

# Connecticut Drought Conditions Report

Monthly Update for August 2023



Interagency Drought Workgroup  
September 7, 2023  
Regular Meeting

**CT Interagency Drought Workgroup  
Regular Meeting  
September 7, 2023  
1:00 PM - 2:30 PM**

## Microsoft Teams meeting

[Click here to join the meeting](#)

Meeting ID: 274 962 551 675, Passcode: uCZtXZ

[Download Teams](#) | [Join on the web](#)

**Or call in (audio only)**

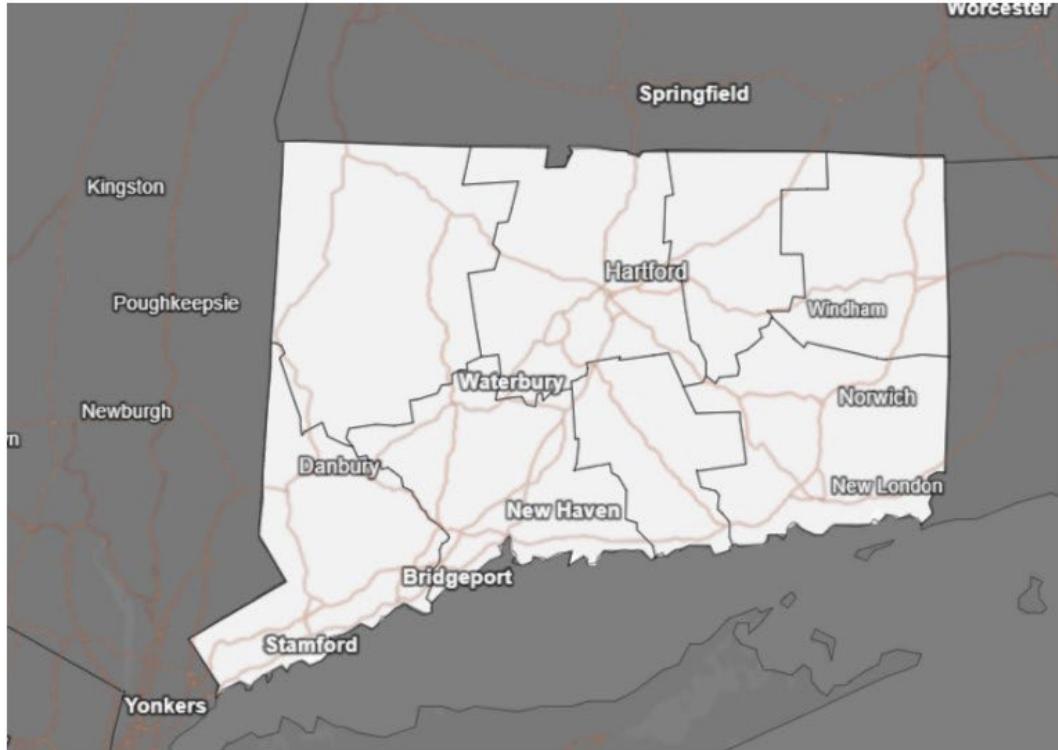
[+1 860-840-2075,,817266018#](#) (Hartford) Phone Conference ID: 817 266 018#

## Agenda

1. Call to order and seating of voting members
2. Adoption of [August 3, 2023, meeting minutes](#) - VOTE
3. State Drought Coordinator Report
  - a. Review of August monthly data and other relevant information
  - b. State Agency Representative Reports
  - c. Drought stage changes if warranted - VOTE
4. Business
  - a. Post-2022 Drought Actions
    - i. [Section VI - Drought Recovery](#)
    - ii. After-Action/Improvement Plan Report - VOTE
  - b. [Drought Plan](#) Review
    - i. Agency updates on [plan priority areas](#)
  - c. Other
5. Public Comment
6. Next Meeting – October 5, 2023
7. Adjourn

**U.S. Drought Monitor (USDM):** On August 1, 2023 the USDM removed the remaining D0 (Abnormally Dry) area in Southwest Fairfield County. Since the beginning of the month through August 31<sup>st</sup>, Connecticut has no drought intensity via the USDM.

## U.S. Drought Monitor



### Drought & Dryness Categories

% of CT

 D0 – Abnormally Dry	0.0%
 D1 – Moderate Drought	0.0%
 D2 – Severe Drought	0.0%
 D3 – Extreme Drought	0.0%
 D4 – Exceptional Drought	0.0%
 Total Area in Drought (D1-D4)	0.0%

Source(s): NDMC, NOAA, USDA

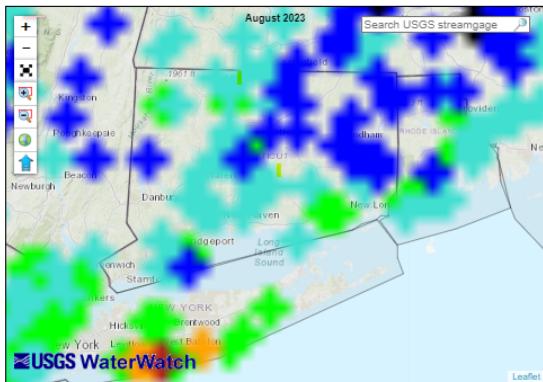
Data Valid: 08/29/23

**Drought.gov**

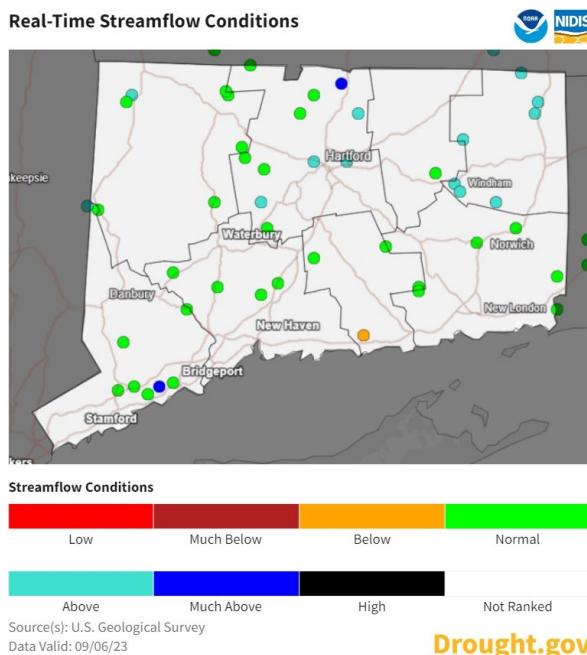
**Streamflow Levels:** In early August, streamflow and groundwater levels across the state ranged from Normal Conditions to Much Above Normal Conditions. Towards the end of the month this came down slightly as more gauges registered in the Normal to Above Normal Conditions.



