

Connecticut Drought Conditions Report

Monthly Update for June 2024

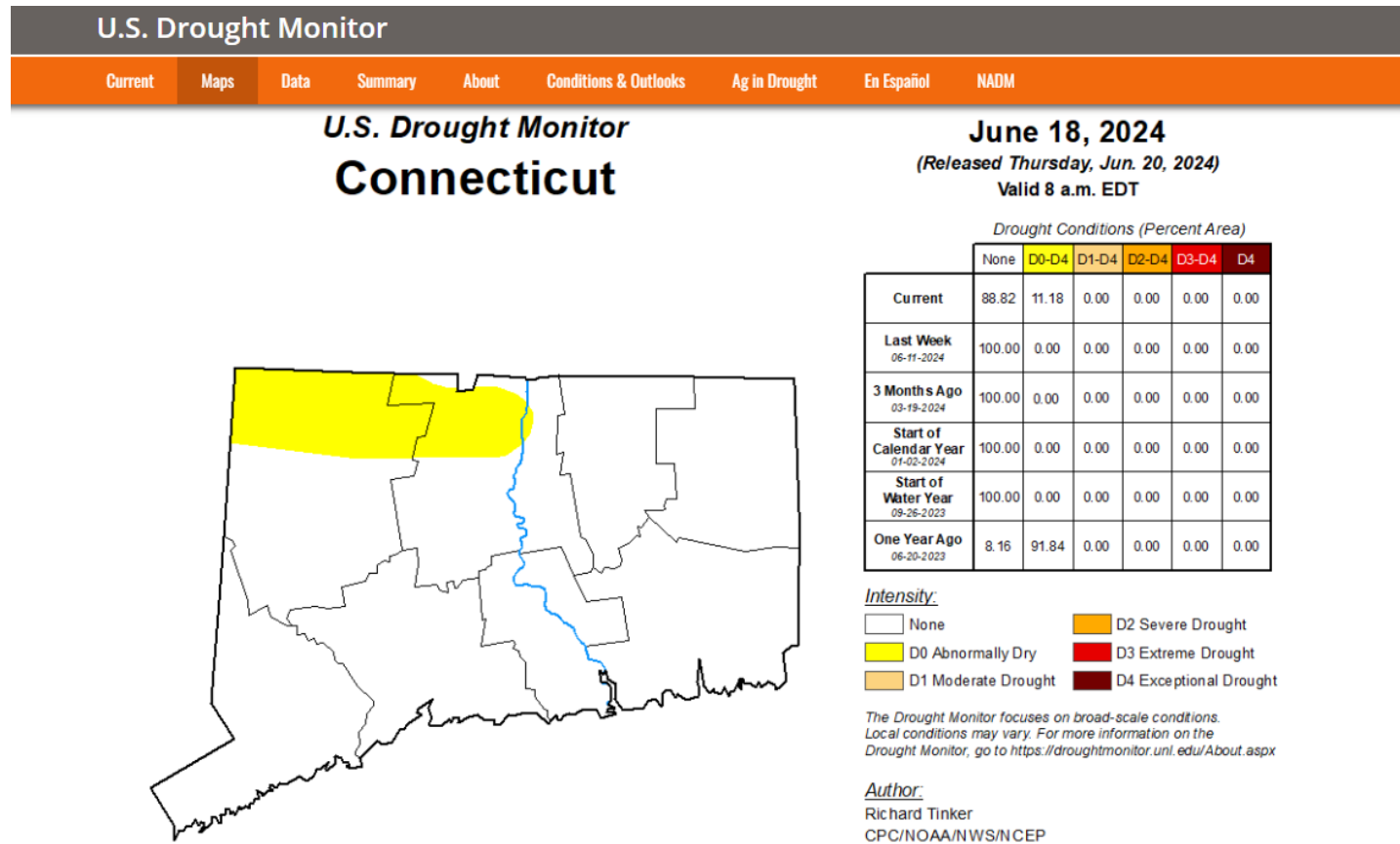


Interagency Drought Workgroup

July 11, 2024

Regular Meeting

U.S. Drought Monitor (USDM): The maps included in this report are from the weeks of June 18th, June 25th and July 2nd. A small portion of the Northwest corner of the state moved into the D0 Category on June 18th. This categorization has since receded in subsequent weeks. The entire state of Connecticut had no drought classification via the USDM until the week of June 18th. This trend continued every week since the September 7, 2023 IDW Meeting.



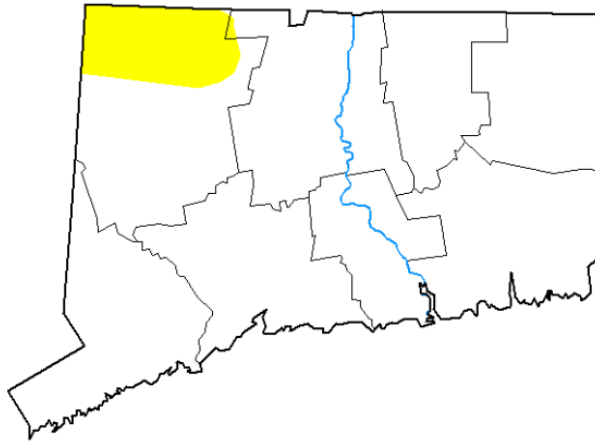
U.S. Drought Monitor
Connecticut

June 25, 2024

(Released Thursday, Jun. 27, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	93.41	6.59	0.00	0.00	0.00	0.00
Last Week 06-18-2024	88.82	11.18	0.00	0.00	0.00	0.00
3 Months Ago 03-26-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2023	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 06-27-2023	8.16	91.84	0.00	0.00	0.00	0.00



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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:

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NOAA/NWS/NCEP/CPC

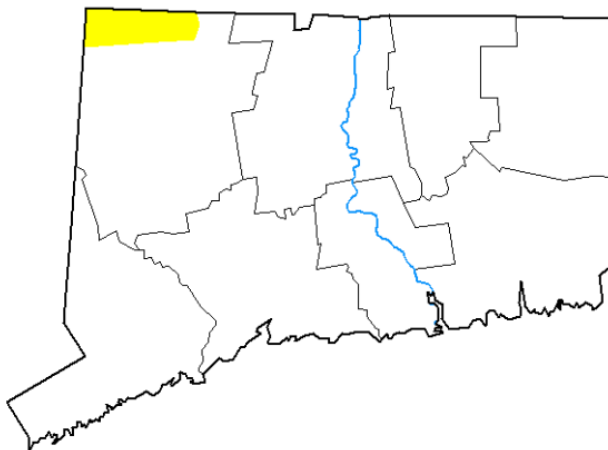
U.S. Drought Monitor
Connecticut

July 2, 2024

(Released Wednesday, Jul. 3, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	97.89	2.11	0.00	0.00	0.00	0.00
Last Week 06-25-2024	93.41	6.59	0.00	0.00	0.00	0.00
3 Months Ago 04-02-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2023	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 07-04-2023	17.17	82.83	4.00	0.00	0.00	0.00



