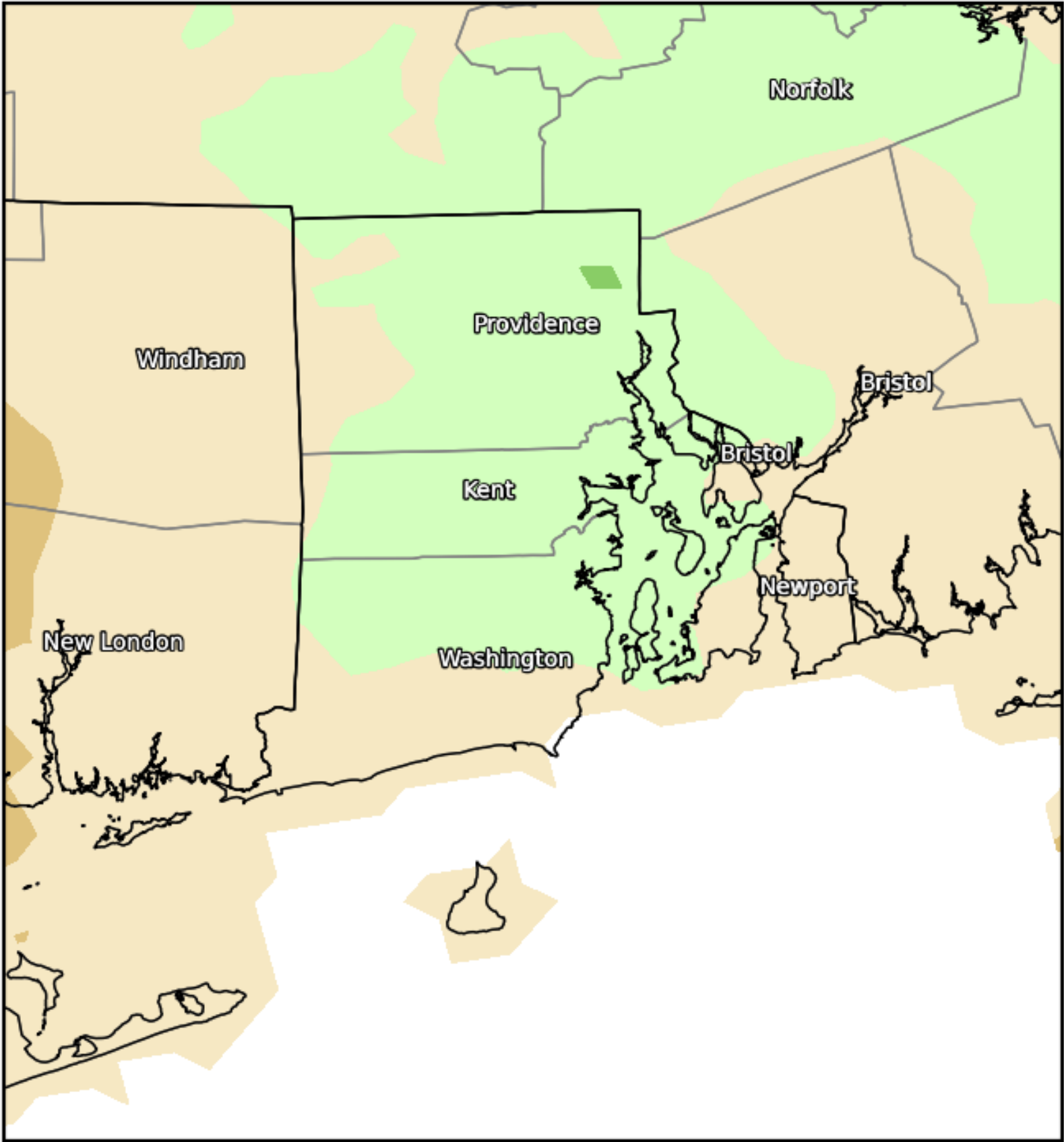
Dec-Feb and Sep-Feb Percent of Normal

Ranging slightly below to slightly above normal

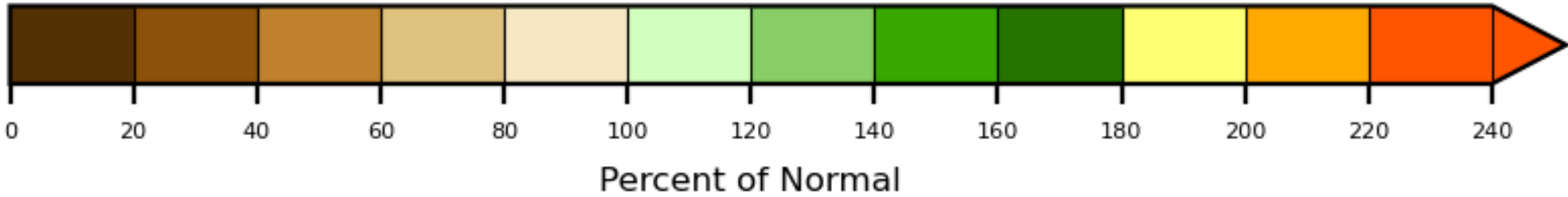
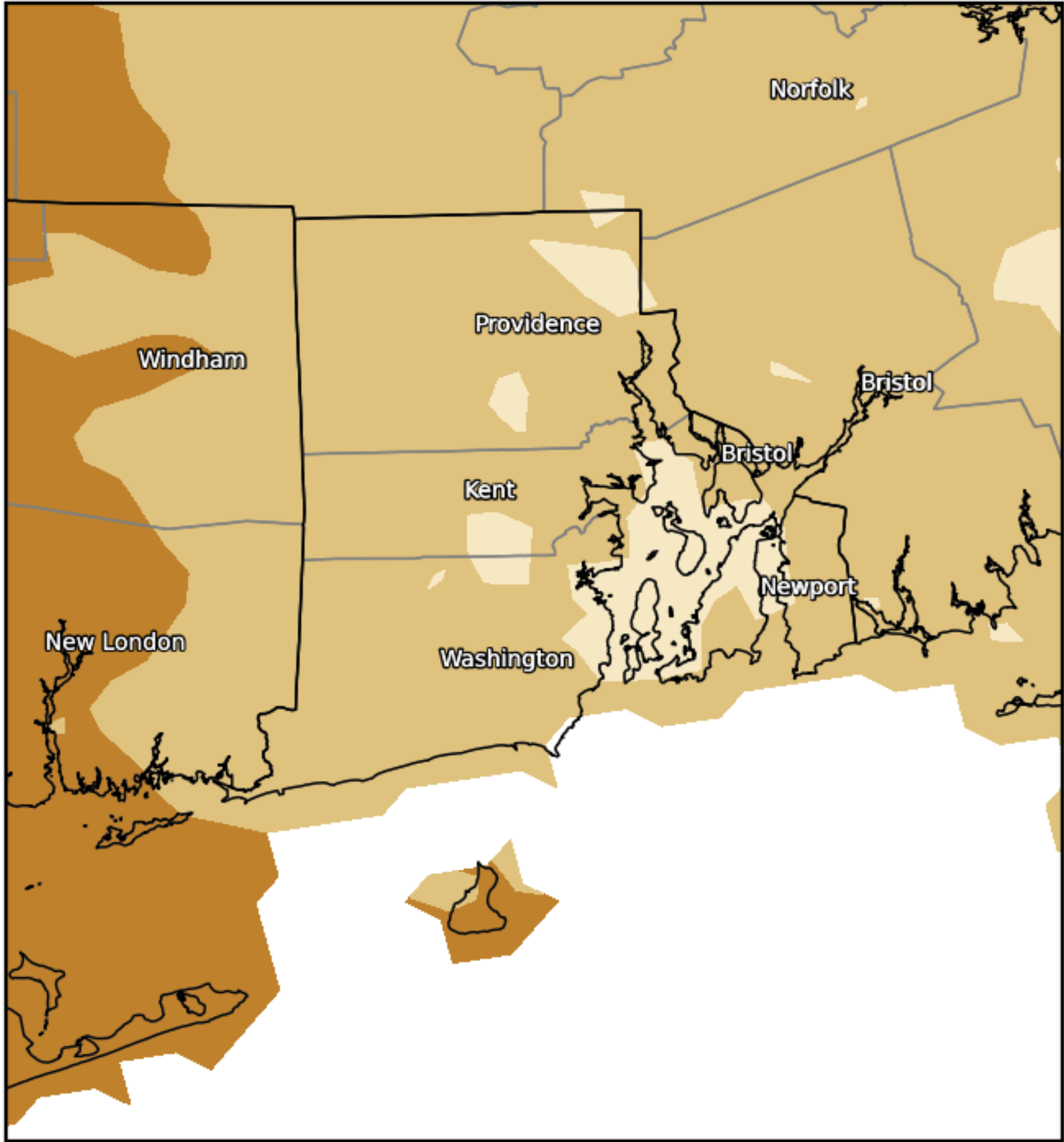


