



# Southern



# New England

**October 2016**

The red maple leaf is for the Red Maple, the State Tree of Rhode Island. This month of October is when the Red Maples show their brilliant red colors. Reds and browns seem to be dominating our drought map, too. Red Hurricane flags are flying in Florida ahead of Hurricane Matthew.

A new Water Year has begun, marking a time for our water resources to recharge themselves. Are you going to make any Water Year resolutions? A Comment with every report? Strive for 365 Daily Reports? The new Water Year gives us observers the opportunity to look at our reports, learn from them and to see what each one of us can do better and differently.

Articles follow on Quality with your reports and the first of several attempts that mentions snow reporting. Read on to see how a 30 day month in September did not slow you down.

The co-chair at a conference I was at recently said for me to tell our observers that reports of zero are just as valuable as reports of precipitation. Of course, I smiled and said that I will do so. But I know, and you all know, that we are heroes that report our zeros. It shows every day and it shows with the ever growing list of stations with complete station data for the month of September.

Welcome to all of our new observers. We have something special here.

# Quality Precipitation Data

One goal of our network is to provide accurate high-quality precipitation data to observers, decision makers and other end-users on a timely basis. With the thousands of reports made each day, mistakes are rare but they do occur.

Common errors include not changing the observation time on those mornings that it is precipitating, entering in the wrong date when filling in missed reports, something we call time-shifting, submitting a value on a Daily Report instead of a Multi-Day Report, and getting the decimal point in the wrong spot resulting in a precipitation value off by a factor of 10 or 100.

All of our reports are verified by another pool of volunteers that quality check our data. They compare reports to radar data and reports from surrounding stations. Any reports requiring verification from the quality group are sent to local Coordinators and Coordinators are asked to verify or correct the report with the observer.

When a Coordinator does send a message to you, please reply and understand that we are all trying to achieve the same goal, and that is to make sure that your report is of high quality.

Daily Precipitation Report	
Station Number:	Station Name:
Observation Date	10/4/2016 9:05 AM
Submitted	10/04/2016 7:06 PM
Total Precip Amount	17.00 in.
Notes	Submitted via CoCoRaHS Observer for Android version 1.1.14
Taken at registered location	Yes

The mobile app makes reporting zeros easy. However, the use of the mobile app lends itself to making mistakes when using a finger touch to put in a non-zero value. A tip in using the mobile app:

Backspace or delete the default values, then enter the non-zero value that you have to report.

Before you press “Submit” with pride, please spend a few seconds looking over your report. After your press “Submit” with pride, enjoy that child-like giddiness that new observers can have by seeing what color dot you got on the map. Spend a brief moment in time verifying your report during the day and your total at the end of the month.








Keep quality in mind as you submit your reports with pride.

## ***There is no season like the snow season***

From the heat and humidity of mid-September, we enter October. More than just leaves changing colors and falling to the ground, we have experienced snow during October in years past.

Whether it's the heat of the summer, or the cold of winter, each and every day, you can submit a snow report. There are 4 additional values to the daily precipitation report pertaining to new snow and snow depth.

Some observers have gotten into the habit of submitting a snow report with every report. All observers are encouraged to do the same.

Date ▲	Time	Station Number	Station Name	Total Precip in.	New Snow in.	Total Snow in.	State	County	View
9/16/2016	6:55 AM	RI-PR-45	Manville 0.4 WSW	0.00	0.0	NA	RI	Providence	
9/16/2016	7:00 AM	RI-KN-2	East Greenwich 2.3 ESE	0.00	0.0	NA	RI	Kent	
9/16/2016	7:00 AM	RI-NW-4	Middletown 1.1 SW	0.00	0.0	NA	RI	Newport	
9/16/2016	7:00 AM	RI-NW-5	Little Compton 1.7 NW	0.00	0.0	NA	RI	Newport	
9/16/2016	7:00 AM	RI-NW-7	Little Compton 0.6 E	0.00	0.0	0.0	RI	Newport	
9/16/2016	7:00 AM	RI-PR-20	West Glocester 3.4 SE	0.00	0.0	NA	RI	Providence	
9/16/2016	7:00 AM	RI-PR-32	Providence 2.3 NE	0.00	0.0	NA	RI	Providence	

New snow and snow depth reports are valuable, telling so many where the snow is and where it isn't. During the warm weather season, changing the default "NA" to 0 is easy and valuable. Obviously, when snow arrives, 0 will not be entered.

As you start the new Water Year, and look over your Water Year summaries for the 12 months that have passed, look closely at the snow values. A count is made of the number days with snow on the ground.

In newsletters to come, snow measuring and reporting will be covered more in depth. The jokes are not going to get any better. We will cover the intricacies of measuring and reporting snow in the next two newsletters.

Look at what other observers are doing by changing the "NA" for new snow and snow depth every day. Join in and while the snow stays away, change those NA's. There are no zeros like snow zeros.

## **Detail and Summary for September 2016**

From the National Weather Service (NWS) Climate sites for Sept 2016.

<b>Location</b>	<b>Station ID</b>	<b>Sep 2016 Precip</b>	<b>Sep departure from normal</b>	<b>Jul-Aug-Sep Precip</b>	<b>3 month departure from normal</b>	<b>Apr-Sep Precip</b>	<b>6 month departure from normal</b>
Pittsfield MA	PSF	1.87"	-2.09"	8.64"	-3.66"	17.61"	-7.16"
Bridgeport CT	BDR	2.73"	-0.75"	10.69"	-0.21"	18.16"	-4.28"
Hartford CT	BDL	2.42"	-1.46"	8.81"	-3.18"	15.73"	-8.68"
Worcester MA	ORH	3.27"	-0.66"	9.29"	-2.58"	15.79"	-8.57"
Providence RI	PVD	2.74"	-1.18"	9.40"	-1.41"	17.54"	-4.82"
Boston MA	BOS	1.38"	-2.06"	3.97"	-6.25"	11.04"	-10.09"

Post Tropical Cyclone Hermine spun its wind and rain to our area over Labor Day Weekend. Rainfall was light until the next widespread event on the 20<sup>th</sup> that is highlighted in the map from the River Forecast Center. More warm, sunny and dry weather continued until the last widespread precipitation event on the 27<sup>th</sup>-28<sup>th</sup>.

Overall, another dry month for most of our area. Yes, our network continues to capture the variability that may make some think that the drought is over. The local area river flows tell another story.

From last month, the number of Comments have increased. Great! Keep entering Comments to give context and more details to your report. We should strive to accumulate beyond 1000 to 2000 comments each month.

In the Comments that I am entering, I make note of each time I find dew on the gauge. Dew occurs more often that I had previously thought.

