



RI Drought Steering Committee NWS Update

Tuesday April 8th, 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

Drought Recovery Phases



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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

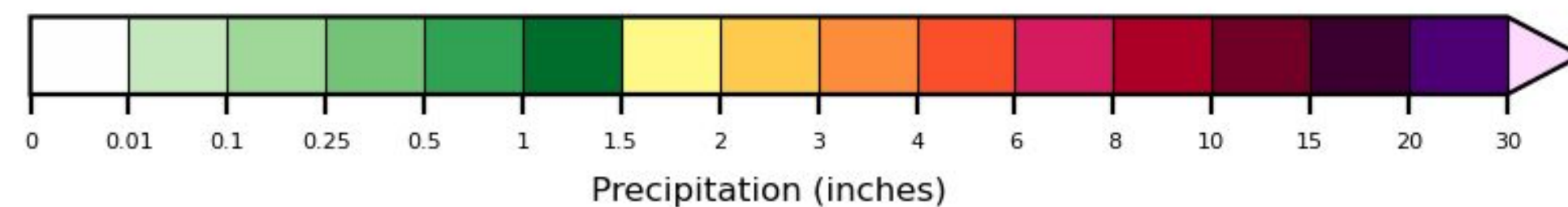
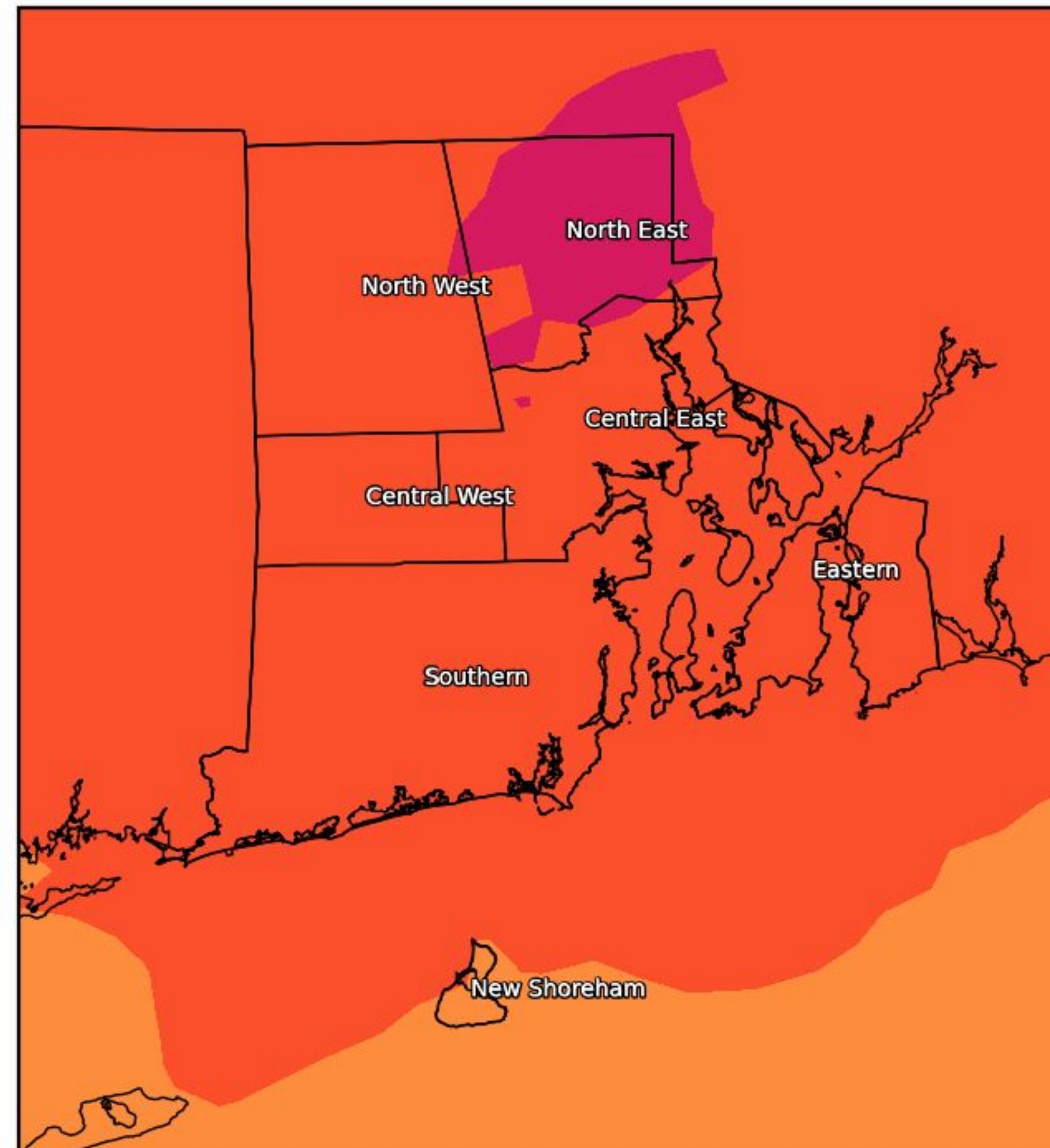
March 2025 Rainfall and Departure

