

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

TO: Hydrologic Information Center, W/OS31
 NOAA's National Weather Service
 1325 East West Highway
 Silver Spring, MD 20910-3283

SIGNATURE
Rodney W. Megnia
Meteorologist
DATE
November 7th 2022

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

....Drought conditions improving across southern New England....

October 2022 liquid-equivalent precipitation ranged from slightly below normal to well above normal across southern New England. Most of southern New England received 3 to 5 inches of rain which was an inch below to an inch above normal. Southeastern MA and RI received 5 to 8 inches of rain which was 1 to 4 inches above normal. Temperatures were near to slightly above normal. No freshwater flooding occurred within NWS Boston/Norton's Hydrologic Service Area. More details for major climate sites in southern New England are included in Table 1.

<i>Location</i>	<i>October Precipitation (Inches)</i>	<i>Precipitation Departure from Normal (Inches)</i>	<i>Temperature Departure from Normal (Degrees F)</i>
<i>Boston</i>	4.28	+0.25	+1.8
<i>Worcester</i>	5.85	+0.40	+1.9
<i>Providence</i>	5.95	+1.67	+1.1
<i>Hartford</i>	5.03	+0.51	+0.9

Table 1. Oct 2022 precipitation, departure from normal and temperature departure from normal. Details are for major climate sites in southern New England. All October information is preliminary.

Drought conditions improving across southern New England

October rain has resulted in continued improvement to the ongoing drought conditions in southern New England. Most of southern New England is now under D0 – abnormally dry, or normal conditions on the US drought monitor. Franklin county and a small portion of eastern Middlesex county in MA remain in D1 – moderate drought on the US drought monitor. Essex county in MA remains in D2 – severe drought on the US drought monitor. See the latest version of the USDM in map 3 below.

State Drought Declarations

MA:

October 11th Update

On October 6th, the MA Drought Management Task Force (DMTF), which is composed of state and federal officials, and other entities, convened to discuss drought conditions within the Commonwealth. On October 7th, MA Energy and Environmental Affairs Secretary Bethany Card announced that thanks to recent rainfall, drought conditions have improved in all regions of the state. She also made the following declarations: The Western Region has been upgraded to Level 0-Normal Conditions; the Connecticut River Valley, Central Region, and Southeast Regions have been upgraded to Level 1-Mild Drought; and, the Northeast and Cape Cod Regions have been upgraded and will join the Islands Region as a Level 2-Significant Drought. This declaration will remain in effect till the next declaration in November.

Outlined in the [Massachusetts Drought Management Plan](#), a Level 2-Significant Drought of higher warrants the convening of an inter-agency Mission Group to more closely coordinate on drought assessments, impacts and response within the government, in addition to detailed monitoring of drought conditions, and technical outreach and assistance to the affected municipalities. The declarations were the result of recommendations made by the MA DMTF. Details from MA DMTF meetings can be found here: <https://www.mass.gov/service-details/drought-management-task-force-meetings>

CT:

The [Connecticut Interagency Drought Workgroup](#) (IDW) convened on October 6th to assess drought conditions in the State. On October 6th, Governor Ned Lamont approved the IDW's recommendations, reducing the drought advisory that he declared in August for New London and Windham counties from a Stage 3 drought level to Stage 2. This change brings all eight of Connecticut's counties to a Stage 2 drought level. "While recent rainfall over the past couple of weeks have brought some relief to Connecticut, particularly in New London and Windham counties, we are still seeing precipitation levels that remain slightly below normal," Governor Lamont said. "As we enter fall, conditions are looking better than they were this summer, but we still urge everyone to be mindful of their water usage. I am hopeful that in the coming weeks our precipitation levels will be back to normal." The Connecticut IDW plans to meet again in November to evaluate conditions. More details can be found at the [Connecticut Drought Information Center](#).

