### Community Collaborative Rain, Hail & Snow Network



**July 2021** 

Our nation's flag had 23 stars at this point 200 years ago. Missouri was admitted in August 1821 and the following year, another star was added.

It seems so long ago, that many of us were watering flowers, gardens, and lawns back in June. With July, not anymore! Within this newsletter are the usual tables of statistics about what transpired in June, but many of you have experienced and reported this wild swing with the pendulum of precipitation that started on Friday July 2.

Summer is upon us, a time to get away and a time to get together. We've noticed a small uptick in Multi-Day reports, so it's apparent that some of you are able to travel more than last year.

Joe gives us his meteorological insights to this wet weather pattern.

We kick it all off with our observers, recently crossing over multiples of 1000 Daily Reports, our version of The "Grand" List.

Let's get into it.

# The "Grand" List

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

### 3000 Daily Reports

CT-HR-15 Southington 3.0 E

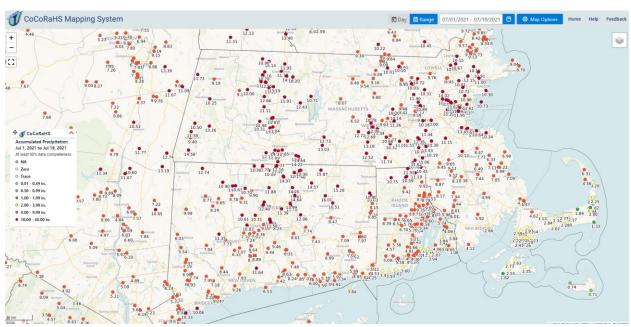
#### **1000 Daily Reports**

RI-WS-25	Rockville 0.4 E
MA-MD-123	Lexington 1.3 SE
MA-HD-26	Brimfield 3.6 NW
MA-MD-126	Melrose 0.5 NE

# Wet Weather Pattern

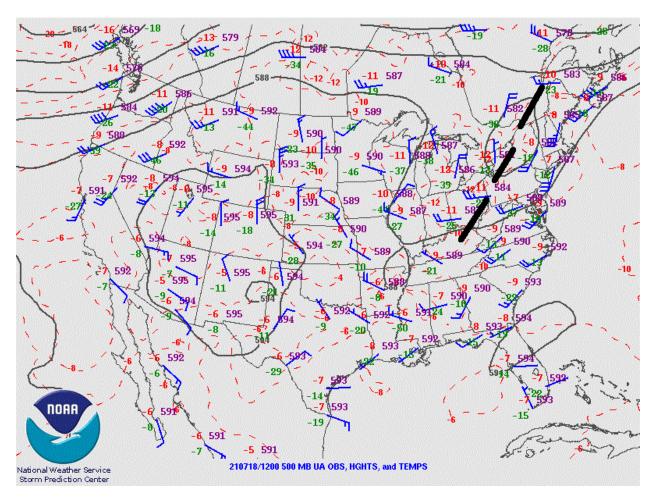
Joe DelliCarpini - Science & Operations Officer, NWS Boston/Norton MA

July has been an active month here in southern New England. Frequent showers and thunderstorms, combined with Tropical Storm Elsa, have brought monthly rainfall totals to over a foot in parts of the region. As of July 19th, the highest totals by state included 18.20 inches in Millers Falls, MA; 17.23 inches in Stafford Springs, CT, and 11.95" in Woonsocket, RI.



