

Community Collaborative Rain, Hail & Snow Network



# Southern



# New England

**January 2021**

A welcome month of precipitation. At last, our drought that started over the summer has loosened its grip on our area. A little bit of everything from rain, snow, cold air and warm air, and strong wind gusts that kept us awake over Christmas morning. Joe's feature article is about our December storms.

When the precip came, so did the mPING reports too, capturing the attention of many others, lighting up the map with those real-time reports, defining the timing, location and precip type.

Significant Weather Reports were a record amount. Thank you for those real-time reports as well. Keep the reporting criteria in mind, as easy as 1-2-3.

A long list of Grand List Observers. 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.

### **4000 Daily Reports**

CT-TL-2        Staffordville 0.4 NNW  
CT-HR-6        Wethersfield 1.2 WSW

### **3000 Daily Reports**

MA-BA-30      Eastham 0.6 SW  
MA-BA-22      Yarmouth 0.9 NNW

### **2000 Daily Reports**

MA-FR-8        New Salem 3.1 S

### **1000 Daily Reports**

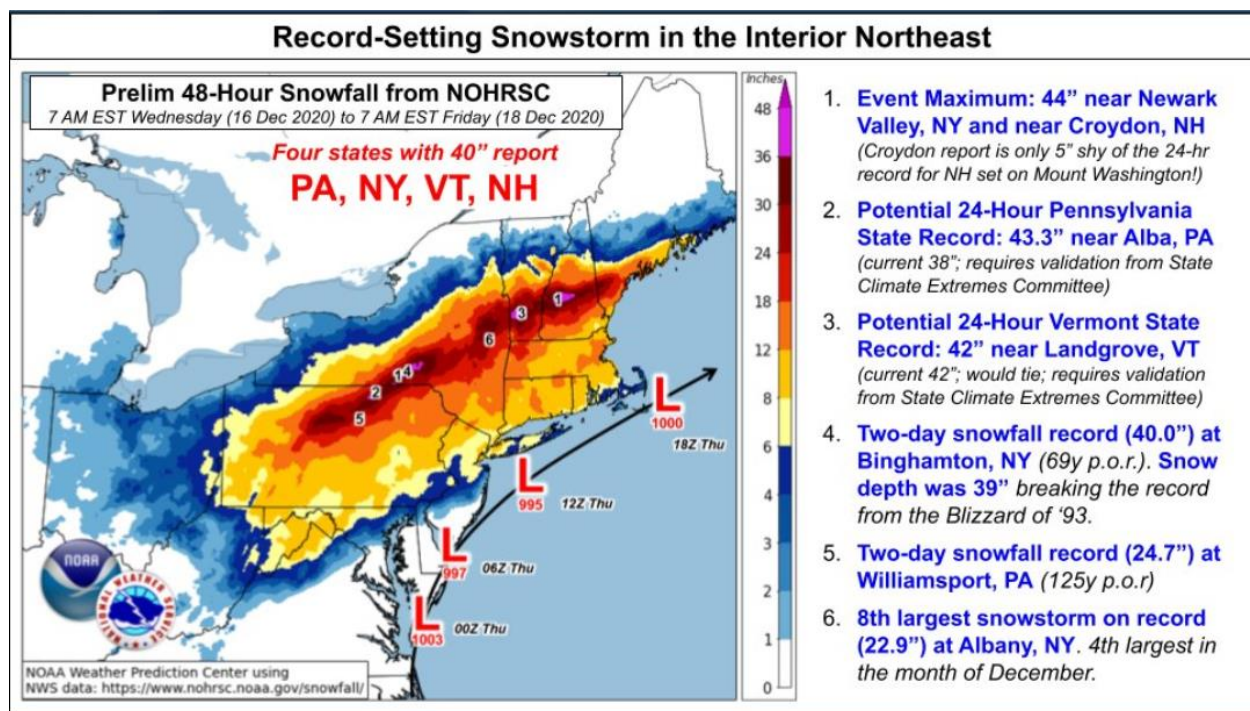
MA-BA-64      Sandwich 1.5 SSE  
MA-MD-93      Westford 1.5 SSW  
CT-MD-21      Killingworth 2.6 ESE  
CT-HR-68      Rocky Hill 1.3 E  
CT-HR-65      Newington 1.9 SSW  
CT-MD-23      Higganum 0.7 N  
MA-BR-52      New Bedford 4.3 N  
RI-NW-19      Portsmouth 2.3 S  
CT-NL-38      Old Lyme 3.4 ESE  
RI-NW-20      Tiverton 1.0 SSW  
CT-TL-27      Willington 2.7 SE

# December Storms

Joe DelliCarpini – Science & Operations Officer, NWS Boston/Norton MA

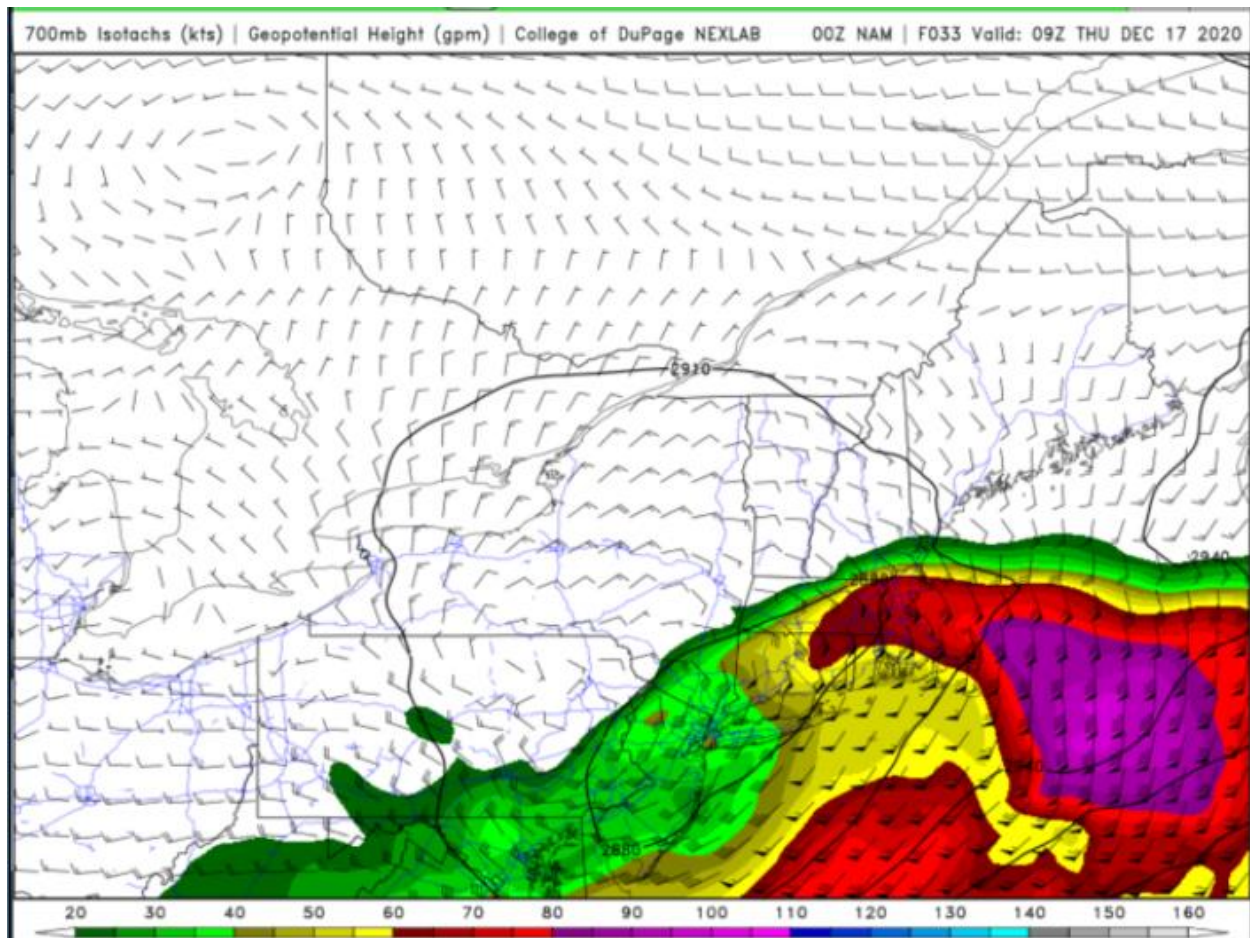
Two significant storm systems affected the Northeast in December which helped to erase the drought conditions that began over the summer.

The first storm on December 16-17 brought heavy snow to much of the region. Most of southern New England, aside from Cape Cod and the Islands, picked up 8 to 18 inches of snow. The storm passed near Nantucket which typically causes the heaviest snow to shift well inland, and in this case extended from northern Pennsylvania into south central and eastern New York to Vermont and New Hampshire, where many locations picked up over 40 inches of snow!



*Summary of the December 16-17, 2020 Winter Storm (NWS Weather Prediction Center)*

There were two key features which led to heavy snowfall in southern New England. The first was a very strong wind convergence near 10,000 feet above the ground. In the image below, note how strong southerly winds of more than 80 MPH (red shading) are running up against much lighter easterly winds of around 10 MPH (green shading) over the region. When these stronger winds meet up with lighter winds the air converges and is forced rapidly upward, leading to bands of very heavy snow (as much as 3-5 inches per hour!) This area of wind convergence eventually pivoted back across Pennsylvania, New York State, and central New England and was the cause of the extreme snowfall totals in that area.