Boston/Norton MA
WEATHER FORECAST OFFICE

Precipitation Percent of Normal
December 01, 2024 to February 28, 2025



Precipitation Percent of Normal
September 01, 2024 to February 28, 2025

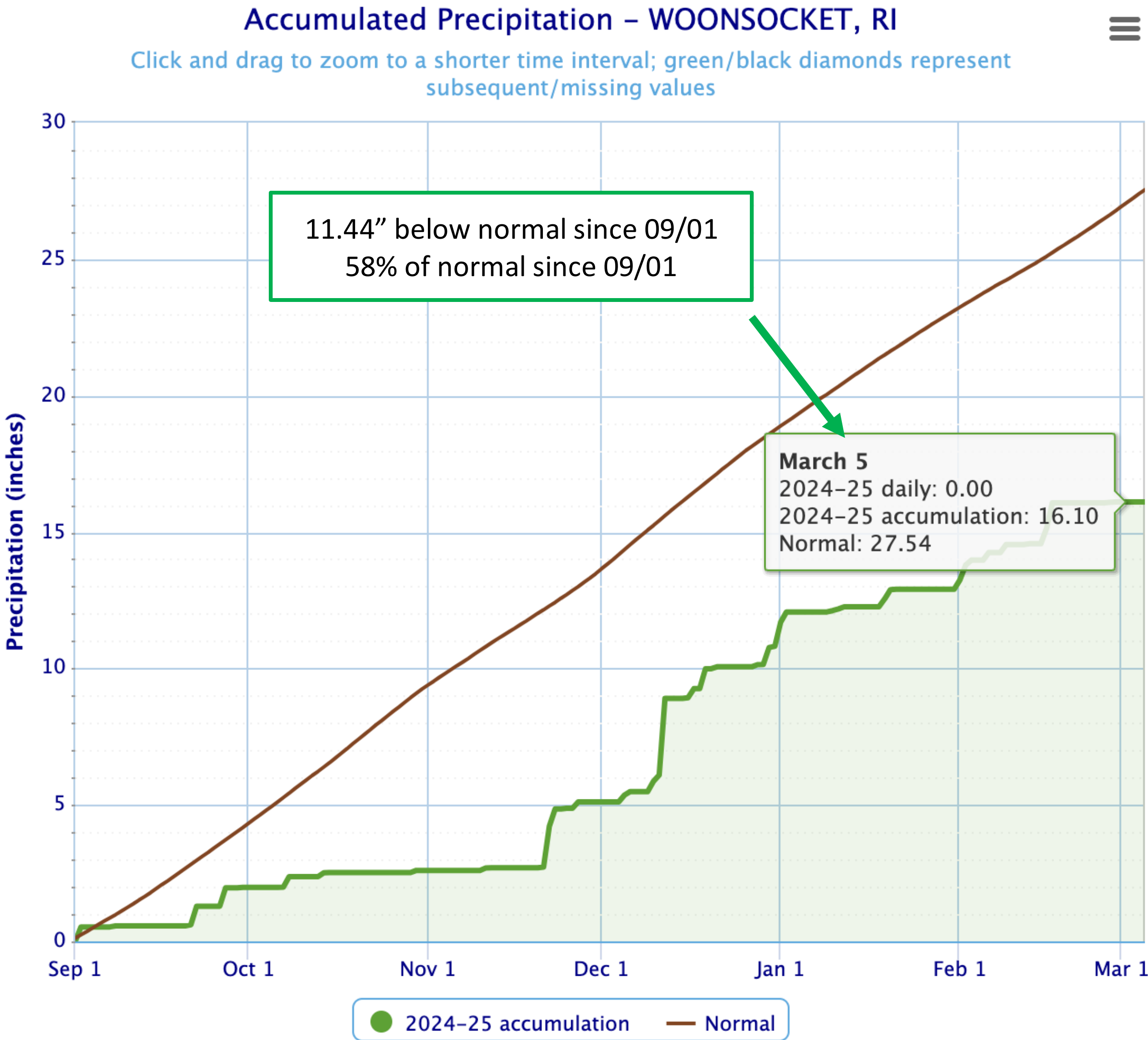


Rainfall Profiles Woonsocket vs Providence

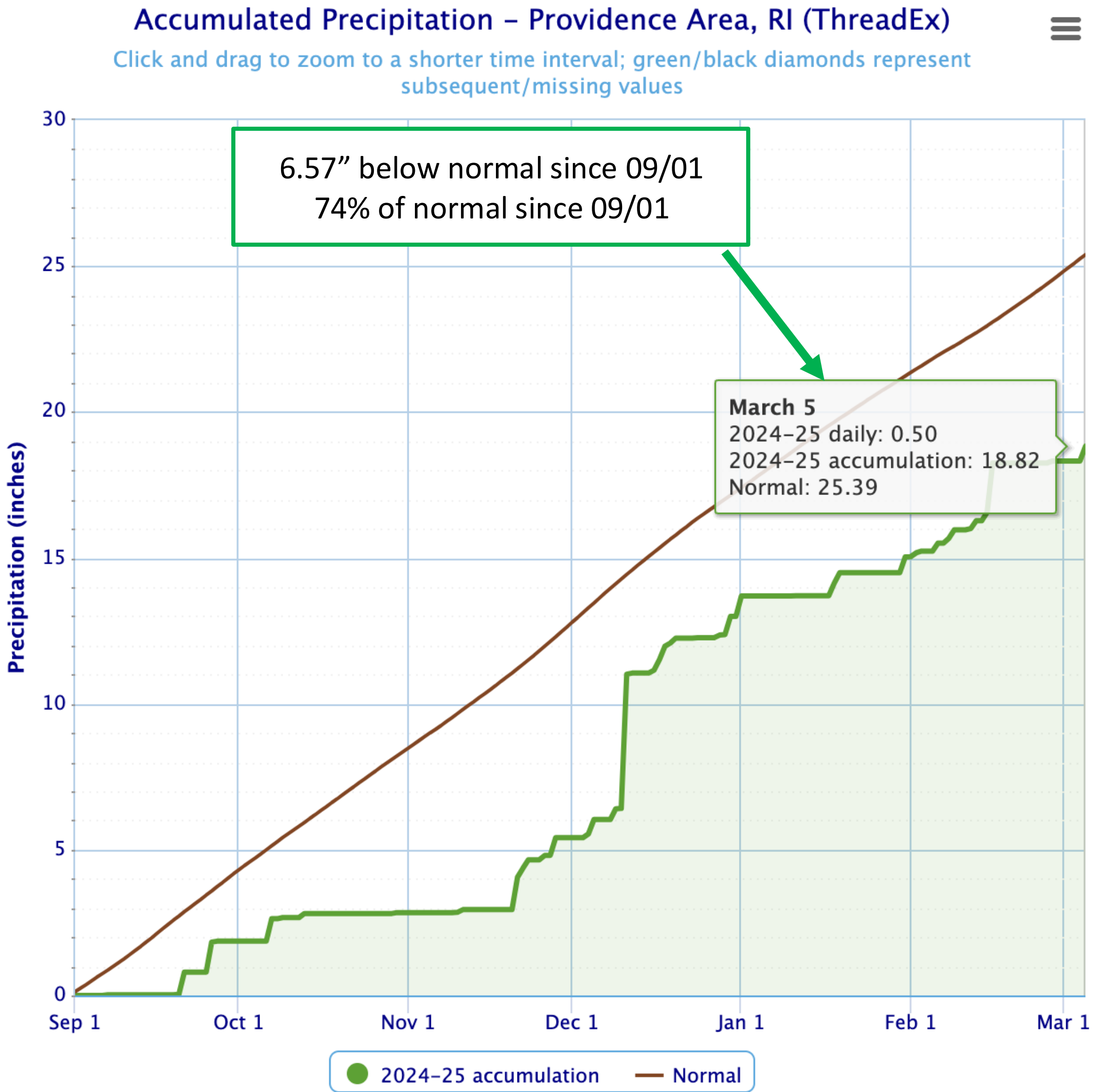


Boston/Norton MA
WEATHER FORECAST OFFICE

Precipitation since September 1st



Powered by ACIS



Powered by ACIS

Rainfall Percent by Region Last 6 Months



Boston/Norton MA
WEATHER FORECAST OFFICE

| | SEP Percent | OCT Percent | NOV Percent | DEC Percent | JAN Percent | FEB Percent | 6 Month Percent (SEP- FEB) |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------------------------|
| Northwest | 41 | 12 | 63 | 114 | 35 | 72 | 57 |
| Northeast | 46 | 13 | 66 | 127 | 41 | 105 | 66 |
| Central West | 36 | 24 | 77 | 181 | 32 | 63 | 72 |
| Central East | 47 | 19 | 59 | 138 | 38 | 101 | 67 |
| Eastern | 75 | 22 | 59 | 128 | 39 | 103 | 71 |
| Southern | 45 | 22 | 76 | 143 | 38 | 103 | 72 |
| New Shoreham | 18 | 18 | 48 | 93 | 24 | 72 | 45 |
| RI Average | 44 | 19 | 65 | 132 | 35 | 88 | 57 |

- **Need 3 consecutive months of near normal (65%+) precipitation to come out of drought**
- **6/7 regions now have one month above normal (65%+)**
- **4/7 regions have 6 month cum. averages below 70% (Watch Criteria)**
- **6 month departures are 7-11" below normal**

Rainfall Percent: Last 2,3, 6,12 Months

CUMULATIVE AVERAGES



Boston/Norton MA
WEATHER FORECAST OFFICE

| Drought Phase |
|---------------|
| Normal |
| Advisory |
| Watch |
| Warning |
| Emergency |

| | 2 Months Jan-Feb | 3 Months Dec-Feb | 6 Months Sep – Feb | 12 Months Mar-Feb |
|--------------|---------------------|---------------------|-----------------------|----------------------|
| Northwest | 52 | 76 | 57 | 89 |
| Northeast | 70 | 92 | 66 | 93 |
| Central West | 46 | 99 | 72 | 123 |
| Central East | 66 | 95 | 67 | 104 |
| Eastern | 69 | 92 | 71 | 100 |
| Southern | 68 | 98 | 72 | 108 |
| New Shoreham | 47 | 64 | 45 | 78 |
| RI Average | 60 | 88 | 65 | 99 |

- Northwest, Central West, New Shoreham still meeting Advisory criteria (2 month cum. <65%)
- Northwest, Northeast, and Central East meeting Watch criteria (6 month cum. <70 %)
- New Shoreham barely meeting Warning Criteria (3 and 6 month cum. < 65%)

