Connecticut Drought Conditions Report

Monthly Update for January 2025



Interagency Drought Workgroup February 6, 2025 Regular Meeting

Stage 2 Drought Trigger Summary by Region – February 5, 2025

	Stage 2 Trigger	Fairfield	Hartford	Litchfield	Middlesex	New Haven	New London	Tolland	Windham	Date of Record
										1/31/2025
										*note:
										precipitation is
										approximate
	Two-month total below	50-100% of	50-100% of	75-100% of	75-100% of	75-100% of	75-100% of	75-100% of	75-100% of	based on
Precipitation (1)*	65% of normal (average)	normal	normal	normal	normal	normal	normal	normal	normal	mapping
		60% of	70% of	100% of	100% of	53.8% of	100% of	83.3% of	33.3% of	
	Two out of three months	stations meet	stations	stations meet	stations meet	stations	stations	stations	stations meet	
Groundwater (2)	below the 25th percentile	trigger	meet trigger	trigger	trigger	meet trigger	meet trigger	meet trigger	trigger	1/31/2025
		45.5% of	45.5% of	40% of	25% of	40% of	20% of	100% of	44.4% of	
	Two out of three months	stations meet	stations	stations meet	stations meet	stations	stations	stations	stations meet	
Streamflow (3)	below the 25th percentile	trigger	meet trigger	trigger	trigger	meet trigger	meet trigger	meet trigger	trigger	1/31/2025
	Average levels less than	86% of	91.5% of	104.2% of	96.67% of	93.5% of	87.2% of	100% of	100% of	
Reservoirs (4)	80% of normal	normal	normal	normal	normal	normal	normal	normal	normal	1/31/2025
Palmer Drought Severity Index		out of season	out of	out of season	out of season	out of	out of	out of	out of season	
(5)	(-2.0 to -2.99)	out of season	season	out of season	out of season	season	season	season		1/25/2025
		out of season	out of	out of season	out of coacon	out of	out of	out of	out of season	
Crop Moisture Index (6)	(-1.0 to -1.99)	out of season	season	out of season	out of season	season	season	season	out of season	1/25/2025
VegDRI (seasonal) (7)	Pre-Drought Conditions	out of season	out of season	out of season	out of season	out of season		out of season	out of season	2/2/2025
Fire Danger (8)	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	2/5/2025
U.S. Drought Monitor (9)	Intensity Level D1-D2	D1-D2	D1-D2	D0-D2	D1	D1	D0-D1	D1-D2	D1-D2	1/28/2025

		Drought	Drought
	Drought trigger met across	trigger	trigger not
Key:	majority of region	partially met	met

State Drought Trigger Summary – February 5, 2025

	State Drought Higger Summary 1 Edituary 3, 2023 Stage 2 Trigger Stage 3 Trigger Stage 4 Trigger Stage 5 Trigger Current Conditions									
	Stage 2 Trigger	Stage 3 Irigger	Stage 4 i rigger	Stage 5 Frigger						
					*NOTE: percentages are					
					approximate from mapping.					
					Stage 3 trigger is partially met					
	Two-month total	Three-month total			with 40-100% of normal					
	below 65% of normal	below 65% of normal	Five-month total below	Seven-month total below	precipitation across the entire					
Precipitation (1)*	(average)	(average)	65% of normal (average)	65% of normal (average)	state.					
					Stage 2 Trigger met in Hartford,					
					Litchfield, Middlesex , New					
					London and Tolland Counties.					
	Two out of three	Four consecutive			Stage 2 Trigger partially met in					
	months below the	months below the 25th	Six consecutive months	Ŭ	Fairfield, New Haven, and					
Groundwater (2)	25th percentile	percentile	below the 25th percentile		Windham Counties					
	Two out of three	Four out of five months		Seven consecutive	Stage 2 Trigger met in Tolland					
	months below the	below the 25th	Six out of seven months	months below the 25th	county. Stage 2 Trigger partially					
Streamflow (3)	25th percentile	percentile	below the 25th percentile	percentile	met in all other counties					
					Reservoir levels are averaging					
				Average levels less than	between 86-104.2% of normal					
	Average levels less	Average levels less than	Average levels less than	50% of normal or less	throughout the state. The					
Reservoirs (4)	than 80% of normal	70% of normal	60% of normal	than 50 days of supply	statewide average is 94.88%.					
Palmer Drought Severity Index (5)	(-2.0 to -2.99)	(-3.0 to -3.99)	(-4 or less)	(-4 or less)	out of season					
Crop Moisture Index (6)	(-1.0 to -1.99)	(-2.0 to -2.99)	(-3 or less)	(-3 or less)	out of season					
	Pre-Drought	Moderate Drought	Severe Drought	Extreme Drought						
VegDRI (seasonal) (7)	Conditions	Conditions	Conditions	Conditions	out of season					
					Moderate as of 2/5/25. Fire					
					Danger went back and forth					
					between Low and High					
Fire Danger (8)	Moderate	High	Very High	Extreme	throughout January.					
					Currently, 10.14 % of the state					
					is classified as D2 (Severe					
					Drought), 84.69% of the state is					
					classified as D1 (Moderate					
					Drought), and 5.17% of the					
					state is classified as D0					
U.S. Drought Monitor (9)	Intensity Level D1-D2	Intensity Level D2-D3	Intensity Level D3-D4	Intensity Level D4	(Abnormally Dry)					
	, , , , , , , , , , , , , , , , , , , ,	. ,	,	,	, , , , , , , , , , , , , , , , , , , ,					

		Portion of the state	
		meets drought trigger	
	Majority of the state	and/or regions partially	
Key:	meets drought trigger	meet drought trigger	Drought trigger not met

Methodology:

- (1) Based on monthly precipitation averaged by region, calculated by National Weather Service (NWS).
- (2) Based on monthly assessment of groundwater stations by region, calculated by United States Geological Survey (USGS). Region is identified as meeting trigger when ≥65% of stations in the region meet the

threshold. Region is identified as parially meeting trigger when $\geq 20\%$ of stations in the region meet the threshold.