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

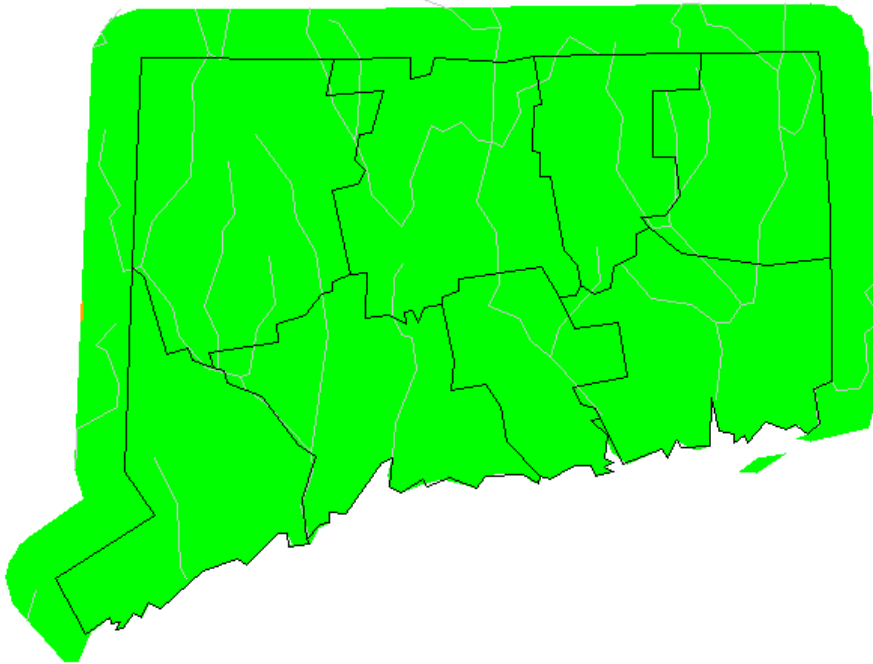
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Streamflow Levels: Two maps of the 28-day average streamflow are included below. The first is for the whole month of June, which compares the streamflow relative to previous years. The first map shows the entire state at a Normal level. The second map is from Thursday, June 20th, comparing the streamflow relative to the entire month of June. In the second map, the Western portion of the state is mostly Below while the rest of the state is at Normal streamflow. Both maps are included to illustrate the change in streamflow conditions during the month, while the state experienced some drier conditions.

June 2024

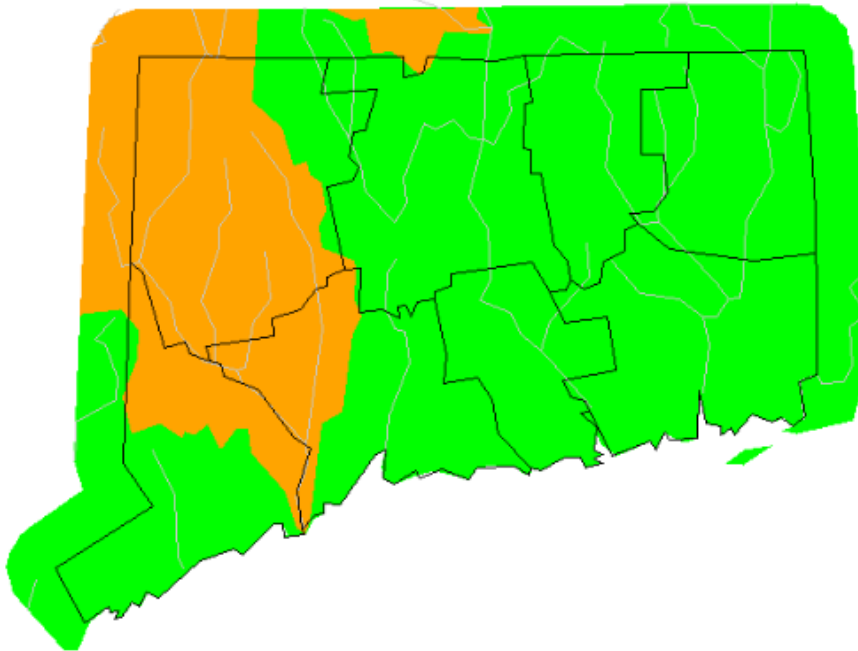


Explanation - Percentile classes						
●	●	●	●	●	●	●
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

