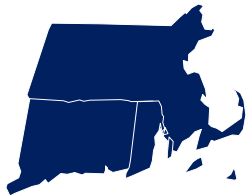


Community Collaborative Rain, Hail & Snow Network



# Southern



# New England

**November 2022**

Record breaking results to start the new Water Year. Massachusetts had over 8,000 precip reports. Rhode Island had over 3,100 precip reports. Combined with Connecticut's 4,200 precip reports and we broke 15,000 reports, nearly 500 reports per day.

Rhode Island has more observers than ..... you can fill in several states and regions. The density of observers in Rhode Island has been noticed and is impressive.

We begin each Newsletter with our version of "The Grand List"

Let's get into it.

## **The “Grand” List**

Congratulations to all of these observers from our three states who have recently passed a milestone of 1000 Daily Reports.

### **5000 Daily Reports**

|         |                |
|---------|----------------|
| MA-NF-1 | Norwood 1.3 NW |
| MA-BR-3 | Norton 1.8 NNE |
| MA-BA-3 | Falmouth 3.0 E |

### **3000 Daily Reports**

|          |             |
|----------|-------------|
| MA-MD-25 | Ayer 0.1 SW |
|----------|-------------|

### **2000 Daily Reports**

|          |                       |
|----------|-----------------------|
| CT-WN-10 | South Windham 1.3 NNE |
|----------|-----------------------|

### **1000 Daily Reports**

|          |                         |
|----------|-------------------------|
| CT-LT-34 | Woodbury Center 1.5 SSW |
|----------|-------------------------|

## **Observer Tips**

**Snow is coming:** Please review the snow measuring and snow reporting guides.

[https://media.cocorahs.org/docs/DataEntry\\_snow.pdf](https://media.cocorahs.org/docs/DataEntry_snow.pdf)

[https://media.cocorahs.org/docs/Measuring\\_SWE.pdf](https://media.cocorahs.org/docs/Measuring_SWE.pdf)

<https://www.youtube.com/playlist?list=PL86DC4C330F518387>

Most mistakes happen with reporting, not with measuring. It is critically important that reported values go in the correct places. Please avoid the most common snowfall reporting mistake and that is, reporting snowfall where precipitation goes. Reports of 4.5", 3.9" and the like do jump out unfavorably on the map of precip reports.

Point of emphasis this year, more than previous years. With days of new snowfall to report. If the precip value is the same as the SWE value, be ready to answer a challenge that goes "Did you take a core sample, or are you just repeating values?" If you do NOT take a core sample, then leave the SWE value "NA".



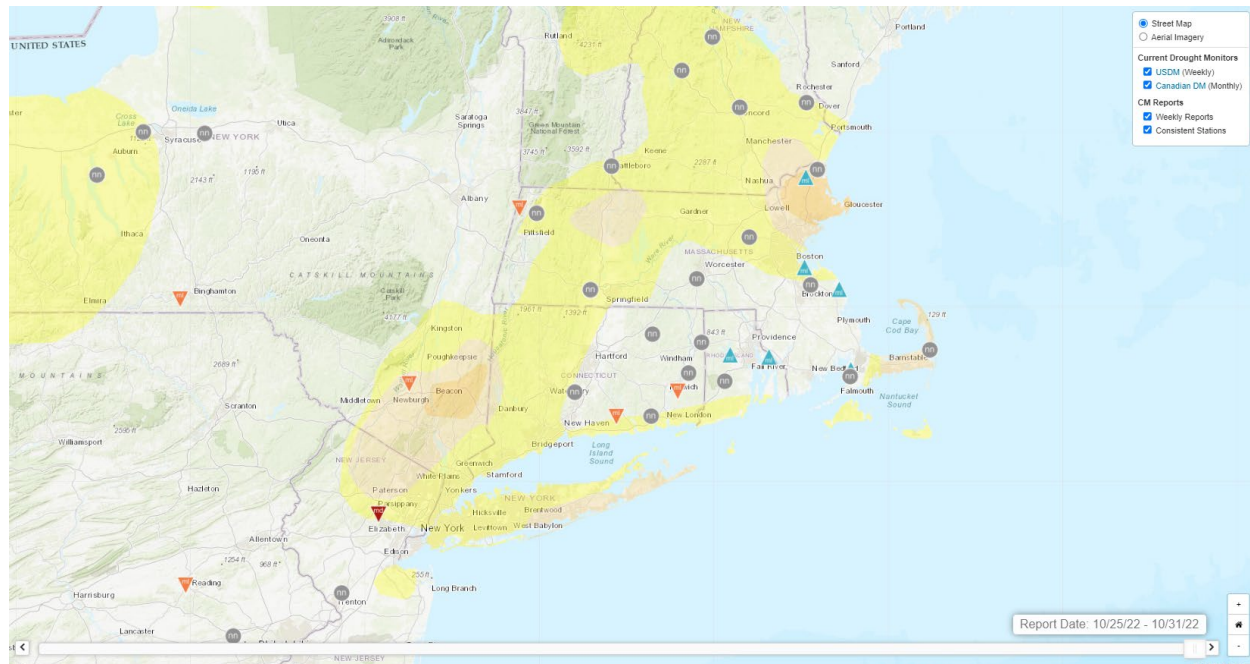
**Significant Weather Reports:** It is as easy to remember as 1-2-3

- **1" or more of rain or snow in 1 hour or less.**
- **2" or more of rain.**
- **Flooding.**
- **Anything you feel is significant!**

**mPING app for Apple and Android:** Citizen Science in action! Use mPING to report precip type and reduced visibility in real time.

## Condition Monitoring Reports

Thank you for continuing to be the standout group in our network.



 **Danielson 3.2 ESE**  
Sun Nov 13 2022

Yesterday's rain was the first meaningful rain in several weeks. Only 1.05" so far this month. Local rivers & streams are lower then normal. The large trees have all shed their leaves but the leaves on our Japanese Maple & Fig tree are just starting to turn & drop. Squirrels have cleaned out all the nut drops from our yard.

CT-WN-26 -- General Awareness,Plants And Wildlife

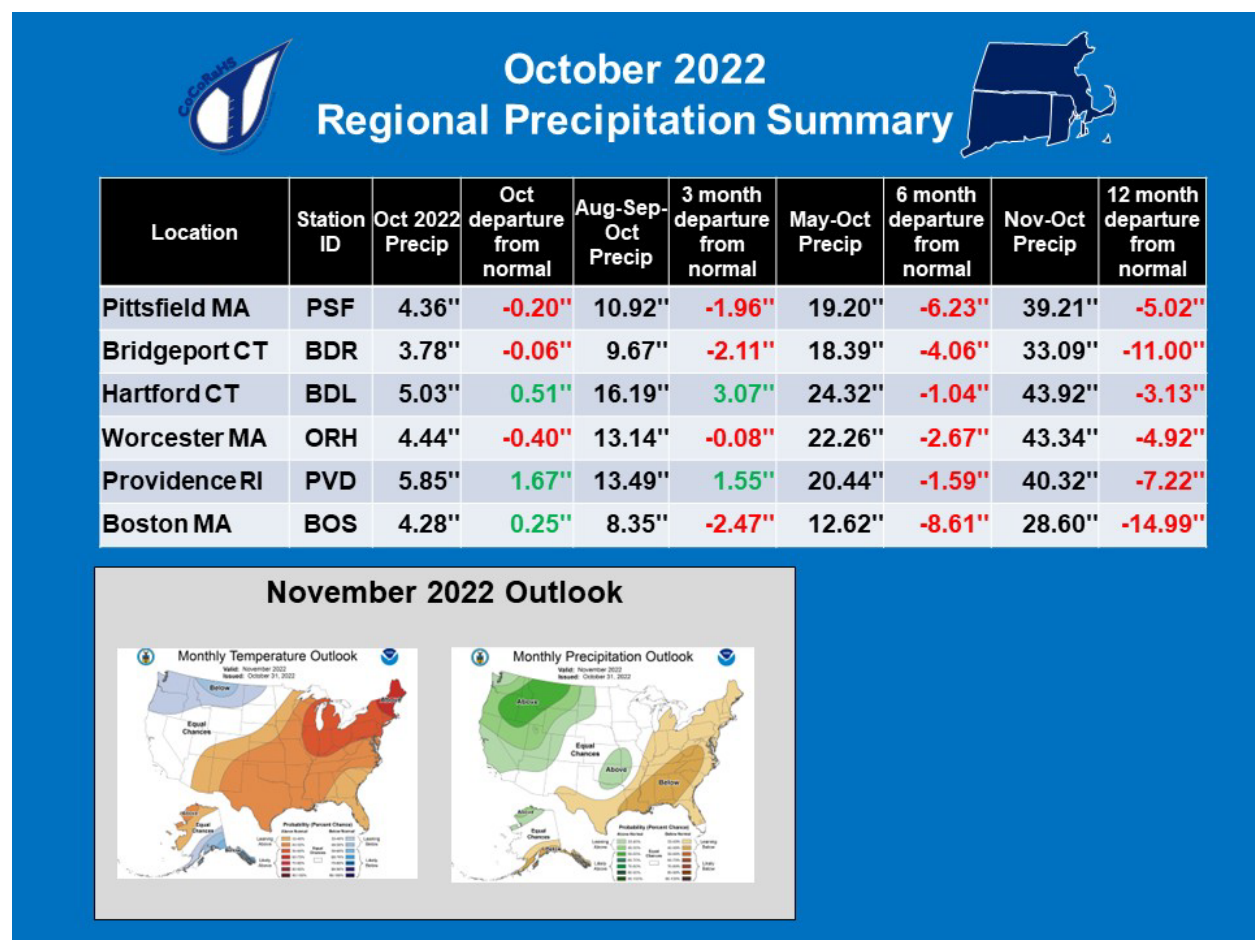
 **Newburyport 0.4 NNW**  
Sat Nov 12 2022

.51 inches of rain in the last week and that is the total for the month so far. Some trees still have leaves but most are gone. Montauk daisies are finished blossoming. Intermittent streams have very little water in them and no water over the dam at the reservoir.