Includes April 1st Observation

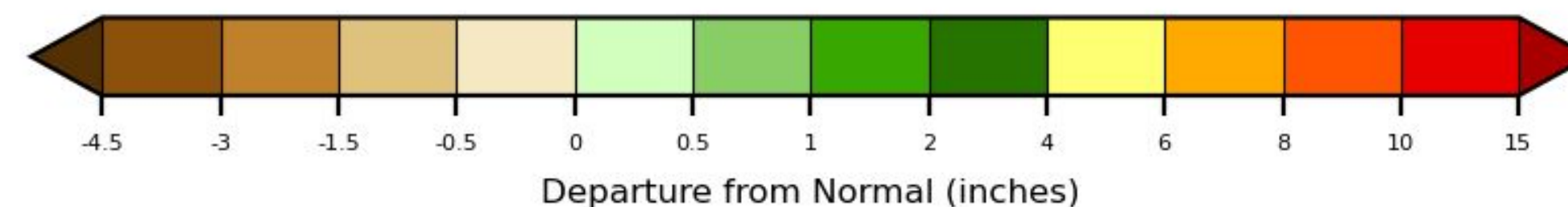
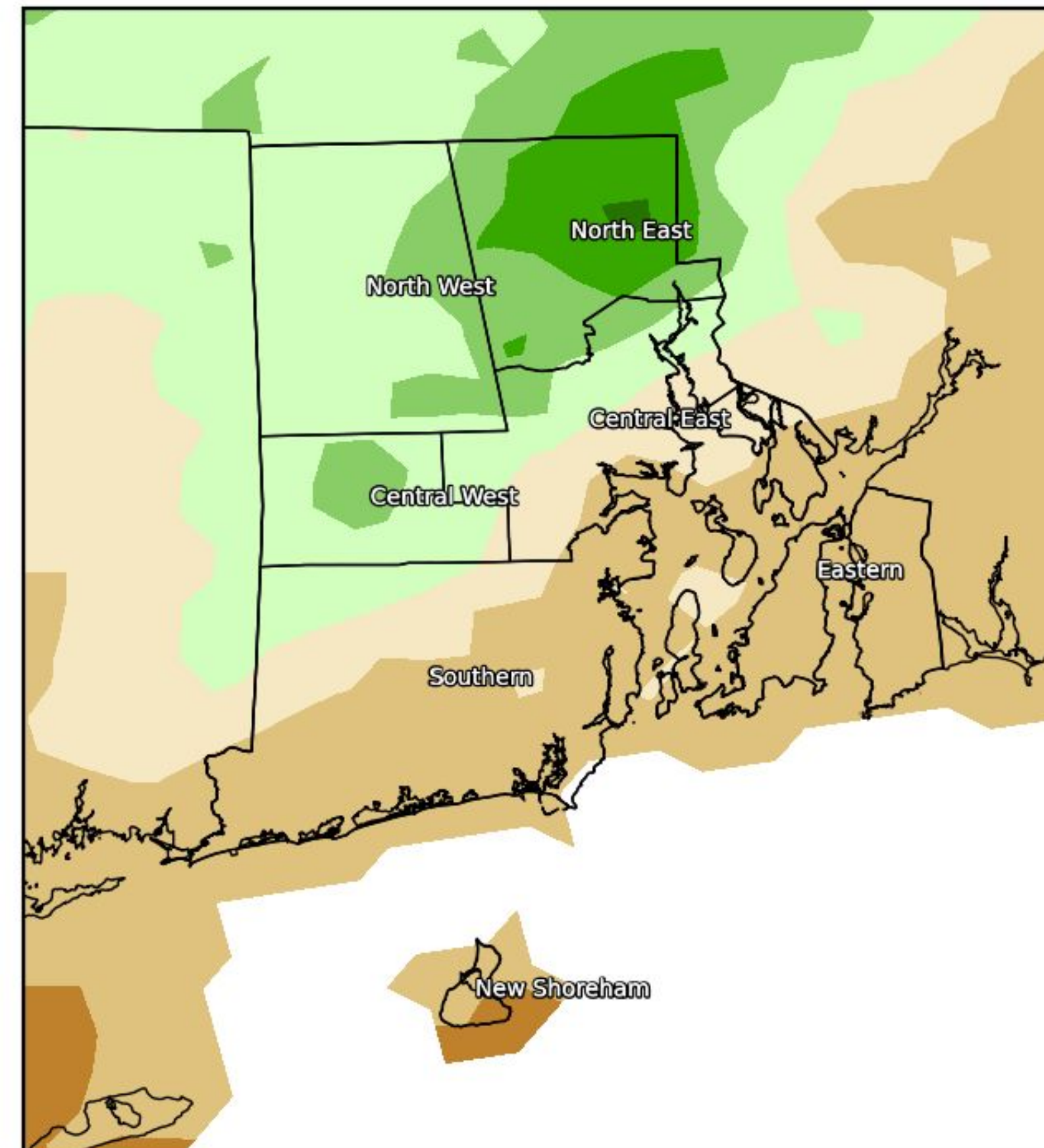


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Accumulated Precipitation (inches)
March 01, 2025 to April 01, 2025



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



Jan-Mar and Oct-Mar Percent of Normal

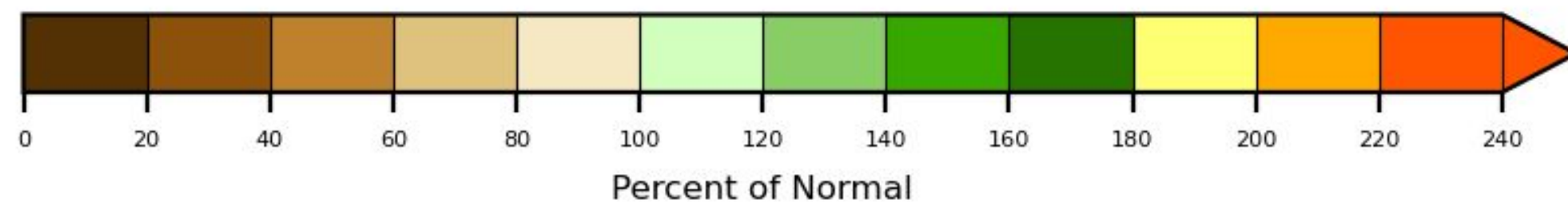
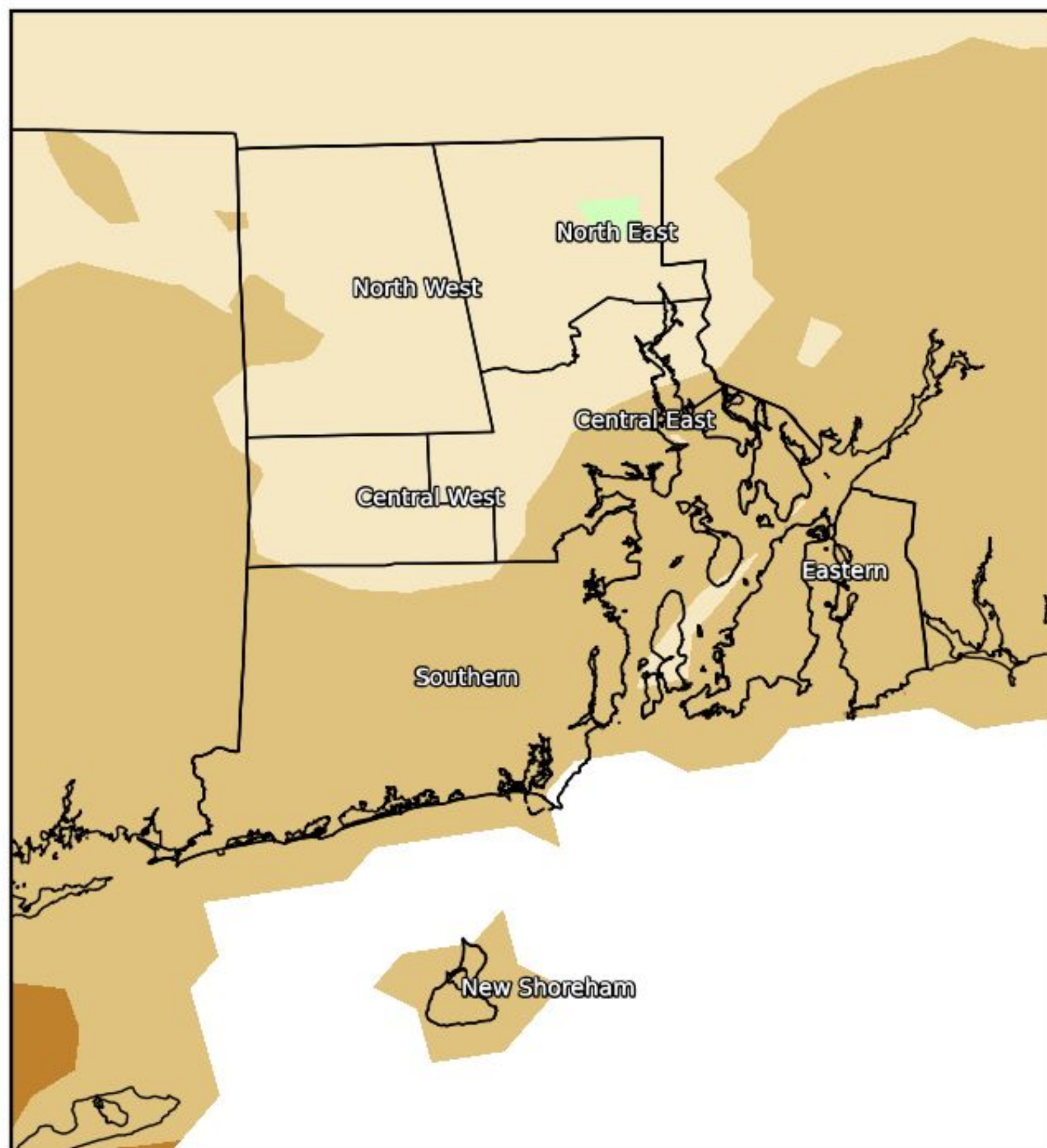
Includes April 1st Observation



