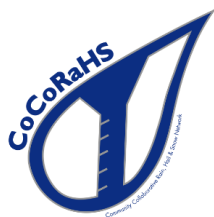


Community Collaborative Rain, Hail & Snow Network



Southern



New England

March 2019

We welcome the longer and brighter days of March, as the sugar maple trees awake with the first harvest of the year.

Massachusetts is celebrating 10 years this month. Celebrate! In years past, we started our anniversary series with Rhode Island in April, Massachusetts in May and Connecticut in June. We start with Massachusetts this month, and April and June will be Rhode Island and Connecticut respectively.

The Grand List starts off the Newsletter. Another two pages of Observer Tips. More topics and shorter messages.

With our recent walk back into the past, the February 2013 Newsletter, it is obvious that the mobile app has changed our reporting landscape. Yes, some of us live on our phones, and some of us are getting away from laptop and desktop computers. A look at the differences among our reporting tools.

Welcome to all of our recently signed up observers. Jump in and see why we do this measuring and reporting of precipitation.

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.

2000 Daily Reports

MA-BA-33 Brewster 1.5 ESE

1000 Daily Reports

MA-BR-30 Taunton 3.9 N
CT-FR-35 Darien 1.8 ENE
CT-TL-15 Central Somers 0.3 N
MA-PL-22 East Bridgewater 0.3 WSW
MA-WR-42 Northborough 2.3 N
CT-FR-41 Bethel 3.5 NNE

Observer Tips

Traces: Once winter loses its grip upon our region, the light spring rains will come. If the pavement becomes completely wet, chances are good that there is 0.01" in the gauge. Just a few drops? Anything less than completely wet pavement? Report a "T" for Trace.

Being outdoors helps find Trace amounts of precipitation when they occur. A few drops on the funnel, or an outdoor object, is another way to tell. You may find Traces occur about twice a month, 20 times in a year.

Hail Reports: The "H" in CoCoRaHS is for Hail. In early April, our network has "Hail Week." With spring time weather, cold air stays at the higher levels of the atmosphere, and hail is more likely to occur before July than after July.

If hail stones do occur at your station location, keep track of a start and stop time. Measure when you can safely do so. A ruler, and a digital picture to look at later with the ruler, helps find hail stone diameters. Fill out and submit a Hail Report as soon as safely possible, that will find its way to a weather forecaster's screen in about a minute's time.

Frequent rains: A springtime reporting challenge, especially as we get into late March to early June. See how many times 3 consecutive days occur with 0 precipitation. See if Memorial Day weekend occurs with 3 consecutive days with 0 precipitation.

Before summer heat and humidity comes, see how often the spring rains come.

1-inch Daily Precipitation: In any month, look over your [Station Precip Summary](#) and see if you reported at least one day with 1" or more of precipitation. Our normal amount of monthly precipitation is about 4". To get close to that 4" mark for the month, it's easier when we have at least one day with 1" or more. When we do not get that one day with 1" or more of precipitation, it's harder to get to the 4" mark for the month. Watch for it.

Comments: Clarify and verify your report with a Comment, especially if you are reporting precipitation.

Snow Reporting: Report the melted contents within the gauge, FIRST. That is the precipitation amount that gets added to all of your other precipitation reports.

Then snow fall. Then snow depth. If you are able, can safely do so, make a snow fall and snow depth measurement and report every day.

Focus on the Gauge Catch. Report those liquid contents FIRST.

Condition Monitoring Reports: Our winter time hibernation is coming to an end. Take a look at your nearby lakes, ponds, rivers and reservoirs. Look for nearby wet spots or dry spots. Take the time to fill out a Condition Monitoring Report. One report a week is all that we seek.

Daily Reports/Multi-Day Reports: Take some time off, skip a few days, but your habit has you submitting a Daily Report by mistake.

- a) Change the precip value on the Daily Report to “NA”
- b) Submit the Multi-Day Report for the start and end date and precip amount.

And another important step...

- c) **Notify a Coordinator.** We would like to delete the report that was entered by mistake. Uncovering these overlaps between Daily and Multi-Day reports is a computer challenge. This challenge would be much easier, or not even necessary, if you tell a Coordinator.

Mobile app Reporting: If your reporting experience never leaves the 1st page of your mobile app, you are missing out on the 2nd page of your mobile app, and you are missing out on additional functions, links to the website, that have been included with your app.

Read on to the next section to learn more about the reporting features of your mobile app.

Reporting




Seems simple. We do it so often. Depending upon with what tool you use to report, depends where and how to find certain functions with Reporting.


Mistakes tend to happen most with Reporting, not with measuring. Do not get into the habit of “submit it and forget it.” Others are looking at your reports, so you should too. Look over your report before pressing “Submit”. Know how to view and change your reports, regardless of which tool that you use.

Comments. Snow fall and Snow depth reporting. Traces. Checking over your reports because Accuracy Matters. Using the other functions of the web site. It's all different with each tool that you use.

Even saw a precip report of 0.88” because NA is the default precip value on the Apple iOS app. Instead of hitting the 0 on the number pad, hit the 8 instead, a phenomenon that can be described as “Crazy 8's”

To point out the differences with the reporting tools, as well as educate those that are new, the below table is for all of you.

Tool	Website 	Apple iOS 	Android 
Reporting app version		1.2.3.1	2.2.5 (build 22005)
Default Precip value	0.00	NA. Slide the “Trace” bar right, then left, and 0.00 appears.	0.00
Trace Precip	Enter “T”	Slide bar for Trace	Check Box for Trace.
NA for Precip	Enter “NA”	Default is NA	Check Box for NA.
Comments	“Observation Notes”	“Additional Notes” found under “Details” or “More Details”	“Optional Notes” on the 1 st screen

Comment box length	3 lines of 48 characters. Can continue to type more.	1 line of 39 characters. Can continue to type more.	1 line of 36 characters. Can continue to type more.
When you enter 0.00 for precip	0.0 for snow fall is automatic	0.0 for snow fall is NOT automatic.	0.0 for snow fall is NOT automatic.
Snow reporting section	With the report form	"Details" or "More Details"	"Click to Specify Snow & Flooding Info"
Additional functions	Links available on the website.	"Other" button to "Maps" and "CoCoRaHS"	☰ button. Web Links to "Maps" and "CoCoRaHS"
Multi-Day Reporting	Link available on the website.	On the 1 st page, "Multi-Day Report"	☰ button. "Multi-Day Reporting"
Traces	Must enter "T" for trace	Must enter "T" for trace	Check Box for Trace
View, Verify, or Change Reports	 Pencil icon to change or Magnifying Glass icon to view. Appears with the 7-day history or with List/Edit My Reports	On the 1 st page, "History" function. Under History, double tap the record to view or edit.	☰ button. Other actions, History. Under History, Tap to Edit the record selected to view or edit.

The Apple iOS app is found in the App Store as an iPhone app. Yes, it will work for iPad, but when searching for the app to install or update, the app is an iPhone app.

With Android, the three bars, the menu button, has another name, complete with a Wikipedia reference. It is called the "Hamburger Button" because of its similarity to two buns with a patty in the middle.

Regardless of the tool that you use, please, look over your reports. Do not get into a habit of "submit it and forget it."