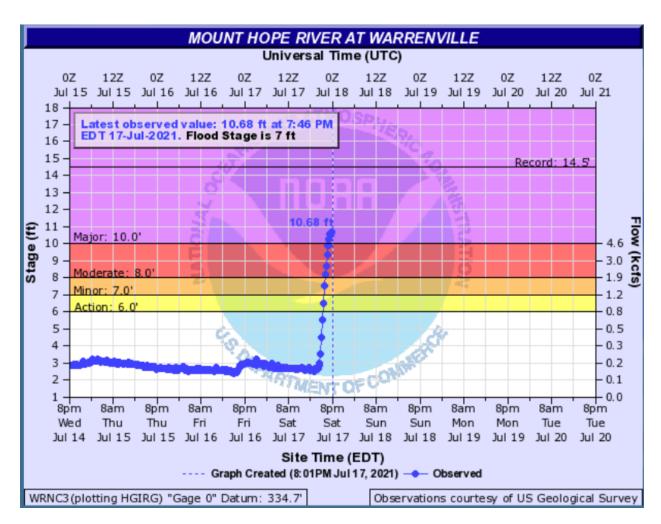
Map monthly rainfall totals across most of southern New England, July 1-19, 2021.

Why so much rain? The dominant weather pattern this month featured a broad trough covering the eastern third of the country (see the image below). The trough helps transport tropical moisture northward, due to broad southerly flow up the East Coast, and provides a source of lift to generate showers and thunderstorms. Most recently, a stalled frontal boundary over southern New England from July 16th-18th provided the focus for "training" showers and thunderstorms, which is another way of saying they repeatedly move through the same locations.

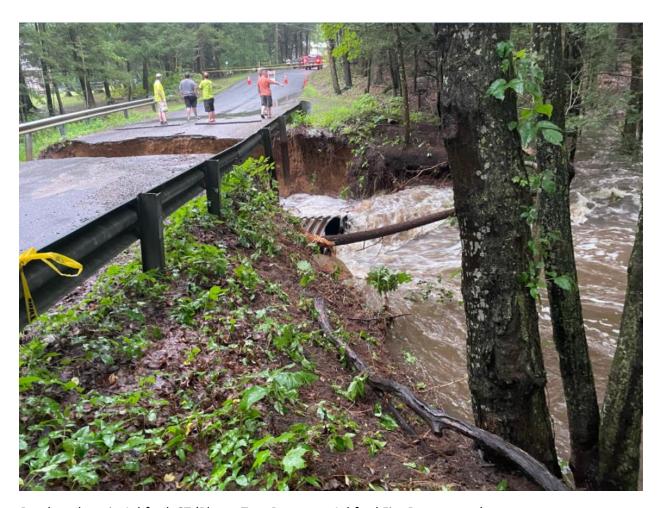


Upper air map (500 mb or 18,000 FT) showing a persistent trough centered over the eastern Great Lakes (dashed black line)

The excessive rainfall led to significant flash flooding. The Mount Hope River at Warrenville (Ashford, CT) reached major flood stage in just a few hours and several road washouts were reported throughout parts of northern Connecticut and western Massachusetts.



Hydrograph for the Mount Hope River at Warrenville (Ashford, CT). Note the rapid jump to Major flood stage in just a few hours.

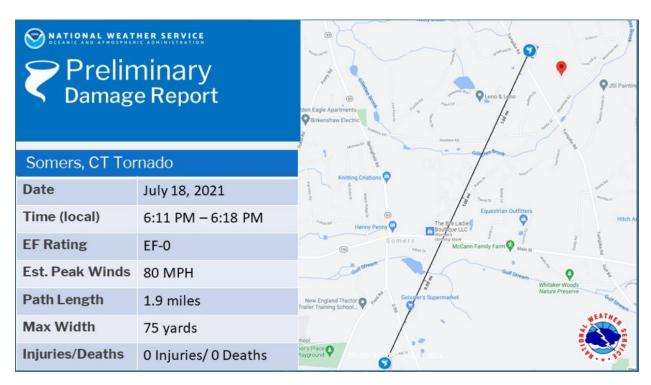


Road washout in Ashford, CT (Photo: Tom Borgman, Ashford Fire Department)



Road washout in Belchertown, MA (Photo: Belchertown Fire Department)

In addition to the heavy rainfall and flooding, conditions were also favorable for weak tornadoes. One EF-0 tornado was confirmed in Somers, CT on Sunday, July 18th. It downed several large pine trees on Colonial Drive and two cars were destroyed by the falling trees. About 20 trees were snapped, twisted, and uprooted on Lake Drive where a resident heard a loud whirring noise and observed the tops of trees fly by the house. shingles were missing on a house next door, a playscape was lifted and landed approximately 50 feet away on Main Street, and a few large oak trees were snapped on Hickory Hill Drive. One interesting aspect of the storm was that it was low-topped and did not possess any lightning. However, atmospheric conditions, including high humidity and just enough wind shear aloft, were strong enough to cause this isolated tornado.



