

Connecticut Drought Conditions Report

Monthly Update for January 2024



Interagency Drought Workgroup

April 4, 2024

Regular Meeting

U.S. Drought Monitor (USDM): The map and designation below are from January 23, 2024. The entire state of Connecticut has continued to have no drought classification via the USDM. This trend has continued every week since the September 7, 2023 IDW Meeting.

U.S. Drought Monitor



Drought & Dryness Categories

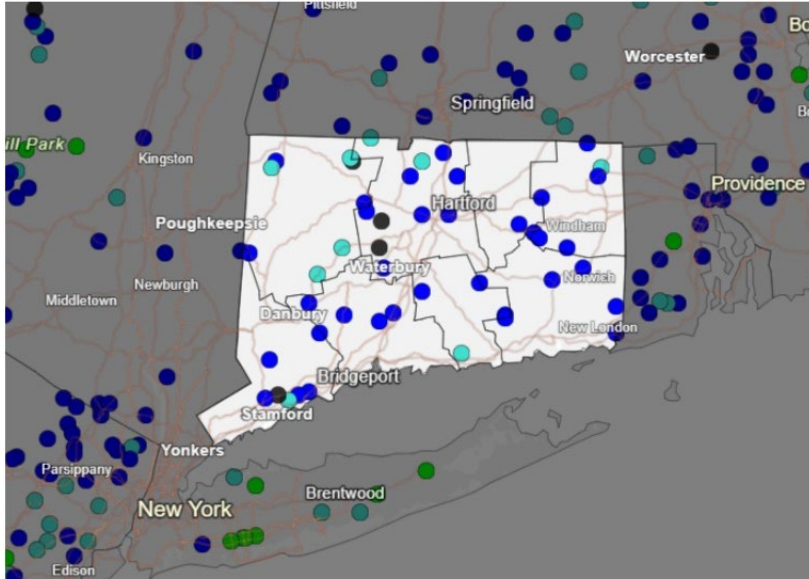
| | % of CT |
|-------------------------------|---------|
| D0 – Abnormally Dry | 0.0% |
| D1 – Moderate Drought | 0.0% |
| D2 – Severe Drought | 0.0% |
| D3 – Extreme Drought | 0.0% |
| D4 – Exceptional Drought | 0.0% |
| Total Area in Drought (D1–D4) | 0.0% |

Source(s): NDMC, NOAA, USDA
 Data Valid: 01/23/24

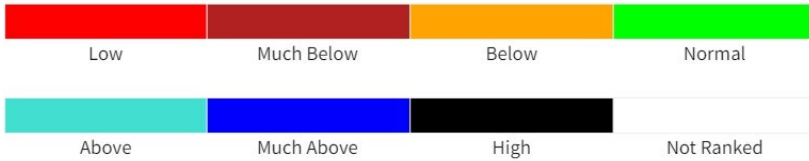
Drought.gov

Streamflow Levels: As of January 31, 2024 – Streamflow levels primarily measured Much Above or Above average, relative to historical monthly data.

Real-Time Streamflow Conditions



Streamflow Conditions



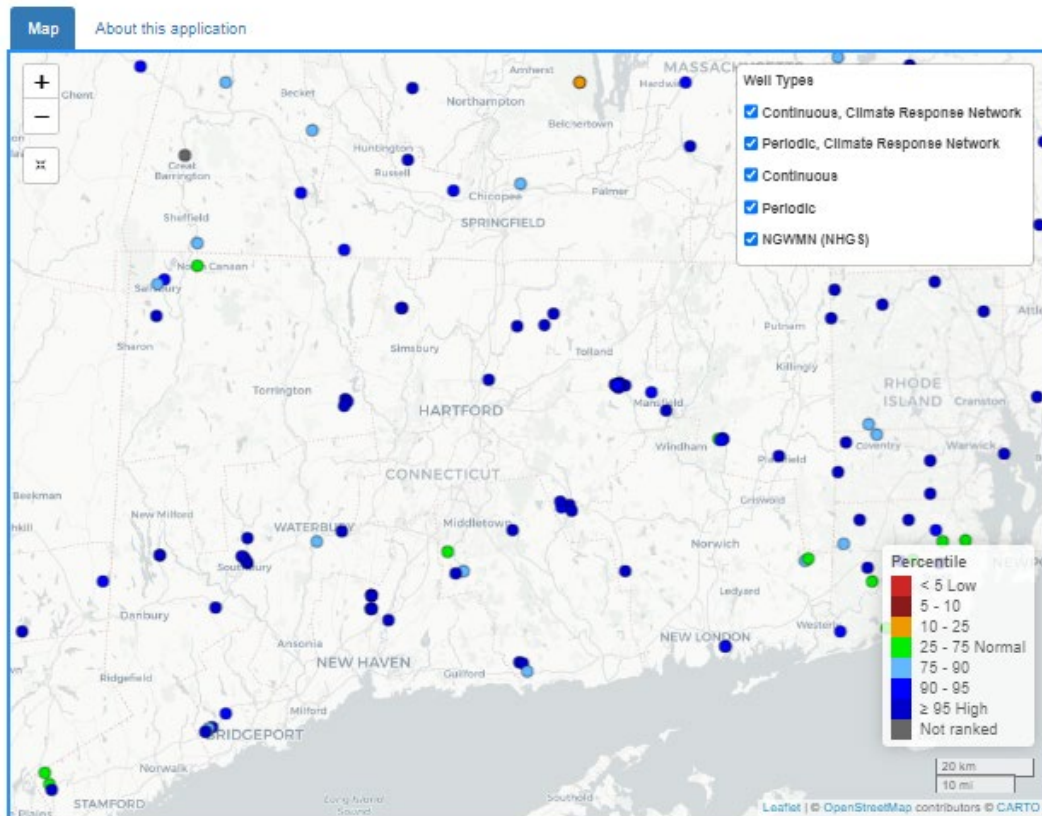
Source(s): U.S. Geological Survey
Data Valid: 01/31/24

Drought.gov

Groundwater Levels: For the month of January, the majority of monitored wells in Connecticut were ranked High (greater than or equal to the 95th percentile). As this was fairly consistent among continuous (or “real-time”) groundwater wells and periodic wells, the map below shows the combination of all groundwater wells.