Happy Anniversary, Massachusetts!



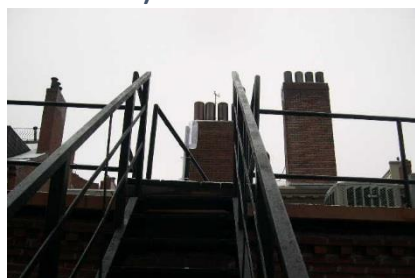
March 1, 2009. Massachusetts is admitted to CoCoRaHS, the 40th state to join the network.

Massachusetts CoCoRaHS

Comments by Joe DelliCarpini – Science & Operations Officer, NWS Norton MA and State Coordinator for Massachusetts



PROMOTIONAL PHOTO FOR MASSACHUSETTS CoCoRaHS
(HENRY REGES)



GAUGE PICTURE OF AMS HQ ON
BEACON STREET IN BOSTON, MA-SF-1

After Rhode Island was established as the first state in New England to join CoCoRaHS in April 2008, Henry Reges set his sights on Massachusetts to join the growing network. As a frequent visitor to Plymouth to see family and friends, he provided us with a special photo which we still use today (left). It's not every day you see a 4-inch rain gauge next to a historical landmark!

Henry worked with our office to set up a meeting at the American Meteorological Society's (AMS) Headquarters in Boston. We also invited representatives from Massachusetts DCR (Department of Conservation and Recreation) to join us since they were a key partner of ours for drought and water resource management in the state. Henry felt it would be appropriate for the AMS

Headquarters to be the first CoCoRaHS station in the Commonwealth and to this day you can see their reports listed under

MA-SF-1. We began an aggressive recruiting campaign that included newspapers, TV meteorologists, and NWS Skywarn training sessions.

Prior to the March 1, 2009 startup we had 16 observers ready to go. Eight of them are reporting 10 years later including:

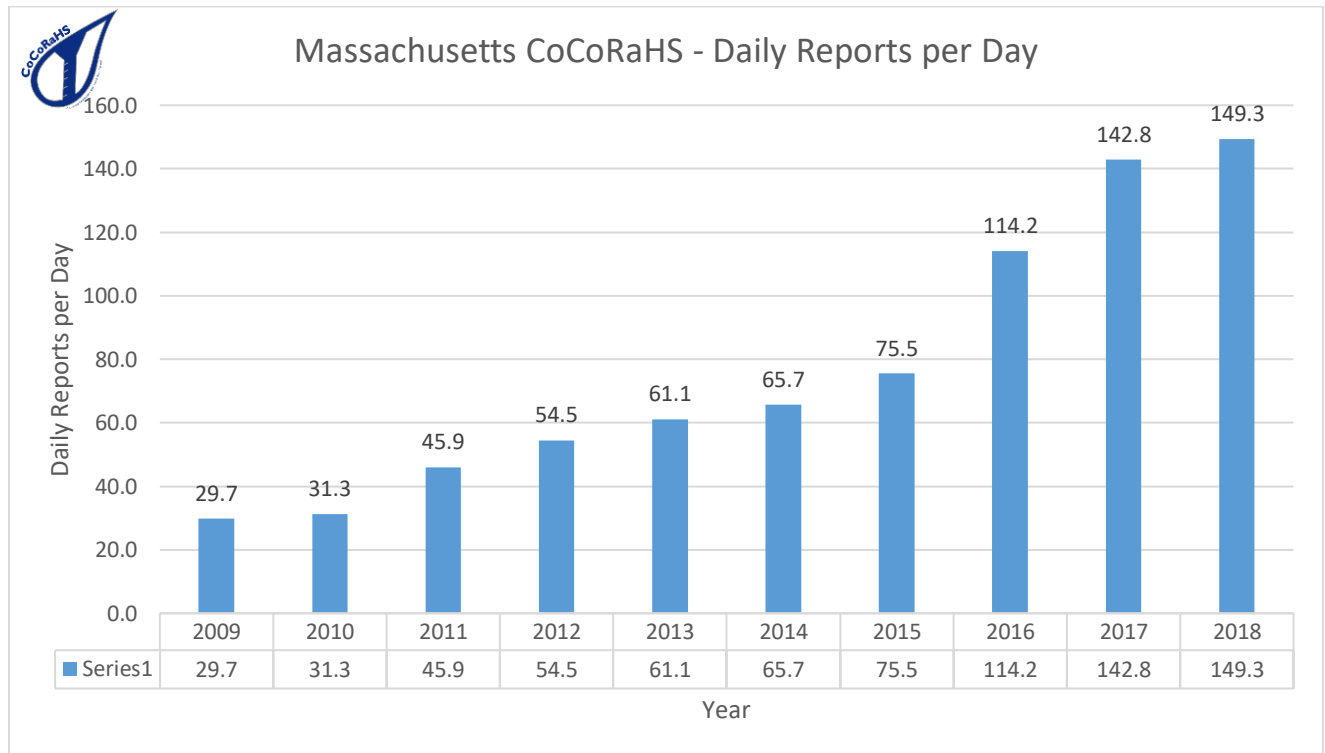
MA-BA-1 Yarmouth	MA-BA-2 Falmouth
MA-BA-3 Falmouth	MA-BR-2 Rehoboth
MA-BR-3 Norton	MA-NF-1 Norwood
MA-SF-1 Boston	MA-WR-1 Milford

Today, we have grown more than 160 actively reporting observers in the Bay State. Your observations have been critical over the past ten years to help define the climate of Massachusetts. Being able to examine trends in rainfall and snowfall patterns, monitor drought conditions, assess the potential for river and stream flooding, and map storm totals are all made more accurate by your daily observations!

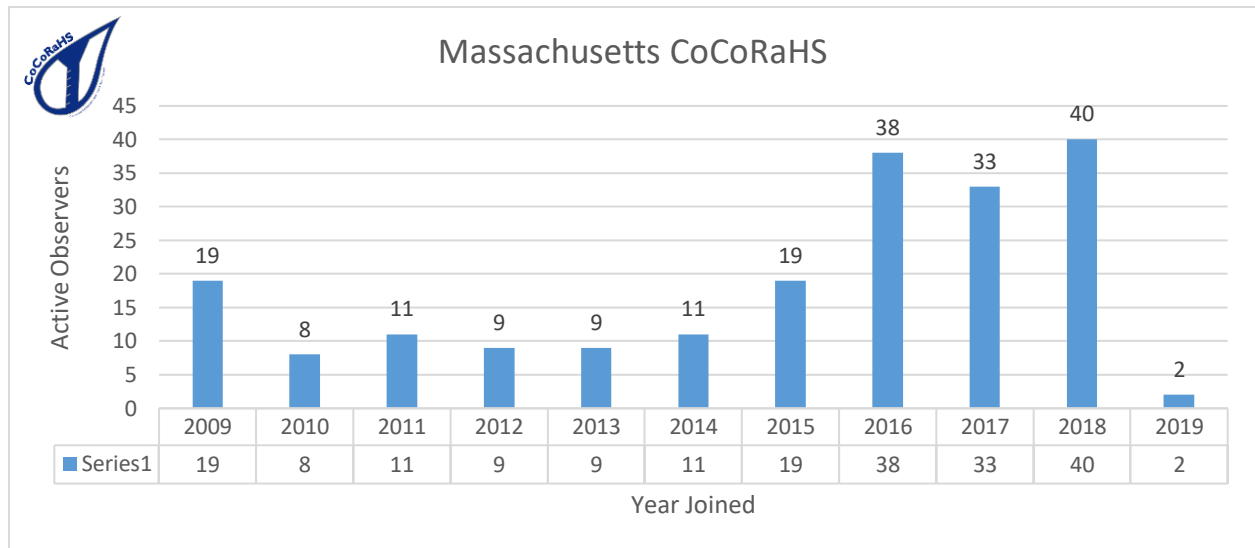
Don't forget to follow us on Twitter (@MA_CoCoRaHS) where we periodically highlight your observations (follow @CT_CoCoRaHS for Connecticut and @RI_CoCoRaHS for Rhode Island). There are also State Pages on the CoCoRaHS web site which features the latest newsletter and other useful information.

