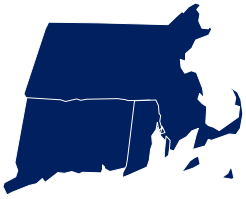
Community Collaborative Rain, Hail & Snow Network

Southern New England



April 2017

For observers new and seasoned alike, it is truly great to have you as part of our network. We have weathered the winter and look forward to spring flowers, green growth, welcome rains, and perhaps those snows and below freezing nights will be in our past.

March brought an unusually cold month and another significant snow storm. We also signed up nearly 70 new observers, and a few more have joined since the 1st of April, so we look forward to many more joining us as we continue the valuable work of measuring and mapping precipitation.

April marks the midpoint of our Water Year, so we will look at our station reports so far. A few changes to our website have occurred in the past month. Hail Week is coming, so a mention of Hail reporting. The Map of the Month is Fairfield County CT. We mark the anniversary of Rhode Island entering our network. Patriots Day comes on the 3rd Monday of April in Massachusetts. That holiday does not come and pass unnoticed, not among this unique group of volunteers.

Lots to cover, so let's get into it.

Midway through the Water Year

Transitioning from winter to summer, this midpoint of the Water Year, it is a good time to look back and check on our reports. Use this table to compare with others. Fill in missing reports. Learn a little more about our drought conditions. See how much snow we received this season, omitting what occurred in the first weekend of April. In a 6 month period, our normal amount of precipitation should be around 25".

Speed was the key in creating this table, so apologies if a station was left off this list. Omitted stations with "NA"'s for precip. Multi-Day Reports quickly tabulated. No Multi-Day Reports overlapping October 1 or April 1. Totals from October 1 – March 31, a time period spanning 182 days. Stations with 90% of the days, 168 days or higher, covered.

Watershed	Watershed Name	Station	Station Name	Precip	Snow Fall	Days Covered
01060003	Piscataqua-Salmon Falls					
0106000310	Hamptom River - Frontal Atlantic Ocean	MA-ES-1	Salisbury 3.7 NW	28.00''	63.7''	182
01070004	Nashua					
0107000401	North Nashua River	MA-WR-13	Leominster 1.5 S	22.90''	68.0''	181
0107000401	North Nashua River	MA-WR-44	Westminster 0.6 WSW	18.48''	60.8''	170
0107000402	Headwaters Nashua River	MA-MD-25	Ayer 0.1 SW	19.33''	0.0''	169
0107000403	Squannacook River	MA-MD-47	West Townsend 0.5 W	23.01''	73.3''	182
01070005	Concord					
0107000502	Concord River	MA-MD-12	Acton 1.3 SW	25.10''	59.7''	182
0107000502	Concord River	MA-MD-51	Maynard 0.7 ESE	25.91''	54.7''	182
0107000502	Concord River	MA-MD-53	Acton 4.0 ENE	22.31''	13.0''	170
0107000502	Concord River	MA-MD-61	Stow 2.3 NW	20.74''	60.3''	178
0107000502	Concord River	MA-MD-62	Chelmsford 1.2 E	22.34''	0.0''	181
0107000502	Concord River	MA-WR-28	Berlin 1.3 WSW	24.46''	51.7''	182
0107000502	Concord River	MA-WR-42	Northborough 2.3 N	22.61''	51.7''	182
01070006	Merrimack River					
0107000613	Shawsheen River	MA-MD-52	Lexington 0.6 SW	21.95''	55.4''	182
0107000614	Powwow River - Merrimack River	MA-ES-3	Haverhill 3.6 WNW	26.77''	65.3''	182
0107000614	Powwow River - Merrimack River	MA-ES-4	Groveland 0.5 WSW	27.30''	66.5''	182
0107000614	Powwow River - Merrimack River	MA-ES-20	Haverhill 0.7 N	24.58''	63.8''	182
0107000614	Powwow River - Merrimack River	MA-ES-27	Amesbury 1.2 ENE	27.70''	61.7''	182
01080201	Middle Connecticut					
0108020106	Manhan River - Connecticut River	MA-FR-12	Sunderland 1.3 SE	18.34''	53.6''	182
0108020106	Manhan River - Connecticut River	MA-HS-2	Westhampton 1.8 SW	23.70''	70.0''	181

0108020106	Manhan River - Connecticut River	MA-HS-8	Williamsburg 1.2 WSW	19.38''	65.2''	182
0108020106	Manhan River - Connecticut River	MA-HS-10	Northampton 1.6 NE	18.71''	60.4''	181
0108020107	Batchelor Brook - Connecticut River	MA-HD-13	Springfield 4.1 W	17.36''	8.5''	174
01080202	Miller					
01080203	Deerfield					
0108020305	Lower Deerfield River	MA-FR-10	Conway 0.9 SW	19.86''	63.5''	182
0108020305	Lower Deerfield River	MA-FR-13	Conway 2.9 NW	22.61''	70.2''	182
0108020305	Lower Deerfield River	MA-FR-17	Buckland 1.8 ESE	22.52''	68.9''	182
01080204	Chicopee					
01080205	Lower Connecticut					
0108020501	Mill River - Connecticut River	CT-HR-5	Enfield 1.5 SE	18.76''	53.9''	182
0108020502	Scantic River	CT-TL-15	Central Somers 0.3 N	18.18''	63.3''	182
0108020503	Park River	CT-HR-9	West Hartford 2.7 NNW	20.69''	32.6''	182
0108020503	Park River	CT-HR-11	West Hartford 2.7 SSE	18.16''	54.9''	180
0108020505	Roaring Brook - Connecticut River	CT-HR-6	Wethersfield 1.2 WSW	18.03''	44.5''	177
0108020505	Roaring Brook - Connecticut River	CT-HR-22	East Hartford 1.3 E	20.47''	50.2''	182
0108020506	Mattabesset River	CT-HR-15	Southington 3.0 E	20.24''	69.8''	182
0108020506	Mattabesset River	CT-HR-18	Berlin 2.4 SSE	20.03''	54.7''	182
01080206	Westfield					
0108020601	Headwaters Westfield River	MA-HS-14	Plainfield 2.4 ESE	22.08''	71.9''	179
01080207	Farmington					
0108020701	Still River	CT-LT-15	Colebrook 1.0 NE	21.79''	80.5''	182
0108020702	West Branch Farmington River	MA-BE-4	Becket 5.6 SSW	21.64''	92.2''	182
0108020704	Headwaters Farmington River	CT-HR-24	Collinsville 0.9 NW	20.32''	64.2''	182
0108020704	Headwaters Farmington River	CT-HR-28	North Canton 0.8 SSW	21.07''	64.5''	177
0108020704	Headwaters Farmington River	CT-LT-9	New Hartford Center 3.2 SW	20.55''	71.3''	182
0108020705	Salmon Brook	CT-HR-8	North Granby 1.3 ENE	19.27''	63.9''	182
01090001	Charles					
0109000102	Ipswich River	MA-ES-2	Beverly 2.8 NW	22.01''	25.8''	181
0109000102	Ipswich River	MA-ES-12	Boxford 2.4 S	23.96''	51.1''	182
0109000102	Ipswich River	MA-MD-45	Wilmington 1.5 NE	22.33''	41.8''	182
0109000104	Saugus River - Frontal Broad Sound	MA-ES-8	Marblehead 0.8 SW	24.17''	42.2''	180
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-7	Winchester 0.7 SE	23.53''	44.9''	182
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-11	Cambridge 0.9 NNW	24.55''	0.0''	182
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-44	Medford 1.2 W	23.24''	46.6''	182
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-67	Lexington 2.3 SE	23.57''	54.9''	179
0109000105	Mystic River - Frontal Boston Harbor	MA-SF-10	Chelsea 0.8 N	25.30''	53.9''	180
0109000106	Upper Charles River	MA-MD-42	Holliston 0.8 S	23.69''	48.5''	182
0109000106	Upper Charles River	MA-MD-55	Holliston 0.7 W	24.18''	41.6''	181
0109000106	Upper Charles River	MA-NF-11	Millis 2.0 SW	24.22''	44.1''	182
0109000106	Upper Charles River	MA-WR-1	Milford 2.3 NNW	24.67''	52.5''	182