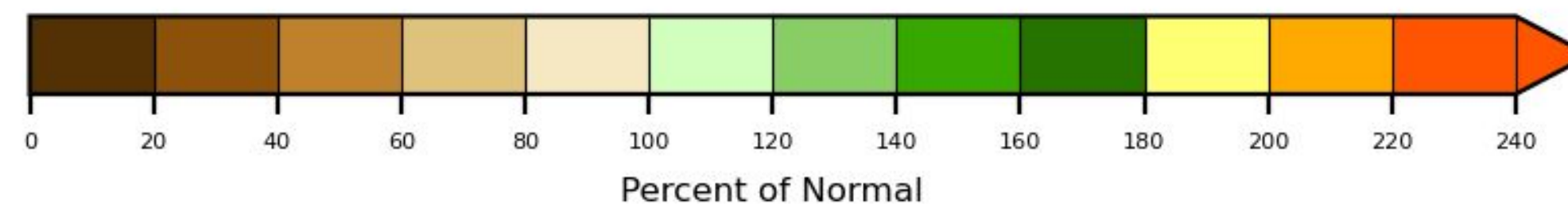
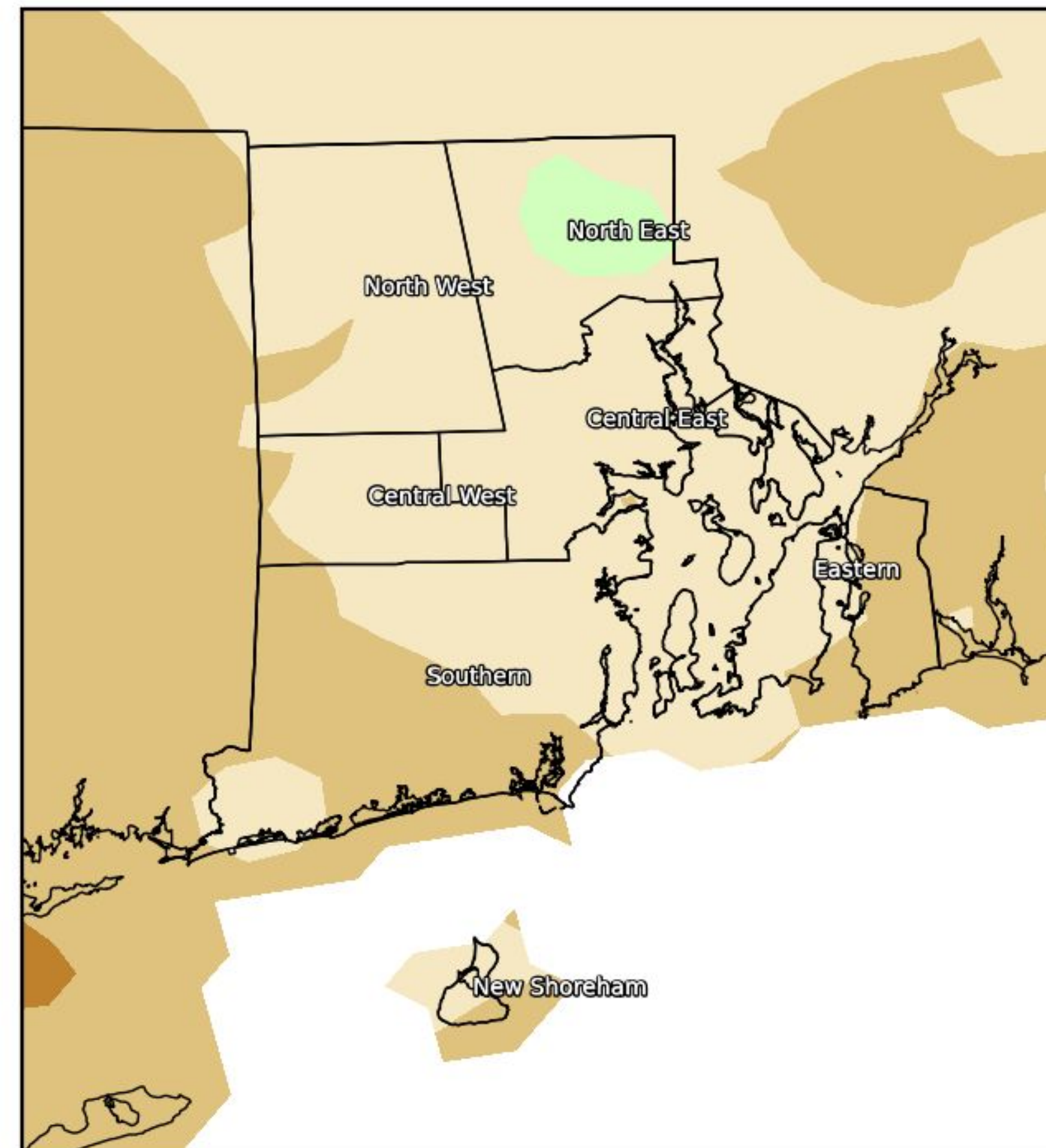
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Precipitation Percent of Normal
January 01, 2025 to April 01, 2025



Precipitation Percent of Normal
October 01, 2024 to April 01, 2025



Rainfall Percent by Region Last 6 Months



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	OCT Percent	NOV Percent	DEC Percent	JAN Percent	FEB Percent	MAR Percent	6 Month Percent (OCT-M AR)
Northwest	12	63	114	35	72	87	65
Northeast	13	66	127	41	105	93	73
Central West	24	77	181	32	63	81	79
Central East	19	59	138	38	101	88	74
Eastern	22	59	128	39	103	77	71
Southern	22	76	143	38	103	88	79
New Shoreham	18	48	93	24	72	58	52
RI Average	19	65	132	35	88	82	70

- **Need 3 consecutive months of near normal (65%+) precipitation to come out of drought**
- **5/7 regions now have two consecutive months above normal (65+%)**
- **6 month departures improving, but still ranging 6-12" below normal with greatest deficits in New Shoreham**

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

CUMULATIVE AVERAGES



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Drought Phase
Normal
Advisory
Watch
Warning
Emergency

	2 Months Feb-Mar	3 Months Jan-Mar	6 Months Oct – Mar	12 Months Apr-Mar
Northwest	80	65	65	80
Northeast	98	79	73	80
Central West	74	59	79	106
Central East	93	75	74	90
Eastern	87	72	71	89
Southern	95	77	79	98
New Shoreham	64	51	52	71
RI Average	84	68	70	88

- Regional averages have improved from last month
- New Shoreham meeting Advisory criteria (2 month cum. <65%)
- Northwest and Central West meeting Watch criteria (3 month cum. <65 or 6 month cum. <70 %)
- New Shoreham meeting Warning Criteria (3 and 6 month cum. < 65%)