7 Day Rain Forecast

Valid 7AM Mon 03/10 – 7AM Mon 03/17



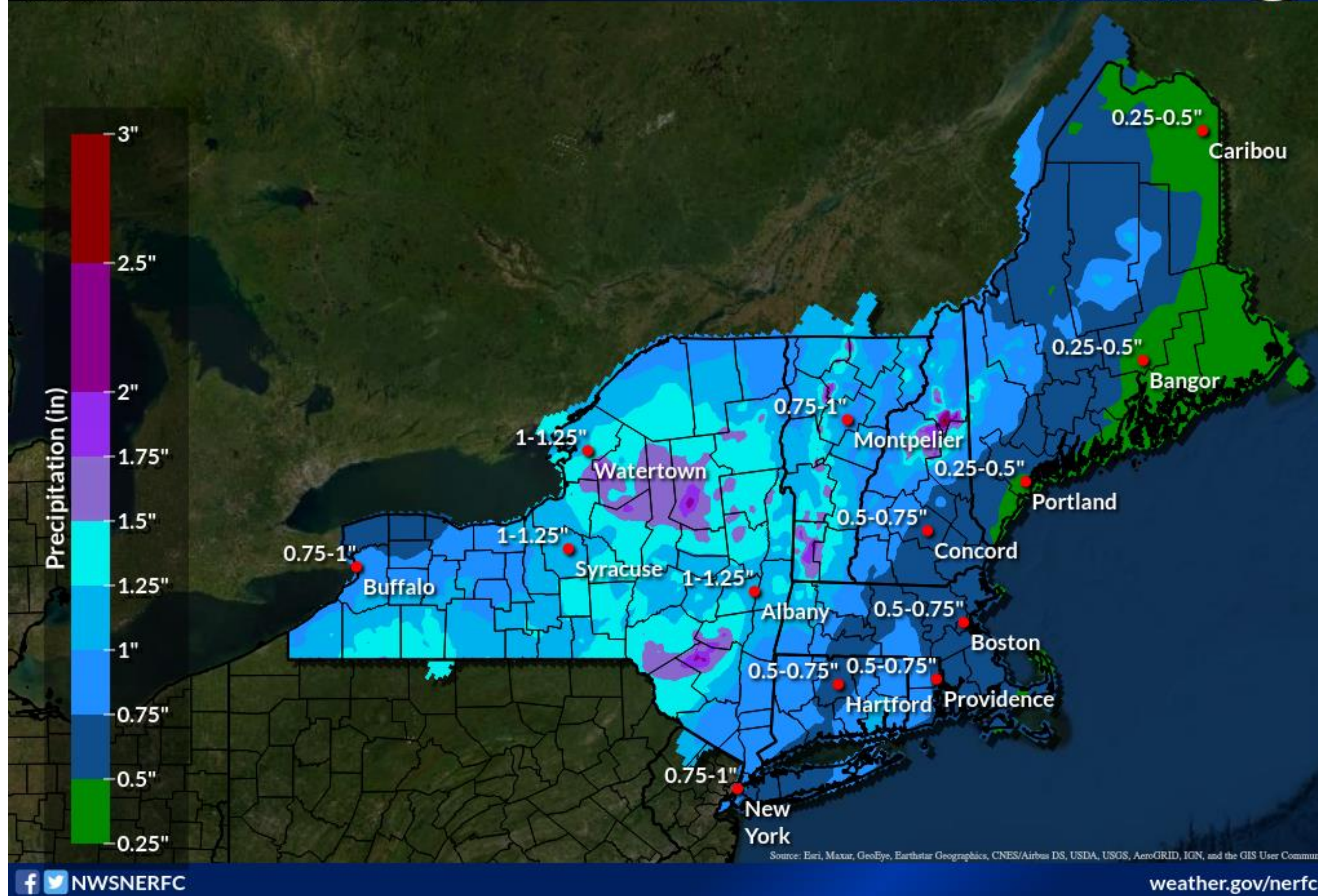
Boston/Norton MA

WEATHER FORECAST OFFICE

7 Day WPC Precipitation Forecast

Valid Mon 8:00AM through Mon 8:00AM EDT

