

Connecticut Drought Conditions Report

Monthly Update for July 2023



Interagency Drought Workgroup

August 3, 2023

Regular Meeting

Surface Reservoir Capacity Measurements and Trends

7/28/2023 Update

US Drought Monitor Continues to Make Improvement Across CT Due to Wet July!

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:

$\geq 100\%$ of Normal n=34

30

Change since last week:

+2

State Average Percent Full

95.8 % ↑

Last week:

94.3%

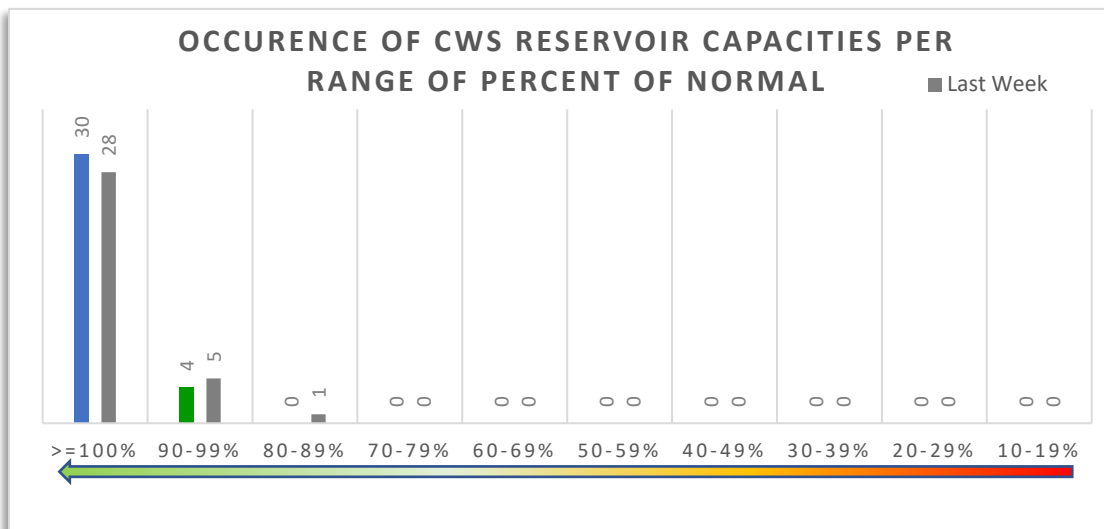
Average Percent of Normal

106.7% ↑

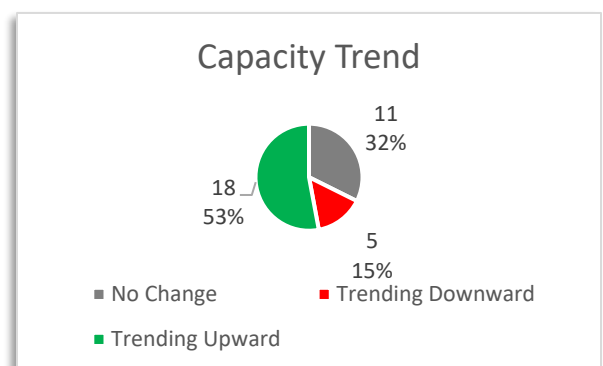
Last week:

104.9%

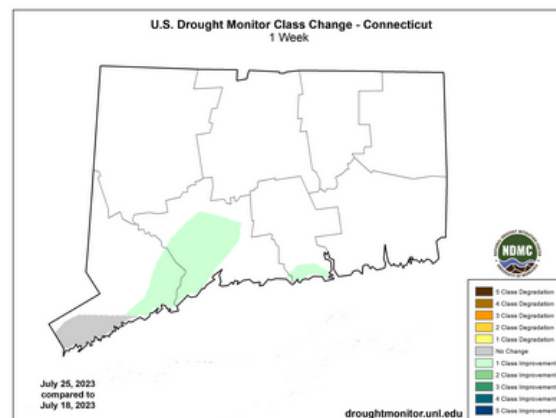
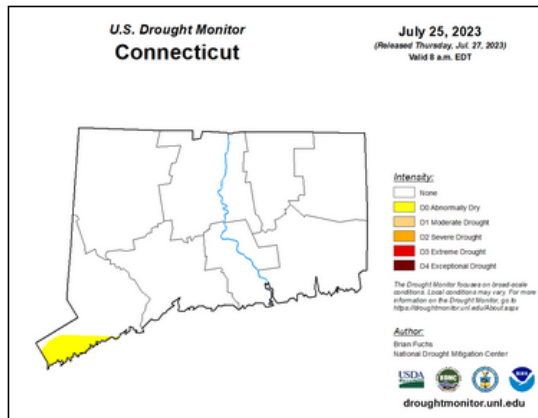
- 15 reservoir systems have reported that they are currently at 100% full (+3 since last week).