0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-74	Somerville 0.7 SSE	19.90''	18.8''	180
0109000108	Neponset River - Frontal Boston Harbor	MA-NF-1	Norwood 1.3 NW	23.32''	52.0''	182
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-NF-5	Weymouth 0.5 NW	24.38''	43.0''	169
01090002	Cape Cod					
0109000201	North River - Frontal Massachusetts Bay	MA-PL-5	Kingston 3.3 WNW	26.98''	60.5''	179
0109000202	Cape Cod	MA-BA-3	Falmouth 3.0 E	23.36''	40.9''	182
0109000202	Cape Cod	MA-BA-8	Falmouth 1.8 WSW	20.77''	29.0''	179
0109000202	Cape Cod	MA-BA-13	Falmouth 0.6 NNW	22.71''	34.1''	175
0109000202	Cape Cod	MA-BA-18	Waquoit 0.6 SSW	23.36''	41.7''	175
0109000202	Cape Cod	MA-BA-19	East Falmouth 0.7 NW	23.99''	40.4''	177
0109000202	Cape Cod	MA-BA-22	Yarmouth 0.9 NNW	24.19''	16.4''	179
0109000202	Cape Cod	MA-BA-27	Wellfleet 0.7 NW	21.27''	43.7''	174
0109000202	Cape Cod	MA-BA-33	Brewster 1.5 ESE	23.05''	16.2''	179
0109000202	Cape Cod	MA-BA-47	Mashpee 2.4 WSW	23.65''	33.6''	175
0109000202	Cape Cod	MA-BA-50	Falmouth 5.4 NNE	21.06''	29.3''	181
0109000202	Cape Cod	MA-BA-51	Orleans 3.0 S	27.85''	41.0''	182
0109000203	Mattapoisett River - Frontal Buzzards Bay	MA-PL-6	Middleborough 5.5 E	22.98''	32.4''	180
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-14	Dartmouth 2.5 SSW	23.03''	38.1''	182
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-5	Little Compton 1.7 NW	21.86''	25.3''	182
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-7	Little Compton 0.6 E	22.37''	22.2''	182
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-2	Vineyard Haven 0.8 WSW	25.54''	33.4''	180
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-5	West Tisbury 2.9 N	26.98''	37.2''	182
0109000207	Nantucket Island	MA-NT-1	Nantucket 3.8 WNW	23.15''	11.0''	182
01090003	Blackstone					
0109000301	Upper Blackstone River	MA-WR-41	Auburn 2.6 SW	23.59''	60.0''	182
0109000301	Upper Blackstone River	MA-WR-43	Leicester 2.4 ESE	22.74''	59.9''	181
0109000302	Lower Blackstone River	MA-NF-26	Bellingham 2.4 S	24.00''	18.3''	182
0109000302	Lower Blackstone River	RI-PR-28	North Smithfield 0.7 SE	25.77''	40.8''	173
01090004	Narragansett					
0109000401	Upper Taunton River	MA-BR-30	Taunton 3.9 N	22.17''	38.3''	182
0109000403	Threemile River	MA-BR-9	Taunton 2.6 NW	24.04''	58.3''	182
0109000403	Threemile River	MA-BR-33	Taunton 2.4 W	23.46''	53.9''	182
0109000404	Ten Mile River	MA-BR-17	North Attleboro 0.8 E	21.54''	12.8''	182
0109000404	Ten Mile River	MA-BR-23	Attleboro 0.9 ENE	20.63''	30.5''	182
0109000405	Wonnasquatucket River-Moshassuck River	RI-PR-33	Greenville 0.7 NNW	26.00''	59.2''	182
0109000406	Pawtuxet River	RI-PR-17	Cranston 4.1 E	24.38''	44.5''	180
0109000407	Palmer River	MA-BR-2	Rehoboth 2.1 N	21.34''	38.5''	182
0109000407	Palmer River	MA-BR-35	Swansea 4.6 WNW	22.15''	46.2''	174

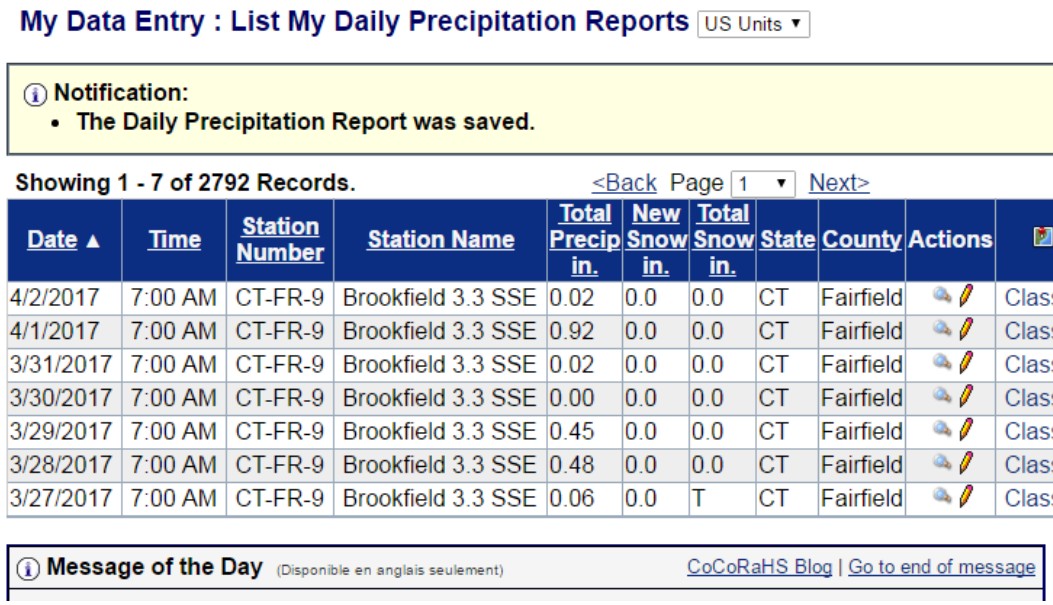
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-3	Norton 1.8 NNE	23.24''	53.8''	182
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-8	Dighton 1.1 WSW	24.24''	50.7''	182
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-16	Somerset 0.4 SSE	22.85''	38.0''	179
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-19	Somerset 2.0 NNE	23.67''	12.7''	177
0109000409	Narragansett Bay	RI-KN-2	East Greenwich 2.3 ESE	25.69''	49.5''	182
0109000409	Narragansett Bay	RI-NW-4	Middletown 1.1 SW	19.03''	38.0''	182
0109000409	Narragansett Bay	RI-NW-11	Tiverton 0.8 SSW	27.06''	40.1''	182
0109000409	Narragansett Bay	RI-PR-32	Providence 2.3 NE	21.31''	49.8''	182
0109000409	Narragansett Bay	RI-WS-31	Kingston 7.5 NNE	25.47''	44.0''	181
01090005	Pawcatuck-Wood					
0109000501	Wood River	RI-WS-1	Hope Valley 3.7 S	26.59''	25.0''	179
0109000502	Upper Pawcatuck River	RI-WS-32	Kingston 6.9 NNW	25.86''	33.6''	182
0109000503	Lower Pawcatuck River	RI-WS-35	Westerly 1.0 SW	21.83''	27.9''	169
01100001	Quinebaug					
0110000103	Fivemile River	CT-WN-4	East Killingly 1.3 SW	22.26''	57.9''	181
0110000105	Mossup River	CT-WN-8	Moosup 1.7 NE	24.00''	61.9''	181
01100002	Shetucket					
0110000201	Willimantic River	CT-TL-2	Staffordville 0.4 NNW	18.44''	69.5''	182
0110000203	Shetucket River	CT-NL-10	Norwich 2.5 NNE	25.24''	51.0''	182
01100003	Thames					
0110000302	Thames River-Frontal New London Harbor	CT-NL-6	New London 1.0 NNW	26.36''	40.7''	182
0110000302	Thames River-Frontal New London Harbor	CT-NL-7	Uncasville-Oxoboxo Valley 5.6 W	26.63''	45.5''	182
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-18	Stonington 0.5 NNE	24.84''	34.1''	182
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-22	Central Waterford 2.7 SSW	24.40''	32.9''	182
01100004	Quinnipiac					
0110000401	Quinnipiac River	CT-HR-23	Southington 0.9 SSE	17.24''	6.0''	181
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-11	Westbrook Center 1.5 NE	22.97''	47.6''	182
0110000403	Mill River - Frontal Long Island Sound	CT-NH-16	Milford 1.8 E	22.83''	42.5''	182
0110000403	Mill River - Frontal Long Island Sound	CT-NH-29	Hamden 3.0 WSW	21.32''	51.4''	182
01100005	Housatonic					
0110000501	Headwaters Housatonic River	MA-BE-3	Stockbridge .2 NNE	20.71''	61.6''	180
0110000501	Headwaters Housatonic River	MA-BE-10	Pittsfield 2.0 NNW	20.98''	79.2''	179
0110000501	Headwaters Housatonic River	MA-BE-11	Great Barrington 3.0 N	22.34''	62.2''	179
0110000508	Still River - Housatonic River	CT-FR-9	Brookfield 3.3 SSE	20.27''	51.6''	182