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

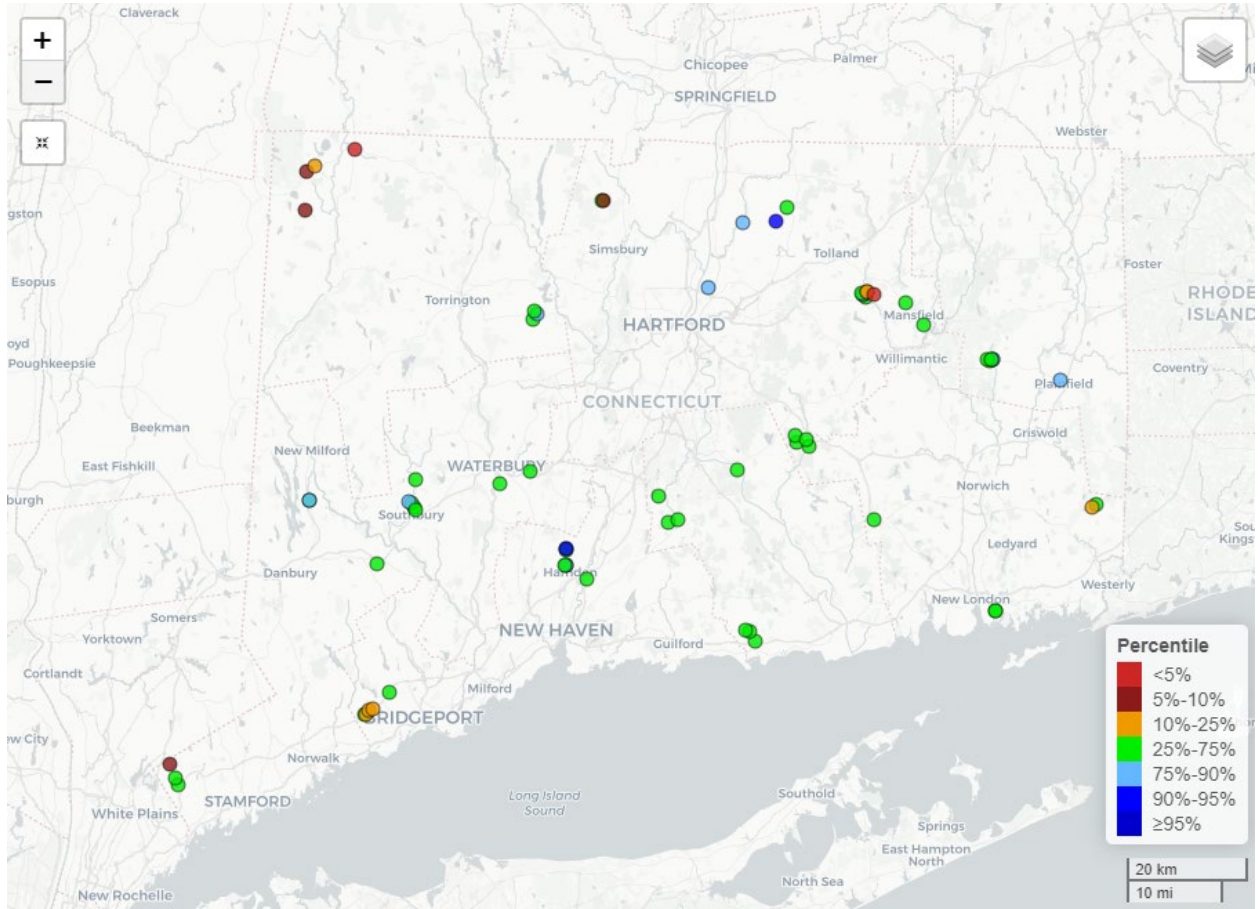
Connecticut or Water-Resources Regions

Thursday, June 20, 2024



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

Groundwater Levels: As of June 30, 2024, groundwater well measurements were largely Normal, with some exceptions in the Northwestern portion of the state and portions of Southern Fairfield County. These exceptions included measurement <5%, 5-10%, and 10-25% of Normal.



Evaporative Demand Drought Index (EDDI): The EDDI uses atmospheric evaporative demand anomalies across the timescale of 1979-present, to indicate when there are drier-than-normal or wetter-than-normal conditions. The map below shows the EDDI for month of June, with most of the state in the E1 category, indicating that that this level of dryness has been observed less than 20% of the of the time in the past 45 years.

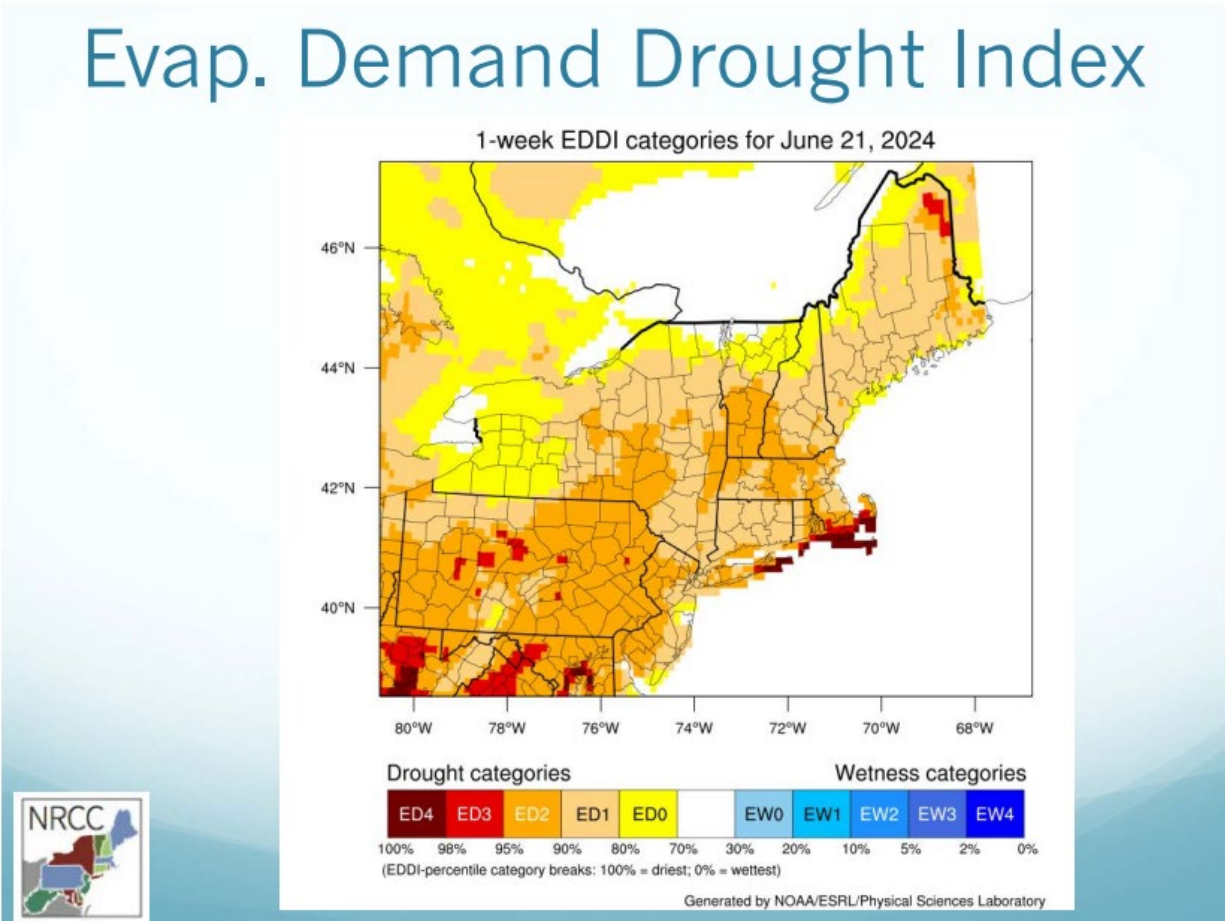


Figure courtesy of the Northeast Regional Climate Center, June 2024

For additional information on weather impacts from [June 2024 see the Northeast Regional Climate Center’s recap slides.](#)

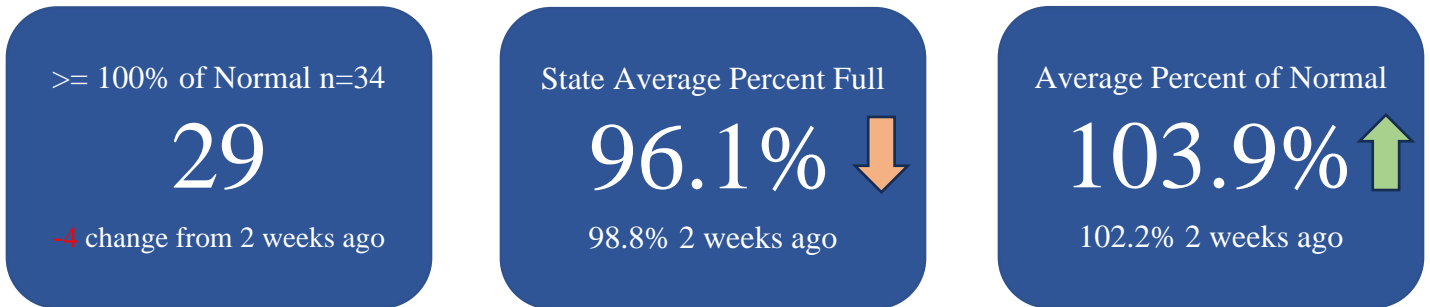
Surface Reservoir Capacity Measurements and Trends