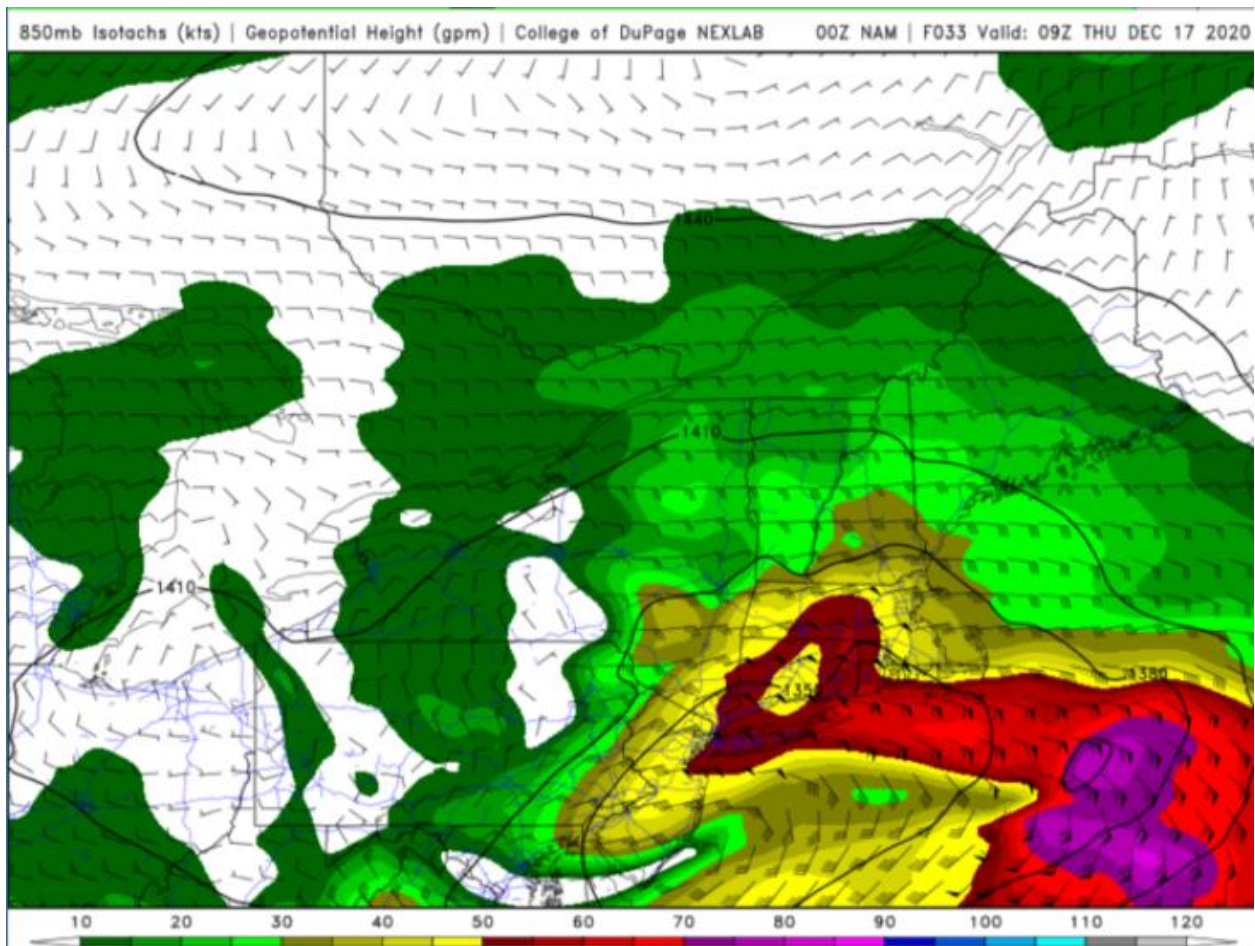


*Winds near 10,000 feet show strong convergence over the region.*



The other feature that led to heavy snow was a persistent flow of moisture off the Atlantic Ocean. The image below shows winds a bit lower in the atmosphere, around 5000 feet, which are from the east at more than 70 MPH (red shading). You can see that the flow has a long fetch, which means it covers a long distance over the ocean and supplied plenty of Atlantic moisture to help produce snow.

These two features help explain why most of the Northeast saw heavy snow from this winter storm. Having a cold air mass in place at the start also helped coastal areas see accumulating snow, even though Cape Cod and the Islands saw an eventual change to rain.

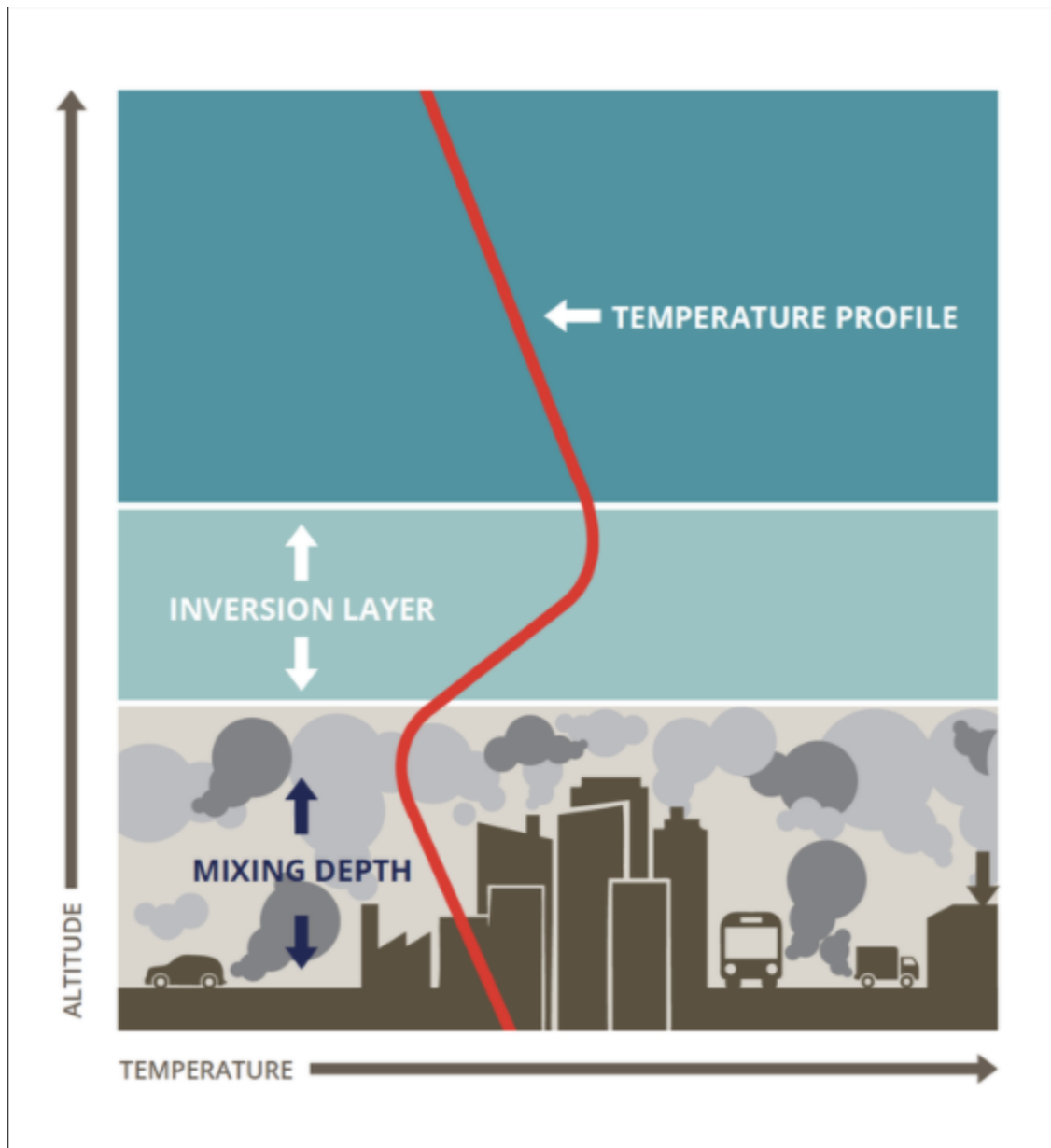


*Winds near 5,000 feet show a long fetch of Atlantic moisture.*

One week later, a second storm tracked through the Great Lakes and brought a surge of milder air into the region from Christmas Eve into Christmas Day. Rainfall of 1 to 3 inches combined with another 1 to 2 inches of runoff from melting snow resulted in minor flooding on several rivers throughout the region.

Damaging wind gusts were another concern. Temperatures warmed into the 50s and lower 60s, but wind gusts would have been much higher if it warmed just a few degrees more. To help forecast wind gusts, meteorologists look at atmospheric soundings taken from weather balloons which record temperature, dew point, wind, and pressure.

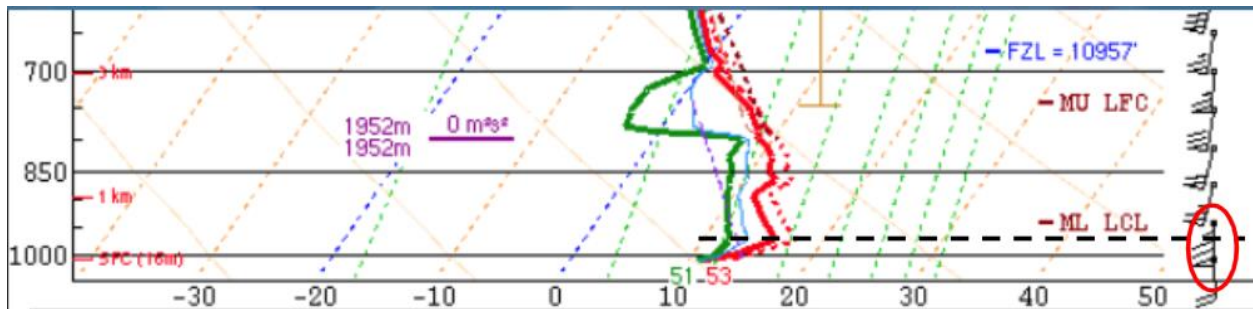
In the image below, the mixing depth is the layer in which temperature decreases with height. Once the temperature levels off, or starts to rise, that marks the height of an inversion, which is essentially a “cap” on how much wind can mix down to the ground. Locating inversions are important since they can tell us how much wind can mix down to the ground from above.