0110000508	Still River - Housatonic River	CT-FR-41	Bethel 3.5 NNE	18.53''	51.5''	182
0110000510	Eightmile Brook - Housatonic River	CT-FR-44	Newtown 4.3 E	20.76''	48.9''	178
0110000511	Headwaters Naugatuck River	CT-LT-7	Litchfield 2.3 NNE	19.08''	7.1''	178
0110000512	Outlet Naugatuck River	CT-NH-22	Prospect 0.5 SW	22.83''	61.3''	182
0110000512	Outlet Naugatuck River	CT-NH-26	Prospect 1.5 NW	21.91''	66.2''	182
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-23	Shelton 1.3 W	20.71''	48.7''	182
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-42	Monroe 0.1 SE	20.19''	39.6''	182
01100006	Saugatuck					
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-3	New Canaan 1.9 ENE	24.13''	48.3''	168
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-25	Norwalk 2.9 NNW	22.65''	40.3''	182
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-29	Ridgefield 1.9 SSE	24.21''	56.9''	182
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-20	Westport 2.5 ENE	22.19''	0.0''	179
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-32	Monroe 0.8 W	21.41''	27.8''	182
0110000604	Mianus River-Rippowam River	CT-FR-35	Darien 1.8 ENE	22.01''	33.7''	182

A changed look, continued

With the use of the website, after submitting a Daily Report, a 7 Day history of your past reports appears. A Magnifying Glass icon appears to expand on the details of that report. A Pencil icon appears so that you can edit that report.

The 7 day list is helpful in seeing if we receive a normal for our area 1" of precipitation each 7 day period. The number of records is your station total since it began reporting.



My Data Entry : List My Daily Precipitation Reports US Units

Notification:
- **The Daily Precipitation Report was saved.**

Showing 1 - 7 of 2792 Records. <Back Page 1 Next>

Date ▲	Time	Station Number	Station Name	Total Precip in.	New Snow in.	Total Snow in.	State	County	Actions	Maps
4/2/2017	7:00 AM	CT-FR-9	Brookfield 3.3 SSE	0.02	0.0	0.0	CT	Fairfield		Classic | New
4/1/2017	7:00 AM	CT-FR-9	Brookfield 3.3 SSE	0.92	0.0	0.0	CT	Fairfield		Classic | New
3/31/2017	7:00 AM	CT-FR-9	Brookfield 3.3 SSE	0.02	0.0	0.0	CT	Fairfield		Classic | New
3/30/2017	7:00 AM	CT-FR-9	Brookfield 3.3 SSE	0.00	0.0	0.0	CT	Fairfield		Classic | New
3/29/2017	7:00 AM	CT-FR-9	Brookfield 3.3 SSE	0.45	0.0	0.0	CT	Fairfield		Classic | New
3/28/2017	7:00 AM	CT-FR-9	Brookfield 3.3 SSE	0.48	0.0	0.0	CT	Fairfield		Classic | New
3/27/2017	7:00 AM	CT-FR-9	Brookfield 3.3 SSE	0.06	0.0	T	CT	Fairfield		Classic | New

Message of the Day (Disponible en anglais seulement) CoCoRaHS Blog | Go to end of message

Now for the background story why. In one word: Quality. In a few words: Reporting mistakes are made. In a few sentences: Quality begins with you. The previous format of displaying your recent report *after* the Message of the Day, was not working well. Please check all of your reported values before clicking and pressing "Submit". Please check all of your reported values after you click or press Submit. If you make a mistake, correct it as soon as you can, using the pencil icon.

If you got into the habit during the winter, or want to get into the habit of reporting snow fall, snow depth and SWE values, you are encouraged to continue throughout the year. Reporting zeros in the snow section, even it's obvious that there is no snow, absolutely anywhere to be found, is valuable. With this addition you can see your reported snow values easily.

With this list of reports, you can see easily if you have any missing reports. Please fill in your missing reports. Your reported measurements increase in value if they are continuous, without any missing reports.

As a new observer, my favorite habit was "What color dot did I get?" looking at the map to see if it what I reported was a grey dot, blue dot or red dot. With the Maps feature, you can see that easily now, as well.

Coordinators check on your reported entries. A team of volunteer quality inspectors check on your reported entries. Without doing so, our network would be the laughing stock of the scientific community. With this addition, we ask that each and every one of you check your reported entries before and after they are submitted. Quality begins with every one of us.

For those of you using the mobile app, you need to be especially careful. Large fingers on a small screen is a recipe for entry mistakes. It is all too common with the mobile app. There is a "History" function with the mobile app to see the results of your entry that day. However, you need to access a web browser to make any changes to your reported entries.

Please. Quality. Check your reported measurements.

The "H" in CoCoRaHS is for Hail

Before CoCoRaHS started nearly 20 years ago, our Founder, Nolan Doesken, wanted to build a database on Hail. Such a database did not exist. There are records for air temperatures and snow fall and precipitation, but none that existed for hail stones.

When the Fort Collins flood occurred in July 1997, plans changed but as the network was created for rainfall, hail was included and grew from there. Our network's database on hail is one of a kind. You are encouraged to participate in it. It is available for inquiry, on a certain date range or state or county or size of hail stone.

The season for convective thunderstorms is coming soon, so a brief mention about the often overlooked part of our network name, hail. The "H" in CoCoRaHS may be silent, but rest assured, when hail falls and makes impact, the impact is not silent.

In the months to come, should hail stones from above fall on your station, please fill out and submit a Hail Report from the website.

Why? Large hail can be followed by damaging winds or even a tornado. In the life cycle of a thunderstorm, most of the time when we have large hail, we get the downburst winds when the storm collapses. But sometimes, we can experience weak tornadoes or stronger ones like Springfield MA experienced on June 1, 2011.

Hail reports find their way directly and in real-time to your local weather forecast office. This can help your forecast correlate what they are seeing on weather radar, and provide the necessary information to issue warnings for areas in the storm's path. This is an opportunity for you to "See something. Say something." to alert your forecast office in real-time to take a closer look into what is occurring at your area.

Hail reports find their way into our database. Use the "View Data" options available on the website and make an inquiry to the Hail reports being submitted throughout the network.

Key tips: Report the time of day that hail started and stopped. A small ruler to measure the hail. Taking a picture of the hail stones next to a ruler can help your memory as you report the size of the hail stones.

If you're feeling nostalgic, a link to the Hail Form from the list of Printable Forms.

Detail and Summary for March 2017

From the National Weather Service (NWS) Climate sites for March 2017.

Location	Station ID	Mar 2017 Precip	Mar departure from normal	Jan-Feb-Mar Precip	3 month departure from normal	Oct-Mar Precip	6 month departure from normal
Pittsfield MA	PSF	3.11''	-0.26''	8.69''	-0.28''	18.41''	-2.20''
Bridgeport CT	BDR	4.34''	0.29''	9.53''	-0.41''	21.44''	1.14''
Hartford CT	BDL	3.93''	0.31''	9.91''	0.17''	17.87''	-3.57''
Worcester MA	ORH	4.01''	-0.21''	10.36''	-0.58''	24.62''	0.90''
Providence RI	PVD	3.85''	-1.16''	11.03''	-1.13''	22.46''	-2.36''
Boston MA	BOS	4.18''	-0.14''	11.65''	0.72''	23.06''	0.42''

At long last, it appears that the pendulum of precipitation is swinging back the other way. Rains fell on the last day of March, which are excluded from our station totals, but included in these Climate Station totals, but look beyond one day and one month and see that over 3 months and 6 months, it is welcome to see departures closer to zero than in recent memory.