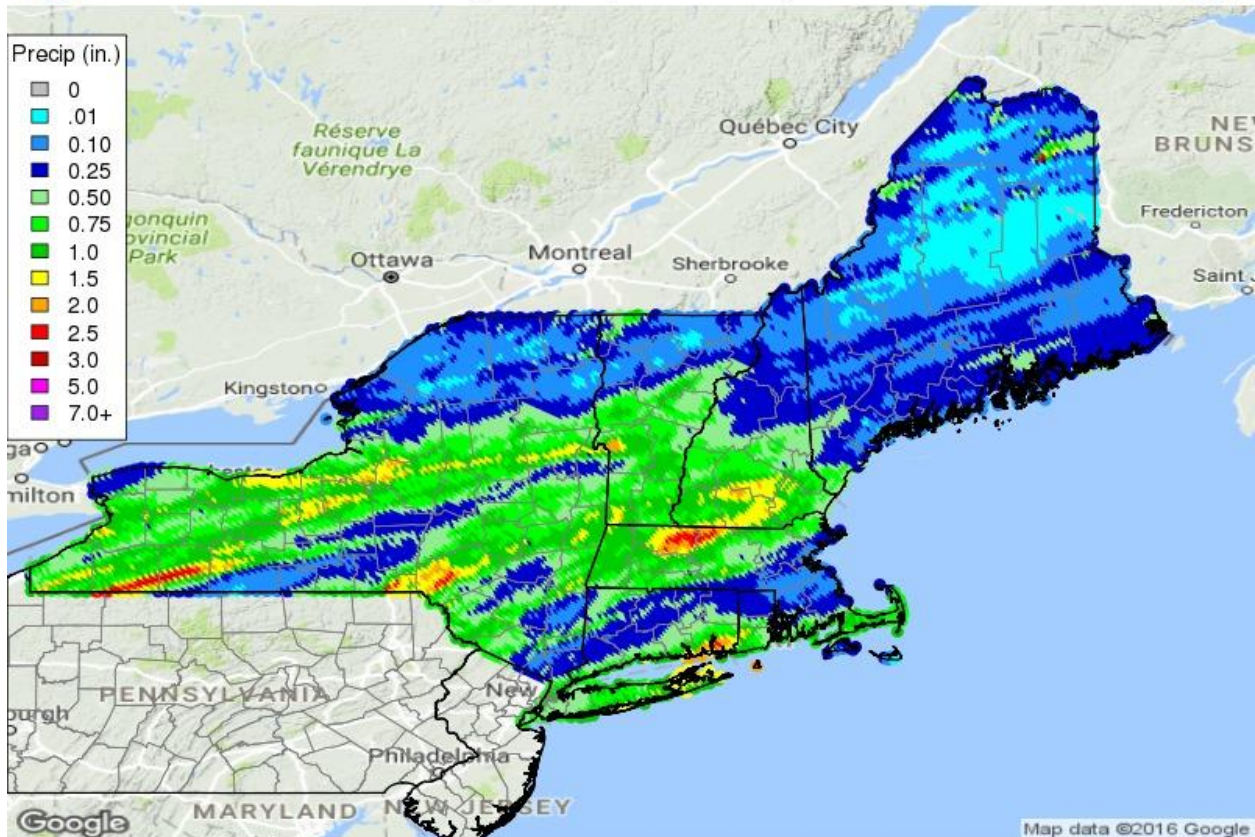
This is one paragraph I always like writing. Last September, our three states totaled 3574 Daily Reports. This September saw 3692 reports of zero entered! To the co-chair of the recent conference, fellow Coordinators and observers alike, yes, it is true that heroes continue to report their zeros in our Southern New England states. Well done by everyone! Enjoy the next few pages of your reports!

## From your reports for September 2016

Observers reporting	266	
Reported all 30 days	130	
Completed by Multi-Day Reports	27	
Missing 1 or 2 reports	34	*** Please look over your station data at end of the month.
Daily Reports	6441	
Zero Reports	3692	
Non-Zero Reports	2749	
Comments	875	
Multi-Day Reports	118	
Significant Weather Reports	6	
Hail Reports	0	
Snowfall Reports	2876	In September, why not?
Snow Depth Reports	424	We love to report zeros!
Highest Daily Report	3.19"	from Uncasville CT (CT-NL-8) reported on 9/20



### 3 Day Precipitation ending 8am September 20, 2016



Source: NOAA / NWS / Northeast River Forecast Center

The growing list is now at 157 stations. Appreciation is given to 5 additional observers who kept their records complete, but once again, we did get precipitation at the end of August and at the beginning of October.

Enjoy this growing list of stations that reported for all days in September!

Station	Location	Precip	County & State
MA-BE-10	Pittsfield 2.0 NNW	2.94"	Berkshire MA
MA-BE-5	Tyringham 1.5 WNW	3.64"	Berkshire MA
MA-BE-4	Becket 5.6 SSW	3.52"	Berkshire MA
CT-LT-14	Watertown 0.5 S	1.32"	Litchfield CT
CT-LT-15	Colebrook 1.0 NE	2.89"	Litchfield CT
CT-FR-39	Stamford 4.2 S	2.25"	Fairfield CT
CT-FR-29	Ridgefield 1.9 SSE	1.51"	Fairfield CT
CT-FR-3	New Canaan 1.9 ENE	2.82"	Fairfield CT
CT-FR-35	Darien 1.8 ENE	2.23"	Fairfield CT
CT-FR-25	Norwalk 2.9 NNW	2.64"	Fairfield CT
CT-FR-43	Bethel 0.5 E	1.24"	Fairfield CT
CT-FR-41	Bethel 3.5 NNE	1.23"	Fairfield CT
CT-FR-9	Brookfield 3.3 SSE	1.52"	Fairfield CT
CT-FR-31	Newtown 4.6 SSW	1.17"	Fairfield CT
CT-FR-32	Monroe 0.8 W	1.29"	Fairfield CT
CT-FR-23	Shelton 1.3 W	1.25"	Fairfield CT
CT-NH-16	Milford 1.8 E	2.34"	New Haven CT
CT-NH-26	Prospect 1.5 NW	1.93"	New Haven CT
CT-NH-22	Prospect 0.5 SW	2.38"	New Haven CT
CT-NH-29	Hamden 3.0 WSW	1.35"	New Haven CT
CT-NH-14	Prospect 1.9 ENE	1.64"	New Haven CT
CT-NH-21	East Haven 3.5 SSW	2.00"	New Haven CT
CT-NH-30	Cheshire Village 2.2 SE	1.51"	New Haven CT
MA-FR-17	Buckland 1.8 ESE	3.30"	Franklin MA
MA-FR-13	Conway 2.9 NW	2.66"	Franklin MA
MA-FR-10	Conway 0.9 SW	2.29"	Franklin MA
MA-FR-12	Sunderland 1.3 SE	2.61"	Franklin MA
MA-HS-2	Westhampton 1.8 SW	2.81"	Hampshire MA
MA-HS-8	Williamsburg 1.2 WSW	2.24"	Hampshire MA
MA-HS-10	Northampton 1.6 NE	2.96"	Hampshire MA
MA-HD-23	Springfield 2.5 WNW	2.66"	Hampden MA
MA-HD-20	Wilbraham 3.7 SSW	4.17"	Hampden MA
MA-HD-16	Wales 0.4 SSW	3.79"	Hampden MA
CT-HR-24	Collinsville 0.9 NW	1.61"	Hartford CT