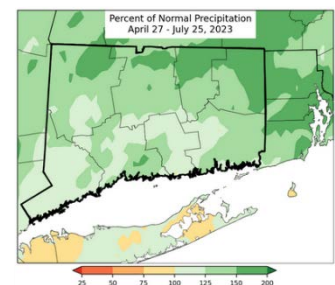
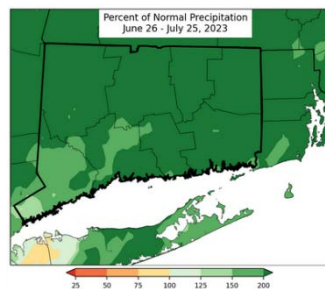
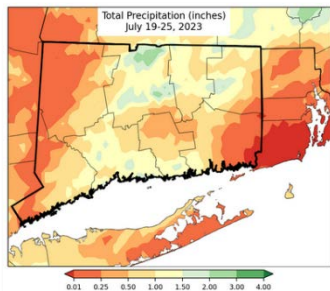
- The gray bars indicate last week's measurements and the colored bar is the current measurement. In non-drought conditions, the graph above would have all of the systems in the $\geq 100\%$ of normal column (n=34).
- 18 system's short-term week to week trend is upward (No change since last week). 5 systems are trending downward in capacity from their previous measurements (-3 since last week). 11 systems have had no change in capacity (+3 since last week).
- Aquarion Greenwich System remains in their 1st drought stage – drought advisory.**



- **US Drought Monitor:** –Removed the D0 Abnormally Dry areas in portions of Fairfield, New Haven and Middlesex Counties. Only SW Fairfield County remains in D0.
- <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CT>



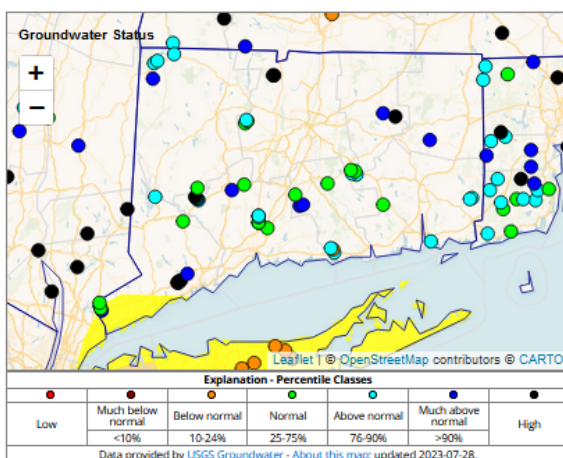
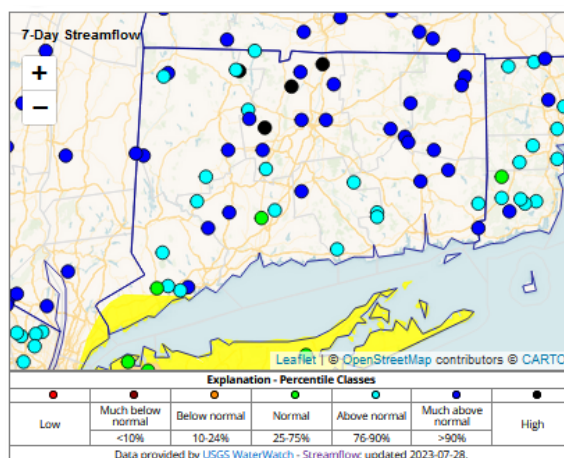
- Last USDM week, CT received trace amounts to over 2 inches of precipitation between July 19th and July 25th. (Map 1). The 30-day Percent of Normal Precipitation map shows above normal precipitation for most portions of CT. (Map 2). The long-term trend over the last 90-days shows that CT has improved and rainfall amounts are at or above normal. (Map 3). The 7-Day Streamflow map shows normal to high from major rainfall in New England. Groundwater real time monitoring wells show normal to much above normal levels.



