

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)

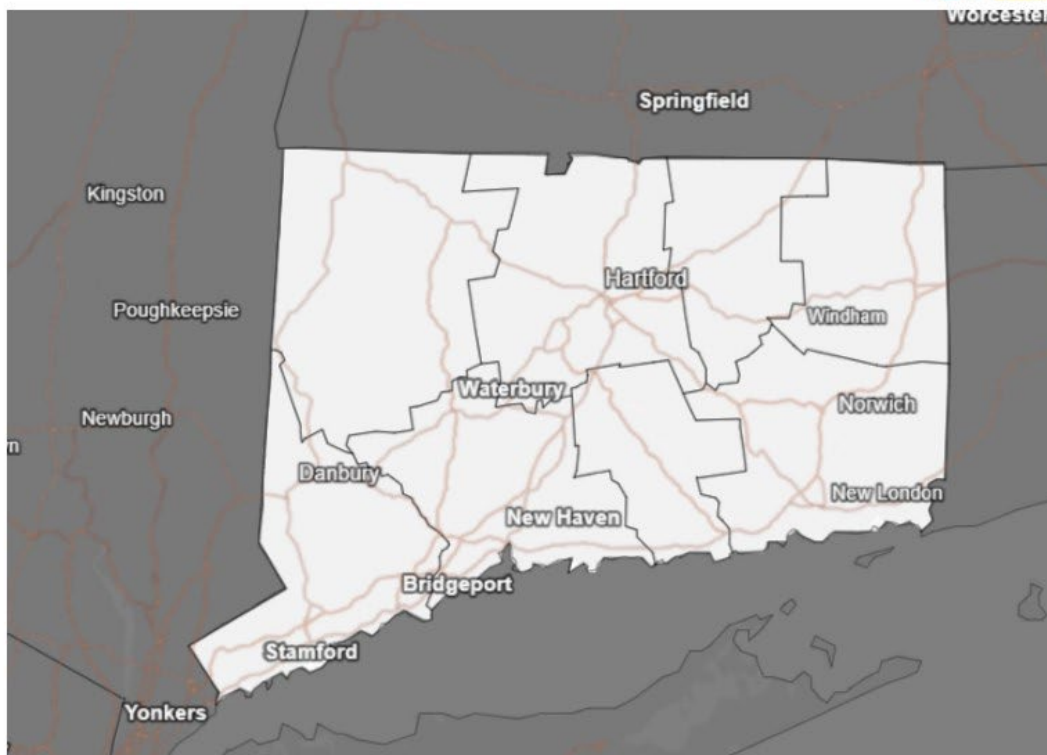
[+1 860-840-2075,,817266018#](#) (Hartford) Phone Conference ID: 817 266 018#

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 31st, Connecticut has no drought intensity via the USDM.

U.S. Drought Monitor



Drought & Dryness Categories

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

% of CT

| |
|------|
| 0.0% |
| 0.0% |
| 0.0% |
| 0.0% |
| 0.0% |
| 0.0% |

Source(s): NDMC, NOAA, USDA
Data Valid: 08/29/23

Drought.gov

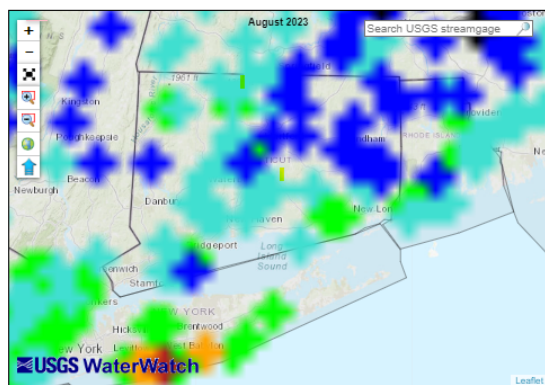
Streamflow Levels: In early August, streamflow and groundwater levels across the state ranged from Normal Conditions to Much Above Normal Conditions. Towards the end of the month this came down slightly as more gauges registered in the Normal to Above Normal Conditions.

WaterWatch Streamflow Map
 Choose a region and then click "GO" to view a regional map
 (Warning: It may take several minutes to process)

Map type: Monthly Flow Site info: xus Clear Multiple regions: ☐ Regional map: ☒ GO

Geographic Area: Water Res. Region

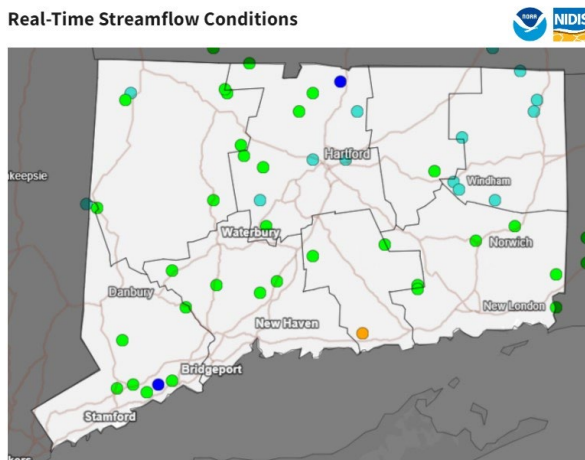
Map of monthly average streamflow compared to historical streamflow for the month of the year



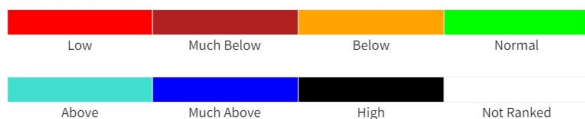
| Explanation - Percentile classes | | | | | |
|----------------------------------|-------------------|--------------|--------|--------------|-------------------|
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 |
| | Much below normal | Below normal | Normal | Above normal | Much above normal |
| | | | | |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