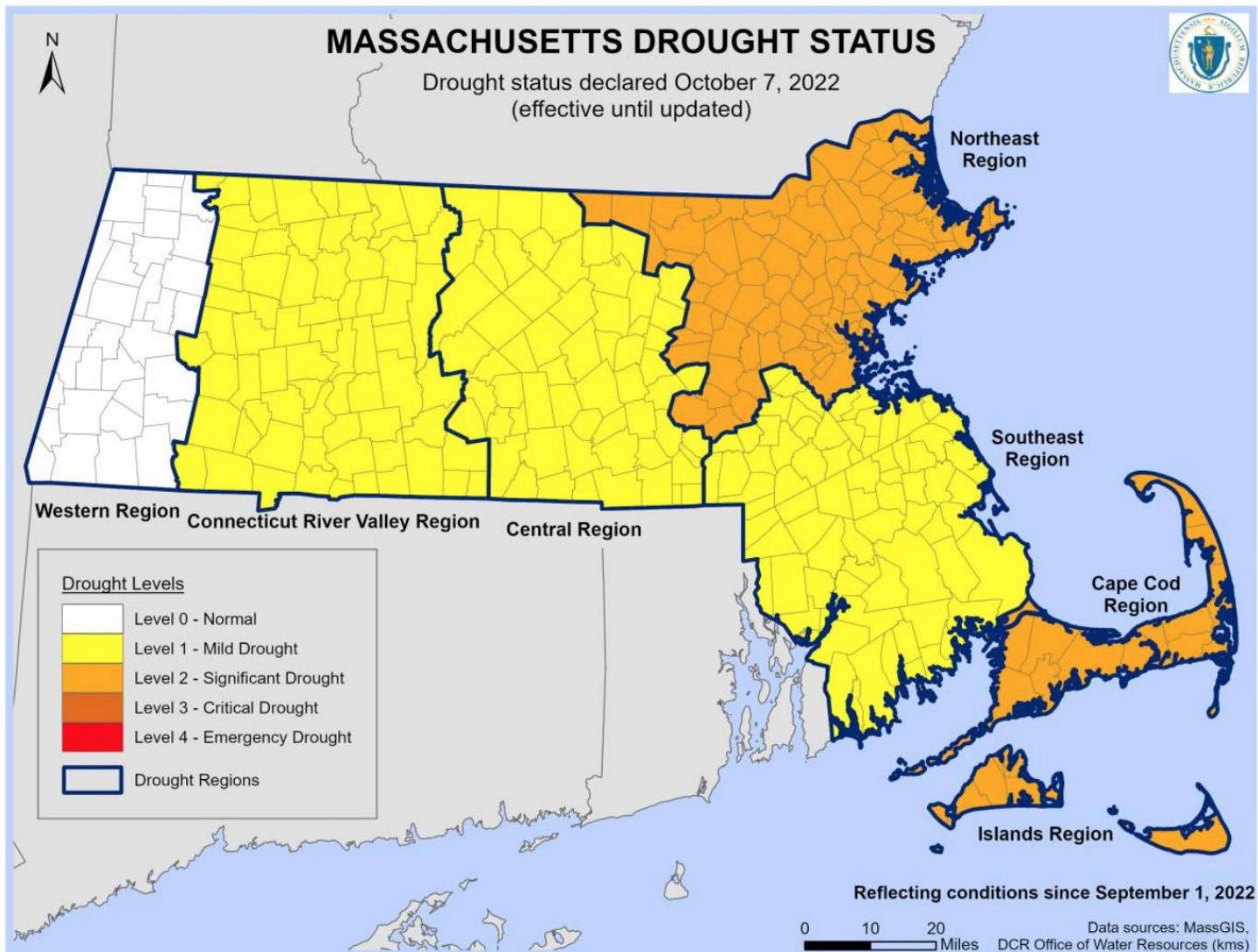
RI:

The RI Water Resources Board held a Drought Steering Committee meeting on October 18th Based on recommendations from the DSC, the [state wide drought advisory issued by Governor Dan McKee on August 9th](#), was continued. The [Rhode Island Drought Monitoring Dashboard](#) contains more information. Monthly conditions reports and updates to Drought Levels are available [here](#).