*Example of a temperature inversion.*

The balloon sounding taken at Chatham, MA on the morning of December 25 is shown below and has been zoomed in on the lowest levels. Note the strong temperature inversion (red) up to the dashed black line, where the temperature is increasing with height. The wind speed at the top of the inversion, which was unable to mix down, was 86 MPH. Had temperatures

been a few degrees warmer, that would have helped weaken the inversion and caused most of that wind to mix down to the ground!



*Chatham, MA balloon sounding from the morning of December 25, 2020*

Since temperatures stayed just cool enough, only a portion of that wind was able to mix down and gusts were limited to between 50 and 60 MPH across most of the region, although a few locations did see gusts over 65 MPH.



## **News Items**

**Year 2020: 5,000,000 Daily Reports:** On Saturday December 26<sup>th</sup>, our network passed a milestone never achieved in the history of the network, 5,000,000 Daily Reports in a calendar year.

We are all part of this growth. As our three states have grown, so has the entire network, both in terms of observers and in terms of the Daily Reports being submitted.

Year 2020 was dramatically different in two parts.

- 1) Recruiting was strong. For the entire network, the strongest since Year 2013. April saw a continuation of the March Recruiting Drive. Our locale was strong too, and the CoCoRaHS Cup for Rhode Island is part of it.
- 2) Daily Reports per Reporting Observer. Yes, we talk about this among our three states. It also gets mentioned when looking at the entire network as well.

During Year 2020, we saw an increase of about 0.8-1.0 Daily Reports per Reporting Observer in a month. Oh, big deal, you say. Well, multiply that 1.0 by the 450+ observers that we have reporting in a month, and the 18,000+ observers across the entire network that we have reporting in a month... and it all adds up! Dramatically! A good 4% annual increase in this aspect alone. We have seen that occur here and across the entire network.

Travel has been sacrificed these past several months. We have noticed. As the Daily Reports exceeded last year's levels, we also notice the downturn in Multi-Day Reports from last year's levels as well.

We miss our families and friends, hugs and handshakes, favorite getaways and the memories that those create.

We appreciate your commitment to our network, during these difficult times, and for being a part of this significant milestone.

## Observer Tips

**Accuracy Matters:** December saw several precip events and snow events. With so many values being reports, we saw numerous reporting mistakes made.

- Mixup of snow fall and precip. Focus on the Gauge Catch. The MELTED amount of snow/ice/rain in your gauge is ALWAYS reported in the 1<sup>st</sup> value.
- Decimal points. Even something as subtle as 0.50" reported instead of 0.05". 3.00" reported instead of 0.30" and more.
- False zeros/Time shifting. Zeros reported on days where it is obvious from surrounding stations that precipitation fell.
- Daily Reports mixed up with Multi-Day reports. If you take a day off from reporting, be accurate with which reporting form you use for your next report.
- Capturing the entire precip event with the use of Daily Reports. If your report is beyond 4 hours of your normal obs time.....  
**PLEASE USE A MULTI-DAY REPORT.** Daily Reports are for a roughly 20-24-26-28-hour period, not a 30, 36 or 40+ hour period.

Not only did we see these mistakes, but our QC checkers saw these mistakes too. And with the new map, they are finding even more mistakes than ever before.

So, for all of you, for sunshine and snowstorms alike.

- 1) Accuracy matters. Be accurate with your reported values.
- 2) Look over ALL of your reported values, and make changes where needed.
- 3) If you have precip, write a Comment with the report that verifies and clarifies. That can answer questions to follow about your report.
- 4) Use the correct form and observation time.
- 5) **WRITE DOWN YOUR REPORTS.** If the QC checkers find that your report is suspicious, we will be asking you about the report, days and maybe weeks afterwards, and your memory should be written down.

Thank you for keeping quality in your reports.

**Snow Water Equivalent:** How much water is in the snow? What potential flood impact does the snow pack hold? Taking that snow depth measurement is the first step to answering those questions.

Find the location of the average depth of snow. Take an empty outer cylinder, turn it upside down and cut a vertical core of snow. Slide a spatula underneath the outer cylinder to keep the core sample from falling out of the outer cylinder.

Find the liquid content of this core sample of snow by adding a measured quantity of hot water, sometimes several 1.00" inner cylinders of hot water, and then pouring out the contents, subtracting the 1.00" inner cylinders of hot water.

Another approach involves weighing the core sample. A gram scale, the known weight of the outer cylinder (460g-480g) (every outer cylinder is different and should be weighed precisely ahead of time) and that 201g of added weight = 1.00" of water with our 4" diameter gauges.

Because of the time involved in making this measurement, and the available terrain to cut a core sample, we make this measurement with Monday morning's report. We call this SWE Monday, a network wide custom during these winter months.

For a viewing explanation on Snow Depth and SWE Measuring, in 2 minutes, the CoCoRaHS animated video is on [YouTube](#).

Wrapping up Snow Measuring and Reporting

- ✓ Gauge Catch, the melted amount, as the 1<sup>st</sup> value reported.
- ✓ Snow fall and its water equivalent, measuring and sweep your snow measuring board when the snow stops, or every 6 hours.
- ✓ Snow depth and its water equivalent, SWE Monday.

The 5 measurements with every Daily Report during these winter months and throughout the year. When accurate, zeros are valuable. We define where the snow is and where it is not.



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

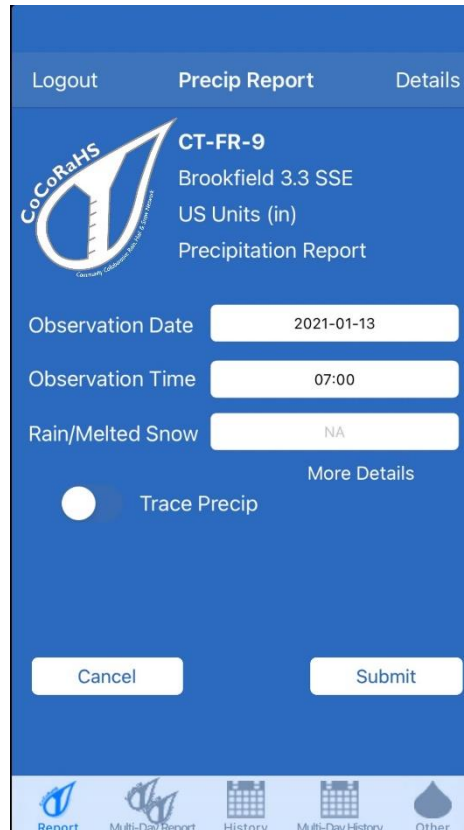
- **1” or more of rain or snow in 1 hour or less.**
- **2” or more of rain.**
- **3” of new snow.**
- **Flooding.**
- **Change of precip type.**
- **Snow total**
- **Anything you feel is significant!**

**mPING app for Apple and Android:** As the two faces of January’s weather appears, mPING can handle both faces. Rain, Snow, Freezing Rain, Ice Pellets/Sleet, all the way to Mixed Rain and Ice Pellets. Use mPING to report precip type and reduced visibility in real time.

**From the Mobile App:** Use the app on an Apple Device? Take a close look. What is the default value on this report form?

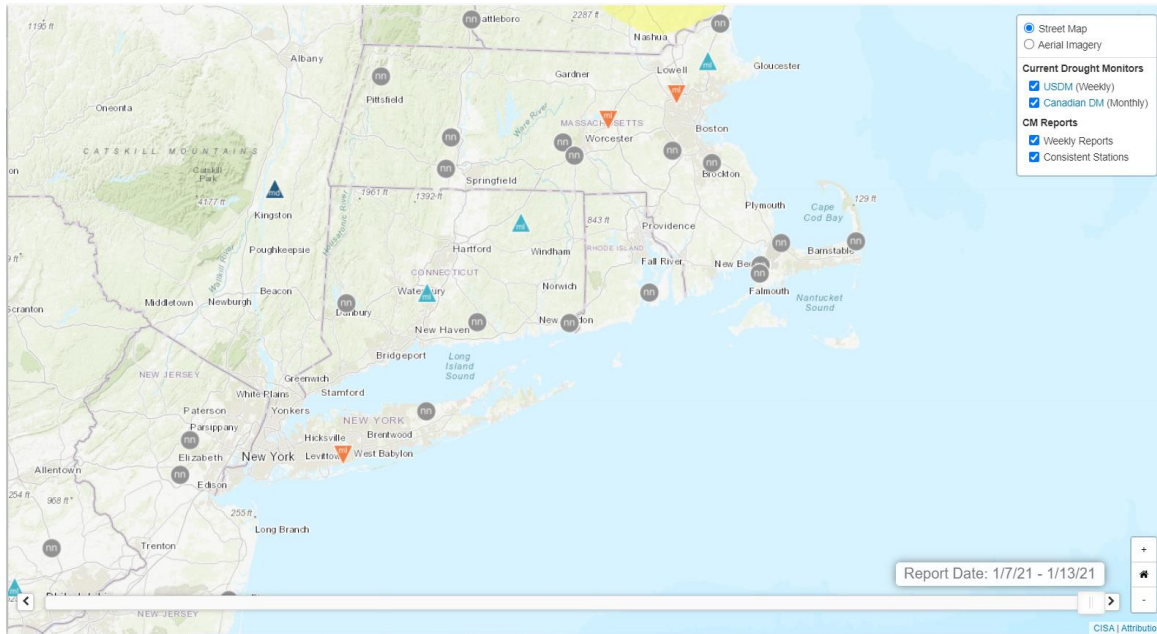
That’s right! NA. Not zero. Be specific and be accurate with your reported values when using the app on any Apple device.

NA is used when you have no measurement to report.



**Condition Monitoring Reports:** What impacts are you seeing from the precipitation? Not enough snow? River and stream flows? Are the reservoirs filling up? Keep watch over conditions where you are!

One report a week is all that we seek. Develop a reputation of being a Consistent Station by submitting over 20 reports in a 52-week timeframe.