March started off windy and cold. The cold air stayed in place for the first two weeks, until the big snow event on the 14th, bringing blizzard conditions and closed roads for some of the day. In the last two weeks of the month, thawing temperatures melted most of the snow cover. About 1" of rain came for the 27th and 28th, starting our spring like pattern.

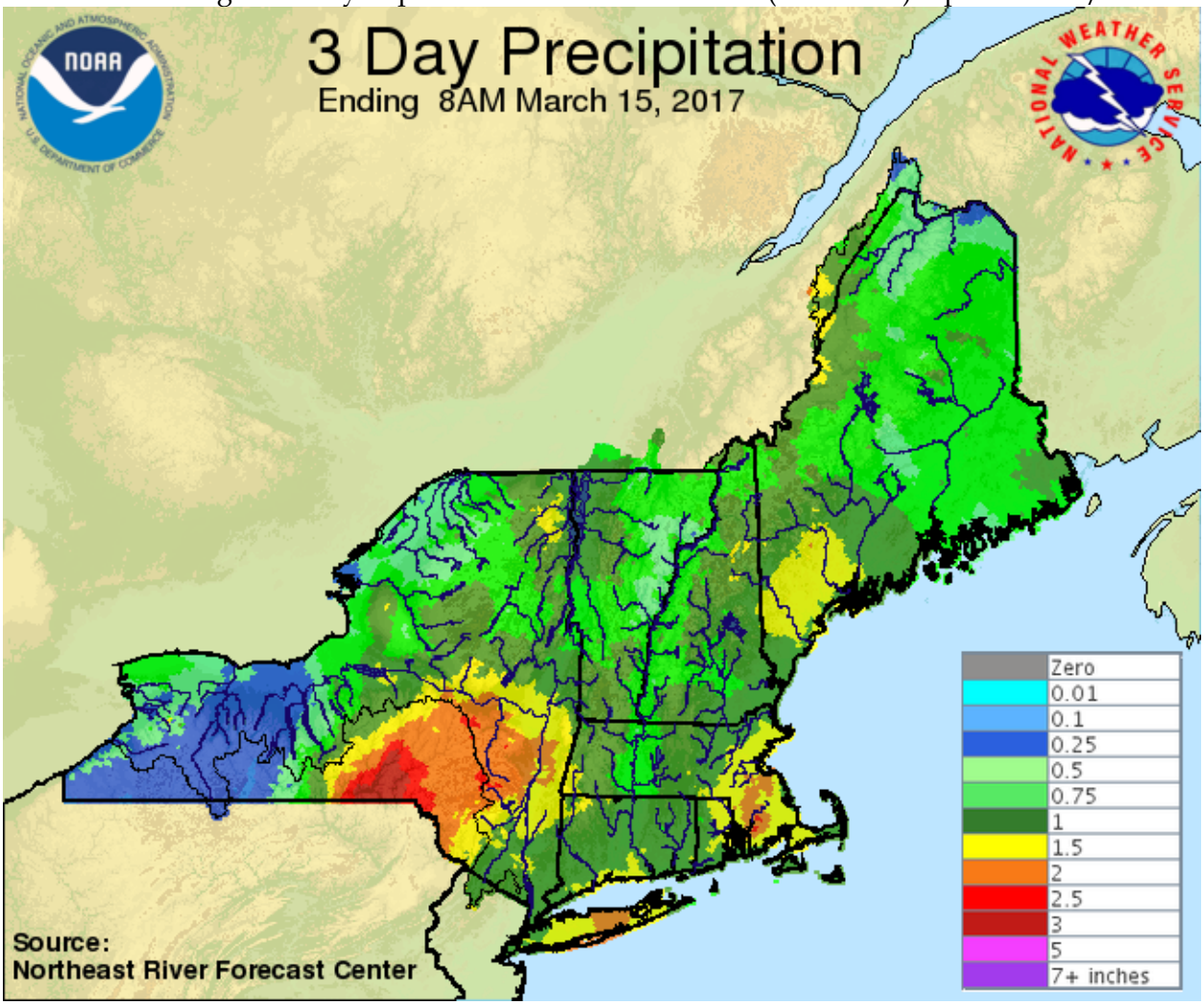
We left last year in October, touching 7000 Daily Reports in that 31 day month. We have some catching up to do, before we start breaking records again, like we did most of last year. These spring months are a great time to resume regular measuring and reporting, so please do so.

Condition Monitoring Reports. Please get into the habit of making these reports, weekly or twice a month, about what you are seeing in your immediate area with as much supporting words as possible. In the next couple of months, I would like to be able to show you where these reports are directed to and are used.

Take in this next section of your reports with appreciation of your efforts.

From your reports for March 2017

Observers reporting	260
Reported all 28 days	117
Completed by Multi-Day Reports	22
Missing 1 or 2 reports	27
Daily Reports	6297
Zero Reports	3216
Non-Zero Reports	3081
Daily Comments	1644
Multi-Day Reports	129
Condition Monitoring Reports	22
Significant Weather Reports	55
Snowfall Reports	4163
Snow Depth Reports	2587
SWE Reports	808
Highest Daily Report	2.90″ from Riverton RI (RI-NW-11) reported on 3/15