CT-HR-28	North Canton 0.8 SSW	1.83"	Hartford CT
CT-HR-23	Southington 0.9 SSE	1.39"	Hartford CT
CT-HR-15	Southington 3.0 E	1.55"	Hartford CT
CT-HR-8	North Granby 1.3 ENE	1.60"	Hartford CT
CT-HR-39	Farmington 1.6 SW	1.18"	Hartford CT
CT-HR-9	West Hartford 2.7 NNW	1.57"	Hartford CT
CT-HR-36	West Hartford 1.1 W	1.20"	Hartford CT
CT-HR-18	Berlin 2.4 SSE	1.80"	Hartford CT
CT-HR-11	West Hartford 2.7 SSE	1.15"	Hartford CT
CT-HR-6	Wethersfield 1.2 WSW	1.26"	Hartford CT
CT-HR-22	East Hartford 1.3 E	1.35"	Hartford CT
CT-HR-5	Enfield 1.5 SE	1.95"	Hartford CT
CT-HR-7	Central Manchester 2.7 SW	1.31"	Hartford CT
CT-HR-40	Glastonbury Center 4.0 ENE	1.43"	Hartford CT
CT-TL-16	Vernon 3.5 NNE	1.69"	Tolland CT
CT-TL-15	Central Somers 0.3 N	2.02"	Tolland CT
CT-TL-18	Hebron 5.3 NW	1.38"	Tolland CT
CT-TL-13	Crystal Lake 1.2 W	1.57"	Tolland CT
CT-TL-14	Storrs 1.5 SW	1.36"	Tolland CT
CT-TL-2	Staffordville 0.4 NNW	2.48"	Tolland CT
CT-TL-4	Mansfield Center 1.9 SW	1.47"	Tolland CT
CT-MD-2	Portland 0.9 S	1.83"	Middlesex CT
CT-MD-5	Westbrook Center 1.1 N	2.62"	Middlesex CT
CT-MD-11	Westbrook Center 1.5 NE	2.87"	Middlesex CT
MA-WR-39	Gardner 1.2 SW	3.13"	Worcester MA
MA-WR-40	Gardner 1.4 SSW	2.68"	Worcester MA
MA-WR-41	Auburn 2.6 SW	1.71"	Worcester MA
MA-WR-13	Leominster 1.5 S	1.85"	Worcester MA
MA-WR-30	Shrewsbury 1.6 NNE	2.93"	Worcester MA
MA-WR-28	Berlin 1.3 WSW	2.12"	Worcester MA
MA-WR-18	Northborough 0.6 SSE	2.36"	Worcester MA
MA-WR-42	Northborough 2.3 N	2.82"	Worcester MA
MA-WR-1	Milford 2.3 NNW	1.26"	Worcester MA
CT-WN-11	Scotland 2.3 SSW	2.51"	Windham CT
CT-WN-6	Dayville 2.0 ENE	1.68"	Windham CT
CT-WN-8	Moosup 1.7 NE	2.33"	Windham CT
CT-WN-4	East Killingly 1.3 SW	2.04"	Windham CT
CT-NL-7	Uncasville-Oxoboxo Valley 5.6 W	2.63"	New London CT
CT-NL-5	Oakdale 2.6 WNW	2.85"	New London CT
CT-NL-22	Central Waterford 2.7 SSW	4.21"	New London CT
CT-NL-17	Waterford 2.2 N	4.25"	New London CT