(3) Based on monthly assessment of stream gauge stations by region, calculated by USGS. Region is identified as meeting trigger when ≥65% of stations in the region meet the

threshold. Region is identified as parially meeting trigger when $\geq 20\%$ of stations in the region meet the threshold.

- (4) Based on latest available reservoir status reports obtained from public water suppliers and compiled by CT Department of Public Health Drinking Water Section.
- 5) Calculated by Climate Prediction Center (CPC) for each State Climate Division and extrapolated to county. Northwestern Climate Division reflective of Hartford,

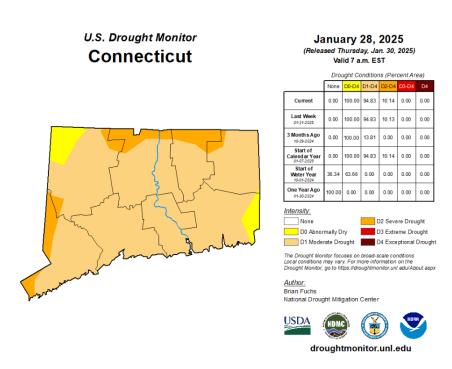
Tolland, Windham counties. Average of Central Climate Division and Coastal Climate Division for Fairfield, New Haven, Middlesex, New London counties.

6) Calculated by CPC for each State Climate Division and extrapolated to county. Northwestern Climate Division reflective of Litchfield county, Central Climate Division reflective of Hartford,

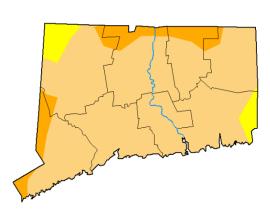
Tolland, Windham counties. Average of Central Climate Division and Coastal Climate Division for Fairfield, New Haven, Middlesex, New London counties.

- (7) Based on visual assessment of geographic extent of each VegDri drought designation in each region, calculated by the National Drought Mitigation Center in collaboration with USGS.
- (8) Based on daily forest fire danger report from CT DEEP Bureau of Natural Resources, Division of Forestry.
- (9) Based on analysis of most recent edition of the U.S. Drought Monitor, produced by the National Drought Mitigation Center

U.S. Drought Monitor (USDM): The state of Connecticut has had some drought classification via the USDM since September 24, 2024. The maps included are from the weeks of January 28th and January 7th. The entire state has remained the same or "status quo" for the month of January. Currently, 10.14 % of the state is classified as D2 (Severe Drought), 84.69% of the state is classified as D1 (Moderate Drought), and 5.17% of the state is classified as D0 (Abnormally Dry)



U.S. Drought Monitor Connecticut



January 7, 2025 (Released Thursday, Jan. 9, 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	94.83	10.14	0.00	0.00		
Last Week 12-31-2024	0.00	100.00	99.24	46.17	0.00	0.00		
3 Month s Ago 10-08-2024	36.80	63.20	0.00	0.00	0.00	0.00		
Start of Calendar Year 01-07-2025	0.00	100.00	94.83	10.14	0.00	0.00		
Start of Water Year 10-01-2024	36.34	63.66	0.00	0.00	0.00	0.00		
One Year Ago 01-09-2024	100.00	0.00	0.00	0.00	0.00	0.00		
Intensity:								
None			D2 Severe Drought					
D0 Abnor	mally D	ry	D3 Extreme Drought					
D1 Mode	rate Dro	ught	D4 Exceptional Drough					

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:

Brad Pugh CPC/NOAA **USDA**







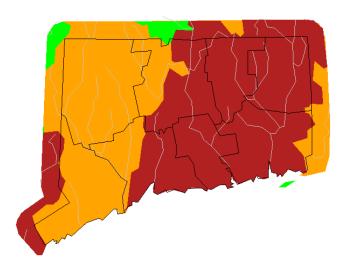
droughtmonitor.unl.edu

<u>Streamflow Levels</u> (via USGS): The map below conveys the 28-day average streamflow as of January 30th. Streamflow across the state have worsened over the last month. The map below illustrates streamflow levels mostly at Below normal and Much below normal levels for this time of year.

Map of 28-day average streamflow compared to historical streamflow for the day of the year (Connecticut)



Thursday, January 30, 2025



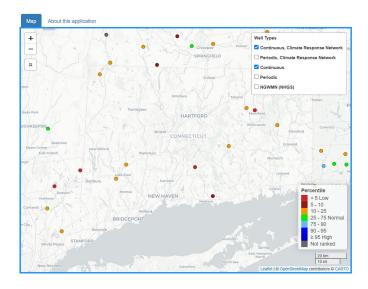
■USGS

Explanation - Percentile classes									
	244	<10	10-24	25-75	76-90	>90	High	N - D-1-	
"	Low	Much below normal	Below normal	Normal	Above normal	Much above normal		No Data	

<u>Groundwater Levels</u> (via USGS): The following maps are from January 31st – the first map displays continuously monitored wells, while the second map displays periodic measured wells. The first map shows wells at below normal (10-25%) and much below normal (5-10%) levels. The second map shows a similar mix, with the addition of a few wells at normal (25-75%) levels. Generally across the state, groundwater levels saw some improvements at the end of December and in early January but have since been declining.

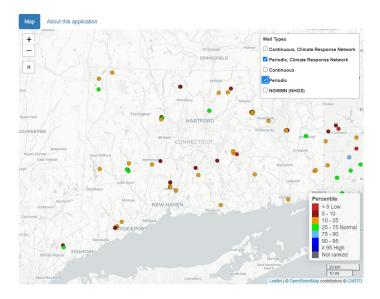
Groundwater Levels in New England

Recent conditions relative to historical monthly statistics

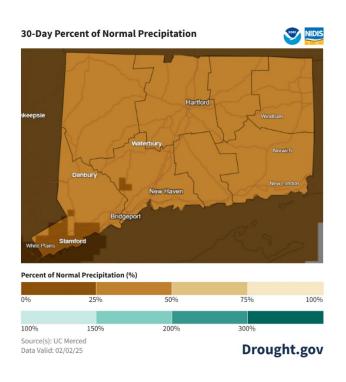


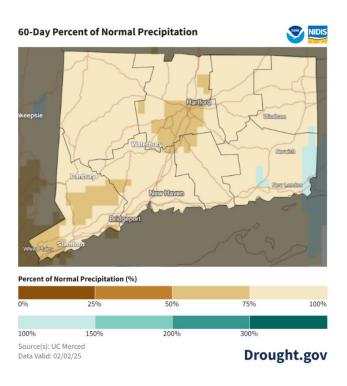
Groundwater Levels in New England

Recent conditions relative to historical monthly statistics



January Precipitation: Below are 60-Day and 30-Day Percent of Normal Precipitation maps dated February 2nd illustrating drier than normal conditions within the last month, and near normal conditions over the last two months.