7 Day Rain Forecast

Valid 7AM Mon 04/07 – 7AM Mon 04/14

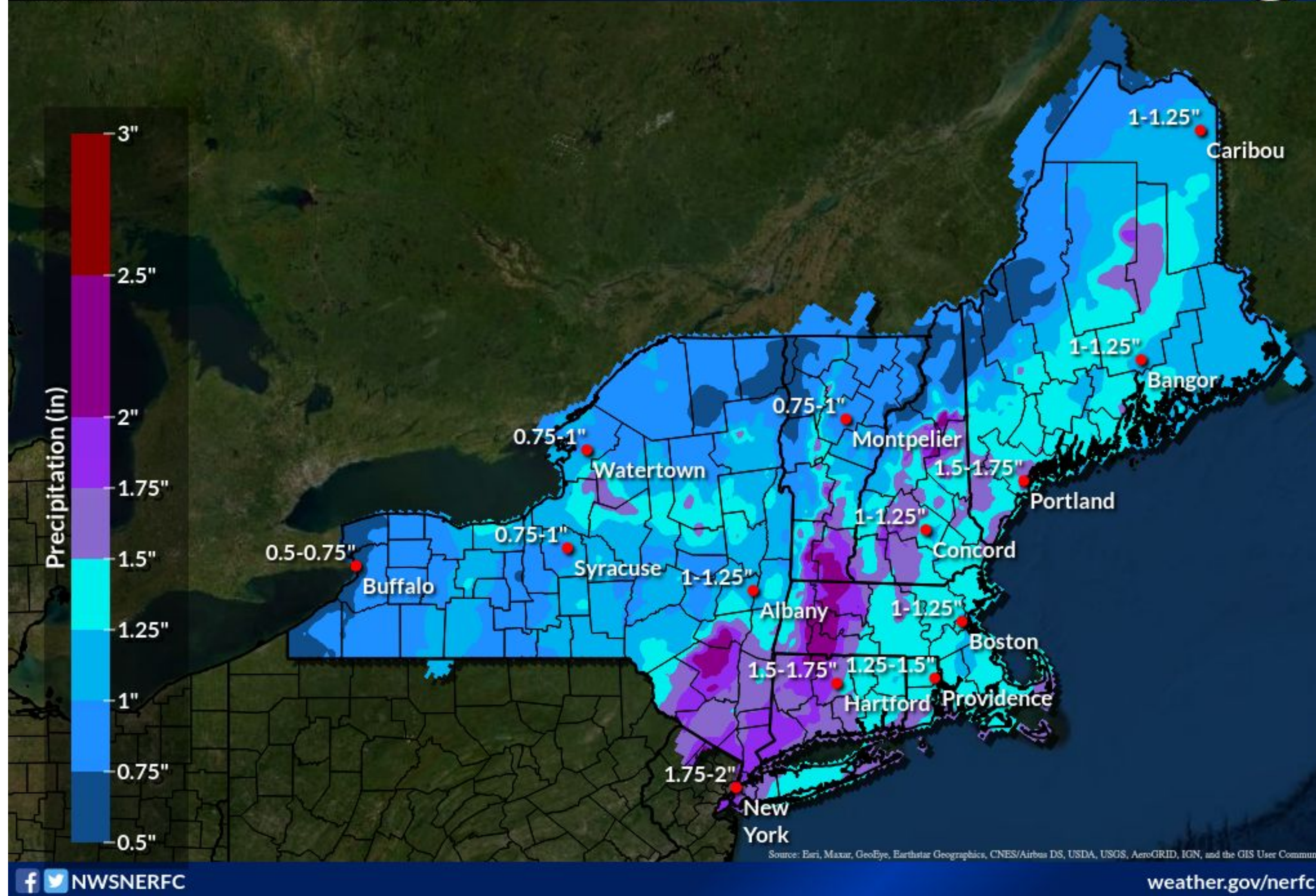


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7 Day WPC Precipitation Forecast

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

River Forecast Center
Northeast RFC
Issued Apr 07, 2025 8:05 AM EDT



Details

- ***1-1.5" of rainfall possible through next Monday***
- ***One system Monday/Tuesday (0.5")***
- ***Second System Friday/Saturday (~1")***

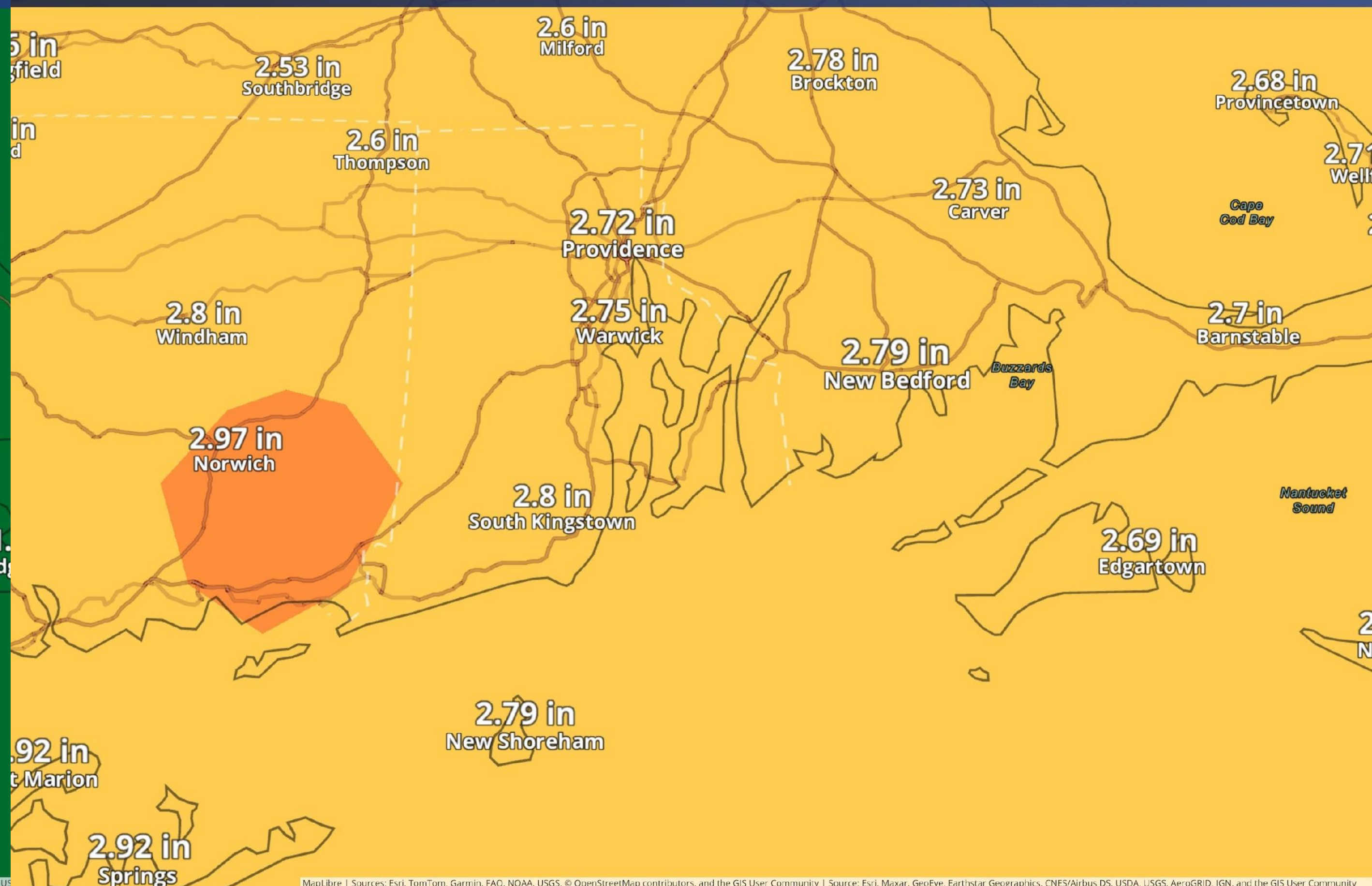
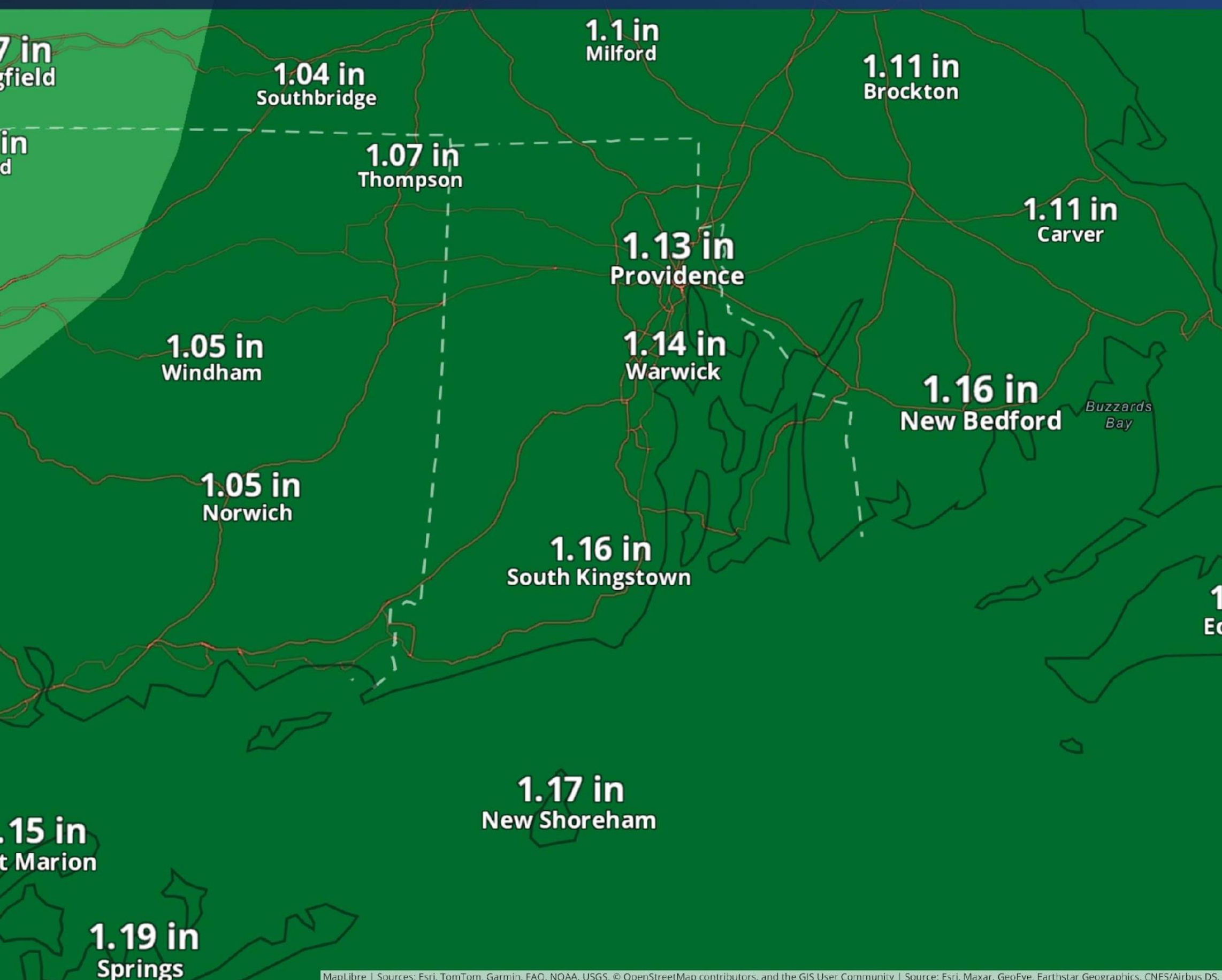
10 Day Probabilistic Rain Forecast