MA-ES-64 -- General Awareness,Water Supply And Quality

## **Detail and Summary for October 2022**

From the National Weather Service (NWS) Climate sites for October 2022.



## From your reports for October 2022

|                                |                                                |
|--------------------------------|------------------------------------------------|
| Observers reporting            | 603                                            |
| Reported all 31 days           | 275                                            |
| Completed by Multi-Day Reports | 80                                             |
| Missing 1 or 2 reports         | 89                                             |
| Daily Reports                  | 15,429                                         |
| Zero Reports                   | 8,342                                          |
| Non-Zero Reports               | 7,087                                          |
| Daily Comments                 | 2,636                                          |
| Multi-Day Reports              | 296                                            |
| Condition Monitoring Reports   | 123                                            |
| Significant Weather Reports    | 17                                             |
| Hail Reports                   | 1                                              |
| Snowfall Reports               | 10,325                                         |
| Snow Depth Reports             | 4,067                                          |
| Total SWE Reports              | 2,835                                          |
| Highest Daily Report           | 3.89" from Chatham 0.2 SSE (MA-BA-65) on 10/27 |

For October 2022, a long list that spans 10 full pages.

Cover all days in the month, no overlapping Multi-Day reports and your station can be listed here.

Make it easy on yourself. Put your station id in this link to see your reports for the month.

<https://www.cocorahs.org/ViewData/StationPrecipSummary.aspx?station=ct-fr-9&startdate=10/01/2022&enddate=10/31/2022>

This list is sorted by Watershed which is explained further in this 5 minute [video](#).

| Watershed  | Watershed Name                 | Station Number | Station Name        | Precip |
|------------|--------------------------------|----------------|---------------------|--------|
| 01070004   | Nashua                         |                |                     |        |
| 0107000401 | North Nashua River             | MA-WR-44       | Westminster 0.6 WSW | 3.85"  |
| 0107000401 | North Nashua River             | MA-WR-8        | Fitchburg 1.6 SSW   | 3.81"  |
| 0107000401 | North Nashua River             | MA-WR-22       | Fitchburg 2.0 NNE   | 3.98"  |
| 0107000402 | Headwaters Nashua River        | MA-WR-89       | Holden 0.9 SSE      | 4.34"  |
| 0107000402 | Headwaters Nashua River        | MA-WR-56       | Sterling 4.3 NW     | 5.31"  |
| 0107000402 | Headwaters Nashua River        | MA-MD-25       | Ayer 0.1 SW         | 3.70"  |
| 0107000402 | Headwaters Nashua River        | MA-MD-192      | Ayer 0.4 SSE        | 3.78"  |
| 0107000403 | Squannacook River              | MA-MD-47       | West Townsend 0.5 W | 4.11"  |
| 0107000404 | Nissitissit River-Nashua River | MA-MD-169      | Pepperell 2.1 SSW   | 3.78"  |
| 01070005   | Concord                        |                |                     |        |
| 0107000501 | Sudbury River                  | MA-MD-89       | Sudbury 3.6 W       | 4.33"  |
| 0107000501 | Sudbury River                  | MA-MD-178      | Framingham 2.0 NNE  | 3.92"  |
| 0107000501 | Sudbury River                  | MA-MD-205      | Framingham 1.6 ENE  | 4.04"  |
| 0107000501 | Sudbury River                  | MA-MD-107      | Framingham 1.7 E    | 4.07"  |
| 0107000502 | Concord River                  | MA-WR-30       | Shrewsbury 1.6 NNE  | 5.27"  |
| 0107000502 | Concord River                  | MA-WR-28       | Berlin 1.3 WSW      | 5.40"  |
| 0107000502 | Concord River                  | MA-WR-42       | Northborough 2.3 N  | 5.58"  |
| 0107000502 | Concord River                  | MA-MD-115      | Hudson 1.4 NW       | 4.99"  |
| 0107000502 | Concord River                  | MA-WR-55       | Harvard 2.1 S       | 5.08"  |
| 0107000502 | Concord River                  | MA-MD-220      | Hudson 0.5 SSE      | 4.79"  |
| 0107000502 | Concord River                  | MA-MD-12       | Acton 1.3 SW        | 4.20"  |
| 0107000502 | Concord River                  | MA-MD-51       | Maynard 0.7 ESE     | 4.46"  |
| 0107000502 | Concord River                  | MA-MD-53       | Acton 4.0 ENE       | 3.85"  |
| 0107000502 | Concord River                  | MA-MD-62       | Chelmsford 1.2 E    | 3.22"  |
| 01070006   | Merrimack River                |                |                     |        |

|            |                                     |           |                         |       |
|------------|-------------------------------------|-----------|-------------------------|-------|
| 0107000612 | Stony Brook - Merrimack River       | MA-MD-104 | Littleton 2.8 NNW       | 3.55" |
| 0107000613 | Shawsheen River                     | MA-MD-52  | Lexington 0.6 SW        | 4.59" |
| 0107000613 | Shawsheen River                     | MA-ES-48  | Andover 0.6 E           | 3.47" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-66  | North Andover 0.3 NW    | 3.47" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-90  | Haverhill 0.8 SW        | 3.40" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-20  | Haverhill 0.7 N         | 4.49" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-4   | Groveland 0.5 WSW       | 3.55" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-86  | West Newbury 1.1 ESE    | 4.20" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-61  | Amesbury 2.6 WSW        | 4.09" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-59  | Amesbury 1.2 N          | 3.86" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-68  | Newburyport 1.3 WNW     | 4.12" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-64  | Newburyport 0.4 NNW     | 4.11" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-70  | Newburyport 0.6 N       | 4.07" |
| 0107000614 | Powwow River - Merrimack River      | MA-ES-56  | Newburyport 1.0 ESE     | 4.90" |
| 0108000511 | Headwaters Naugatuck River          | CT-LT-46  | Watertown 3.4 N         | 3.62" |
| 01080201   | Middle Connecticut                  |           |                         |       |
| 0108020106 | Manhan River - Connecticut River    | MA-HS-2   | Westhampton 1.8 SW      | 5.09" |
| 0108020106 | Manhan River - Connecticut River    | MA-HS-8   | Williamsburg 1.2 WSW    | 4.82" |
| 0108020106 | Manhan River - Connecticut River    | MA-HS-48  | Easthampton 1.0 E       | 4.32" |
| 0108020106 | Manhan River - Connecticut River    | MA-HS-21  | Northampton 0.6 ESE     | 3.72" |
| 0108020106 | Manhan River - Connecticut River    | MA-FR-12  | Sunderland 1.3 SE       | 3.38" |
| 0108020107 | Batchelor Brook - Connecticut River | MA-HD-36  | West Springfield 0.3 E  | 2.87" |
| 0108020107 | Batchelor Brook - Connecticut River | MA-HD-13  | Springfield 4.1 W       | 2.97" |
| 0108020107 | Batchelor Brook - Connecticut River | MA-HS-56  | South Hadley 3.2 SSW    | 3.45" |
| 01080202   | Miller                              |           |                         |       |
| 0108020201 | Upper Millers River                 | NH-CH-20  | Rindge 3.2 ESE          | 4.40" |
| 0108020202 | Lower Millers River                 | MA-WR-106 | Athol 2.8 NNE           | 3.74" |
| 0108020202 | Lower Millers River                 | MA-WR-40  | Gardner 1.4 SSW         | 5.15" |
| 01080203   | Deerfield                           |           |                         |       |
| 0108020303 | North River                         | MA-FR-31  | Colrain 3.7 WNW         | 3.08" |
| 0108020305 | Lower Deerfield River               | MA-FR-17  | Buckland 1.8 ESE        | 4.25" |
| 0108020305 | Lower Deerfield River               | MA-FR-41  | Conway 3.4 WSW          | 4.89" |
| 0108020305 | Lower Deerfield River               | MA-FR-42  | Shelburne Falls 0.4 ENE | 3.89" |
| 0108020305 | Lower Deerfield River               | MA-FR-13  | Conway 2.9 NW           | 4.08" |
| 0108020305 | Lower Deerfield River               | MA-FR-10  | Conway 0.9 SW           | 4.59" |
| 01080204   | Chicopee                            |           |                         |       |
| 0108020402 | Ware River                          | MA-WR-108 | Hardwick 1.1 S          | 2.84" |
| 0108020403 | Quaboag River                       | MA-WR-75  | Warren 2.4 WSW          | 3.52" |
| 01080205   | Lower Connecticut                   |           |                         |       |
| 0108020501 | Mill River - Connecticut River      | CT-HR-57  | Suffield Depot 3.3 NNE  | 4.88" |
| 0108020501 | Mill River - Connecticut River      | MA-HD-33  | Agawam 1.1 SSW          | 3.54" |