Map of monthly average streamflow compared to historical streamflow for the month of the year



**Streamflow Map 1: Monthly Average Streamflow for August 2023**

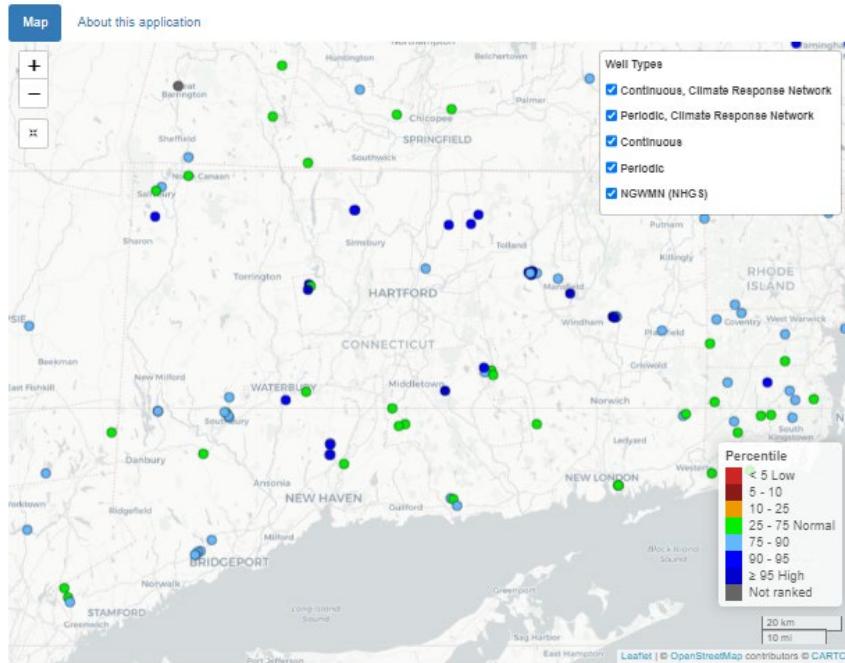


**Streamflow Map 2: Real-Time Streamflow Conditions as of 9/6/23**

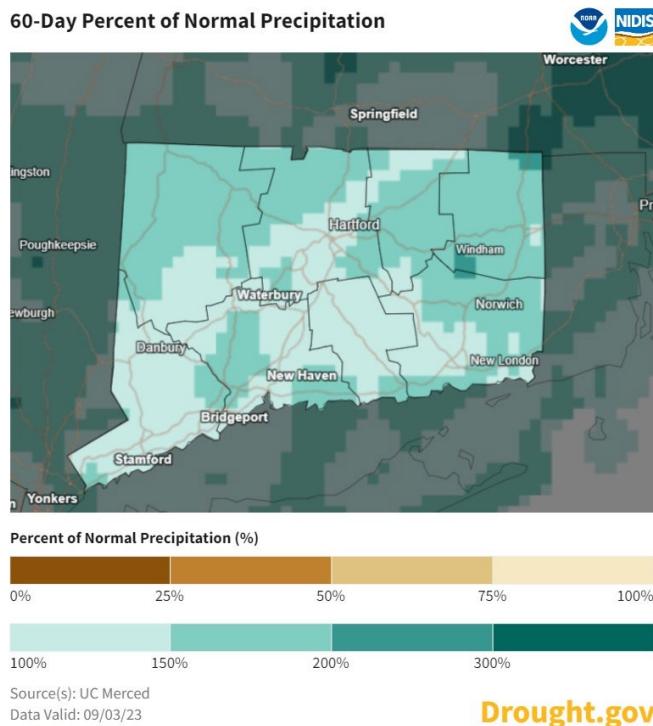
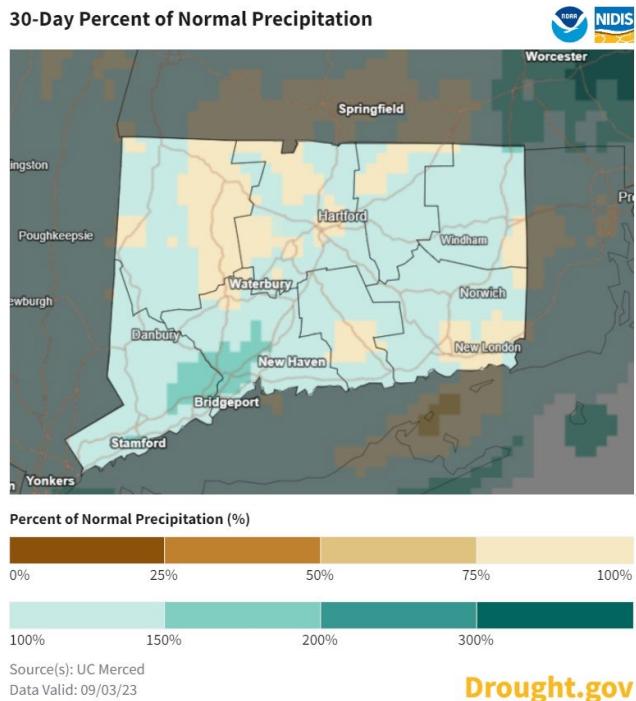
**Groundwater Levels:** Throughout the month of August 2023, groundwater levels mirrored the trends of streamflow levels – ranging between Normal and Above Normal levels throughout the state. Below is a map of the up-to-date conditions for periodic and continuous wells.

## Groundwater Levels in New England

Recent conditions relative to historical monthly statistics



**Precipitation:** The significant amount of rainfall experienced between mid-July through early August has contributed to the above average streamflow and groundwater levels. Below are the most-recent 30-day and 60-day Percentage Normal Precipitation maps to further illustrate this pattern.



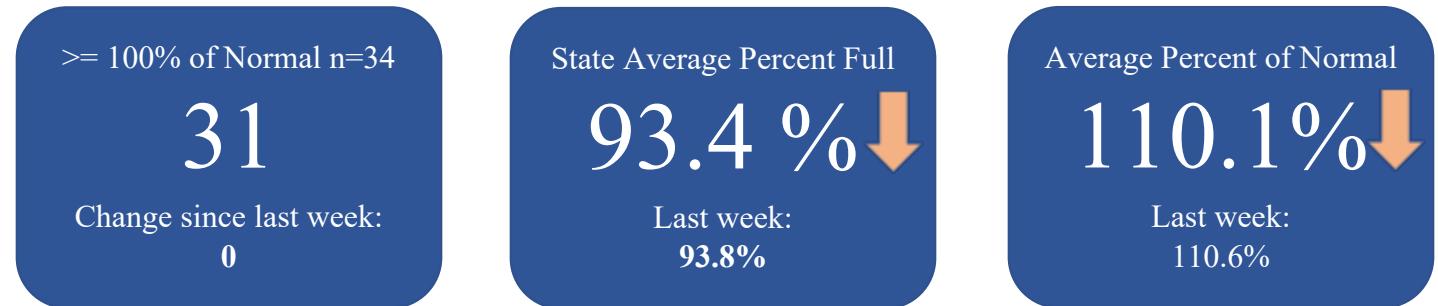
# Surface Reservoir Capacity Measurements and Trends

9/1/2023 Update

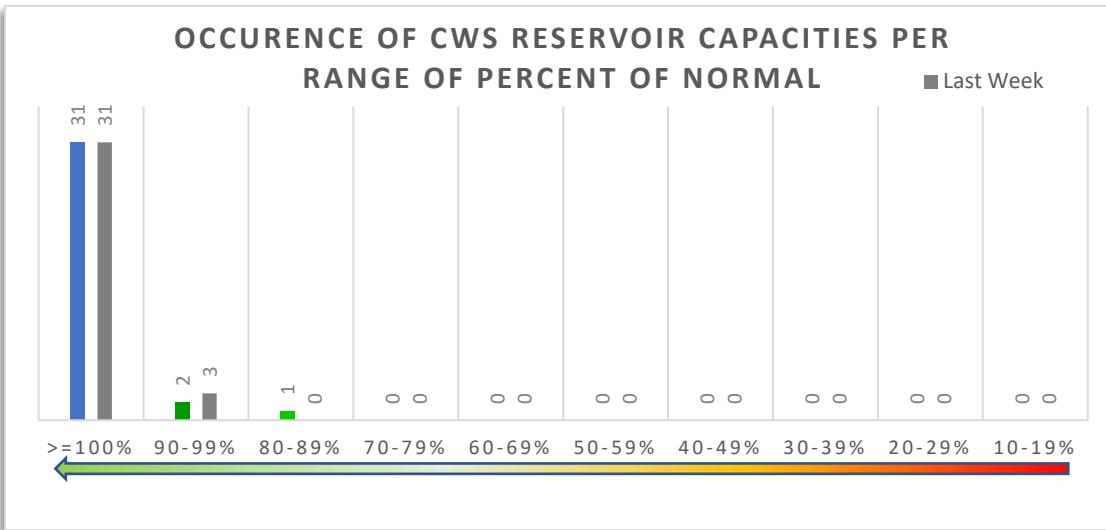
*August Had Above Normal Rainfall and Lower Than Normal Temperatures!*

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.