River Forecast Center
Northeast RFC
Issued Mar 10, 2025 8:05 AM EDT



Details

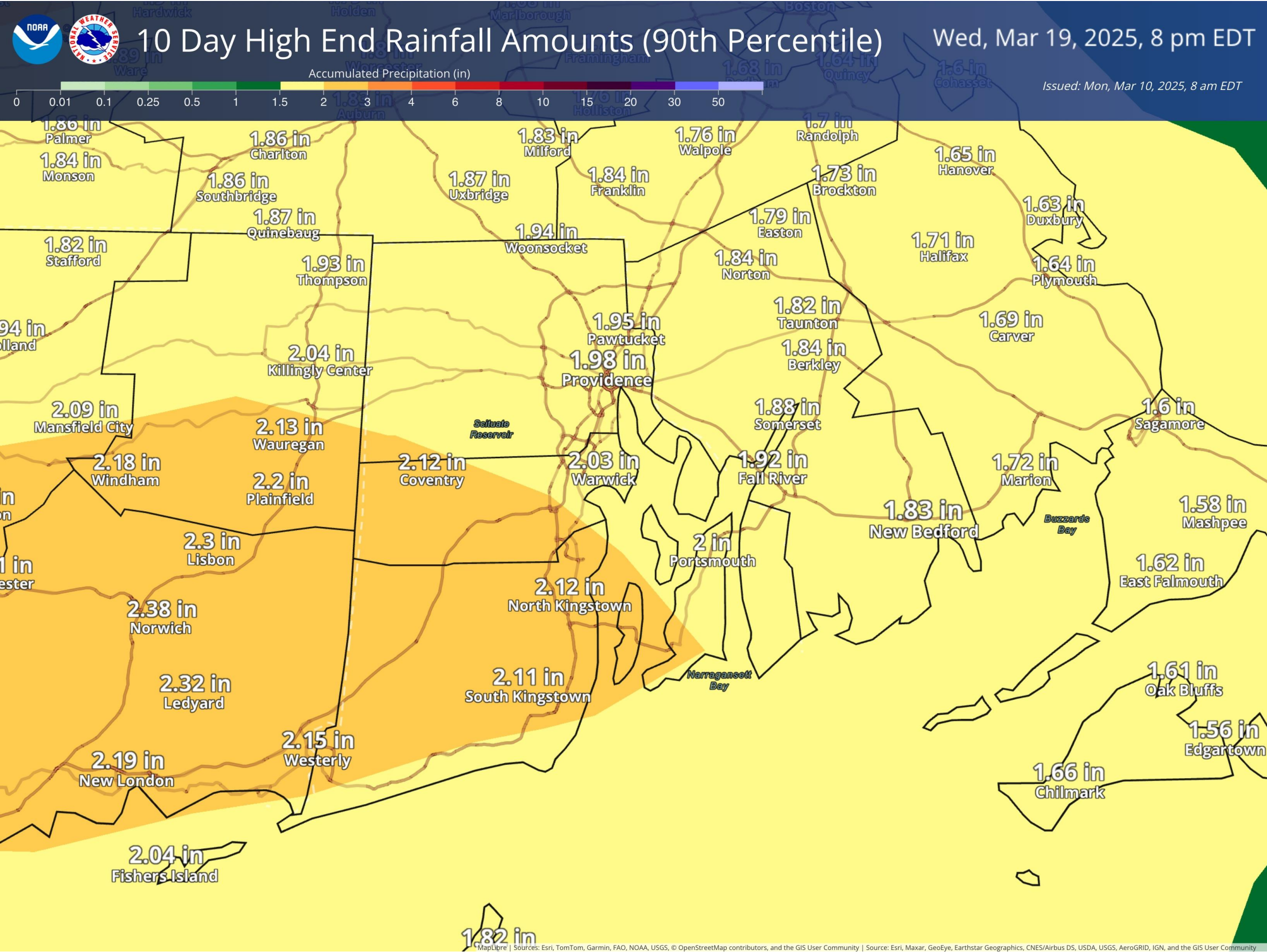
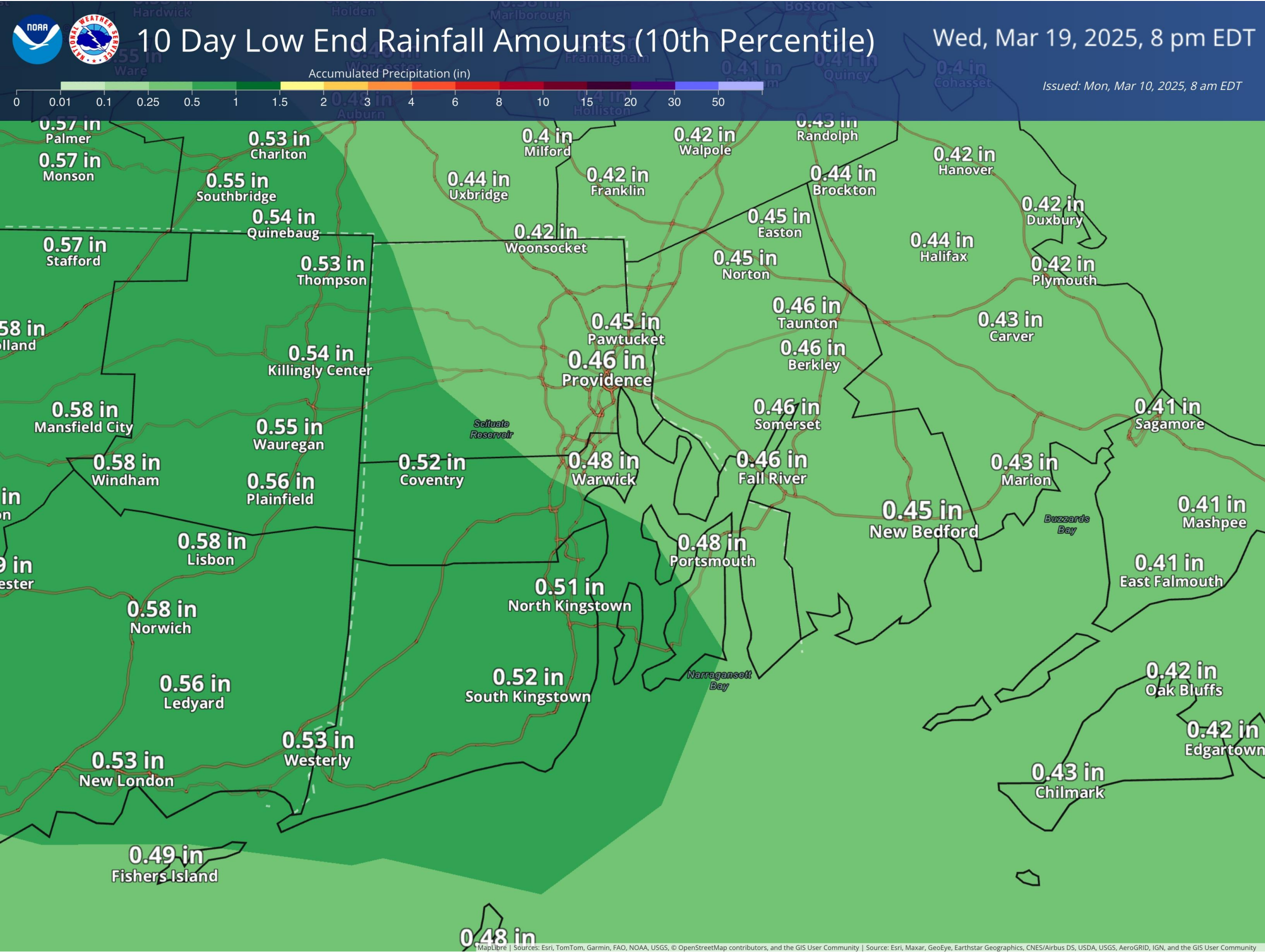
- *0.5 to 1" of new precipitation possible by early next week*