Streamflow Map 1: Monthly Average Streamflow for August 2023

Real-Time Streamflow Conditions



Streamflow Conditions



Source(s): U.S. Geological Survey
 Data Valid: 09/06/23

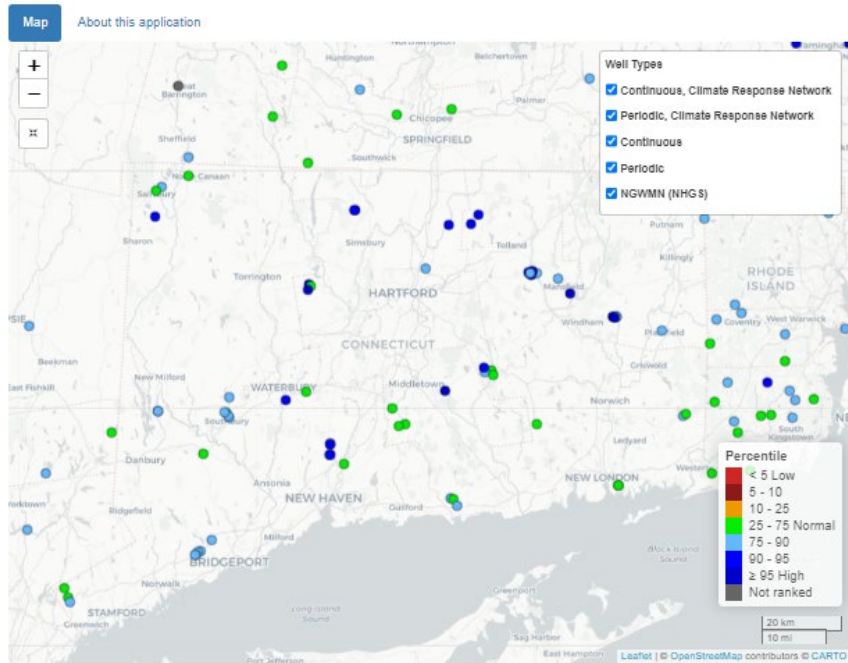
Drought.gov

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.

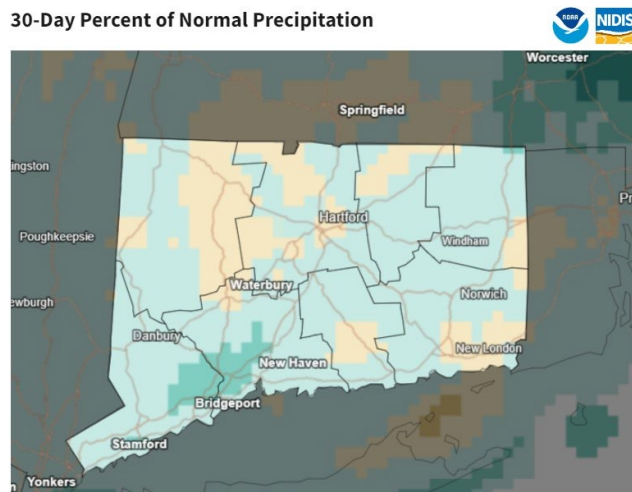
Groundwater Levels in New England

Recent conditions relative to historical monthly statistics

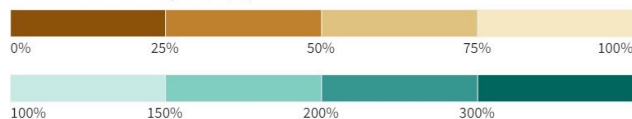


Precipitation: The significant amount of rainfall experienced between mid-July through early August has contributed to the above average streamflow and groundwater levels. Below are the most-recent 30-day and 60-day Percentage Normal Precipitation maps to further illustrate this pattern.

30-Day Percent of Normal Precipitation



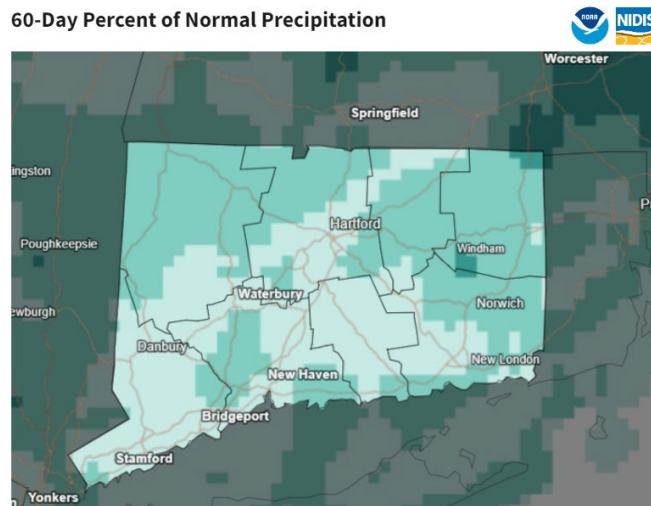
Percent of Normal Precipitation (%)



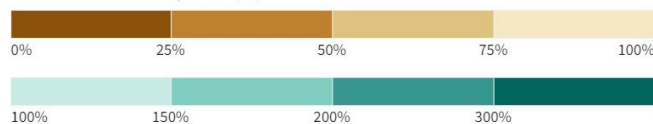
Source(s): UC Merced
Data Valid: 09/03/23

[Drought.gov](https://drought.gov)

60-Day Percent of Normal Precipitation



Percent of Normal Precipitation (%)



Source(s): UC Merced
Data Valid: 09/03/23

[Drought.gov](https://drought.gov)

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:

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

31

Change since last week:
0

State Average Percent Full

93.4 %

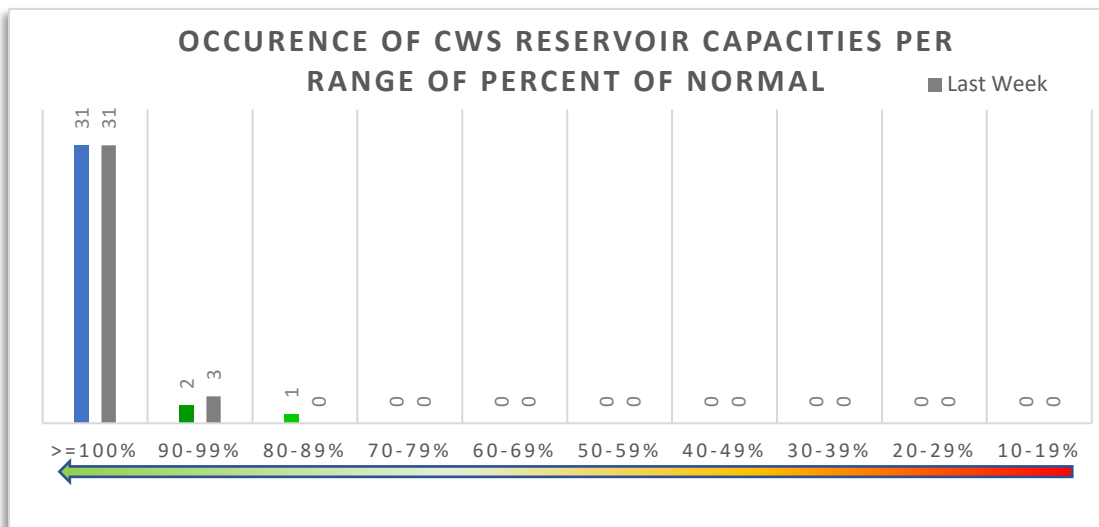
Last week:
93.8%

Average Percent of Normal

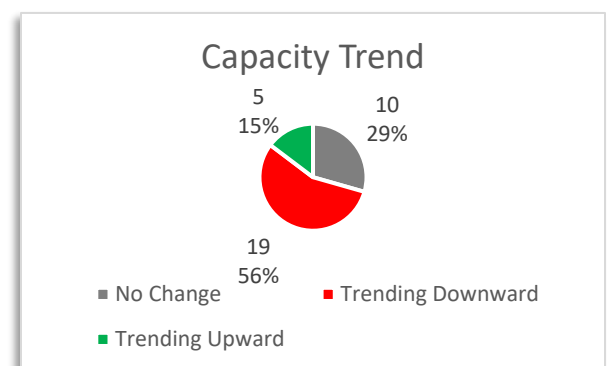
110.1%

Last week:
110.6%

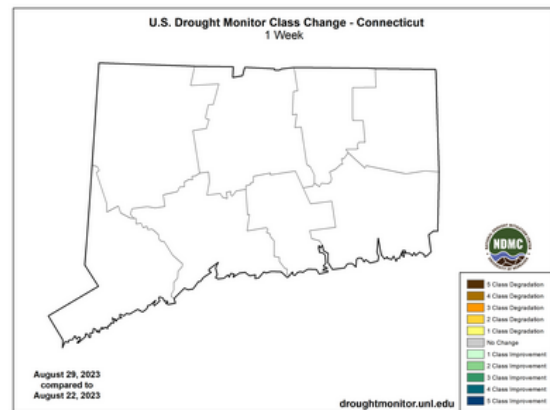
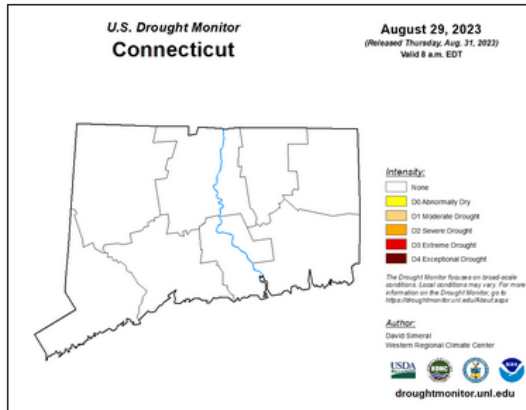
- 10 reservoir systems have reported that they are currently at 100% full (-1 since last week).



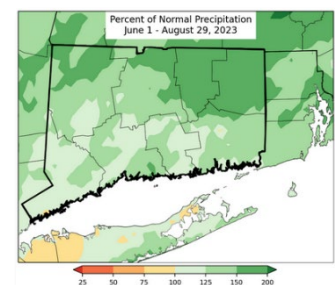
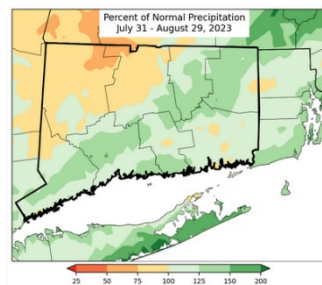
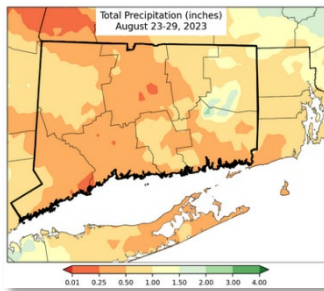
- The gray bars indicate last week's measurements and the colored bar is the current measurement. In non-drought conditions, the graph above would have all of the systems in the $\geq 100\%$ of normal column (n=34).
- 5 system's short-term week to week trend is upward (+2 since last week). 19 systems 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 1st drought stage – drought advisory.**



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



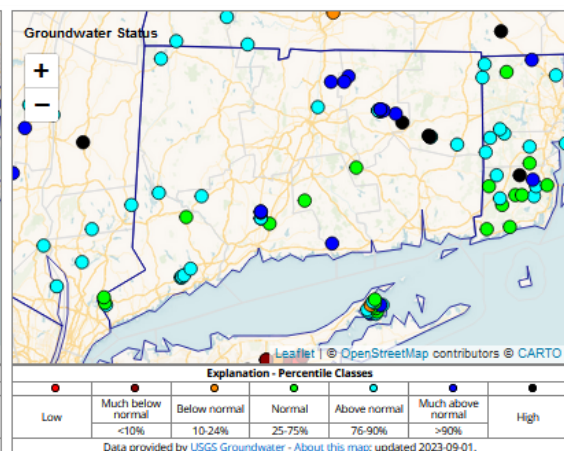
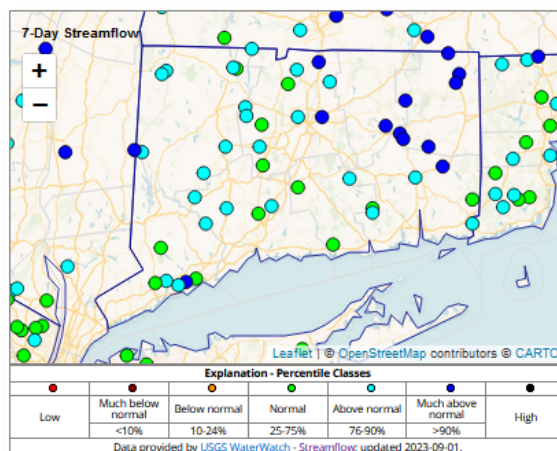
- Last USDM week (between August 23rd and August 29th), CT received trace amounts to 2 inches (isolated pockets) of rain. (Map 1). The 30-day Percent of Normal Precipitation map shows well above normal precipitation for two thirds of CT. Northwest portion had below normal rainfall (Map 2). The long-term 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