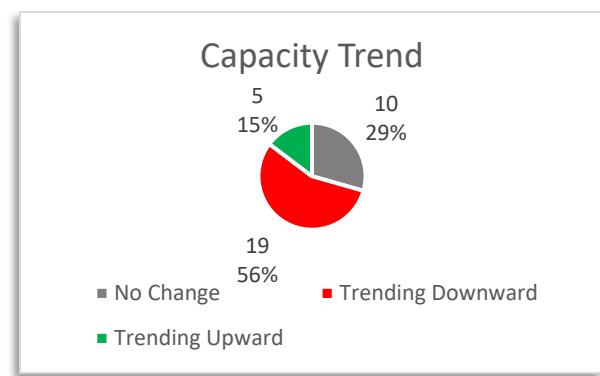
**Key takeaways:**



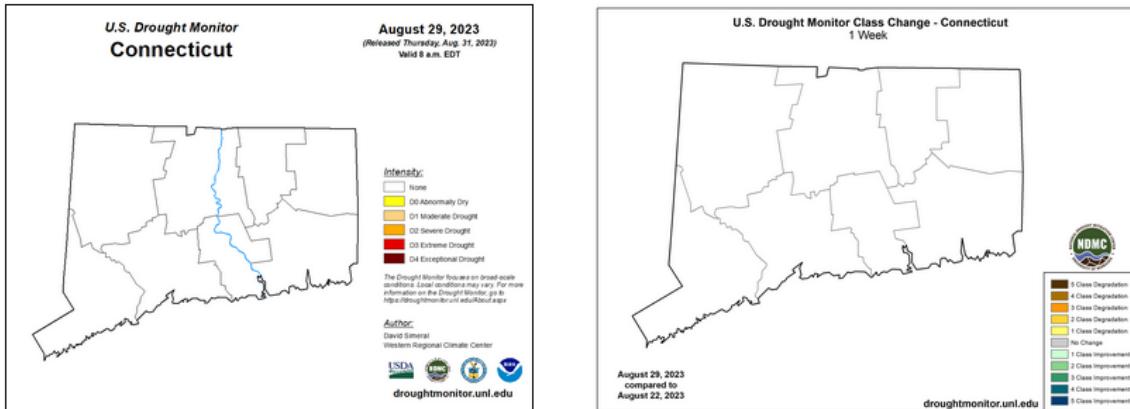
- 10 reservoir systems have reported that they are currently at 100% full (-1 since last week).



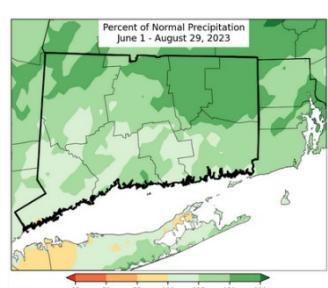
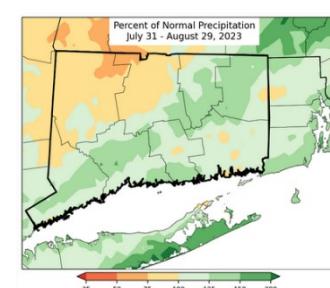
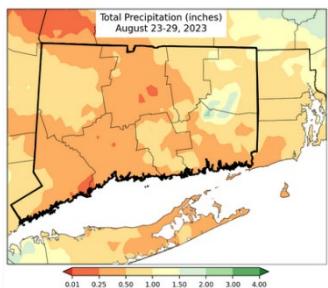
- The gray bars indicate last week's measurements and the colored bar is the current measurement. In non-drought conditions, the graph above would have all of the systems in the >=100% of normal column (n=34).
- 5 system's short-term week to week trend is upward (+2 since last week). 19 systems are trending downward in capacity from their previous measurements (+5 since last week). 10 systems have had no change in capacity (-2 since last week).
- **Aquarion Greenwich System remains in their 1<sup>st</sup> drought stage – drought advisory.**



- **US Drought Monitor:** – No changes since last week.
- <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CT>

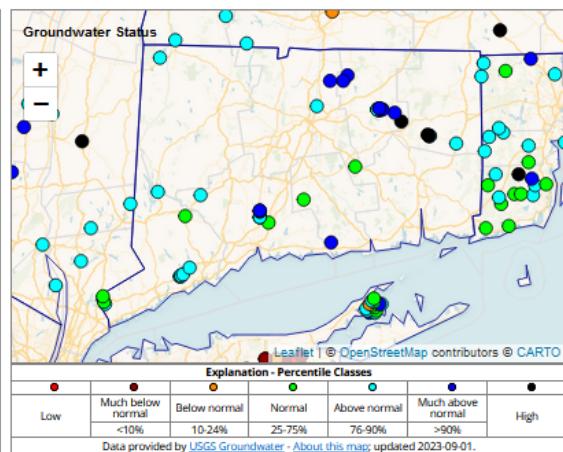
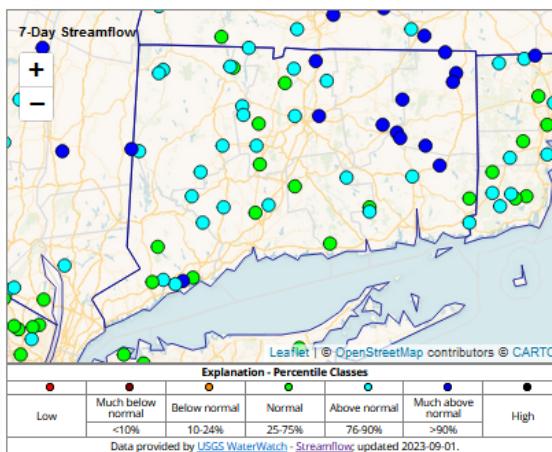


- Last USDM week (between August 23<sup>rd</sup> and August 29<sup>th</sup>), CT received trace amounts to 2 inches (isolated pockets) of rain. (Map 1). The 30-day Percent of Normal Precipitation map shows well above normal precipitation for two thirds of CT. Northwest portion had below normal rainfall (Map 2). The long-term trend over the last 90-days shows that CT has rainfall amounts at or above normal. (Map 3). The 7-Day Streamflow map shows normal to much above normal. Groundwater real time monitoring wells show normal to high levels.