Groundwater Levels in New England

Recent conditions relative to historical monthly statistics

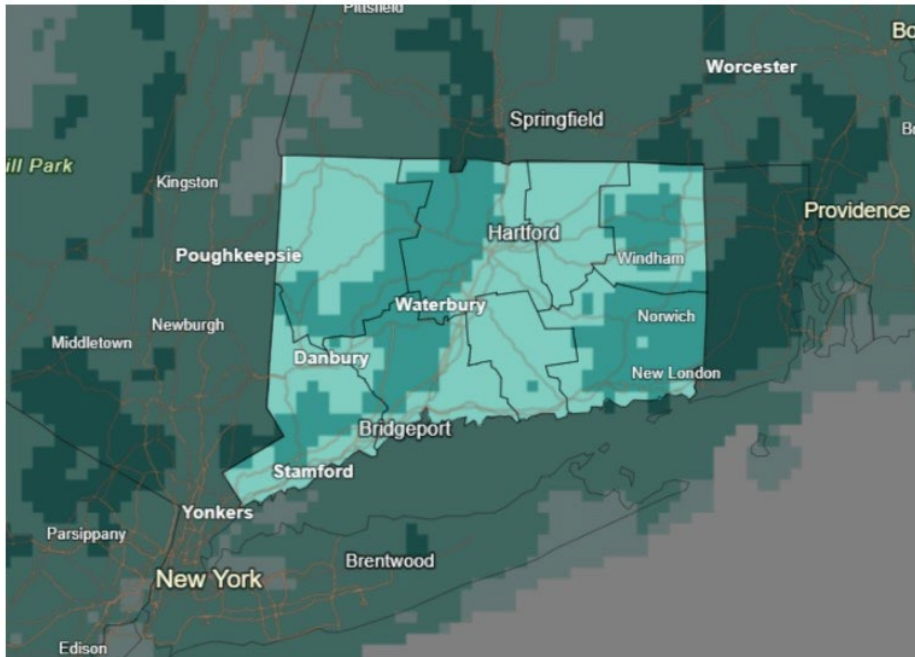


Interactive map showing the percentile of the most recently measured groundwater levels relative to long-term monthly statistics. Hovering over and clicking on each data point will provide additional information and data for the site. [NGWMN, National Groundwater Monitoring Network; NHGS, New Hampshire Geological Survey; <, less than; >, greater than; ≥, greater than or equal to; Not ranked, site has less than 10 years of data for the most recent month]

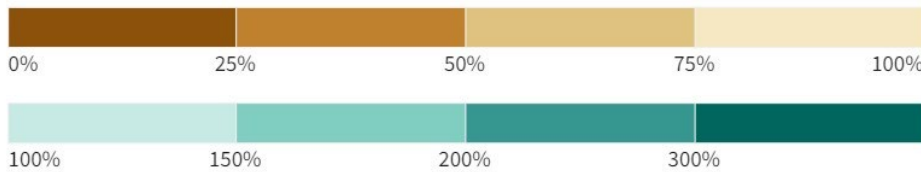
Percent of Normal Precipitation: The following maps include data up until January 29, 2024. Below you will find the 30-Day and 60-Day Percent of Normal Precipitation maps. For the 30-Day span, eastern Connecticut and the western edges of Hartford and New Haven counties experienced 200% of normal precipitation, while the majority of the state experienced 150% of normal precipitation.

For the 60-Day span, which included most of December 2023 and January 2024, patterns largely followed those of the 30-Day map.

30-Day Percent of Normal Precipitation



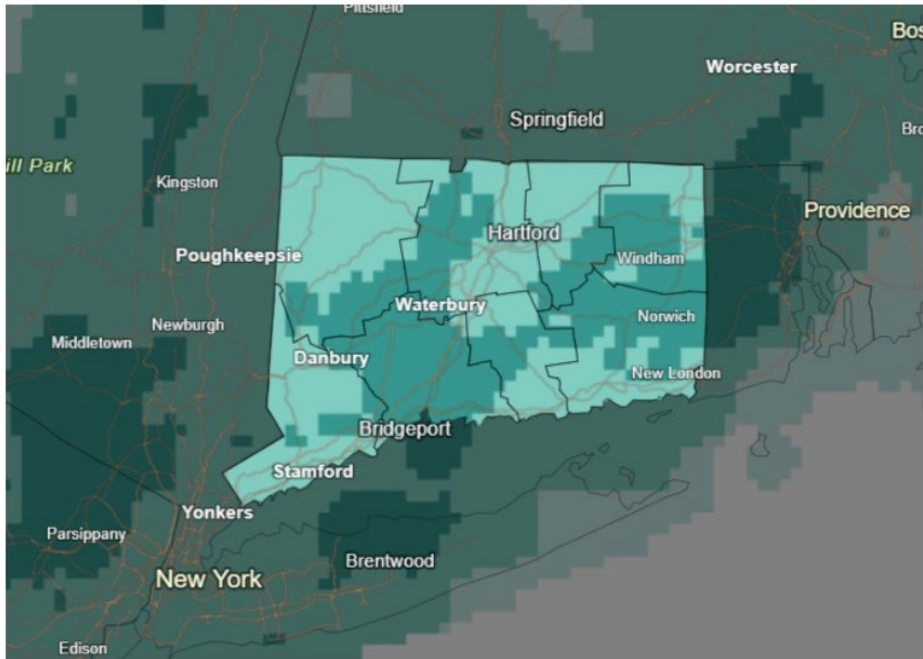
Percent of Normal Precipitation (%)



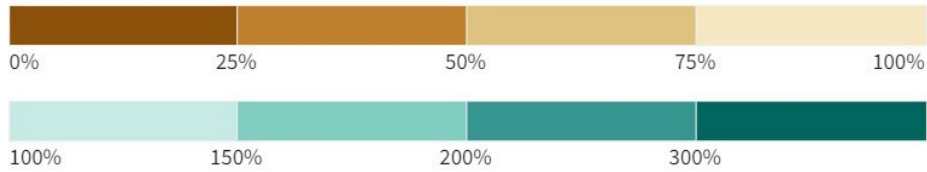
Source(s): UC Merced
Data Valid: 01/29/24



60-Day Percent of Normal Precipitation



Percent of Normal Precipitation (%)



Source(s): UC Merced
Data Valid: 01/29/24

Drought.gov

Connecticut Drought Conditions Report

Monthly Update for February 2024



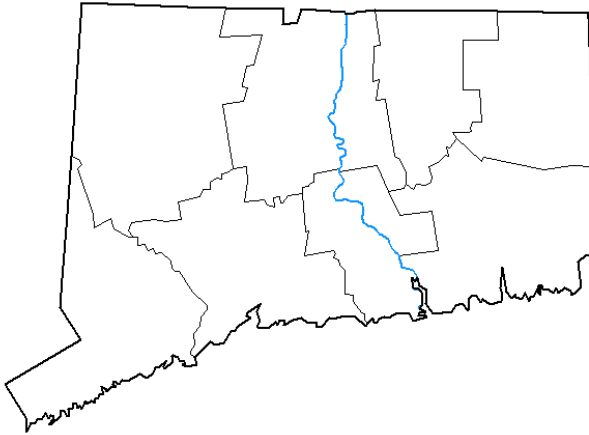
Interagency Drought Workgroup

April 4, 2024

Regular Meeting

U.S. Drought Monitor (USDM): The map and designation below are from February 27, 2024. The entire state of Connecticut has continued to have no drought classification via the USDM. This trend has continued every week since the September 7, 2023 IDW Meeting.