Summary and track of the EF-0 tornado in Somers, CT on July 18th.

# Observer Tips

**Accuracy matters**: Whether it's decimal points, "Crazy 8's" on the mobile app, the observation date, observation time, the correct use of Multi-Day Reports, keeping your daily reports separated by no more than 28 hours. **Accuracy matters**!

Please avoid submit-it and forget-it. The website offers the previous 7 days of reports, with a pencil icon to make corrections. The mobile app, both Apple and Android, offers a "History" function with a tap-to-edit.

Most mistakes happen with reporting, not with measuring. **Accuracy matters!** 

**Comments help**: July has shown us large rains. Comments, Observation Notes, the big text box, behind the "More Details" button on the Apple app, please type something to clarify and verify your report.



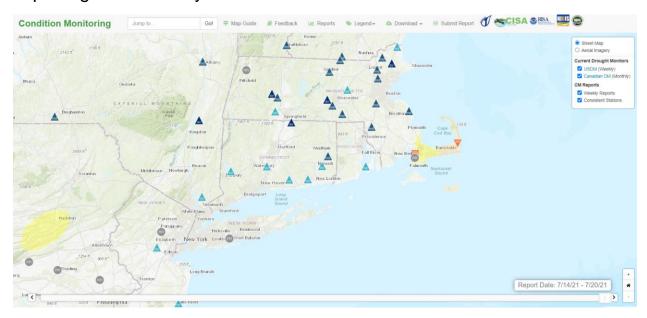
**Significant Weather Reports:** The season of downpours has appeared in July. You have an opportunity to assist in verifying radar estimates in real-time, and issuing Flood Warnings. This real-time report only takes a minute to alarm at a forecaster's workstation.

- 1" or more of rain in 1 hour or less.
- 2" or more of rain. Even when you measure 2" or more with your morning observation.
- Flooding.
- Anything you feel is significant!

**mPING app for Apple and Android**: Show the rest of us where the localized rain showers are. Use mPING to rain and reduced visibility and I hope nothing more serious than that.

#### **Condition Monitoring Reports**

Thank you! to all that have submitted Condition Monitoring Reports, capturing the variability of conditions from west to east!





Sun Jul 18 2021

Great start to the month, but this week has brought ~ .08" total... that, and other things, make me ready to go back to mildly dry. Grasses are starting to brown again in many locations. Pond level is down an inch or two, though not much irrigation draw noted. Wildlife activity normal.

MA-BA-57 -- General Awareness, Agriculture, Fire, Plants And Wildlife, Water Supply And Quality

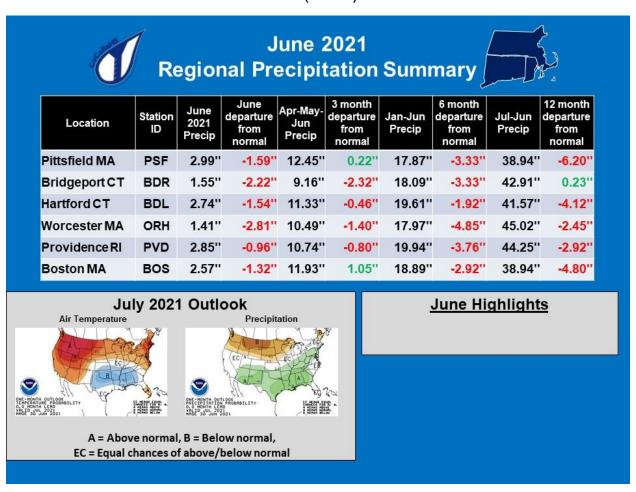


All the recent rain this month has kept things on the moist side. No garden watering needed. We dug up the garlic today and the soil was damp.