10 Day Probabilistic Rain Forecast

Valid 7AM Mon 03/10 – 7AM Mon 03/17



Boston/Norton MA
WEATHER FORECAST OFFICE



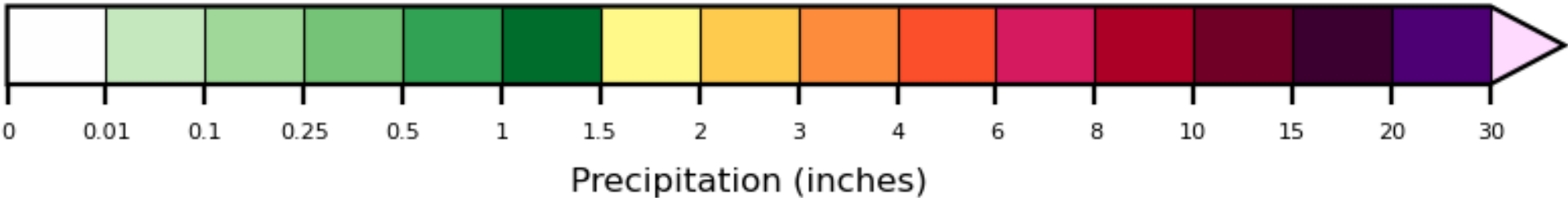
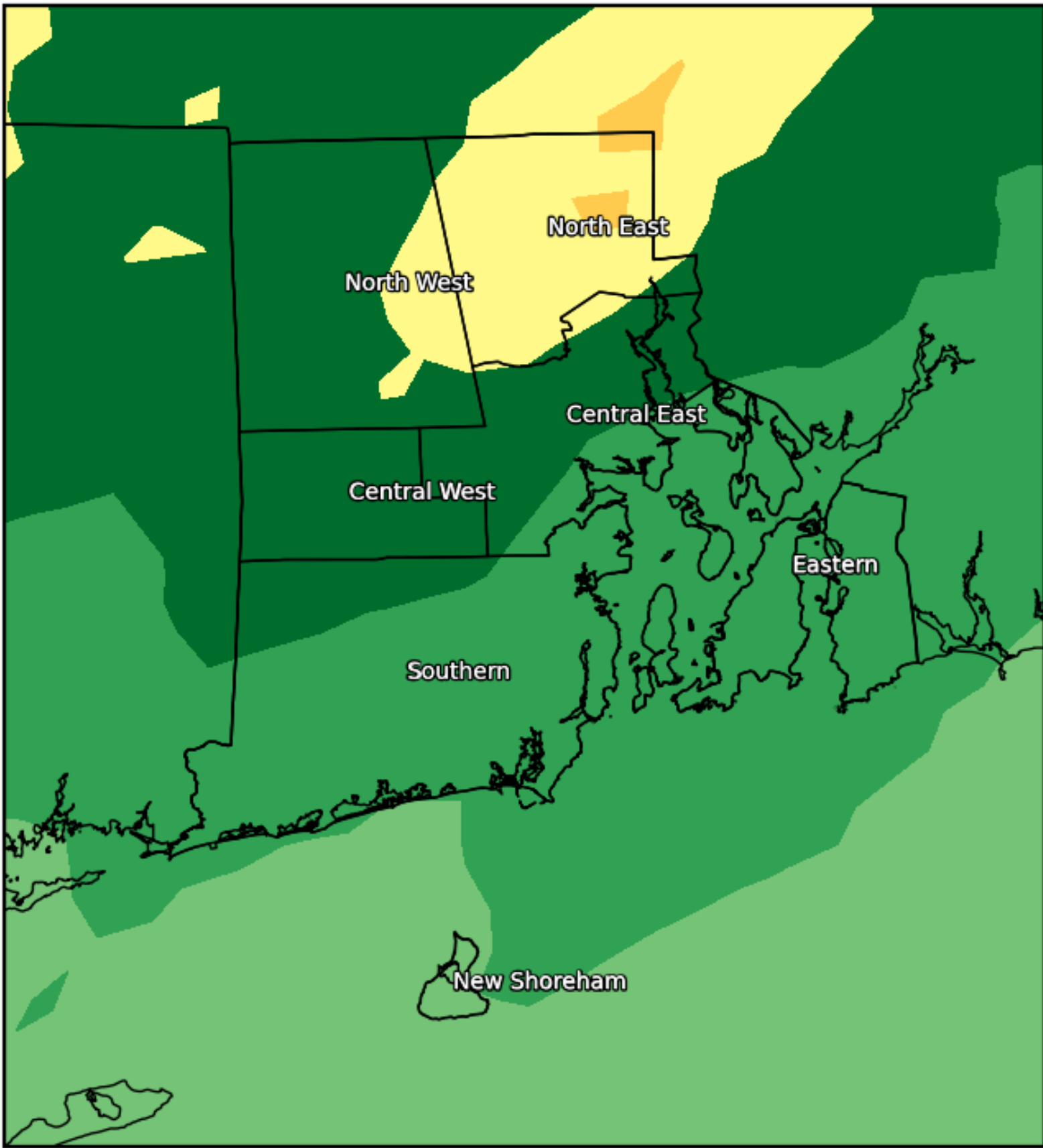
March Precipitation to Date