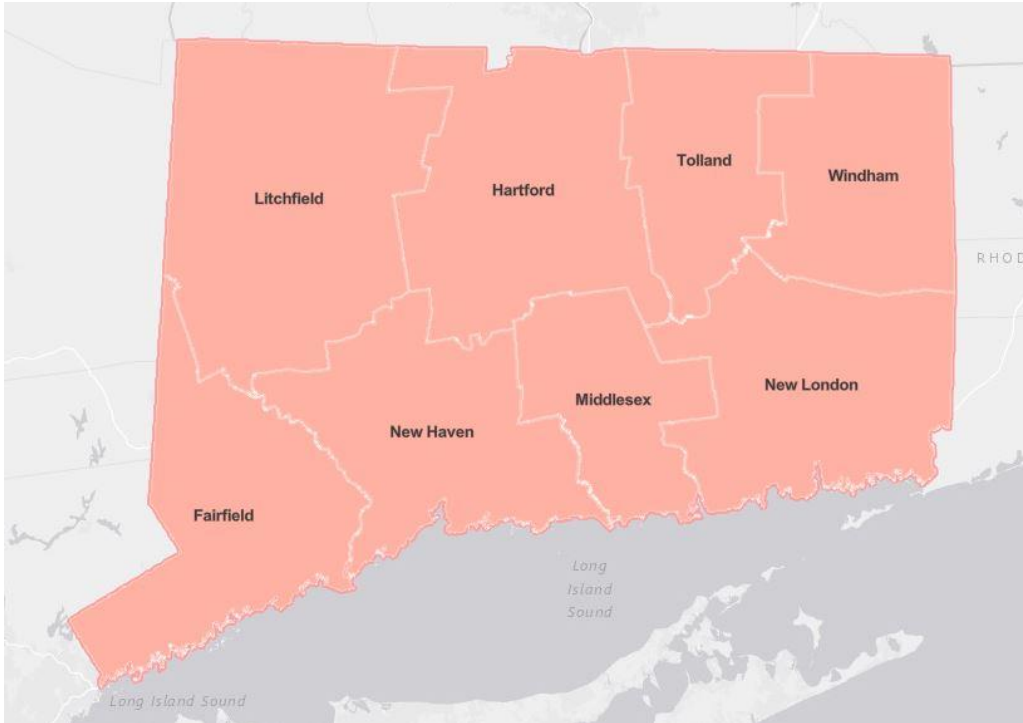
Streamflow and Groundwater

As of the end of October, streamflow across much of southern New England was at or above normal. A couple of gages in Cape Cod, Franklin County in MA, and Essex county in MA were below to much below normal. Groundwater recovered a great deal across southern New England during the month of October as well. Most groundwater wells were at or above normal with only a hand full of wells below normal. Cape Cod continues to

see groundwater wells reporting levels well below normal. Several ground water wells across extreme western MA and extreme northeastern MA are below to much below normal as well.



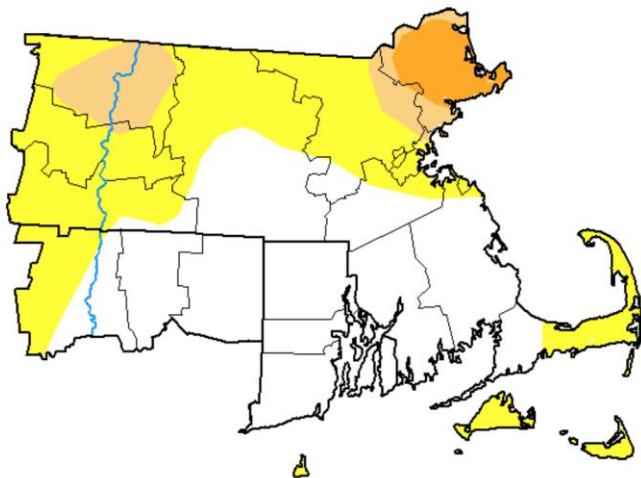
Map 1: Massachusetts Drought Status for October 2022, retroactive to September 1st. Map from the MA Department of Conservation and Recreation, Office of Water Resources.