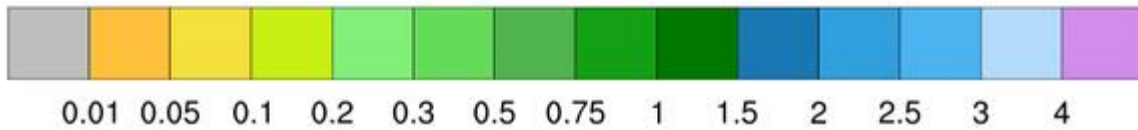
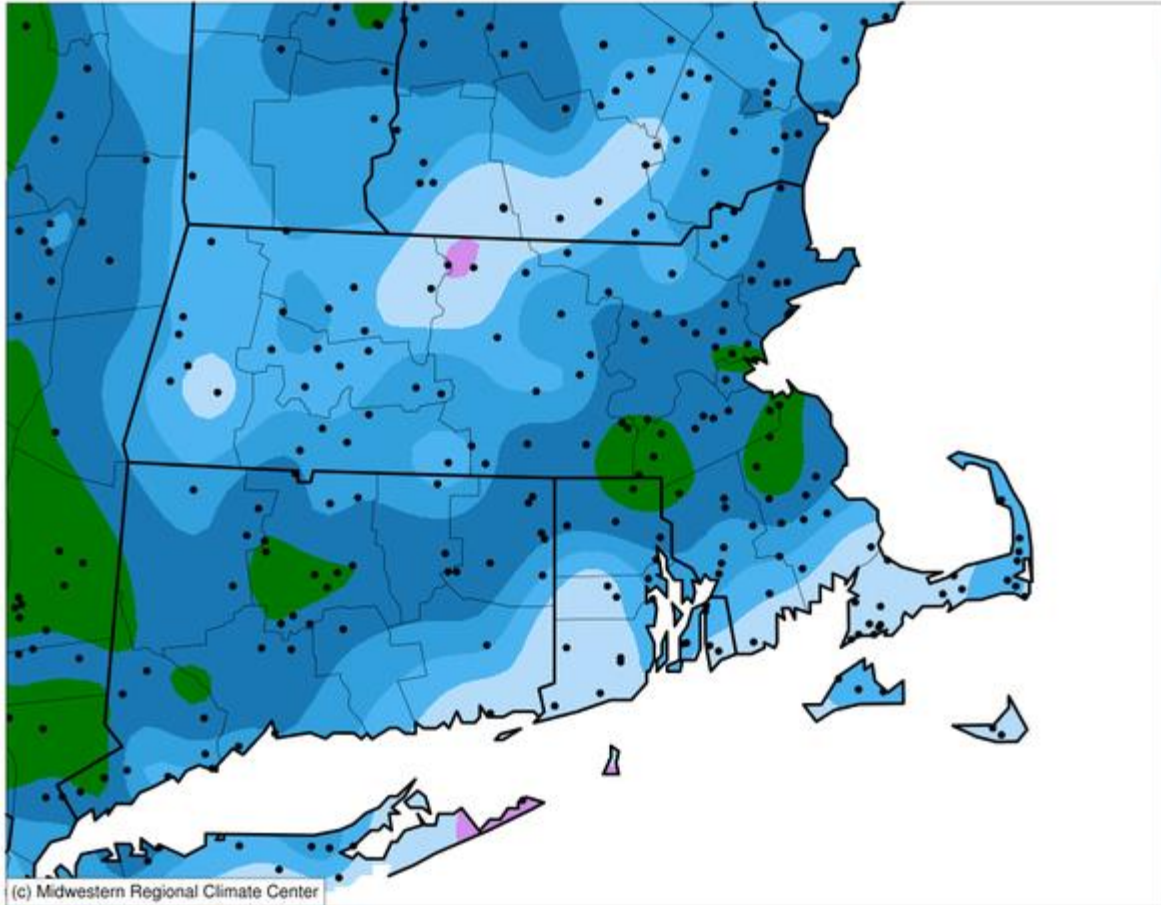
CT-NL-6	New London 1.0 NNW	3.77"	New London CT
CT-NL-8	Uncasville-Oxoboxo Valley 1.6 ENE	4.89"	New London CT
CT-NL-10	Norwich 2.5 NNE	2.95"	New London CT
CT-NL-23	Mystic 1.4 W	3.84"	New London CT
CT-NL-19	Mystic 0.9 W	3.32"	New London CT
CT-NL-21	Griswold 0.9 N	2.37"	New London CT
CT-NL-18	Stonington 0.5 NNE	3.09"	New London CT
RI-PR-33	Greenville 0.7 NNW	1.51"	Providence RI
RI-PR-48	Providence 1.2 NNW	1.53"	Providence RI
RI-PR-17	Cranston 4.1 E	2.29"	Providence RI
RI-PR-44	Cranston 4.2 ENE	2.08"	Providence RI
RI-PR-35	Cumberland Hill 3.7 E	1.35"	Providence RI
RI-PR-32	Providence 2.3 NE	1.60"	Providence RI
RI-KN-9	Warwick 2.4 SW	2.52"	Kent RI
RI-KN-2	East Greenwich 2.3 ESE	2.23"	Kent RI
RI-WS-25	Rockville 0.4 E	3.97"	Washington RI
RI-WS-32	Kingston 6.9 NNW	3.60"	Washington RI
RI-NW-4	Middletown 1.1 SW	2.33"	Newport RI
RI-NW-5	Little Compton 1.7 NW	3.58"	Newport RI
RI-NW-7	Little Compton 0.6 E	3.04"	Newport RI
MA-BR-17	North Attleboro 0.8 E	1.28"	Bristol MA
MA-BR-23	Attleboro 0.9 ENE	1.52"	Bristol MA
MA-BR-2	Rehoboth 2.1 N	1.91"	Bristol MA
MA-BR-3	Norton 1.8 NNE	1.49"	Bristol MA
MA-BR-33	Taunton 2.4 W	1.59"	Bristol MA
MA-BR-8	Dighton 1.1 WSW	2.25"	Bristol MA
MA-BR-30	Taunton 3.9 N	1.67"	Bristol MA
MA-BR-14	Dartmouth 2.5 SSW	3.32"	Bristol MA
MA-BR-32	Acushnet 1.8 SSE	3.94"	Bristol MA
MA-MD-47	West Townsend 0.5 W	2.85"	Middlesex MA
MA-MD-25	Ayer 0.1 SW	2.02"	Middlesex MA
MA-MD-61	Stow 2.3 NW	1.41"	Middlesex MA
MA-MD-12	Acton 1.3 SW	1.74"	Middlesex MA
MA-MD-51	Maynard 0.7 ESE	1.74"	Middlesex MA
MA-MD-42	Holliston 0.8 S	1.54"	Middlesex MA
MA-MD-62	Chelmsford 1.2 E	2.72"	Middlesex MA
MA-MD-34	Chelmsford 2.0 ENE	3.14"	Middlesex MA
MA-MD-60	Billerica 2.0 W	2.53"	Middlesex MA
MA-MD-52	Lexington 0.6 SW	1.68"	Middlesex MA
MA-MD-67	Lexington 2.3 SE	1.66"	Middlesex MA
MA-MD-45	Wilmington 1.5 NE	2.11"	Middlesex MA



MA-MD-66	Woburn 1.2 SE	2.10"	Middlesex MA
MA-MD-7	Winchester 0.7 SE	1.65"	Middlesex MA
MA-MD-44	Medford 1.2 W	1.69"	Middlesex MA
MA-MD-11	Cambridge 0.9 NNW	1.31"	Middlesex MA
MA-MD-43	Somerville 0.8 SSE	1.39"	Middlesex MA
MA-ES-3	Haverhill 3.6 WNW	2.41"	Essex MA
MA-ES-20	Haverhill 0.7 N	2.40"	Essex MA
MA-ES-12	Boxford 2.4 S	2.07"	Essex MA
MA-ES-1	Salisbury 3.7 NW	2.08"	Essex MA
MA-ES-24	Newburyport 0.8 SW	1.83"	Essex MA
MA-ES-2	Beverly 2.8 NW	1.46"	Essex MA
MA-ES-8	Marblehead 0.8 SW	1.81"	Essex MA
MA-ES-22	Rockport 1.0 E	1.13"	Essex MA
MA-SF-4	Brighton 0.5 W	1.62"	Suffolk MA
MA-SF-10	Chelsea 0.8 N	1.34"	Suffolk MA
MA-NF-11	Millis 2.0 SW	1.24"	Norfolk MA
MA-NF-19	Foxborough 1.8 SSW	1.46"	Norfolk MA
MA-NF-25	Needham 1.4 ENE	1.93"	Norfolk MA
MA-NF-1	Norwood 1.3 NW	1.70"	Norfolk MA
MA-PL-22	East Bridgewater 0.3 WSW	1.59"	Plymouth MA
MA-PL-24	Whitman 1.1 WSW	1.43"	Plymouth MA
MA-PL-28	Whitman 0.1 SSW	1.28"	Plymouth MA
MA-PL-23	Pembroke 2.8 SW	1.36"	Plymouth MA
MA-PL-19	Rochester 1.2 NNW	2.78"	Plymouth MA
MA-PL-5	Kingston 3.3 WNW	1.39"	Plymouth MA
MA-BA-14	North Falmouth 0.5 ENE	3.68"	Barnstable MA
MA-BA-13	Falmouth 0.6 NNW	3.56"	Barnstable MA
MA-BA-3	Falmouth 3.0 E	2.97"	Barnstable MA
MA-BA-11	East Falmouth 1.4 ESE	3.90"	Barnstable MA
MA-BA-18	Waquoit 0.6 SSW	3.39"	Barnstable MA
MA-BA-47	Mashpee 2.4 WSW	3.43"	Barnstable MA
MA-BA-22	Yarmouth 0.9 NNW	3.68"	Barnstable MA
MA-BA-1	Yarmouth 2.3 SSE	3.04"	Barnstable MA
MA-BA-33	Brewster 1.5 ESE	3.16"	Barnstable MA
MA-BA-36	Harwich 2.6 ENE	2.45"	Barnstable MA
MA-BA-51	Orleans 3.0 S	2.83"	Barnstable MA
MA-BA-12	Orleans 1.1 E	2.53"	Barnstable MA
MA-BA-30	Eastham 0.6 SW	3.22"	Barnstable MA
MA-NT-1	Nantucket 3.8 WNW	3.04"	Nantucket MA
MA-DK-5	West Tisbury 2.9 N	3.74"	Dukes MA
MA-DK-9	West Tisbury 0.4 S	1.81"	Dukes MA