Map 1- 7 Day Total Precipitation

Map 2- 30 Day Percent of Normal Precipitation

Map 3 – 90 Day Percent of Normal Precipitation





U.S. Geological Survey

**Status of streamflow
and groundwater levels,
as of July 31, 2023**



Provisional Data, subject to review and revision

Name	total	Number of wells		Number of wells		Percent below normal	Percent stage 2	Percent stage 3
		Number of wells below normal	below normal for ≥ 2 out of the last 3 months	below normal for 4 or more consecutive months				
Fairfield	11	0	0	0	0	0	0	0
Hartford	10	0	0	0	0	0	0	0
Litchfield	5	0	0	0	0	0	0	0
Middlesex	7	1	1	1	14.3	14.3	14.3	
New Haven	13	0	0	0	0	0	0	0
New London	5	0	0	0	0	0	0	0
Tolland	11	0	0	0	0	0	0	0
Windham	6	0	0	0	0	0	0	0

END OF JULY 2023 GROUNDWATER SUMMARY BY COUNTY



Provisional Data, subject to review and revision

Name	total	Number of streamgages below normal	Number of streamgages below normal for ≥ 2 out of the last 3 months	Number of streamgages below normal for ≥ 4 out of the last 5 months	Percent below normal	Percent stage 2	Percent stage 3
Fairfield	14	0	0	0	0	0	0
Hartford	11	0	0	0	0	0	0
Litchfield	10	0	0	0	0	0	0
Middlesex	4	0	0	0	0	0	0
New Haven	8	0	0	0	0	0	0
New London	5	0	0	0	0	0	0
Tolland	3	0	0	0	0	0	0
Windham	10	0	0	0	0	0	0

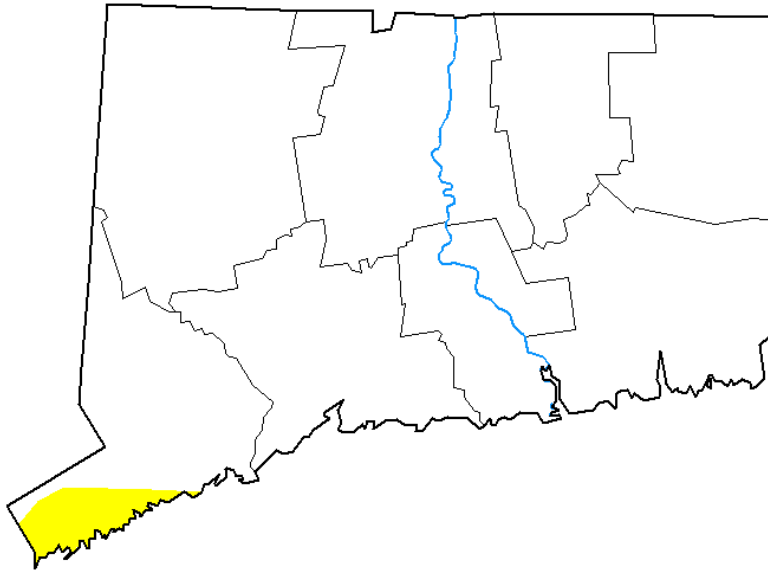
JULY 2023 STREAMFLOW SUMMARY BY COUNTY









Provisional Data, subject to review and revision

U.S. Drought Monitor
Connecticut

July 25, 2023
(Released Thursday, Jul. 27, 2023)
Valid 8 a.m. EDT



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 <http://droughtmonitor.unl.edu/About.aspx>

Author:

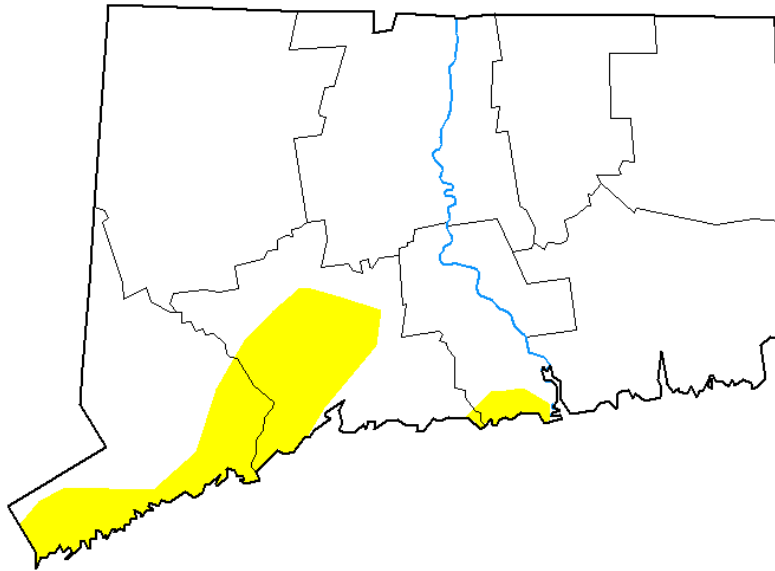
Brian Fuchs
National Drought Mitigation Center