Map 2: Connecticut Drought Status as of October 6th, 2022. All of CT are currently in Stage 2 drought.

U.S. Drought Monitor Boston/Norton, MA WFO

November 1, 2022
(Released Thursday, Nov. 3, 2022)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	50.51	49.49	11.51	3.90	0.00	0.00
Last Week 10-25-2022	48.23	51.77	13.75	3.90	0.00	0.00
3 Months Ago 08-02-2022	0.00	100.00	98.76	63.88	0.00	0.00
Start of Calendar Year 01-04-2022	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-27-2022	0.00	100.00	82.14	30.35	2.81	0.00
One Year Ago 11-02-2021	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>

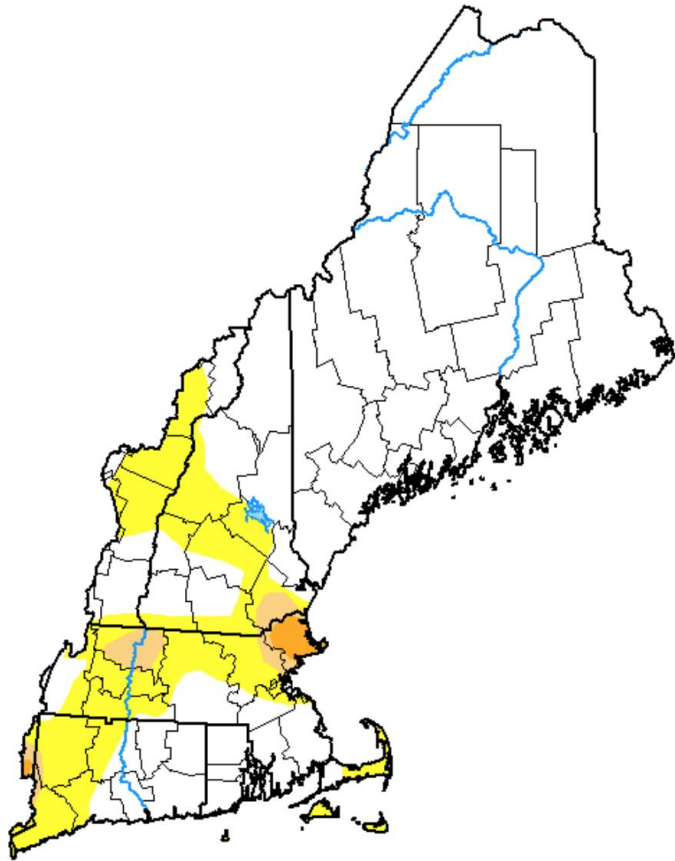
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National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor New England Watershed