CT Interagency Drought Workgroup NWS Update

Thursday September 7th 2023

Prepared by: NWS WFO Boston/Norton, MA

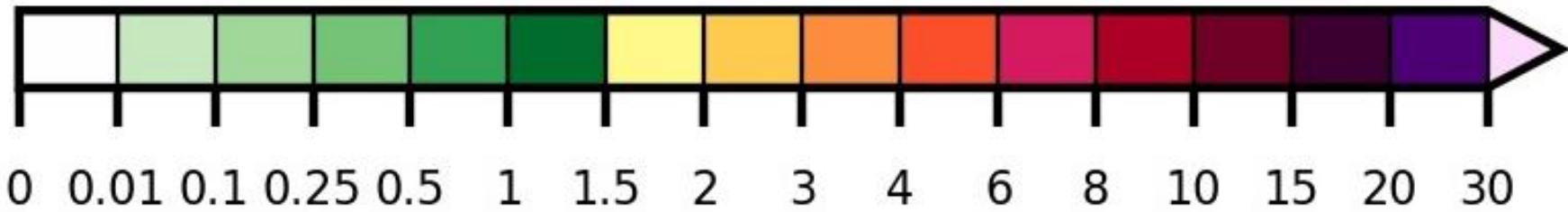
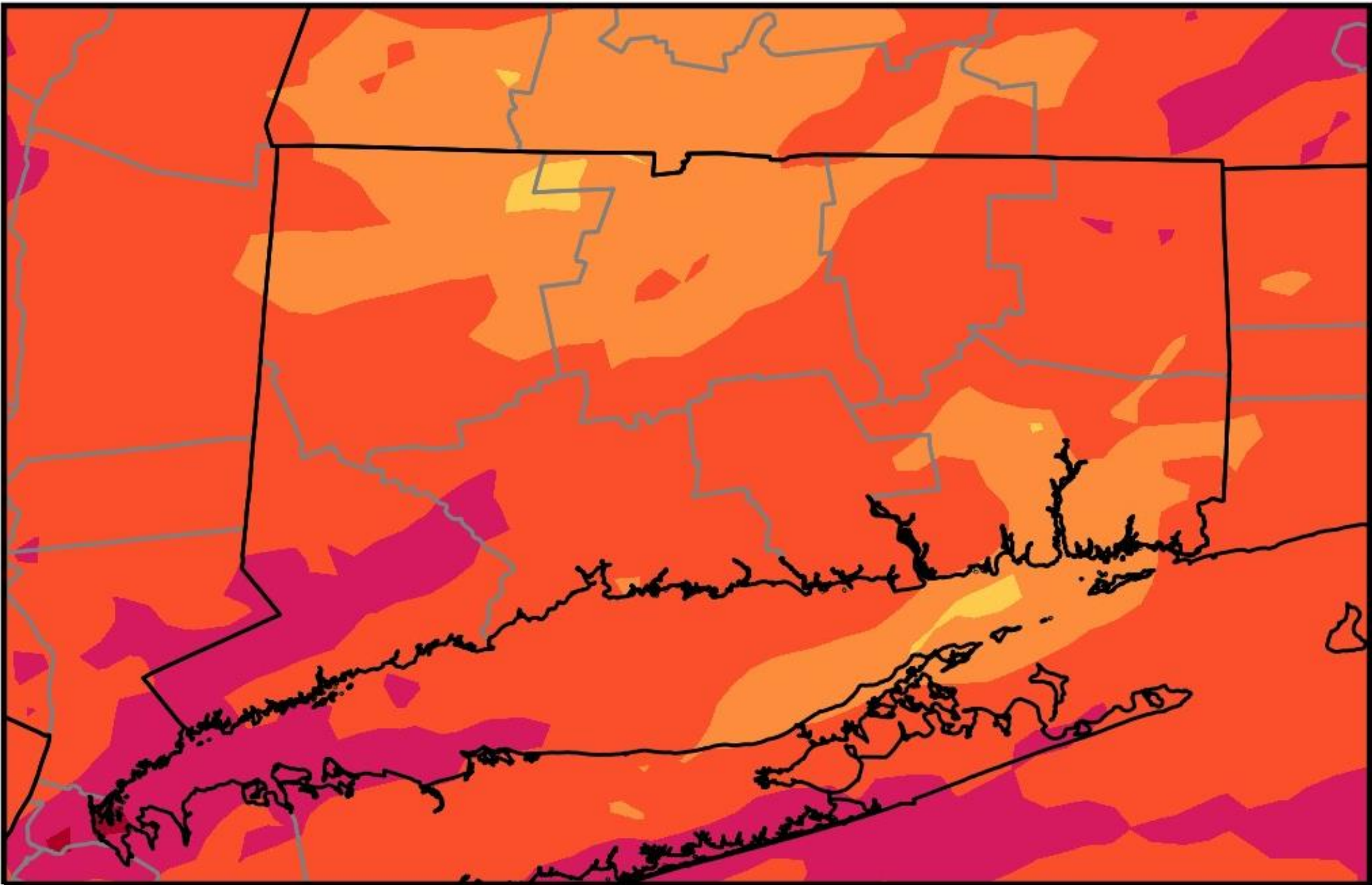
August 2023 Rainfall