**nn Jamestown 0.3 SSE**  
Sat Jan 09 2021

The ground is frozen for the first time this winter. Seasonal stream still flowing. Compost pile at 30 degrees, a low for the season.

RI-NW-18 -- General Awareness, Plants And Wildlife

**nn Easthampton 0.5 SW**  
Mon Jan 11 2021


After many days of dry conditions and cold temperatures, things seem to be getting back to normal conditions for this time of year, except perhaps without the snow. There is a fine crusty layer of old snow/ice on the ground - bare in some spots, crusty and ice in others. Birds are active at the feeders, and squirrels are active as well. Ponds have finally frozen and are able to be walked on in places.

MA-HS-26 -- General Awareness, Plants And Wildlife




# Detail and Summary for December 2020

From the National Weather Service (NWS) Climate sites for Dec 2020.




## December 2020 Regional Precipitation Summary




Location	Station ID	Dec 2020 Precip	December departure from normal	Oct-Nov-Dec Precip	3 month departure from normal	Jul-Dec Precip	6 month departure from normal	Jan-Dec Precip	12 month departure from normal
Pittsfield MA	PSF	2.40"	-0.60"	9.50"	-2.14"	21.07"	-2.87"	37.41"	-7.97"
Bridgeport CT	BDR	4.12"	0.79"	12.57"	2.21"	24.82"	3.56"	42.84"	0.10"
Hartford CT	BDL	5.30"	1.39"	16.67"	4.50"	21.96"	-2.20"	39.57"	-6.75"
Worcester MA	ORH	6.73"	2.91"	18.69"	5.91"	27.05"	2.40"	46.90"	-1.17"
Providence RI	PVD	8.08"	3.86"	19.73"	7.07"	24.31"	0.84"	44.71"	-2.47"
Boston MA	BOS	5.67"	1.89"	14.85"	3.14"	20.05"	-1.88"	37.54"	-6.23"

### January 2021 Outlook

**Air Temperature**



**Precipitation**



A = Above normal, B = Below normal,  
EC = Equal chances of above/below normal

### December Highlights

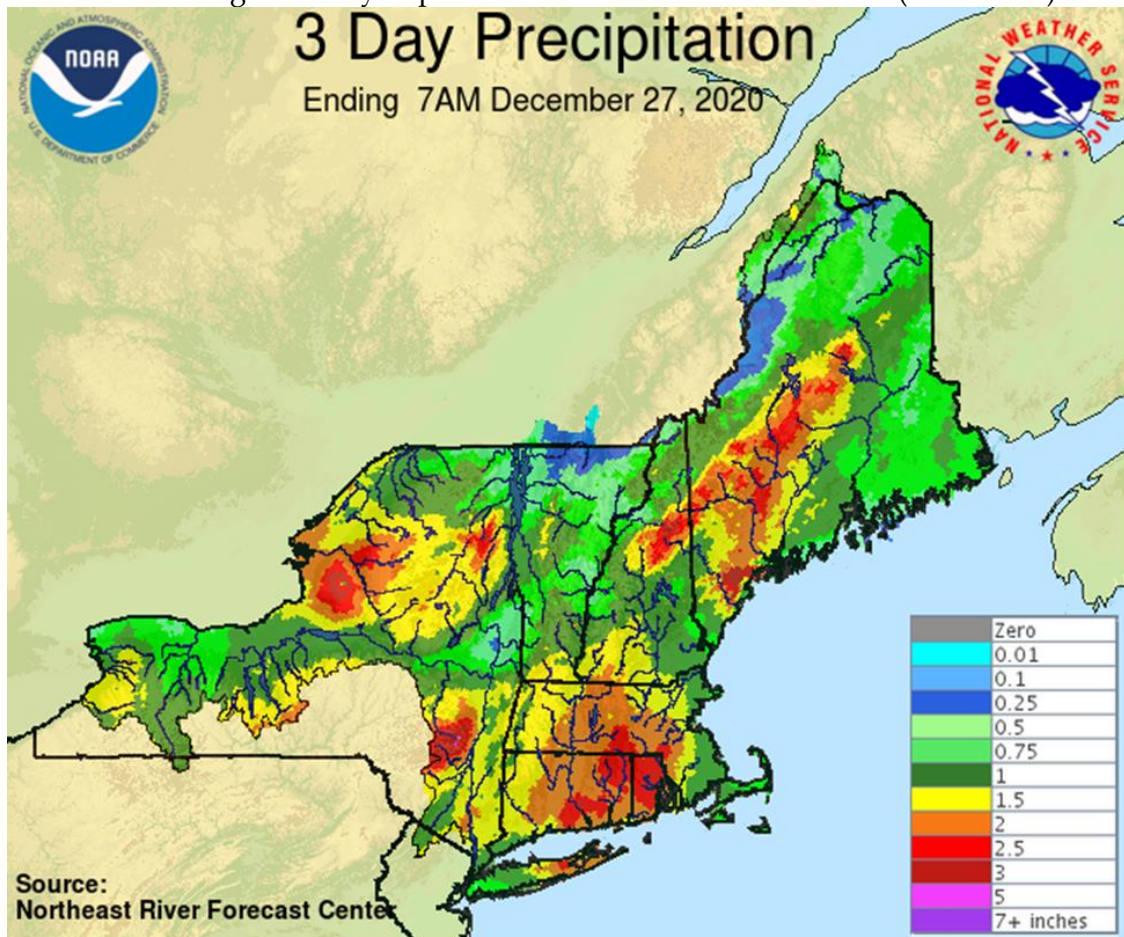
Lots of 2" and 3" reports.

Rain with strong wind gusts at the end of November that was reported on the 1<sup>st</sup>. More widespread rain and snow on the 5<sup>th</sup> into the 6<sup>th</sup>. Precip on the Cape and the Island on the 8<sup>th</sup> and 9<sup>th</sup>. Widespread on the 13<sup>th</sup>, and snow mix with rain on the 15<sup>th</sup>. Winter Storm Warning on the 17<sup>th</sup> giving many of us a snowpack to measure for the next few days. Rain and warm temps on 25<sup>th</sup>, accompanied by High Wind Warnings, the Main Event for the month noted by the map on the next page, erased the snowpack for many locations, and sent the rivers and streams into flood in some areas.

Take in the next section with appreciation of your efforts.

## From your reports for December 2020

Observers reporting	478
Reported all 31 days	247
Completed by Multi-Day Reports	40
Missing 1 or 2 reports	63
Daily Reports	12,393
Zero Reports	7,040
Non-Zero Reports	5,353
Daily Comments	2,731
Multi-Day Reports	138
Condition Monitoring Reports	98
Significant Weather Reports	79
Hail Reports	0
Snowfall Reports	7,947
Snow Depth Reports	5,343
Total SWE Reports	2,538
Highest Daily Report	3.67" from East Sandwich MA (MA-BA-10) on 12/6



A wide range of totals from 5” to over 10”-11” for December.

Keep quality in your reports. Avoid reporting snow fall where the liquid precip value is reported.

<b>Watershed</b>	<b>Watershed Name</b>	<b>Station Number</b>	<b>Station Name</b>	<b>Precip</b>
01070004	Nashua			
0107000401	North Nashua River	MA-WR-8	Fitchburg 1.6 SSW	5.21"
0107000401	North Nashua River	MA-WR-22	Fitchburg 2.0 NNE	8.87"
0107000402	Headwaters Nashua River	MA-WR-89	Holden 0.9 SSE	9.57"
0107000402	Headwaters Nashua River	MA-WR-56	Sterling 4.3 NW	10.40"
0107000402	Headwaters Nashua River	MA-WR-58	Lunenburg 0.6 NE	6.49"
0107000402	Headwaters Nashua River	MA-MD-25	Ayer 0.1 SW	8.09"
0107000403	Squannacook River	MA-MD-47	West Townsend 0.5 W	7.86"
01070005	Concord			
0107000501	Sudbury River	MA-MD-156	Marlborough 2.8 ENE	6.80"
0107000501	Sudbury River	MA-MD-89	Sudbury 3.6 W	7.21"
0107000501	Sudbury River	MA-MD-173	Sudbury 2.7 WNW	7.16"
0107000501	Sudbury River	MA-MD-178	Framingham 2.0 NNE	7.69"
0107000501	Sudbury River	MA-MD-107	Framingham 1.7 E	7.88"
0107000502	Concord River	MA-WR-28	Berlin 1.3 WSW	8.35"
0107000502	Concord River	MA-WR-18	Northborough 0.6 SSE	7.45"
0107000502	Concord River	MA-WR-42	Northborough 2.3 N	7.32"
0107000502	Concord River	MA-MD-115	Hudson 1.4 NW	7.35"
0107000502	Concord River	MA-WR-55	Harvard 2.1 S	7.40"
0107000502	Concord River	MA-MD-12	Acton 1.3 SW	7.54"
0107000502	Concord River	MA-MD-166	Acton 0.5 SW	6.88"
0107000502	Concord River	MA-MD-51	Maynard 0.7 ESE	7.51"
0107000502	Concord River	MA-MD-62	Chelmsford 1.2 E	6.89"
01070006	Merrimack River			
0107000612	Stony Brook - Merrimack River	MA-MD-104	Littleton 2.8 NNW	6.52"
0107000612	Stony Brook - Merrimack River	MA-ES-10	Andover 1.5 W	5.32"
0107000613	Shawsheen River	MA-MD-96	Lexington 0.3 NE	5.71"
0107000613	Shawsheen River	MA-ES-48	Andover 0.6 E	7.58"
0107000614	Powwow River - Merrimack River	MA-ES-66	North Andover 0.3 NW	4.79"
0107000614	Powwow River - Merrimack River	MA-ES-20	Haverhill 0.7 N	6.38"
0107000614	Powwow River - Merrimack River	MA-ES-4	Groveland 0.5 WSW	6.68"