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	Historical Average	Percent of Normal	Previous Date	Previous Percent Full	County_Served
CT1350011	Aquarion Water Co of CT-Stamford	8/20/2023	71.40	No Drought Stage	↓	76.70	93	8/13/2023	73.10	FAIRFIELD
CT0150011	Aquarion Water Co of CT-Main System	8/20/2023	87.80	No Drought Stage	↑	86.40	102	8/13/2023	87.60	FAIRFIELD
CT0090011	Bethel Water Dept	8/27/2023	100.00	No Drought Stage	--	94.60	106	8/20/2023	100.00	FAIRFIELD
CT0570011	Aquarion Water Co of CT-Greenwich Syster	8/20/2023	82.60	Drought Advisory	↑	78.10	106	8/13/2023	81.10	FAIRFIELD
CT0340011	Danbury Water Department	8/20/2023	92.20	No Drought Stage	↓	82.40	112	8/13/2023	92.80	FAIRFIELD
CT1030011	Norwalk First Taxing District	8/27/2023	92.30	No Drought Stage	↓	77.00	120	8/20/2023	93.90	FAIRFIELD
CT1030021	South Norwalk Electric & Water	8/28/2023	86.20	No Drought Stage	↓	72.00	120	8/21/2023	87.10	FAIRFIELD
CT0170011	Bristol Water Department	8/27/2023	89.10	No Drought Stage	↓	84.70	105	8/13/2023	94.50	HARTFORD
CT0890011	New Britain Water Department	8/24/2023	80.10	No Drought Stage	↓	73.20	109	8/17/2023	80.10	HARTFORD
CT0473011	CTWC - Northern Reg-Western System	8/24/2023	91.10	No Drought Stage	↓	82.90	110	8/17/2023	92.00	HARTFORD
CT0640011	Metropolitan District Commission	8/28/2023	99.00	No Drought Stage	↓	89.90	110	8/21/2023	99.40	HARTFORD
CT0770021	Manchester Water Department	8/13/2023	99.50	No Drought Stage	↓	86.10	116	8/6/2023	99.50	HARTFORD
CT1310011	Southington Water Department	8/26/2023	99.80	No Drought Stage	↓	70.60	141	8/19/2023	100.00	HARTFORD
CT0980011	Aquarion Water Co of CT-Norfolk System	8/20/2023	100.00	No Drought Stage	--	97.90	102	8/13/2023	100.00	LITCHFIELD
CT1250011	Sharon Water & Sewer Commission	8/5/2023	100.00	No Drought Stage	--	95.90	104	7/29/2023	100.00	LITCHFIELD
CT1620011	Winsted Water Works	8/27/2023	100.00	No Drought Stage	--	95.60	105	8/20/2023	100.00	LITCHFIELD
CT1220011	Aquarion Water Co of CT-Salisbury Sys	8/20/2023	100.00	No Drought Stage	--	88.90	113	8/13/2023	100.00	LITCHFIELD
CT1430011	Torrington Water Company	8/20/2023	100.00	No Drought Stage	--	79.20	126	8/13/2023	100.00	LITCHFIELD
CT0830011	Middletown Water Department	7/27/2023	87.90	No Drought Stage	↓	90.30	97	7/16/2023	90.10	MIDDLESEX
CT0830021	Connecticut Valley Hospital	7/31/2023	100.00	No Drought Stage	--	91.80	109	7/24/2023	100.00	MIDDLESEX
CT0261031	CTWC - Shoreline Region-Chester System	8/24/2023	97.70	No Drought Stage	↓	87.70	112	8/17/2023	98.70	MIDDLESEX
CT0800011	Meriden Water Division	8/13/2023	91.50	No Drought Stage	↑	84.20	109	8/6/2023	89.70	NEW HAVEN
CT1510011	Waterbury Water Department	8/6/2023	94.80	No Drought Stage	↓	87.20	109	7/30/2023	95.90	NEW HAVEN
CT0880011	CTWC - Naugatuck Region-Central System	8/24/2023	96.30	No Drought Stage	↑	86.80	111	8/17/2023	95.20	NEW HAVEN
CT1480011	Wallingford Water Department	8/25/2023	89.10	No Drought Stage	↓	80.60	111	8/18/2023	89.50	NEW HAVEN
CT0930011	Regional Water Authority	8/13/2023	93.60	No Drought Stage	↓	80.10	117	8/6/2023	93.70	NEW HAVEN
CT0608011	CTWC - Shoreline Region-Guilford System	8/24/2023	100.00	No Drought Stage	--	79.50	126	8/17/2023	100.00	NEW HAVEN
CT1040011	Norwich Public Utilities	8/26/2023	94.90	No Drought Stage	↓	85.20	111	8/19/2023	96.00	NEW LONDON
CT0590011	Groton Utilities	8/21/2023	96.40	No Drought Stage	↑	86.00	112	8/14/2023	95.80	NEW LONDON
CT0580011	Jewett City Water Company	8/21/2023	95.20	No Drought Stage	↓	85.30	112	8/14/2023	96.80	NEW LONDON
CT0950011	New London Dept. of Public Utilities	8/27/2023	80.00	No Drought Stage	↓	68.80	116	8/20/2023	81.20	NEW LONDON
CT1370011	Aquarion Water Co of CT-Mystic	8/20/2023	100.00	No Drought Stage	--	82.10	122	8/13/2023	100.00	NEW LONDON
CT1340011	CTWC - Northern Reg-Stafford System	8/24/2023	85.30	No Drought Stage	↓	95.40	89	8/17/2023	89.00	TOLLAND
CT1630011	Windham Water Works	8/27/2023	100.00	No Drought Stage	--	100.00	100	8/20/2023	100.00	WINDHAM

93.35

84.80

110.08

Ave Percent of Normal by County

↑	-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% of Normal  
 Between 90% and 99% of Normal  
 Less than 90% of Normal  
 At 100% Full

31  
 2  
 1  
 10

108.43 FAIRFIELD  
 115.17 HARTFORD  
 110.00 LITCHFIELD  
 106.00 MIDDLESEX  
 113.83 NEW HAVEN  
 114.60 NEW LONDON  
 89.00 TOLLAND



