



RI Drought Steering Committee NWS Update

Tuesday March 11th, 2025

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

Drought Indices from RI Water 2030



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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

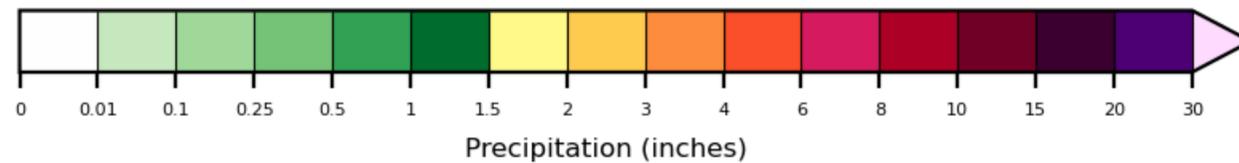
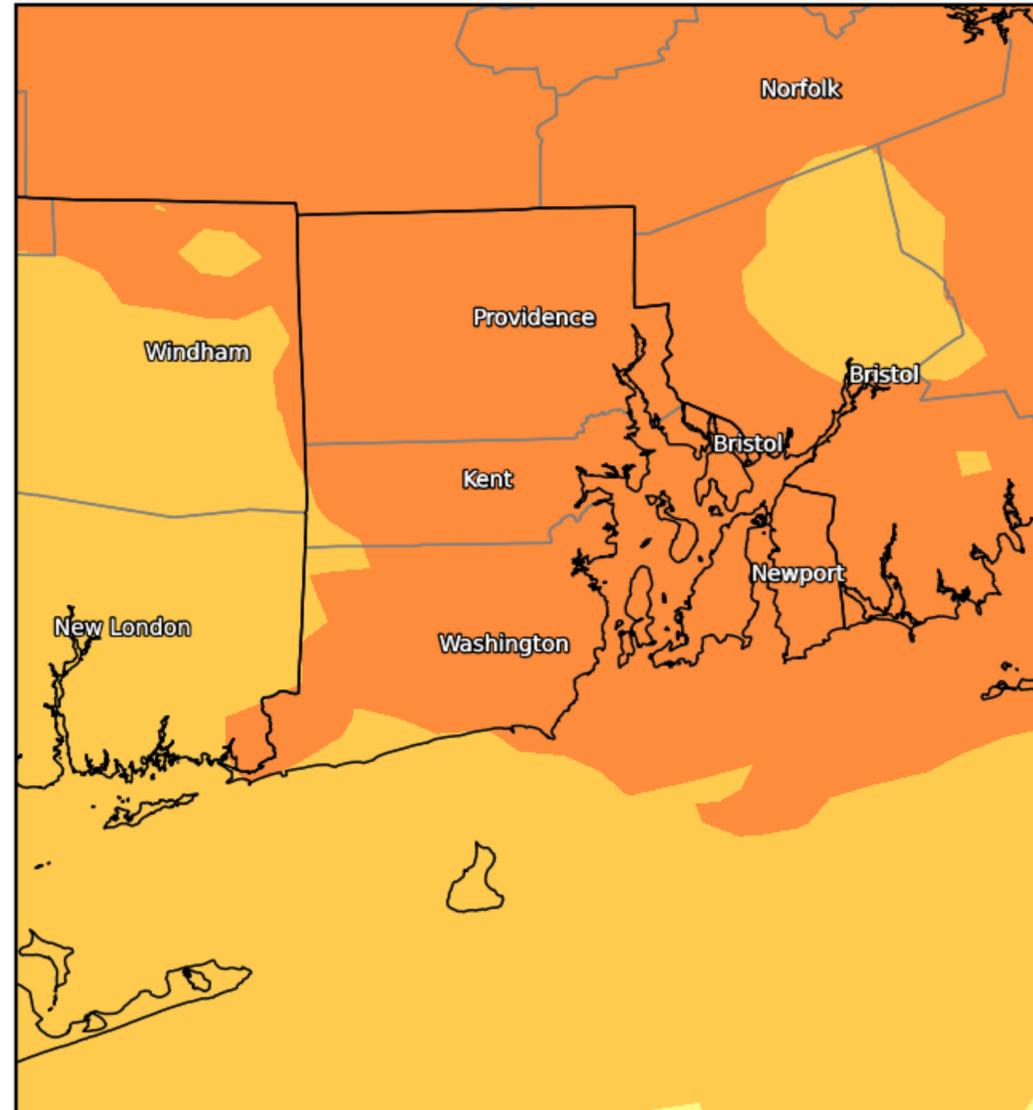
February 2025 Rainfall and Departure



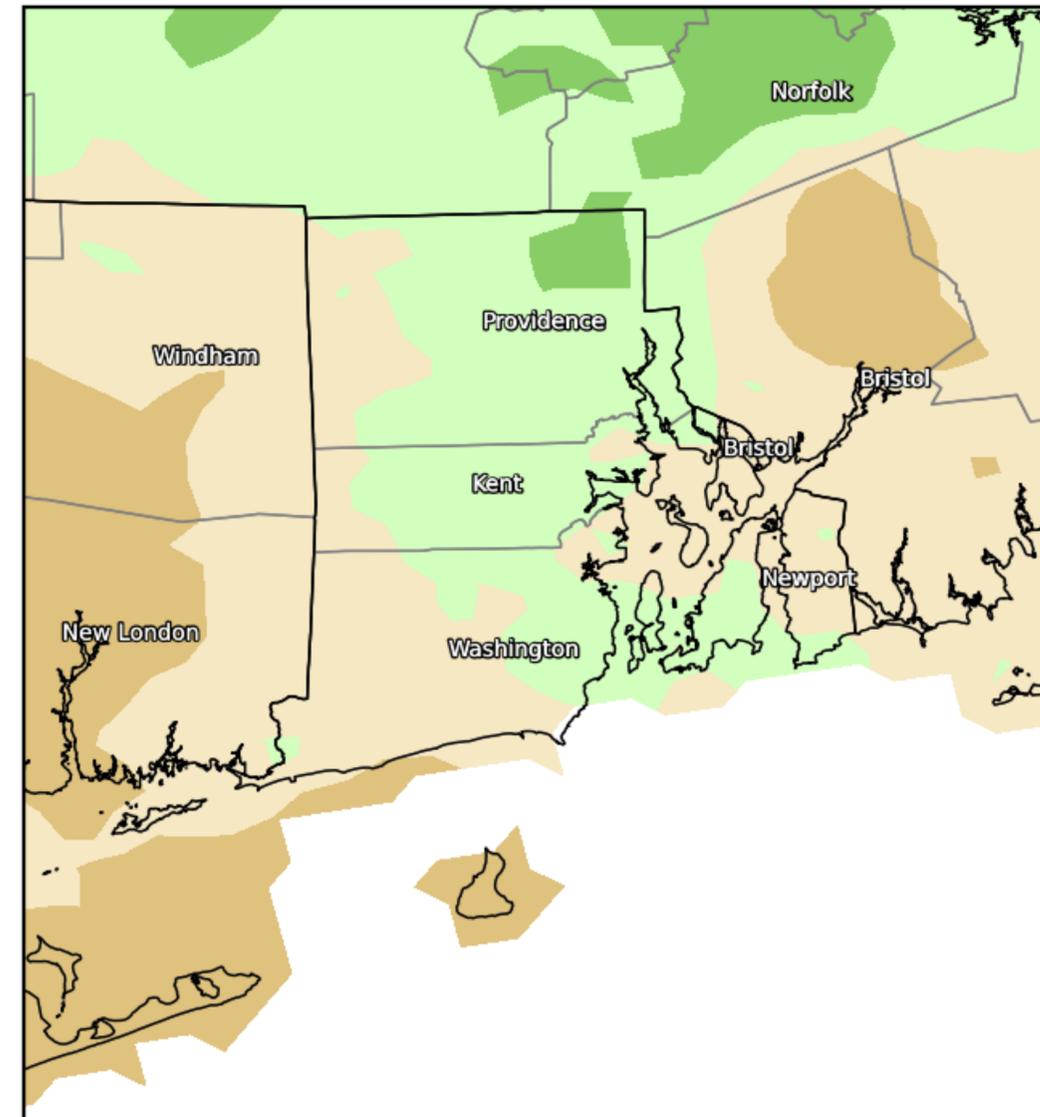
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Accumulated Precipitation (inches)
February 01, 2025 to February 28, 2025