# Accumulated Precipitation (in)

September 01, 2016 to September 30, 2016



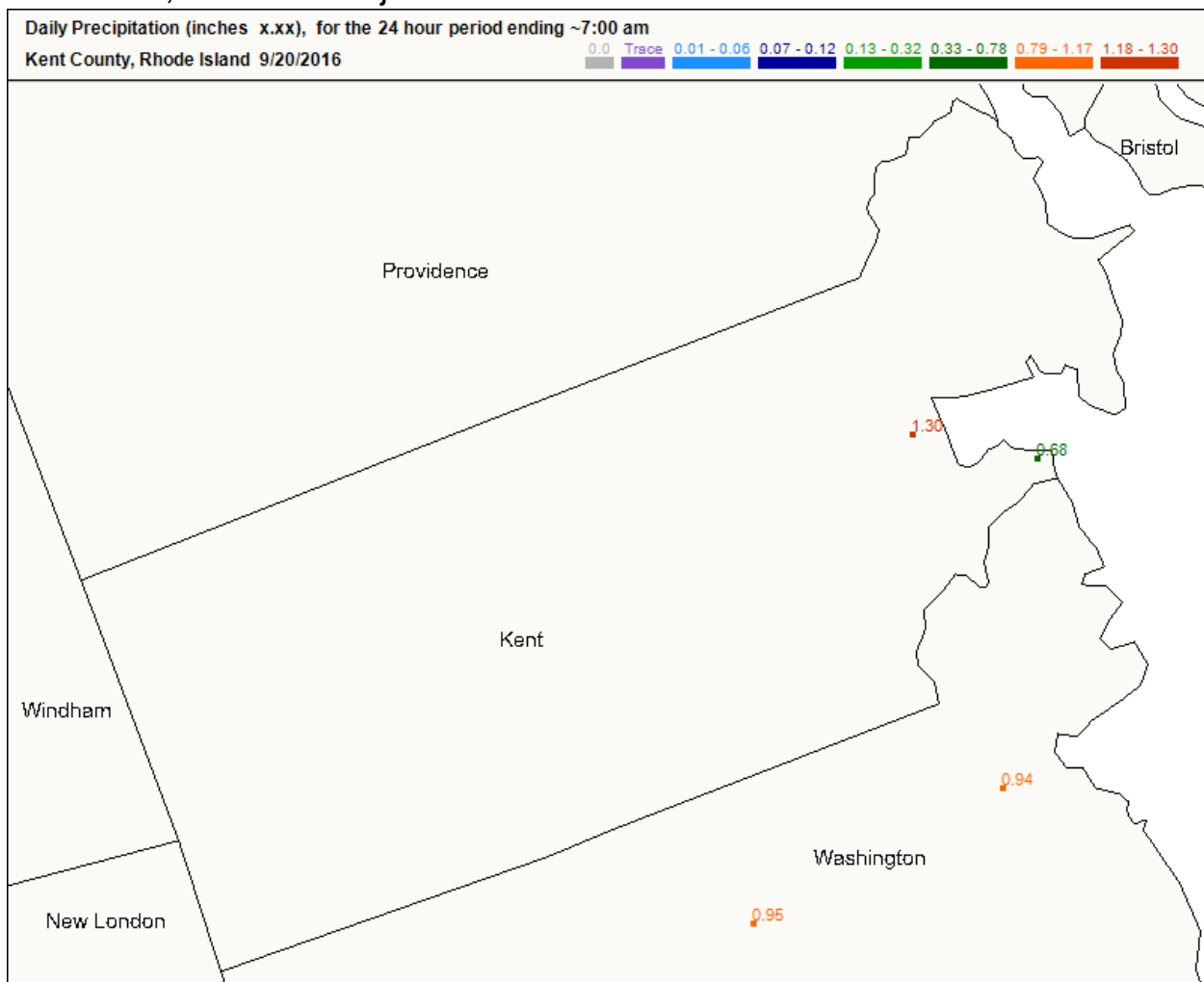
## **Map of the Month – Kent County RI**

The five municipalities of Warwick, West Warwick, Coventry, East Greenwich and West Greenwich make up Kent County. A county of over 150,000 residents in nearly 170 square miles, the city of Warwick is almost surrounded. Surrounded by the Pawtuxet River to the north, the mouth of the Providence River to the east and Greenwich Bay to the south. Flash flooding is a concern in the city of Warwick.



Kent County has the Central West drought region for Rhode Island. We could use more than 2 observers in Kent County to measure and report precipitation.

If you know of someone who might be interested, ask them to join CoCoRaHS.



From the Drought Monitor.

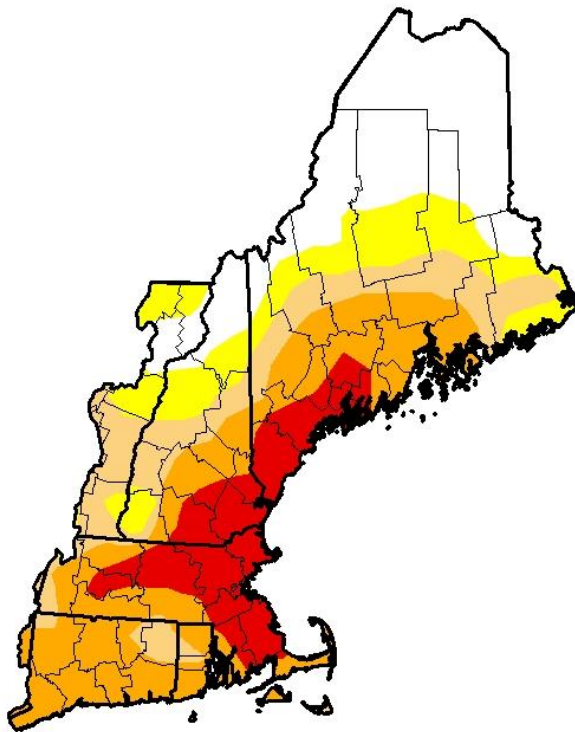
As has been the case in the past few months, the drought is getting worse while your reporting continues to get better. Every drop counts and zeros do too!