Valid 7AM Mon 04/07 – 7AM Thu 04/17



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Monday, April 7, 2025

www.weather.gov/box

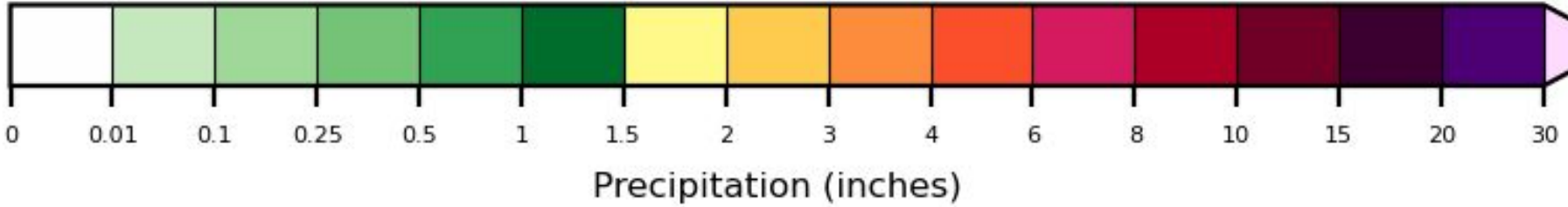
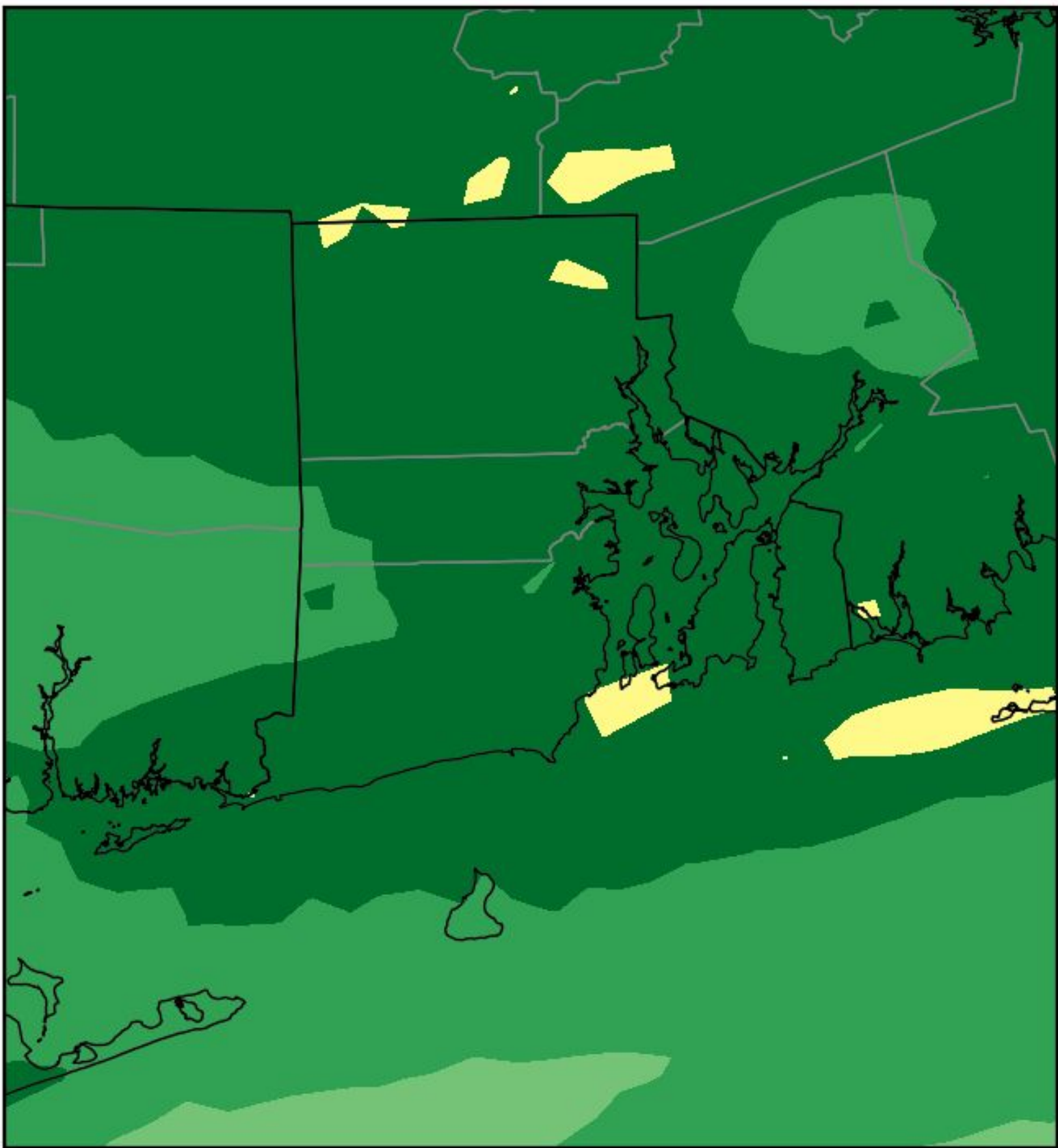
April Precipitation to Date