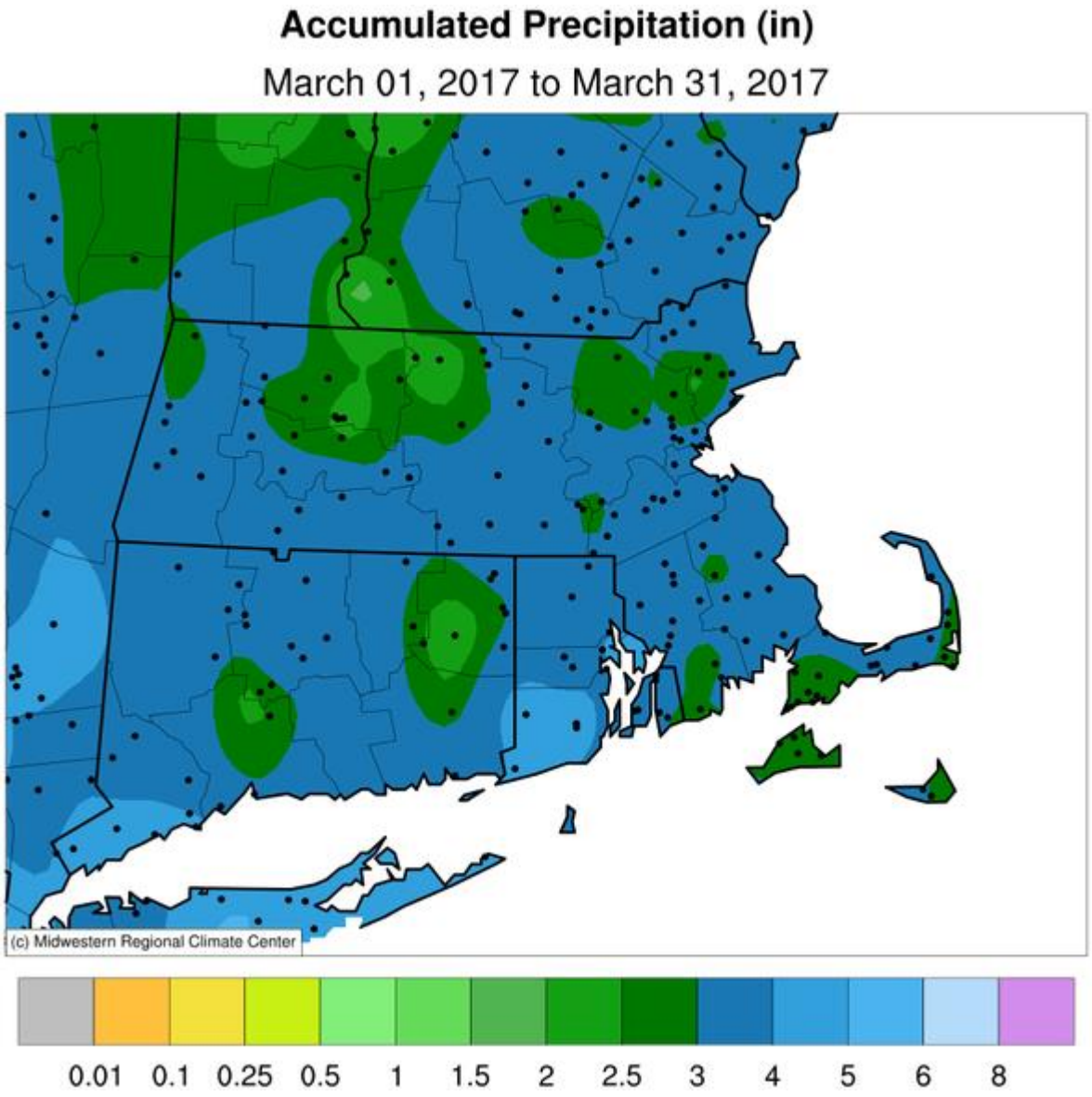


Watershed	Watershed Name	Station	Station Name	Precip
01060003	Piscataqua-Salmon Falls			
0106000310	Hamptom River - Frontal Atlantic Ocean	MA-ES-1	Salisbury 3.7 NW	3.47''
01070004	Nashua			
0107000401	North Nashua River	MA-WR-44	Westminster 0.6 WSW	2.83''
0107000401	North Nashua River	MA-WR-8	Fitchburg 1.6 SSW	2.19''
0107000401	North Nashua River	MA-WR-52	Fitchburg 2.3 N	2.60''
0107000403	Squannacook River	MA-MD-47	West Townsend 0.5 W	3.33''
0107000403	Squannacook River	MA-MD-36	Townsend 2.6 S	3.78''
01070005	Concord			
0107000502	Concord River	MA-WR-28	Berlin 1.3 WSW	3.08''
0107000502	Concord River	MA-WR-42	Northborough 2.3 N	2.55''
0107000502	Concord River	MA-MD-61	Stow 2.3 NW	2.60''
0107000502	Concord River	MA-MD-12	Acton 1.3 SW	2.77''
0107000502	Concord River	MA-MD-51	Maynard 0.7 ESE	3.55''
0107000502	Concord River	MA-MD-62	Chelmsford 1.2 E	2.98''
01070006	Merrimack River			
0107000613	Shawsheen River	MA-MD-52	Lexington 0.6 SW	2.96''
0107000614	Powwow River - Merrimack River	MA-ES-3	Haverhill 3.6 WNW	4.51''
0107000614	Powwow River - Merrimack River	MA-ES-20	Haverhill 0.7 N	3.54''
0107000614	Powwow River - Merrimack River	MA-ES-4	Groveland 0.5 WSW	4.75''
0107000614	Powwow River - Merrimack River	MA-ES-27	Amesbury 1.2 ENE	3.88''
01080201	Middle Connecticut			
0108020106	Manhan River - Connecticut River	MA-HS-2	Westhampton 1.8 SW	3.81''
0108020106	Manhan River - Connecticut River	MA-HS-8	Williamsburg 1.2 WSW	2.65''
0108020106	Manhan River - Connecticut River	MA-HS-10	Northampton 1.6 NE	2.92''
0108020106	Manhan River - Connecticut River	MA-FR-12	Sunderland 1.3 SE	2.93''
01080202	Miller			
01080203	Deerfield			
0108020305	Lower Deerfield River	MA-FR-17	Buckland 1.8 ESE	3.16''
0108020305	Lower Deerfield River	MA-FR-13	Conway 2.9 NW	3.12''
0108020305	Lower Deerfield River	MA-FR-10	Conway 0.9 SW	2.49''
01080204	Chicopee			
0108020402	Ware River	MA-WR-54	Barre 1.4 NNE	3.04''
01080205	Lower Connecticut			
0108020501	Mill River - Connecticut River	CT-HR-5	Enfield 1.5 SE	3.58''
0108020502	Scantic River	CT-TL-15	Central Somers 0.3 N	3.67''
0108020503	Park River	CT-HR-9	West Hartford 2.7 NNW	4.19''
0108020503	Park River	CT-HR-11	West Hartford 2.7 SSE	3.65''
0108020505	Roaring Brook - Connecticut River	CT-HR-6	Wethersfield 1.2 WSW	3.22''
0108020505	Roaring Brook - Connecticut River	CT-HR-22	East Hartford 1.3 E	4.19''

0108020506	Mattabesset River	CT-HR-15	Southington 3.0 E	3.66''
01080206	Westfield			
01080207	Farmington			
0108020701	Still River	CT-LT-15	Colebrook 1.0 NE	3.81''
0108020702	West Branch Farmington River	MA-BE-4	Becket 5.6 SSW	3.56''
0108020704	Headwaters Farmington River	CT-LT-9	New Hartford Center 3.2 SW	3.64''
0108020704	Headwaters Farmington River	CT-HR-24	Collinsville 0.9 NW	3.72''
0108020704	Headwaters Farmington River	CT-HR-28	North Canton 0.8 SSW	3.26''
0108020705	Salmon Brook	CT-HR-8	North Granby 1.3 ENE	3.28''
01090001	Charles			
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-24	Newburyport 0.8 SW	3.84''
0109000102	Ipswich River	MA-MD-45	Wilmington 1.5 NE	2.75''
0109000102	Ipswich River	MA-ES-12	Boxford 2.4 S	3.22''
0109000102	Ipswich River	MA-ES-2	Beverly 2.8 NW	2.58''
0109000104	Saugus River - Frontal Broad Sound	MA-SF-2	Winthrop 0.2 N	3.32''
0109000104	Saugus River - Frontal Broad Sound	MA-ES-8	Marblehead 0.8 SW	3.20''
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-7	Winchester 0.7 SE	3.12''
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-44	Medford 1.2 W	3.39''
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-11	Cambridge 0.9 NNW	3.66''
0109000106	Upper Charles River	MA-WR-1	Milford 2.3 NNW	3.11''
0109000106	Upper Charles River	MA-MD-42	Holliston 0.8 S	2.70''
0109000106	Upper Charles River	MA-NF-11	Millis 2.0 SW	2.95''
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-43	Somerville 0.8 SSE	3.06''
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-74	Somerville 0.7 SSE	3.13''
0109000107	Lower Charles River - Frontal Boston Harbor	MA-SF-1	Boston 0.5 WSW	2.74''
0109000108	Neponset River - Frontal Boston Harbor	MA-NF-1	Norwood 1.3 NW	3.75''
01090002	Cape Cod			
0109000202	Cape Cod	MA-BA-8	Falmouth 1.8 WSW	2.59''
0109000202	Cape Cod	MA-BA-14	North Falmouth 0.5 ENE	2.75''
0109000202	Cape Cod	MA-BA-50	Falmouth 5.4 NNE	2.57''
0109000202	Cape Cod	MA-BA-19	East Falmouth 0.7 NW	2.81''
0109000202	Cape Cod	MA-BA-3	Falmouth 3.0 E	2.73''
0109000202	Cape Cod	MA-BA-47	Mashpee 2.4 WSW	2.82''
0109000202	Cape Cod	MA-BA-45	Sandwich 0.9 NNE	3.12''
0109000202	Cape Cod	MA-BA-49	Sandwich 3.5 SSE	3.67''
0109000202	Cape Cod	MA-BA-22	Yarmouth 0.9 NNW	4.65''
0109000202	Cape Cod	MA-BA-33	Brewster 1.5 ESE	3.16''
0109000202	Cape Cod	MA-BA-27	Wellfleet 0.7 NW	3.51''
0109000202	Cape Cod	MA-BA-51	Orleans 3.0 S	3.88''
0109000202	Cape Cod	MA-BA-12	Orleans 1.1 E	2.93''
0109000202	Cape Cod	MA-BA-30	Eastham 0.6 SW	3.48''