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

# **Detail and Summary for June 2021**

From the National Weather Service (NWS) Climate sites for June 2021.



#### From your reports for June 2021

Observers reporting 569 Reported all 30 days 292 Completed by Multi-Day Reports 61 Missing 1 or 2 reports 69 Daily Reports 13,904 Zero Reports 8,318 Non-Zero Reports 5,586 2,228 **Daily Comments** Multi-Day Reports 201 **Condition Monitoring Reports** 112 Significant Weather Reports 31 Hail Reports 6 Snowfall Reports 9,980 Snow Depth Reports 3,810 2,509 **Total SWE Reports** 

Highest Daily Report 2.54" from East Hampton 2.1 N (CT-MD-22) on 6/5

Welcome to another 9 new members to this list from around the area, including new locations of Danielson CT, Greenfield MA & Pawtucket RI.

We are filling up 10 pages with this list. A record 353 stations on this list.

Rains came over Memorial Day weekend in May. Rains came before the 4<sup>th</sup> of July weekend. Because June 1-2 & June 29-30 were largely rain free, most of the stations that overlapped a Multi-Day report, I was able to adjust. There were a small few were I was not able to accurately adjust. It feels a little more like normal with some of you getting away for a week or weekend.

Cover all days in the month, no NA's, no overlapping Multi-Day reports and your station can be listed here. I can't wait to see what July's list is going to look like!

This list is sorted by Watershed which is explained further in this 5 minute video.

		Station		
Watershed	Watershed Name	Number	Station Name	Precip
01070004	Nashua			
0107000401	North Nashua River	MA-WR-44	Westminster 0.6 WSW	1.27"
0107000401	North Nashua River	MA-WR-22	Fitchburg 2.0 NNE	1.51"
0107000402	Headwaters Nashua River	MA-WR-56	Sterling 4.3 NW	1.84"
0107000402	Headwaters Nashua River	MA-MD-25	Ayer 0.1 SW	1.92"
0107000402	Headwaters Nashua River	MA-MD-192	Ayer 0.4 SSE	1.67"
0107000403	Squannacook River	MA-MD-47	West Townsend 0.5 W	2.19"
0107000404	Nissitissit River-Nashua River	MA-MD-169	Pepperell 2.1 SSW	1.81"
01070005	Concord			
0107000501	Sudbury River	MA-MD-89	Sudbury 3.6 W	2.71"
0107000501	Sudbury River	MA-MD-178	Framingham 2.0 NNE	2.30"
0107000501	Sudbury River	MA-MD-193	Sudbury 2.7 NNW	2.78"
0107000502	Concord River	MA-WR-30	Shrewsbury 1.6 NNE	2.27"
0107000502	Concord River	MA-WR-28	Berlin 1.3 WSW	2.11"
0107000502	Concord River	MA-WR-42	Northborough 2.3 N	2.25"
0107000502	Concord River	MA-MD-115	Hudson 1.4 NW	2.52"
0107000502	Concord River	MA-WR-55	Harvard 2.1 S	1.62"
0107000502	Concord River	MA-MD-86	Hudson 1.0 N	2.28"
0107000502	Concord River	MA-MD-12	Acton 1.3 SW	2.19"
0107000502	Concord River	MA-MD-166 Acton 0.5 SW		1.81''