04/01-04/07

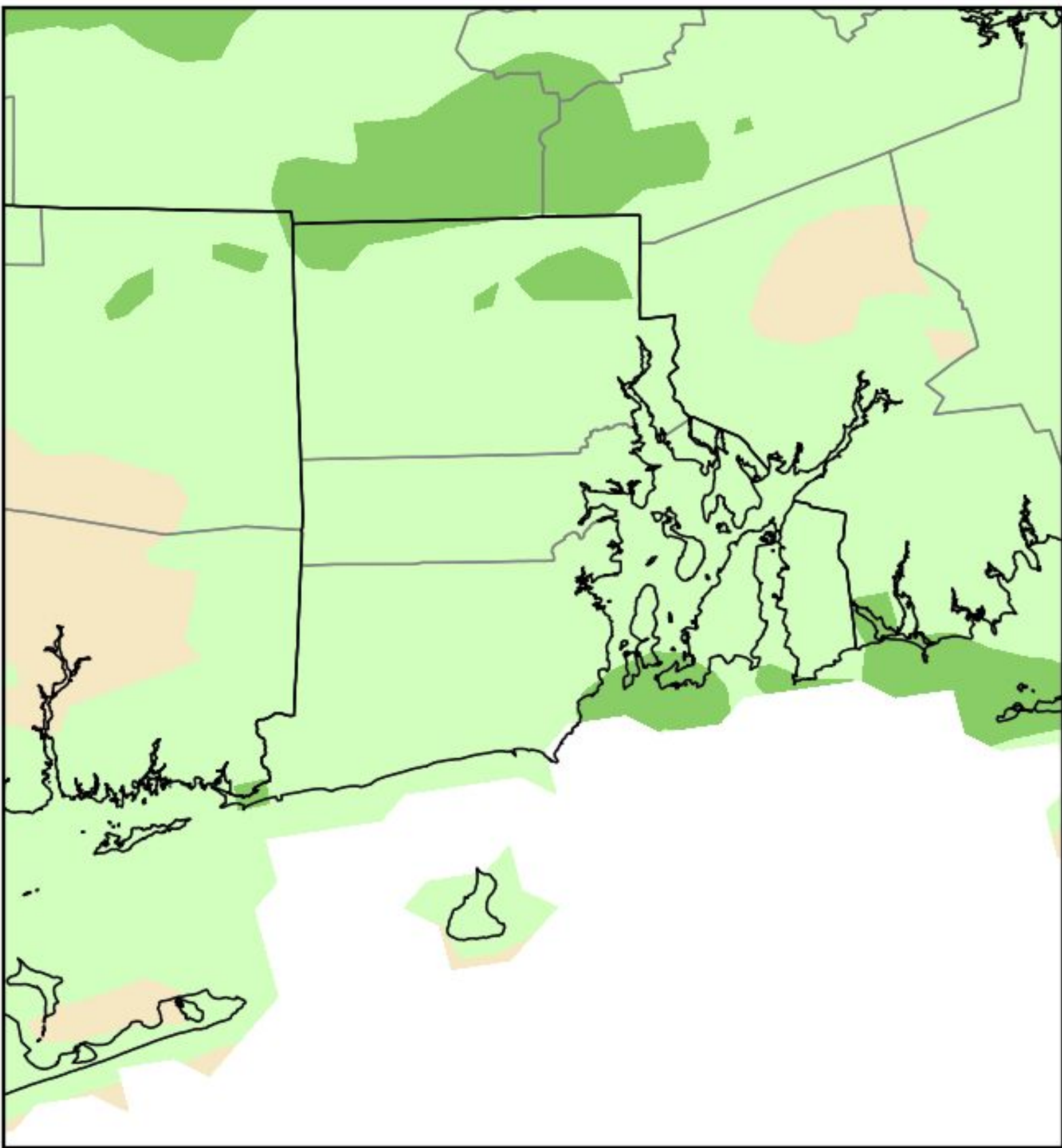


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Accumulated Precipitation (inches)
April 01, 2025 to April 07, 2025