Fire Danger Levels from CT DEEP:

CT DEEP Forestry monitors wildfire conditions regularly and moves to a daily measurement when conditions are drier and the risk of wildfires is greater. In order, their fire danger ranking scheme is: **LOW, MODERATE, HIGH, VERY HIGH, AND EXTREME**. According to CT DEEP Forestry, wildfire danger levels in the state were as follows for the month of January and the first week of February:

Week of 12/31/24: LOW
 1/4/25 – 1/5/24: HIGH

• 1/6/25: **LOW**

• 1/7/25-1/10/25: **HIGH**

• 1/11/25: **LOW**

• 1/14/25 - 1/15/25: **HIGH**

• 1/16/26 – 1/18/25: **MODERATE**

• 1/19/25: **LOW**

• Week of 1/22/25: **LOW**

• Week of 2/5/25: **MODERATE**

Surface Reservoir Capacity Measurements and Trends 1/31/2025 Update

Despite a Dry January Reservoirs Continue to be in Good Shape!

Thirty-four surface water systems measure their reservoir capacities weekly and report the readings to the Drinking Water Section (DWS). The attached table summarizes the most recent measurements in percent full and shows the week-to-week trend of their capacities.

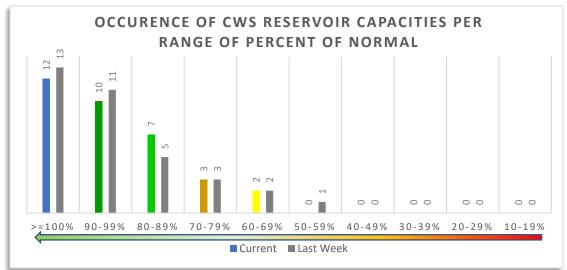
Key takeaways:

>= 100% of Normal n=34 $\frac{1}{2}$

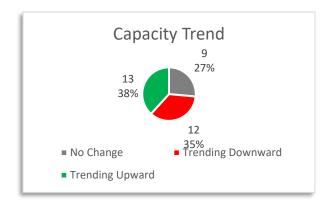
State Average Percent Full 85.2% last week

Average Percent of Normal 93.1% 91.5% last week

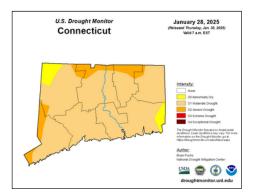
• 8 reservoir systems have reported that they are currently 100% full. (No change since last week)

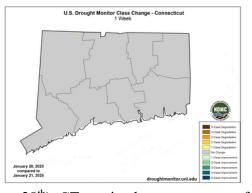


- The gray bars indicate last week's measurements, and the colored bar is the current measurement. In non-drought conditions, the graph above would have all of the systems in the >=100% of normal column (n=34).
- 13 systems' short-term week to week trend is upward (-4 since last week). 12 systems are trending downward in capacity from their previous measurements (+3 since last week). 9 systems have had no change in capacity (+1 since last week).

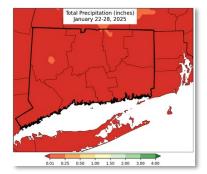


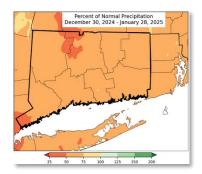
- Putnam Water, East Lyme, Danbury Water, and Bristol Water have entered into their 1st drought stage. New Britain Water is approaching their 1st drought stage trigger.
- US Drought Monitor: US Drought Monitor made no changes in drought classification this week.
- https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CT

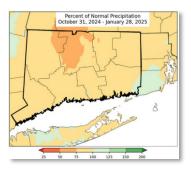




• Last USDM week (between January 22nd and January 28th), CT received trace amounts of precipitation across the state (Map 1). The 30-day Percent of Normal Precipitation map shows below normal for the entire state (Map 2). The long-term trend over the last 90 days still shows below normal rainfall for the majority of CT (Map 3). The 7-Day Streamflow map shows below or much below normal for most streams/rivers in CT. Real time monitoring groundwater wells shows many wells below or much below normal across the state.

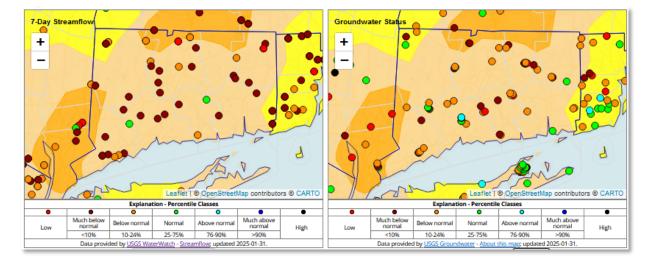






Map 1-7 Day Total Precipitation

Map 2-30 Day Percent of Normal Precipitation Map 3 – 90 Day Percent of Normal Precipitation