0107000502	Concord River	MA-MD-51	Maynard 0.7 ESE	2.65"
0107000502	Concord River	MA-MD-53	Acton 4.0 ENE	2.24"
0107000502	Concord River	MA-MD-62	Chelmsford 1.2 E	1.60"
01070006	Merrimack River	1000 02	Greenistera 112 E	1.00
0107000612	Stony Brook - Merrimack River	MA-MD-104	Littleton 2.8 NNW	1.59"
0107000612	Stony Brook - Merrimack River	MA-MD-105	Littleton 0.9 WSW	1.79"
0107000613	Shawsheen River	MA-MD-96	Lexington 0.3 NE	2.91"
0107000613	Shawsheen River	MA-ES-48	Andover 0.6 E	2.23"
0107000614	Powwow River - Merrimack River	MA-ES-66	North Andover 0.3 NW	2.51"
0107000614	Powwow River - Merrimack River	MA-ES-20	Haverhill 0.7 N	2.36"
0107000614	Powwow River - Merrimack River	MA-ES-4	Groveland 0.5 WSW	3.31"
0107000614	Powwow River - Merrimack River	MA-ES-61	Amesbury 2.6 WSW	2.38"
0107000614	Powwow River - Merrimack River	MA-ES-59	Amesbury 1.2 N	2.07"
0107000614	Powwow River - Merrimack River	MA-ES-64	Newburyport 0.4 NNW	2.51"
0107000614	Powwow River - Merrimack River	MA-ES-70	Newburyport 0.6 N	2.63"
0107000614	Powwow River - Merrimack River	MA-ES-56	Newburyport 1.0 ESE	2.45"
01080201	Middle Connecticut			
0108020105	Fall River - Connecticut River	MA-FR-35	Bernardston 1.0 SW	2.09"
0108020106	Manhan River - Connecticut River	MA-HS-2	Westhampton 1.8 SW	2.59"
0108020106	Manhan River - Connecticut River	MA-HS-45	Westhampton 0.4 WNW	2.34"
0108020106	Manhan River - Connecticut River	MA-HS-8	Williamsburg 1.2 WSW	1.84"
0108020106	Manhan River - Connecticut River	MA-HS-26	Easthampton 0.5 SW	2.42"
0108020106	Manhan River - Connecticut River	MA-HS-12	Northampton 0.4 S	1.42"
0108020106	Manhan River - Connecticut River	MA-HS-48	Easthampton 1.0 E	2.65"
0108020106	Manhan River - Connecticut River	MA-HS-21	Northampton 0.6 ESE	2.89"
0108020106	Manhan River - Connecticut River	MA-FR-12	Sunderland 1.3 SE	1.77"
0108020106	Manhan River - Connecticut River	MA-FR-38	Shutesbury 2.9 SW	1.65"
0108020107	Batchelor Brook - Connecticut River	MA-HD-13	Springfield 4.1 W	1.77"
01080202	Miller			
0108020201	Upper Millers River	NH-CH-20	Rindge 3.2 ESE	2.04''
0108020202	Lower Millers River	MA-WR-40	Gardner 1.4 SSW	1.24"
01080203	Deerfield			
0108020303	North River	MA-FR-31	Colrain 3.7 WNW	2.58"
0108020303	North River	MA-FR-29	Colrain 0.8 WNW	2.48''
0108020304	Green River	MA-FR-45	Greenfield 1.6 N	1.44"
0108020305	Lower Deerfield River	MA-FR-17	Buckland 1.8 ESE	1.82"
0108020305	Lower Deerfield River	MA-FR-13	Conway 2.9 NW	1.77"
0108020305	Lower Deerfield River	MA-FR-25	Conway 2.7 NW	1.60''
0108020305	Lower Deerfield River	MA-FR-10	Conway 0.9 SW	1.83"
01080204	Chicopee			
0108020401	Swift River	MA-FR-8	New Salem 3.1 S	1.52"