Precipitation Departure from Normal (inches)
April 01, 2025 to April 07, 2025



- Slightly above normal preicp through the first week of April*

CPC 8-14 Day Outlook

April 14 – April 20, 2025

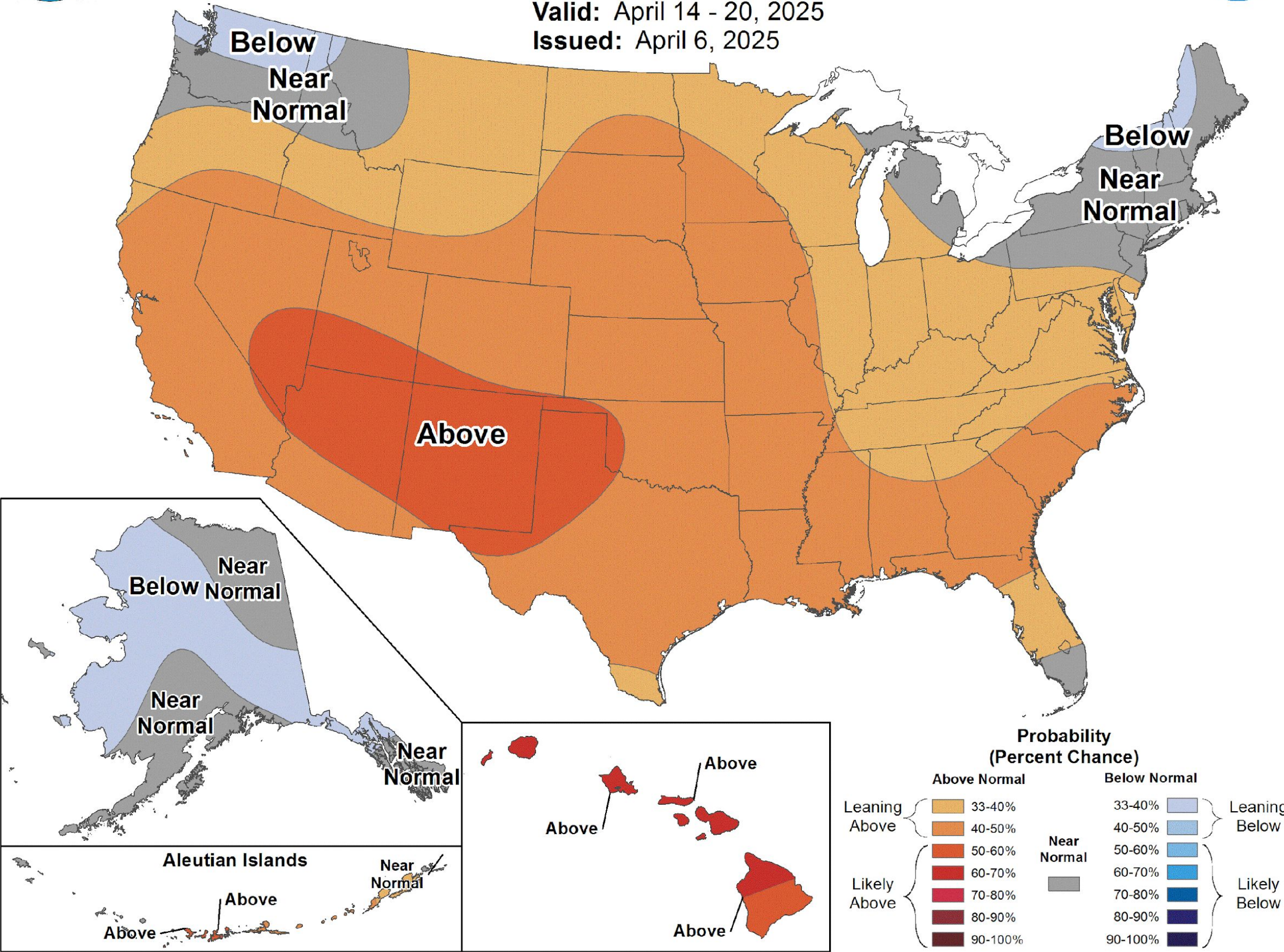


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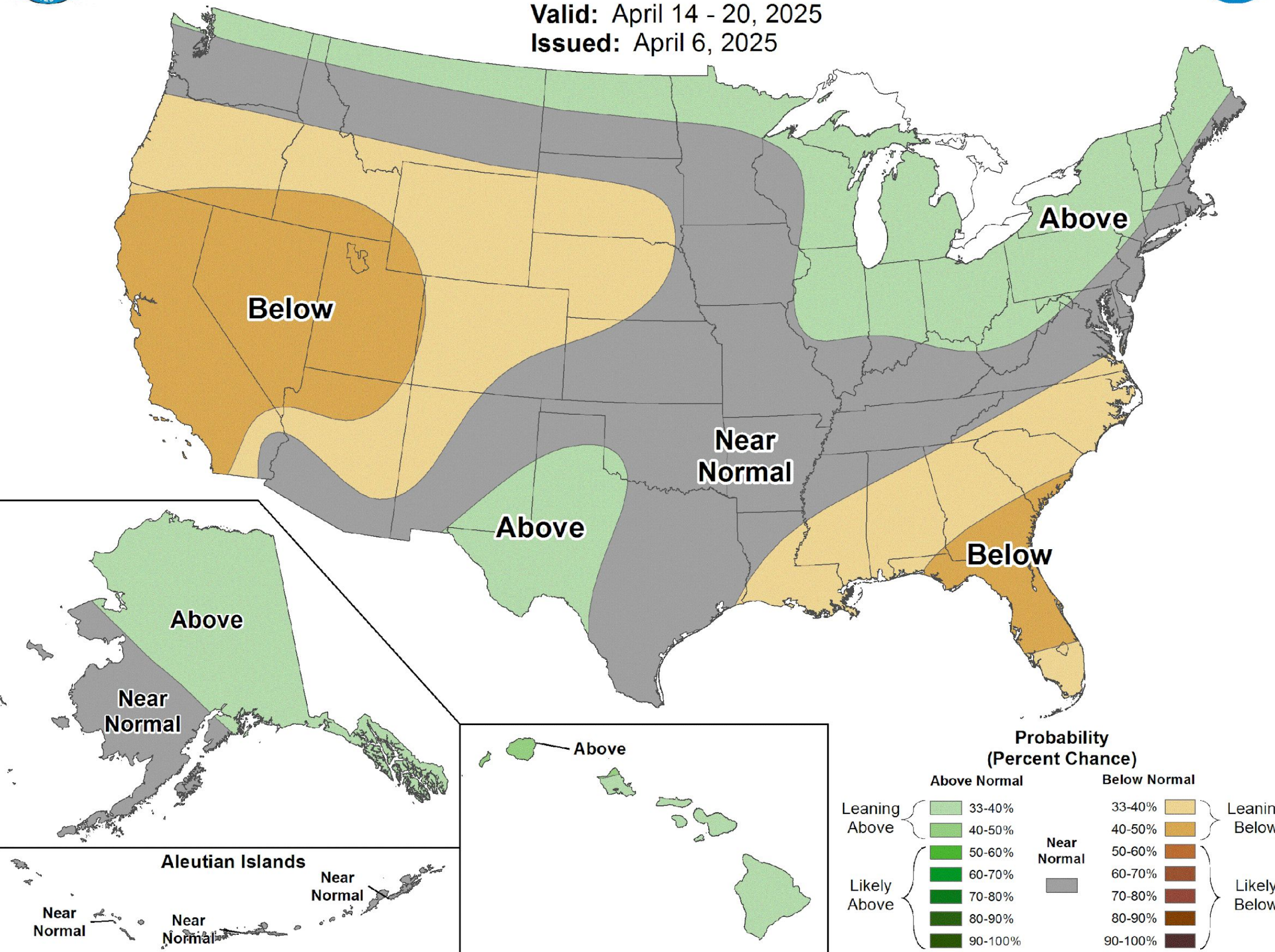
8-14 Day Temperature Outlook