0109000202	Cape Cod	MA-BA-43	Chatham 0.4 WSW	3.77''
0109000203	Mattapoisett River - Frontal Buzzards Bay	MA-PL-19	Rochester 1.2 NNW	3.44''
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-14	Dartmouth 2.5 SSW	2.81''
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-5	Little Compton 1.7 NW	3.22''
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-7	Little Compton 0.6 E	2.74''
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-5	West Tisbury 2.9 N	2.99''
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-2	Vineyard Haven 0.8 WSW	2.40''
0109000207	Nantucket Island	MA-NT-1	Nantucket 3.8 WNW	3.30''
01090003	Blackstone			
0109000301	Upper Blackstone River	MA-WR-41	Auburn 2.6 SW	2.99''
0109000301	Upper Blackstone River	MA-WR-43	Leicester 2.4 ESE	3.25''
0109000302	Lower Blackstone River	MA-NF-26	Bellingham 2.4 S	3.00''
01090004	Narragansett			
0109000401	Upper Taunton River	MA-BR-30	Taunton 3.9 N	3.45''
0109000401	Upper Taunton River	MA-PL-15	Abington 1.2 NNE	3.04''
0109000403	Threemile River	MA-BR-33	Taunton 2.4 W	3.73''
0109000403	Threemile River	MA-BR-9	Taunton 2.6 NW	3.57''
0109000404	Ten Mile River	MA-BR-17	North Attleboro 0.8 E	2.63''
0109000404	Ten Mile River	MA-BR-23	Attleboro 0.9 ENE	3.07''
0109000405	Wonnasquatucket River-Moshassuck River	RI-PR-33	Greenville 0.7 NNW	3.33''
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-51	North Smithfield 0.6 S	2.77''
0109000406	Pawtuxet River	RI-PR-17	Cranston 4.1 E	4.28''
0109000407	Palmer River	MA-BR-2	Rehoboth 2.1 N	3.57''
0109000407	Palmer River	MA-BR-35	Swansea 4.6 WNW	3.43''
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-3	Norton 1.8 NNE	3.86''
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-16	Somerset 0.4 SSE	3.85''
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-19	Somerset 2.0 NNE	4.17''
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-8	Dighton 1.1 WSW	4.27''
0109000409	Narragansett Bay	RI-WS-31	Kingston 7.5 NNE	4.08''
0109000409	Narragansett Bay	RI-KN-2	East Greenwich 2.3 ESE	4.03''
0109000409	Narragansett Bay	RI-PR-32	Providence 2.3 NE	3.00''
0109000409	Narragansett Bay	RI-NW-4	Middletown 1.1 SW	2.72''
0109000409	Narragansett Bay	RI-NW-11	Tiverton 0.8 SSW	4.55''
01090005	Pawcatuck-Wood			
0109000501	Wood River	RI-WS-25	Rockville 0.4 E	4.75''
0109000501	Wood River	RI-WS-1	Hope Valley 3.7 S	4.05''
0109000502	Upper Pawcatuck River	RI-WS-32	Kingston 6.9 NNW	4.02''
0109000503	Lower Pawcatuck River	RI-WS-35	Westerly 1.0 SW	3.57''
0109000504	Frontal Block Island Sound	RI-WS-36	Charlestown 3.0 WSW	3.77''
01100001	Quinebaug			
0110000103	Fivemile River	CT-WN-6	Dayville 2.0 ENE	2.70''

0110000103	Fivemile River	CT-WN-4	East Killingly 1.3 SW	2.82''
0110000105	Mossup River	CT-WN-8	Moosup 1.7 NE	3.21''
01100002	Shetucket			
0110000201	Willmantic River	CT-TL-2	Staffordville 0.4 NNW	3.21''
0110000203	Shetucket River	CT-NL-10	Norwich 2.5 NNE	3.52''
01100003	Thames			
0110000302	Thames River-Frontal New London Harbor	CT-NL-7	Uncasville-Oxoboxo Valley 5.6 W	4.17''
0110000302	Thames River-Frontal New London Harbor	CT-NL-6	New London 1.0 NNW	3.85''
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-22	Central Waterford 2.7 SSW	3.76''
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-24	Stonington 1.4 NNW	3.72''
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-18	Stonington 0.5 NNE	3.60''
01100004	Quinnipiac			
0110000401	Quinnipiac River	CT-HR-23	Southington 0.9 SSE	3.04''
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-11	Westbrook Center 1.5 NE	3.63''
0110000403	Mill River - Frontal Long Island Sound	CT-NH-16	Milford 1.8 E	3.85''
0110000403	Mill River - Frontal Long Island Sound	CT-NH-29	Hamden 3.0 WSW	3.27''
01100005	Housatonic			
0110000501	Headwaters Housatonic River	MA-BE-11	Great Barrington 3.0 N	3.77''
0110000501	Headwaters Housatonic River	MA-BE-3	Stockbridge .2 NNE	3.13''
0110000508	Still River - Housatonic River	CT-FR-41	Bethel 3.5 NNE	2.72''
0110000508	Still River - Housatonic River	CT-FR-9	Brookfield 3.3 SSE	3.83''
0110000510	Eightmile Brook - Housatonic River	CT-FR-44	Newtown 4.3 E	3.67''
0110000512	Outlet Naugatuck River	CT-NH-26	Prospect 1.5 NW	3.86''
0110000512	Outlet Naugatuck River	CT-NH-22	Prospect 0.5 SW	3.74''
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-42	Monroe 0.1 SE	3.49''
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-23	Shelton 1.3 W	3.47''
01100006	Saugatuck			
0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-31	Newtown 4.6 SSW	3.77''
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-29	Ridgefield 1.9 SSE	5.24''
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-3	New Canaan 1.9 ENE	4.56''
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-25	Norwalk 2.9 NNW	4.22''
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-20	Westport 2.5 ENE	4.54''
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-32	Monroe 0.8 W	3.92''
0110000604	Mianus River-Rippowam River	CT-FR-35	Darien 1.8 ENE	4.31''


Accumulated Precipitation (in)
March 01, 2017 to March 31, 2017
(c) Midwestern Regional Climate Center
0.01 0.1 0.25 0.5 1 1.5 2 2.5 3 4 5 6 8

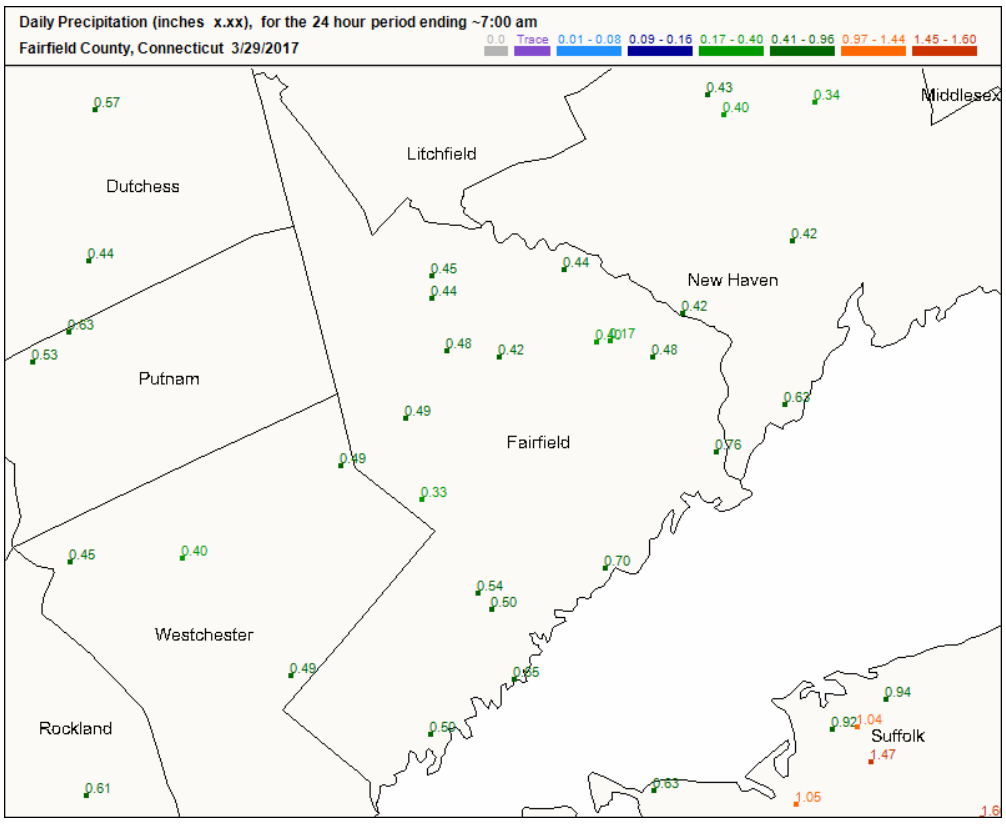
Map of the Month – Fairfield County CT

One of the most populated counties in Connecticut, there are nearly 1 million people living in Fairfield County on 625 sq miles of land. Bordering to the east is the Housatonic River. Dams named Shepaug and Stevenson provide flood control and hydroelectric power along the Housantonic River. The borders with New York State, jagged and odd shaped as they are, are consistent with the watersheds with the Housatonic River and smaller rivers named Saugatuck, Norwalk, Fivemile, Noroton, Rippowam and Mianus.