PWSID	PWS Name	Most Recent Reading Date	Percent Full	Current Status	Trend F	listorical Average	Percent of Normal	Previous Date	Previous Percent Full	County_Served
CT0570011	Aquarion Water Co of CT-Greenwich Systen	1/12/2025	61.00	No Drought Stage	1	84.20	72	1/5/2025	60.70	FAIRFIELD
CT1030021	South Norwalk Electric & Water	1/27/2025	65.80	No Drought Stage		87.80	75	1/21/2025	65.80	FAIRFIELD
CT0150011	Aquarion Water Co of CT-Main System	1/12/2025	75.50	No Drought Stage	<u> </u>	91.30	83	1/5/2025	75.70	FAIRFIELD
CT1350011	Aquarion Water Co of CT-Stamford	1/12/2025	68.20	No Drought Stage	1	80.60	85	1/5/2025	67.90	FAIRFIELD
CT0340011	Danbury Water Department	1/26/2025	80.00	Drought Watch	<u> </u>	89.50	89	1/19/2025	80.40	FAIRFIELD
CT1030011	Norwalk First Taxing District	1/26/2025	91.40	No Drought Stage	<u> </u>	95.10	96	1/19/2025	91.60	FAIRFIELD
CT0090011	Bethel Water Dept	1/12/2025	100.00	No Drought Stage		98.10	102	1/5/2025	100.00	FAIRFIELD
CT0473011	CTWC - Northern Reg-Western System	1/23/2025	60.70	No Drought Stage	<u>↓</u>	90.80	67	1/9/2025	62.10	HARTFORD
CT0890011	New Britain Water Department	1/23/2025	65.50	No Drought Stage	↓	74.60	88	1/9/2025	67.50	HARTFORD
CT0170011	Bristol Water Department	1/5/2025	81.20	Emergency Phase -1	1	91.60	89	12/29/2024	75.40	HARTFORD
CT0770021	Manchester Water Department	1/26/2025	90.90	No Drought Stage	1	97.20	94	1/19/2025	90.40	HARTFORD
CT0640011	Metropolitan District Commission	1/26/2025	89.60	No Drought Stage	↓	88.60	101	1/19/2025	90.00	HARTFORD
CT1310011	Southington Water Department	1/25/2025	100.00	No Drought Stage		90.80	110	1/18/2025	100.00	HARTFORD
CT0980011	Aquarion Water Co of CT-Norfolk System	1/12/2025	100.00	No Drought Stage		99.60	100	1/5/2025	100.00	LITCHFIELD
CT1620011	Winsted Water Works	1/26/2025	100.00	No Drought Stage		99.40	101	1/19/2025	100.00	LITCHFIELD
CT1220011	Aquarion Water Co of CT-Salisbury Sys	1/12/2025	100.00	No Drought Stage		98.00	102	1/5/2025	100.00	LITCHFIELD
CT1250011	Sharon Water & Sewer Commission	1/4/2025	100.00	No Drought Stage		94.80	106	12/28/2024	100.00	LITCHFIELD
CT1430011	Torrington Water Company	1/12/2025	94.20	No Drought Stage	↑	83.80	112	1/5/2025	93.20	LITCHFIELD
CT0830011	Middletown Water Department	12/29/2024	71.00	Drought Alert	^	82.00	87	12/22/2024	68.40	MIDDLESEX
CT0261031	CTWC - Shoreline Region-Chester System	1/23/2025	98.40	No Drought Stage	\	99.10	99	1/9/2025	99.40	MIDDLESEX
CT0830021	Connecticut Valley Hospital	1/20/2025	98.80	No Drought Stage	↑	94.60	104	1/6/2025	97.70	MIDDLESEX
CT1510011	Waterbury Water Department	1/19/2025	82.70	No Drought Stage	<u>↓</u>	94.40	88	1/12/2025	83.20	NEW HAVEN
CT0930011	Regional Water Authority	1/26/2025	76.40	No Drought Stage	↓	84.10	91	1/19/2025	76.70	NEW HAVEN
CT0800011	Meriden Water Division	12/29/2024	83.80	No Drought Stage	1	90.10	93	12/22/2024	78.60	NEW HAVEN
CT0880011	CTWC - Naugatuck Region-Central System	1/23/2025	90.10	No Drought Stage	↑	95.90	94	1/9/2025	90.00	NEW HAVEN
CT1480011	Wallingford Water Department	1/24/2025	82.30	No Drought Stage	\	84.70	97	1/17/2025	83.20	NEW HAVEN
CT0608011	CTWC - Shoreline Region-Guilford System	1/23/2025	91.60	No Drought Stage	1	93.50	98	1/9/2025	90.70	NEW HAVEN
CT0580011	Jewett City Water Company	1/13/2025	61.80	No Drought Stage	1	96.60	64	1/6/2025	60.70	NEW LONDON
CT1370011	Aquarion Water Co of CT-Mystic	1/12/2025	77.40	No Drought Stage	$\downarrow \downarrow$	98.30	79	1/5/2025	91.20	NEW LONDON
CT0950011	New London Dept. of Public Utilities	1/19/2025	70.20	No Drought Stage	1	74.60	94	1/12/2025	69.20	NEW LONDON
CT1040011	Norwich Public Utilities	1/25/2025	91.70	No Drought Stage	1	95.10	96	1/18/2025	91.40	NEW LONDON
CT0590011	Groton Utilities	1/20/2025	97.90	No Drought Stage	\	94.70	103	1/13/2025	98.10	NEW LONDON
CT1340011	CTWC - Northern Reg-Stafford System	1/23/2025	100.00	No Drought Stage		100.00	100	1/9/2025	100.00	TOLLAND
CT1630011	Windham Water Works	1/26/2025	100.00	No Drought Stage		100.00	100	1/19/2025	100.00	WINDHAM
			85.24			91.57	93.08		Ave Percent of Normal by	County
\(\frac{\frac{1}{2}}{2}\)	-Increase since last measurement (less than 10% increase) -Increase since last measurement (10% or greater increase) -Decrease since last measurement (less than 10% decrease) -Decrease since last measurement (10% or greater decrease) Same measurement as the previous measurement			Number of systems: Greater than or equal to 100% Between 90% and 99% of Nor Less than 90% of Normal At 100% Full			12 10 12 8			86.00 FAIRFIELD 91.50 HARTFORD 104.20 LITCHFIELD 96.67 MIDDLESEX 93.50 NEW HAVEN 87.20 NEW LONDON