7/5/2024 Update

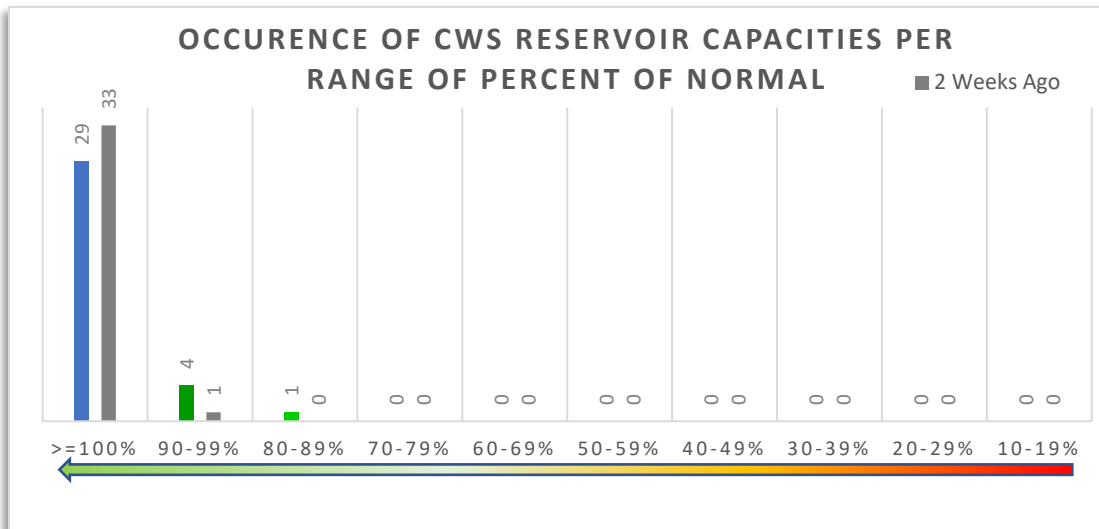
Reservoir Capacity Across the State Remain in Good Shape But Conditions are Getting Drier!

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.

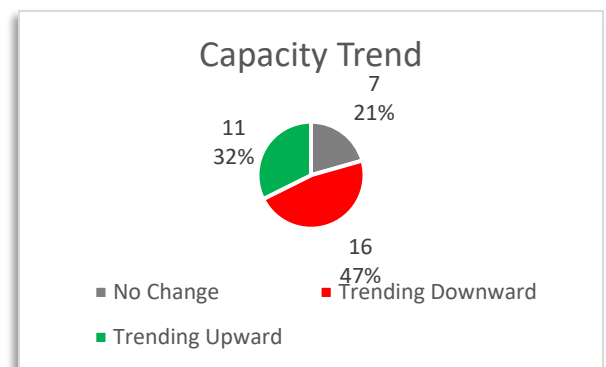
Key takeaways:



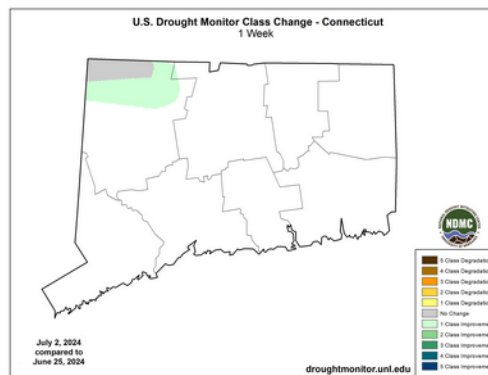
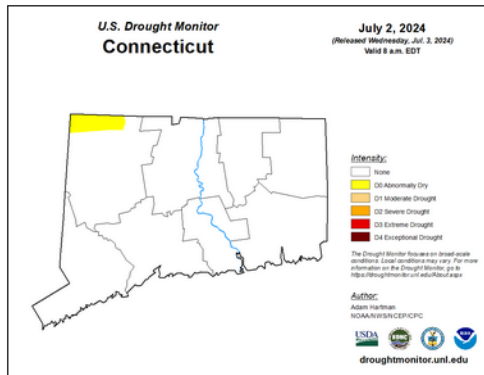
- 7 reservoir systems have reported that they are currently at 100% full (-12 since 2 weeks ago).



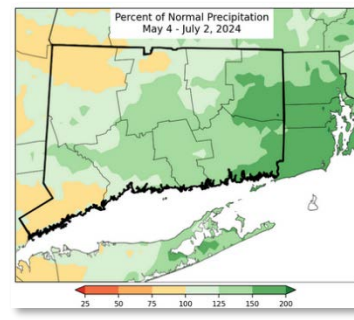
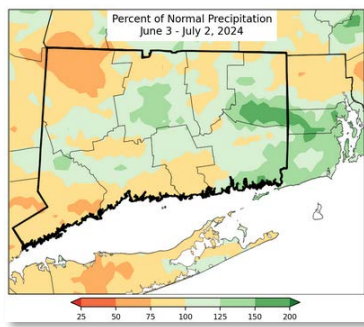
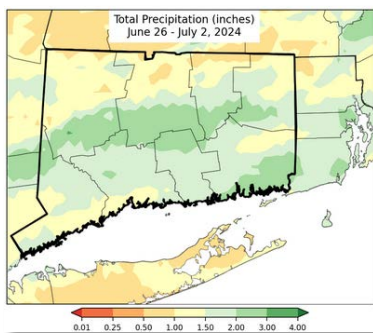
- The gray bars indicate last week's measurements, and the colored bar is the current measurement. In non-drought conditions, the graph above would have all of the systems in the >=100% of normal column (n=34).
- 11 system's short-term week to week trend is upward (+3 since 2 weeks ago). 16 system is trending downward in capacity from their previous measurements (+9 since 2 weeks ago). 7 systems have had no change in capacity (-12 since 2 weeks ago).
- No water systems are under a drought category.



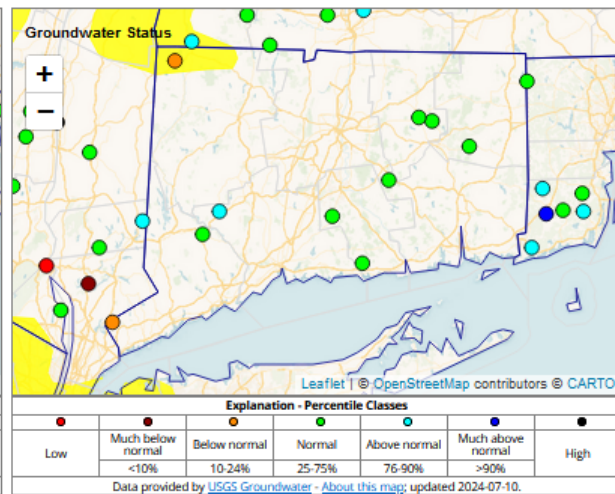
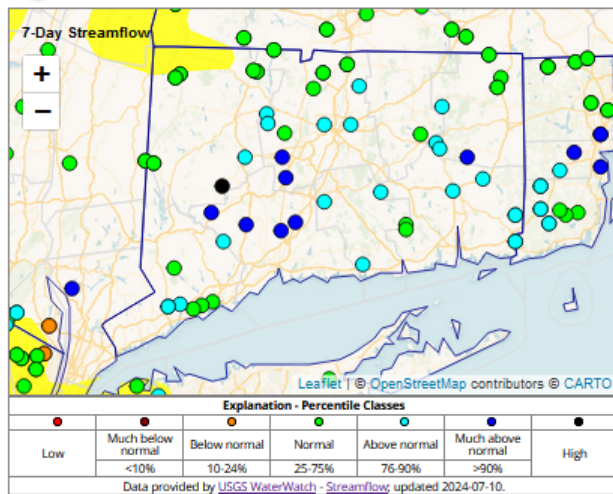
- **US Drought Monitor:** – 2 weeks ago US Drought monitor introduced D0-Abnormally Dry in Litchfield County. The July 2 map reduced that D0 to a small area in Litchfield County.
- <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CT>



- Last USDM week (between June 26th and July 2nd), CT received trace amounts to nearly 2 inches of precipitation (Map 1). The 30-day Percent of Normal Precipitation map shows some drying across the state. (Map 2). The long-term trend over the last 90 days shows normal to above normal rainfall in the Central and Eastern parts of CT. The Eastern portion, especially northern and southern areas, show drying conditions. (Map 3). The 7-Day Streamflow map shows normal to high stream flows. Real time monitoring groundwater wells shows normal to above normal levels. There is a well in Fairfield County that is much below normal.