4.5 to 5.25 inches of rainfall across CT in August



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WEATHER FORECAST OFFICE

Accumulated Precipitation (inches)
August 01, 2023 to August 31, 2023



Precipitation (inches)

| 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 |

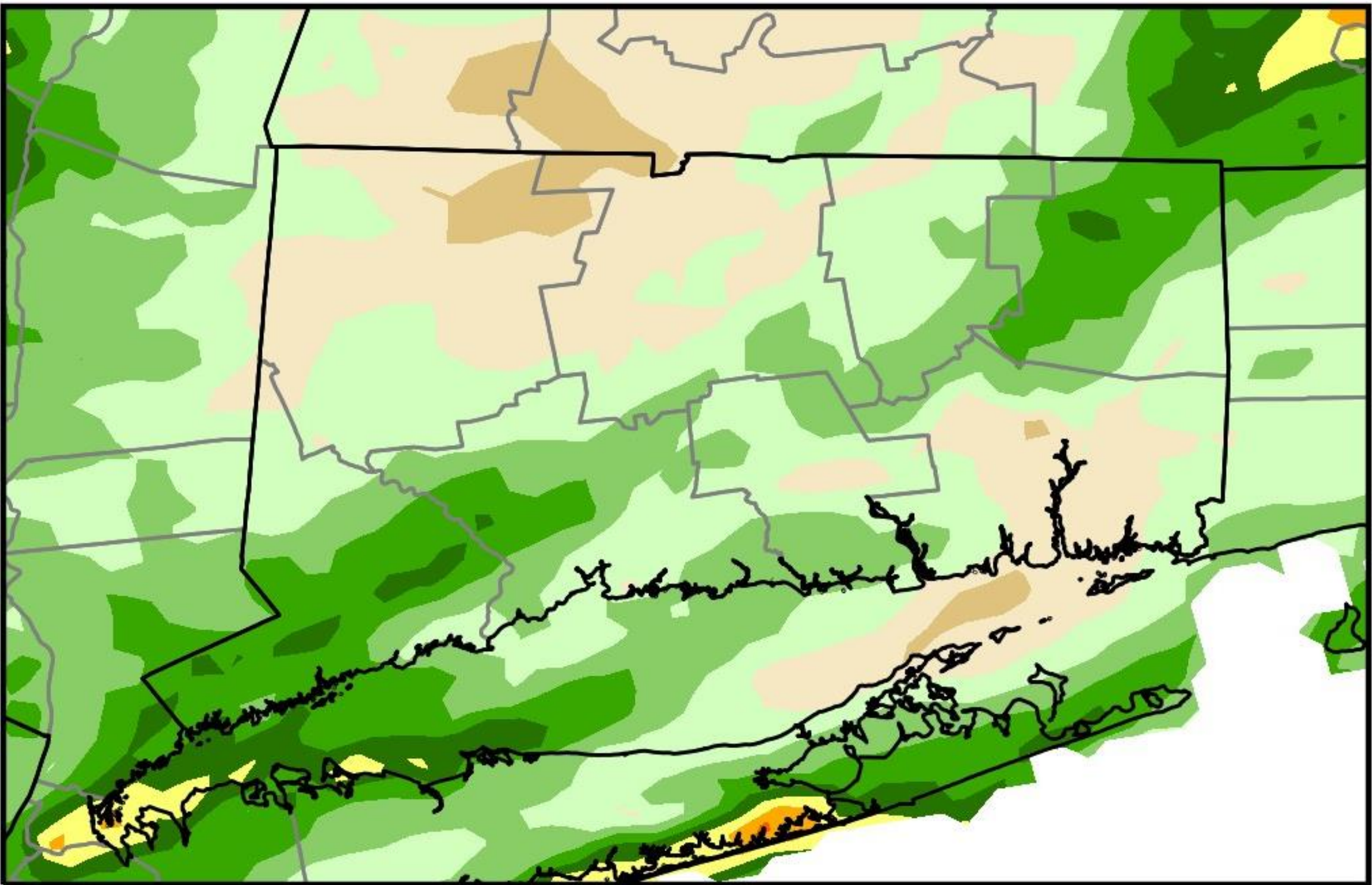
August 2023 Rainfall

August rainfall ranged from 80 to 160 percent of Normal



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



Percent of Normal

| CT 1-Month Aug 2023 | Rainfall | Departure | Percent | Normal |
|---------------------|----------|-----------|---------|--------|
| Litchfield | 4.66 | 0.27 | 106 | 4.39 |
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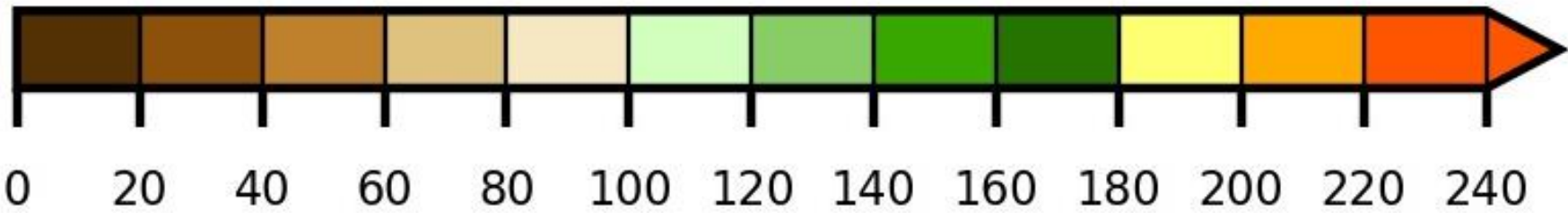
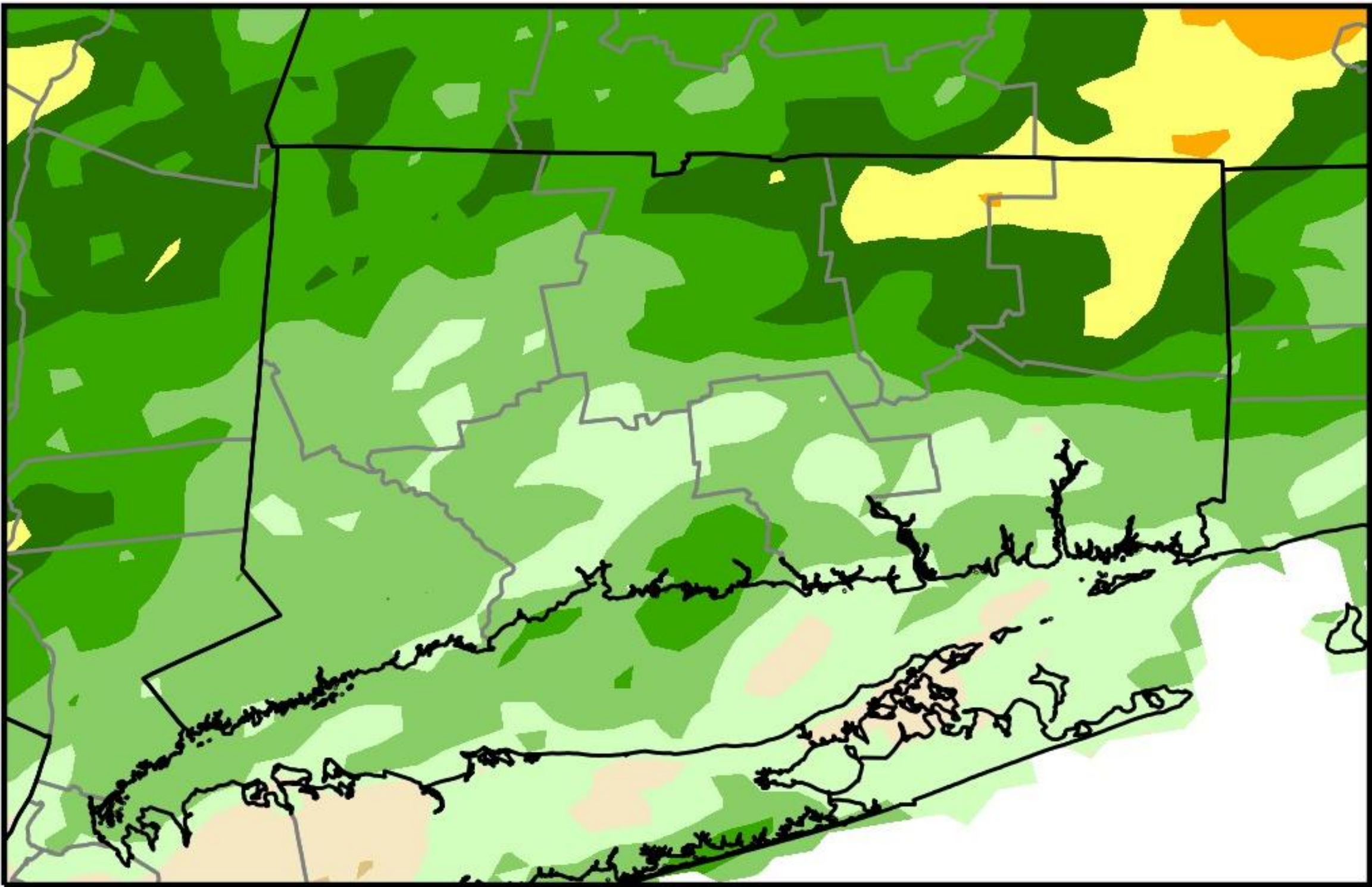
Percent of Normal Since April 1st