droughtmonitor.unl.edu

U.S. Drought Monitor Connecticut

July 18, 2023
(Released Thursday, Jul. 20, 2023)
Valid 8 a.m. EDT



Intensity:

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

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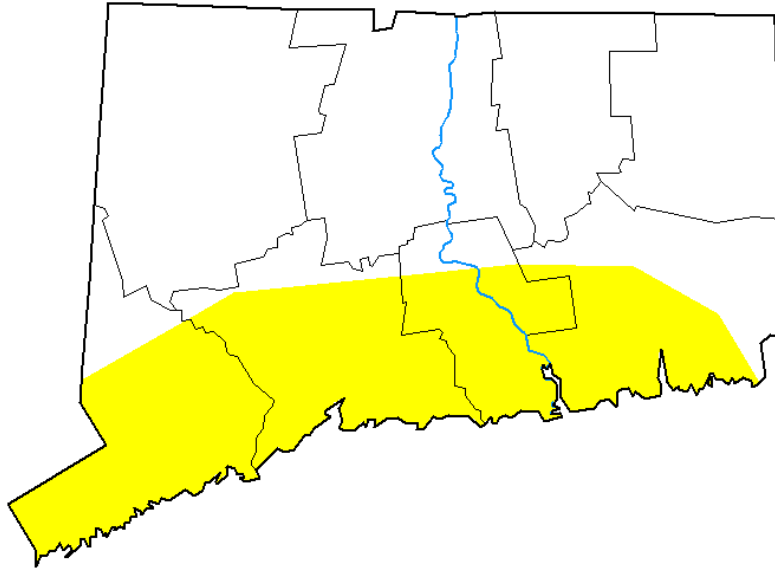
Richard Tinker
CPC/NOAA/NWS/NCEP









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U.S. Drought Monitor Connecticut

July 11, 2023
(Released Thursday, Jul. 13, 2023)
Valid 8 a.m. EDT



Intensity:

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

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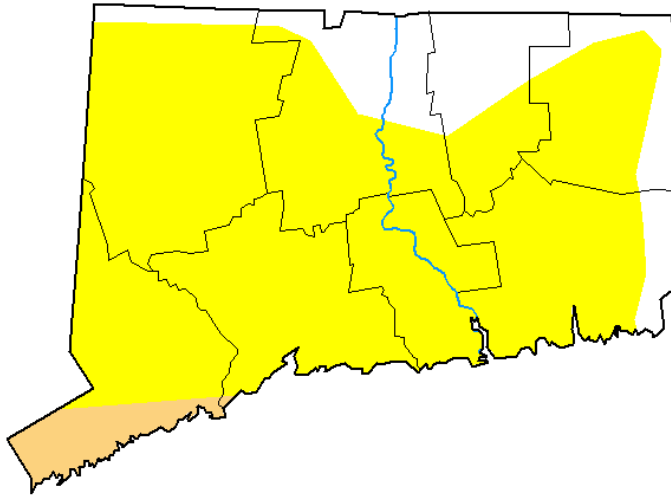
Author:

Richard Tinker
CPC/NOAA/NWS/NCEP



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U.S. Drought Monitor Connecticut



July 4, 2023
(Released Thursday, Jul. 6, 2023)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	17.17	82.83	4.00	0.00	0.00	0.00
Last Week 06-27-2023	8.16	91.84	0.00	0.00	0.00	0.00
3 Months Ago 04-04-2023	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-03-2023	53.82	46.18	0.00	0.00	0.00	0.00
Start of Water Year 09-27-2022	0.00	100.00	70.06	28.07	0.00	0.00
One Year Ago 07-05-2022	37.56	62.44	39.48	0.00	0.00	0.00

Intensity:

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

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Author:

Curtis Riganti
National Drought Mitigation Center



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What is the USDM?