03/01-03/09

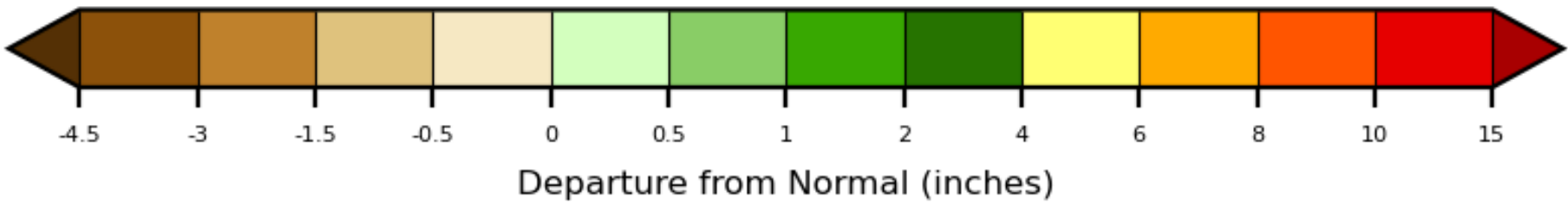
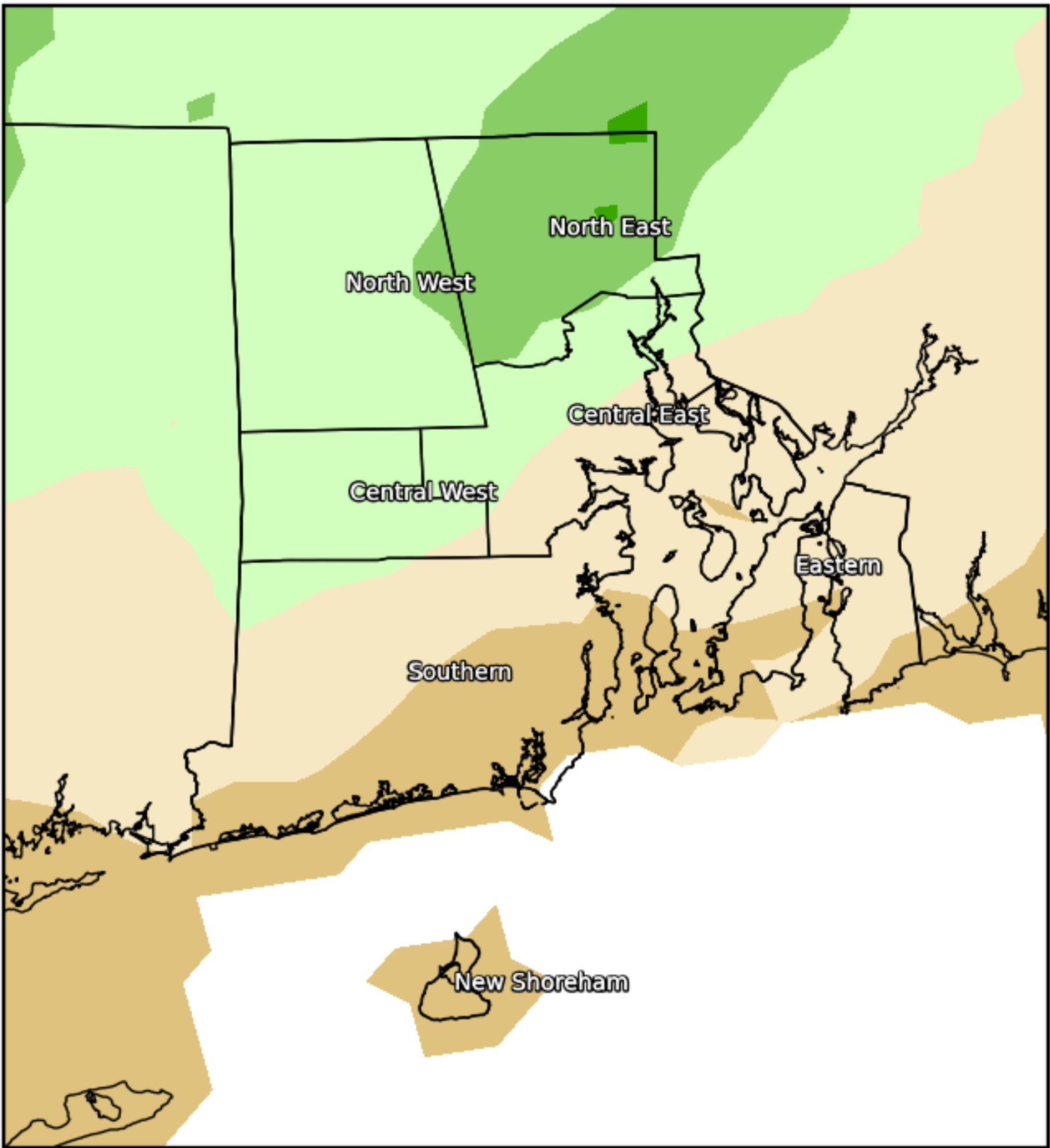


Boston/Norton MA
WEATHER FORECAST OFFICE

Accumulated Precipitation (inches)
March 01, 2025 to March 09, 2025



Precipitation Departure from Normal (inches)
March 01, 2025 to March 09, 2025



- **Central/Northern Regions are 0 to 1” above normal**
- **Southern Eastern, New Shoreham are 0 to 1.5” below normal**