0107000614	Powwow River - Merrimack River	MA-ES-61	Amesbury 2.6 WSW	7.15"
0107000614	Powwow River - Merrimack River	MA-ES-59	Amesbury 1.2 N	6.82"
0107000614	Powwow River - Merrimack River	MA-ES-64	Newburyport 0.4 NNW	6.25"
0107000614	Powwow River - Merrimack River	MA-ES-70	Newburyport 0.6 N	7.10"
0107000614	Powwow River - Merrimack River	MA-ES-56	Newburyport 1.0 ESE	5.18"
01080201	Middle Connecticut			
0108020105	Green River	MA-FR-35	Bernardston 1.0 SW	6.75"
0108020106	Manhan River - Connecticut River	MA-HS-8	Williamsburg 1.2 WSW	9.20"
0108020106	Manhan River - Connecticut River	MA-FR-12	Sunderland 1.3 SE	7.42"
0108020107	Batchelor Brook - Connecticut River	MA-HD-13	Springfield 4.1 W	7.57"
01080202	Miller			
0108020201	Upper Millers River	NH-CH-20	Rindge 3.2 ESE	6.58"
0108020202	Lower Millers River	MA-WR-40	Gardner 1.4 SSW	6.36"
01080203	Deerfield			
0108020303	North River	MA-FR-31	Colrain 3.7 WNW	7.03"
0108020305	Lower Deerfield River	MA-FR-17	Buckland 1.8 ESE	7.53"
0108020305	Lower Deerfield River	MA-FR-13	Conway 2.9 NW	8.61"
0108020305	Lower Deerfield River	MA-FR-10	Conway 0.9 SW	8.99"
01080204	Chicopee			
0108020401	Swift River	MA-FR-8	New Salem 3.1 S	5.88"
0108020402	Ware River	MA-WR-54	Barre 1.4 NNE	7.04"
0108020403	Quaboag River	MA-HD-26	Brimfield 3.6 NW	7.89"
0108020403	Quaboag River	MA-WR-75	Warren 2.4 WSW	6.56"
0108020404	Chicopee River	MA-HD-25	Ludlow 2.3 SW	5.12"
01080205	Lower Connecticut			
0108020501	Mill River - Connecticut River	CT-HR-82	Suffield 0.5 NNE	7.37"
0108020501	Mill River - Connecticut River	CT-HR-99	Suffield 3.6 ENE	6.98"
0108020501	Mill River - Connecticut River	CT-HR-57	Suffield Depot 3.3 NNE	6.92"
0108020501	Mill River - Connecticut River	MA-HD-33	Agawam 1.1 SSW	6.29"
0108020501	Mill River - Connecticut River	CT-HR-5	Enfield 1.5 SE	6.85"
0108020501	Mill River - Connecticut River	MA-HD-20	Wilbraham 3.7 SSW	4.80"
0108020501	Mill River - Connecticut River	MA-HD-30	Hampden 2.0 NW	6.93"
0108020502	Scantic River	CT-TL-26	Broad Brook 2.6 ESE	6.66"
0108020502	Scantic River	CT-TL-35	Somersville 0.2 ENE	6.05"
0108020502	Scantic River	CT-TL-41	Somers 0.3 S	6.91"
0108020502	Scantic River	CT-TL-15	Central Somers 0.3 N	7.44"
0108020503	Park River	CT-HR-49	West Hartford 1.1 W	8.15"
0108020503	Park River	CT-HR-85	West Hartford 2.3 NNE	6.75"
0108020504	Hockanum River	CT-HR-100	Manchester 0.4 ENE	8.09"
0108020504	Hockanum River	CT-TL-19	Vernon 2.8 N	7.68"
0108020505	Roaring Brook - Connecticut River	CT-HR-68	Rocky Hill 1.3 E	7.59"

0108020505	Roaring Brook - Connecticut River	CT-HR-22	East Hartford 1.3 E	8.19"
0108020506	Mattabesset River	CT-HR-15	Southington 3.0 E	8.58"
0108020506	Mattabesset River	CT-HR-80	Kensington 0.7 WSW	7.53"
0108020506	Mattabesset River	CT-HR-65	Newington 1.9 SSW	8.50"
0108020506	Mattabesset River	CT-MD-25	Middlefield 0.6 SE	8.55"
0108020507	Higganum Creek - Connecticut River	CT-MD-23	Higganum 0.7 N	9.51"
0108020507	Higganum Creek - Connecticut River	CT-MD-26	Higganum 0.8 NE	9.01"
0108020509	Eightmile River - Connecticut River	CT-MD-18	Essex Village 0.9 S	7.60"
0108020509	Eightmile River - Connecticut River	CT-NL-44	Old Lyme 0.5 W	5.86"
01080206	Westfield			
0108020601	Headwaters Westfield River	MA-HS-7	Plainfield 2.2 SW	7.59"
0108020601	Headwaters Westfield River	MA-HS-14	Plainfield 2.4 ESE	6.31"
0108020603	Outlet Westfield River	MA-HD-31	Westfield 1.6 SSW	7.79"
0108020603	Outlet Westfield River	CT-HR-88	Suffield Depot 6.0 WNW	7.29"
0108020603	Outlet Westfield River	MA-HD-28	Westfield 2.8 SE	7.71"
0108020603	Outlet Westfield River	MA-HD-29	West Springfield 1.6 SSW	7.39"
01080207	Farmington			
0108020702	West Branch Farmington River	CT-LT-43	Winsted 3.8 ESE	6.62"
0108020702	West Branch Farmington River	CT-LT-18	New Hartford Center 1.5 N	7.13"
0108020704	Headwaters Farmington River	CT-LT-9	New Hartford Center 3.2 SW	7.75"
0108020704	Headwaters Farmington River	CT-HR-70	Canton 1.5 W	5.84"
0108020705	Salmon Brook	CT-HR-8	North Granby 1.3 ENE	9.00"
01090001	Charles			
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-46	Georgetown 1.3 ENE	6.68"
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-24	Newburyport 0.8 SW	6.46"
0109000102	Ipswich River	MA-MD-125	Tewksbury 3.6 SSE	6.65"
0109000102	Ipswich River	MA-MD-45	Wilmington 1.5 NE	6.81"
0109000102	Ipswich River	MA-ES-58	Middleton 1.4 SSW	7.79"
0109000102	Ipswich River	MA-ES-12	Boxford 2.4 S	6.84"
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-41	Danvers 0.8 ESE	7.69"
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-22	Rockport 1.0 E	4.56"
0109000104	Saugus River - Frontal Broad Sound	MA-MD-81	Wakefield 0.5 NNW	6.57"
0109000104	Saugus River - Frontal Broad Sound	MA-MD-126	Melrose 0.5 NE	7.48"
0109000104	Saugus River - Frontal Broad Sound	MA-ES-45	Nahant 0.4 N	5.42"
0109000104	Saugus River - Frontal Broad Sound	MA-ES-8	Marblehead 0.8 SW	5.73"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-123	Lexington 1.3 SE	7.75"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-175	Arlington 0.4 WNW	7.73"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-7	Winchester 0.7 SE	7.84"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-44	Medford 1.2 W	8.11"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-11	Cambridge 0.9 NNW	8.34"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-170	Somerville 0.5 W	6.56"



0109000105	Mystic River - Frontal Boston Harbor	MA-SF-10	Chelsea 0.8 N	7.45"
0109000106	Upper Charles River	MA-WR-1	Milford 2.3 NNW	7.99"
0109000106	Upper Charles River	MA-MD-106	Holliston 2.4 W	8.19"
0109000106	Upper Charles River	MA-MD-55	Holliston 0.7 W	8.42"
0109000106	Upper Charles River	MA-MD-42	Holliston 0.8 S	7.39"
0109000106	Upper Charles River	MA-NF-62	Franklin 1.4 SW	9.60"
0109000106	Upper Charles River	MA-MD-158	Sherborn 1.1 NW	8.44"
0109000106	Upper Charles River	MA-NF-11	Millis 2.0 SW	8.32"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-120	Natick 1.9 NNE	7.85"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-71	Newton 2.2 NNW	6.45"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-119	Watertown 1.1 W	8.20"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-134	Somerville 0.5 SSE	7.32"
0109000108	Neponset River - Frontal Boston Harbor	MA-NF-1	Norwood 1.3 NW	8.71"
0109000108	Neponset River - Frontal Boston Harbor	MA-NF-54	Quincy 1.2 W	7.73"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-NF-32	Quincy 1.8 WSW	7.01"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-PL-36	Hingham 0.8 ESE	7.15"
01090002	Cape Cod			
0109000201	North River - Frontal Massachusetts Bay	MA-PL-57	Hanson 1.8 N	7.32"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-30	Duxbury 3.7 W	7.52"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-48	Marshfield 1.5 NNW	7.19"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-47	Plymouth 1.1 NNW	7.72"
0109000202	Cape Cod	MA-BA-2	Falmouth 3.1 NNW	7.88"
0109000202	Cape Cod	MA-BA-13	Falmouth 0.6 NNW	8.05"
0109000202	Cape Cod	MA-BA-17	East Falmouth 1.2 WNW	7.13"
0109000202	Cape Cod	MA-BA-3	Falmouth 3.0 E	8.16"
0109000202	Cape Cod	MA-BA-11	East Falmouth 1.4 ESE	6.57"
0109000202	Cape Cod	MA-BA-83	Mashpee 2.5 W	8.20"
0109000202	Cape Cod	MA-BA-18	Waquoit 0.6 SSW	8.40"
0109000202	Cape Cod	MA-BA-45	Sandwich 0.9 NNE	7.52"
0109000202	Cape Cod	MA-BA-64	Sandwich 1.5 SSE	8.94"
0109000202	Cape Cod	MA-BA-79	Mashpee 0.8 SSW	7.93"
0109000202	Cape Cod	MA-BA-78	Mashpee 4.6 S	8.61"
0109000202	Cape Cod	MA-BA-10	East Sandwich 2.3 SE	8.89"
0109000202	Cape Cod	MA-BA-59	Barnstable 3.6 W	8.92"
0109000202	Cape Cod	MA-BA-76	Barnstable 0.7 NE	8.44"
0109000202	Cape Cod	MA-BA-72	Yarmouth 2.0 S	8.29"
0109000202	Cape Cod	MA-BA-77	South Dennis 1.0 NW	7.73"
0109000202	Cape Cod	MA-BA-52	Truro 0.8 E	8.04"
0109000202	Cape Cod	MA-BA-68	Eastham 1.9 WSW	7.61"
0109000202	Cape Cod	MA-BA-51	Orleans 3.0 S	9.10"
0109000202	Cape Cod	MA-BA-30	Eastham 0.6 SW	7.94"