Nearly 1 million people must get their drinking water from somewhere. Each city, and even the historical colonial houses near the iconic Flagpole in Newtown CT, get their drinking water from its nearby reservoirs.

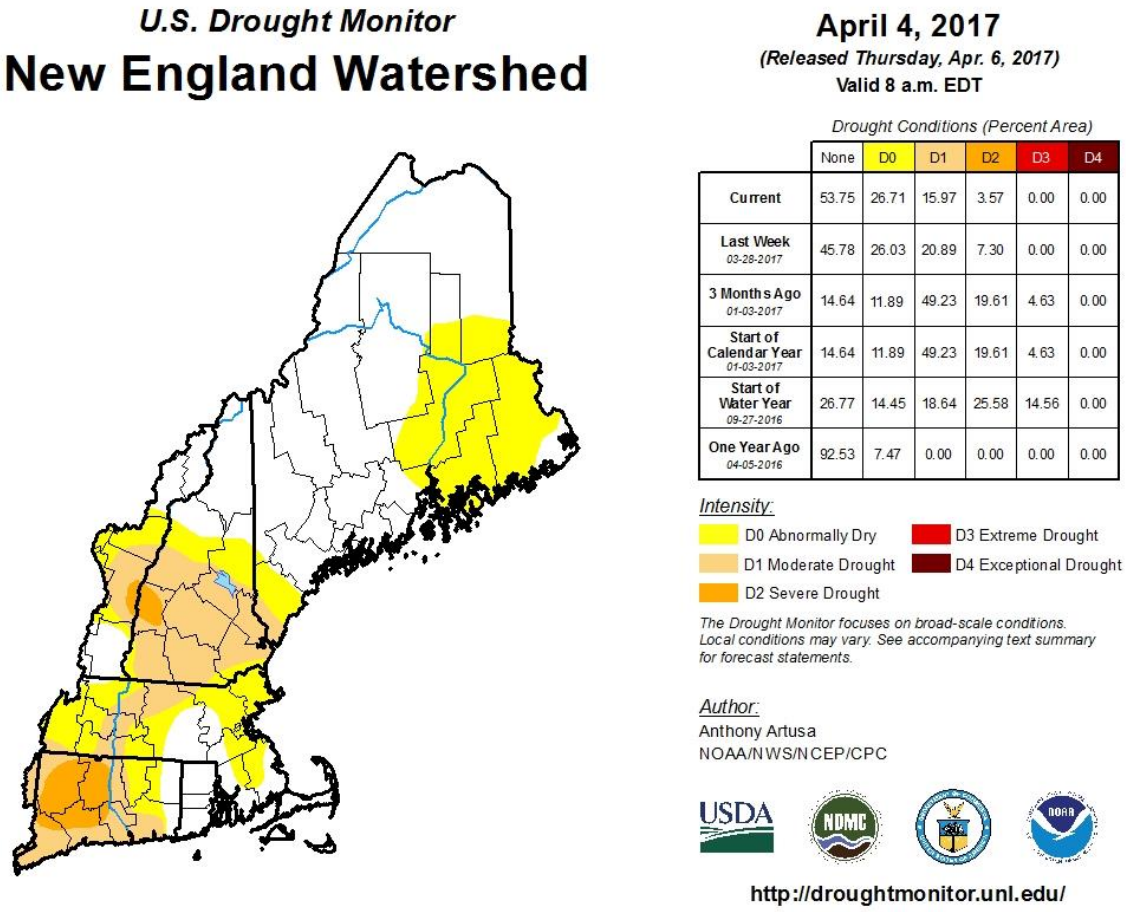
Ridgefield CT is unique in its altitude and starting 5 watersheds. The Still River, Croton, Mianus, Norwalk and Saugatuck rivers all start in Ridgefield.

We started off with a small handful of observers in Fairfield County, grew tremendously last year and certainly have more gaps to fill in. In this season of growth, if you know of someone who wants to grow with us, ask them to join us at CoCoRaHS.



From the Drought Monitor.

More improvement this past month in most areas. The rains will stop and another period of dry weather can return. Every drop counts and zeros do too!



For a viewing explanation on the Drought Monitor, the CoCoRaHS animated video is on YouTube.

Rulers of the Snow

For March, the snow storm of the 14th made the largest impact on the totals. Leaving out the NA's, 112 observers reported precip, 43 observers reported snow fall, 32 observers reported snow depth, and 28 observers reported all 3 for ALL days in March!!! You are the Rulers of the Snow.

Station	Name	March 2017 Snowfall	All Days Precip	All Days Snowfall	All Days Snow Depth
CT-HR-18	Berlin 2.4 SSE	24.5''			
CT-HR-31	Bristol 2.7 WNW	23.5''			
CT-FR-29	Ridgefield 1.9 SSE	23.0''	✓		
CT-HR-15	Southington 3.0 E	21.9''	✓		✓
MA-BE-4	Becket 5.6 SSW	21.3''	✓	✓	✓
CT-HR-35	Weatogue 0.7 E	21.1''			
CT-LT-17	Thomaston 1.2 N	20.5''			
CT-LT-9	New Hartford Center 3.2 SW	20.3''	✓	✓	✓
CT-NH-22	Prospect 0.5 SW	19.9''	✓		
CT-LT-15	Colebrook 1.0 NE	19.5''	✓		
CT-NH-26	Prospect 1.5 NW	19.1''	✓		
CT-FR-31	Newtown 4.6 SSW	19.0''	✓		
CT-HR-24	Collinsville 0.9 NW	19.0''	✓	✓	✓
CT-LT-14	Watertown 0.5 S	19.0''			
MA-HS-7	Plainfield 2.2 SW	18.1''			
CT-FR-32	Monroe 0.8 W	18.0''	✓		
CT-FR-45	Newtown 1.2 ESE	18.0''			
CT-HR-8	North Granby 1.3 ENE	18.0''	✓	✓	✓
CT-HR-28	North Canton 0.8 SSW	18.0''	✓	✓	
CT-HR-39	Farmington 1.6 SW	18.0''			
MA-ES-4	Groveland 0.5 WSW	17.8''	✓	✓	✓
MA-HS-2	Westhampton 1.8 SW	17.8''	✓		
CT-FR-3	New Canaan 1.9 ENE	17.7''	✓		
CT-FR-41	Bethel 3.5 NNE	17.4''	✓		✓
CT-FR-9	Brookfield 3.3 SSE	17.2''	✓	✓	✓
CT-WN-2	North Grosvenor Dale 1.7 SSE	17.0''			
CT-TL-2	Staffordville 0.4 NNW	16.9''	✓		
MA-BE-11	Great Barrington 3.0 N	16.7''			
CT-TL-15	Central Somers 0.3 N	16.5''	✓		
MA-WR-56	Sterling 4.3 NW	16.4''			
CT-FR-44	Newtown 4.3 E	16.1''	✓	✓	✓

Happy Anniversary, Rhode Island!

April 1, 2008. Rhode Island is admitted to CoCoRaHS, the 30th state to join our network, and the first of the 6 New England states to join the network.

These 4 observers all joined within a few months of April 2008 and have stayed active since. In total, they have made 11,589 daily reports through the end of March 2017.