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



Dec-Feb and Sep-Feb Percent of Normal

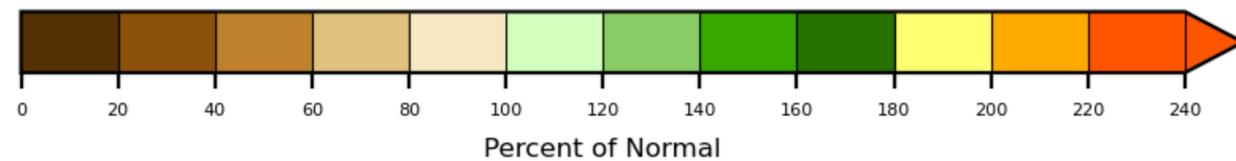
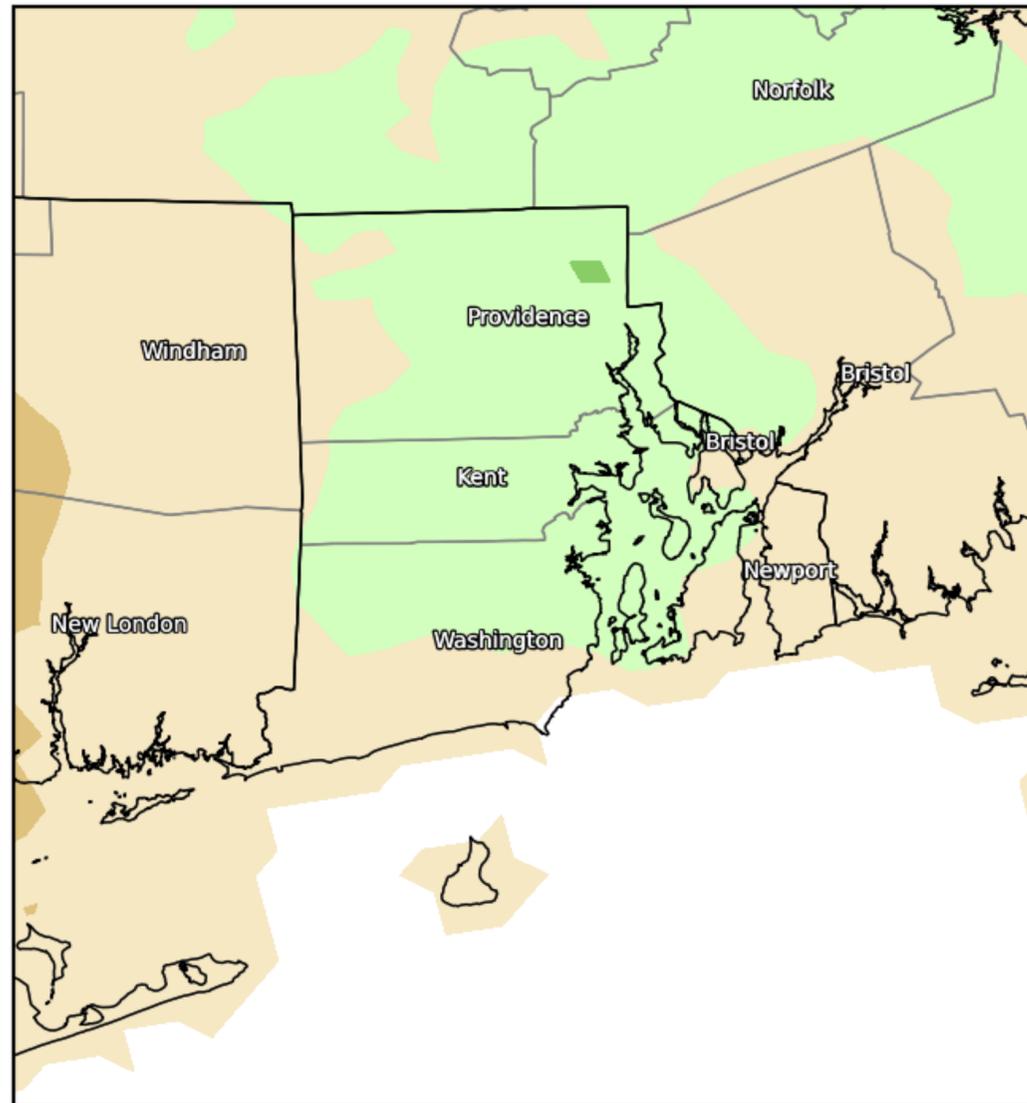


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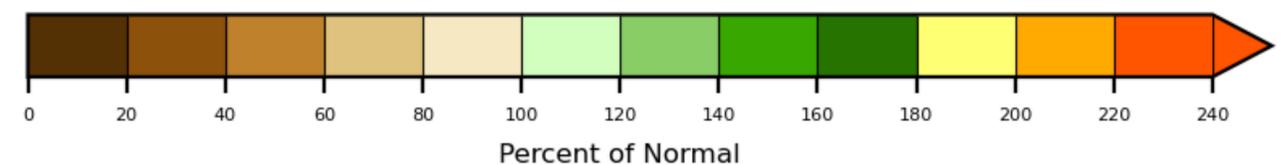
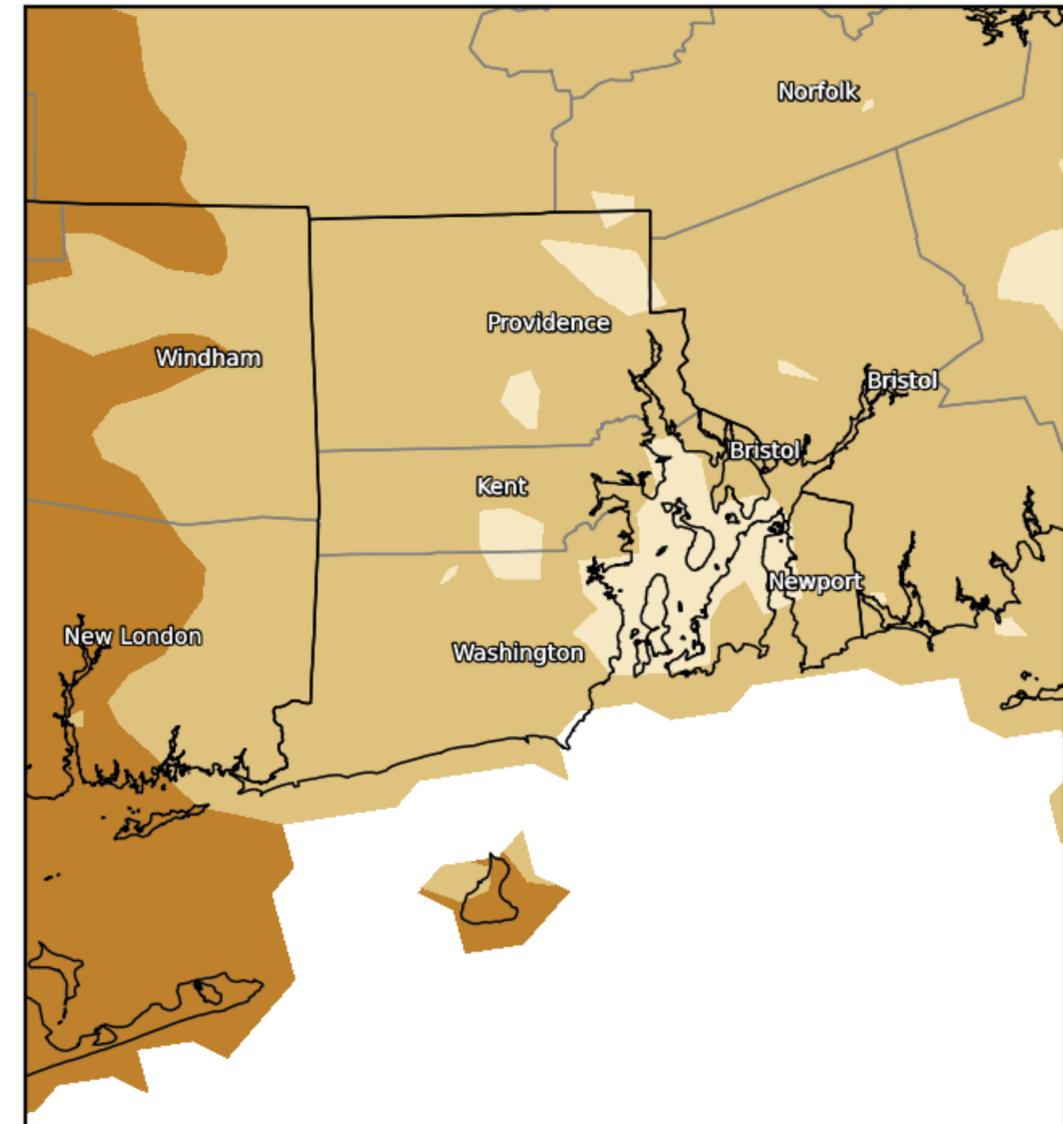
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Ranging slightly below to slightly above normal