|            |                                     |           |                            |       |
|------------|-------------------------------------|-----------|----------------------------|-------|
| 0108020501 | Mill River - Connecticut River      | CT-HR-106 | Southwood Acres 0.3 WSW    | 5.34" |
| 0108020501 | Mill River - Connecticut River      | MA-HD-45  | Longmeadow 1.2 SSE         | 4.10" |
| 0108020501 | Mill River - Connecticut River      | MA-HD-20  | Wilbraham 3.7 SSW          | 4.20" |
| 0108020501 | Mill River - Connecticut River      | MA-HD-30  | Hampden 2.0 NW             | 5.11" |
| 0108020502 | Scantic River                       | CT-TL-46  | Broad Brook 3.3 SE         | 4.29" |
| 0108020502 | Scantic River                       | CT-TL-26  | Broad Brook 2.6 ESE        | 5.36" |
| 0108020502 | Scantic River                       | CT-TL-35  | Somersville 0.2 ENE        | 5.36" |
| 0108020502 | Scantic River                       | MA-HD-32  | East Longmeadow 2.3 ESE    | 5.12" |
| 0108020502 | Scantic River                       | CT-TL-41  | Somers 0.3 S               | 6.13" |
| 0108020502 | Scantic River                       | CT-TL-15  | Central Somers 0.3 N       | 6.12" |
| 0108020503 | Park River                          | CT-HR-39  | Farmington 1.6 SW          | 3.33" |
| 0108020503 | Park River                          | CT-HR-115 | West Hartford 1.6 SE       | 3.62" |
| 0108020504 | Hockanum River                      | CT-HR-100 | Manchester 0.4 ENE         | 4.99" |
| 0108020504 | Hockanum River                      | CT-HR-116 | Manchester 2.2 NE          | 4.65" |
| 0108020505 | Roaring Brook - Connecticut River   | CT-HR-6   | Wethersfield 1.2 WSW       | 4.12" |
| 0108020505 | Roaring Brook - Connecticut River   | CT-HR-68  | Rocky Hill 1.3 E           | 6.19" |
| 0108020505 | Roaring Brook - Connecticut River   | CT-HR-84  | East Hartford 2.0 SSE      | 4.87" |
| 0108020505 | Roaring Brook - Connecticut River   | CT-HR-22  | East Hartford 1.3 E        | 4.73" |
| 0108020505 | Roaring Brook - Connecticut River   | CT-HR-120 | South Windsor 0.9 ENE      | 4.79" |
| 0108020506 | Mattabesset River                   | CT-HR-15  | Southington 3.0 E          | 4.27" |
| 0108020506 | Mattabesset River                   | CT-HR-65  | Newington 1.9 SSW          | 3.82" |
| 0108020506 | Mattabesset River                   | CT-MD-25  | Middlefield 0.6 SE         | 6.65" |
| 0108020506 | Mattabesset River                   | CT-MD-24  | Durham 1.2 W               | 6.44" |
| 0108020506 | Mattabesset River                   | CT-MD-34  | Cromwell 0.4 WNW           | 5.90" |
| 0108020507 | Higganum Creek - Connecticut River  | CT-MD-23  | Higganum 0.7 N             | 5.58" |
| 0108020507 | Higganum Creek - Connecticut River  | CT-MD-26  | Higganum 0.8 NE            | 5.84" |
| 0108020509 | Eightmile River - Connecticut River | CT-MD-30  | Chester Center 2.7 WNW     | 5.41" |
| 0108020509 | Eightmile River - Connecticut River | CT-MD-19  | Ivoryton 0.9 WSW           | 3.77" |
| 0108020509 | Eightmile River - Connecticut River | CT-NL-63  | Old Lyme 1.7 NNE           | 2.94" |
| 01080206   | Westfield                           |           |                            |       |
| 0108020601 | Headwaters Westfield River          | MA-HS-7   | Plainfield 2.2 SW          | 5.40" |
| 0108020603 | Outlet Westfield River              | MA-HD-44  | Westfield 2.2 N            | 3.94" |
| 0108020603 | Outlet Westfield River              | MA-HD-40  | Westfield 1.7 S            | 3.76" |
| 0108020603 | Outlet Westfield River              | MA-HD-28  | Westfield 2.8 SE           | 3.99" |
| 0108020603 | Outlet Westfield River              | MA-HD-46  | Westfield 3.2 SE           | 4.08" |
| 0108020603 | Outlet Westfield River              | MA-HD-49  | West Springfield 1.8 WSW   | 3.87" |
| 01080207   | Farmington                          |           |                            |       |
| 0108020702 | West Branch Farmington River        | MA-BE-4   | Becket 5.6 SSW             | 4.86" |
| 0108020702 | West Branch Farmington River        | CT-LT-18  | New Hartford Center 1.5 N  | 5.14" |
| 0108020704 | Headwaters Farmington River         | CT-LT-9   | New Hartford Center 3.2 SW | 4.13" |
| 0108020704 | Headwaters Farmington River         | CT-HR-123 | Bristol 2.2 W              | 3.18" |

|            |                                             |           |                      |       |
|------------|---------------------------------------------|-----------|----------------------|-------|
| 0108020704 | Headwaters Farmington River                 | CT-HR-70  | Canton 1.5 W         | 3.56" |
| 0108020704 | Headwaters Farmington River                 | CT-HR-128 | Bristol 2.8 NNE      | 3.49" |
| 0108020704 | Headwaters Farmington River                 | CT-HR-28  | North Canton 0.8 SSW | 3.84" |
| 0108020705 | Salmon Brook                                | CT-HR-8   | North Granby 1.3 ENE | 5.04" |
| 01090001   | Charles                                     |           |                      |       |
| 0109000101 | Plum Island Sound - Frontal Atlantic Ocean  | MA-ES-77  | Groveland 1.2 NE     | 4.01" |
| 0109000101 | Plum Island Sound - Frontal Atlantic Ocean  | MA-ES-19  | West Newbury 1.8 SSE | 4.25" |
| 0109000101 | Plum Island Sound - Frontal Atlantic Ocean  | MA-ES-24  | Newburyport 0.8 SW   | 4.25" |
| 0109000102 | Ipswich River                               | MA-MD-85  | Wilmington 2.2 WNW   | 3.77" |
| 0109000102 | Ipswich River                               | MA-MD-125 | Tewksbury 3.6 SSE    | 3.49" |
| 0109000102 | Ipswich River                               | MA-MD-160 | Reading 1.2 N        | 4.15" |
| 0109000102 | Ipswich River                               | MA-ES-58  | Middleton 1.4 SSW    | 4.73" |
| 0109000102 | Ipswich River                               | MA-ES-95  | Boxford 1.8 WSW      | 4.30" |
| 0109000102 | Ipswich River                               | MA-ES-12  | Boxford 2.4 S        | 3.86" |
| 0109000102 | Ipswich River                               | MA-ES-71  | Danvers 2.5 NNE      | 3.84" |
| 0109000103 | Essex River - Frontal Atlantic Ocean        | MA-ES-41  | Danvers 0.8 ESE      | 3.67" |
| 0109000103 | Essex River - Frontal Atlantic Ocean        | MA-ES-94  | Marblehead 1.9 NNE   | 3.66" |
| 0109000103 | Essex River - Frontal Atlantic Ocean        | MA-ES-22  | Rockport 1.0 E       | 3.03" |
| 0109000104 | Saugus River - Frontal Broad Sound          | MA-MD-126 | Melrose 0.5 NE       | 3.90" |
| 0109000104 | Saugus River - Frontal Broad Sound          | MA-ES-76  | Nahant 0.7 N         | 3.87" |
| 0109000104 | Saugus River - Frontal Broad Sound          | MA-ES-45  | Nahant 0.4 N         | 3.73" |
| 0109000105 | Mystic River - Frontal Boston Harbor        | MA-MD-123 | Lexington 1.3 SE     | 3.61" |
| 0109000105 | Mystic River - Frontal Boston Harbor        | MA-MD-175 | Arlington 0.4 WNW    | 4.39" |
| 0109000105 | Mystic River - Frontal Boston Harbor        | MA-MD-7   | Winchester 0.7 SE    | 4.09" |
| 0109000105 | Mystic River - Frontal Boston Harbor        | MA-MD-44  | Medford 1.2 W        | 3.80" |
| 0109000105 | Mystic River - Frontal Boston Harbor        | MA-MD-11  | Cambridge 0.9 NNW    | 4.31" |
| 0109000105 | Mystic River - Frontal Boston Harbor        | MA-SF-10  | Chelsea 0.8 N        | 4.06" |
| 0109000106 | Upper Charles River                         | MA-MD-55  | Holliston 0.7 W      | 4.40" |
| 0109000106 | Upper Charles River                         | MA-NF-64  | Medway 2.1 W         | 4.86" |
| 0109000106 | Upper Charles River                         | MA-MD-42  | Holliston 0.8 S      | 4.37" |
| 0109000106 | Upper Charles River                         | MA-NF-62  | Franklin 1.4 SW      | 4.67" |
| 0109000106 | Upper Charles River                         | MA-MD-158 | Sherborn 1.1 NW      | 4.37" |
| 0109000106 | Upper Charles River                         | MA-NF-63  | Norfolk 1.1 W        | 4.97" |
| 0109000106 | Upper Charles River                         | MA-NF-50  | Millis 1.4 ENE       | 4.54" |
| 0109000107 | Lower Charles River - Frontal Boston Harbor | MA-MD-120 | Natick 1.9 NNE       | 3.67" |
| 0109000107 | Lower Charles River - Frontal Boston Harbor | MA-MD-80  | Lincoln 1.5 SW       | 4.22" |
| 0109000107 | Lower Charles River - Frontal Boston Harbor | MA-MD-119 | Watertown 1.1 W      | 4.40" |
| 0109000107 | Lower Charles River - Frontal Boston Harbor | MA-SF-31  | Boston 6.5 SW        | 4.41" |
| 0109000107 | Lower Charles River - Frontal Boston Harbor | MA-MD-134 | Somerville 0.5 SSE   | 3.62" |
| 0109000108 | Neponset River - Frontal Boston Harbor      | MA-NF-78  | Walpole 1.4 SW       | 4.45" |
| 0109000108 | Neponset River - Frontal Boston Harbor      | MA-NF-82  | Westwood 1.5 SSW     | 4.16" |