100.00 TOLLAND





			Number of	Number of wells			
		Number of	wells	below normal			
		wells	below normal	for 4 or more	Percent		
		below	for 2 out of last	consecutive	below	Percent	Percent
Name	Total	normal	3 months*	months	normal	stage 2	stage 3
Fairfield	10	10	6	2	100	60	20
Hartford	10	9	7	1	90	70	10
Litchfield	4	3	4	1	75	100	25
Middlesex	6	6	6	3	100	100	50
New Haven	13	10	7	0	76.9	53.8	0
New London	5	5	5	2	100	100	40
Tolland	12	12	10	1	100	83.3	8.3
Windham	6	4	2	0	66.7	33.3	0///

END OF JANUARY 2025
GROUNDWATER SUMMARY BY
COUNTY *BEGINNING NOV. 2024



Caution: stats based on incomplete data due to ice in rivers in Jan. – see Excel table for details

		Number of streamgages	Number of streamgages below normal		Percent		
		below	for 2 out of last		below	Percent	Percent
Name	Total	normal	3 months	last 5 months	normal	stage 2	stage 3
Fairfield	11	6	5	0	54.5	45.5	0
Hartford	11	6	5	1	54.5	45.5	9.1
Litchfield	10	4	4	1	40	40	10
Middlesex	4	1	1	0	25	25	0
New Haven	5	2	2	0	40	40	0
New London	5	1	1	0	20	20	0
Tolland	1	1	1	0	100	100	0
Windham	9	4	4	1	44.4	44.4	11.1