0109000202	Cape Cod	MA-BA-43	Chatham 0.4 WSW	7.44"
0109000203	Mattapoisett River - Frontal Buzzards Bay	MA-PL-52	Plymouth 10.6 SSE	7.11"
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-14	Dartmouth 2.5 SSW	7.91"
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-52	New Bedford 4.3 N	6.08"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-5	Little Compton 1.7 NW	7.49"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-17	Tiverton 4.4 SSE	7.32"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-7	Little Compton 0.6 E	8.25"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-21	Chilmark 0.9 E	8.33"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-5	West Tisbury 2.9 N	8.22"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-9	West Tisbury 0.4 S	7.70"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-2	Vineyard Haven 0.8 WSW	7.07"
0109000207	Nantucket Island	MA-NT-1	Nantucket 3.8 WNW	7.36"
0109000207	Nantucket Island	MA-NT-9	Nantucket 5.9 ESE	7.58"
01090003	Blackstone			
0109000301	Upper Blackstone River	MA-WR-41	Auburn 2.6 SW	8.68"
0109000301	Upper Blackstone River	MA-WR-43	Leicester 2.4 ESE	8.63"
0109000301	Upper Blackstone River	MA-WR-81	Worcester 1.6 SE	9.00"
0109000301	Upper Blackstone River	MA-WR-70	Grafton 1.5 W	7.42"
0109000302	Lower Blackstone River	RI-PR-50	Harrisville 1.2 SSE	8.91"
0109000302	Lower Blackstone River	RI-PR-28	North Smithfield 0.7 SE	9.85"
0109000302	Lower Blackstone River	RI-PR-89	Woonsocket 1.8 WNW	9.74"
0109000302	Lower Blackstone River	RI-PR-45	Manville 0.4 WSW	9.83"
0109000302	Lower Blackstone River	RI-PR-55	Cumberland Hill 3.6 NNE	9.44"
01090004	Narragansett			
0109000401	Upper Taunton River	MA-BR-30	Taunton 3.9 N	6.50"
0109000401	Upper Taunton River	MA-NF-31	Stoughton 1.2 E	7.95"
0109000401	Upper Taunton River	MA-PL-22	East Bridgewater 0.3 WSW	6.24"
0109000401	Upper Taunton River	MA-PL-15	Abington 1.2 NNE	6.64"
0109000401	Upper Taunton River	MA-PL-23	Pembroke 2.8 SW	7.49"
0109000402	Middle Taunton River	MA-PL-31	Bridgewater 1.8 SE	6.87"
0109000403	Threemile River	MA-NF-19	Foxborough 1.8 SSW	9.34"
0109000403	Threemile River	MA-BR-55	NWS Boston/Norton 2.5 ESE	7.64"
0109000404	Ten Mile River	MA-NF-58	Plainville 0.6 NNW	8.73"
0109000404	Ten Mile River	MA-BR-23	Attleboro 0.9 ENE	9.92"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-33	Greenville 0.7 NNW	9.37"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-51	North Smithfield 0.6 S	9.82"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-82	Providence 1.6 NNW	11.31"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-53	Providence 1.7 N	8.87"
0109000406	Pawtuxet River	RI-KN-21	Coventry 1.9 NE	10.34"
0109000406	Pawtuxet River	RI-PR-71	Cranston 1.3 N	9.74"
0109000407	Palmer River	RI-BR-11	Bristol 2.0 NNW	6.28"

0109000407	Palmer River	MA-BR-2	Rehoboth 2.1 N	9.61"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-61	Mansfield 2.4 ENE	8.53"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-3	Norton 1.8 NNE	8.68"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-64	Somerset 0.8 NE	7.30"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-58	Dighton 3.3 NNW	7.19"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-8	Dighton 1.1 WSW	7.73"
0109000409	Narragansett Bay	RI-WS-54	North Kingstown 2.7 WSW	10.99"
0109000409	Narragansett Bay	RI-WS-31	Kingston 7.5 NNE	11.63"
0109000409	Narragansett Bay	RI-WS-66	Narragansett 2.9 N	9.00"
0109000409	Narragansett Bay	RI-KN-2	East Greenwich 2.3 ESE	9.98"
0109000409	Narragansett Bay	RI-KN-23	Warwick 3.2 NNE	10.27"
0109000409	Narragansett Bay	RI-KN-31	Warwick 0.8 ENE	9.66"
0109000409	Narragansett Bay	RI-PR-67	Providence 1.6 NE	10.67"
0109000409	Narragansett Bay	RI-NW-18	Jamestown 0.3 SSE	7.33"
0109000409	Narragansett Bay	RI-PR-77	Riverside 0.8 SE	9.82"
0109000409	Narragansett Bay	RI-BR-5	Barrington 1.3 WNW	9.46"
0109000409	Narragansett Bay	RI-NW-27	Newport 1.3 SW	5.97"
0109000409	Narragansett Bay	RI-NW-4	Middletown 1.1 SW	5.95"
0109000409	Narragansett Bay	RI-NW-16	Portsmouth 1.3 S	7.87"
0109000409	Narragansett Bay	MA-BR-63	Swansea 2.1 W	7.43"
0109000409	Narragansett Bay	RI-NW-20	Tiverton 1.0 SSW	8.08"
01090005	Pawcatuck-Wood			
0109000501	Wood River	RI-WS-1	Hope Valley 3.7 S	9.56"
0109000502	Upper Pawcatuck River	RI-WS-46	Westerly 3.4 E	7.92"
0109000502	Upper Pawcatuck River	RI-WS-51	Richmond 2.4 SSE	10.82"
0109000502	Upper Pawcatuck River	RI-WS-42	Richmond 4.6 NNE	10.67"
0109000502	Upper Pawcatuck River	RI-WS-45	Charlestown 4.7 NNE	10.19"
0109000503	Lower Pawcatuck River	RI-WS-47	Westerly 0.8 WNW	8.02"
0109000504	Frontal Block Island Sound	RI-WS-36	Charlestown 3.0 WSW	9.43"
0109000504	Frontal Block Island Sound	RI-WS-67	Charlestown 0.7 E	9.57"
0109000504	Frontal Block Island Sound	RI-WS-55	Wakefield 0.8 ENE	9.72"
01100001	Quinebaug			
0110000102	French River	MA-WR-88	Leicester 2.5 WSW	10.06"
0110000102	French River	MA-WR-68	Oxford 0.9 SSW	9.23"
0110000103	Fivemile River	CT-WN-4	East Killingly 1.3 SW	8.75"
0110000105	Moosup River	CT-WN-8	Moosup 1.7 NE	10.46"
0110000105	Moosup River	RI-KN-14	Greene 1.4 E	10.36"
0110000106	Pachaug River	CT-NL-21	Griswold 0.9 N	8.72"
01100002	Shetucket			
0110000201	Willimantic River	CT-TL-40	Coventry 0.3 NNE	8.83"
0110000201	Willimantic River	CT-TL-32	Coventry 2.3 N	8.53"

0110000201	Willimantic River	CT-TL-24	Stafford Springs 0.8 NE	6.17"
0110000201	Willimantic River	CT-TL-2	Staffordville 0.4 NNW	8.88"
0110000202	Natchaug River	CT-TL-27	Willington 2.7 SE	10.09"
0110000202	Natchaug River	CT-TL-30	Mansfield Center 2.7 NE	9.27"
0110000202	Natchaug River	CT-WN-12	Eastford 2.0 W	8.36"
0110000203	Shetucket River	CT-WN-10	South Windham 1.3 NNE	9.53"
0110000203	Shetucket River	CT-NL-10	Norwich 2.5 NNE	8.79"
01100003	Thames			
0110000302	Thames River-Frontal New London Harbor	CT-NL-5	Oakdale 2.6 WNW	9.77"
0110000302	Thames River-Frontal New London Harbor	CT-NL-6	New London 1.0 NNW	7.47"
0110000302	Thames River-Frontal New London Harbor	CT-NL-8	Uncasville-Oxoboxo Valley 1.6 ENE	7.55"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-38	Old Lyme 3.4 ESE	7.01"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-29	East Lyme 0.5 SW	8.19"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-32	Niantic 1.1 SW	5.89"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-22	Central Waterford 2.7 SSW	6.91"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-46	Mystic 3.4 NW	8.17"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-37	Mystic 1.6 W	7.42"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-19	Mystic 0.9 W	6.57"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-24	Stonington 1.4 NNW	7.33"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-18	Stonington 0.5 NNE	7.25"
01100004	Quinnipiac			
0110000401	Quinnipiac River	CT-NH-14	Prospect 1.9 ENE	9.72"
0110000401	Quinnipiac River	CT-HR-55	Southington 1.7 WNW	9.69"
0110000401	Quinnipiac River	CT-HR-83	Plainville 1.7 SW	9.49"
0110000401	Quinnipiac River	CT-HR-76	Southington 1.0 ENE	8.50"
0110000401	Quinnipiac River	CT-NH-43	Wallingford Center 3.3 NNW	8.25"
0110000401	Quinnipiac River	CT-NH-75	Meriden 2.8 WSW	9.20"
0110000401	Quinnipiac River	CT-NH-42	Wallingford Center 1.1 N	7.20"
0110000401	Quinnipiac River	CT-NH-72	Northford 0.8 SW	9.34"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-NH-21	East Haven 3.5 SSW	5.80"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-21	Killingworth 2.6 ESE	7.37"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-27	Clinton 3.7 N	7.71"
0110000403	Mill River - Frontal Long Island Sound	CT-NH-57	New Haven 2.9 NNW	6.92"
01100005	Housatonic			
0110000501	Headwaters Housatonic River	MA-BE-3	Stockbridge .2 NNE	4.02"
0110000501	Headwaters Housatonic River	MA-BE-20	Lee 3.7 SE	5.78"
0110000501	Headwaters Housatonic River	MA-BE-22	Dalton 2.9 SW	4.92"
0110000502	Williams River - Housatonic River	MA-BE-23	Sheffield 1.6 NW	4.44"
0110000503	Konkapot River-Housatonic River	CT-LT-28	Canaan 4.2 ESE	7.00"
0110000504	Macedonia Brook - Housatonic River	CT-LT-20	Warren 2.4 WNW	7.52"
0110000506	Candlewood Lake-Housatonic River	CT-LT-37	New Milford 3.1 WNW	7.03"