|            |                                           |          |                       |        |
|------------|-------------------------------------------|----------|-----------------------|--------|
| 0109000108 | Neponset River - Frontal Boston Harbor    | MA-NF-1  | Norwood 1.3 NW        | 4.17"  |
| 0109000108 | Neponset River - Frontal Boston Harbor    | MA-NF-54 | Quincy 1.2 W          | 6.36"  |
| 0109000109 | Whitmans Pond - Frontal Boston Harbor     | MA-NF-68 | Quincy 1.5 SSE        | 6.79"  |
| 0109000109 | Whitmans Pond - Frontal Boston Harbor     | MA-NF-75 | Braintree 1.5 SE      | 6.45"  |
| 0109000109 | Whitmans Pond - Frontal Boston Harbor     | MA-PL-36 | Hingham 0.8 ESE       | 6.39"  |
| 01090002   | Cape Cod                                  |          |                       |        |
| 0109000201 | North River - Frontal Massachusetts Bay   | MA-PL-57 | Hanson 1.8 N          | 6.36"  |
| 0109000201 | North River - Frontal Massachusetts Bay   | MA-PL-5  | Kingston 3.3 WNW      | 8.58"  |
| 0109000201 | North River - Frontal Massachusetts Bay   | MA-PL-30 | Duxbury 3.7 W         | 10.02" |
| 0109000201 | North River - Frontal Massachusetts Bay   | MA-PL-48 | Marshfield 1.5 NNW    | 7.06"  |
| 0109000201 | North River - Frontal Massachusetts Bay   | MA-PL-65 | Marshfield 1.4 ENE    | 8.08"  |
| 0109000202 | Cape Cod                                  | MA-BA-2  | Falmouth 3.1 NNW      | 7.47"  |
| 0109000202 | Cape Cod                                  | MA-BA-57 | Falmouth 5.7 N        | 8.87"  |
| 0109000202 | Cape Cod                                  | MA-BA-87 | Falmouth 1.5 NNW      | 6.74"  |
| 0109000202 | Cape Cod                                  | MA-BA-13 | Falmouth 0.6 NNW      | 6.64"  |
| 0109000202 | Cape Cod                                  | MA-BA-50 | Falmouth 5.4 NNE      | 6.53"  |
| 0109000202 | Cape Cod                                  | MA-BA-17 | East Falmouth 1.2 WNW | 7.06"  |
| 0109000202 | Cape Cod                                  | MA-BA-19 | East Falmouth 0.7 NW  | 7.26"  |
| 0109000202 | Cape Cod                                  | MA-BA-3  | Falmouth 3.0 E        | 6.52"  |
| 0109000202 | Cape Cod                                  | MA-BA-92 | Mashpee 3.2 WSW       | 7.12"  |
| 0109000202 | Cape Cod                                  | MA-BA-11 | East Falmouth 1.4 ESE | 7.74"  |
| 0109000202 | Cape Cod                                  | MA-BA-83 | Mashpee 2.5 W         | 7.26"  |
| 0109000202 | Cape Cod                                  | MA-BA-18 | Waquoit 0.6 SSW       | 7.59"  |
| 0109000202 | Cape Cod                                  | MA-BA-47 | Mashpee 2.4 WSW       | 6.93"  |
| 0109000202 | Cape Cod                                  | MA-BA-45 | Sandwich 0.9 NNE      | 6.11"  |
| 0109000202 | Cape Cod                                  | MA-BA-64 | Sandwich 1.5 SSE      | 7.82"  |
| 0109000202 | Cape Cod                                  | MA-BA-79 | Mashpee 0.8 SSW       | 5.93"  |
| 0109000202 | Cape Cod                                  | MA-BA-78 | Mashpee 4.6 S         | 6.95"  |
| 0109000202 | Cape Cod                                  | MA-BA-10 | East Sandwich 2.3 SE  | 8.32"  |
| 0109000202 | Cape Cod                                  | MA-BA-59 | Barnstable 3.6 W      | 6.87"  |
| 0109000202 | Cape Cod                                  | MA-BA-60 | Hyannis 0.7 WNW       | 7.29"  |
| 0109000202 | Cape Cod                                  | MA-BA-22 | Yarmouth 0.9 NNW      | 7.42"  |
| 0109000202 | Cape Cod                                  | MA-BA-72 | Yarmouth 2.0 S        | 7.13"  |
| 0109000202 | Cape Cod                                  | MA-BA-80 | Brewster 1.4 W        | 9.31"  |
| 0109000202 | Cape Cod                                  | MA-BA-95 | Harwich 0.6 N         | 8.02"  |
| 0109000202 | Cape Cod                                  | MA-BA-52 | Truro 0.8 E           | 7.97"  |
| 0109000202 | Cape Cod                                  | MA-BA-42 | Orleans 1.8 S         | 9.88"  |
| 0109000202 | Cape Cod                                  | MA-BA-51 | Orleans 3.0 S         | 10.55" |
| 0109000202 | Cape Cod                                  | MA-BA-12 | Orleans 1.1 E         | 9.16"  |
| 0109000202 | Cape Cod                                  | MA-BA-43 | Chatham 0.4 WSW       | 10.30" |
| 0109000203 | Mattapoisett River - Frontal Buzzards Bay | MA-BR-79 | Fairhaven 1.9 ENE     | 6.60"  |

|            |                                             |           |                           |       |
|------------|---------------------------------------------|-----------|---------------------------|-------|
| 0109000203 | Mattapoisett River - Frontal Buzzards Bay   | MA-PL-55  | Carver 2.3 E              | 7.22" |
| 0109000203 | Mattapoisett River - Frontal Buzzards Bay   | MA-PL-63  | Wareham 5.6 NE            | 7.12" |
| 0109000204 | Paskamanset River - Frontal Buzzards Bay    | MA-BR-14  | Dartmouth 2.5 SSW         | 6.29" |
| 0109000204 | Paskamanset River - Frontal Buzzards Bay    | MA-BR-52  | New Bedford 4.3 N         | 6.01" |
| 0109000205 | Sakonnet Point - Frontal Rhode Island Sound | RI-NW-7   | Little Compton 0.6 E      | 5.50" |
| 0109000205 | Sakonnet Point - Frontal Rhode Island Sound | MA-BR-37  | Westport 0.9 ESE          | 7.44" |
| 0109000206 | Elizabeth Islands - Marthas Vineyard        | MA-DK-21  | Chilmark 0.9 E            | 7.07" |
| 0109000206 | Elizabeth Islands - Marthas Vineyard        | MA-DK-5   | West Tisbury 2.9 N        | 8.10" |
| 0109000206 | Elizabeth Islands - Marthas Vineyard        | MA-DK-2   | Vineyard Haven 0.8 WSW    | 6.50" |
| 0109000206 | Elizabeth Islands - Marthas Vineyard        | MA-DK-18  | Oak Bluffs 0.1 SW         | 6.21" |
| 01090003   | Blackstone                                  |           |                           |       |
| 0109000301 | Upper Blackstone River                      | MA-WR-41  | Auburn 2.6 SW             | 4.41" |
| 0109000301 | Upper Blackstone River                      | MA-WR-43  | Leicester 2.4 ESE         | 4.13" |
| 0109000301 | Upper Blackstone River                      | MA-WR-98  | Worcester 2.2 NW          | 5.22" |
| 0109000301 | Upper Blackstone River                      | MA-WR-113 | Worcester 2.0 SE          | 4.19" |
| 0109000301 | Upper Blackstone River                      | MA-WR-81  | Worcester 1.6 SE          | 4.52" |
| 0109000301 | Upper Blackstone River                      | MA-WR-100 | Douglas 1.9 NNE           | 4.04" |
| 0109000301 | Upper Blackstone River                      | MA-WR-69  | Northbridge 1.7 WNW       | 3.34" |
| 0109000302 | Lower Blackstone River                      | RI-PR-50  | Harrisville 1.2 SSE       | 4.58" |
| 0109000302 | Lower Blackstone River                      | MA-WR-90  | Upton 0.4 NE              | 4.58" |
| 0109000302 | Lower Blackstone River                      | RI-PR-28  | North Smithfield 0.7 SE   | 4.67" |
| 0109000302 | Lower Blackstone River                      | RI-PR-89  | Woonsocket 1.8 WNW        | 4.41" |
| 0109000302 | Lower Blackstone River                      | MA-NF-67  | Bellingham 3.6 SSW        | 4.43" |
| 0109000302 | Lower Blackstone River                      | MA-NF-26  | Bellingham 2.4 S          | 4.91" |
| 0109000302 | Lower Blackstone River                      | RI-PR-55  | Cumberland Hill 3.6 NNE   | 4.31" |
| 0109000302 | Lower Blackstone River                      | RI-PR-21  | Cumberland 2.4 ENE        | 5.17" |
| 0109000302 | Lower Blackstone River                      | RI-PR-106 | Valley Falls 1.1 W        | 5.15" |
| 01090004   | Narragansett                                |           |                           |       |
| 0109000401 | Upper Taunton River                         | MA-BR-30  | Taunton 3.9 N             | 6.78" |
| 0109000401 | Upper Taunton River                         | MA-NF-31  | Stoughton 1.2 E           | 6.17" |
| 0109000401 | Upper Taunton River                         | MA-PL-22  | East Bridgewater 0.3 WSW  | 6.33" |
| 0109000401 | Upper Taunton River                         | MA-PL-60  | Abington 1.7 ESE          | 5.94" |
| 0109000401 | Upper Taunton River                         | MA-PL-23  | Pembroke 2.8 SW           | 7.39" |
| 0109000402 | Middle Taunton River                        | MA-PL-31  | Bridgewater 1.8 SE        | 6.65" |
| 0109000402 | Middle Taunton River                        | MA-PL-61  | Middleborough 3.5 SSE     | 6.78" |
| 0109000403 | Threemile River                             | MA-NF-19  | Foxborough 1.8 SSW        | 4.77" |
| 0109000403 | Threemile River                             | MA-BR-84  | Norton 1.8 W              | 4.83" |
| 0109000403 | Threemile River                             | MA-BR-55  | NWS Boston/Norton 2.5 ESE | 6.72" |
| 0109000404 | Ten Mile River                              | RI-PR-119 | Pawtucket 2.6 SSE         | 5.72" |
| 0109000404 | Ten Mile River                              | MA-BR-23  | Attleboro 0.9 ENE         | 4.83" |
| 0109000405 | Woonasquatucket River-Moshassuck River      | RI-PR-33  | Greenville 0.7 NNW        | 4.97" |