# CT Interagency Drought Workgroup

## NWS Update

Thursday September 7th 2023

*Prepared by: NWS WFO Boston/Norton, MA*

# August 2023 Rainfall

4.5 to 5.25 inches of rainfall across CT in August

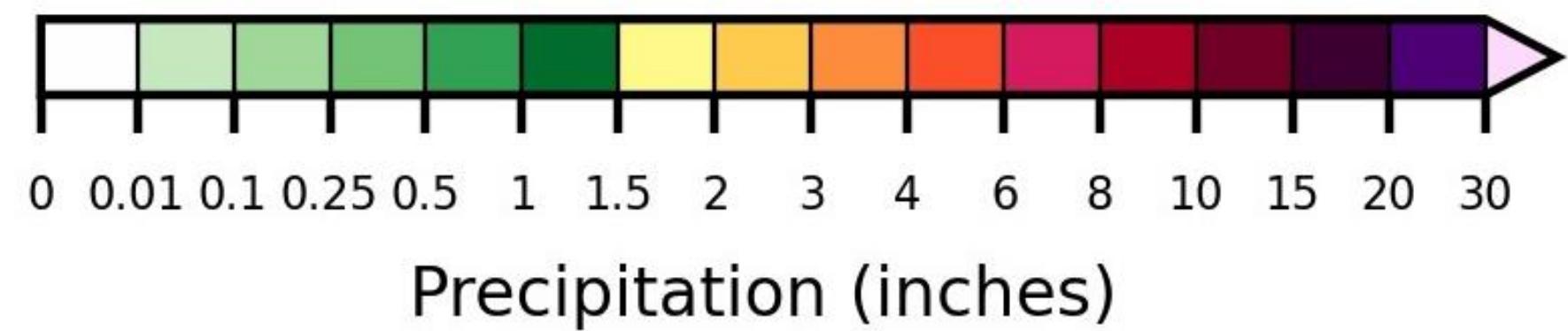
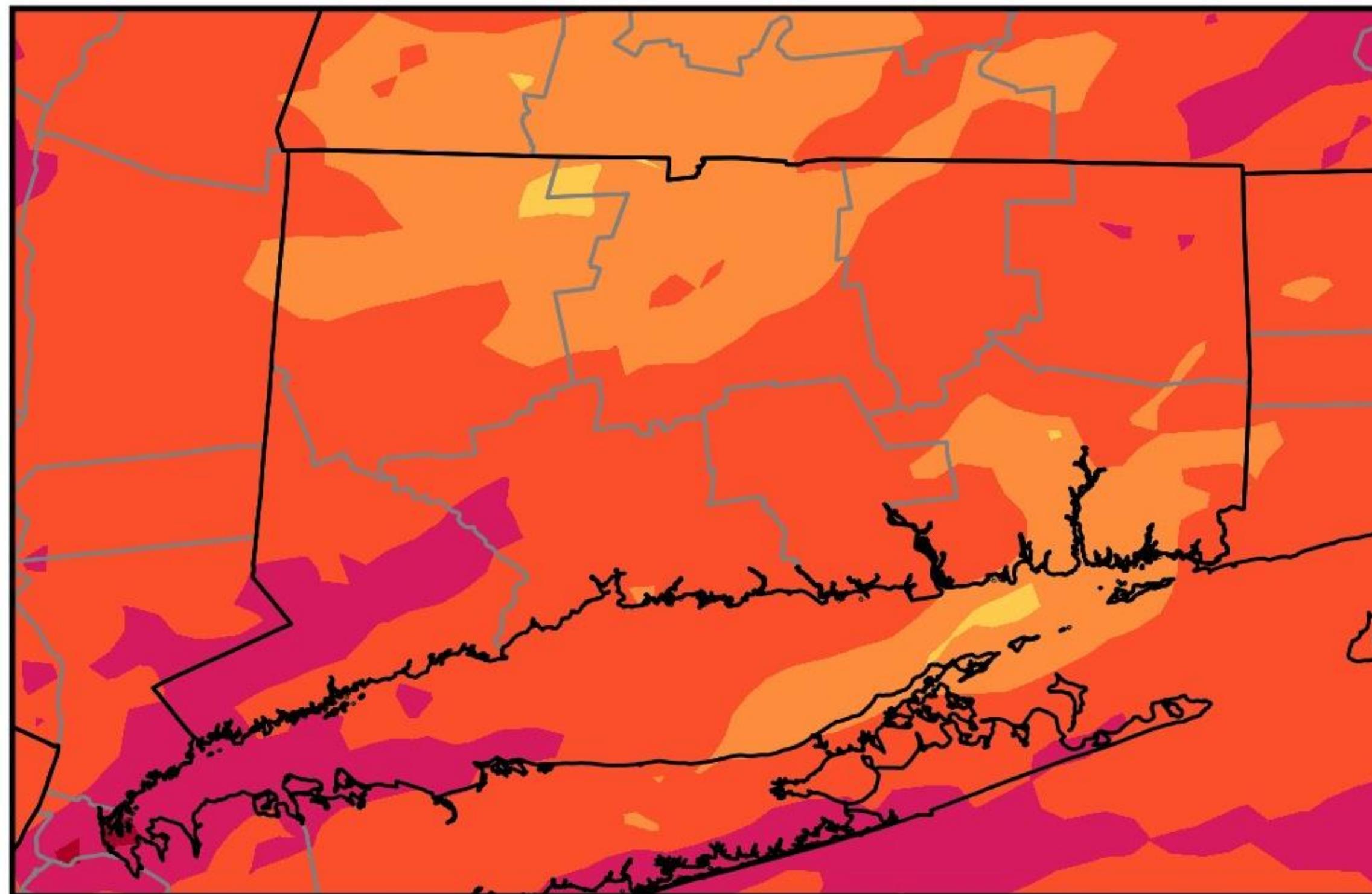


# Boston/Norton MA

# WEATHER FORECAST OFFICE

# Accumulated Precipitation (inches)

## August 01, 2023 to August 31, 2023



CT 1-Month Aug 2023	Rainfall	Departure	Percent	Normal
Litchfield	4.66	0.27	106	4.39
Hartford	4.54	0.20	105	4.34
Tolland	5.03	1.06	127	3.97
Windham	4.05	-0.12	97	4.17
Fairfield	5.04	0.59	113	4.45
New Haven	5.20	1.25	132	3.95
Middlesex	5.11	1.09	127	4.02
New London	4.65	0.18	104	4.47

# August 2023 Rainfall

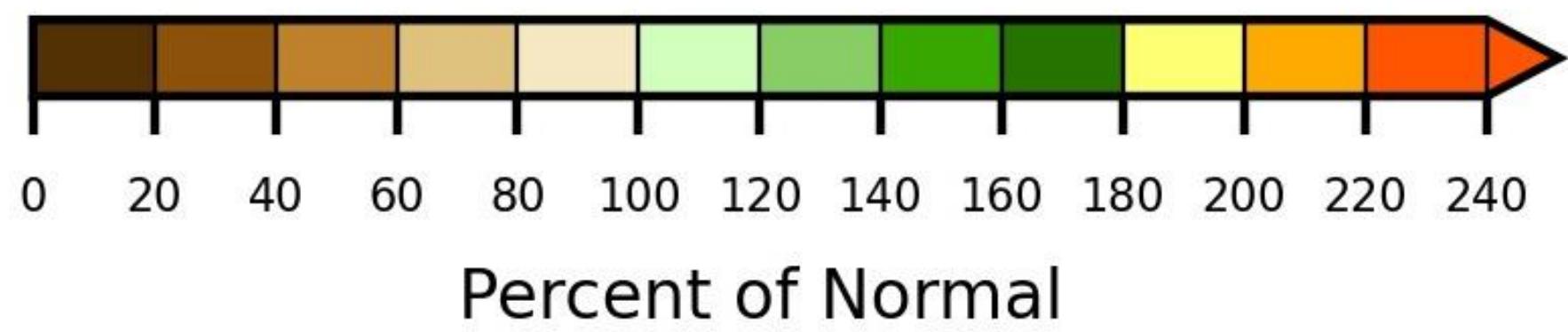
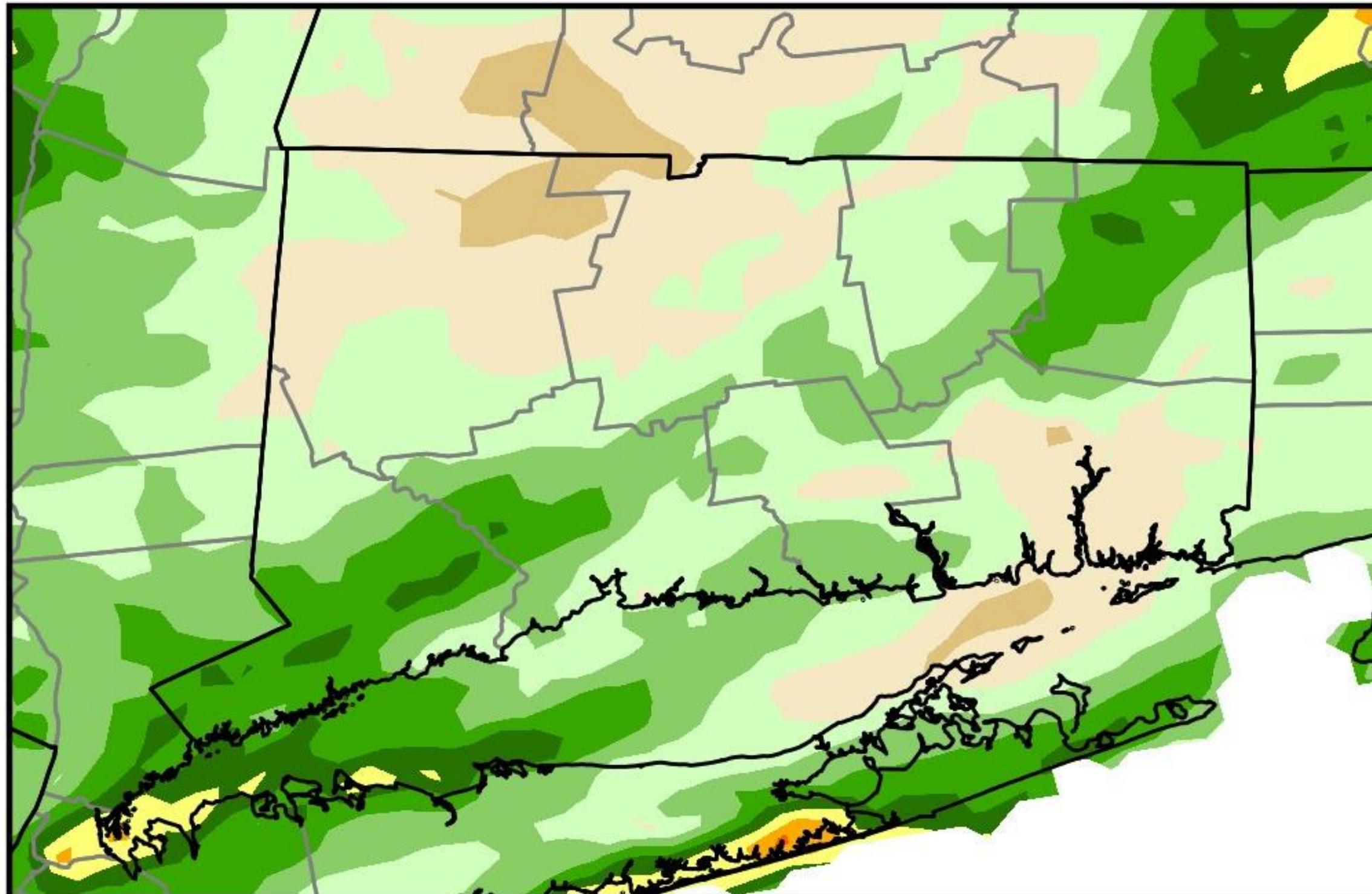
August rainfall ranged from 80 to 160 percent of Normal