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
CT1030011	Norwalk First Taxing District	6/30/2024	85.90	No Drought Stage	↓	93.20	92	6/23/2024	86.60	FAIRFIELD
CT0570011	Aquarion Water Co of CT-Greenwich Syster	6/30/2024	91.10	No Drought Stage	↓	95.30	96	6/23/2024	92.50	FAIRFIELD
CT1350011	Aquarion Water Co of CT-Stamford	6/30/2024	89.10	No Drought Stage	↓	91.80	97	6/23/2024	90.90	FAIRFIELD
CT0090011	Bethel Water Dept	6/30/2024	96.40	No Drought Stage	↑	96.60	100	6/23/2024	95.20	FAIRFIELD
CT0150011	Aquarion Water Co of CT-Main System	5/26/2024	99.80	No Drought Stage	↑	98.20	102	5/19/2024	99.80	FAIRFIELD
CT0340011	Danbury Water Department	6/16/2024	97.30	No Drought Stage	↓	92.60	105	6/9/2024	99.20	FAIRFIELD
CT1030021	South Norwalk Electric & Water	7/8/2024	89.40	No Drought Stage	↓	82.20	109	7/1/2024	90.70	FAIRFIELD
CT0170011	Bristol Water Department	7/7/2024	94.40	No Drought Stage	↑	91.10	104	6/30/2024	92.60	HARTFORD
CT0640011	Metropolitan District Commission	7/8/2024	98.20	No Drought Stage	↓	93.40	105	7/1/2024	98.50	HARTFORD
CT0770021	Manchester Water Department	7/7/2024	98.50	No Drought Stage	↓	92.20	107	6/30/2024	99.20	HARTFORD
CT0890011	New Britain Water Department	7/3/2024	86.90	No Drought Stage	↑	80.60	108	6/27/2024	85.80	HARTFORD
CT0473011	CTWC - Northern Reg-Western System	7/4/2024	97.20	No Drought Stage	↑	88.40	110	6/27/2024	96.70	HARTFORD
CT1310011	Southington Water Department	7/6/2024	100.00	No Drought Stage	--	81.80	122	6/29/2024	100.00	HARTFORD
CT1220011	Aquarion Water Co of CT-Salisbury Sys	6/30/2024	87.10	No Drought Stage	↓	98.30	89	6/23/2024	92.20	LITCHFIELD
CT0980011	Aquarion Water Co of CT-Norfolk System	6/30/2024	100.00	No Drought Stage	--	99.40	101	6/23/2024	100.00	LITCHFIELD
CT1620011	Winsted Water Works	7/7/2024	100.00	No Drought Stage	--	98.40	102	6/30/2024	100.00	LITCHFIELD
CT1250011	Sharon Water & Sewer Commission	6/8/2024	100.00	No Drought Stage	--	95.50	105	6/1/2024	100.00	LITCHFIELD
CT1430011	Torrington Water Company	6/30/2024	97.30	No Drought Stage	↑	92.20	106	6/23/2024	95.80	LITCHFIELD
CT0830011	Middletown Water Department	6/30/2024	89.40	No Drought Stage	↓	94.90	94	6/23/2024	92.90	MIDDLESEX
CT0830021	Connecticut Valley Hospital	6/24/2024	99.80	No Drought Stage	↑	94.60	106	6/17/2024	99.50	MIDDLESEX
CT0261031	CTWC - Shoreline Region-Chester System	7/4/2024	99.40	No Drought Stage	↑	91.20	109	6/27/2024	98.70	MIDDLESEX
CT0930011	Regional Water Authority	6/30/2024	94.00	No Drought Stage	↓	92.00	102	6/23/2024	94.70	NEW HAVEN
CT1510011	Waterbury Water Department	6/6/2024	98.50	No Drought Stage	↓	95.60	103	5/26/2024	99.70	NEW HAVEN
CT1480011	Wallingford Water Department	7/5/2024	91.10	No Drought Stage	↓	85.60	106	6/28/2024	91.20	NEW HAVEN
CT0800011	Meriden Water Division	6/2/2024	98.70	No Drought Stage	↓	91.60	108	5/26/2024	99.10	NEW HAVEN
CT0880011	CTWC - Naugatuck Region-Central System	7/4/2024	98.00	No Drought Stage	↓	91.00	108	6/27/2024	98.10	NEW HAVEN
CT0608011	CTWC - Shoreline Region-Guilford System	7/4/2024	99.80	No Drought Stage	--	86.90	115	6/27/2024	99.80	NEW HAVEN
CT1370011	Aquarion Water Co of CT-Mystic	6/30/2024	100.00	No Drought Stage	↑	97.80	102	6/23/2024	99.80	NEW LONDON
CT0580011	Jewett City Water Company	6/24/2024	100.00	No Drought Stage	--	97.30	103	6/17/2024	100.00	NEW LONDON
CT0950011	New London Dept. of Public Utilities	6/30/2024	90.90	No Drought Stage	↑	84.90	107	6/23/2024	90.70	NEW LONDON
CT0590011	Groton Utilities	7/1/2024	99.00	No Drought Stage	↑	89.80	110	6/24/2024	98.70	NEW LONDON
CT1040011	Norwich Public Utilities	7/6/2024	99.70	No Drought Stage	↓	90.30	110	6/29/2024	100.00	NEW LONDON
CT1340011	CTWC - Northern Reg-Stafford System	7/4/2024	99.20	No Drought Stage	↓	98.50	101	6/13/2024	100.00	TOLLAND
CT1630011	Windham Water Works	7/7/2024	100.00	No Drought Stage	--	100.00	100	6/30/2024	100.00	WINDHAM

96.06

92.45

103.91

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	29
Between 90% and 99% of Normal	4
Less than 90% of Normal	1
At 100% Full	7