|            |                                              |           |                         |       |
|------------|----------------------------------------------|-----------|-------------------------|-------|
| 0109000405 | Woonasquatucket River-Moshassuck River       | RI-PR-51  | North Smithfield 0.6 S  | 4.82" |
| 0109000405 | Woonasquatucket River-Moshassuck River       | RI-PR-82  | Providence 1.6 NNW      | 6.10" |
| 0109000406 | Pawtuxet River                               | RI-PR-121 | Greenville 6.7 WSW      | 4.70" |
| 0109000406 | Pawtuxet River                               | RI-KN-67  | Coventry 5.5 WSW        | 5.47" |
| 0109000406 | Pawtuxet River                               | RI-KN-51  | Coventry 3.7 W          | 5.44" |
| 0109000406 | Pawtuxet River                               | RI-PR-130 | Greenville 2.6 WSW      | 5.32" |
| 0109000406 | Pawtuxet River                               | RI-KN-36  | Coventry 2.5 NW         | 5.80" |
| 0109000406 | Pawtuxet River                               | RI-KN-59  | Coventry 1.2 SW         | 5.23" |
| 0109000406 | Pawtuxet River                               | RI-KN-71  | West Warwick 2.1 NNE    | 5.31" |
| 0109000406 | Pawtuxet River                               | RI-PR-71  | Cranston 1.3 N          | 5.63" |
| 0109000407 | Palmer River                                 | RI-BR-11  | Bristol 2.0 NNW         | 4.58" |
| 0109000408 | Lower Taunton River - Frontal Mount Hope Bay | MA-BR-61  | Mansfield 2.4 ENE       | 4.85" |
| 0109000408 | Lower Taunton River - Frontal Mount Hope Bay | MA-BR-3   | Norton 1.8 NNE          | 5.50" |
| 0109000408 | Lower Taunton River - Frontal Mount Hope Bay | MA-BR-16  | Somerset 0.4 SSE        | 6.24" |
| 0109000408 | Lower Taunton River - Frontal Mount Hope Bay | MA-BR-72  | Somerset 2.3 NNE        | 6.03" |
| 0109000408 | Lower Taunton River - Frontal Mount Hope Bay | MA-BR-58  | Dighton 3.3 NNW         | 6.77" |
| 0109000408 | Lower Taunton River - Frontal Mount Hope Bay | MA-BR-8   | Dighton 1.1 WSW         | 6.49" |
| 0109000409 | Narragansett Bay                             | RI-WS-54  | North Kingstown 2.7 WSW | 5.76" |
| 0109000409 | Narragansett Bay                             | RI-WS-31  | Kingston 7.5 NNE        | 5.25" |
| 0109000409 | Narragansett Bay                             | RI-KN-45  | East Greenwich 2.8 NE   | 5.08" |
| 0109000409 | Narragansett Bay                             | RI-WS-97  | North Kingstown 0.4 W   | 5.04" |
| 0109000409 | Narragansett Bay                             | RI-KN-30  | East Greenwich 2.0 NE   | 5.12" |
| 0109000409 | Narragansett Bay                             | RI-KN-69  | Warwick 1.6 N           | 5.32" |
| 0109000409 | Narragansett Bay                             | RI-KN-2   | East Greenwich 2.3 ESE  | 4.57" |
| 0109000409 | Narragansett Bay                             | RI-KN-23  | Warwick 3.2 NNE         | 5.79" |
| 0109000409 | Narragansett Bay                             | RI-KN-31  | Warwick 0.8 ENE         | 5.18" |
| 0109000409 | Narragansett Bay                             | RI-KN-37  | Warwick 2.3 NNE         | 5.22" |
| 0109000409 | Narragansett Bay                             | RI-PR-67  | Providence 1.6 NE       | 4.18" |
| 0109000409 | Narragansett Bay                             | RI-KN-38  | Warwick 3.9 NNE         | 5.31" |
| 0109000409 | Narragansett Bay                             | RI-PR-104 | Providence 2.1 NE       | 6.21" |
| 0109000409 | Narragansett Bay                             | RI-PR-84  | Providence 2.7 NNE      | 5.83" |
| 0109000409 | Narragansett Bay                             | RI-NW-35  | Jamestown 0.3 SW        | 4.41" |
| 0109000409 | Narragansett Bay                             | RI-PR-108 | East Providence 0.8 SSW | 5.46" |
| 0109000409 | Narragansett Bay                             | RI-NW-30  | Jamestown 0.7 NNE       | 4.96" |
| 0109000409 | Narragansett Bay                             | RI-PR-77  | Riverside 0.8 SE        | 4.66" |
| 0109000409 | Narragansett Bay                             | RI-BR-5   | Barrington 1.3 WNW      | 5.01" |
| 0109000409 | Narragansett Bay                             | RI-BR-18  | Barrington 1.8 NW       | 4.90" |
| 0109000409 | Narragansett Bay                             | RI-BR-12  | Barrington 1.1 NNE      | 5.39" |
| 0109000409 | Narragansett Bay                             | RI-NW-31  | Newport 1.0 NE          | 4.91" |
| 0109000409 | Narragansett Bay                             | RI-NW-4   | Middletown 1.1 SW       | 4.70" |
| 0109000409 | Narragansett Bay                             | RI-NW-16  | Portsmouth 1.3 S        | 5.32" |

|            |                            |           |                             |       |
|------------|----------------------------|-----------|-----------------------------|-------|
| 0109000409 | Narragansett Bay           | RI-NW-32  | Portsmouth 5.2 SSE          | 4.85" |
| 0109000409 | Narragansett Bay           | RI-NW-20  | Tiverton 1.0 SSW            | 5.33" |
| 0109000409 | Narragansett Bay           | RI-NW-23  | Tiverton 3.6 S              | 5.64" |
| 01090005   | Pawcatuck-Wood             |           |                             |       |
| 0109000501 | Wood River                 | RI-WS-99  | Hope Valley 1.1 NW          | 5.78" |
| 0109000502 | Upper Pawcatuck River      | RI-WS-42  | Richmond 4.6 NNE            | 5.19" |
| 0109000502 | Upper Pawcatuck River      | RI-WS-45  | Charlestown 4.7 NNE         | 5.63" |
| 0109000502 | Upper Pawcatuck River      | RI-WS-80  | South Kingston 4.3 WSW      | 5.83" |
| 0109000502 | Upper Pawcatuck River      | RI-WS-37  | Kingston 2.4 SW             | 4.93" |
| 0109000502 | Upper Pawcatuck River      | RI-WS-77  | Kingston 0.7 WSW            | 5.28" |
| 0109000503 | Lower Pawcatuck River      | CT-NL-40  | Pawcatuck 1.8 SSE           | 4.85" |
| 0109000503 | Lower Pawcatuck River      | CT-NL-52  | Pawcatuck 0.8 SE            | 4.57" |
| 0109000503 | Lower Pawcatuck River      | RI-WS-30  | Westerly 2.4 NNW            | 4.71" |
| 0109000503 | Lower Pawcatuck River      | RI-WS-47  | Westerly 0.8 WNW            | 5.26" |
| 0109000504 | Frontal Block Island Sound | RI-WS-36  | Charlestown 3.0 WSW         | 4.79" |
| 0109000504 | Frontal Block Island Sound | RI-WS-71  | Wakefield-Peacedale 5.0 SW  | 4.60" |
| 0109000504 | Frontal Block Island Sound | RI-WS-58  | Kingston 0.3 SW             | 5.15" |
| 0109000504 | Frontal Block Island Sound | RI-WS-65  | Wakefield-Peacedale 0.9 W   | 4.93" |
| 0109000504 | Frontal Block Island Sound | RI-WS-106 | Wakefield-Peacedale 1.1 SW  | 5.40" |
| 0109000504 | Frontal Block Island Sound | RI-WS-81  | Wakefield-Peacedale 0.4 SW  | 4.18" |
| 0109000504 | Frontal Block Island Sound | RI-WS-83  | Wakefield-Peacedale 0.4 NNW | 5.19" |
| 0109000504 | Frontal Block Island Sound | RI-WS-55  | Wakefield 0.8 ENE           | 5.17" |
| 0109000504 | Frontal Block Island Sound | RI-WS-70  | Wakefield-Peacedale 1.7 NNE | 5.01" |
| 01100001   | Quinebaug                  |           |                             |       |
| 0110000101 | Upper Quinebaug River      | MA-WR-116 | Sturbridge 2.4 NW           | 5.25" |
| 0110000102 | French River               | MA-WR-88  | Leicester 2.5 WSW           | 4.39" |
| 0110000103 | Fivemile River             | CT-WN-4   | East Killingly 1.3 SW       | 4.16" |
| 0110000105 | Moosup River               | CT-WN-8   | Moosup 1.7 NE               | 4.99" |
| 0110000105 | Moosup River               | CT-WN-25  | Sterling 2.6 N              | 4.54" |
| 0110000105 | Moosup River               | CT-WN-26  | Danielson 3.2 ESE           | 4.37" |
| 0110000105 | Moosup River               | RI-KN-14  | Greene 1.4 E                | 6.15" |
| 0110000106 | Pachaug River              | CT-NL-57  | Jewett City 3.0 ESE         | 3.85" |
| 0110000106 | Pachaug River              | CT-NL-21  | Griswold 0.9 N              | 3.75" |
| 01100002   | Shetucket                  |           |                             |       |
| 0110000201 | Willimantic River          | CT-TL-18  | Hebron 5.3 NW               | 4.47" |
| 0110000201 | Willimantic River          | CT-TL-40  | Coventry 0.3 NNE            | 4.02" |
| 0110000201 | Willimantic River          | CT-TL-51  | Coventry 3.4 SE             | 4.81" |
| 0110000201 | Willimantic River          | CT-TL-2   | Staffordville 0.4 NNW       | 5.15" |
| 0110000202 | Natchaug River             | CT-TL-27  | Willington 2.7 SE           | 4.32" |
| 0110000202 | Natchaug River             | CT-TL-52  | Storrs 3.4 E                | 4.94" |
| 0110000202 | Natchaug River             | CT-TL-30  | Mansfield Center 2.7 NE     | 4.08" |