## U.S. Drought Monitor New England Watershed

**October 4, 2016**

(Released Thursday, Oct. 6, 2016)

Valid 8 a.m. EDT



*Drought Conditions (Percent Area)*

	None	D0	D1	D2	D3	D4
<b>Current</b>	26.59	15.17	16.69	27.11	14.44	0.00
<b>Last Week</b> <i>9/27/2016</i>	26.52	15.24	18.41	25.39	14.44	0.00
<b>3 Months Ago</b> <i>7/5/2016</i>	26.96	47.70	19.25	6.10	0.00	0.00
<b>Start of Calendar Year</b> <i>12/29/2015</i>	55.73	28.42	15.85	0.00	0.00	0.00
<b>Start of Water Year</b> <i>9/27/2016</i>	26.52	15.24	18.41	25.39	14.44	0.00
<b>One Year Ago</b> <i>10/6/2015</i>	71.65	14.98	13.37	0.00	0.00	0.00

*Intensity:*

- 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. See accompanying text summary for forecast statements.*

**Author:**

*Brian Fuchs*

*National Drought Mitigation Center*



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

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

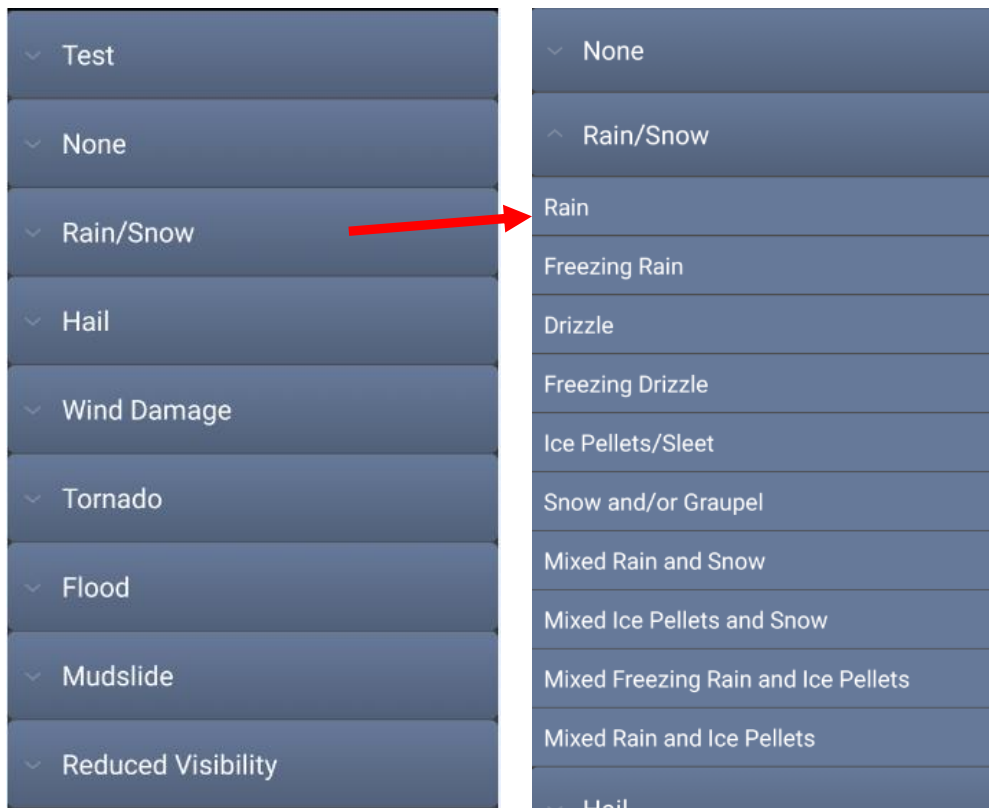
# mPING

If you used this app last winter, the app needs to be updated. If you viewed reports from mPING in the past, you need to use a different website.

A research project is being conducted by the National Severe Storms Laboratory on the campus of the University of Oklahoma called, meteorological Phenomena Identification Near the Ground, mPING. Through the use of GPS-enabled mobile devices, participants can transmit what is occurring in real time, rain, drizzle, snow, dense fog and more in real time.

The project's goal is make weather forecasts and weather radar more accurate. During the winter months, participants transmitting precipitation types in real time are a huge help to NWS forecast offices as they correlate mPING reports with what their weather radar is indicating.

Download and use the *updated* mPING app for Apple or Android.



## **Closing Comments from the Editor**

It is a remarkable difference when looking at the map of reports now and looking at the same map of reports from one year ago.

A year ago, New London County had one regularly reporting observer. This September, 11 observers in New London County reported for all 30 days!

### **11 Stations with 327 Reports over 30 Days**

<b>Station Numbers</b>	<b>Station Name</b>	<b>Daily Precip Sum in.</b>	<b>Multi-Day Precip in.</b>	<b>Total Precip in.</b>	<b>Daily Snow Sum in.</b>	<b># of Reports</b>
<a href="#">CT-NL-5</a>	Oakdale 2.6 WNW	2.45	0.40	2.85	0.0	27
<a href="#">CT-NL-6</a>	New London 1.0 NNW	3.77		3.77	0.0	30
<a href="#">CT-NL-7</a>	Uncasville-Oxoboxo Valley 5.6 W	2.63		2.63	0.0	30
<a href="#">CT-NL-8</a>	Uncasville-Oxoboxo Valley 1.6 ENE	4.89		4.89	0.0	30
<a href="#">CT-NL-10</a>	Norwich 2.5 NNE	2.95		2.95	0.0	30
<a href="#">CT-NL-17</a>	Waterford 2.2 N	4.25		4.25	0.0	30
<a href="#">CT-NL-18</a>	Stonington 0.5 NNE	3.09		3.09	0.0	30
<a href="#">CT-NL-19</a>	Mystic 0.9 W	3.32		3.32	0.0	30
<a href="#">CT-NL-21</a>	Griswold 0.9 N	2.37		2.37	0.0	30
<a href="#">CT-NL-22</a>	Central Waterford 2.7 SSW	4.21		4.21	0.0	30
<a href="#">CT-NL-23</a>	Mystic 1.4 W	3.84		3.84	0.0	30

A year ago, Tolland County had one regularly reporting observer. This September, 7 observers for Tolland County reported all 30 days!