U.S. Drought Monitor Connecticut



February 27, 2024
(Released Thursday, Feb. 29, 2024)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|--------|-------|-------|-------|-------|------|
| Current | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Last Week 02-20-2024 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago 11-28-2023 | 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 02-28-2023 | 100.00 | 0.00 | 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>

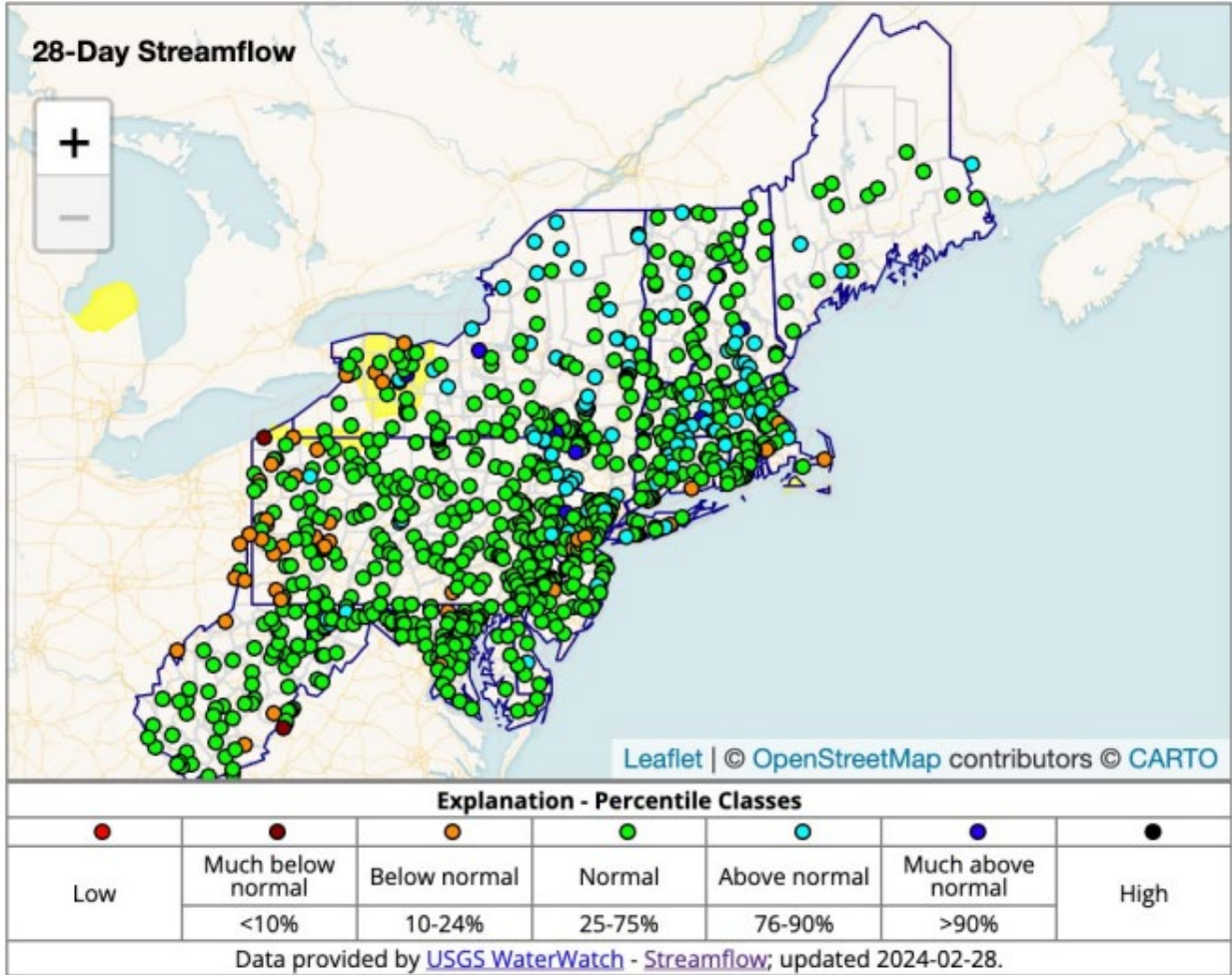
Author:

Richard Heim
NCEI/NOAA

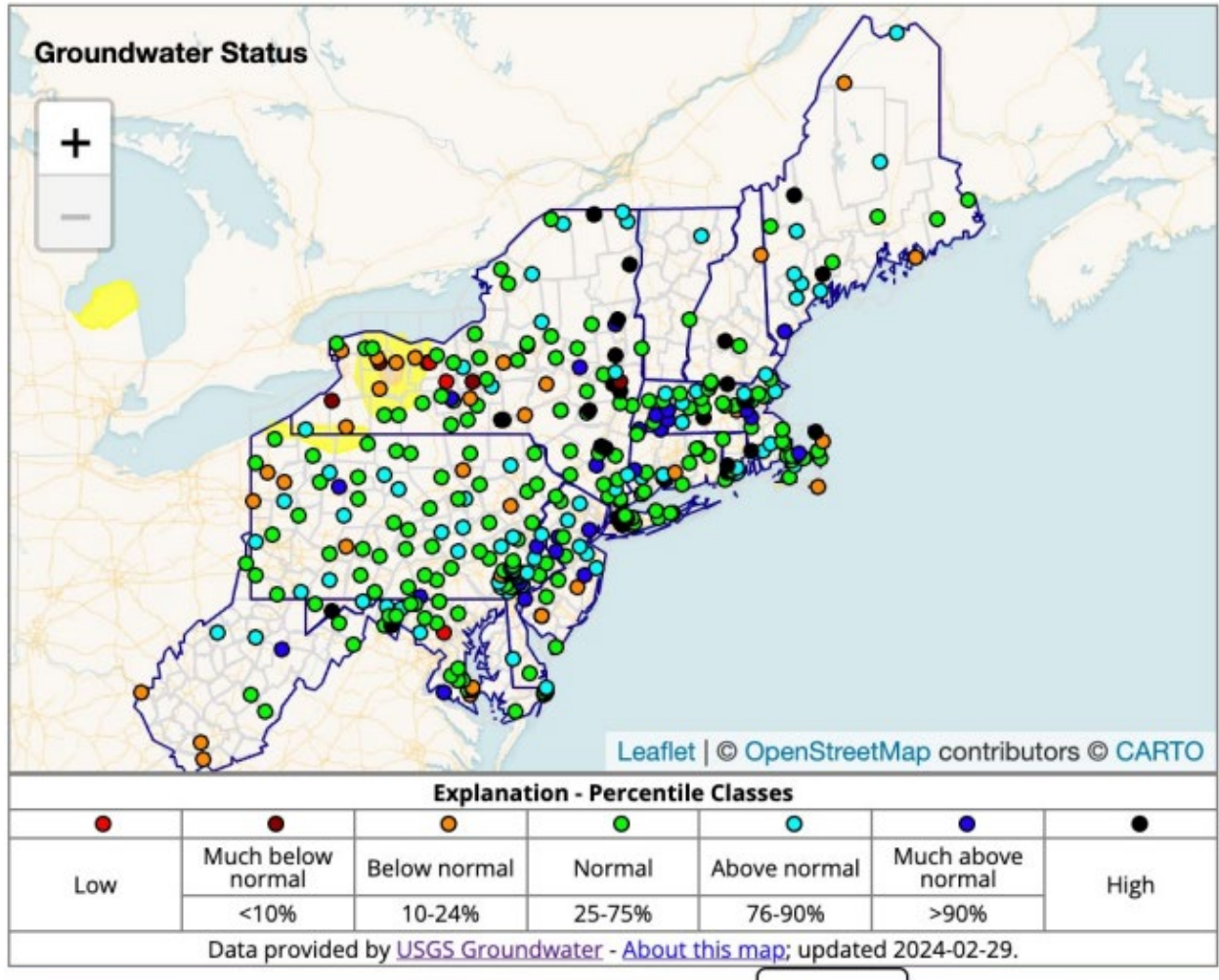


droughtmonitor.unl.edu

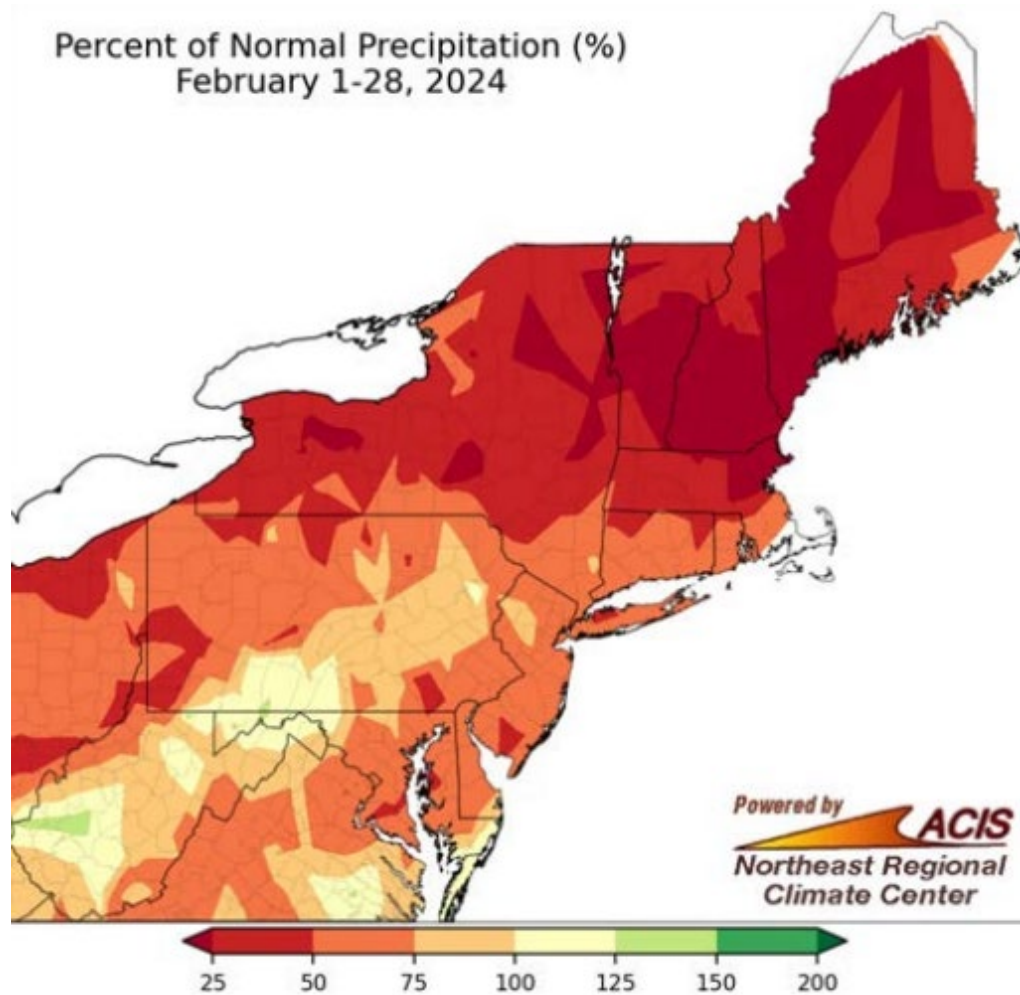
Streamflow Levels: As of February 28, 2024 – Streamflow levels primarily measured Normal or Above Normal relative to historical monthly data. Drier conditions this month (which will be detailed later in this report) led to streamflow levels decreasing from January into February.



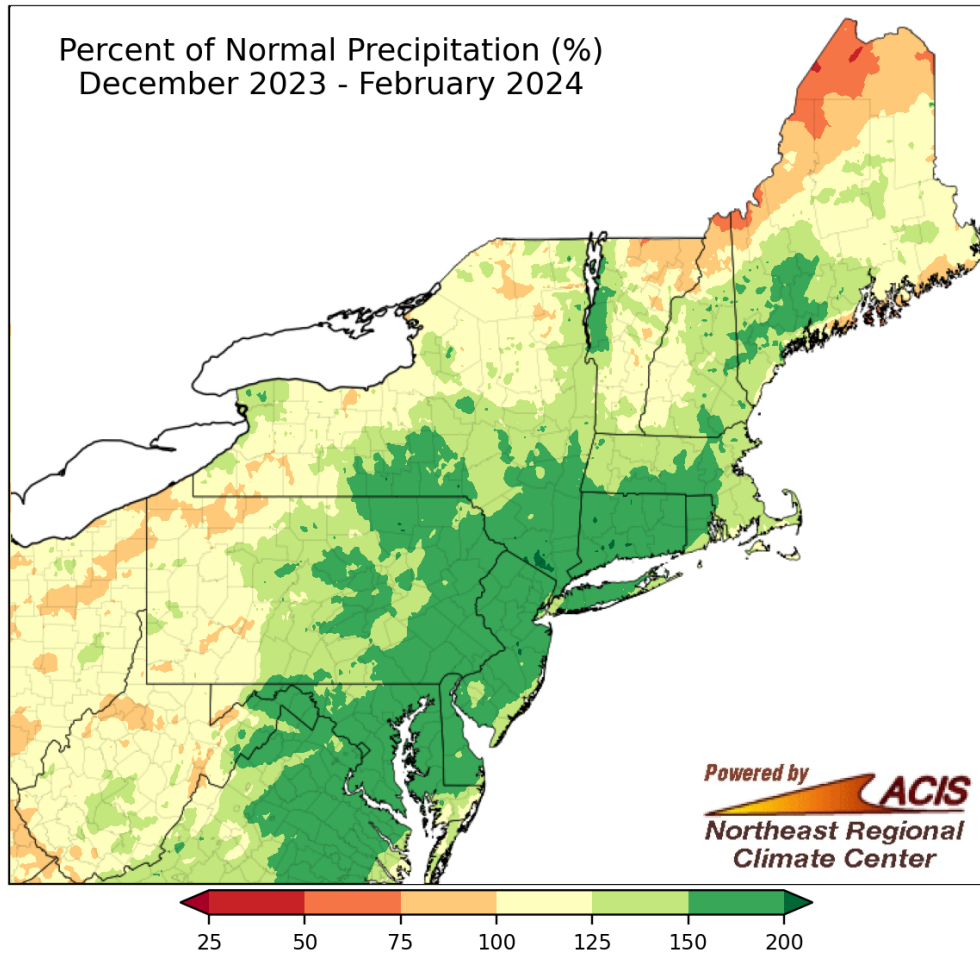
Groundwater Levels: Like streamflow conditions, as of February 29, 2024, groundwater levels also tapered down from previous months, due to the decreased precipitation experience in February.