Congratulations to all in Massachusetts!

All of the other states have had their ups and downs with reporting year over year, except two. South Carolina is one. Massachusetts is the other.

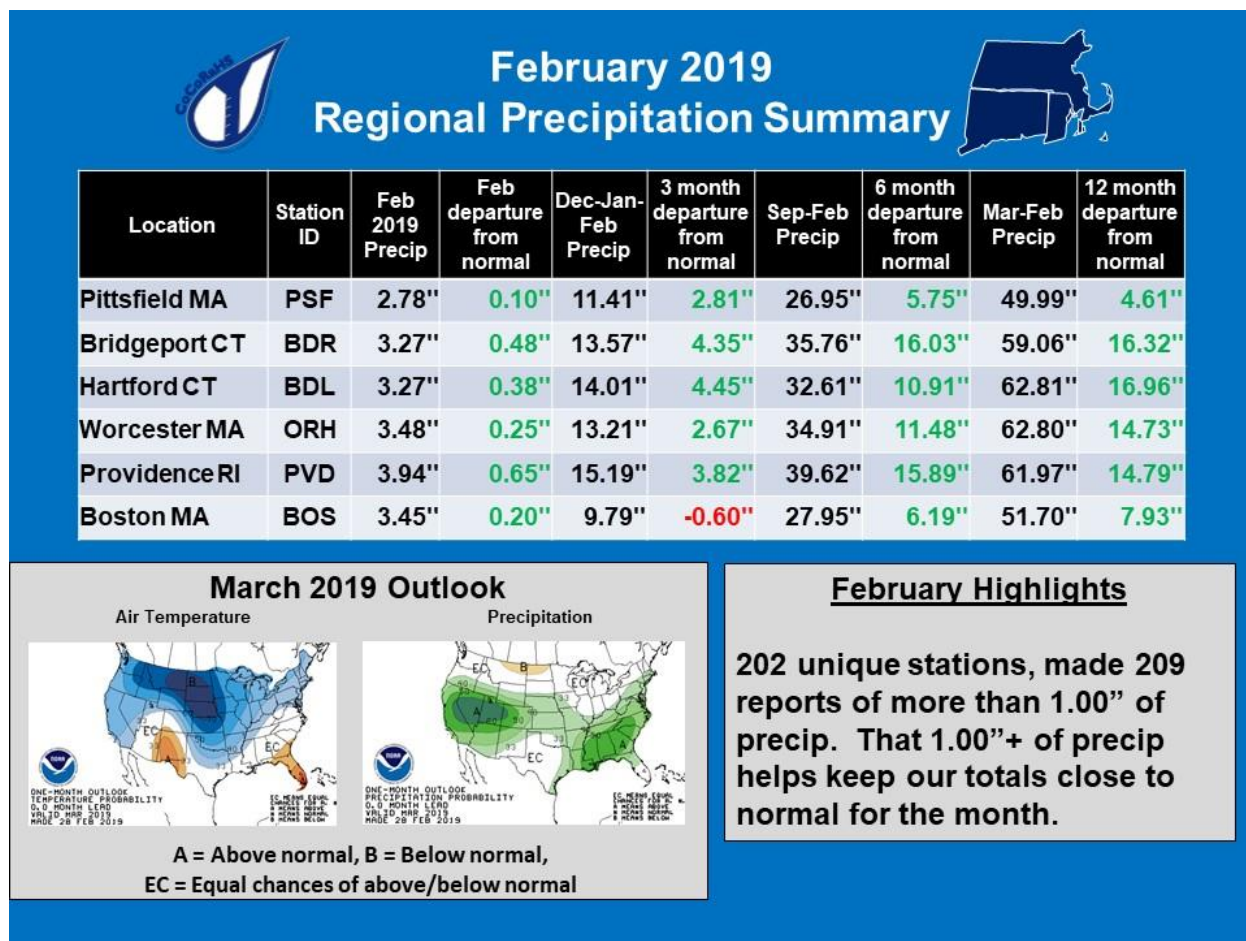


Recruiting helps! If you know of someone who would like the measure and map precipitation, ask them to join us at CoCoRaHS.



Detail and Summary for February 2019

From the National Weather Service (NWS) Climate sites for Feb 2019.