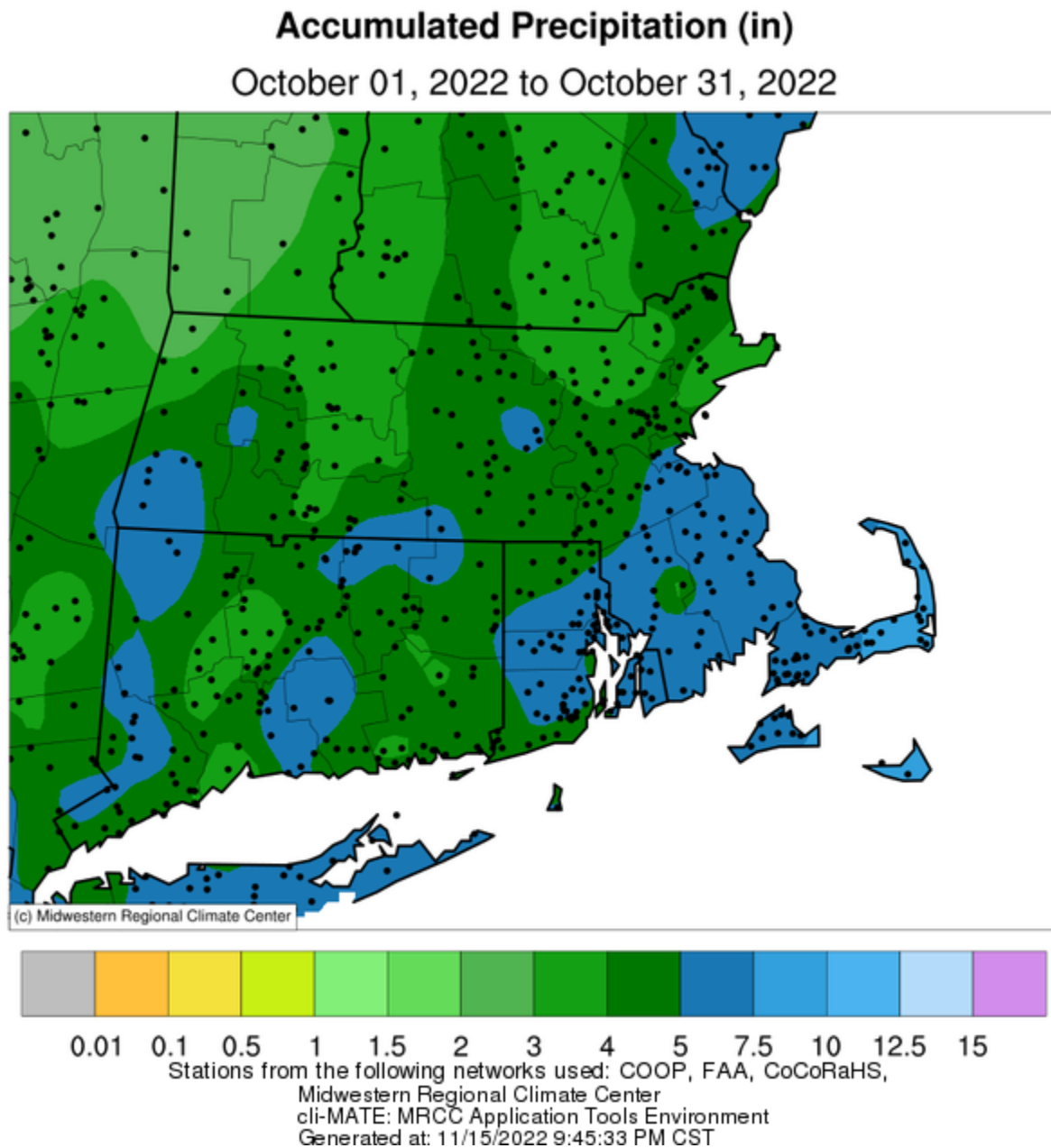
|            |                                               |          |                            |       |
|------------|-----------------------------------------------|----------|----------------------------|-------|
| 0110000202 | Natchaug River                                | CT-WN-12 | Eastford 2.0 W             | 5.32" |
| 0110000203 | Shetucket River                               | CT-NL-10 | Norwich 2.5 NNE            | 3.89" |
| 01100003   | Thames                                        |          |                            |       |
| 0110000302 | Thames River-Frontal New London Harbor        | CT-NL-5  | Oakdale 2.6 WNW            | 4.66" |
| 0110000302 | Thames River-Frontal New London Harbor        | CT-NL-6  | New London 1.0 NNW         | 4.76" |
| 0110000302 | Thames River-Frontal New London Harbor        | CT-NL-56 | Norwich 5.2 SE             | 4.40" |
| 0110000302 | Thames River-Frontal New London Harbor        | CT-NL-50 | Norwich 5.4 SE             | 4.70" |
| 0110000303 | Mystic River - Frontal Fishers Island Sound   | CT-NL-38 | Old Lyme 3.4 ESE           | 3.80" |
| 0110000303 | Mystic River - Fronter Fishers Island Sound   | CT-NL-62 | Salem 3.6 SE               | 4.21" |
| 0110000303 | Mystic River - Frontal Fishers Island Sound   | CT-NL-29 | East Lyme 0.5 SW           | 4.12" |
| 0110000303 | Mystic River - Frontal Fishers Island Sound   | CT-NL-32 | Niantic 1.1 SW             | 3.24" |
| 0110000303 | Mystic River - Frontal Fishers Island Sound   | CT-NL-22 | Central Waterford 2.7 SSW  | 3.78" |
| 0110000303 | Mystic River - Frontal Fishers Island Sound   | CT-NL-60 | Waterford 1.1 E            | 4.76" |
| 0110000303 | Mystic River - Frontal Fishers Island Sound   | CT-NL-24 | Stonington 1.4 NNW         | 4.47" |
| 0110000303 | Mystic River - Frontal Fishers Island Sound   | CT-NL-18 | Stonington 0.5 NNE         | 3.61" |
| 01100004   | Quinnipiac                                    |          |                            |       |
| 0110000401 | Quinnipiac River                              | CT-HR-83 | Plainville 1.7 SW          | 3.40" |
| 0110000401 | Quinnipiac River                              | CT-HR-23 | Southington 0.9 SSE        | 4.17" |
| 0110000401 | Quinnipiac River                              | CT-HR-76 | Southington 1.0 ENE        | 3.65" |
| 0110000401 | Quinnipiac River                              | CT-NH-44 | Wallingford Center 1.9 WNW | 5.14" |
| 0110000401 | Quinnipiac River                              | CT-NH-43 | Wallingford Center 3.3 NNW | 5.00" |
| 0110000401 | Quinnipiac River                              | CT-NH-75 | Meriden 2.8 WSW            | 4.60" |
| 0110000401 | Quinnipiac River                              | CT-NH-72 | Northford 0.8 SW           | 5.63" |
| 0110000402 | Hammonasset River - Frontal Long Island Sound | CT-NH-56 | Guilford Center 2.7 WSW    | 5.45" |
| 0110000402 | Hammonasset River - Frontal Long Island Sound | CT-NH-50 | Madison Center 4.1 N       | 4.67" |
| 0110000402 | Hammonasset River - Frontal Long Island Sound | CT-MD-32 | Killingworth 1.1 N         | 5.45" |
| 0110000402 | Hammonasset River - Frontal Long Island Sound | CT-MD-21 | Killingworth 2.6 ESE       | 4.54" |
| 0110000402 | Hammonasset River - Frontal Long Island Sound | CT-MD-35 | Westbrook 1.6 E            | 4.59" |
| 0110000403 | Mill River - Frontal Long Island Sound        | CT-NH-39 | West Haven 0.8 W           | 3.79" |
| 0110000403 | Mill River - Frontal Long Island Sound        | CT-NH-57 | New Haven 2.9 NNW          | 3.76" |
| 01100005   | Housatonic                                    |          |                            |       |
| 0110000501 | Headwaters Housatonic River                   | MA-BE-20 | Lee 3.7 SE                 | 5.50" |
| 0110000503 | Konkapot River-Housatonic River               | CT-LT-28 | Canaan 4.2 ESE             | 6.02" |
| 0110000504 | Macedonia Brook - Housatonic River            | CT-LT-20 | Warren 2.4 WNW             | 5.02" |
| 0110000506 | Candlewood Lake-Housatonic River              | CT-LT-51 | South Kent 0.1 SE          | 4.56" |
| 0110000506 | Candlewood Lake-Housatonic River              | CT-LT-37 | New Milford 3.1 WNW        | 5.46" |
| 0110000508 | Still River - Housatonic River                | CT-FR-43 | Bethel 0.5 E               | 4.95" |
| 0110000508 | Still River - Housatonic River                | CT-FR-41 | Bethel 3.5 NNE             | 4.78" |
| 0110000508 | Still River - Housatonic River                | CT-FR-9  | Brookfield 3.3 SSE         | 4.96" |
| 0110000509 | Pomperaug River                               | CT-NH-77 | Southbury 2.3 W            | 5.01" |
| 0110000512 | Outlet Naugatuck River                        | CT-NH-80 | Seymour 1.2 WSW            | 4.34" |