Boston/Norton MA

WEATHER FORECAST OFFICE

Precipitation Percent of Normal  
August 01, 2023 to August 31, 2023



CT 1-Month Aug 2023	Rainfall	Departure	Percent	Normal
Litchfield	4.66	0.27	106	4.39
Hartford	4.54	0.20	105	4.34
Tolland	5.03	1.06	127	3.97
Windham	4.05	-0.12	97	4.17
Fairfield	5.04	0.59	113	4.45
New Haven	5.20	1.25	132	3.95
Middlesex	5.11	1.09	127	4.02
New London	4.65	0.18	104	4.47

# Percent of Normal Since April 1st

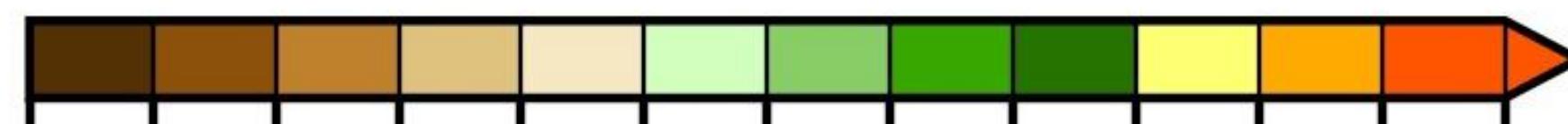
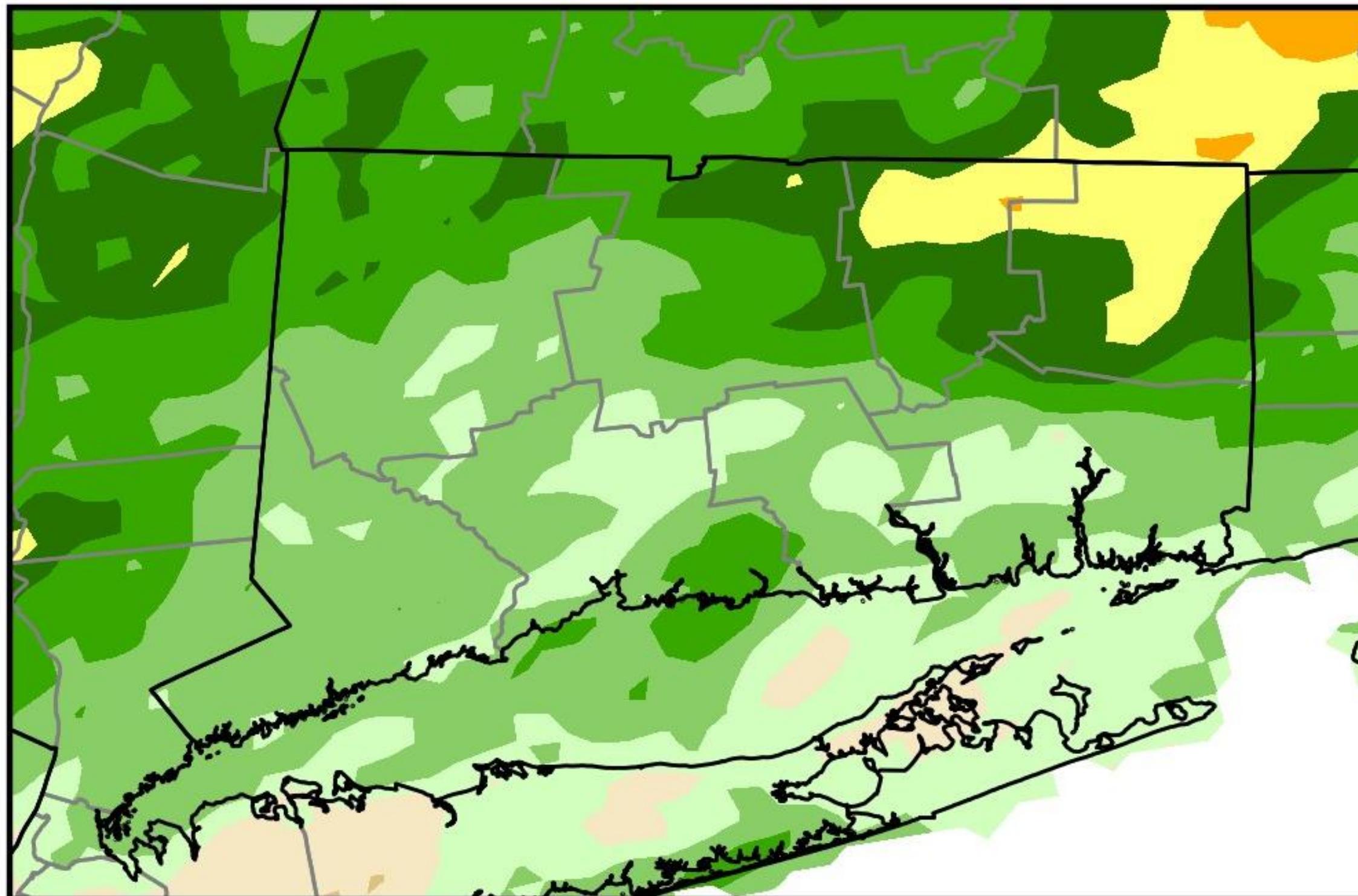
3 month percent of normal ranging from 100 to 200 percent