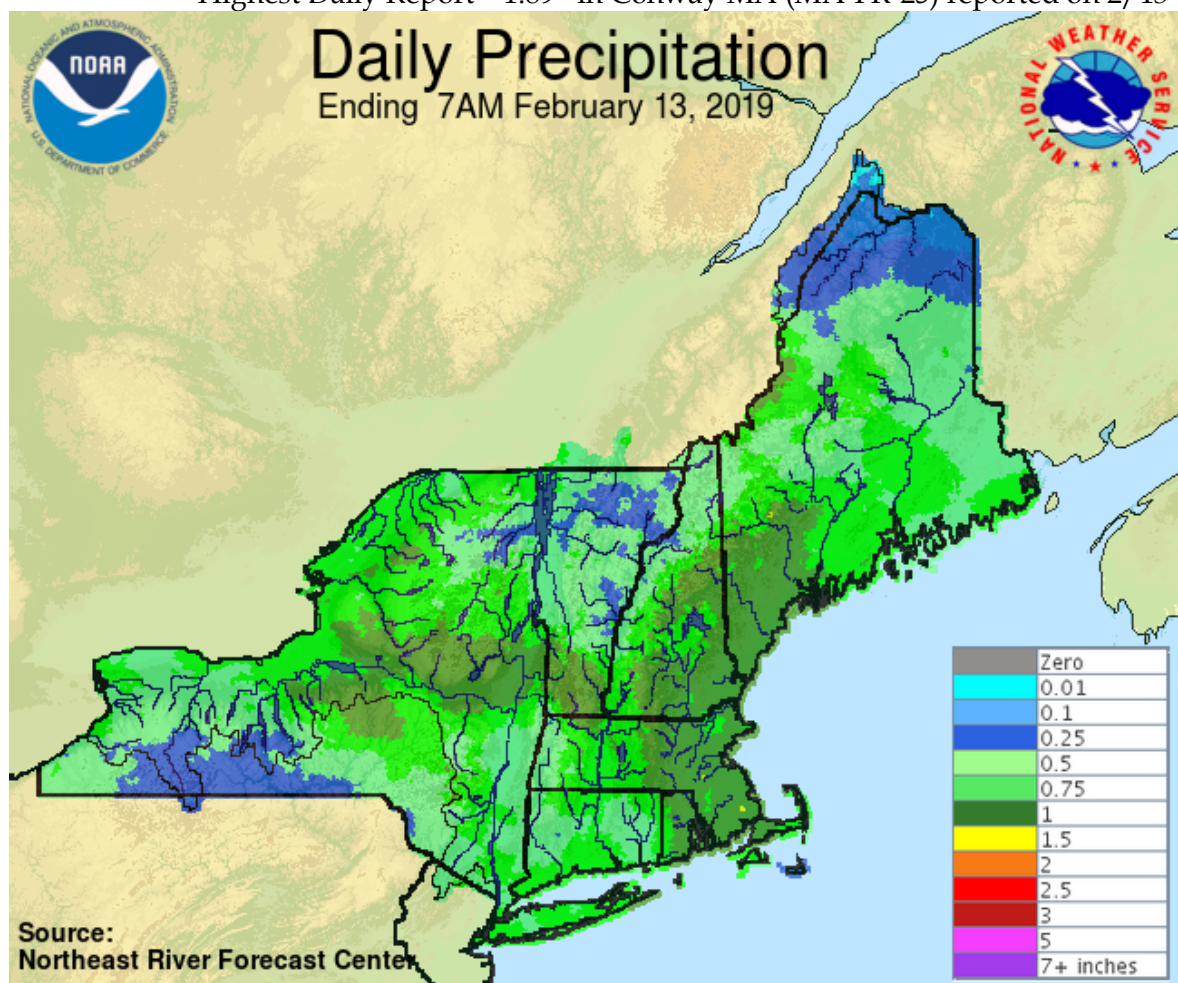


Groundhog Day came in clear and cold. Thoughts of an early spring arrived with 60F temps came with the 1st week of February. Nearly 1" of rain with a stretch of wet days on the 6th-8th. Winter returned with gusty winds on the 9th. The main event for the month was snow changing to rain on the 12th, noted by the map on the next page, and generated most of the Significant Weather Reports for the month. Warm temps for Presidents Day weekend. Bright full moon. Snow changing to sleet and freezing rain on the 20th. Light rain on the 24th. High Wind Warning for the 25th ushered in cold air to end the month.

Take in the next section with appreciation of your efforts.

From your reports for February 2019

Observers reporting	340
Reported all 28 days	166
Completed by Multi-Day Reports	36
Missing 1 or 2 reports	58
Daily Reports	7917
Zero Reports	4501
Non-Zero Reports	3416
Daily Comments	1815
Multi-Day Reports	163
Condition Monitoring Reports	12
Significant Weather Reports	8
Snowfall Reports	5407
Snow Depth Reports	3339
SWE Reports	1283
Highest Daily Report	1.89" in Conway MA (MA-FR-25) reported on 2/13



February is a difficult month for reporting with the cold and snow. 15 stations were excluded for reporting "NA" precip. Another 58 stations were missing 1 or 2 days of reports.

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

Watershed	Watershed Name	Station Number	Station Name	Precip
01070004	Nashua			
0107000401	North Nashua River	MA-WR-44	Westminster 0.6 WSW	3.34"
0107000401	North Nashua River	MA-WR-52	Fitchburg 2.3 N	3.09"
0107000401	North Nashua River	MA-WR-22	Fitchburg 2.0 NNE	3.36"
0107000402	Headwaters Nashua River	MA-WR-64	Sterling 3.7 WNW	3.62"
0107000402	Headwaters Nashua River	MA-WR-56	Sterling 4.3 NW	3.90"
0107000402	Headwaters Nashua River	MA-MD-25	Ayer 0.1 SW	3.56"
0107000403	Squannacook River	MA-MD-47	West Townsend 0.5 W	3.42"
01070005	Concord			
0107000501	Sudbury River	MA-MD-88	Wayland 2.1 SSE	3.47"
0107000502	Concord River	MA-WR-28	Berlin 1.3 WSW	3.81"
0107000502	Concord River	MA-WR-18	Northborough 0.6 SSE	2.58"
0107000502	Concord River	MA-WR-42	Northborough 2.3 N	3.39"
0107000502	Concord River	MA-WR-55	Harvard 2.1 S	3.79"
0107000502	Concord River	MA-MD-12	Acton 1.3 SW	4.01"
0107000502	Concord River	MA-MD-51	Maynard 0.7 ESE	3.79"
0107000502	Concord River	MA-MD-62	Chelmsford 1.2 E	4.04"
01070006	Merrimack River			
0107000612	Stony Brook - Merrimack River	MA-MD-104	Littleton 2.8 NNW	3.41"
0107000613	Shawsheen River	MA-MD-52	Lexington 0.6 SW	3.49"
0107000613	Shawsheen River	MA-ES-48	Andover 0.6 E	3.76"
0107000614	Powwow River - Merrimack River	MA-ES-20	Haverhill 0.7 N	3.25"
0107000614	Powwow River - Merrimack River	MA-ES-4	Groveland 0.5 WSW	3.49"
01080201	Middle Connecticut			
0108020106	Manhan River - Connecticut River	MA-HS-2	Westhampton 1.8 SW	4.25"
0108020106	Manhan River - Connecticut River	MA-HS-8	Williamsburg 1.2 WSW	3.93"
0108020106	Manhan River - Connecticut River	MA-FR-12	Sunderland 1.3 SE	3.44"
0108020107	Batchelor Brook - Connecticut River	MA-HD-13	Springfield 4.1 W	3.74"
01080202	Miller			
0108020201	Upper Millers River	NH-CH-20	Rindge 3.2 ESE	2.85"