DECEMBER 2025 STREAMFLOW SUMMARY BY COUNTY





CT Interagency Drought Workgroup NWS Update

Thursday, February 6th 2025
Prepared by: NWS WFO Boston, MA



January Precipitation

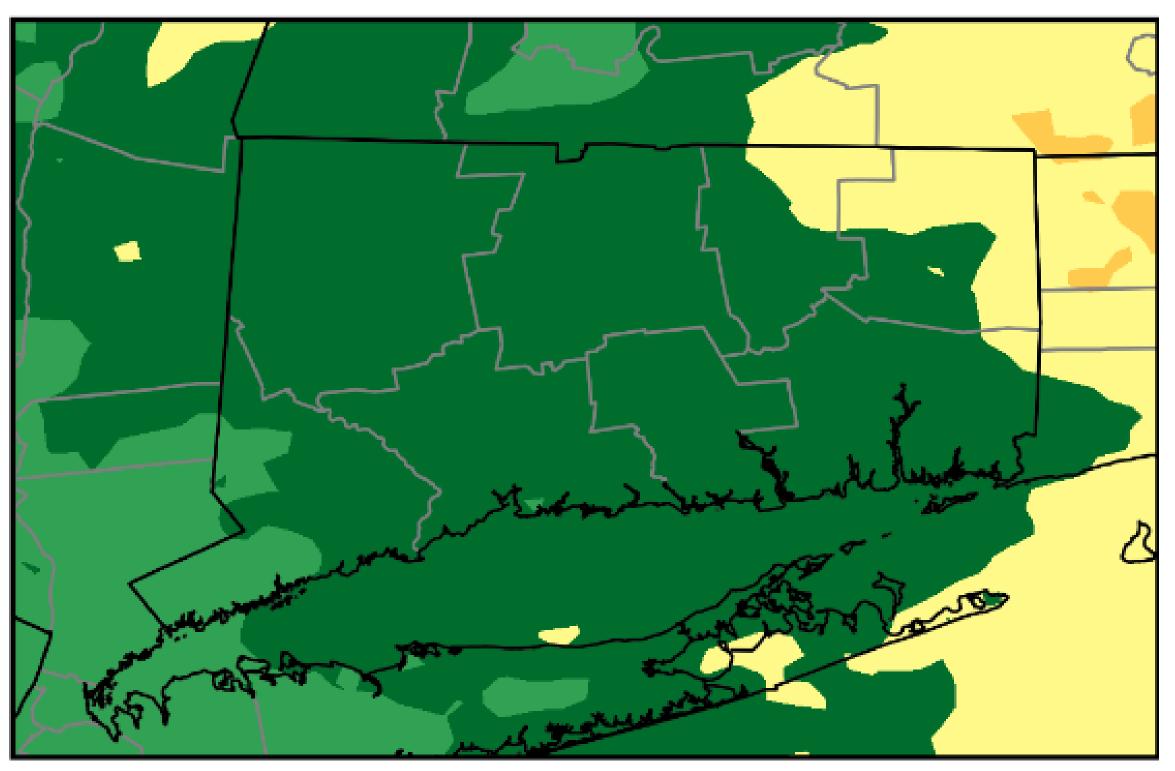


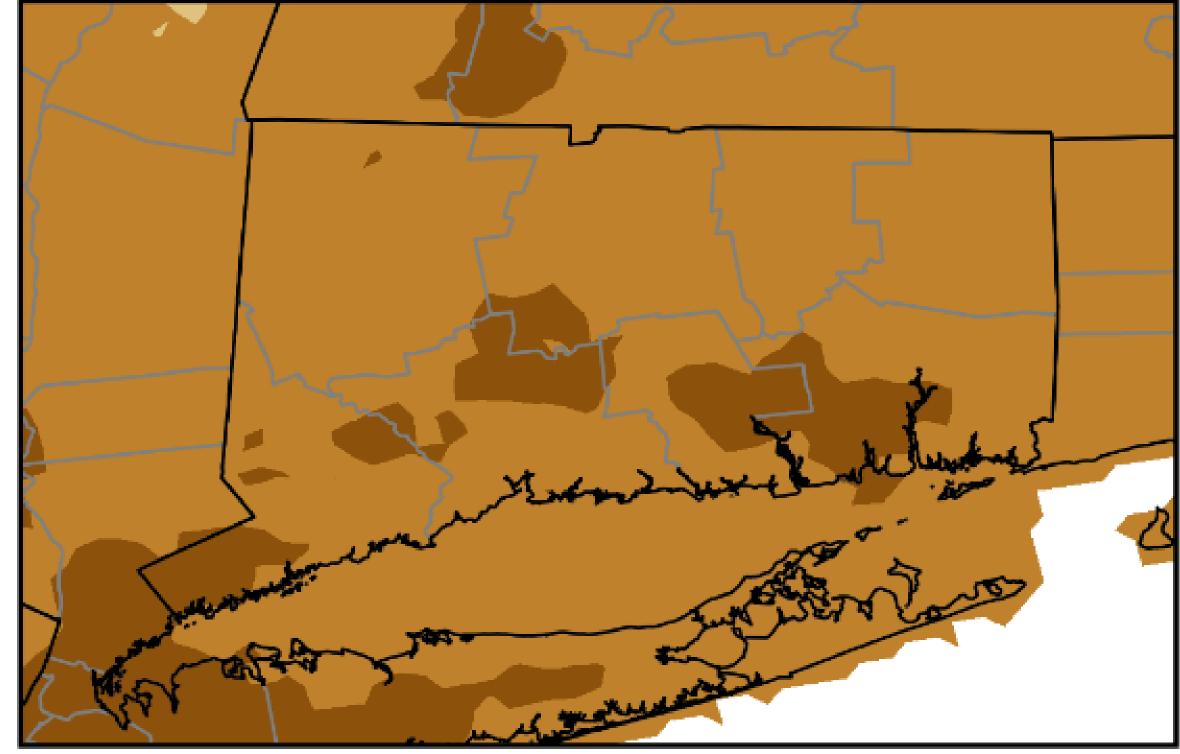
Albany, NY WEATHER FORECAST OFFICE

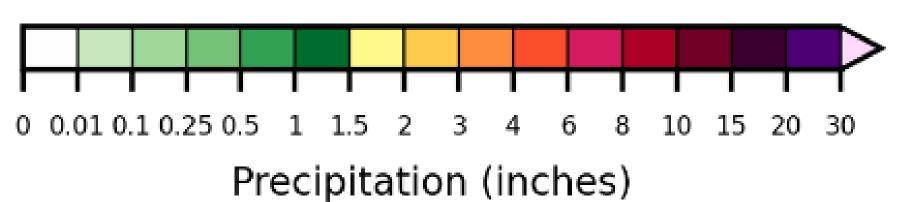
I-2" of liquid equivalent precipitation in January. I.5 to 3" below normal

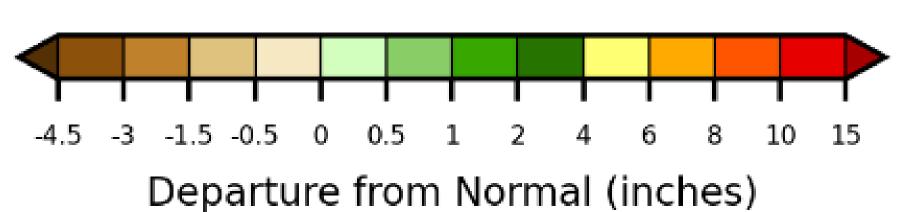
Accumulated Precipitation (inches) January 01, 2025 to February 01, 2025