CPC 8-14 Day Outlook

March 17- March 23, 2025



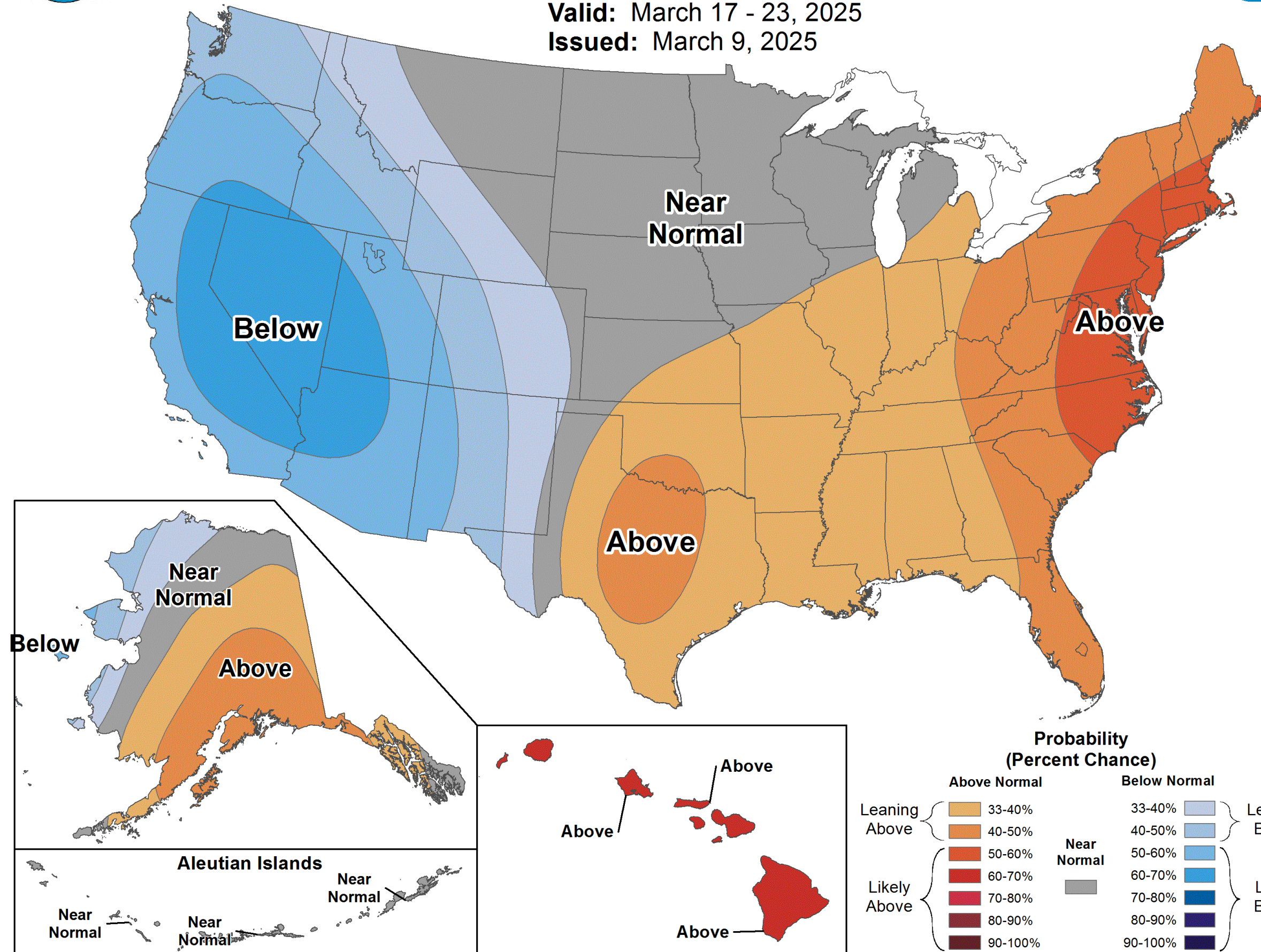
Boston/Norton MA

WEATHER FORECAST OFFICE



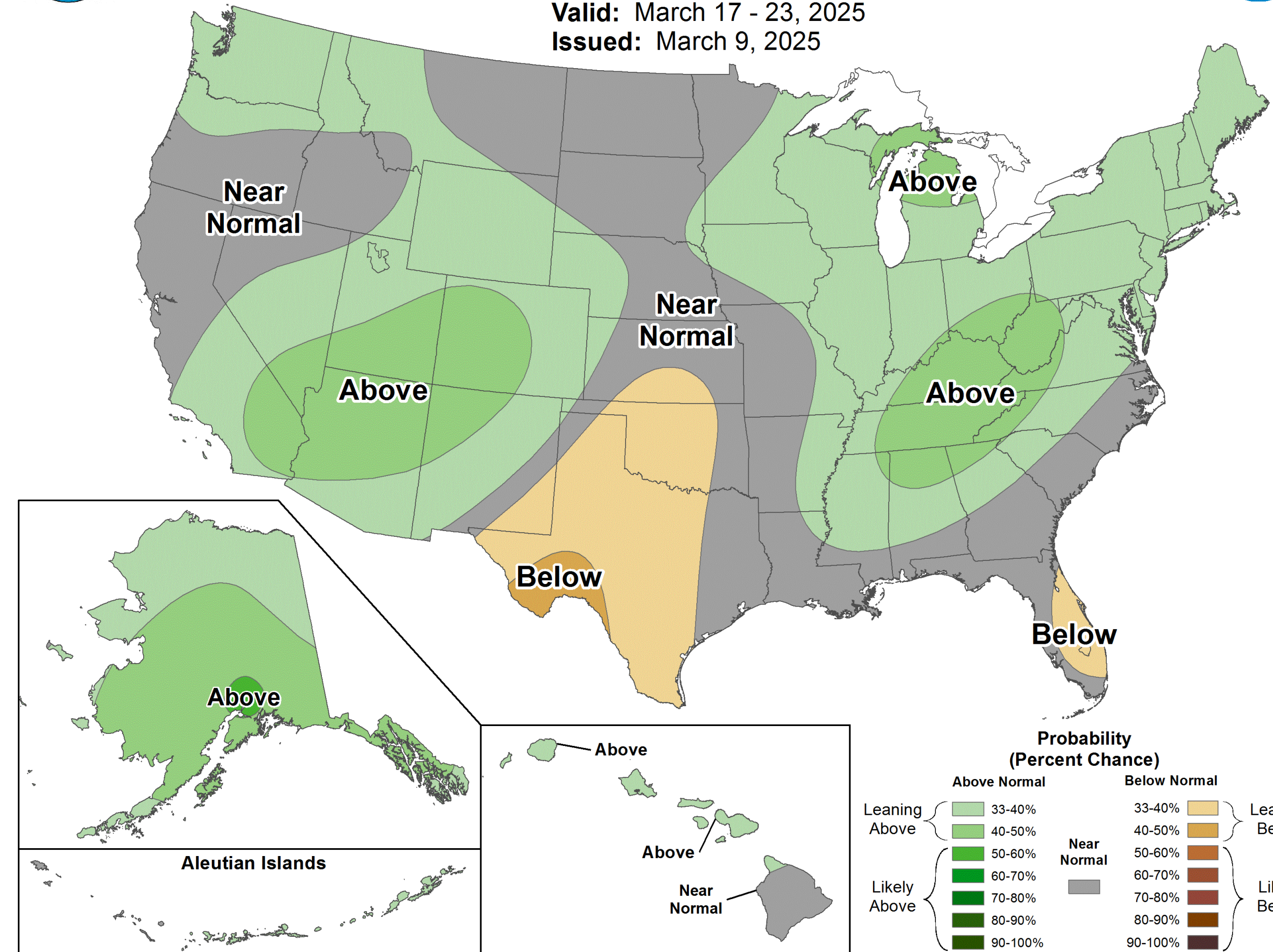
8-14 Day Temperature Outlook

Valid: March 17 - 23, 2025
Issued: March 9, 2025



8-14 Day Precipitation Outlook

Valid: March 17 - 23, 2025
Issued: March 9, 2025



CPC 3-4 Week Outlook