0108020202	Lower Millers River	MA-WR-40	Gardner 1.4 SSW	2.33"
01080203	Deerfield			
0108020305	Lower Deerfield River	MA-FR-17	Buckland 1.8 ESE	4.14"
0108020305	Lower Deerfield River	MA-FR-13	Conway 2.9 NW	4.18"
0108020305	Lower Deerfield River	MA-FR-25	Conway 2.7 NW	5.09"
0108020305	Lower Deerfield River	MA-FR-10	Conway 0.9 SW	3.86"
01080204	Chicopee			
0108020402	Ware River	MA-WR-54	Barre 1.4 NNE	3.36"
0108020404	Chicopee River	MA-HD-25	Ludlow 2.3 SW	3.60"
01080205	Lower Connecticut			
0108020501	Mill River-Connecticut River	CT-HR-57	Suffield Depot 3.3 NNE	3.86"
0108020502	Scantic River	CT-TL-26	Broad Brook 2.6 ESE	3.00"
0108020502	Scantic River	CT-TL-15	Central Somers 0.3 N	3.33"
0108020503	Park River	CT-HR-39	Farmington 1.6 SW	3.28"
0108020504	Hockanum River	CT-TL-19	Vernon 2.8 N	2.97"
0108020505	Roaring Brook - Connecticut River	CT-HR-6	Wethersfield 1.2 WSW	3.23"
0108020505	Roaring Brook - Connecticut River	CT-HR-68	Rocky Hill 1.3 E	3.17"
0108020505	Roaring Brook - Connecticut River	CT-HR-22	East Hartford 1.3 E	3.00"
0108020505	Roaring Brook - Connecticut River	CT-HR-7	Central Manchester 2.7 SW	3.07"
0108020506	Mattabesset River	CT-HR-15	Southington 3.0 E	3.21"
0108020506	Mattabesset River	CT-HR-80	Kensington 0.7 WSW	3.46"
0108020506	Mattabesset River	CT-HR-65	Newington 1.9 SSW	3.09"
0108020506	Mattabesset River	CT-MD-25	Middlefield 0.6 SE	3.44"
0108020507	Higganum Creek - Connecticut River	CT-MD-23	Higganum 0.7 N	3.48"
0108020507	Higganum Creek - Connecticut River	CT-MD-26	Higganum 0.8 NE	2.15"
0108020509	Eightmile River-Connecticut River	CT-MD-18	Essex Village 0.9 S	3.73"
01080206	Westfield			
0108020601	Headwaters Westfield River	MA-HS-14	Plainfield 2.4 ESE	4.22"
01080207	Farmington			
0108020701	Still River	CT-LT-15	Colebrook 1.0 NE	3.72"
0108020702	West Branch Farmington River	CT-LT-18	New Hartford Center 1.5 N	3.43"
0108020704	Headwaters Farmington River	CT-LT-9	New Hartford Center 3.2 SW	3.36"
0108020704	Headwaters Farmington River	CT-HR-28	North Canton 0.8 SSW	3.82"
0108020705	Salmon Brook	CT-HR-60	North Granby 0.7 N	3.83"
0108020705	Salmon Brook	CT-HR-8	North Granby 1.3 ENE	3.68"
01090001	Charles			
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-24	Newburyport 0.8 SW	3.65"
0109000102	Ipswich River	MA-MD-85	Wilmington 2.2 WNW	3.70"
0109000102	Ipswich River	MA-MD-125	Tewksbury 3.6 SSE	3.58"
0109000102	Ipswich River	MA-MD-45	Wilmington 1.5 NE	3.16"
0109000102	Ipswich River	MA-ES-12	Boxford 2.4 S	3.78"

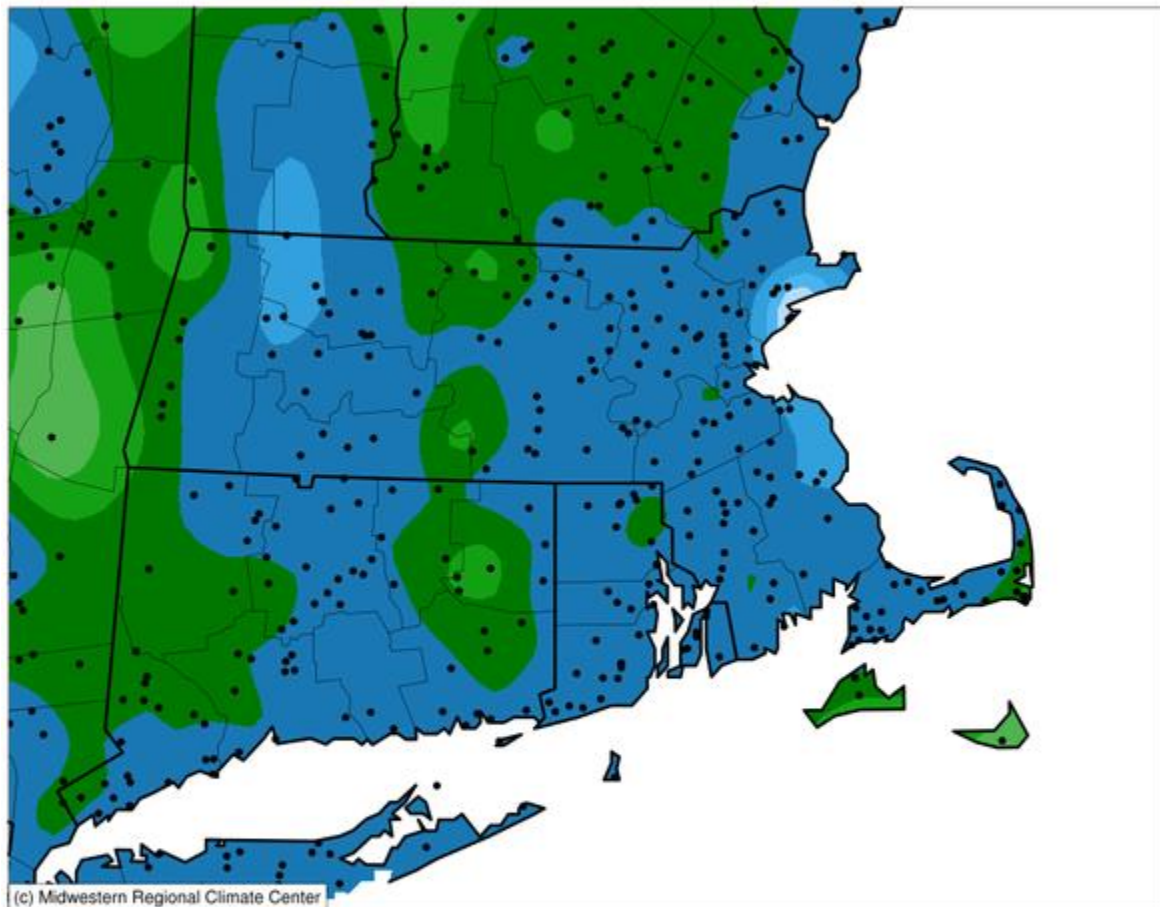
0109000102	Ipswich River	MA-ES-2	Beverly 2.8 NW	3.19"
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-41	Danvers 0.8 ESE	4.00"
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-22	Rockport 1.0 E	3.13"
0109000104	Saugus River - Frontal Broad Sound	MA-ES-8	Marblehead 0.8 SW	3.33"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-123	Lexington 1.3 SE	3.51"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-7	Winchester 0.7 SE	3.61"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-44	Medford 1.2 W	3.93"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-11	Cambridge 0.9 NNW	4.13"
0109000105	Mystic River - Frontal Boston Harbor	MA-SF-10	Chelsea 0.8 N	4.27"
0109000106	Upper Charles River	MA-MD-106	Holliston 2.4 W	3.60"
0109000106	Upper Charles River	MA-MD-42	Holliston 0.8 S	3.41"
0109000106	Upper Charles River	MA-NF-11	Millis 2.0 SW	3.06"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-120	Natick 1.9 NNE	3.58"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-71	Newton 2.2 NNW	2.95"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-119	Watertown 1.1 W	3.14"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-134	Somerville 0.5 SSE	3.55"
0109000108	Neponset River - Frontal Boston Harbor	MA-NF-1	Norwood 1.3 NW	3.24"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-PL-36	Hingham 0.8 ESE	3.47"
01090002	Cape Cod			
0109000201	North River - Frontal Massachusetts Bay	MA-PL-5	Kingston 3.3 WNW	4.37"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-30	Duxbury 3.7 W	4.54"
0109000202	Cape Cod	MA-BA-8	Falmouth 1.8 WSW	3.49"
0109000202	Cape Cod	MA-BA-2	Falmouth 3.1 NNW	3.46"
0109000202	Cape Cod	MA-BA-57	Falmouth 5.7 N	3.41"
0109000202	Cape Cod	MA-BA-13	Falmouth 0.6 NNW	3.62"
0109000202	Cape Cod	MA-BA-50	Falmouth 5.4 NNE	3.46"
0109000202	Cape Cod	MA-BA-19	East Falmouth 0.7 NW	3.91"
0109000202	Cape Cod	MA-BA-3	Falmouth 3.0 E	3.61"
0109000202	Cape Cod	MA-BA-18	Waquoit 0.6 SSW	3.79"
0109000202	Cape Cod	MA-BA-47	Mashpee 2.4 WSW	3.69"
0109000202	Cape Cod	MA-BA-45	Sandwich 0.9 NNE	3.35"
0109000202	Cape Cod	MA-BA-78	Mashpee 4.6 S	3.67"
0109000202	Cape Cod	MA-BA-10	East Sandwich 2.3 SE	3.78"
0109000202	Cape Cod	MA-BA-59	Barnstable 3.6 W	4.08"
0109000202	Cape Cod	MA-BA-76	Barnstable 0.7 NE	3.55"
0109000202	Cape Cod	MA-BA-22	Yarmouth 0.9 NNW	4.16"
0109000202	Cape Cod	MA-BA-1	Yarmouth 2.3 SSE	3.18"
0109000202	Cape Cod	MA-BA-52	Truro 0.8 E	3.91"
0109000202	Cape Cod	MA-BA-27	Wellfleet 0.7 NW	3.00"
0109000202	Cape Cod	MA-BA-51	Orleans 3.0 S	3.55"
0109000202	Cape Cod	MA-BA-43	Chatham 0.4 WSW	3.35"