0108020403	Quaboag River	MA-WR-75	Warren 2.4 WSW	1.84"
0108020403	Quaboag River	MA-WR-63	Rutland 3.1 SW	1.92"
01080205	Lower Connecticut			
0108020501	Mill River - Connecticut River	CT-HR-82	Suffield 0.5 NNE	1.85"
0108020501	Mill River - Connecticut River	CT-HR-99	Suffield 3.6 ENE	2.35"
0108020501	Mill River - Connecticut River	CT-HR-57	Suffield Depot 3.3 NNE	2.94"
0108020501	Mill River - Connecticut River	MA-HD-33	Agawam 1.1 SSW	2.66''
0108020501	Mill River - Connecticut River	CT-HR-5	Enfield 1.5 SE	2.98"
0108020501	Mill River - Connecticut River	MA-HD-20	Wilbraham 3.7 SSW	2.13"
0108020501	Mill River - Connecticut River	MA-HD-30	Hampden 2.0 NW	2.53"
0108020502	Scantic River	CT-TL-46	Broad Brook 3.3 SE	2.77''
0108020502	Scantic River	CT-TL-26	Broad Brook 2.6 ESE	2.79"
0108020502	Scantic River	MA-HD-32	East Longmeadow 2.3 ESE	1.83"
0108020502	Scantic River	CT-TL-41	Somers 0.3 S	2.28"
0108020502	Scantic River	CT-TL-15	Central Somers 0.3 N	3.19"
0108020502	Scantic River	CT-TL-49	Somers 1.2 NE	3.23"
0108020503	Park River	CT-HR-39	Farmington 1.6 SW	2.02"
0108020503	Park River	CT-HR-63	West Hartford 1.1 NNE	1.40''
0108020504	Hockanum River	CT-HR-52	Central Manchester 0.8 N	1.83"
0108020504	Hockanum River	CT-HR-100	Manchester 0.4 ENE	1.68''
0108020504	Hockanum River	CT-TL-19	Vernon 2.8 N	2.64''
0108020505	Roaring Brook - Connecticut River	CT-HR-6	Wethersfield 1.2 WSW	1.78"
0108020505	Roaring Brook - Connecticut River	CT-HR-45	Wethersfield 1.9 SSW	1.95"
0108020505	Roaring Brook - Connecticut River	CT-HR-68	Rocky Hill 1.3 E	2.27''
0108020505	Roaring Brook - Connecticut River	CT-HR-22	East Hartford 1.3 E	2.05"
0108020506	Mattabesset River	CT-HR-15	Southington 3.0 E	1.62"
0108020506	Mattabesset River	CT-HR-80	Kensington 0.7 WSW	1.52"
0108020506	Mattabesset River	CT-HR-65	Newington 1.9 SSW	1.82"
0108020506	Mattabesset River	CT-MD-25	Middlefield 0.6 SE	1.30''
0108020506	Mattabesset River	CT-MD-24	Durham 1.2 W	1.60''
0108020507	Higganum Creek - Connecticut River	CT-MD-23	Higganum 0.7 N	1.42''
0108020507	Higganum Creek - Connecticut River	CT-MD-26	Higganum 0.8 NE	1.46''
0108020508	Salmon River	CT-MD-22	East Hampton 2.1 N	3.94''
0108020509	Eightmile River - Connecticut River	CT-MD-18	Essex Village 0.9 S	2.78''
0108020509	Eightmile River - Connecticut River	CT-NL-44	Old Lyme 0.5 W	2.14''
01080206	Westfield			
0108020601	Headwaters Westfield River	MA-HS-7	Plainfield 2.2 SW	1.77"
0108020601	Headwaters Westfield River	MA-HS-14	Plainfield 2.4 ESE	1.36"
0108020603	Outlet Westfield River	MA-HD-31	Westfield 1.6 SSW	1.46''
0108020603	Outlet Westfield River	CT-HR-88	Suffield Depot 6.0 WNW	2.60"
0108020603	Outlet Westfield River	MA-HD-29	West Springfield 1.6 SSW	1.65''