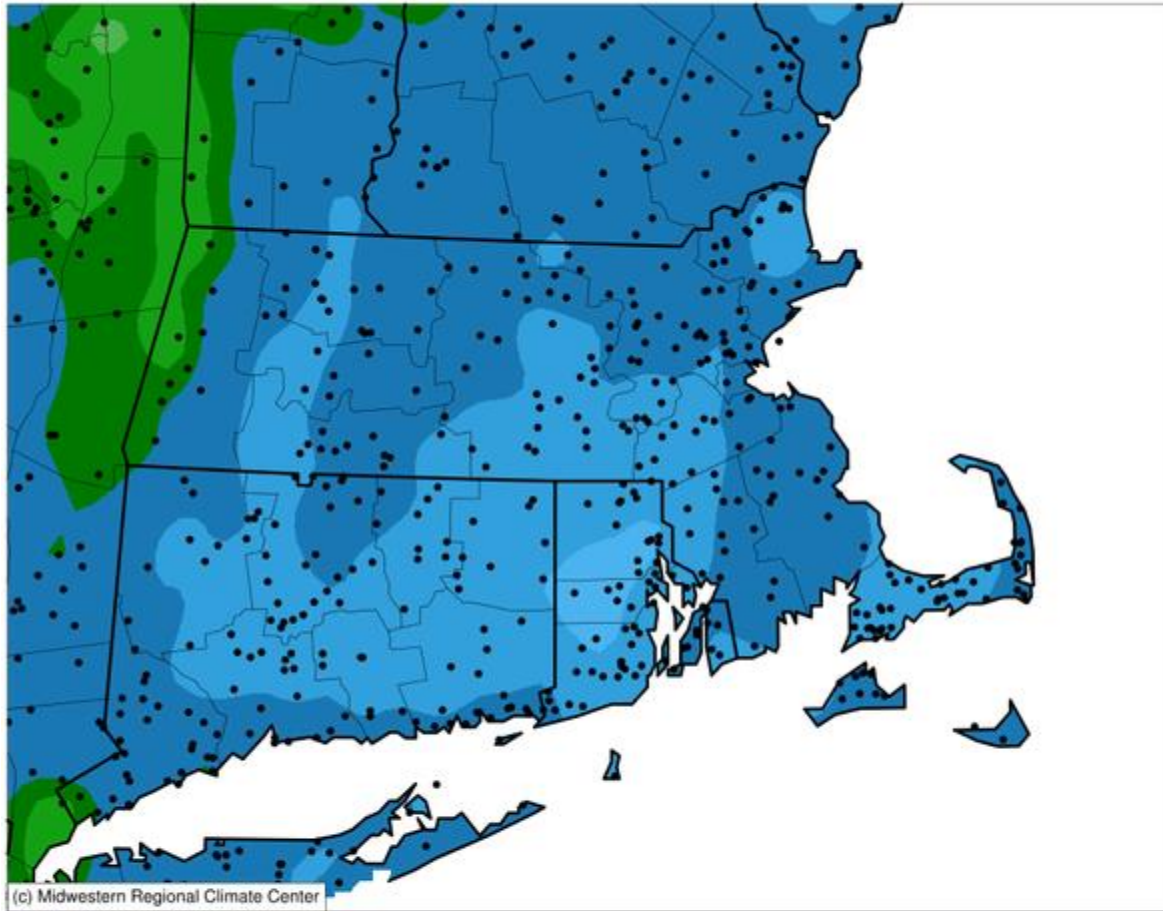
0110000506	Candlewood Lake-Housatonic River	CT-LT-22	New Milford 5.3 SSW	7.19"
0110000507	Shepaug River	CT-LT-29	Goshen 0.5 NW	9.23"
0110000508	Still River - Housatonic River	CT-FR-43	Bethel 0.5 E	8.56"
0110000508	Still River - Housatonic River	CT-FR-41	Bethel 3.5 NNE	7.34"
0110000508	Still River - Housatonic River	CT-FR-9	Brookfield 3.3 SSE	7.65"
0110000509	Pomperaug River	CT-LT-34	Woodbury Center 1.5 SSW	7.51"
0110000511	Headwaters Naugatuck River	CT-LT-7	Litchfield 2.3 NNE	7.15"
0110000512	Outlet Naugatuck River	CT-NH-47	Seymour 1.5 NE	8.24"
0110000512	Outlet Naugatuck River	CT-NH-45	Naugatuck 1.7 NNE	8.81"
0110000512	Outlet Naugatuck River	CT-NH-22	Prospect 0.5 SW	8.53"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-77	Shelton 2.3 WSW	6.07"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-23	Shelton 1.3 W	6.16"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-46	Stratford 0.2 ESE	5.62"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-55	Shelton 2.7 SSE	4.84"
01100006	Saugatuck			
0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-58	Ridgefield 3.6 N	6.66"
0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-64	Bethel 4.5 SSE	6.01"
0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-31	Newtown 4.6 SSW	6.81"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-59	New Canaan 3.8 N	6.51"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-29	Ridgefield 1.9 SSE	7.39"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-63	Wilton 1.9 NW	5.91"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-3	New Canaan 1.9 ENE	6.03"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-25	Norwalk 2.9 NNW	5.26"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-20	Westport 2.5 ENE	6.20"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-68	Fairfield 1.1 SSE	4.17"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-60	Fairfield 1.5 NE	6.23"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-32	Monroe 0.8 W	7.79"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-70	Bridgeport 2.9 NNW	4.56"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-67	Trumbull 1.2 S	7.97"
0110000604	Mianus River-Rippowam River	CT-FR-83	Darien 2.4 NW	5.57"
0110000604	Mianus River-Rippowam River	CT-FR-35	Darien 1.8 ENE	5.35"
02020003	Hudson-Hoosic			
0202000306	Upper Hoosic River	MA-BE-21	Cheshire 0.5 NNW	5.80"
02020006	Middle Hudson			
0202000603	Wynants Kill - Hudson River	NY-AB-21	NWS Albany	5.03"
02030203	Long Island Sound			
0203020300	Long Island Sound	NY-SF-114	Fishers Island 0.5 NE	6.36"



A welcome and needed wet month, a little on the wild side, and widespread 5"+ totals for many. A small pocket of 10"+ totals in the middle of Rhode Island.

### Accumulated Precipitation (in)

December 01, 2020 to December 31, 2020



0.01 0.1 0.5 1 1.5 2 3 4 5 7.5 10 12.5 15

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

Midwestern Regional Climate Center

cli-MATE: MRCC Application Tools Environment

Generated at: 1/13/2021 10:29:06 PM CST

**“We do not live at the airport”**

If it weren't for the collective bunch of you, the hundreds of you, measuring and reporting every day, this table of precip totals would carry more weight to base decisions about drought and more. **LOOK AT THIS.** Do many of you have a under-20" total for the past 6 months and/or a under-40" total for the past 12 months? **LOOK AT YOUR TOTALS** and compare.

This list averaged 4.89", while our own stations averaged 7.68".

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

Location	Station ID	Dec 2020 Precip	Dec departure from normal	Oct-Nov-Dec Precip	3 month departure from normal	Jul-Dec Precip	6 month departure from normal	Jan-Dec Precip	12 month departure from normal
White Plains NY	HPN	1.79"	-2.53"	10.39"	-2.31"	22.86"	-2.43"	39.32"	-10.03"
Danbury CT	DXR	4.03"	-0.07"	13.43"	0.37"	26.85"	0.37"	42.72"	-7.15"
New Haven CT	HVN	3.81"	0.20"	11.57"	-0.21"	19.26"	-4.85"	36.53"	-10.58"
Meriden CT	MMK	5.84"	2.23"	16.62"	4.84"	23.73"	-0.38"	47.54"	0.43"
Hartford CT	HFD	5.04"	1.69"	14.90"	3.57"	22.08"	-0.39"	39.05"	-4.55"
Willimantic CT	IJD	4.98"	0.73"	13.66"	0.63"	17.18"	-7.92"	38.25"	-10.17"
New London CT	GON	5.68"	1.95"	15.13"	3.23"	18.03"	-5.80"	36.35"	-10.14"
Westerly RI	WST	4.86"	1.10"	15.17"	2.97"	18.33"	-5.73"	36.38"	-11.01"
Newport RI	UUU	6.17"	2.41"	16.66"	4.60"	21.05"	-2.09"	38.21"	-8.12"
New Bedford MA	EWB	5.39"	1.42"	12.70"	-0.05"	13.98"	-9.76"	26.59"	-21.77"
Hyannis MA	HYA	6.14"	1.86"	13.45"	0.58"	16.32"	-7.29"	33.28"	-14.41"
Nantucket MA	ACK	5.56"	1.76"	14.27"	2.12"	17.33"	-5.86"	35.40"	-9.02"
Marthas Vineyard MA	MVY	4.48"	0.63"	12.01"	-0.45"	14.11"	-9.44"	34.84"	-10.32"
Taunton MA	TAN	5.72"	1.40"	16.70"	3.59"	21.15"	-4.11"	41.80"	-7.94"
Plymouth MA	PYM	6.19"	1.80"	17.22"	4.09"	22.42"	-1.91"	42.38"	-6.77"
Norwood MA	OWD	6.14"	2.06"	13.53"	0.80"	21.34"	-2.77"	45.67"	-1.39"
Bedford MA	BED	4.82"	1.14"	14.05"	1.86"	19.69"	-3.43"	34.73"	-10.98"
Lawrence MA	LWM	4.76"	1.64"	13.47"	2.35"	22.36"	0.64"	39.99"	-3.17"
Fitchburg MA	FIT	5.15"	1.43"	14.00"	1.75"	19.32"	-4.66"	36.57"	-10.57"
Orange MA	ORE	4.24"	1.03"	10.99"	0.11"	20.27"	-1.84"	36.17"	-6.38"
Westfield MA	BAF	4.00"	0.57"	14.58"	2.28"	23.12"	-1.92"	39.74"	-8.65"
North Adams MA	AQW	2.84"	-0.54"	10.31"	-1.77"	20.72"	-4.21"	34.16"	-12.45"

## **Rulers of the Snow**

We are the Rulers of the Snow. We define where the snow is and where it is not.