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



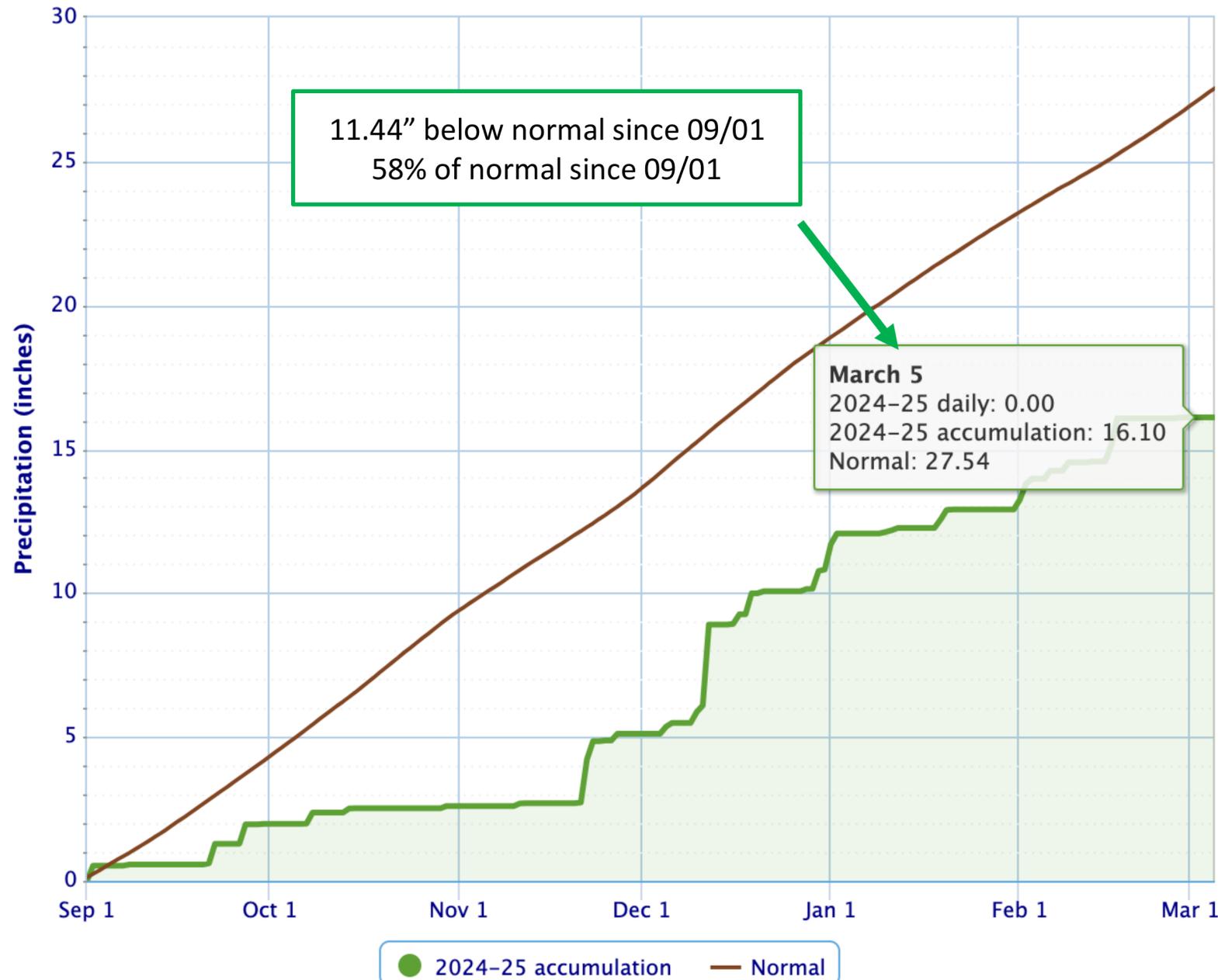
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Precipitation since September 1st

Accumulated Precipitation – WOONSOCKET, RI

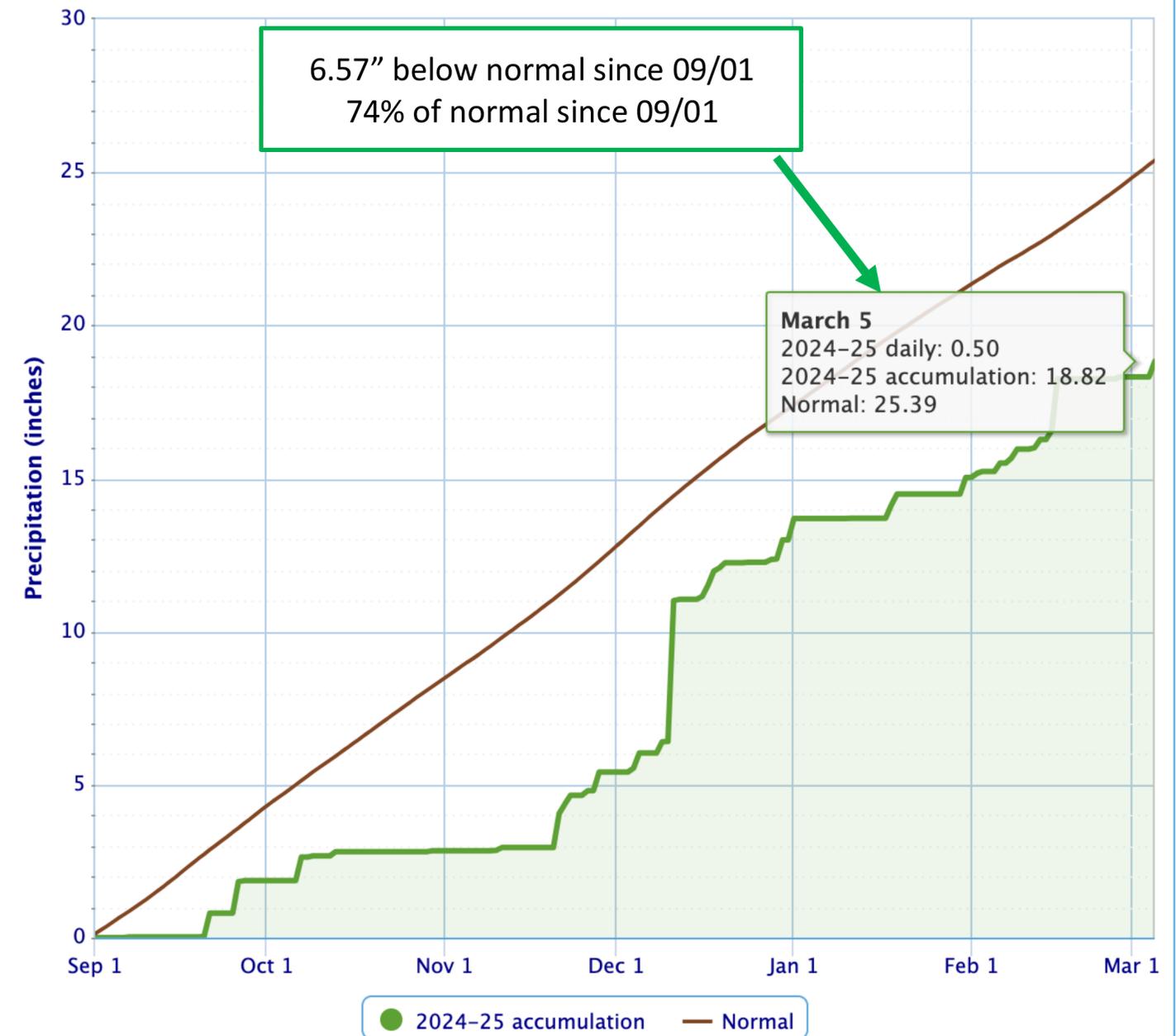
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Accumulated Precipitation – Providence Area, RI (ThreadEx)