Precipitation: Throughout the month of February, Connecticut experienced below normal precipitation levels (as shown on Map A below), however the saturation from the previous months allowed conditions to remain relatively normal. Further down in this section, Map B demonstrates that the majority of Connecticut received 150-200% of normal precipitation between over the three-month period of December 2023 through February 2024 (AKA meteorological winter). Finally, in the chart below, you can see that the Greater Hartford region experienced the wettest winter on record, while the Greater Bridgeport area experienced the third wettest winter on record.



Map A: Percent Normal Precipitation, February 1-28, 2024



Map B: Percent Normal Precipitation, December 2023 – February 2024

| Location | Winter 2023-24 Precip (in.) | Normal (in.) | Percent of Normal | Rank (wettest) |
|-------------------------|--------------------------------|--------------|----------------------|-------------------|
| Scranton, PA | 13.01 | 7.46 | 174% | 1 |
| Hartford, CT | 18.28 | 10.49 | 174% | 1 |
| Allentown, PA | 17.27 | 9.93 | 174% | 1 |
| Baltimore, MD | 15.77 | 9.69 | 163% | 4 |
| Wilmington, DE | 16.00 | 9.91 | 161% | 4 |
| Bridgeport, CT | 16.27 | 10.28 | 158% | 3 |
| Providence, RI | 19.05 | 12.05 | 158% | 2 |
| Williamsport, PA | 13.44 | 8.54 | 157% | 4 |
| Islip, NY | 18.28 | 11.66 | 157% | 3 |
| Philadelphia, PA | 15.32 | 9.85 | 156% | 5 |
| Washington National, DC | 13.72 | 8.89 | 154% | 12 |
| Worcester, MA | 16.92 | 11.06 | 153% | 4 |
| Kennedy Airport, NY | 15.15 | 9.95 | 152% | 3 |
| Concord, NH | 14.05 | 9.25 | 152% | 4 |
| Binghamton, NY | 12.27 | 8.11 | 151% | 1 |
| Dulles Airport, VA | 13.20 | 8.85 | 149% | 3 |
| Burlington, VT | 9.52 | 6.40 | 149% | 2 |
| Harrisburg, PA | 13.34 | 9.05 | 147% | 7 |
| Newark, NJ | 14.82 | 10.54 | 141% | 9 |
| LaGuardia Airport, NY | 14.40 | 10.26 | 140% | 4 |
| Albany, NY | 11.23 | 8.14 | 138% | 5 |
| Atlantic City, NJ | 15.02 | 11.08 | 136% | 5 |
| Portland, ME | 15.26 | 11.54 | 132% | 14 |
| Boston, MA | 14.27 | 10.90 | 131% | 17 |
| Syracuse, NY | 10.73 | 8.32 | 129% | 13 |
| Central Park, NY | 14.04 | 11.21 | 125% | 15 |
| Pittsburgh, PA | 9.84 | 8.42 | 117% | |
| Beckley, WV | 11.02 | 9.54 | 116% | |
| Huntington, WV | 11.19 | 10.04 | 111% | |
| Buffalo, NY | 10.57 | 9.59 | 110% | |
| Charleston, WV | 10.92 | 10.19 | 107% | |
| Rochester, NY | 7.75 | 7.35 | 105% | |
| Elkins, WV | 10.51 | 10.19 | 103% | |
| Erie, PA | 8.65 | 10.10 | 86% | |
| Caribou, ME | 7.01 | 8.97 | 78% | |

Connecticut Drought Conditions Report

Monthly Update for March 2024



Interagency Drought Workgroup

April 4, 2024

Regular Meeting

PLEASE NOTE: Many of the maps typically shown throughout the Drought Conditions Report are included further along in the report. The condition descriptions for the different data sets are below.

U.S. Drought Monitor (USDM): The map and designations included later on in this report are from March 26, 2024 – which is the most recent edition of the USDM. The entire state of Connecticut has continued to have no drought classification via the USDM. This trend has continued every week since the September 7, 2023 IDW Meeting.

Streamflow Levels: As of March 28, 2024 – Streamflow levels primarily measured Above Normal or Much Above Normal, relative to historical monthly data. The map for this can be found further down in the report.

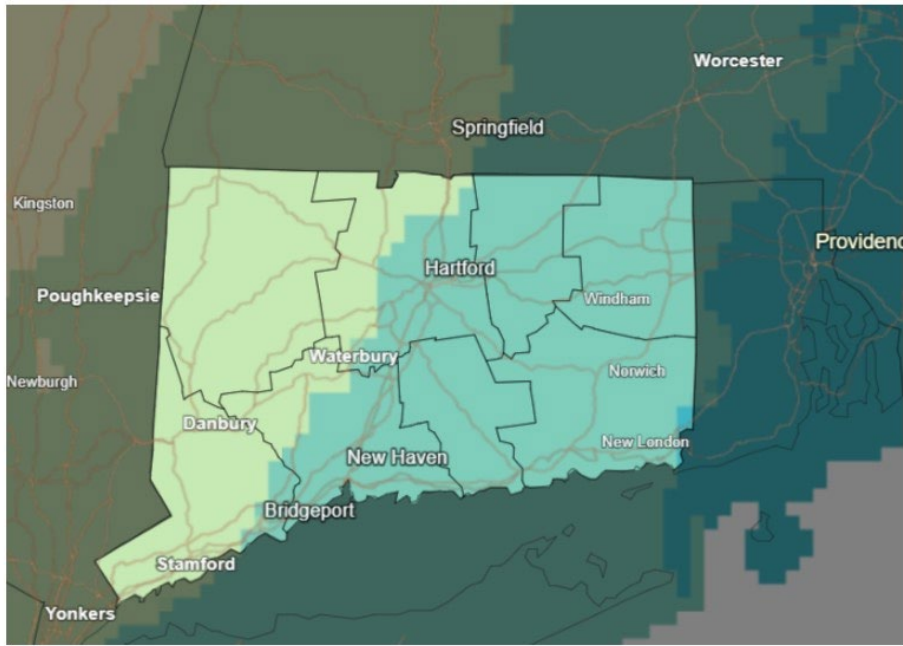
Groundwater Levels: As of March 28, 2024 – groundwater well measurements ranged from Normal (25-75% of normal) to High. The most frequent measurement throughout the state for monitored groundwater wells was Much Above Normal (>90% of normal). The map for this status update can be found further down in the report.

Precipitation: The 30-Day of Normal Precipitation Map (included later in this report) demonstrates the very wet conditions throughout the month of March. Nearly all of Connecticut experienced greater than 200% of normal precipitation for this time of year. The 90-Day of Normal Precipitation Map (included later in this report) shows that nearly all of Connecticut experienced greater than 150% of normal precipitation, with some portions of the state experiencing greater than 200% of normal.