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









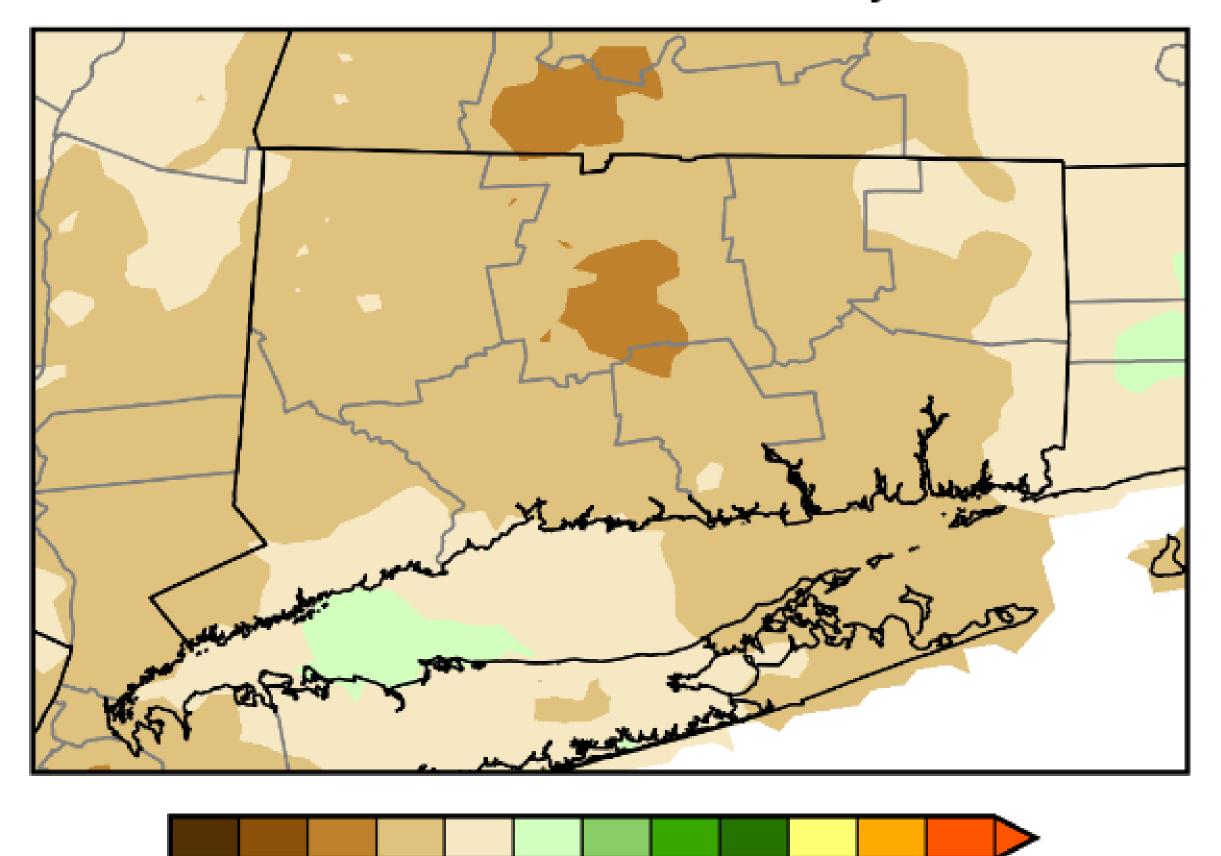
2/5/2025 10:45 AM www.weather.gov/box

3 and 6 Month Percent of Normal Precip

Albany, NY
WEATHER FORECAST OFFICE

I-2" of liquid equivalent precipitation in January. I.5 to 3" below normal

Precipitation Percent of Normal November 01, 2024 to February 01, 2025

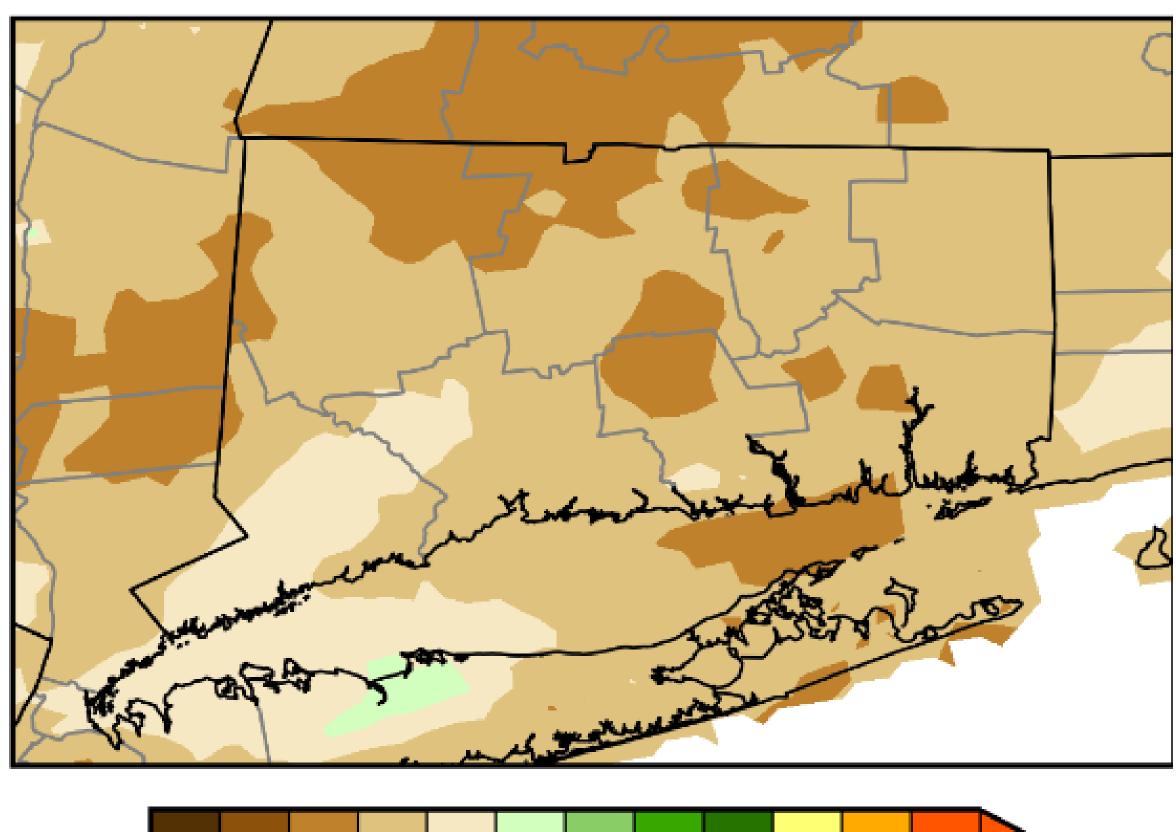


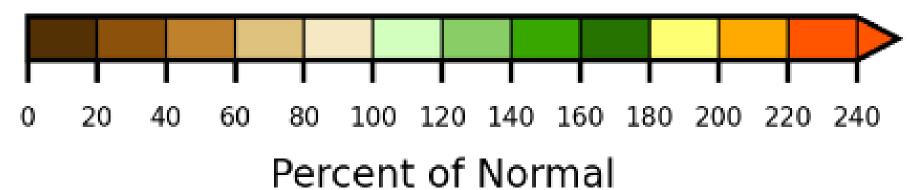
Percent of Normal

100 120 140 160 180 200 220 240

20

Precipitation Percent of Normal August 01, 2024 to February 01, 2025