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Rainfall Percent by Region Last 6 Months



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	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



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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



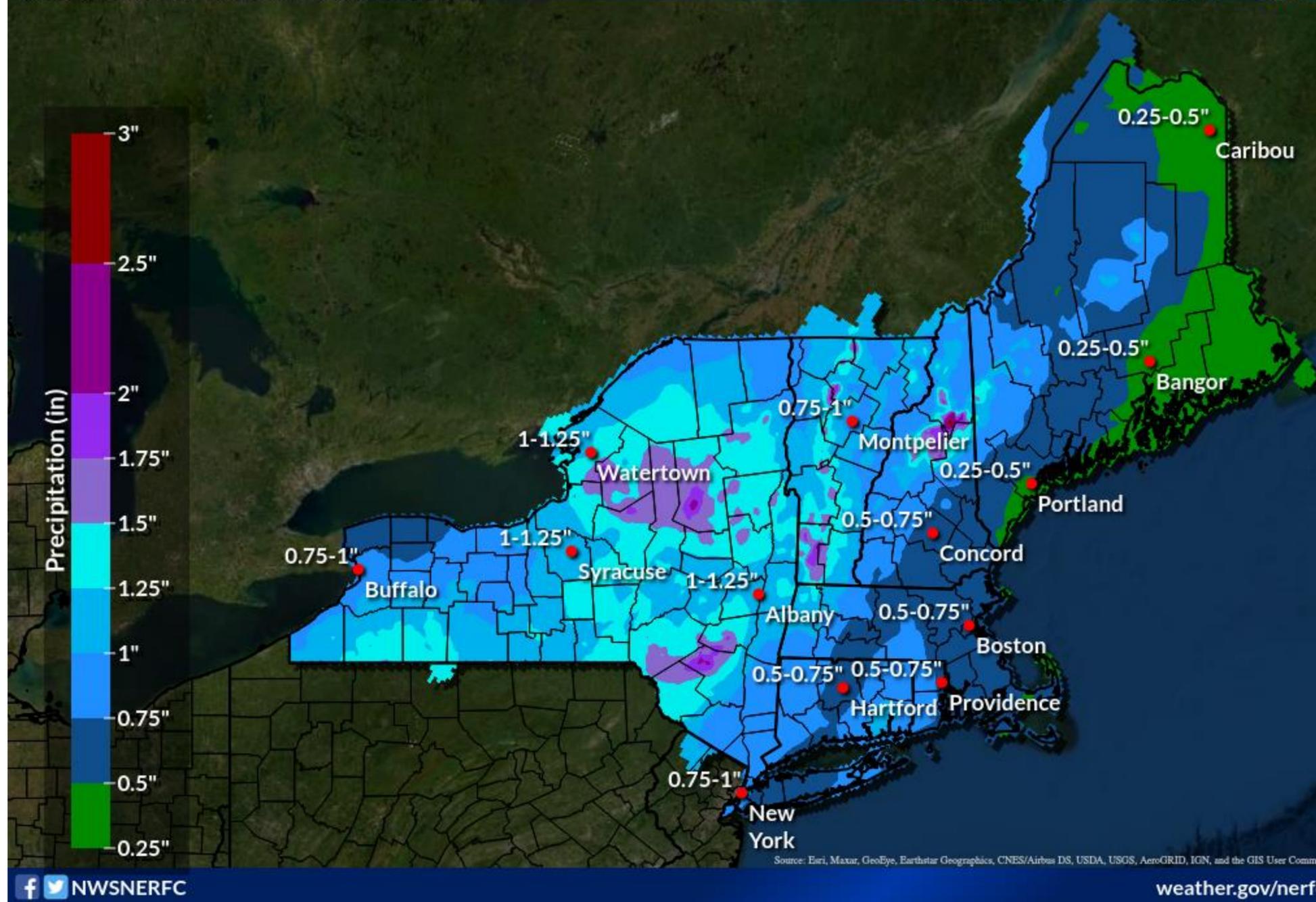
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7 Day WPC Precipitation Forecast