100.14	FAIRFIELD
109.33	HARTFORD
100.60	LITCHFIELD
103.00	MIDDLESEX
107.00	NEW HAVEN
106.40	NEW LONDON
101.00	TOLLAND



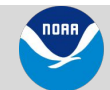
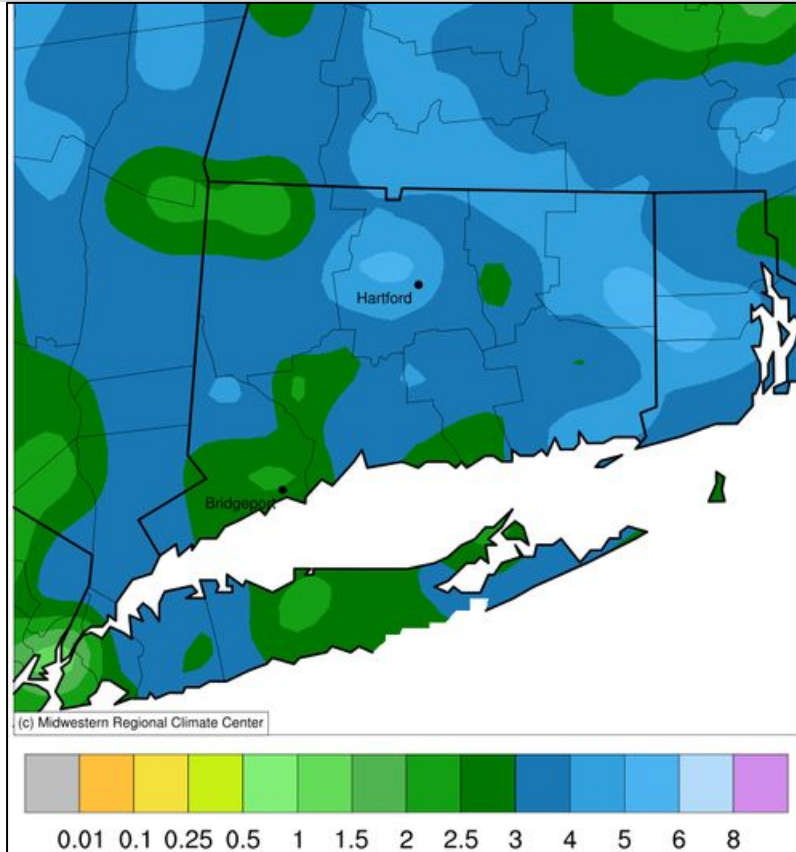
Connecticut Interagency Drought Working Group Meeting

July 11, 2024



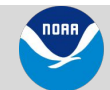
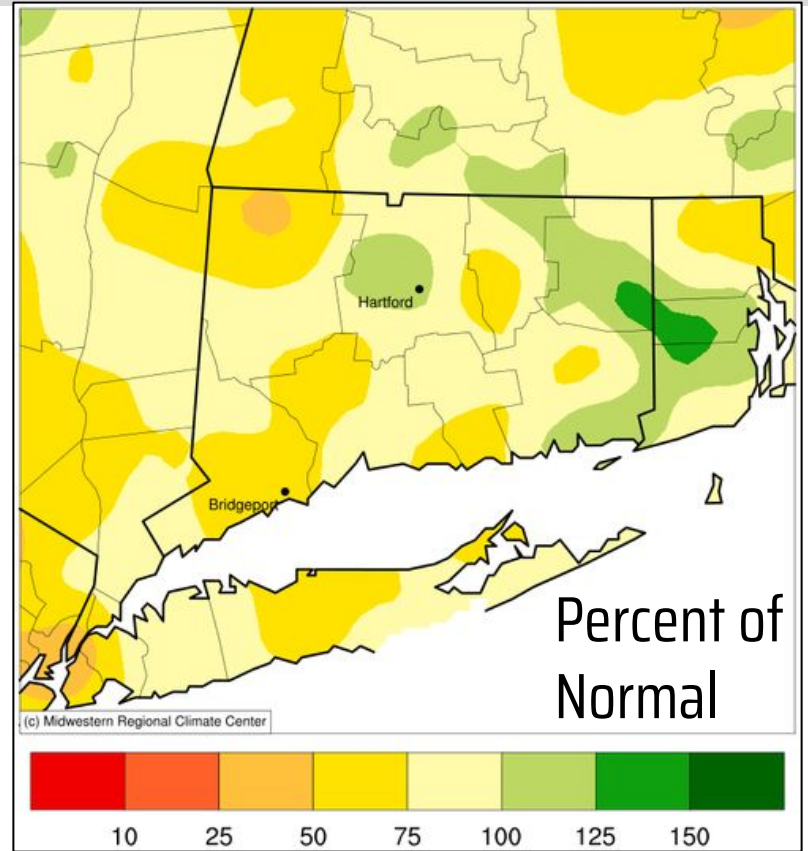
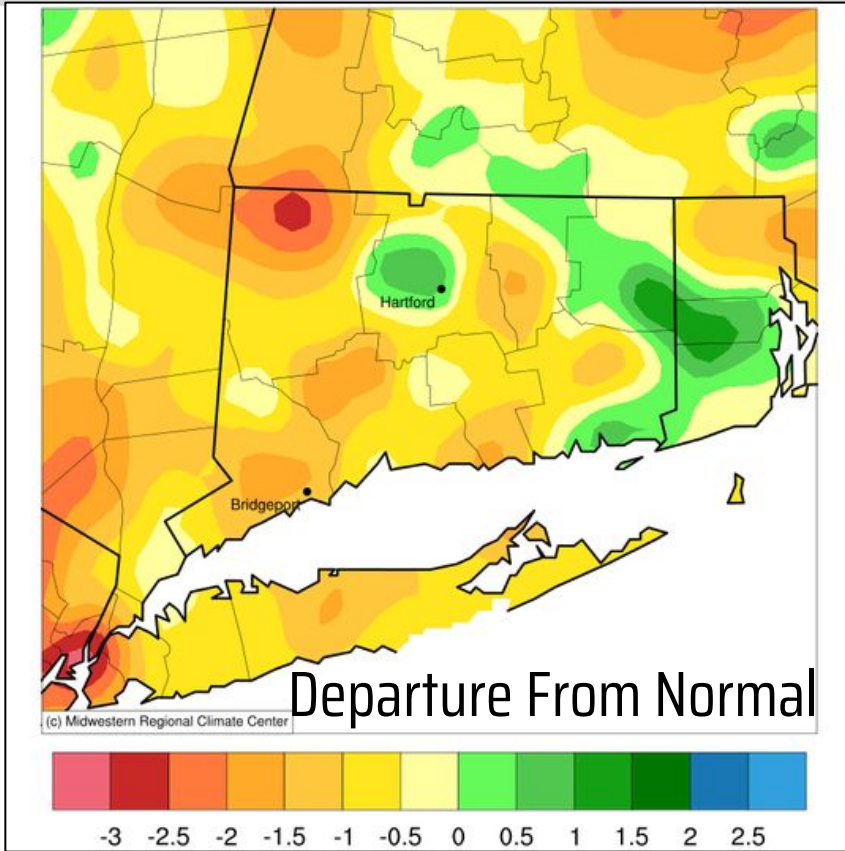