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



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 |

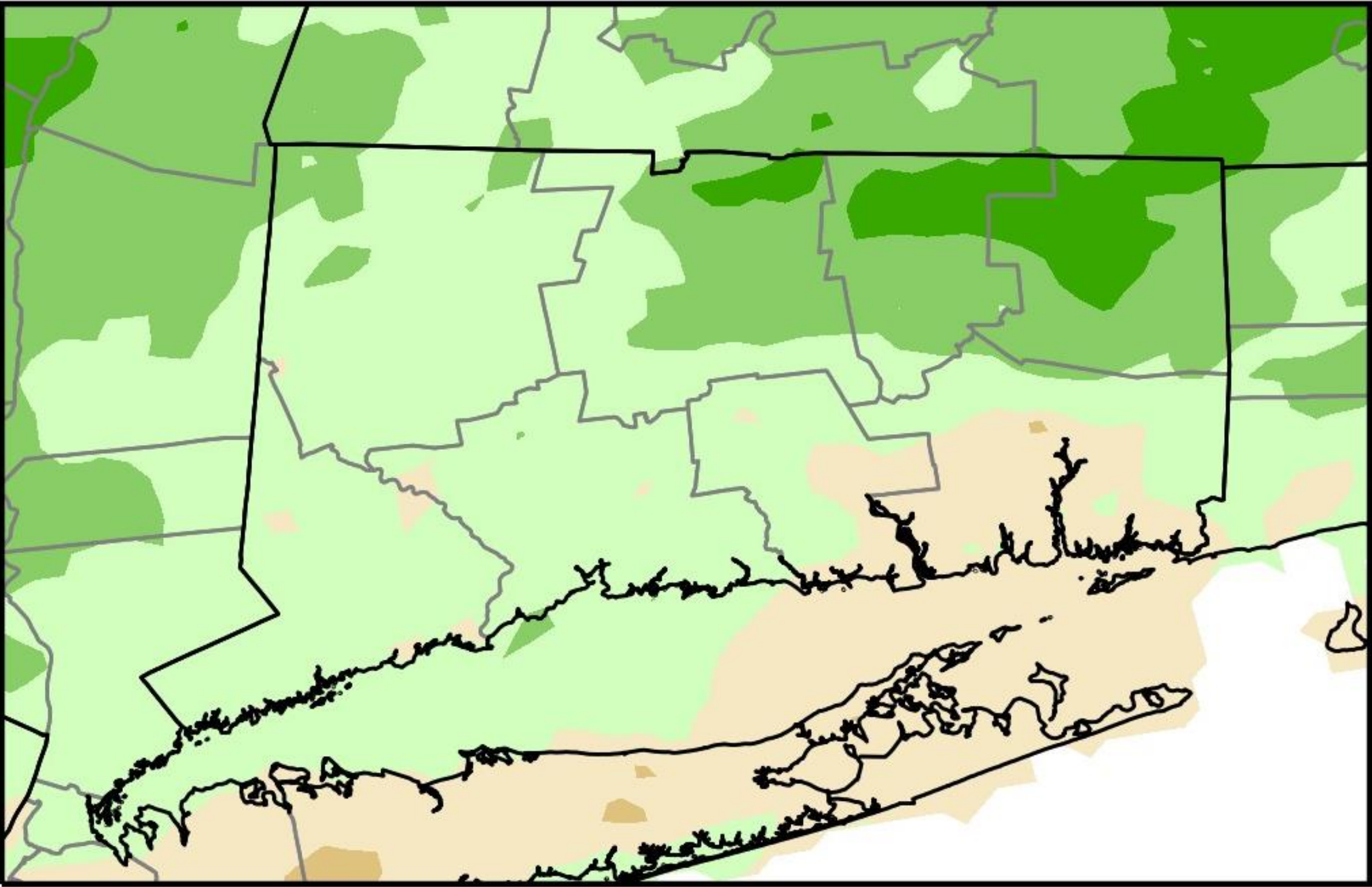
Percent of Normal Since March 1st



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6 month percent of normal generally 80 to 140 percent