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*

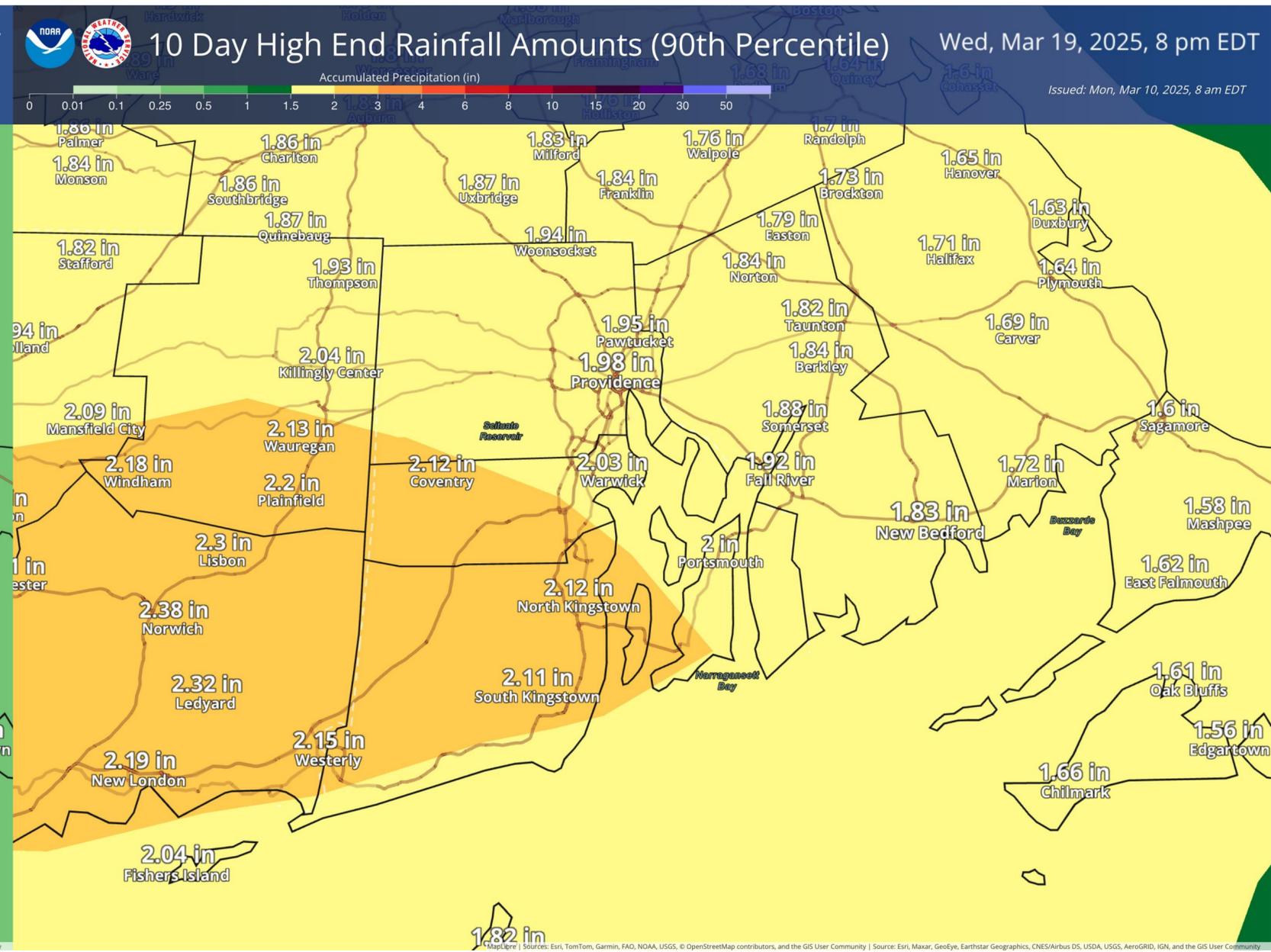
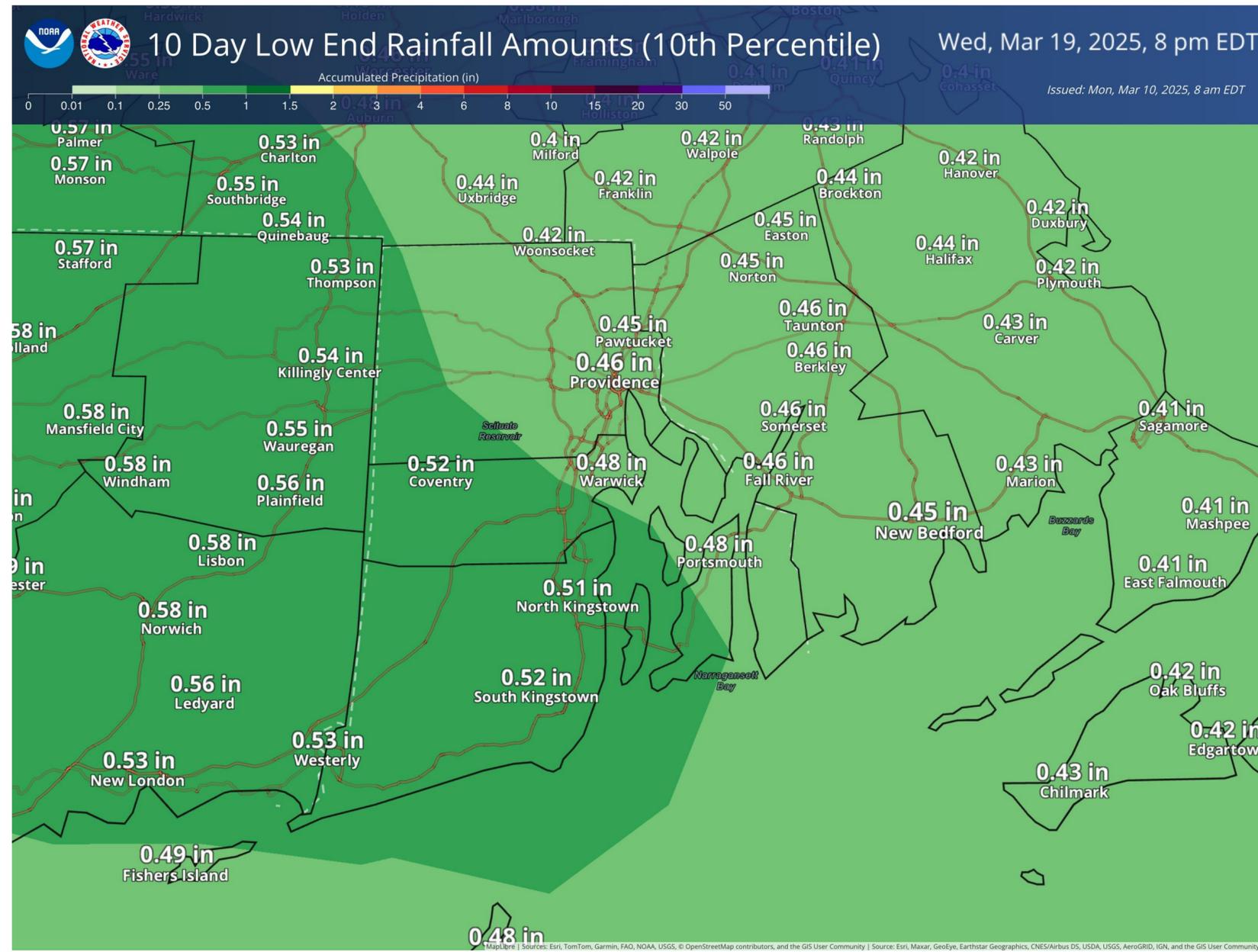
10 Day Probabilistic Rain Forecast