June Observed Precipitation



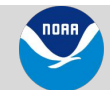
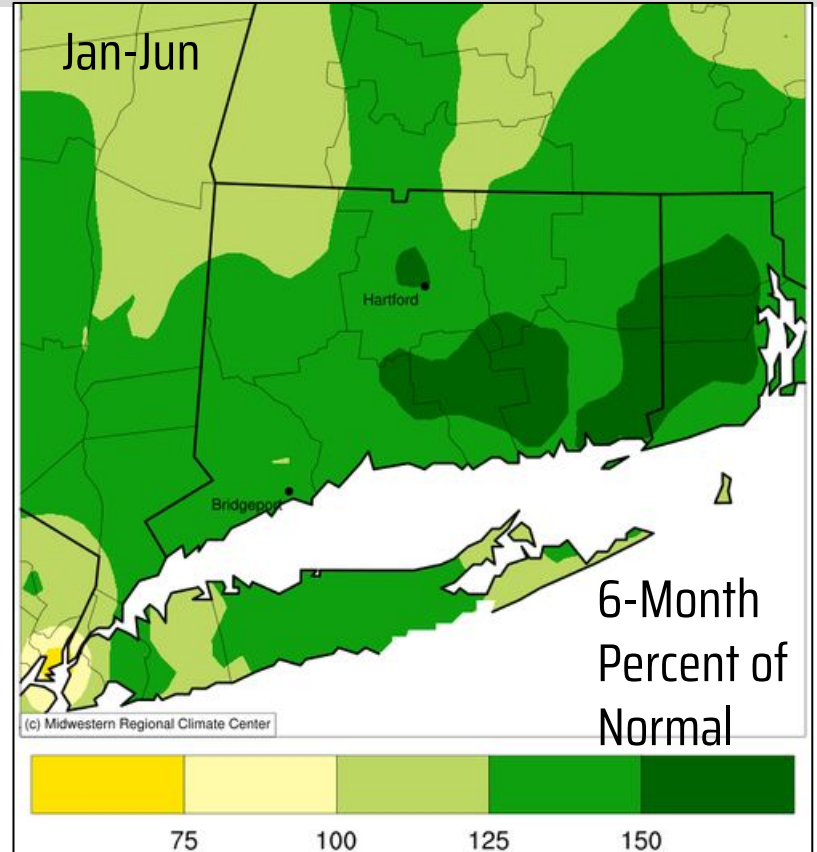
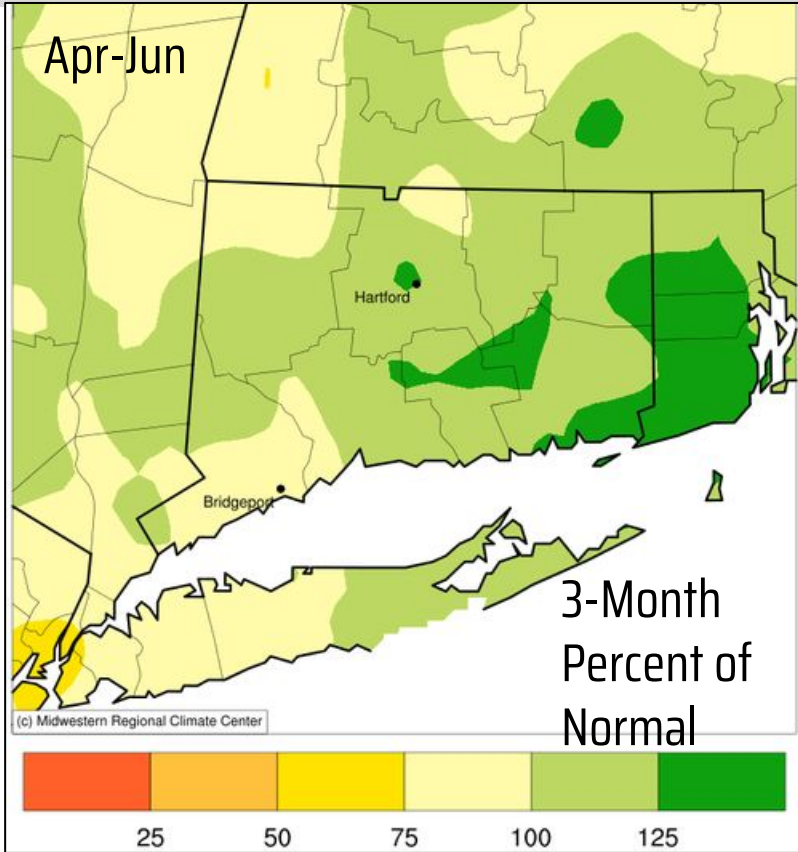


June Precipitation: Departure from Normal and Percent of Normal



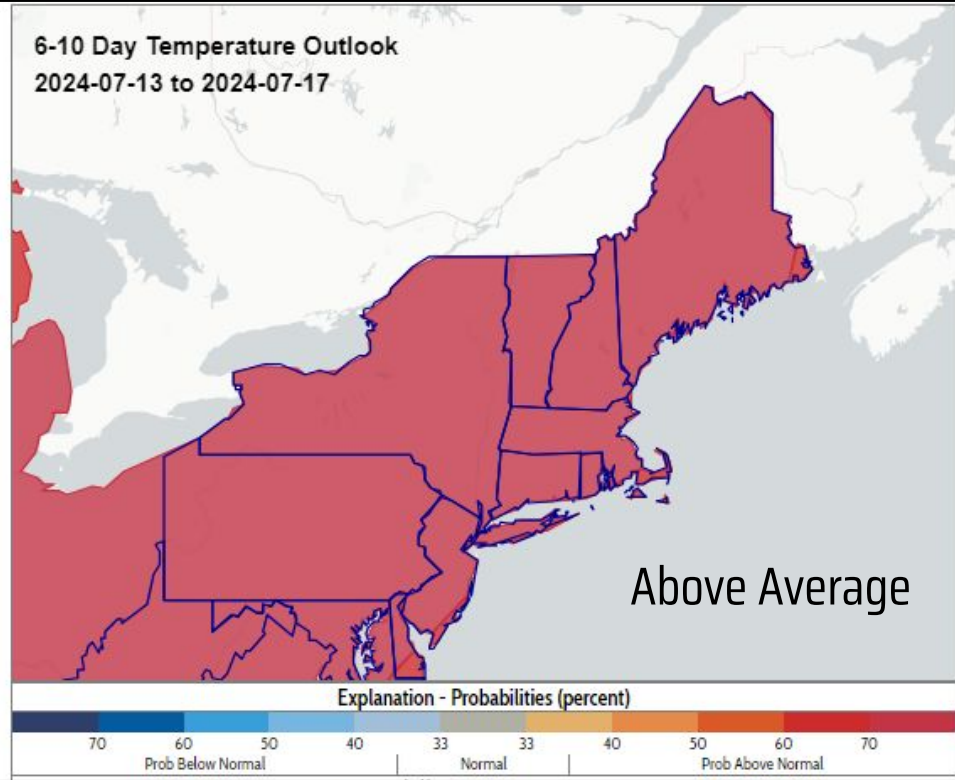
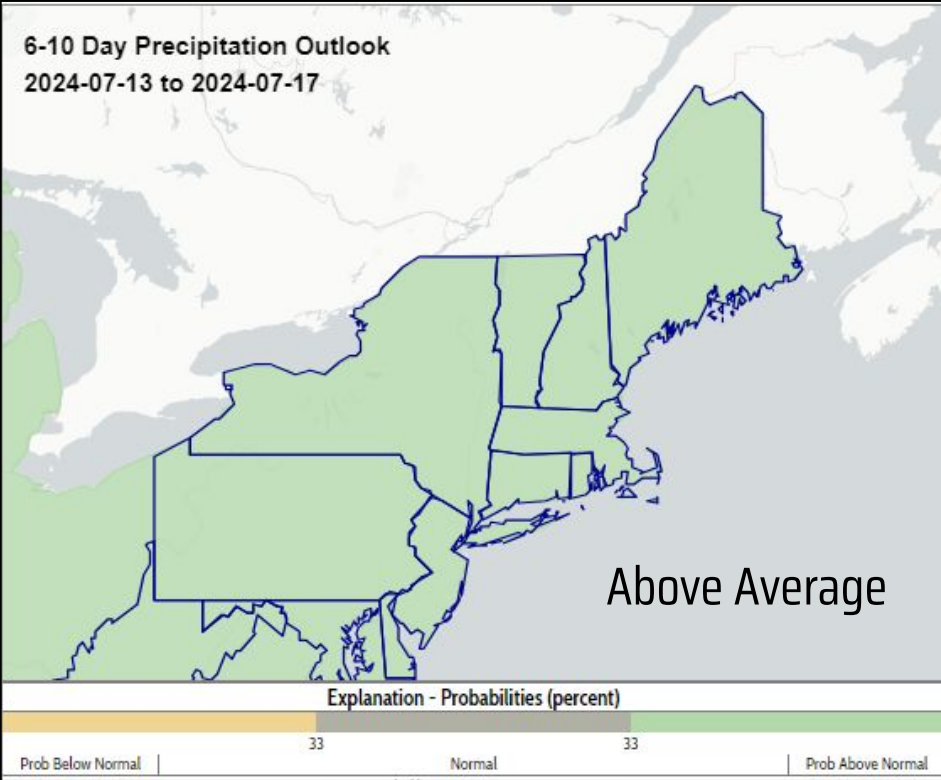