March 22- April 4, 2025



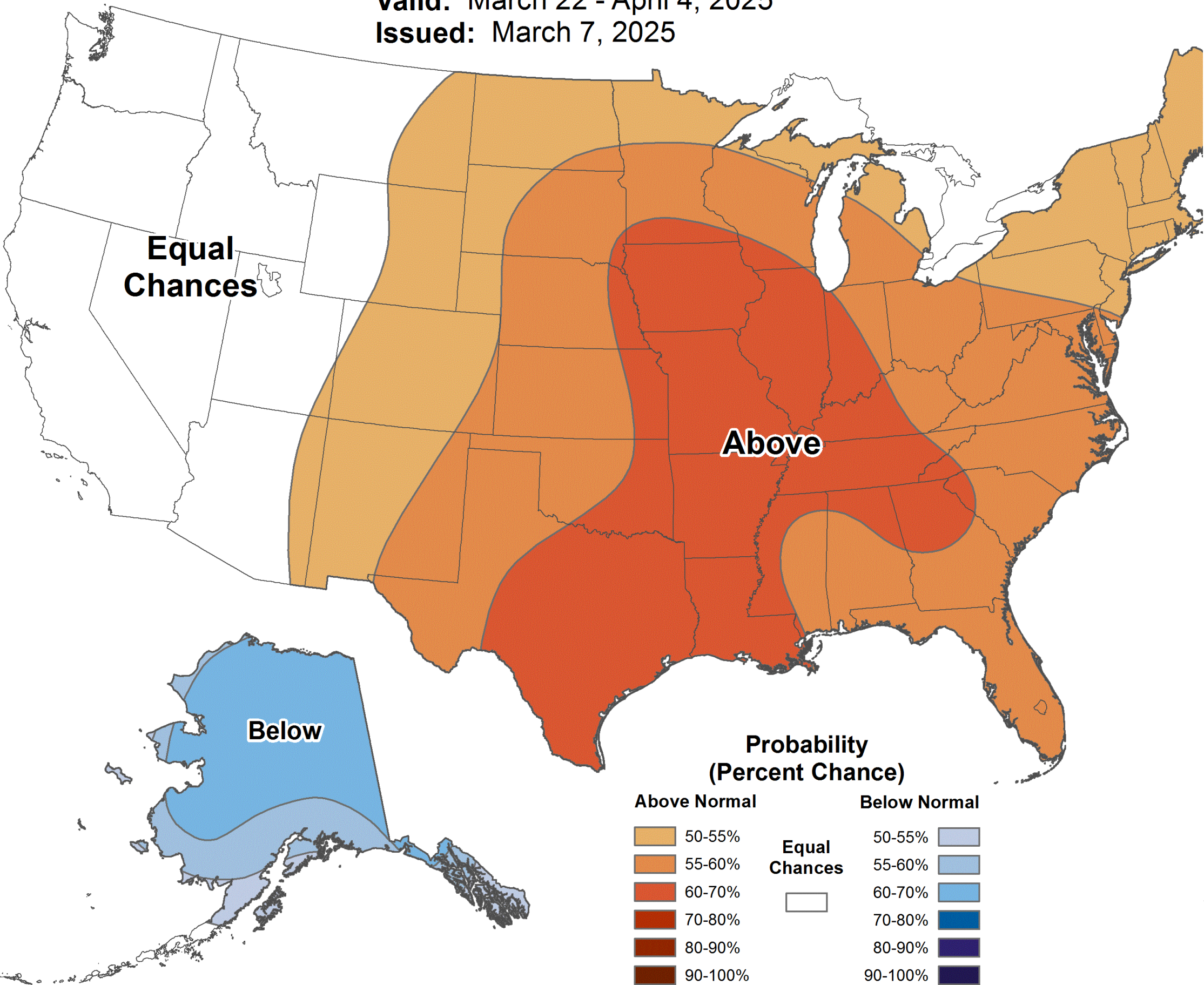
Boston/Norton MA
WEATHER FORECAST OFFICE



Weeks 3-4 Temperature Outlook



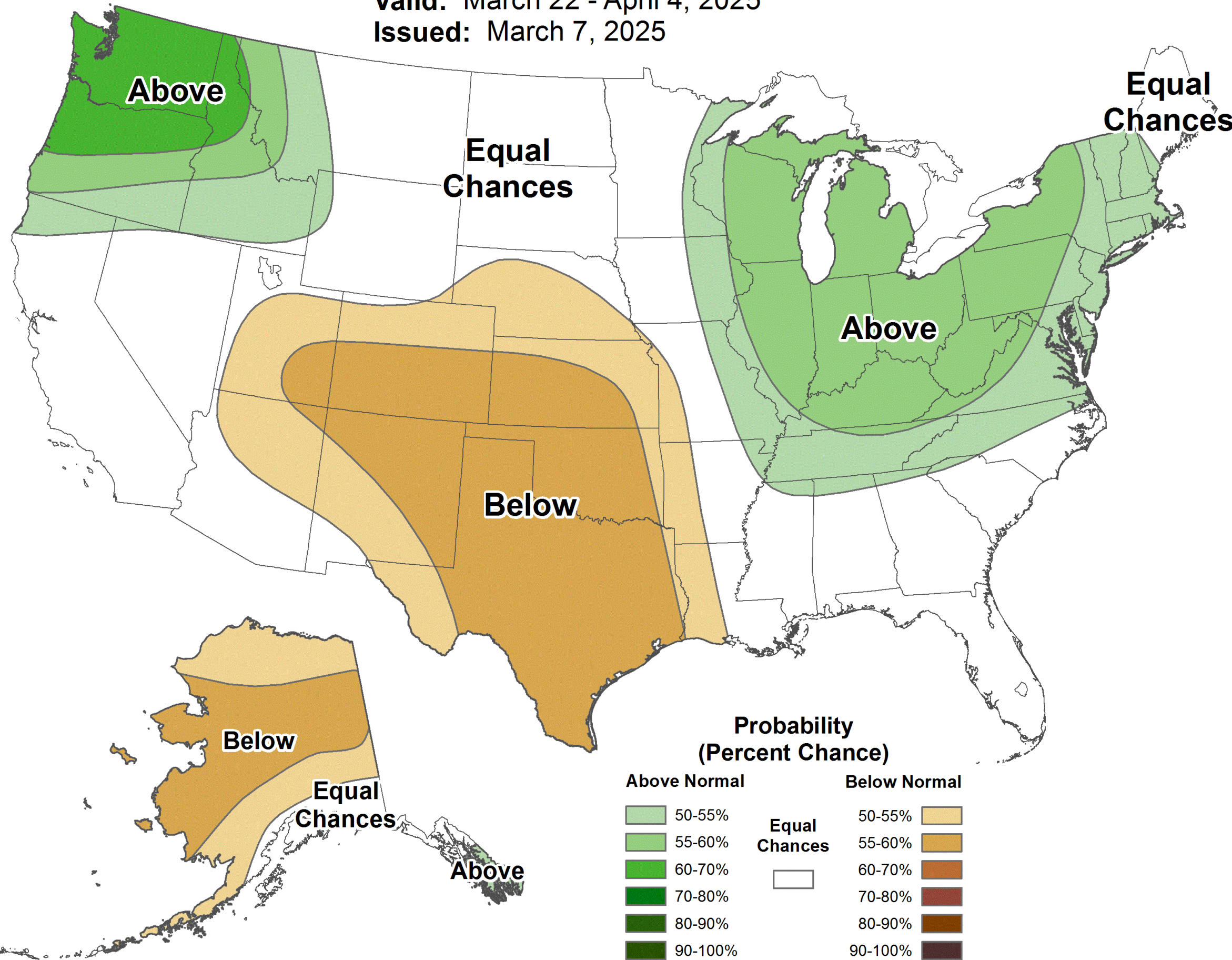
Valid: March 22 - April 4, 2025
Issued: March 7, 2025



Weeks 3-4 Precipitation Outlook



Valid: March 22 - April 4, 2025
Issued: March 7, 2025



Boston/Norton MA

WEATHER FORECAST OFFICE