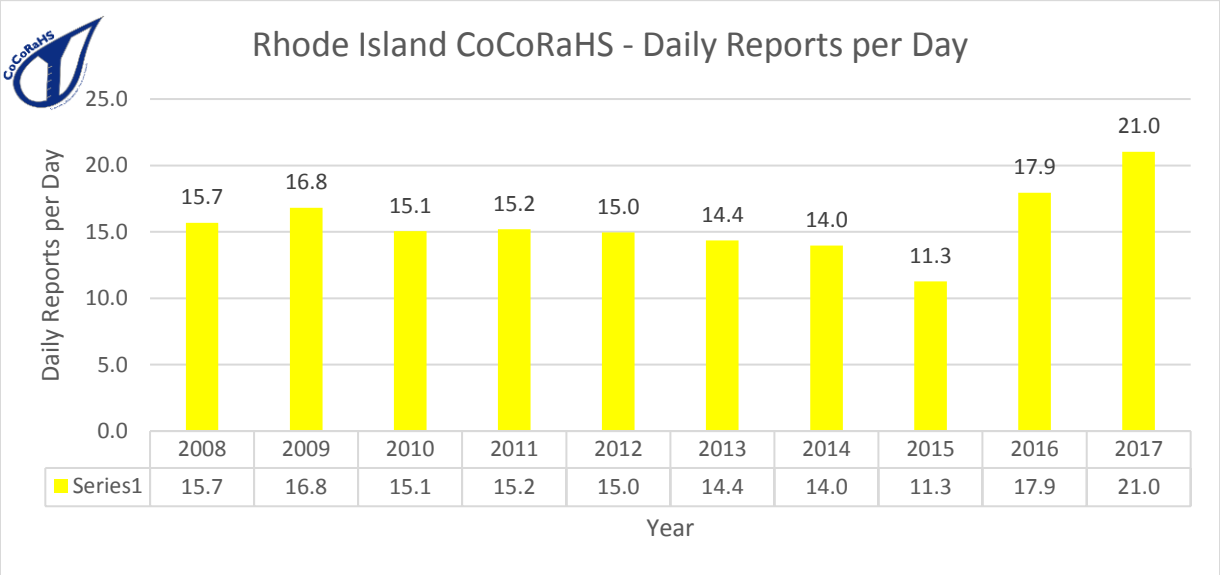
RI-WS-1	Hope Valley 3.7 S
RI-NW-4	Middletown 1.1 SW
RI-KN-2	East Greenwich 2.3 ESE
RI-NW-5	Little Compton 1.7 NW

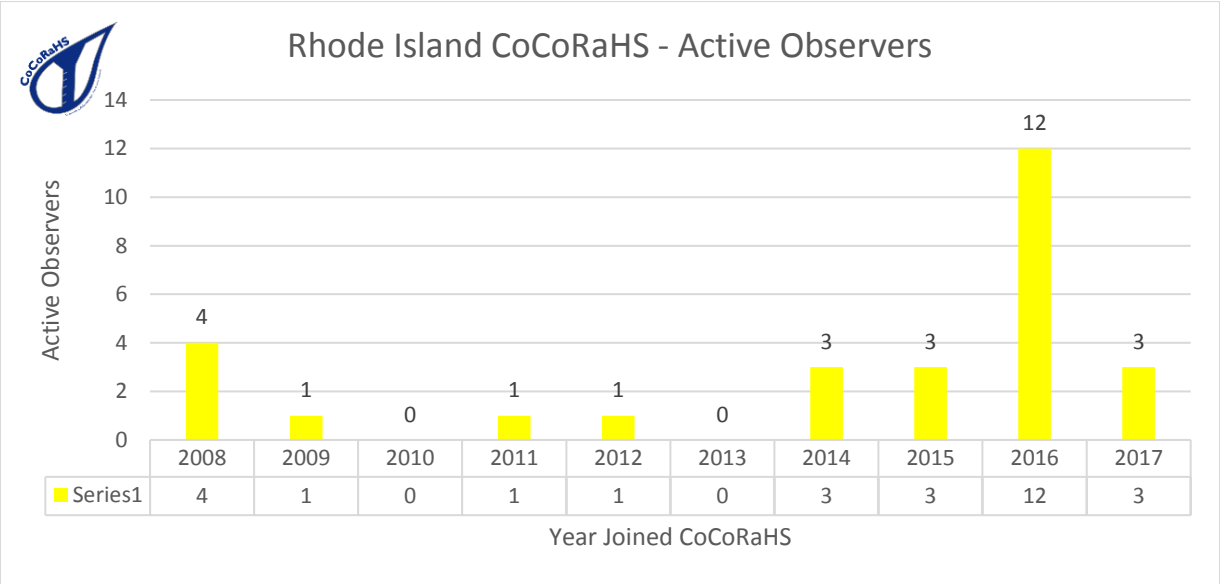
Rhode Island CoCoRaHS

Comments by Joe DelliCarpini – Science & Operations Officer, NWS Taunton MA

Back in 2007, Henry Reges, National Coordinator of CoCoRaHS (who himself has roots in southern New England) approached me about having Connecticut, Massachusetts, and Rhode Island join the expanding CoCoRaHS network in the eastern U.S. We decided to focus on Rhode Island first, since as a relatively small state that is covered by our NWS office in Taunton, and would be a good "test case" for the rest of the region.

Fortunately we have a long-standing partnership with the Rhode Island Water Resources Board and state Emergency Management Office, so they were a natural fit as partners with our office for CoCoRaHS. We were able to spread the word around the state that we were looking for volunteers to join CoCoRaHS, and were fortunate to have over two dozen observers sign up in the first couple of months. The program expanded from there, and as of this month, there are 28 active CoCoRaHS observers in the Ocean State!


Rhode Island CoCoRaHS - Daily Reports per Day
Daily Reports per Day
25.0
20.0
15.0
10.0
5.0
0.0
15.7
16.8
15.1
15.2
15.0
14.4
14.0
11.3
17.9
21.0
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
Series1 15.7 16.8 15.1 15.2 15.0 14.4 14.0 11.3 17.9 21.0
Year


Rhode Island CoCoRaHS - Active Observers
Active Observers
14
12
10
8
6
4
2
0
4
1
0
1
1
0
3
3
12
3
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
Series1 4 1 0 1 1 0 3 3 12 3
Year Joined CoCoRaHS

Wrap up

Our area NWS Forecast Offices are offering SkyWarn classes in the upcoming months. Look at their website for details. If the location and time fits, they are recommended to attend.

Prelude to Patriots Day

It was the first time I met Joe in his Taunton Forecast Office, on a gorgeous warm September afternoon a year and half ago. The Southern New England Weather Conference is usually scheduled for the last Saturday in October, near the Blue Hill Observatory. Joe thought it would be a good idea that I should speak at that Conference about CoCoRaHS. He was going to see if I could be placed on the agenda for 15 minutes.

15 minutes?!? I could talk for an hour or more! Several of you have experienced, first hand, me talking for an hour or more. How was I going to summarize and synthesize all that I have learned and all that this network means to me in a mere 15 minutes?

I went away thinking, thinking that Sunday afternoons in September – January and the Super Bowl, would be considered "Patriots Day". The Patriots never play on Patriots Day. The Red Sox do. Maybe there would be a connection there about the Patriots, the 1st ones, not the football team.

The next page was going to be my closing remarks, summarizing this network in the context of Patriots Day. This is for all of you, and especially those that mark this unique and special state holiday in Massachusetts. There is a chance you may see these very same remarks again at some other time. Others have recently asked the question "Why participate? Why volunteer? Why measure and report precipitation for this network?" I have no better location appropriate words than these on the next page. Mark this holiday by submitting your Daily Report with pride on this Patriots Day, Monday April 17th .

If you like what you read, you are asked to email Joe and ask that I do get 15 minutes, or more, at the next Southern New England Weather Conference, to tell this to all of the weather professionals and enthusiasts alike.

Patriots Day

The holiday in Massachusetts, commemorating the Battles of Lexington and Concord, occurs this month. Robert Newman lit two lanterns and climbed 154 steps to place them in the belfry of the Old North Church. Paul Revere and William Dawes took separate routes as they rode on horseback to warn of the British advance.

A year later, Thomas Jefferson drafted the Declaration of Independence. John Hancock signed his name to the Declaration so large that King George would have little difficulty seeing it without his spectacles.

Jefferson was a weather buff. He carried a thermometer with him to Philadelphia and recorded the temperature several times a day.

As CoCoRaHS observers, we do not have lanterns, horses, or large signatures. Our records may not be as meticulous as Jefferson's, although Jefferson would be impressed with our Water Year Summaries.

Like the Patriots during our American Revolution, we are all volunteers bounded together by a common cause. We are part of a citizen-science project that warns others in real time with Significant Weather Reports and Hail Reports. No lanterns to light or 154 steps to climb.

We measure and report rain, hail and snow on a daily basis through the internet for so many to see and to make good use of. No need to get on horseback to get the word out or to send two riders to make certain of it.

We can make relevant and insightful comments with any of our reports and with our new Condition Monitoring Reports so that any King, Drought Monitor, River or Weather Forecaster can see and read easily. Probably without wearing their spectacles!

As a part of Southern New England's CoCoRaHS, with whatever Patriot in mind that best fits your personality, press or click "Submit" on our reports with pride in our area's Patriot past.

Thank you for all that you do for CoCoRaHS, whether in the past, present and in the days to come. Press or click "Submit" with pride!