0109000203	Mattapoissett River - Frontal Buzzards Bay	MA-PL-19	Rochester 1.2 NNW	3.87"
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-14	Dartmouth 2.5 SSW	3.39"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-5	Little Compton 1.7 NW	3.98"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-7	Little Compton 0.6 E	3.78"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-2	Vineyard Haven 0.8 WSW	3.25"
01090003	Blackstone			
0109000301	Upper Blackstone River	MA-WR-41	Auburn 2.6 SW	3.13"
0109000301	Upper Blackstone River	MA-WR-43	Leicester 2.4 ESE	3.45"
0109000302	Lower Blackstone River	RI-PR-50	Harrisville 1.2 SSE	3.29"
0109000302	Lower Blackstone River	RI-PR-28	North Smithfield 0.7 SE	3.52"
0109000302	Lower Blackstone River	RI-PR-63	Woonsocket 1.5 NW	3.53"
0109000302	Lower Blackstone River	RI-PR-55	Cumberland Hill 3.6 NNE	3.19"
01090004	Narragansett			
0109000401	Upper Taunton River	MA-BR-30	Taunton 3.9 N	3.48"
0109000401	Upper Taunton River	MA-NF-31	Stoughton 1.2 E	3.75"
0109000401	Upper Taunton River	MA-PL-22	East Bridgewater 0.3 WSW	3.93"
0109000401	Upper Taunton River	MA-PL-15	Abington 1.2 NNE	3.09"
0109000401	Upper Taunton River	MA-PL-23	Pembroke 2.8 SW	3.95"
0109000402	Middle Taunton River	MA-BR-48	Taunton 1.0 E	3.47"
0109000402	Middle Taunton River	MA-PL-31	Bridgewater 1.8 SE	4.11"
0109000403	Threemile River	MA-NF-19	Foxborough 1.8 SSW	3.69"
0109000403	Threemile River	MA-BR-55	NWS Boston/Norton 2.5 ESE	3.70"
0109000403	Threemile River	MA-BR-9	Taunton 2.6 NW	3.72"
0109000404	Ten Mile River	MA-BR-23	Attleboro 0.9 ENE	3.64"
0109000405	Wonnasquatucket River-Moshassuck River	RI-PR-33	Greenville 0.7 NNW	3.45"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-51	North Smithfield 0.6 S	3.35"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-60	North Providence 0.9 E	3.90"
0109000406	Pawtuxet River	RI-KN-21	Coventry 1.9 NE	2.95"
0109000406	Pawtuxet River	RI-PR-57	Cranston 1.2 SSE	3.66"
0109000407	Palmer River	MA-BR-2	Rehoboth 2.1 N	3.73"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-3	Norton 1.8 NNE	3.76"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-16	Somerset 0.4 SSE	3.75"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-19	Somerset 2.0 NNE	3.62"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-8	Dighton 1.1 WSW	3.91"
0109000409	Narragansett Bay	RI-KN-17	East Greenwich 1.2 NNE	4.12"
0109000409	Narragansett Bay	RI-WS-31	Kingston 7.5 NNE	3.93"
0109000409	Narragansett Bay	RI-NW-18	Jamestown 0.3 SSE	4.02"
0109000409	Narragansett Bay	RI-NW-4	Middletown 1.1 SW	2.80"
0109000409	Narragansett Bay	RI-NW-19	Portsmouth 2.3 S	3.35"
0109000409	Narragansett Bay	RI-NW-16	Portsmouth 1.3 S	3.60"
0109000409	Narragansett Bay	RI-NW-11	Tiverton 0.8 SSW	3.93"