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 |

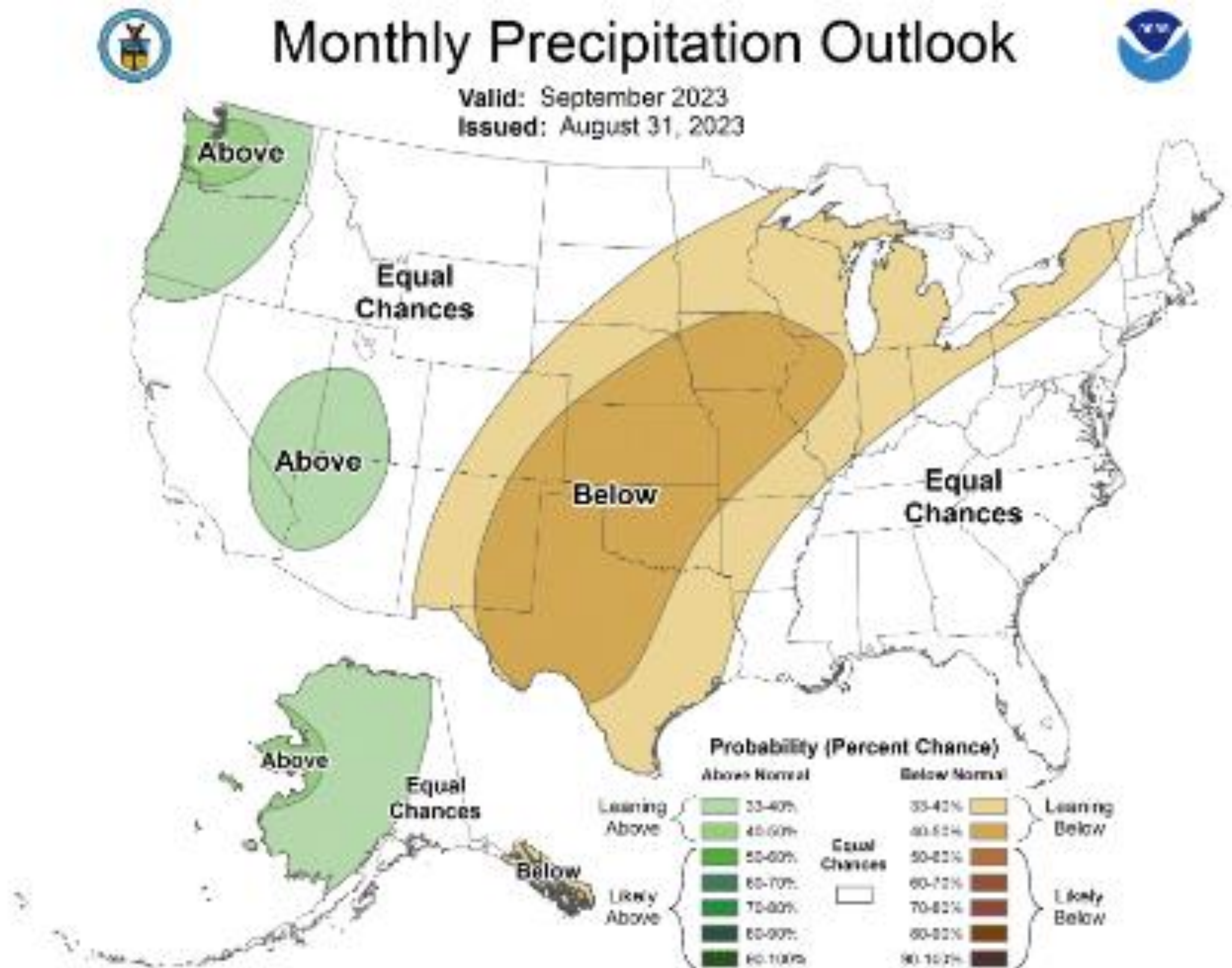
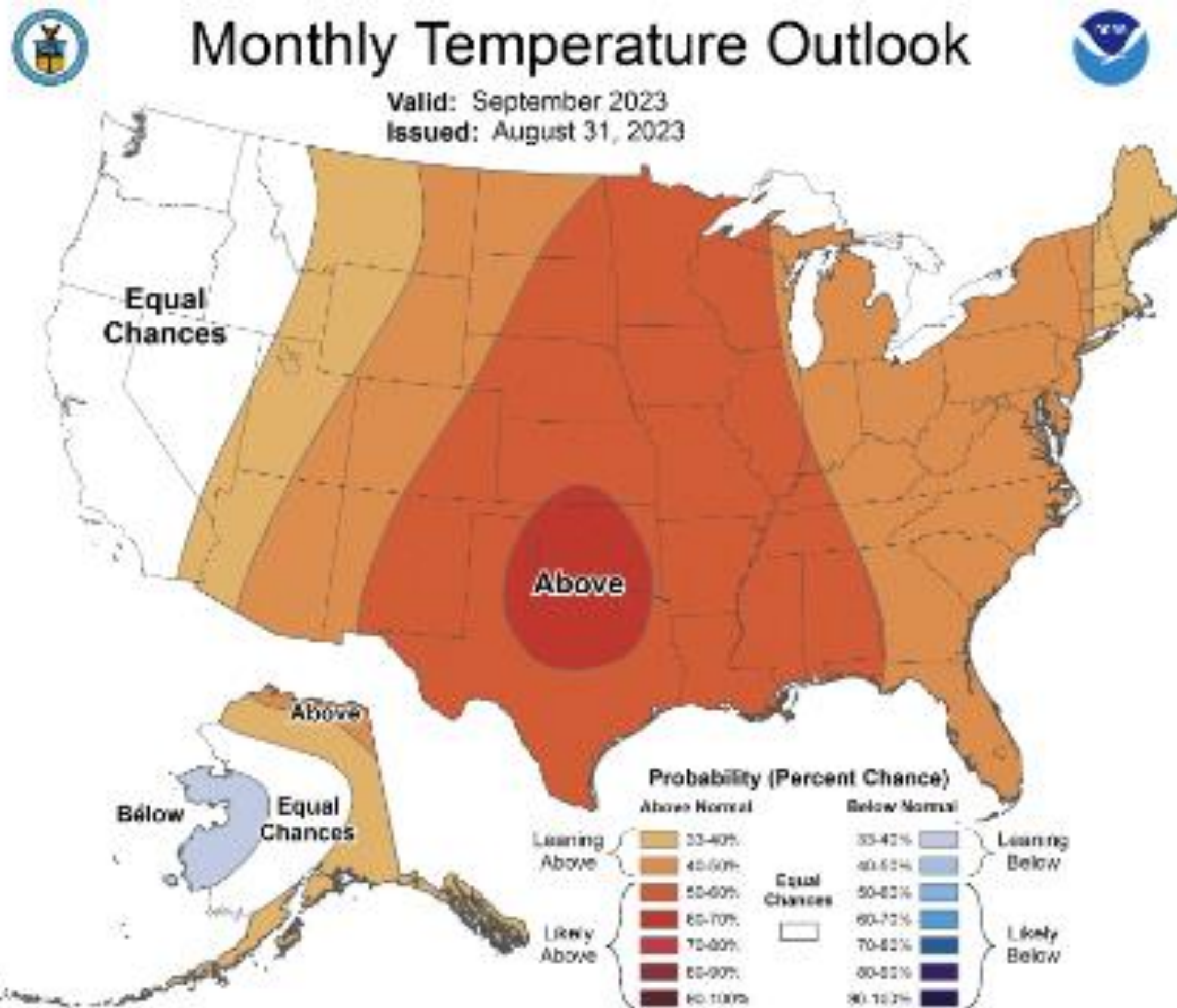
| CT 3-month Jun 23-Aug 23 | Rainfall | Departure | Percent | Normal |
|--------------------------|----------|-----------|---------|--------|
| Litchfield | 18.76 | 5.19 | 138 | 13.57 |
| Hartford | 18.93 | 5.40 | 140 | 13.53 |
| Tolland | 20.64 | 8.16 | 165 | 12.48 |
| Windham | 17.55 | 4.78 | 137 | 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 |