|            |                                              |           |                       |       |
|------------|----------------------------------------------|-----------|-----------------------|-------|
| 0110000512 | Outlet Naugatuck River                       | CT-NH-67  | Waterbury 1.3 WNW     | 3.56" |
| 0110000512 | Outlet Naugatuck River                       | CT-NH-84  | Bethany 1.3 SW        | 3.76" |
| 0110000512 | Outlet Naugatuck River                       | CT-NH-22  | Prospect 0.5 SW       | 4.08" |
| 0110000513 | Housatonic River - Frontal Long Island Sound | CT-FR-23  | Shelton 1.3 W         | 4.17" |
| 0110000513 | Housatonic River - Frontal Long Island Sound | CT-FR-46  | Stratford 0.2 ESE     | 4.35" |
| 01100006   | Saugatuck                                    |           |                       |       |
| 0110000601 | Saugatuck River - Frontal Long Island Sound  | CT-FR-58  | Ridgefield 3.6 N      | 4.38" |
| 0110000601 | Saugatuck River - Frontal Long Island Sound  | CT-FR-64  | Bethel 4.5 SSE        | 4.90" |
| 0110000601 | Saugatuck River - Frontal Long Island Sound  | CT-FR-78  | Redding 1.4 E         | 5.42" |
| 0110000602 | Norwalk River - Frontal Norwalk Harbor       | CT-FR-59  | New Canaan 3.8 N      | 5.71" |
| 0110000602 | Norwalk River - Frontal Norwalk Harbor       | CT-FR-63  | Wilton 1.9 NW         | 5.55" |
| 0110000602 | Norwalk River - Frontal Norwalk Harbor       | CT-FR-3   | New Canaan 1.9 ENE    | 4.51" |
| 0110000602 | Norwalk River - Frontal Norwalk Harbor       | CT-FR-25  | Norwalk 2.9 NNW       | 4.53" |
| 0110000603 | Pequonnock River - Frontal Long Island Sound | CT-FR-68  | Fairfield 1.1 SSE     | 3.68" |
| 0110000603 | Pequonnock River - Frontal Long Island Sound | CT-FR-60  | Fairfield 1.5 NE      | 4.54" |
| 0110000603 | Pequonnock River - Frontal Long Island Sound | CT-FR-57  | Trumbull 0.9 W        | 5.25" |
| 0110000603 | Pequonnock River - Frontal Long Island Sound | CT-FR-70  | Bridgeport 2.9 NNW    | 3.85" |
| 0110000603 | Pequonnock River - Frontal Long Island Sound | CT-FR-26  | Stratford 0.9 W       | 3.80" |
| 0110000604 | Mianus River-Rippowam River                  | CT-FR-83  | Darien 2.4 NW         | 4.30" |
| 0110000604 | Mianus River-Rippowam River                  | CT-FR-35  | Darien 1.8 ENE        | 5.07" |
| 0110000604 | Mianus River-Rippowam River                  | CT-FR-66  | Norwalk 1.4 ENE       | 5.04" |
| 02020003   | Hudson-Hoosic                                |           |                       |       |
| 0202000306 | Upper Hoosic River                           | MA-BE-21  | Cheshire 0.5 NNW      | 3.15" |
| 02020006   | Middle Hudson                                |           |                       |       |
| 0202000603 | Wynants Kill - Hudson River                  | NY-AB-21  | NWS Albany            | 3.32" |
| 0202000606 | Kinderhook Creek                             | MA-BE-24  | Hancock 3.6 NNE       | 2.99" |
| 02030203   | Long Island Sound                            |           |                       |       |
| 0203020300 | Long Island Sound                            | NY-SF-114 | Fishers Island 0.5 NE | 4.35" |
| 10190007   | Cache La Poudre                              |           |                       |       |
| 1019000708 | Horsetooth Reservoir - Cache La Poudre River | CO-LR-273 | FCL 2.2 NW            | 0.57" |

Got to the bottom are still wondering? Click on the link below and add your station id to the display.

<https://www.cocorahs.org/ViewData/StationPrecipSummary.aspx?station=ma-nf-1&startdate=10/01/2022&enddate=10/31/2022>

The variable nature of precipitation on display. Drier to the east. Pockets of wet results in Rhode Island and Connecticut.



### **“We do not live at the airport”**

Without Taunton\*, this list averages 4.55” of precip for October. Our list of stations averages 5.01” of precip for October. Why the difference? The gauge is a big part of it.

Please use and report from the 4” diameter gauge all year round. Our network does not use automated gauges. And we do not live at the airport!

| Location            | Station ID | Oct 2022 Precip | Oct departure from normal | Aug-Sep-Oct Precip | 3 month departure from normal | May-Oct Precip | 6 month departure from normal | Nov-Oct Precip | 12 month departure from normal |
|---------------------|------------|-----------------|---------------------------|--------------------|-------------------------------|----------------|-------------------------------|----------------|--------------------------------|
| White Plains NY     | HPN        | 2.97"           | -1.44"                    | 8.46"              | -4.83"                        | 19.08"         | -6.29"                        | 34.48"         | -14.87"                        |
| Danbury CT          | DXR        | 4.58"           | -0.13"                    | 11.33"             | -2.22"                        | 22.03"         | -5.02"                        | 37.47"         | -12.40"                        |
| New Haven CT        | HVN        | 2.26"           | -1.98"                    | 5.80"              | -6.76"                        | 11.80"         | -12.96"                       | 25.79"         | -21.32"                        |
| Meriden CT          | MMK        | 4.86"           | 0.62"                     | 15.56"             | 3.00"                         | 23.74"         | -1.02"                        | 40.62"         | -6.49"                         |
| Hartford CT         | HFD        | 4.10"           | -0.04"                    | 11.71"             | 0.43"                         | 19.09"         | -4.07"                        | 35.84"         | -7.76"                         |
| Willimantic CT      | IJD        | 3.20"           | -1.25"                    | 11.41"             | -1.02"                        | 17.37"         | -7.19"                        | 30.22"         | -18.20"                        |
| New London CT       | GON        | 3.89"           | 0.03"                     | 12.53"             | 0.51"                         | 18.29"         | -5.46"                        | 32.69"         | -13.80"                        |
| Westerly RI         | WST        | 4.44"           | 0.52"                     | 11.25"             | -0.74"                        | 16.65"         | -6.60"                        | 30.91"         | -16.48"                        |
| Newport RI          | UUU        | 4.83"           | 1.00"                     | 12.02"             | 0.56"                         | 18.55"         | -3.70"                        | 36.22"         | -10.11"                        |
| New Bedford MA      | EWB        | 6.10"           | 1.97"                     | 13.99"             | 2.19"                         | 18.08"         | -4.68"                        | 32.36"         | -16.00"                        |
| Hyannis MA          | HYA        | 6.22"           | 2.11"                     | 9.91"              | -1.70"                        | 15.96"         | -5.94"                        | 29.36"         | -18.33"                        |
| Nantucket MA        | ACK        | 8.31"           | 4.39"                     | 10.69"             | -1.18"                        | 19.71"         | -2.16"                        | 34.78"         | -9.64"                         |
| Marthas Vineyard MA | MVY        | 6.07"           | 2.00"                     | 11.89"             | -0.36"                        | 17.78"         | -4.01"                        | 32.14"         | -13.02"                        |
| Taunton MA          | TAN        | 0.00"           | -4.29"                    | 1.64"              | -11.05"                       | 8.01"          | -15.65"                       | 28.36"         | -21.38"                        |
| Plymouth MA         | PYM        | 7.15"           | 3.07"                     | 17.16"             | 5.37"                         | 24.31"         | 1.39"                         | 45.86"         | -3.29"                         |
| Norwood MA          | OWD        | 4.32"           | 0.16"                     | 10.91"             | -0.85"                        | 16.41"         | -6.76"                        | 33.35"         | -13.71"                        |
| Bedford MA          | BED        | 3.76"           | -0.46"                    | 9.37"              | -2.06"                        | 13.98"         | -8.94"                        | 31.49"         | -14.22"                        |
| Lawrence MA         | LWM        | 3.73"           | -0.44"                    | 8.54"              | -2.56"                        | 13.82"         | -8.78"                        | 32.49"         | -10.67"                        |
| Fitchburg MA        | FIT        | 4.55"           | 0.27"                     | 10.58"             | -1.35"                        | 16.17"         | -8.15"                        | 34.96"         | -12.18"                        |
| Orange MA           | ORE        | 4.00"           | 0.21"                     | 11.45"             | 0.56"                         | 19.47"         | -3.82"                        | 36.70"         | -5.85"                         |
| Westfield MA        | BAF        | 4.00"           | -0.75"                    | 13.22"             | -0.18"                        | 20.80"         | -5.48"                        | 38.95"         | -9.44"                         |
| North Adams MA      | AQW        | 2.28"           | -2.46"                    | 11.38"             | -1.66"                        | 21.04"         | -5.62"                        | 37.98"         | -8.63"                         |

\* Note about Taunton: There is a problem with the power supply to the automated weather station. Data will not be available until the FAA is able to correct the issue.

## **Rulers of the Snow**

We are the Rulers of the Snow.

A list of 90 stations in October who reported snow fall and snow depth for all days.

Using the mobile app? Look at the 2<sup>nd</sup> page of the mobile app, “More Details” on the Apple App, and fill in those snow values. Make a snow fall and snow depth measurement with every Daily Report, if you can safely do so, ***all year round***.

| Station  | Name                   | Oct 2022 Snowfall | Station   | Name                  | Oct 2022 Snowfall |
|----------|------------------------|-------------------|-----------|-----------------------|-------------------|
| MA-BE-21 | Cheshire 0.5 NNW       | 0.0"              | RI-KN-14  | Greene 1.4 E          | 0.0"              |
| CT-LT-51 | South Kent 0.1 SE      | 0.0"              | RI-KN-38  | Warwick 3.9 NNE       | 0.0"              |
| CT-FR-3  | New Canaan 1.9 ENE     | 0.0"              | RI-KN-45  | East Greenwich 2.8 NE | 0.0"              |
| CT-FR-9  | Brookfield 3.3 SSE     | 0.0"              | RI-KN-59  | Coventry 1.2 SW       | 0.0"              |
| MA-FR-10 | Conway 0.9 SW          | 0.0"              | RI-WS-31  | Kingston 7.5 NNE      | 0.0"              |
| MA-FR-12 | Sunderland 1.3 SE      | 0.0"              | RI-WS-37  | Kingston 2.4 SW       | 0.0"              |
| MA-FR-13 | Conway 2.9 NW          | 0.0"              | RI-WS-42  | Richmond 4.6 NNE      | 0.0"              |
| MA-FR-17 | Buckland 1.8 ESE       | 0.0"              | RI-WS-47  | Westerly 0.8 WNW      | 0.0"              |
| MA-HS-7  | Plainfield 2.2 SW      | 0.0"              | RI-NW-7   | Little Compton 0.6 E  | 0.0"              |
| MA-HD-28 | Westfield 2.8 SE       | 0.0"              | MA-BR-3   | Norton 1.8 NNE        | 0.0"              |
| MA-HD-30 | Hampden 2.0 NW         | 0.0"              | MA-BR-8   | Dighton 1.1 WSW       | 0.0"              |
| MA-HD-33 | Agawam 1.1 SSW         | 0.0"              | MA-BR-61  | Mansfield 2.4 ENE     | 0.0"              |
| CT-HR-8  | North Granby 1.3 ENE   | 0.0"              | MA-BR-79  | Fairhaven 1.9 ENE     | 0.0"              |
| CT-HR-22 | East Hartford 1.3 E    | 0.0"              | MA-MD-12  | Acton 1.3 SW          | 0.0"              |
| CT-HR-57 | Suffield Depot 3.3 NNE | 0.0"              | MA-MD-47  | West Townsend 0.5 W   | 0.0"              |
| CT-HR-65 | Newington 1.9 SSW      | 0.0"              | MA-MD-51  | Maynard 0.7 ESE       | 0.0"              |
| CT-TL-2  | Staffordville 0.4 NNW  | 0.0"              | MA-MD-104 | Littleton 2.8 NNW     | 0.0"              |
| CT-TL-18 | Hebron 5.3 NW          | 0.0"              | MA-MD-115 | Hudson 1.4 NW         | 0.0"              |
| CT-TL-27 | Willington 2.7 SE      | 0.0"              | MA-MD-119 | Watertown 1.1 W       | 0.0"              |
| CT-TL-35 | Somersville 0.2 ENE    | 0.0"              | MA-MD-125 | Tewksbury 3.6 SSE     | 0.0"              |
| CT-TL-40 | Coventry 0.3 NNE       | 0.0"              | MA-MD-126 | Melrose 0.5 NE        | 0.0"              |
| CT-MD-21 | Killingworth 2.6 ESE   | 0.0"              | MA-MD-158 | Sherborn 1.1 NW       | 0.0"              |
| CT-MD-23 | Higginum 0.7 N         | 0.0"              | MA-MD-178 | Framingham 2.0 NNE    | 0.0"              |
| MA-WR-8  | Fitchburg 1.6 SSW      | 0.0"              | MA-MD-220 | Hudson 0.5 SSE        | 0.0"              |
| MA-WR-41 | Auburn 2.6 SW          | 0.0"              | MA-ES-4   | Groveland 0.5 WSW     | 0.0"              |
| MA-WR-44 | Westminster 0.6 WSW    | 0.0"              | MA-ES-12  | Boxford 2.4 S         | 0.0"              |