Valid 7AM Mon 03/10 – 7AM Mon 03/17



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March Precipitation to Date

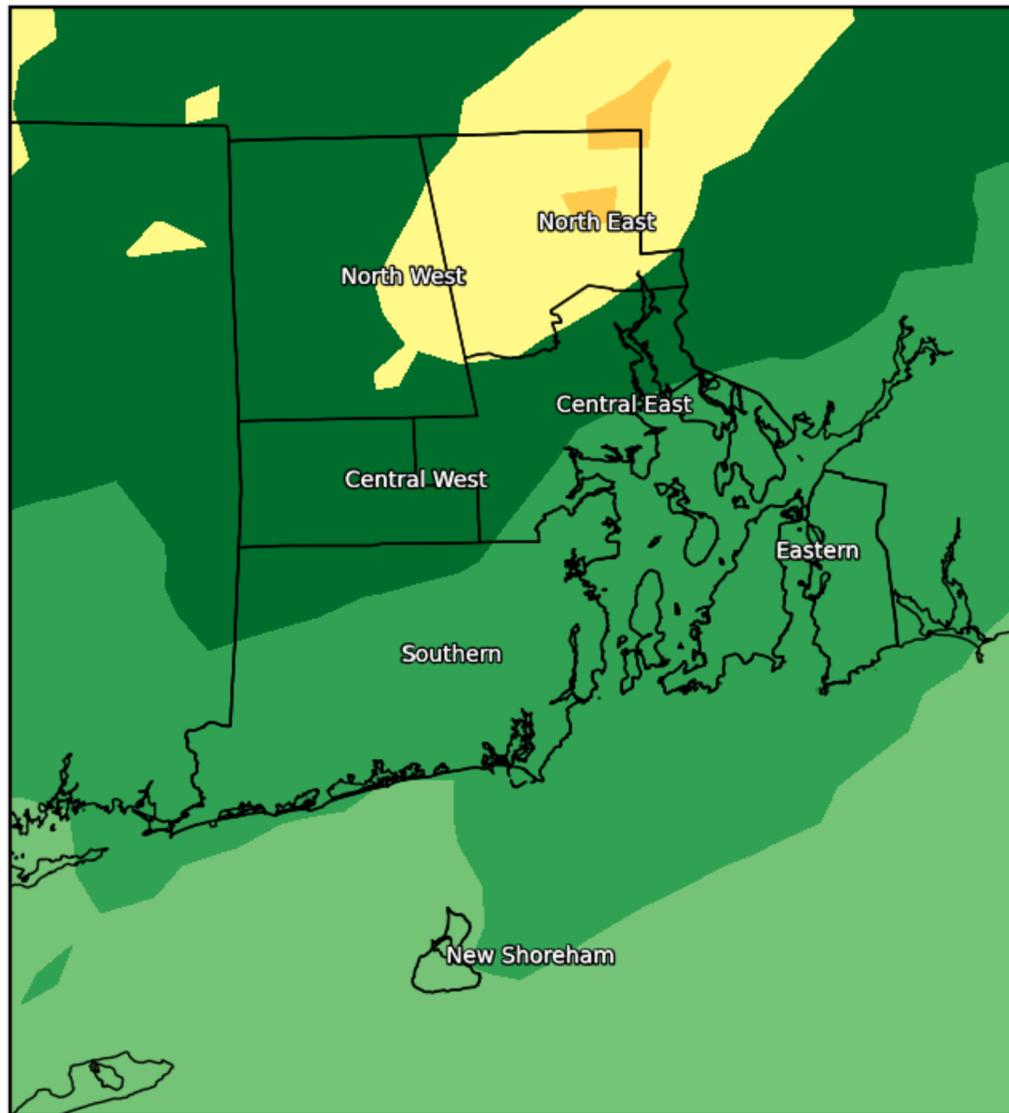
03/01-03/09



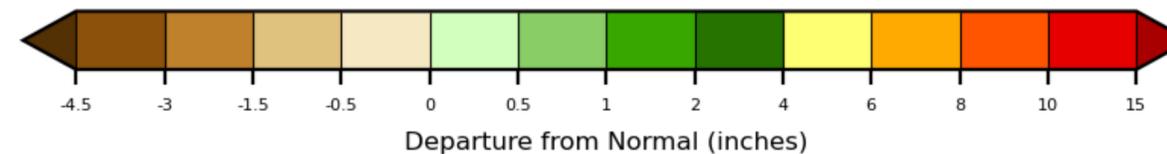
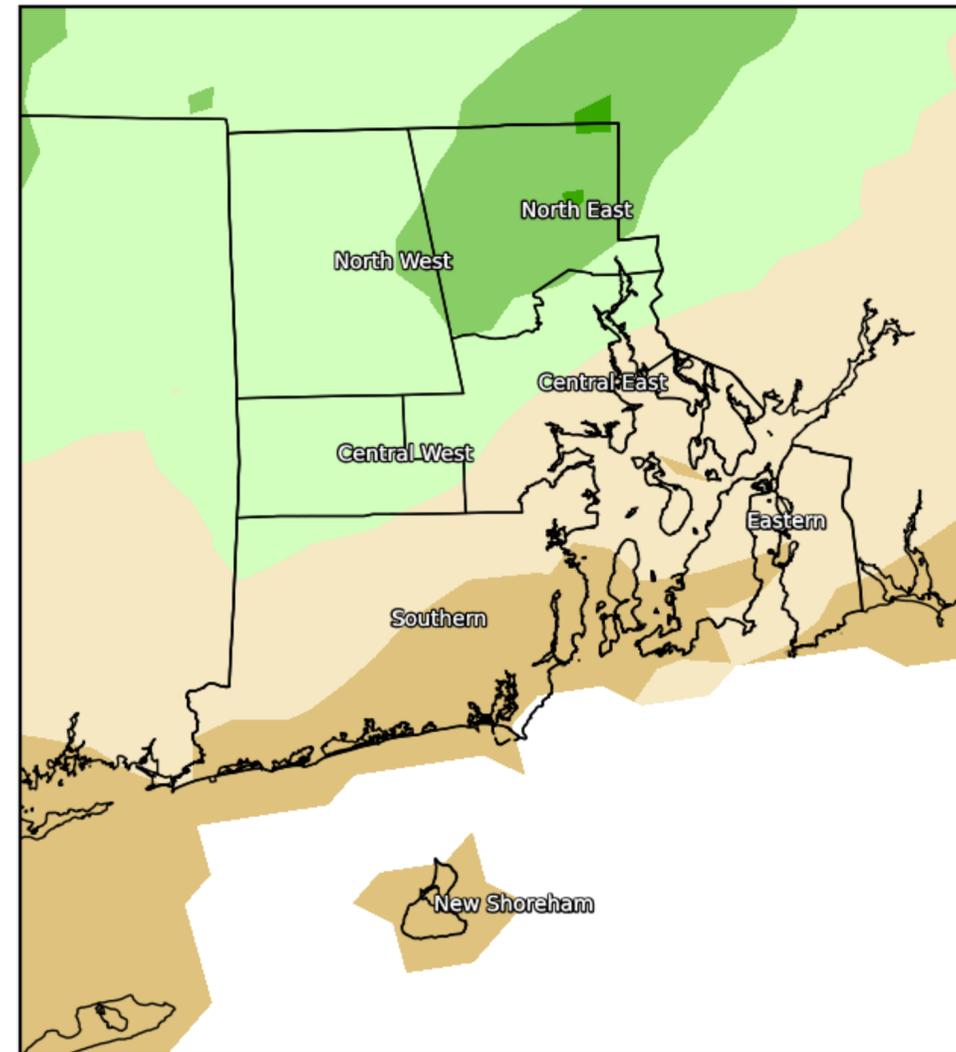
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Accumulated Precipitation (inches)
March 01, 2025 to March 09, 2025