Valid: April 14 - 20, 2025
Issued: April 6, 2025



8-14 Day Precipitation Outlook

Valid: April 14 - 20, 2025
Issued: April 6, 2025



CPC 3-4 Week Outlook

April 19- May 2, 2025



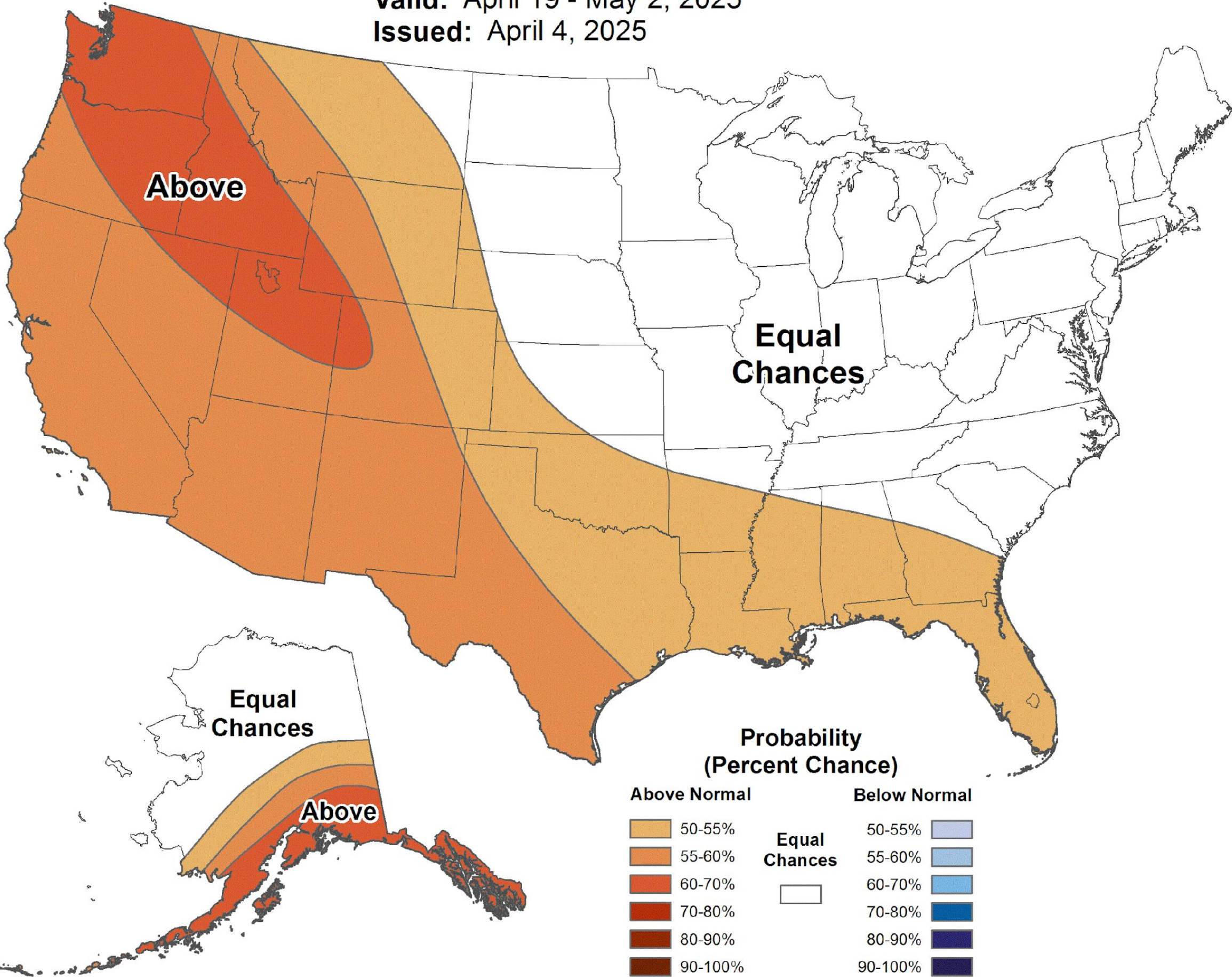
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Weeks 3-4 Temperature Outlook



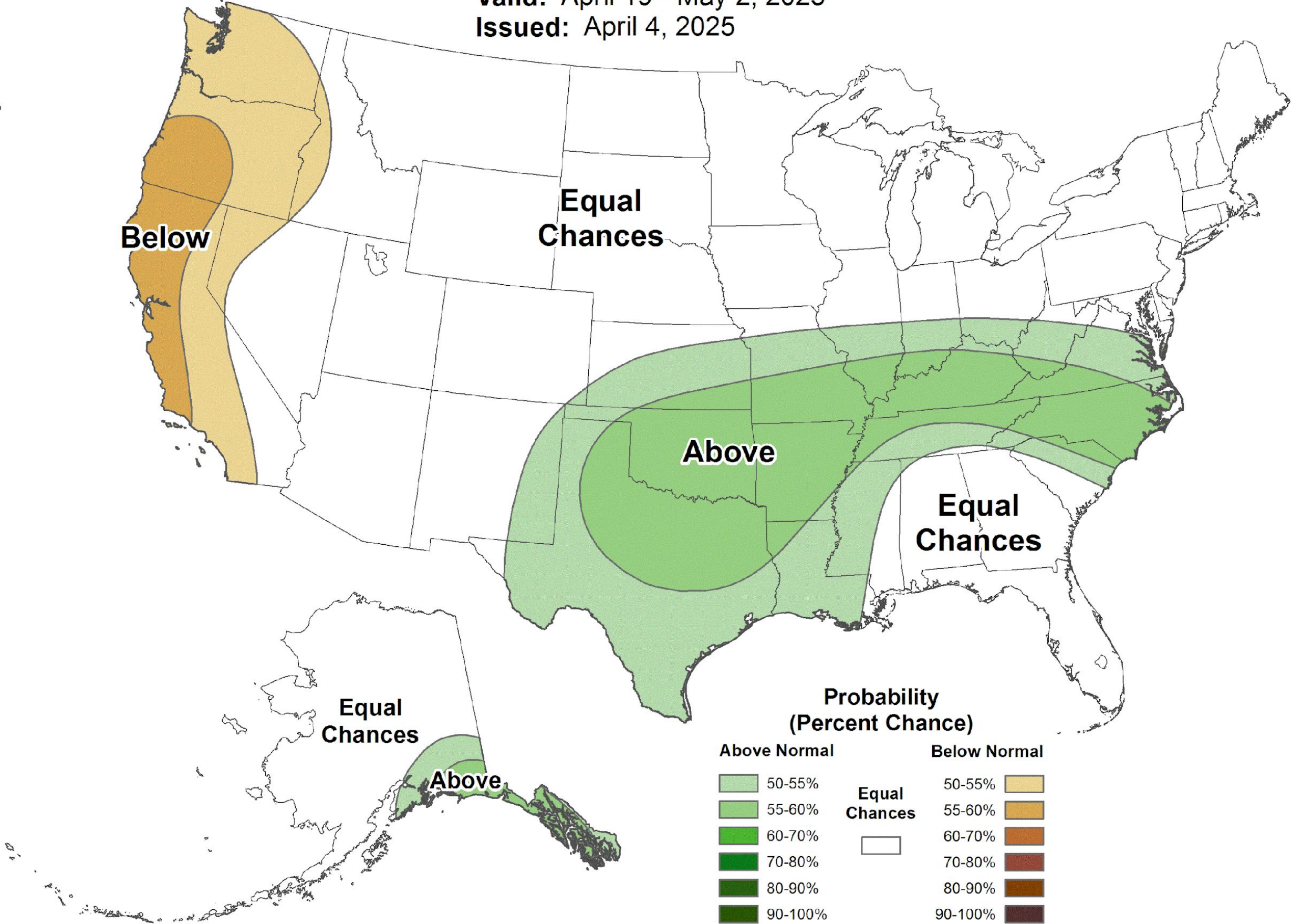
Valid: April 19 - May 2, 2025
Issued: April 4, 2025



Weeks 3-4 Precipitation Outlook



Valid: April 19 - May 2, 2025
Issued: April 4, 2025



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Valid: Apr-May-Jun 2025
Issued: March 20, 2025

Equal Chances

Above

Below

Equal Chances

Above

Below

Above

Probability (Percent Chance)

Above Normal	Near Normal	Below Normal
33-40%	33-40%	33-40%
40-50%	40-50%	40-50%
50-60%		50-60%
60-70%		60-70%
70-80%		70-80%
80-90%		80-90%
90-100%		90-100%

Equal Chances

Leaning Above

Likely Above

Leaning Below

Likely Below

Valid: April-May-June 2025
Issued: March 20, 2025

Probability (Percent Chance)

Above Normal		Near Normal	Below Normal	
Leaning Above	33-40%	33-40%	33-40%	Leaning Below
	40-50%	40-50%	40-50%	
	50-60%		50-60%	
	60-70%		60-70%	
	70-80%		70-80%	
Likely Above	80-90%	Equal Chances	80-90%	Likely Below
	90-100%		90-100%	