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Precipitation Percent of Normal  
June 01, 2023 to August 31, 2023



0 20 40 60 80 100 120 140 160 180 200 220 240

Percent of Normal

CT 3-month Jun 23-Aug 23	Rainfall	Departure	Percent	Normal
Litchfield	18.76	5.19	138	13.57
Hartford	18.93	5.40	140	13.53
Tolland	20.64	8.16	165	12.48
Windham	17.55	4.78	137	12.77
Fairfield	14.51	1.36	110	13.16
New Haven	16.08	3.70	130	12.38
Middlesex	14.30	0.94	107	13.36
New London	14.16	1.90	115	12.27

# Percent of Normal Since March 1st

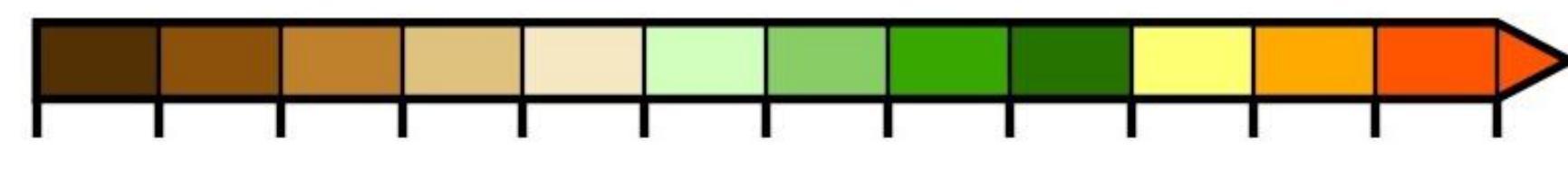
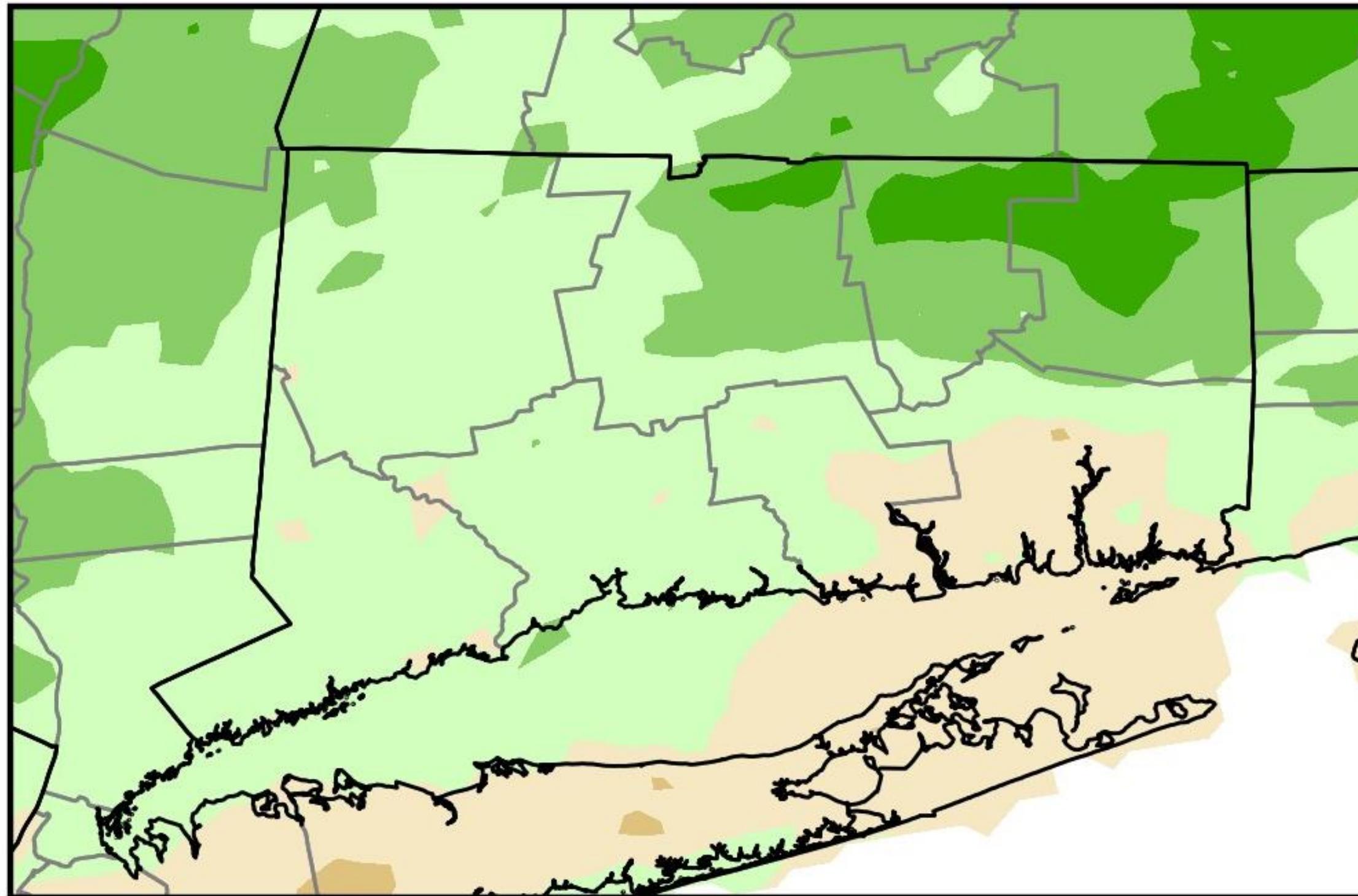
6 month percent of normal generally 80 to 140 percent



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Precipitation Percent of Normal  
March 01, 2023 to August 31, 2023



Percent of Normal

CT 6-month Mar 23-Aug 23	Rainfall	Departure	Percent	Normal
Litchfield	30.18	3.85	115	26.33
Hartford	31.75	5.39	120	26.36
Tolland	32.21	6.69	126	25.53
Windham	29.33	3.50	114	25.83
Fairfield	25.79	-0.55	98	26.34
New Haven	29.08	3.74	115	25.34
Middlesex	26.08	-0.27	99	26.35
New London	24.96	-0.49	98	25.45

# Rainfall Tables for 2 and 3 Months

2-3 month ranging from 100 to 200+ percent of normal



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CT 2-month Jul 23-Aug 23	Rainfall	Departure	Percent	Normal
Litchfield	16.73	7.76	187	8.97
Hartford	17.22	8.31	193	8.91
Tolland	17.88	9.98	226	7.90
Windham	14.50	6.07	172	8.43
Fairfield	12.89	4.17	148	8.72
New Haven	14.41	6.43	181	7.98
Middlesex	13.06	4.66	155	8.40
New London	12.40	4.21	151	8.19