74 stations in December. Through the snow storm and the wind storm.

Using the mobile app? Look at the 2<sup>nd</sup> page of the mobile 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	Dec 2020 Snowfall	Station	Name	Dec 2020 Snowfall
MA-BE-21	Cheshire 0.5 NNW	30.1"	MA-NF-1	Norwood 1.3 NW	13.1"
MA-WR-88	Leicester 2.5 WSW	23.1"	CT-NH-72	Northford 0.8 SW	13.0"
CT-TL-2	Staffordville 0.4 NNW	19.5"	MA-HD-25	Ludlow 2.3 SW	12.7"
MA-FR-17	Buckland 1.8 ESE	18.5"	MA-HD-28	Westfield 2.8 SE	12.5"
MA-MD-125	Tewksbury 3.6 SSE	17.7"	MA-MD-47	West Townsend 0.5 W	12.4"
CT-TL-15	Central Somers 0.3 N	17.6"	CT-NH-43	Wallingford Center 3.3 NNW	12.3"
MA-WR-41	Auburn 2.6 SW	17.5"	RI-KN-14	Greene 1.4 E	12.3"
MA-FR-13	Conway 2.9 NW	17.2"	CT-MD-25	Middlefield 0.6 SE	11.4"
MA-ES-48	Andover 0.6 E	17.2"	CT-HR-8	North Granby 1.3 ENE	11.3"
MA-MD-12	Acton 1.3 SW	16.9"	CT-FR-9	Brookfield 3.3 SSE	11.2"
MA-ES-41	Danvers 0.8 ESE	16.9"	CT-MD-21	Killingworth 2.6 ESE	11.2"
MA-MD-81	Wakefield 0.5 NNW	16.7"	MA-ES-70	Newburyport 0.6 N	11.2"
MA-WR-8	Fitchburg 1.6 SSW	16.5"	CT-NL-29	East Lyme 0.5 SW	10.7"
MA-MD-156	Marlborough 2.8 ENE	16.0"	CT-LT-34	Woodbury Center 1.5 SSW	10.4"
MA-MD-7	Winchester 0.7 SE	15.9"	CT-LT-22	New Milford 5.3 SSW	10.0"
MA-ES-4	Groveland 0.5 WSW	15.9"	RI-PR-45	Manville 0.4 WSW	10.0"
MA-MD-126	Melrose 0.5 NE	15.6"	MA-BR-8	Dighton 1.1 WSW	9.7"
MA-FR-12	Sunderland 1.3 SE	15.4"	CT-NL-6	New London 1.0 NNW	9.5"
MA-MD-158	Sherborn 1.1 NW	15.4"	MA-BR-30	Taunton 3.9 N	9.5"
CT-TL-27	Willington 2.7 SE	15.1"	MA-BR-61	Mansfield 2.4 ENE	9.5"
RI-PR-33	Greenville 0.7 NNW	15.1"	RI-WS-31	Kingston 7.5 NNE	9.3"
CT-HR-15	Southington 3.0 E	15.0"	CT-FR-3	New Canaan 1.9 ENE	9.1"
CT-HR-65	Newington 1.9 SSW	14.8"	CT-NH-45	Naugatuck 1.7 NNE	8.8"
CT-LT-9	New Hartford Center 3.2 SW	14.5"	RI-WS-47	Westerly 0.8 WNW	8.6"
CT-MD-23	Higganum 0.7 N	14.5"	RI-KN-2	East Greenwich 2.3 ESE	8.5"
MA-MD-51	Maynard 0.7 ESE	14.5"	CT-NL-21	Griswold 0.9 N	8.2"

CT-TL-40	Coventry 0.3 NNE	14.1"	MA-BA-2	Falmouth 3.1 NNW	7.8"
MA-HD-30	Hampden 2.0 NW	14.0"	MA-BA-64	Sandwich 1.5 SSE	7.1"
MA-MD-42	Holliston 0.8 S	14.0"	CT-NL-24	Stonington 1.4 NNW	6.8"
RI-PR-51	North Smithfield 0.6 S	13.9"	CT-FR-25	Norwalk 2.9 NNW	6.6"
CT-WN-8	Moosup 1.7 NE	13.8"	MA-BA-77	South Dennis 1.0 NW	6.0"
CT-NH-57	New Haven 2.9 NNW	13.7"	MA-BA-3	Falmouth 3.0 E	5.2"
MA-ES-12	Boxford 2.4 S	13.7"	RI-NW-18	Jamestown 0.3 SSE	4.6"
MA-FR-10	Conway 0.9 SW	13.5"	NY-SF-114	Fishers Island 0.5 NE	4.3"
RI-PR-28	North Smithfield 0.7 SE	13.2"	MA-BA-76	Barnstable 0.7 NE	4.2"
MA-MD-119	Watertown 1.1 W	13.2"	MA-BA-72	Yarmouth 2.0 S	4.0"
MA-NF-11	Millis 2.0 SW	13.2"	MA-BA-45	Sandwich 0.9 NNE	2.3"

December 2020 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. The high point with the rain that fell on the 30<sup>th</sup> of November that we reported on the 1<sup>st</sup> of December. The low point after the snow fell on the 17<sup>th</sup>, reported on the 18<sup>th</sup>.

400 Reports per Day was our record reporting average for December.

December 2020

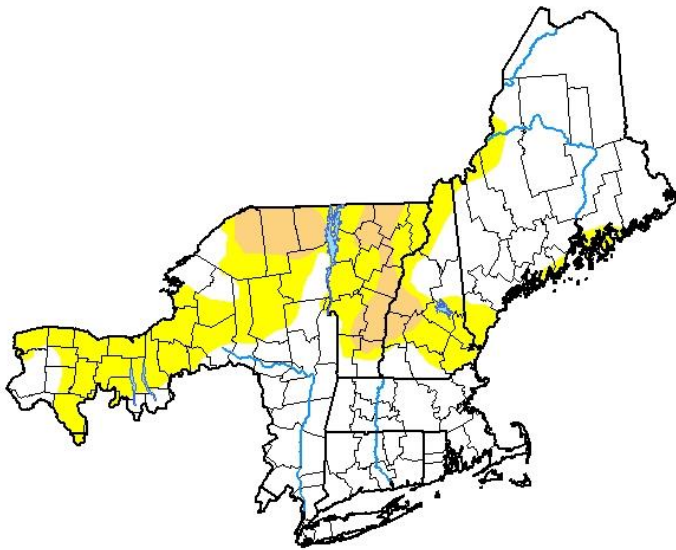
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 451	2 419	3 407	4 405	5 428
6 423	7 399	8 395	9 401	10 400	11 408	12 400
13 411	14 402	15 412	16 383	17 391	18 366	19 381
20 378	21 388	22 382	23 389	24 382	25 397	26 399
27 391	28 394	29 398	30 389	31 424		

Just what we needed. Plenty of precip in December helped get rid of the last of the Drought classifications for our immediate area.

Every drop counts and zeros do too!

## U.S. Drought Monitor Northeast RFC

**January 12, 2021**  
(Released Thursday, Jan. 14, 2021)  
Valid 7 a.m. EST



*Drought Conditions (Percent Area)*

	None	D0	D1	D2	D3	D4
<b>Current</b>	64.23	28.23	7.53	0.00	0.00	0.00
<b>Last Week</b> <i>01-05-2021</i>	65.84	27.02	7.14	0.00	0.00	0.00
<b>3 Months Ago</b> <i>10-13-2020</i>	10.60	17.11	29.33	31.45	11.51	0.00
<b>Start of Calendar Year</b> <i>12-29-2020</i>	67.55	25.31	7.14	0.00	0.00	0.00
<b>Start of Water Year</b> <i>09-29-2020</i>	5.16	22.39	24.44	40.31	7.69	0.00
<b>One Year Ago</b> <i>01-14-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Deborah Bathke  
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**

Thanks to all that made our recent network fundraiser the success that it was.

A new climate decade is upon us. Check out the updated precipitation normals here in this [blog post](#).

A wrap up to Year 2020 is the subject of our next WxTalk Webinar. This Thursday, January 28th, at 1pm, on **A Review of Significant Weather Events Occurring in 2020**, from Greg Carbin at our Weather Prediction Center (WPC) in College Park MD. All our WxTalk Webinars are recorded and uploaded on YouTube for later viewing and listening.

January is named after Janus, the two headed god. Our weather has been quiet these past two weeks, but be always aware of the two-headed nature of January's weather, and the two different appearances our own 4" diameter gauge can have, with and without the funnel and inner cylinder.

We start February with a look at our favorite furry and four-legged climatologists. Tuesday February 2<sup>nd</sup> marks yet another "Groundhog Day" as we mark the mid-point of winter in a time-honored way.

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