Given the extremely saturated conditions we've been experiencing over the last few weeks, we have included a 7-Day Total Precipitation Map for the period of 3/23/24 – 3/30/24. This shows the eastern two-thirds of the state received 1-2 inches in that one-week span, while the western third experienced 0.5-1 inches.

Finally, this report includes a table of precipitation measures for the Greater Bridgeport and Greater Hartford regions. The Bridgeport area received 10.38 inches of rain, making it the wettest March on record. The Hartford areas received 7.99 inches of rain, making it the second wettest March on record.

7-Day Total Precipitation (Inches)



Source(s): UC Merced
Data Valid: 03/30/24

Drought.gov

| Area | Mar. 2024 Precip (in.) | Normal (in.) | Percent of Normal | Rank (wettest) |
|-------------------------|---------------------------|--------------|----------------------|-------------------|
| Portland, ME | 11.00 | 4.08 | 270% | 2 |
| Bridgeport, CT | 10.38 | 4.09 | 254% | 1 |
| Kennedy Airport, NY | 9.88 | 3.94 | 251% | 1 |
| Providence, RI | 12.05 | 4.90 | 246% | 2 |
| Concord, NH | 7.92 | 3.28 | 241% | 3 |
| LaGuardia Airport, NY | 9.62 | 4.01 | 240% | 1 |
| Atlantic City, NJ | 9.85 | 4.52 | 218% | 1 |
| Boston, MA | 8.94 | 4.17 | 214% | 6 |
| Islip, NY | 9.54 | 4.51 | 212% | 1 |
| Central Park, NY | 9.06 | 4.29 | 211% | 4 |
| Hartford, CT | 7.99 | 3.81 | 210% | 2 |
| Caribou, ME | 5.74 | 2.77 | 207% | 1 |
| Albany, NY | 6.34 | 3.09 | 205% | 1 |
| Worcester, MA | 8.57 | 4.19 | 205% | 4 |
| Newark, NJ | 7.99 | 4.13 | 193% | 6 |
| Philadelphia, PA | 7.19 | 3.96 | 182% | 4 |
| Burlington, VT | 3.97 | 2.24 | 177% | 4 |
| Scranton, PA | 4.85 | 2.77 | 175% | 10 |
| Wilmington, DE | 7.20 | 4.16 | 173% | 5 |
| Binghamton, NY | 4.70 | 3.05 | 154% | 8 |
| Allentown, PA | 5.14 | 3.63 | 142% | 17 |
| Washington National, DC | 4.89 | 3.50 | 140% | |
| Baltimore, MD | 5.54 | 4.01 | 138% | |
| Syracuse, NY | 3.47 | 3.04 | 114% | |
| Williamsport, PA | 3.56 | 3.13 | 114% | |
| Dulles Airport, VA | 3.89 | 3.50 | 111% | |
| Harrisburg, PA | 3.96 | 3.70 | 107% | |
| Pittsburgh, PA | 3.25 | 3.15 | 103% | |
| Elkins, WV | 3.46 | 3.98 | 87% | |
| Huntington, WV | 3.60 | 4.16 | 87% | |
| Charleston, WV | 3.46 | 4.14 | 84% | |
| Rochester, NY | 1.94 | 2.49 | 78% | |
| Beckley, WV | 3.04 | 4.03 | 75% | |
| Buffalo, NY | 2.11 | 2.89 | 73% | |
| Erie, PA | 1.92 | 3.08 | 62% | |

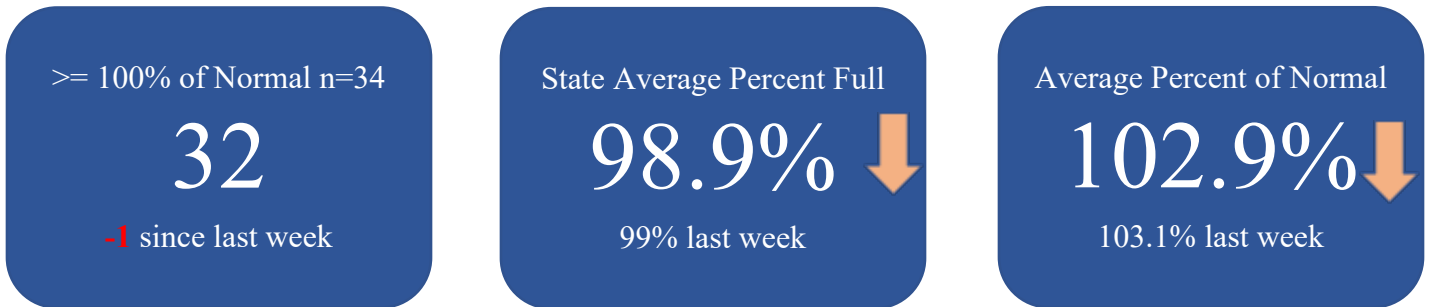
Surface Reservoir Capacity Measurements and Trends

3/29/2024 Update

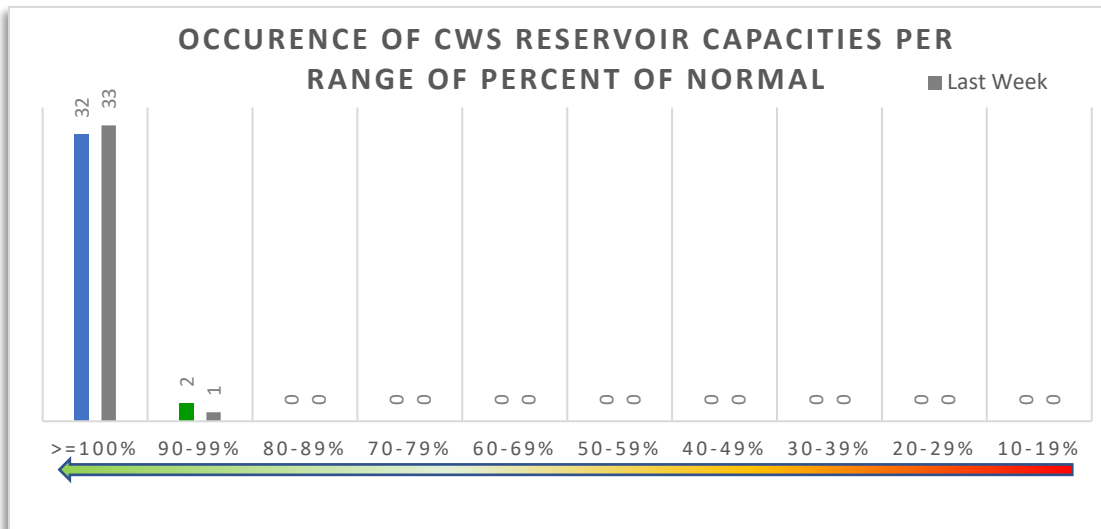
Reservoir Capacity Across the State Remain in Good Shape!