[Home](#) / [About](#) / What is the USDM?

Maybe you've seen it in the media: that map of the U.S. painted with blobs of yellow, orange and red. It shows drought—but how do we know which colors go where? Who decides? What does it mean for you? Read below to find out.

The U.S. Drought Monitor (USDM) is a map released every Thursday, showing where drought is and how bad it is across the U.S. and its territories. The map uses six classifications: normal conditions, abnormally dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought: moderate (D1), severe (D2), extreme (D3) and exceptional (D4).

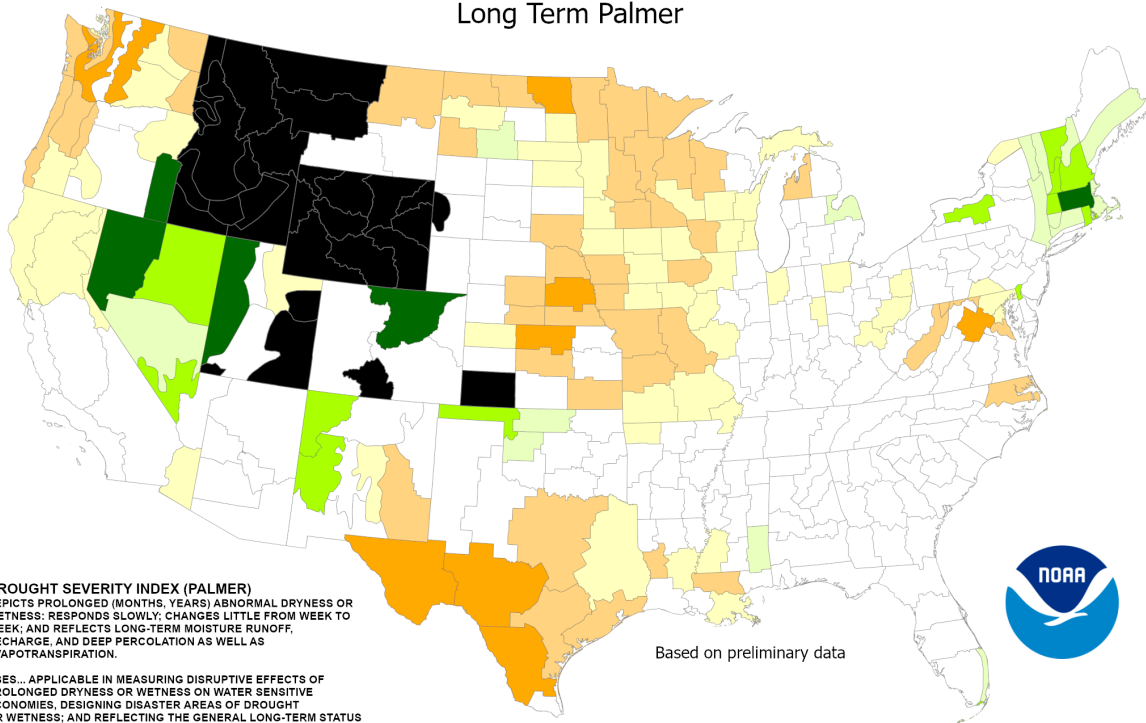
An associated product—the [North American Drought Monitor](#)—comes out monthly, reflecting drought conditions across the entire continent.

Category	None	D0	D1	D2	D3	D4
Description	Normal or wet conditions	Abnormally Dry	Moderate Drought	Severe Drought	Extreme Drought	Exceptional Drought

The included graphics and more information about the US Drought Monitor can be found at this link:

<https://droughtmonitor.unl.edu/About/WhatistheUSDM.aspx>

Drought Severity Index by Division Weekly Value for Period Ending Jul 29, 2023 Long Term Palmer



DROUGHT SEVERITY INDEX (PALMER)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES; DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary data



- | | |
|-----------------------------------|--------------------------------------|
| ■ -4.0 or less (Extreme Drought) | ■ +2.0 to +2.9 (Unusual Moist Spell) |
| ■ -3.0 to -3.9 (Severe Drought) | ■ +3.0 to +3.9 (Very Moist Spell) |
| ■ -2.0 to -2.9 (Moderate Drought) | ■ +4.0 and above (Extremely Moist) |
| ■ -1.9 to +1.9 (Near Normal) | ■ Missing/Incomplete |