### **7 Stations with 210 Reports over 30 Days**

<b>Station Numbers</b>	<b>Station Name</b>	<b>Daily Precip Sum in.</b>	<b>Multi-Day Precip in.</b>	<b>Total Precip in.</b>	<b>Daily Snow Sum in.</b>	<b># of Reports</b>
<a href="#">CT-TL-2</a>	Staffordville 0.4 NNW	2.48		2.48	0.0	30
<a href="#">CT-TL-4</a>	Mansfield Center 1.9 SW	1.47		1.47	0.0	30
<a href="#">CT-TL-13</a>	Crystal Lake 1.2 W	1.57		1.57	0.0	30
<a href="#">CT-TL-14</a>	Storrs 1.5 SW	1.36		1.36	0.0	30
<a href="#">CT-TL-15</a>	Central Somers 0.3 N	2.02		2.02	0.0	30
<a href="#">CT-TL-16</a>	Vernon 3.5 NNE	1.69		1.69	0.0	30
<a href="#">CT-TL-18</a>	Hebron 5.3 NW	1.38		1.38	0.0	30

A year ago, Franklin County had two regularly reporting observers. This September, 4 observers for Franklin County reported for all 30 days!

**4 Stations with 114 Reports over 30 Days**

Station Numbers	Station Name	Daily Precip Sum in.	Multi-Day Precip in.	Total Precip in.	Daily Snow Sum in.	# of Reports
<a href="#">MA-FR-10</a>	Conway 0.9 SW	2.29		2.29	0.0	30
<a href="#">MA-FR-12</a>	Sunderland 1.3 SE	0.95	1.66	2.61	0.0	24
<a href="#">MA-FR-13</a>	Conway 2.9 NW	2.66		2.66	0.0	30
<a href="#">MA-FR-17</a>	Buckland 1.8 ESE	3.30		3.30	0.0	30

Honorable mention to Middlesex County CT, Kent County RI, and Nantucket MA! All reporting observers reporting for all days in September.

The new [Water Year Summaries](#) are available. Take a look at your Water Year Summary, learn from it, fill in any missing reports that you can before a final pass is made within the next 3-4 weeks.

Our growth continues and is for all to see and to take pride in. A listing of 95 stations that have accounted for over 340 days in the past Water Year.

Congratulations, everyone!

Station Number	Station Name	Water Year Total Prcp Sum	Days Covered By All Obs	Water Year Total Snowfall	Elev	County
MA-BE-11	Great Barrington 3.0 N	35.13"	344	18.6"	743'	Berkshire MA
MA-BE-3	Stockbridge .2 NNE	41.59"	355	18.9"	830'	Berkshire MA
MA-BE-10	Pittsfield 2.0 NNW	44.34"	357	19.1"	1087'	Berkshire MA
MA-BE-4	Becket 5.6 SSW	38.89"	366	35.9"	1356'	Berkshire MA
CT-LT-7	Litchfield 2.3 NNE	37.36"	360	19.1"	1083'	Litchfield CT
CT-LT-9	New Hartford Center 3.2 SW	40.43"	365	32.4"	648'	Litchfield CT
CT-FR-3	New Canaan 1.9 ENE	44.97"	365	36.5"	235'	Fairfield CT
CT-FR-9	Brookfield 3.3 SSE	39.11"	366	23.9"	479'	Fairfield CT
CT-FR-20	Westport 2.5 ENE	40.53"	355	0.0"	31'	Fairfield CT
CT-FR-23	Shelton 1.3 W	45.03"	366	33.0"	507'	Fairfield CT
CT-NH-16	Milford 1.8 E	40.03"	359	33.7"	7'	New Haven CT
CT-NH-14	Prospect 1.9 ENE	39.81"	365	27.3"	324'	New Haven CT
MA-FR-10	Conway 0.9 SW	41.64"	366	20.4"	546'	Franklin MA

MA-HS-7	Plainfield 2.2 SW	43.43"	358	28.4"	1388'	Hampshire MA
MA-HS-2	Westhampton 1.8 SW	39.05"	355	26.9"	722'	Hampshire MA
MA-HS-8	Williamsburg 1.2 WSW	40.70"	358	26.3"	747'	Hampshire MA
MA-HS-10	Northampton 1.6 NE	34.65"	364	19.9"	212'	Hampshire MA
MA-HD-13	Springfield 4.1 W	33.84"	351	10.4"	57'	Hampden MA
CT-HR-24	Collinsville 0.9 NW	39.83"	364	30.2"	552'	Hartford CT
CT-HR-23	Southington 0.9 SSE	35.57"	362	0.0"	212'	Hartford CT
CT-HR-15	Southington 3.0 E	40.28"	366	44.2"	338'	Hartford CT
CT-HR-8	North Granby 1.3 ENE	36.43"	363	10.2"	444'	Hartford CT
CT-HR-9	West Hartford 2.7 NNW	41.27"	366	25.5"	340'	Hartford CT
CT-HR-18	Berlin 2.4 SSE	44.21"	366	34.7"	394'	Hartford CT
CT-HR-11	West Hartford 2.7 SSE	34.50"	365	29.8"	117'	Hartford CT
CT-HR-6	Wethersfield 1.2 WSW	35.10"	366	27.5"	190'	Hartford CT
CT-HR-22	East Hartford 1.3 E	37.15"	366	30.7"	83'	Hartford CT
CT-HR-5	Enfield 1.5 SE	36.23"	359	20.8"	117'	Hartford CT
CT-HR-7	Central Manchester 2.7 SW	38.62"	354	30.0"	286'	Hartford CT
CT-TL-2	Staffordville 0.4 NNW	43.06"	366	44.2"	759'	Tolland CT
CT-MD-5	Westbrook Center 1.1 N	37.81"	344	6.0"	35'	Middlesex CT
MA-WR-8	Fitchburg 1.6 SSW	30.94"	353	13.7"	714'	Worcester MA
MA-WR-13	Leominster 1.5 S	34.94"	366	35.9"	589'	Worcester MA
MA-WR-28	Berlin 1.3 WSW	34.06"	364	32.4"	405'	Worcester MA
MA-WR-1	Milford 2.3 NNW	37.70"	364	43.2"	397'	Worcester MA
CT-WN-6	Dayville 2.0 ENE	44.00"	360	39.4"	602'	Windham CT
CT-WN-8	Moosup 1.7 NE	39.10"	366	43.4"	419'	Windham CT
CT-WN-4	East Killingly 1.3 SW	45.23"	365	38.8"	368'	Windham CT
CT-NL-5	Oakdale 2.6 WNW	47.97"	355	23.2"	568'	New London CT
RI-PR-33	Greenville 0.7 NNW	42.22"	366	46.8"	311'	Providence RI
RI-PR-17	Cranston 4.1 E	42.56"	359	37.5"	23'	Providence RI
RI-PR-35	Cumberland Hill 3.7 E	37.35"	358	11.6"	149'	Providence RI
RI-PR-32	Providence 2.3 NE	39.64"	364	30.7"	77'	Providence RI
RI-KN-2	East Greenwich 2.3 ESE	43.25"	364	33.7"	29'	Kent RI
RI-WS-25	Rockville 0.4 E	47.52"	362	39.5"	277'	Washington RI
RI-WS-1	Hope Valley 3.7 S	43.99"	343	20.6"	59'	Washington RI
RI-NW-4	Middletown 1.1 SW	30.07"	365	19.5"	102'	Newport RI
RI-NW-7	Little Compton 0.6 E	44.54"	366	25.2"	78'	Newport RI
MA-BR-23	Attleboro 0.9 ENE	33.93"	366	19.5"	124'	Bristol MA
MA-BR-2	Rehoboth 2.1 N	39.70"	365	35.3"	153'	Bristol MA
MA-BR-3	Norton 1.8 NNE	37.06"	353	36.7"	95'	Bristol MA
MA-BR-16	Somerset 0.4 SSE	39.47"	343	30.7"	57'	Bristol MA
MA-BR-8	Dighton 1.1 WSW	39.42"	366	39.7"	138'	Bristol MA
MA-BR-9	Taunton 2.6 NW	38.85"	363	39.8"	79'	Bristol MA