|           |                         |      |           |                          |      |
|-----------|-------------------------|------|-----------|--------------------------|------|
| MA-WR-75  | Warren 2.4 WSW          | 0.0" | MA-ES-41  | Danvers 0.8 ESE          | 0.0" |
| MA-WR-88  | Leicester 2.5 WSW       | 0.0" | MA-ES-48  | Andover 0.6 E            | 0.0" |
| MA-WR-106 | Athol 2.8 NNE           | 0.0" | MA-ES-58  | Middleton 1.4 SSW        | 0.0" |
| CT-WN-4   | East Killingly 1.3 SW   | 0.0" | MA-ES-70  | Newburyport 0.6 N        | 0.0" |
| CT-WN-26  | Danielson 3.2 ESE       | 0.0" | MA-NF-1   | Norwood 1.3 NW           | 0.0" |
| CT-NL-6   | New London 1.0 NNW      | 0.0" | MA-NF-54  | Quincy 1.2 W             | 0.0" |
| CT-NL-21  | Griswold 0.9 N          | 0.0" | MA-NF-64  | Medway 2.1 W             | 0.0" |
| CT-NL-24  | Stonington 1.4 NNW      | 0.0" | MA-PL-22  | East Bridgewater 0.3 WSW | 0.0" |
| CT-NL-29  | East Lyme 0.5 SW        | 0.0" | MA-PL-60  | Abington 1.7 ESE         | 0.0" |
| CT-NL-32  | Niantic 1.1 SW          | 0.0" | MA-BA-2   | Falmouth 3.1 NNW         | 0.0" |
| CT-NL-40  | Pawcatuck 1.8 SSE       | 0.0" | MA-BA-3   | Falmouth 3.0 E           | 0.0" |
| RI-PR-28  | North Smithfield 0.7 SE | 0.0" | MA-BA-12  | Orleans 1.1 E            | 0.0" |
| RI-PR-33  | Greenville 0.7 NNW      | 0.0" | MA-BA-47  | Mashpee 2.4 WSW          | 0.0" |
| RI-PR-50  | Harrisville 1.2 SSE     | 0.0" | MA-BA-50  | Falmouth 5.4 NNE         | 0.0" |
| RI-PR-51  | North Smithfield 0.6 S  | 0.0" | MA-BA-51  | Orleans 3.0 S            | 0.0" |
| RI-PR-55  | Cumberland Hill 3.6 NNE | 0.0" | MA-BA-72  | Yarmouth 2.0 S           | 0.0" |
| RI-PR-82  | Providence 1.6 NNW      | 0.0" | MA-DK-2   | Vineyard Haven 0.8 WSW   | 0.0" |
| RI-PR-106 | Valley Falls 1.1 W      | 0.0" | NY-AB-21  | NWS Albany               | 0.0" |
| RI-KN-2   | East Greenwich 2.3 ESE  | 0.0" | NY-SF-114 | Fishers Island 0.5 NE    | 0.0" |

October 2022 as a calendar. Dark blue and white font for the highest number of reports. Light blue and dark font for the lowest number of reports.

498 Reports per Day was our reporting average for October 2022.

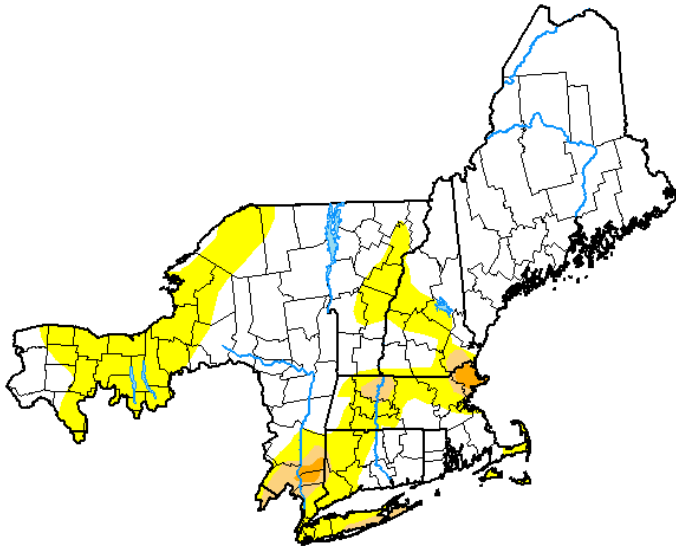
| Observation Date            |                             |                             |                             |                             |                             |                             |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Sun                         | Mon                         | Tue                         | Wed                         | Thu                         | Fri                         | Sat                         |
|                             |                             |                             |                             |                             |                             | <sup>1</sup><br><b>493</b>  |
| <sup>2</sup><br><b>513</b>  | <sup>3</sup><br><b>494</b>  | <sup>4</sup><br><b>504</b>  | <sup>5</sup><br><b>528</b>  | <sup>6</sup><br><b>524</b>  | <sup>7</sup><br><b>490</b>  | <sup>8</sup><br><b>479</b>  |
| <sup>9</sup><br><b>469</b>  | <sup>10</sup><br><b>479</b> | <sup>11</sup><br><b>489</b> | <sup>12</sup><br><b>498</b> | <sup>13</sup><br><b>499</b> | <sup>14</sup><br><b>557</b> | <sup>15</sup><br><b>512</b> |
| <sup>16</sup><br><b>485</b> | <sup>17</sup><br><b>493</b> | <sup>18</sup><br><b>533</b> | <sup>19</sup><br><b>491</b> | <sup>20</sup><br><b>482</b> | <sup>21</sup><br><b>486</b> | <sup>22</sup><br><b>471</b> |
| <sup>23</sup><br><b>478</b> | <sup>24</sup><br><b>514</b> | <sup>25</sup><br><b>518</b> | <sup>26</sup><br><b>518</b> | <sup>27</sup><br><b>505</b> | <sup>28</sup><br><b>488</b> | <sup>29</sup><br><b>473</b> |
| <sup>30</sup><br><b>479</b> | <sup>31</sup><br><b>487</b> |                             |                             |                             |                             |                             |

Please continue to report the conditions where you are.

There is always more room for more “Consistent Stations”. What do you have to do? Submit over 20 Condition Monitoring Reports in a 52-week period.

Every drop counts and zeros do too!

## U.S. Drought Monitor Northeast RFC



**November 8, 2022**

(Released Thursday, Nov. 10, 2022)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

|                                             | None  | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4   |
|---------------------------------------------|-------|-------|-------|-------|-------|------|
| <b>Current</b>                              | 70.57 | 29.43 | 3.52  | 0.73  | 0.00  | 0.00 |
| <b>Last Week</b><br>11-01-2022              | 70.60 | 29.40 | 3.52  | 0.73  | 0.00  | 0.00 |
| <b>3 Months Ago</b><br>08-09-2022           | 33.05 | 66.95 | 30.93 | 11.27 | 2.27  | 0.00 |
| <b>Start of Calendar Year</b><br>01-04-2022 | 87.86 | 12.14 | 4.01  | 1.67  | 0.00  | 0.00 |
| <b>Start of Water Year</b><br>09-27-2022    | 62.04 | 37.96 | 19.41 | 6.50  | 0.27  | 0.00 |
| <b>One Year Ago</b><br>11-09-2021           | 87.86 | 12.14 | 4.01  | 1.67  | 0.00  | 0.00 |

### Intensity:

|                     |                        |
|---------------------|------------------------|
| None                | D2 Severe Drought      |
| D0 Abnormally Dry   | D3 Extreme Drought     |
| D1 Moderate 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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National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

For a viewing explanation on the Drought Monitor, the CoCoRaHS animated video is on [YouTube](#).

## **Wrap up**

Thanksgiving. A unique holiday, each year by presidential proclamation, a National Day of Thanksgiving, in which we pause to give thanks.

Thank you for making our part of the network the growing success that it is.

The staff at Headquarters would like to express their thanks, at this time of the year, to the observers who reported from October 2021 to September 2022. Login in to your account on the website and access [My Account](#) . Towards the upper right, within your 2022 Water Year, click on the link for Certificate. That action will download a pdf file containing your Certificate of Appreciation, where you can view or print it. Please pass on your feedback about this Certificate to the team at Headquarters at [info@cocorahs.org](mailto:info@cocorahs.org)

Every one of our monthly newsletters concludes with a word of thanks and this season of Thanksgiving will conclude in the same way. Thank you for all that you do for CoCoRaHS, whether in the past, present and in the days to come.

If you have any questions about reporting, please contact:

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