01090005	Pawcatuck-Wood			
0109000502	Upper Pawcatuck River	RI-WS-42	Richmond 4.6 NNE	3.51"
0109000502	Upper Pawcatuck River	RI-WS-37	Kingston 2.4 SW	3.58"
0109000503	Lower Pawcatuck River	CT-NL-40	Pawcatuck 1.8 SSE	3.95"
0109000503	Lower Pawcatuck River	RI-WS-47	Westerly 0.8 WNW	3.45"
0109000504	Frontal Block Island Sound	RI-WS-36	Charlestown 3.0 WSW	4.41"
0109000504	Frontal Block Island Sound	RI-WS-26	Charlestown 1.1 ENE	4.35"
01100001	Quinebaug			
0110000102	French River	MA-WR-68	Oxford 0.9 SSW	3.15"
0110000103	Fivemile River	CT-WN-4	East Killingly 1.3 SW	2.96"
0110000106	Pachaug River	CT-NL-21	Griswold 0.9 N	2.62"
01100002	Shetucket			
0110000201	Willimantic River	CT-TL-18	Hebron 5.3 NW	3.16"
0110000201	Willimantic River	CT-TL-28	South Coventry 1.2 NNW	3.06"
0110000201	Willimantic River	CT-TL-2	Staffordville 0.4 NNW	3.05"
0110000202	Natchaug River	CT-TL-27	Willington 2.7 SE	3.53"
0110000202	Natchaug River	CT-TL-30	Mansfield Center 2.7 NE	2.99"
0110000203	Shetucket River	CT-NL-10	Norwich 2.5 NNE	3.01"
01100003	Thames			
0110000302	Thames River-Frontal New London Harbor	CT-NL-6	New London 1.0 NNW	3.61"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-38	Old Lyme 3.4 ESE	3.26"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-29	East Lyme 0.5 SW	3.67"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-32	Niantic 1.1 SW	3.34"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-22	Central Waterford 2.7 SSW	3.56"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-24	Stonington 1.4 NNW	3.21"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-18	Stonington 0.5 NNE	3.57"
01100004	Quinnipiac			
0110000401	Quinnipiac River	CT-NH-14	Prospect 1.9 ENE	3.40"
0110000401	Quinnipiac River	CT-HR-55	Southington 1.7 WNW	3.23"
0110000401	Quinnipiac River	CT-HR-23	Southington 0.9 SSE	3.24"
0110000401	Quinnipiac River	CT-NH-44	Wallingford Center 1.9 WNW	3.78"
0110000401	Quinnipiac River	CT-NH-43	Wallingford Center 3.3 NNW	3.66"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-NH-50	Madison Center 4.1 N	3.70"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-21	Killingworth 2.6 ESE	3.53"
0110000403	Mill River - Frontal Long Island Sound	CT-NH-16	Milford 1.8 E	3.59"
01100005	Housatonic			
0110000501	Headwaters Housatonic River	MA-BE-11	Great Barrington 3.0 N	2.85"
0110000501	Headwaters Housatonic River	MA-BE-3	Stockbridge .2 NNE	2.82"
0110000501	Headwaters Housatonic River	MA-BE-10	Pittsfield 2.0 NNW	3.09"
0110000504	Macedonia Brook - Housatonic River	CT-LT-20	Warren 2.4 WNW	2.83"
0110000506	Candlewood Lake-Housatonic River	CT-LT-22	New Milford 5.3 SSW	2.85"

0110000508	Still River - Housatonic River	CT-FR-43	Bethel 0.5 E	3.37"
0110000508	Still River - Housatonic River	CT-FR-41	Bethel 3.5 NNE	2.78"
0110000508	Still River - Housatonic River	CT-FR-9	Brookfield 3.3 SSE	2.94"
0110000510	Eightmile Brook - Housatonic River	CT-FR-44	Newtown 4.3 E	3.00"
0110000512	Outlet Naugatuck River	CT-NH-45	Naugatuck 1.7 NNE	2.76"
0110000512	Outlet Naugatuck River	CT-NH-22	Prospect 0.5 SW	3.25"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-42	Monroe 0.1 SE	3.48"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-23	Shelton 1.3 W	3.39"
01100006	Saugatuck			
0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-31	Newtown 4.6 SSW	3.03"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-29	Ridgefield 1.9 SSE	3.30"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-3	New Canaan 1.9 ENE	3.68"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-25	Norwalk 2.9 NNW	3.68"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-26	Stratford 0.9 W	2.44"
02020003	Hudson-Hoosic			
0202000306	Upper Hoosic River	MA-BE-18	North Adams 3.0 WNW	2.12"
02020006	Middle Hudson			
0202000603	Wynants Kill - Hudson River	NY-AB-21	NWS Albany	2.40"
02030203	Long Island Sound			
0203020300	Long Island Sound	NY-SF-114	Fishers Island 0.5 NE	3.64"

Accumulated Precipitation (in)
February 01, 2019 to February 28, 2019



(c) Midwestern Regional Climate Center



0.01 0.1 0.25 0.5 1 1.5 2 2.5 3 4 5 6 8

Stations from the following networks used: COOP, FAA, CoCoRaHS,

Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment

Generated at: 3/5/2019 9:02:58 PM CST

“We do not live at the airport”

Our network’s reported average was 3.49”. Do you see any reported totals for February at or above 3.49” here in this list below?

Our network does not use automated gauges. And we do not live at the airport!

Location	Station ID	February 2019 Precip	Feb departure from normal	Dec-Jan-Feb Precip	3 month departure from normal	Sep-Feb Precip	6 month departure from normal	Mar-Feb Precip	12 month departure from normal
White Plains NY	HPN	2.54"	-0.45"	13.39"	2.30"	33.16"	8.97"	59.64"	10.29"
Danbury CT	DXR	2.28"	-0.49"	12.67"	2.44"	29.16"	5.67"	55.69"	5.82"
New Haven CT	HVN	2.89"	0.00"	11.85"	2.16"	30.68"	8.45"	51.27"	4.16"
Meriden CT	MMK	3.18"	0.29"	15.52"	5.83"	35.45"	13.22"	58.53"	11.42"
Hartford CT	HFD	2.69"	0.04"	11.71"	2.56"	30.78"	10.17"	55.53"	11.93"
Willimantic CT	IJD	2.16"	-0.82"	11.78"	1.10"	33.86"	10.45"	53.19"	4.77"
New London CT	GON	2.82"	-0.04"	12.93"	3.07"	23.63"	1.60"	44.19"	-2.30"
Westerly RI	WST	3.13"	0.13"	14.13"	3.98"	35.11"	12.60"	51.94"	4.55"
Newport RI	UUU	3.53"	0.40"	13.19"	2.65"	34.94"	12.17"	53.00"	6.67"
New Bedford MA	EWB	2.34"	-1.33"	11.99"	0.42"	32.81"	8.86"	51.83"	3.47"
Hyannis MA	HYA	2.63"	-0.89"	11.98"	0.15"	28.75"	4.46"	47.02"	-0.67"
Nantucket MA	ACK	1.90"	-0.82"	9.90"	-0.23"	25.70"	3.18"	46.36"	1.94"
Marthas Vineyard MA	MVY	2.36"	-0.82"	11.56"	1.15"	30.23"	7.01"	43.85"	-1.31"
Taunton MA	TAN	3.51"	-0.05"	12.35"	0.49"	35.64"	10.67"	60.13"	10.39"
Plymouth MA	PYM	2.86"	-0.74"	13.35"	1.67"	35.50"	11.16"	59.31"	10.16"
Norwood MA	OWD	2.50"	-0.75"	10.49"	-0.27"	28.67"	5.53"	53.21"	6.15"
Bedford MA	BED	3.48"	0.47"	9.22"	-0.94"	27.44"	5.21"	48.81"	3.10"
Beverly MA	BVY	3.40"	0.12"	9.79"	-0.21"	30.79"	8.22"	54.14"	7.96"
Lawrence MA	LWM	1.70"	-1.09"	5.74"	-3.05"	20.64"	0.34"	39.76"	-3.40"
Fitchburg MA	FIT	2.99"	-0.01"	10.01"	-0.06"	30.96"	8.51"	59.49"	12.35"
Orange MA	ORE	2.55"	-0.10"	10.77"	2.19"	28.61"	8.81"	56.31"	13.76"
Westfield MA	BAF	2.98"	0.15"	12.06"	2.54"	35.60"	12.72"	60.56"	12.17"
North Adams MA	AQW	1.68"	-0.89"	8.04"	-0.57"	21.84"	0.42"	43.89"	-2.72"

Rulers of the Snow

Rhode Island observers have rarely been listed here. Another approach to this section.

A listing of all observers that reported precip, snow fall, and snow depth with EVERY daily report this month. No NA's.