CT 3-month Jun 23-Aug 23	Rainfall	Departure	Percent	Normal
Litchfield	18.76	5.19	138	13.57
Hartford	18.93	5.40	140	13.53
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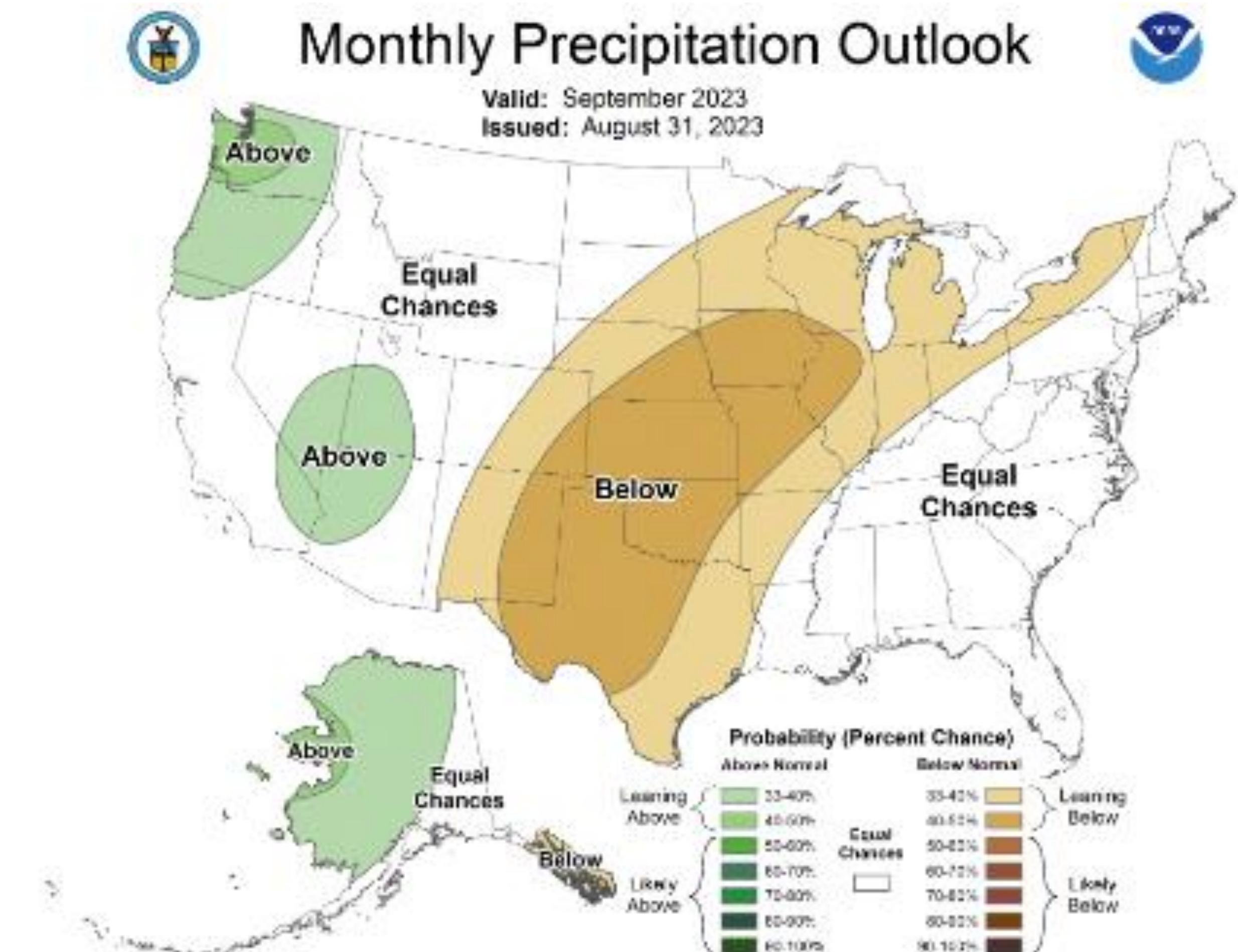
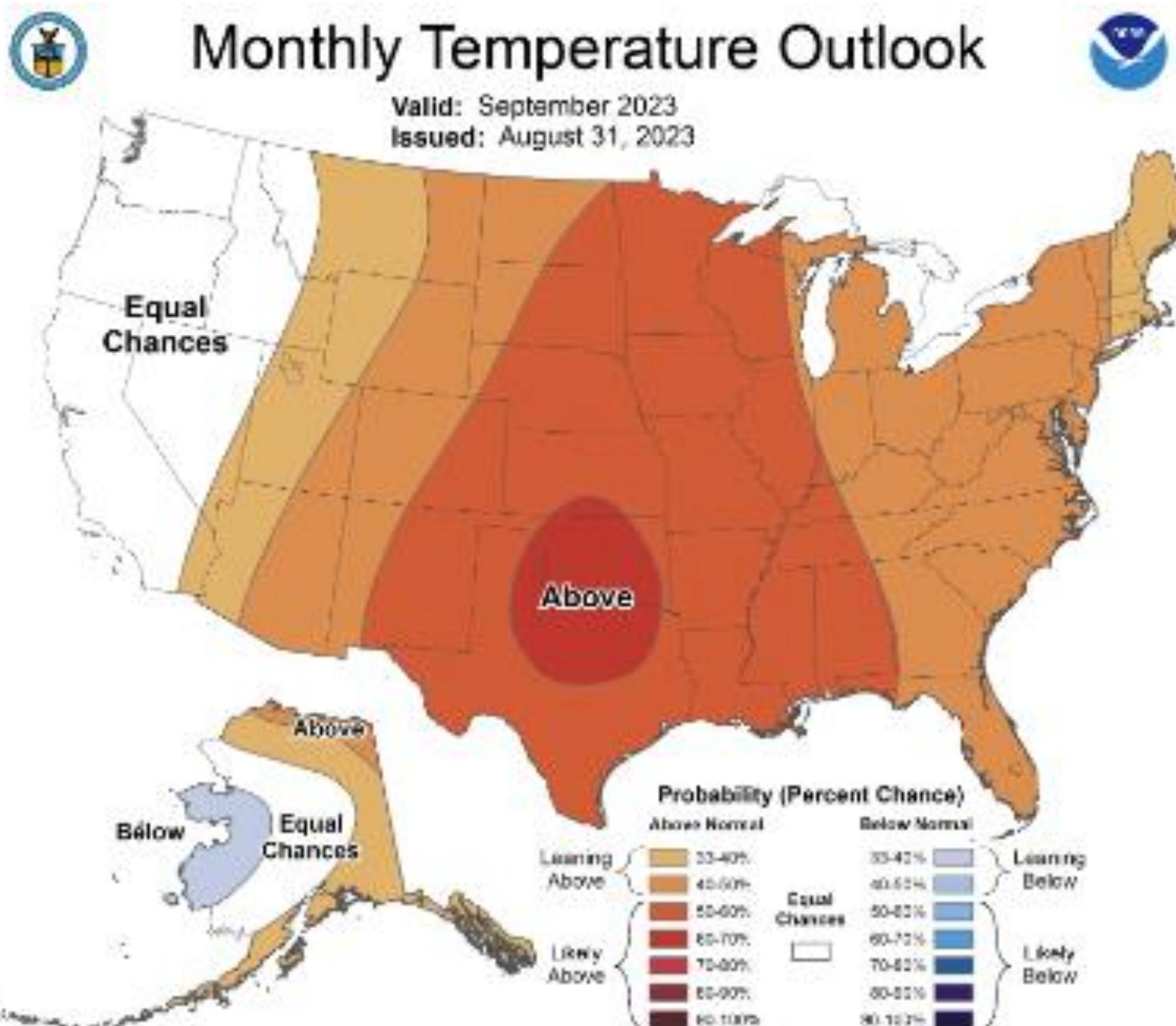
# CPC September Outlook

Equal Chances for Above/Below Normal Precipitation This Month



Boston/Norton MA

WEATHER FORECAST OFFICE



# CPC 3 Month Outlook (Sep-Oct-Nov)

Equal Chance for Above/Below Normal Precip



Boston/Norton MA

WEATHER FORECAST OFFICE