MA-BR-14	Dartmouth 2.5 SSW	39.21"	366	9.1"	91'	Bristol MA
MA-MD-47	West Townsend 0.5 W	33.20"	365	32.1"	313'	Middlesex MA
MA-MD-12	Acton 1.3 SW	34.97"	366	39.0"	211'	Middlesex MA
MA-MD-51	Maynard 0.7 ESE	33.06"	366	36.6"	209'	Middlesex MA
MA-MD-42	Holliston 0.8 S	37.57"	366	34.9"	265'	Middlesex MA
MA-MD-52	Lexington 0.6 SW	31.78"	365	28.2"	267'	Middlesex MA
MA-MD-45	Wilmington 1.5 NE	32.79"	365	28.6"	84'	Middlesex MA
MA-MD-7	Winchester 0.7 SE	34.27"	366	30.9"	45'	Middlesex MA
MA-MD-44	Medford 1.2 W	34.66"	366	29.4"	28'	Middlesex MA
MA-ES-3	Haverhill 3.6 WNW	34.34"	366	39.3"	220'	Essex MA
MA-ES-20	Haverhill 0.7 N	30.04"	346	36.5"	95'	Essex MA
MA-ES-12	Boxford 2.4 S	34.15"	366	39.3"	50'	Essex MA
MA-ES-1	Salisbury 3.7 NW	35.22"	365	38.0"	80'	Essex MA
MA-ES-2	Beverly 2.8 NW	33.76"	365	26.2"	46'	Essex MA
MA-ES-8	Marblehead 0.8 SW	36.50"	359	25.9"	38'	Essex MA
MA-SF-4	Brighton 0.5 W	34.41"	360	33.5"	53'	Suffolk MA
MA-SF-1	Boston 0.5 WSW	28.91"	363	0.0"	43'	Suffolk MA
MA-SF-10	Chelsea 0.8 N	39.39"	363	42.4"	106'	Suffolk MA
MA-SF-2	Winthrop 0.2 N	33.93"	365	36.1"	43'	Suffolk MA
MA-NF-16	Bellingham 4.7 S	36.29"	357	8.5"	223'	Norfolk MA
MA-NF-11	Millis 2.0 SW	31.83"	363	28.8"	191'	Norfolk MA
MA-NF-1	Norwood 1.3 NW	38.21"	366	38.4"	215'	Norfolk MA
MA-NF-5	Weymouth 0.5 NW	36.57"	359	40.0"	99'	Norfolk MA
MA-PL-15	Abington 1.2 NNE	29.63"	358	41.6"	151'	Plymouth MA
MA-PL-6	Middleborough 5.5 E	42.64"	358	34.2"	138'	Plymouth MA
MA-PL-5	Kingston 3.3 WNW	42.51"	360	53.2"	72'	Plymouth MA
MA-BA-8	Falmouth 1.8 WSW	43.60"	349	25.0"	3'	Barnstable MA
MA-BA-14	North Falmouth 0.5 ENE	43.66"	354	27.3"	8'	Barnstable MA
MA-BA-3	Falmouth 3.0 E	46.85"	366	40.4"	8'	Barnstable MA
MA-BA-18	Waquoit 0.6 SSW	46.52"	364	36.8"	32'	Barnstable MA
MA-BA-47	Mashpee 2.4 WSW	41.62"	345	34.6"	54'	Barnstable MA
MA-BA-45	Sandwich 0.9 NNE	42.27"	365	18.3"	22'	Barnstable MA
MA-BA-22	Yarmouth 0.9 NNW	46.23"	354	0.0"	10'	Barnstable MA
MA-BA-1	Yarmouth 2.3 SSE	48.15"	343	30.3"	41'	Barnstable MA
MA-BA-33	Brewster 1.5 ESE	46.56"	363	31.0"	104'	Barnstable MA
MA-BA-27	Wellfleet 0.7 NW	41.84"	350	33.4"	65'	Barnstable MA
MA-BA-36	Harwich 2.6 ENE	47.33"	361	20.0"	56'	Barnstable MA
MA-BA-12	Orleans 1.1 E	47.31"	366	15.6"	28'	Barnstable MA
MA-BA-30	Eastham 0.6 SW	48.30"	364	28.9"	13'	Barnstable MA
MA-NT-1	Nantucket 3.8 WNW	51.48"	364	0.0"	14'	Nantucket MA
MA-DK-5	West Tisbury 2.9 N	51.05"	362	39.5"	187'	Dukes MA

## **Wrap up**

Our first frost should occur in October, marking the end of the growing season. With no precipitation in the gauge, below freezing weather is not a concern, but if you do have precipitation in the gauge when below freezing weather arrives, measure, write down, take in the funnel and inner cylinder and report your measurement at your regular time. When the warmer weather returns, so can your inner cylinder and funnel.

Snow can occur in October, so that is another reason to be ready to bring in your inner cylinder and funnel. More about snow measuring and reporting in next month's newsletter.

The first pass of new [Water Year Summaries](#) have appeared. They are a "Thank You" card from CoCoRaHS. Look over your past 12 months, fill in missing reports that you can, and learn from the Summaries. See your monthly and 12 month totals, your snow fall and snow depth reports, and your narrative in the form of Comments.

Autumn's natural beauty will occur with the changing of leaf colors. Enjoy the colorful splendor that accents our landscape. Take in the harvests of apples, grapes, and cranberries this month.

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