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



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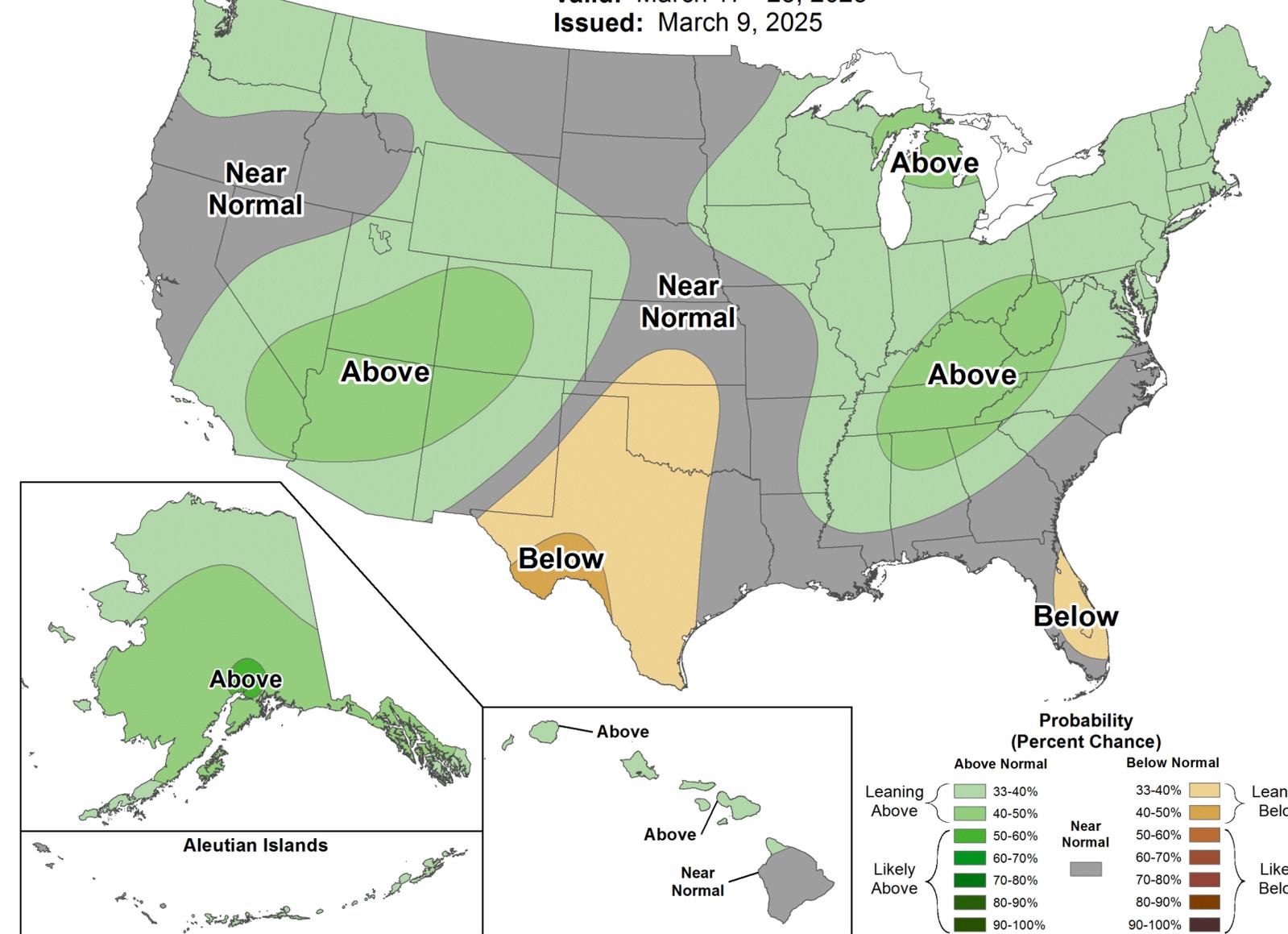
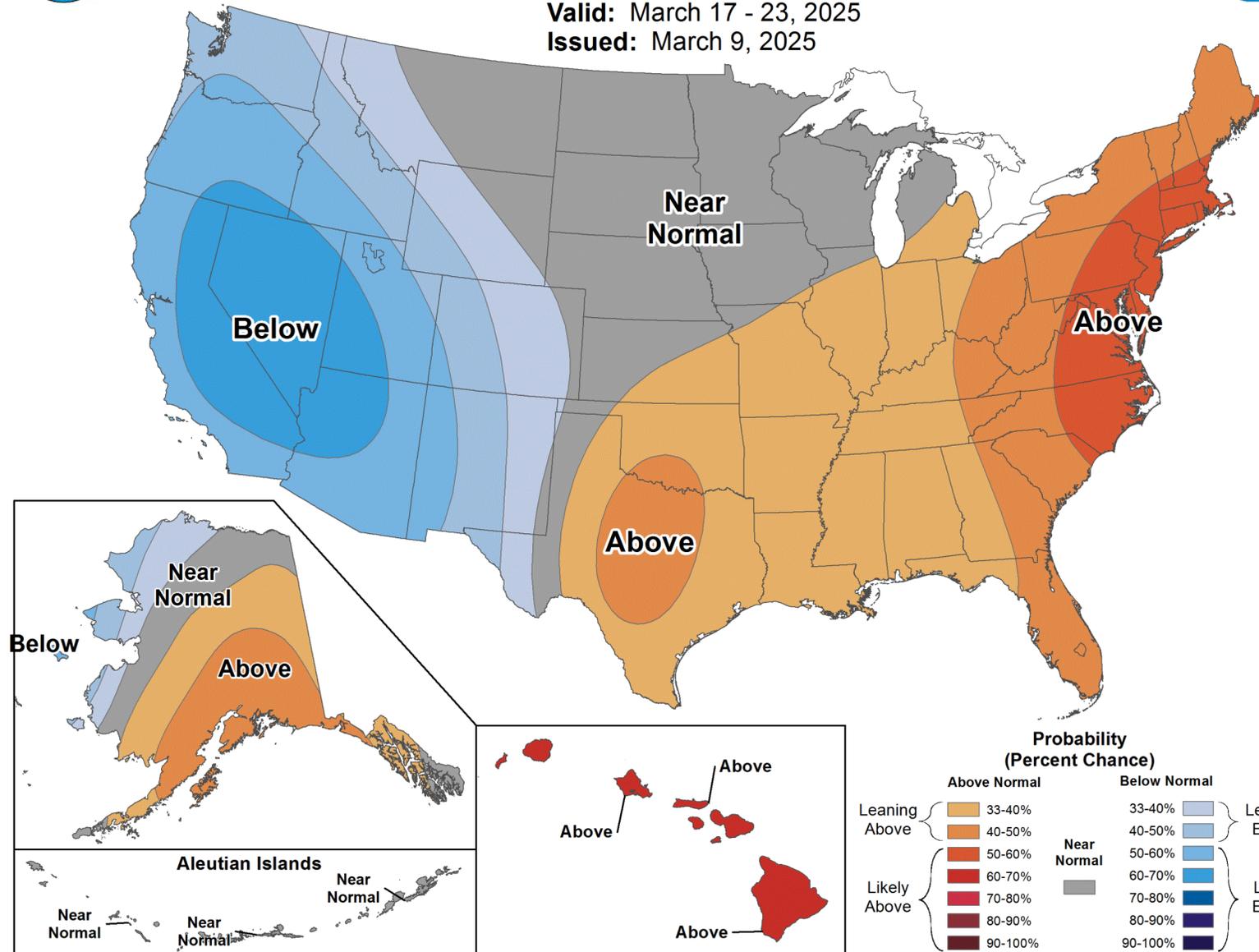
8-14 Day Temperature Outlook

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



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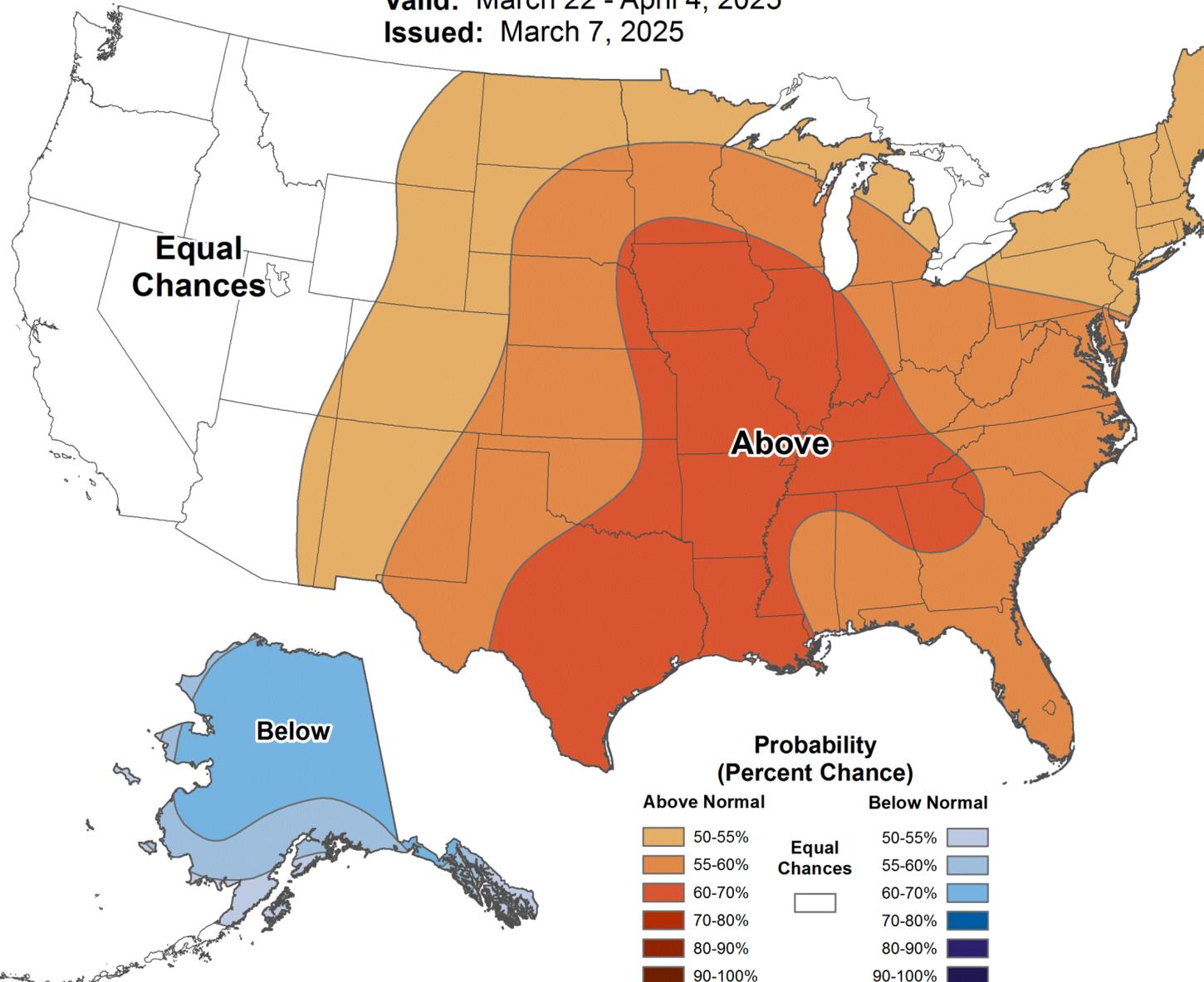
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Weeks 3-4 Temperature Outlook