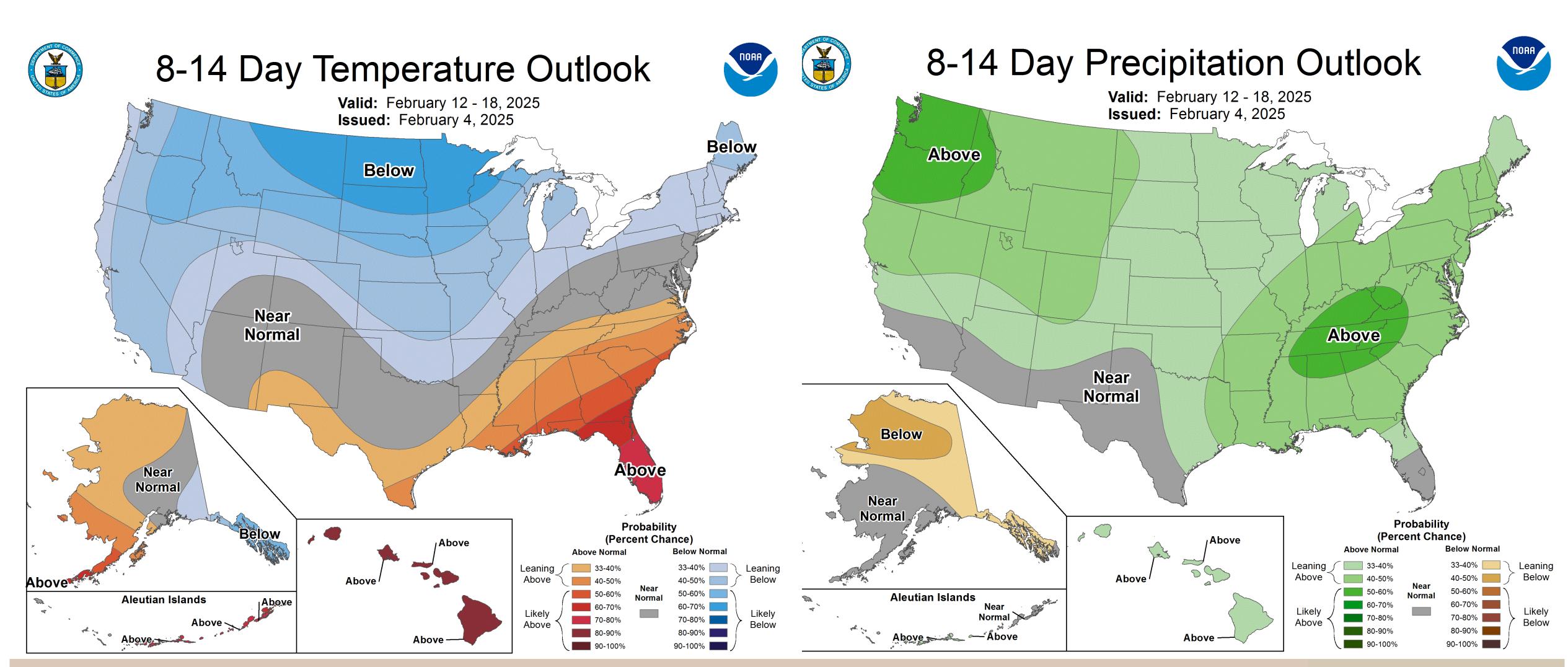
2/5/2025 10:45 AM www.weather.gov/box

CPC 8-14 Day Outlook

WEATHER SERVICE

Albany, NY
WEATHER FORECAST OFFICE

Leaning below normal temperatures and above normal precipitation

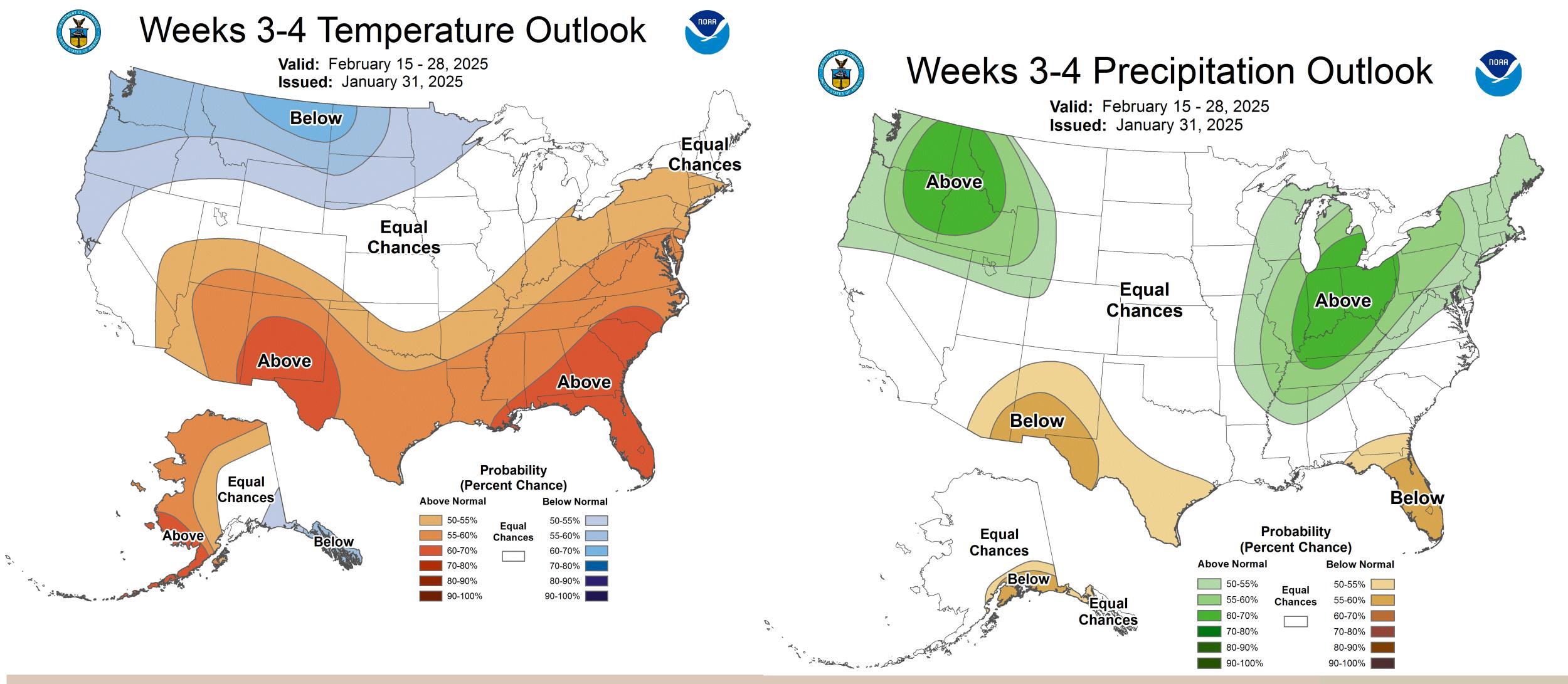


CPC 3-4 Week Outlook

EATHER SERVICES

Albany, NY WEATHER FORECAST OFFICE

Leaning above normal temperatures and above normal precipitation



CPC 3 Month Outlook (Feb-Apr)

EATHER SERVICE

Albany, NY
WEATHER FORECAST OFFICE

Leaning above normal temperatures