We are the Rulers of the Snow. We define where the snow is and where it is not. You are all encouraged to do the same. Find the 2nd page of the mobile app. Look further on the Daily Report form. Make a snow fall and snow depth measurement, if you can safely do so, ***all year round***.

Station	Name	Feb 2019 Snowfall	Station	Name	Feb 2019 Snowfall
MA-ES-4	Groveland 0.5 WSW	14.9"	MA-MD-7	Winchester 0.7 SE	10.5"
MA-ES-12	Boxford 2.4 S	14.8"	CT-HR-8	North Granby 1.3 ENE	10.4"
MA-FR-13	Conway 2.9 NW	14.3"	MA-HD-25	Ludlow 2.3 SW	10.4"
MA-FR-17	Buckland 1.8 ESE	13.8"	MA-BR-8	Dighton 1.1 WSW	9.9"
MA-MD-125	Tewksbury 3.6 SSE	13.8"	CT-LT-9	New Hartford Center 3.2 SW	9.4"
MA-ES-2	Beverly 2.8 NW	13.5"	MA-BA-50	Falmouth 5.4 NNE	7.2"
MA-MD-52	Lexington 0.6 SW	13.0"	MA-BA-47	Mashpee 2.4 WSW	6.6"
CT-TL-2	Staffordville 0.4 NNW	12.9"	MA-BA-45	Sandwich 0.9 NNE	5.5"
MA-MD-12	Acton 1.3 SW	12.8"	RI-WS-42	Richmond 4.6 NNE	5.4"
MA-MD-88	Wayland 2.1 SSE	12.5"	MA-PL-19	Rochester 1.2 NNW	4.5"
RI-PR-33	Greenville 0.7 NNW	12.4"	CT-LT-22	New Milford 5.3 SSW	4.4"
MA-MD-51	Maynard 0.7 ESE	12.0"	CT-FR-23	Shelton 1.3 W	4.3"
MA-MD-119	Watertown 1.1 W	11.9"	CT-FR-3	New Canaan 1.9 ENE	4.3"
MA-NF-1	Norwood 1.3 NW	11.9"	CT-FR-25	Norwalk 2.9 NNW	3.6"
MA-FR-12	Sunderland 1.3 SE	11.8"	CT-FR-9	Brookfield 3.3 SSE	3.5"
MA-FR-10	Conway 0.9 SW	11.5"	RI-NW-7	Little Compton 0.6 E	3.4"
MA-BR-30	Taunton 3.9 N	11.4"	CT-NL-29	East Lyme 0.5 SW	3.3"
CT-LT-15	Colebrook 1.0 NE	11.1"	CT-NH-45	Naugatuck 1.7 NNE	3.2"
MA-BR-55	NWS Boston/Norton 2.5 ESE	11.0"	CT-NL-10	Norwich 2.5 NNE	3.1"
MA-PL-31	Bridgewater 1.8 SE	11.0"	CT-NL-6	New London 1.0 NNW	2.9"
RI-PR-51	North Smithfield 0.6 S	10.7"	CT-MD-23	Higganum 0.7 N	2.7"
MA-ES-41	Danvers 0.8 ESE	10.5"	CT-NL-40	Pawcatuck 1.8 SSE	2.6"
			RI-WS-47	Westerly 0.8 WNW	2.4"

February 2019 as a calendar. A count of your Daily Reports by Date. Magenta colors are for the highest counts. Lime green color for the lowest counts.

Our average was 283 Daily Reports per day.

February 2019						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 288	2 274
3 278	4 286	5 285	6 281	7 305	8 304	9 284
10 284	11 280	12 294	13 308	14 294	15 288	16 275
17 267	18 278	19 269	20 271	21 286	22 279	23 266
24 269	25 273	26 282	27 281	28 288		

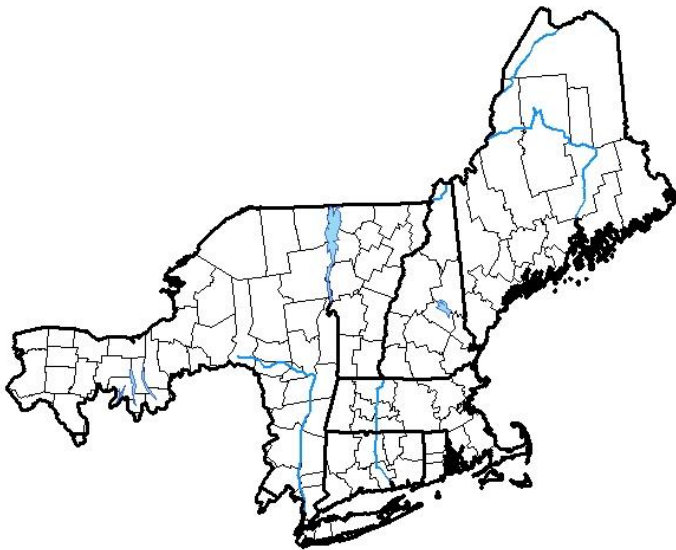
From the Drought Monitor.

February did not see the widespread, above normal precipitation, that we have seen since July.

More to be mentioned about [Condition Monitoring Reports](#) in the months to come. Spring into making a report!

Every drop counts and zeros do too!

U.S. Drought Monitor Northeast RFC



February 26, 2019

(Released Thursday, Feb. 28, 2019)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 02-19-2019	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 11-27-2018	91.58	8.42	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	94.65	5.35	0.00	0.00	0.00	0.00
Start of Water Year 09-25-2018	58.29	31.22	8.70	1.78	0.00	0.00
One Year Ago 02-27-2018	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought
D2 Severe Drought	

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Brad Rippey
U.S. Department of Agriculture



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

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

Wrap up

Shortly after last month's newsletter came out, the link that was included for the Climate Prediction Center, was not working as provided. Use this link <http://www.cpc.ncep.noaa.gov> A few new experimental features are added with 8-14 day guidance. If your crystal ball is a little blurry, or should you want to look beyond a 7-day weather forecast, check out what the Climate Prediction Center is saying, updated 7 days a week after 3PM.

We set our clocks ahead one hour for Daylight Saving Time on Sunday March 10th. Will it be three years in a row, seeing a snow-covered landscape in the setting sun at 7PM?

The vernal equinox occurs on Wednesday, March 20th at 5:58PM. Equal hours of daylight and darkness for all points on our planet, as we continue our transition to summer. As the days get longer the storms get stronger.

The next in the series of WxTalk Webinars is slated for Thursday, March 21st at 1PM, titled *Into the wind...Oh, the places mobile radars will go!* There is always something to learn, something you never thought of, with any of these Webinars. If you cannot attend live, do look for them when they are uploaded to [YouTube](#).

SkyWarn classes are starting this spring. Although not a requirement as a CoCoRaHS observer, it is recommended to attend a SkyWarn session at some point, if there is a session nearby. Learn about wind related hazards, more about your local NWS Forecast Office, and SkyWarn's reporting criteria. Please look at your local NWS Forecast Office's website for dates and times. BOX has a web site for their [schedule](#). Dates, times and locations to follow. The other two offices should have their schedule posted in the weeks to come.

Thank you for all that you do for CoCoRaHS, whether in the past, present and in the days to come.