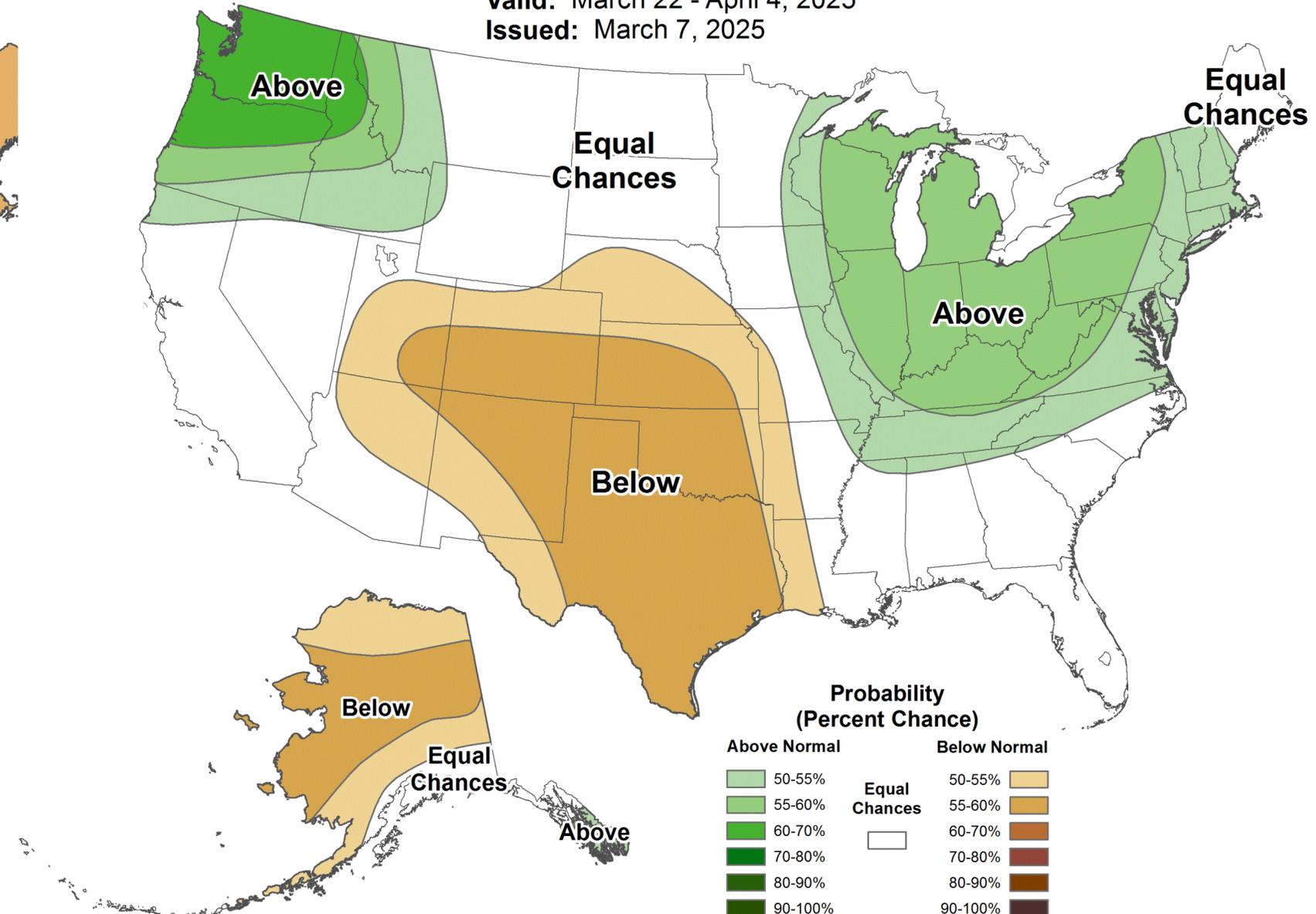
Valid: March 22 - April 4, 2025
Issued: March 7, 2025



Weeks 3-4 Precipitation Outlook



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



CPC Outlook for Mar/Apr/May



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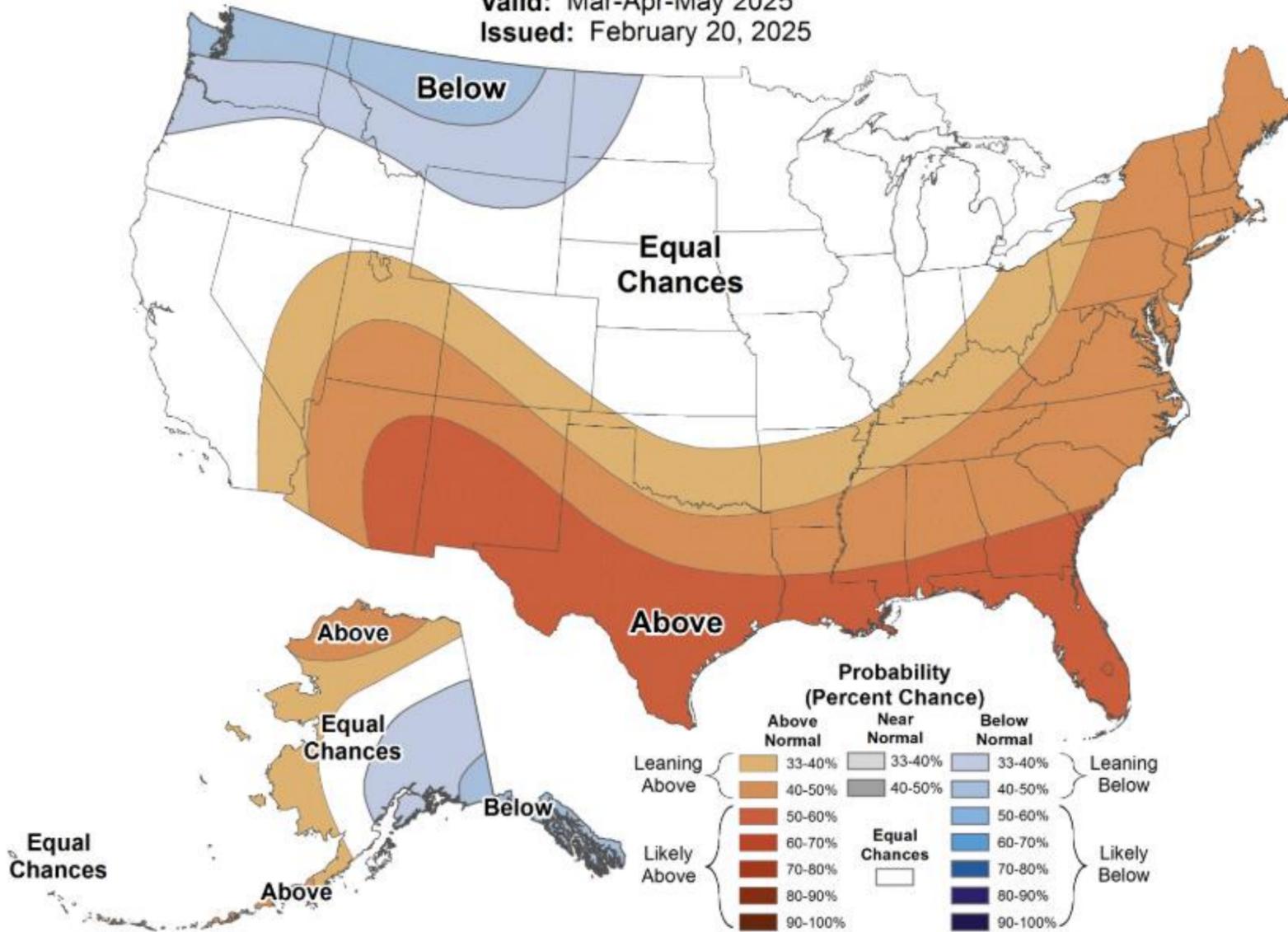
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Seasonal Temperature Outlook



Valid: Mar-Apr-May 2025
Issued: February 20, 2025



Seasonal Precipitation Outlook



Valid: Mar-Apr-May 2025
Issued: February 20, 2025