November 1, 2022
(Released Thursday, Nov. 3, 2022)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	78.73	21.27	2.78	0.71	0.00	0.00
Last Week 10-25-2022	74.80	25.20	3.15	0.71	0.00	0.00
3 Months Ago 08-02-2022	19.80	80.20	58.32	18.17	0.00	0.00
Start of Calendar Year 01-04-2022	81.86	18.14	6.91	2.88	0.00	0.00
Start of Water Year 09-27-2022	57.71	42.29	25.67	7.96	0.47	0.00
One Year Ago 11-02-2021	81.86	18.14	6.91	3.62	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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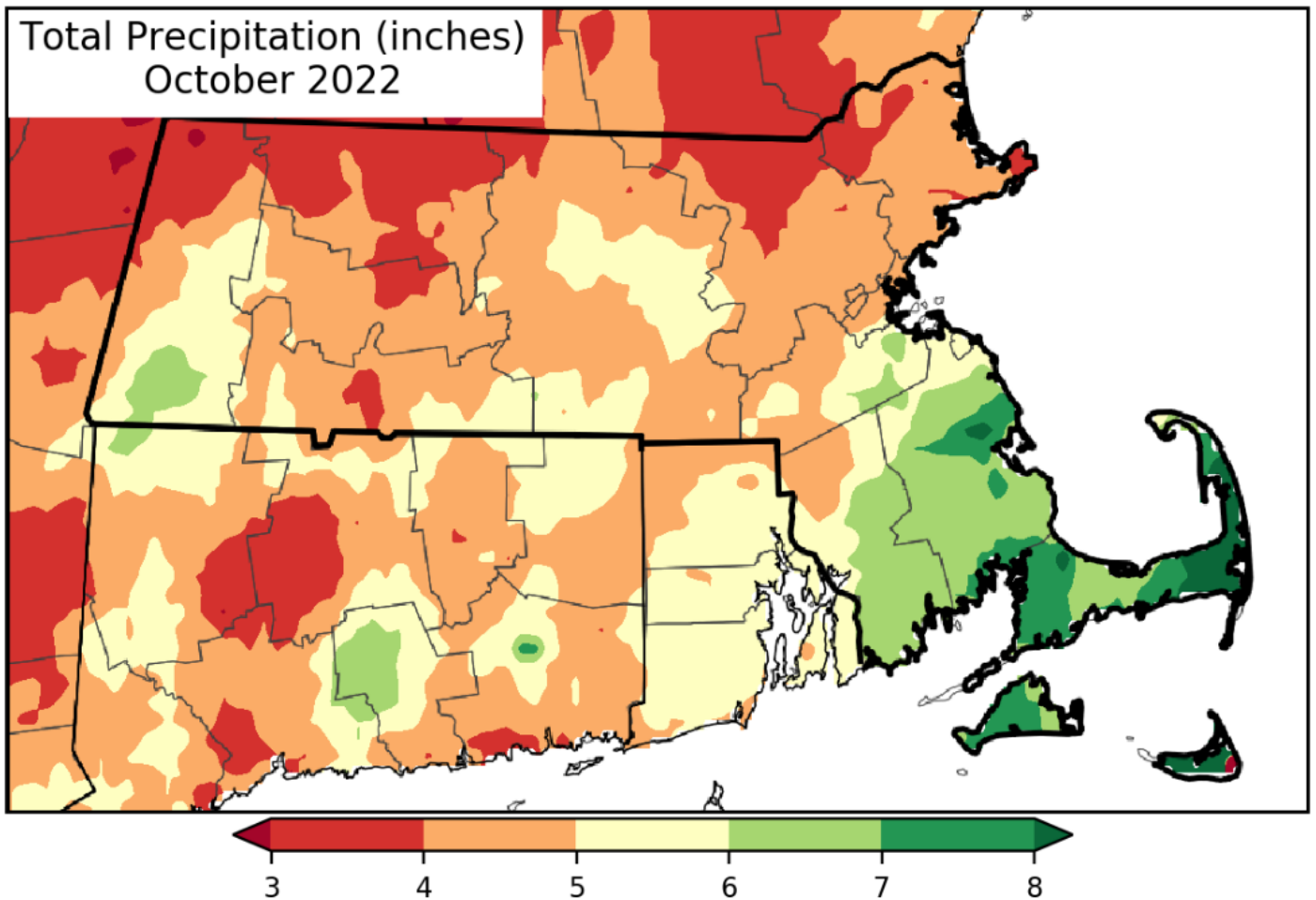
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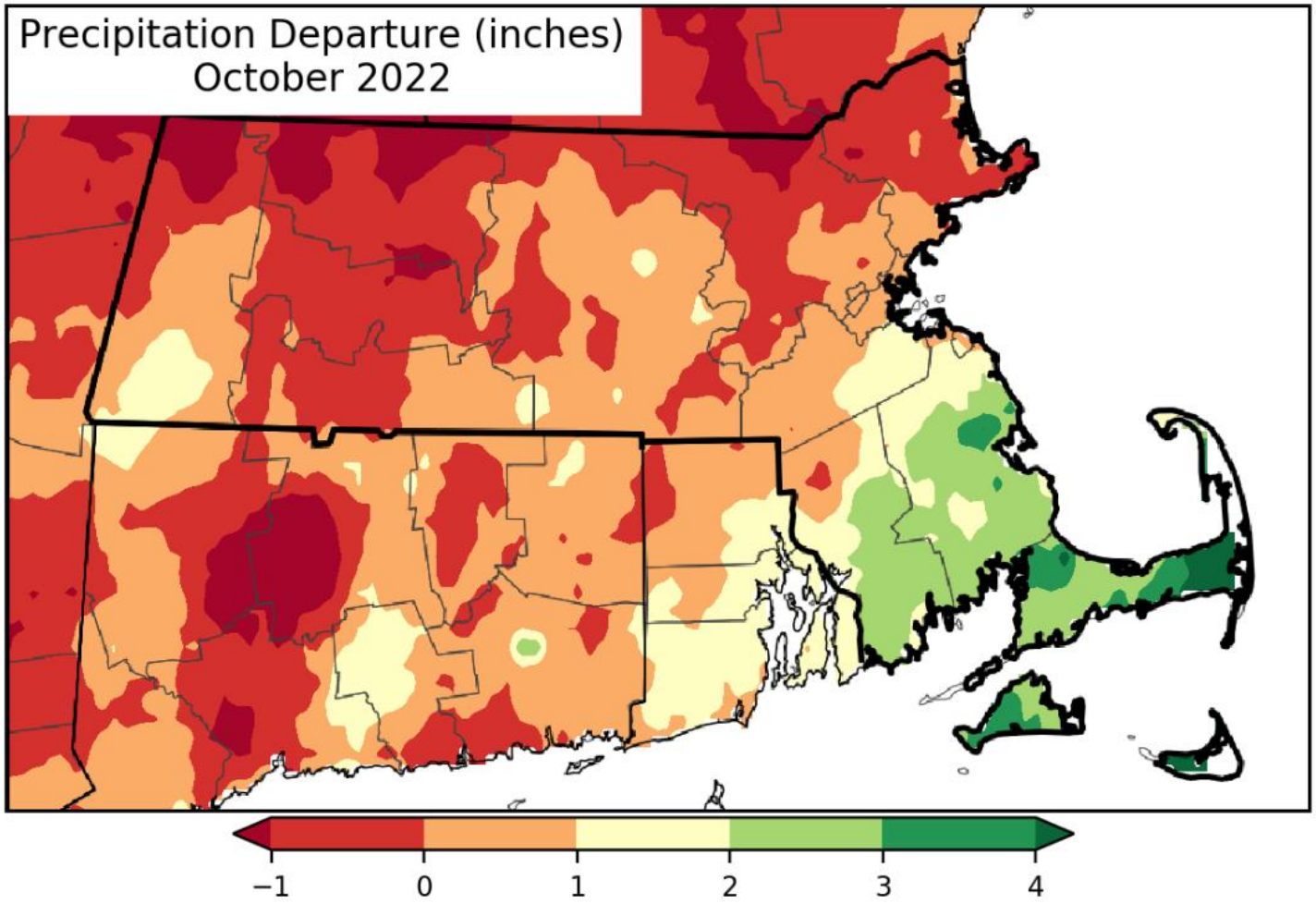