Precipitation Percent of Normal: 3 and 6 Month



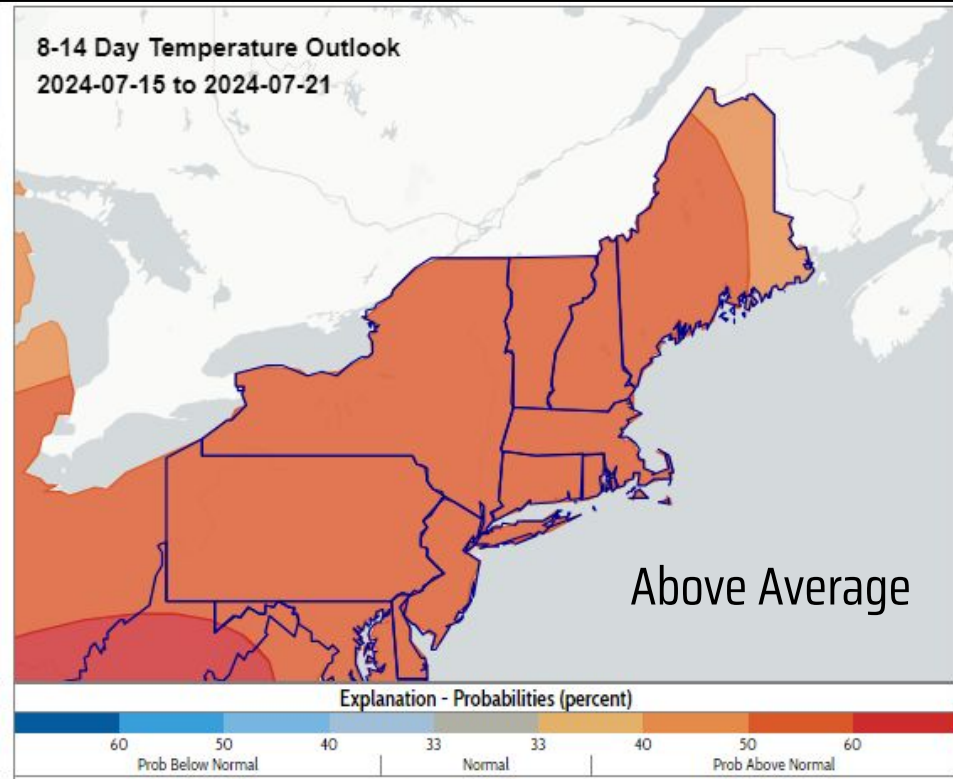
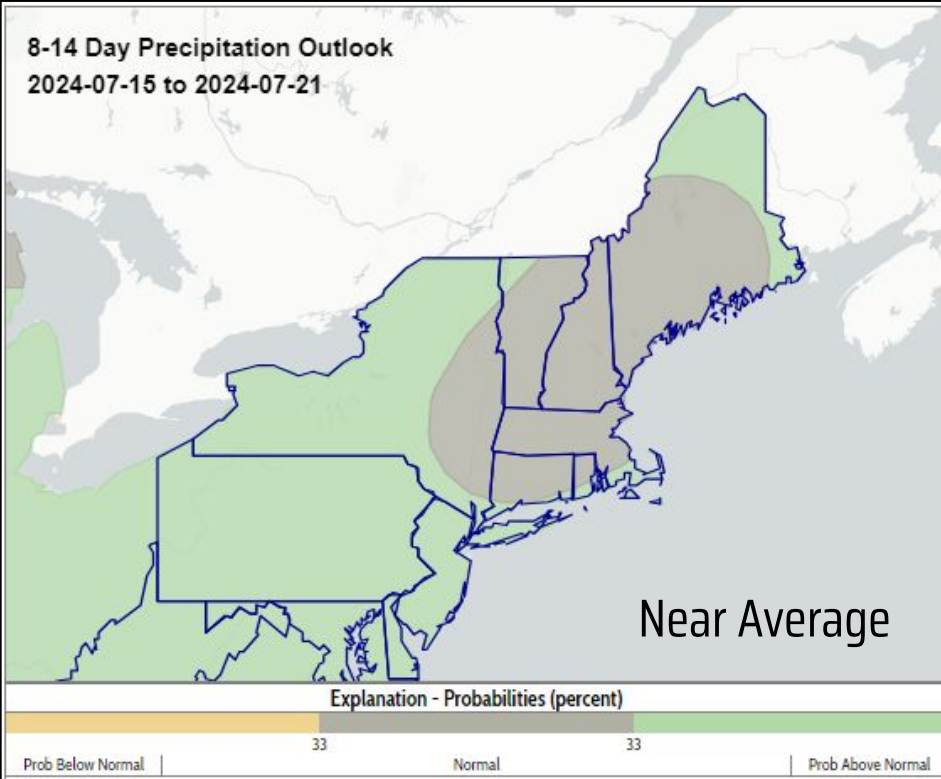


Longer Range Outlook: Sat July 13 - Wed July 17





Longer Range Outlook: Mon July 15 - Sun July 21





Longer Range Outlook: July, August, and September