CPC September Outlook

Equal Chances for Above/Below Normal Precipitation This Month



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CPC 3 Month Outlook (Sep-Oct-Nov)

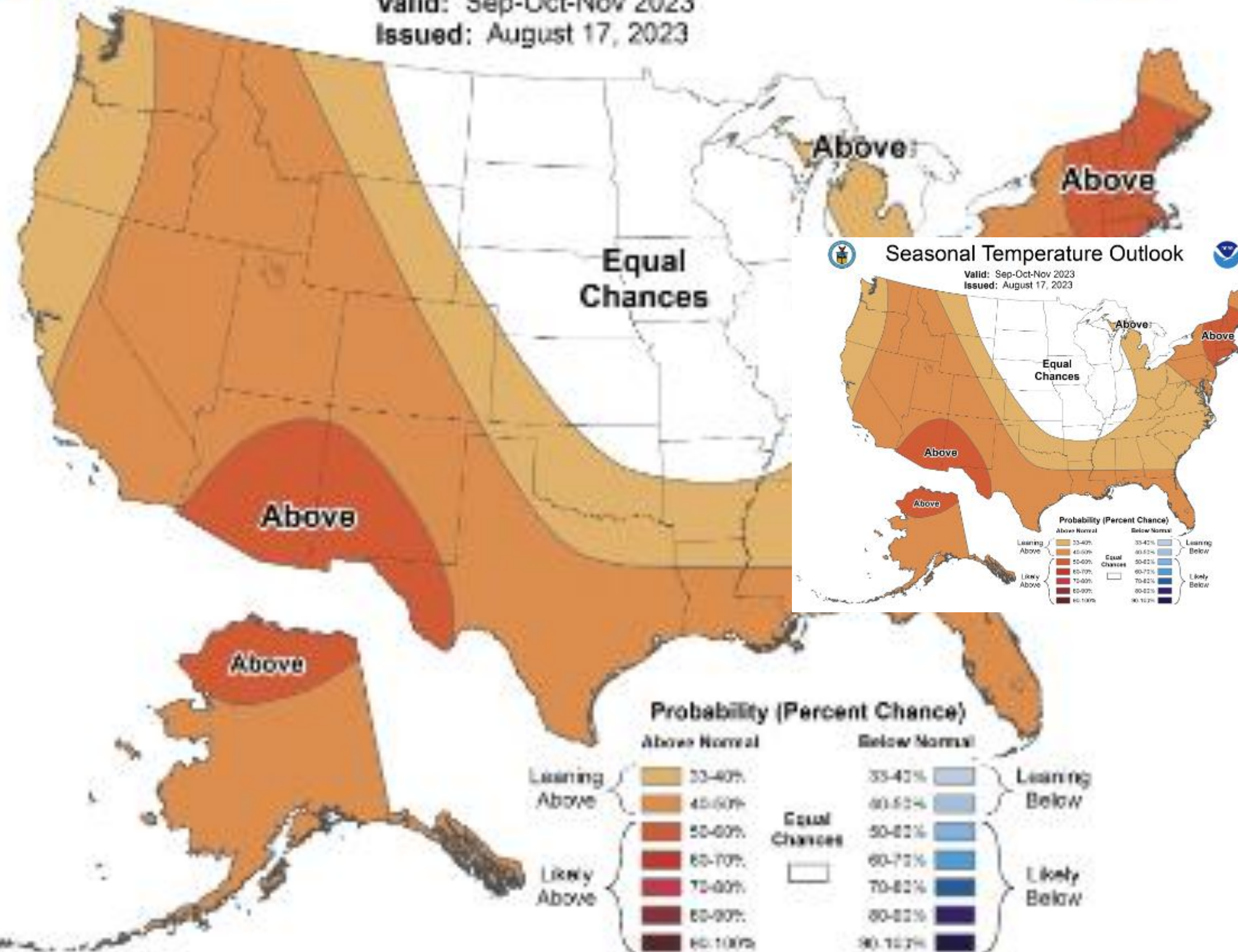
Equal Chance for Above/Below Normal Precip



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Seasonal Temperature Outlook

Valid: Sep-Oct-Nov 2023
Issued: August 17, 2023



Seasonal Precipitation Outlook

Valid: Sep-Oct-Nov 2023
Issued: August 17, 2023