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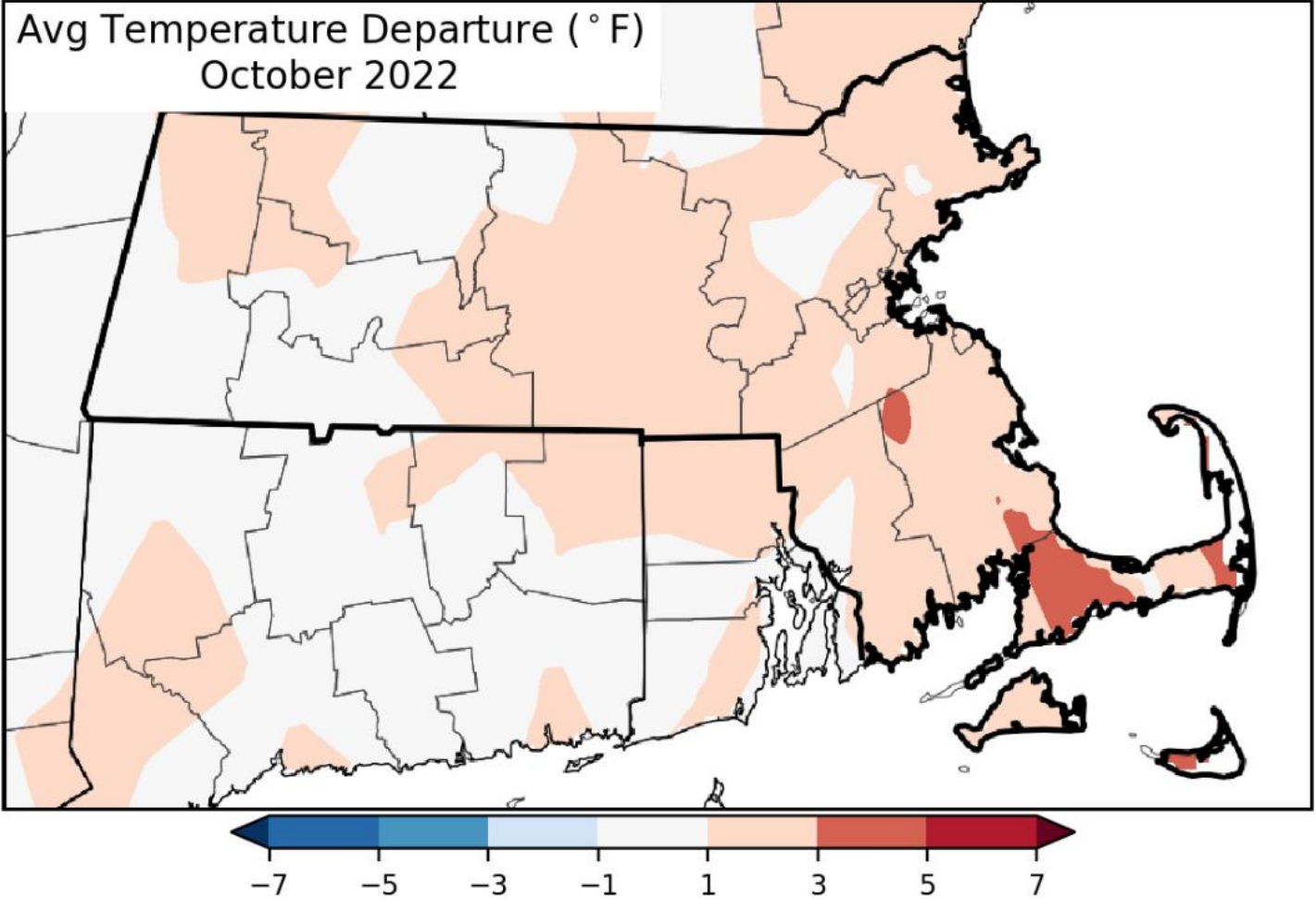
Map 3: US Drought Monitor for NWS Boston (top) and New England (bottom), effective November 1st



Map 4: October 2022 liquid equivalent precipitation for southern New England. From the Northeast Regional Climate Center.



Map 5. October 2022 precipitation departure from normal for southern New England. From the Northeast Regional Climate Center.



Map 6. Average temperature departure from normal across southern New England for October 2022.
From the Northeast Regional Climate Center.