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.

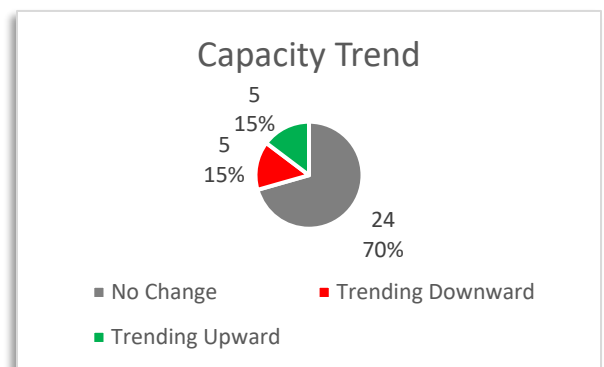
Key takeaways:



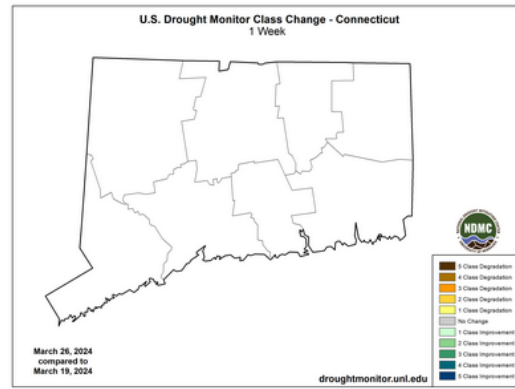
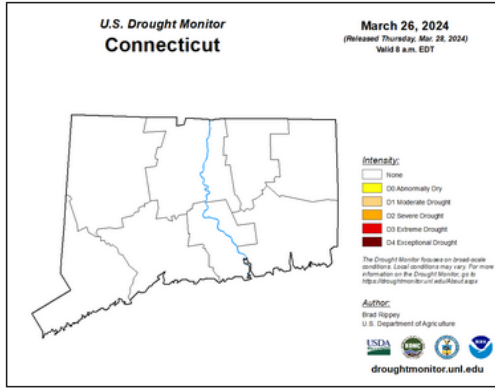
- 24 reservoir systems have reported that they are currently at 100% full (-1 since week).



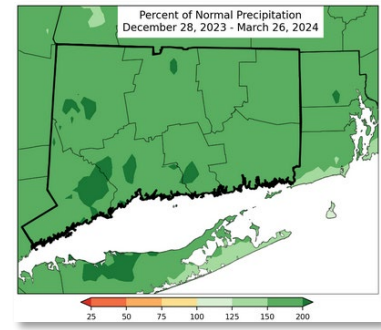
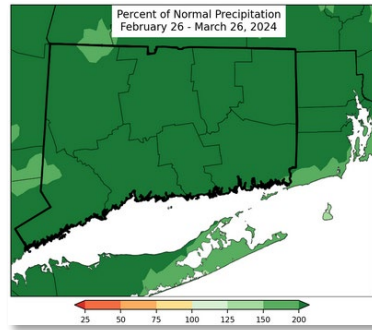
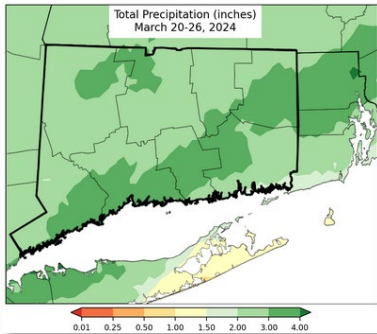
- The gray bars indicate last week's measurements, and the colored bar is the current measurement. In non-drought conditions, the graph above would have all of the systems in the >=100% of normal column (n=34).
- 5 system's short-term week to week trend is upward (-3 since last week). 5 system is trending downward in capacity from their previous measurements (+4 since last week). 24 systems have had no change in capacity (-1 since last week).
- No water systems are under a drought category.
- **US Drought Monitor:** – No changes since last week.



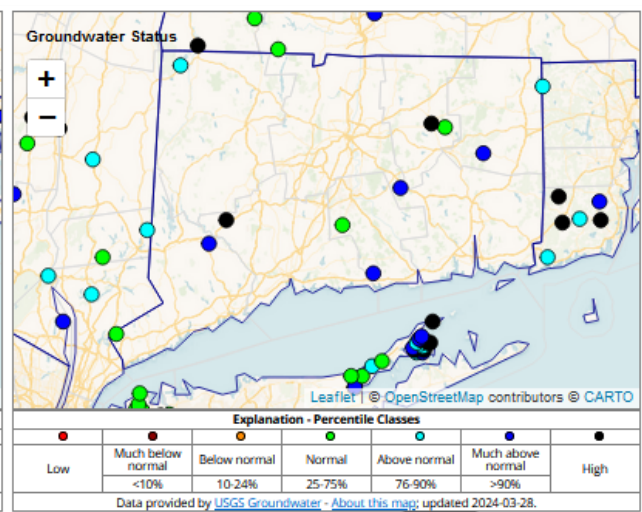
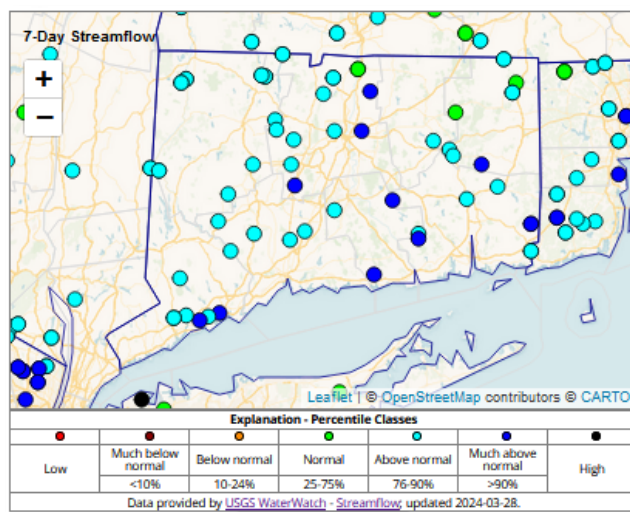
- <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CT>



- Last USDM week (between March 20th and March 26th), CT received 2 to 4 inches of precipitation (Map 1). The 30-day Percent of Normal Precipitation map shows above normal conditions throughout CT. (Map 2). The long-term trend over the last 90 days shows that CT had rainfall amounts above normal. (Map 3). The 7-Day Streamflow map shows above normal to much above normal stream flows. Real time monitoring groundwater wells show above 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 |
|-----------|--|--------------------------|--------------|------------------|-------|--------------------|-------------------|---------------|-----------------------|---------------|
| CT1030011 | Norwalk First Taxing District | 3/24/2024 | 94.70 | No Drought Stage | -- | 96.90 | 98 | 3/17/2024 | 94.70 | FAIRFIELD |
| CT0090011 | Bethel Water Dept | 3/24/2024 | 100.00 | No Drought Stage | -- | 98.70 | 101 | 3/17/2024 | 100.00 | FAIRFIELD |
| CT0150011 | Aquarion Water Co of CT-Main System | 3/17/2024 | 99.80 | No Drought Stage | ↑ | 97.70 | 102 | 3/10/2024 | 99.40 | FAIRFIELD |
| CT1030021 | South Norwalk Electric & Water | 3/25/2024 | 100.00 | No Drought Stage | -- | 97.00 | 103 | 3/18/2024 | 100.00 | FAIRFIELD |
| CT0570011 | Aquarion Water Co of CT-Greenwich Syster | 3/17/2024 | 99.70 | No Drought Stage | ↑ | 94.40 | 106 | 3/10/2024 | 99.50 | FAIRFIELD |
| CT0340011 | Danbury Water Department | 2/18/2024 | 100.00 | No Drought Stage | -- | 92.40 | 108 | 2/11/2024 | 100.00 | FAIRFIELD |
| CT1350011 | Aquarion Water Co of CT-Stamford | 3/17/2024 | 99.90 | No Drought Stage | ↓ | 90.70 | 110 | 3/10/2024 | 100.00 | FAIRFIELD |
| CT0170011 | Bristol Water Department | 3/24/2024 | 94.20 | No Drought Stage | ↓ | 96.80 | 97 | 3/10/2024 | 97.70 | HARTFORD |
| CT0770021 | Manchester Water Department | 3/24/2024 | 100.00 | No Drought Stage | -- | 100.30 | 100 | 3/17/2024 | 100.00 | HARTFORD |
| CT0473011 | CTWC - Northern Reg-Western System | 3/21/2024 | 100.00 | No Drought Stage | -- | 96.80 | 103 | 3/14/2024 | 100.00 | HARTFORD |
| CT1310011 | Southington Water Department | 3/23/2024 | 100.00 | No Drought Stage | -- | 95.60 | 105 | 3/16/2024 | 100.00 | HARTFORD |
| CT0890011 | New Britain Water Department | 3/21/2024 | 92.40 | No Drought Stage | ↓ | 85.40 | 108 | 3/14/2024 | 94.10 | HARTFORD |
| CT0640011 | Metropolitan District Commission | 3/25/2024 | 100.00 | No Drought Stage | -- | 92.10 | 109 | 3/18/2024 | 100.00 | HARTFORD |
| CT0980011 | Aquarion Water Co of CT-Norfolk System | 3/17/2024 | 100.00 | No Drought Stage | -- | 99.80 | 100 | 3/10/2024 | 100.00 | LITCHFIELD |
| CT1620011 | Winsted Water Works | 3/24/2024 | 100.00 | No Drought Stage | -- | 99.70 | 100 | 3/10/2024 | 100.00 | LITCHFIELD |
| CT1220011 | Aquarion Water Co of CT-Salisbury Sys | 3/17/2024 | 100.00 | No Drought Stage | -- | 99.50 | 101 | 3/10/2024 | 100.00 | LITCHFIELD |
| CT1250011 | Sharon Water & Sewer Commission | 3/9/2024 | 100.00 | No Drought Stage | -- | 95.20 | 105 | 3/2/2024 | 100.00 | LITCHFIELD |
| CT1430011 | Torrington Water Company | 3/17/2024 | 100.00 | No Drought Stage | ↓ | 91.50 | 109 | 3/10/2024 | 100.00 | LITCHFIELD |
| CT0261031 | CTWC - Shoreline Region-Chester System | 3/21/2024 | 100.00 | No Drought Stage | -- | 99.70 | 100 | 3/14/2024 | 100.00 | MIDDLESEX |
| CT0830011 | Middletown Water Department | 2/25/2024 | 93.30 | No Drought Stage | -- | 91.70 | 102 | 2/18/2024 | 93.30 | MIDDLESEX |
| CT0830021 | Connecticut Valley Hospital | 3/18/2024 | 100.00 | No Drought Stage | -- | 95.70 | 104 | 3/11/2024 | 100.00 | MIDDLESEX |
| CT0608011 | CTWC - Shoreline Region-Guilford System | 3/21/2024 | 100.00 | No Drought Stage | -- | 98.80 | 101 | 3/14/2024 | 100.00 | NEW HAVEN |
| CT0880011 | CTWC - Naugatuck Region-Central System | 3/21/2024 | 100.00 | No Drought Stage | -- | 98.80 | 101 | 3/14/2024 | 100.00 | NEW HAVEN |
| CT1510011 | Waterbury Water Department | 3/10/2024 | 99.40 | No Drought Stage | ↓ | 97.60 | 102 | 3/3/2024 | 99.70 | NEW HAVEN |
| CT1480011 | Wallingford Water Department | 3/22/2024 | 92.80 | No Drought Stage | ↑ | 90.40 | 103 | 3/15/2024 | 92.20 | NEW HAVEN |
| CT0800011 | Meriden Water Division | 3/17/2024 | 100.00 | No Drought Stage | ↑ | 96.30 | 104 | 3/10/2024 | 99.70 | NEW HAVEN |
| CT0930011 | Regional Water Authority | 3/17/2024 | 100.00 | No Drought Stage | ↑ | 94.20 | 106 | 3/10/2024 | 99.60 | NEW HAVEN |
| CT0580011 | Jewett City Water Company | 3/18/2024 | 100.00 | No Drought Stage | -- | 99.70 | 100 | 3/11/2024 | 100.00 | NEW LONDON |
| CT0590011 | Groton Utilities | 3/18/2024 | 100.00 | No Drought Stage | -- | 99.30 | 101 | 3/11/2024 | 100.00 | NEW LONDON |
| CT1040011 | Norwich Public Utilities | 3/23/2024 | 100.00 | No Drought Stage | -- | 99.00 | 101 | 3/16/2024 | 100.00 | NEW LONDON |
| CT1370011 | Aquarion Water Co of CT-Mystic | 3/17/2024 | 100.00 | No Drought Stage | -- | 99.40 | 101 | 3/10/2024 | 100.00 | NEW LONDON |
| CT0950011 | New London Dept. of Public Utilities | 3/24/2024 | 95.20 | No Drought Stage | -- | 85.80 | 111 | 3/17/2024 | 95.20 | NEW LONDON |
| CT1340011 | CTWC - Northern Reg-Stafford System | 3/21/2024 | 100.00 | No Drought Stage | -- | 100.00 | 100 | 3/14/2024 | 100.00 | TOLLAND |
| CT1630011 | Windham Water Works | 3/24/2024 | 100.00 | No Drought Stage | -- | 100.00 | 100 | 3/17/2024 | 100.00 | WINDHAM |

98.86

96.09

102.89

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 | 32 |
| Between 90% and 99% of Normal | 2 |
| Less than 90% of Normal | 0 |
| At 100% Full | 24 |

| | |
|--------|------------|
| 104.00 | FAIRFIELD |
| 103.67 | HARTFORD |
| 103.00 | LITCHFIELD |
| 102.00 | MIDDLESEX |
| 102.83 | NEW HAVEN |
| 102.80 | NEW LONDON |
| 100.00 | TOLLAND |