Page 15

01080207	Farmington						
0108020701	Still River	CT-LT-44	-LT-44 Winsted 1.0 WSW				
0108020702	West Branch Farmington River	CT-LT-43	Winsted 3.8 ESE	1.62"			
0108020702	West Branch Farmington River	CT-LT-18	New Hartford Center 1.5 N	1.32"			
0108020704	Headwaters Farmington River	CT-LT-9	New Hartford Center 3.2 SW	2.39"			
0108020704	Headwaters Farmington River	CT-HR-70	Canton 1.5 W	1.78''			
0108020704	Headwaters Farmington River	CT-HR-71	Bristol 2.7 NNE	2.30"			
0108020704	Headwaters Farmington River	CT-HR-28	North Canton 0.8 SSW	2.02"			
0108020705	Salmon Brook	CT-HR-8	North Granby 1.3 ENE	2.15"			
0108020706	Outlet Farmington River	CT-HR-113	West Simsbury 0.4 S	2.08''			
0108020706	Outlet Farmington River	CT-HR-102	Windsor Locks 3.2 SW	1.57''			
01090001	Charles						
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-79	Georgetown 1.2 WSW	3.22"			
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-19	West Newbury 1.8 SSE	2.58"			
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-46	Georgetown 1.3 ENE	3.42"			
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-24	Newburyport 0.8 SW	2.45"			
0109000102	Ipswich River	MA-MD-85	Wilmington 2.2 WNW	2.06''			
0109000102	Ipswich River	MA-MD-125	Tewksbury 3.6 SSE	2.22"			
0109000102	Ipswich River	MA-MD-160	Reading 1.2 N	1.93"			
0109000102	Ipswich River	MA-ES-58	Middleton 1.4 SSW	2.18''			
0109000102	Ipswich River	MA-ES-12	Boxford 2.4 S	1.86''			
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-41	Danvers 0.8 ESE	1.74''			
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-25	Gloucester 4.3 N	2.19''			
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-22	Rockport 1.0 E	2.50''			
0109000104	Saugus River - Frontal Broad Sound	MA-MD-81	Wakefield 0.5 NNW	1.60''			
0109000104	Saugus River - Frontal Broad Sound	MA-MD-126	Melrose 0.5 NE	1.71''			
0109000104	Saugus River - Frontal Broad Sound	MA-ES-8	Marblehead 0.8 SW	1.83"			
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-175	Arlington 0.4 WNW	2.06''			
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-7	Winchester 0.7 SE	2.11"			
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-11	Cambridge 0.9 NNW	2.13''			
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-170	Somerville 0.5 W	2.04''			
0109000105	Mystic River - Frontal Boston Harbor	MA-SF-30	Charlestown 0.4 SSE	3.14''			
0109000105	Mystic River - Frontal Boston Harbor	MA-SF-10	Chelsea 0.8 N	2.99''			
0109000106	Upper Charles River	MA-WR-1	Milford 2.3 NNW	2.39''			
0109000106	Upper Charles River	MA-MD-55	Holliston 0.7 W	2.68''			
0109000106	Upper Charles River	MA-NF-64	Medway 2.1 W	3.02"			
0109000106	Upper Charles River	MA-MD-42	Holliston 0.8 S	2.60"			
0109000106	Upper Charles River	MA-NF-62	Franklin 1.4 SW	3.28"			
0109000106	Upper Charles River	MA-MD-158	Sherborn 1.1 NW	2.13"			
0109000106	Upper Charles River	MA-NF-63	Norfolk 1.1 W	3.58"			
0109000106	Upper Charles River	MA-NF-50	Millis 1.4 ENE	2.56"			

Page 16

0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-120	Natick 1.9 NNE	2.32"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-80	Lincoln 1.5 SW	2.50"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-71	Newton 2.2 NNW	2.48"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-119	Watertown 1.1 W	2.48
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-134	Somerville 0.5 SSE	2.63"
0109000107		MA-NF-47	Westwood 1.1 WSW	4.26"
0109000108	Neponset River - Frontal Boston Harbor  Neponset River - Frontal Boston Harbor		Norwood 1.3 NW	2.74"
	†	MA-NF-1 MA-NF-54		
0109000108	Neponset River - Frontal Boston Harbor Whitmans Pond - Frontal Boston Harbor		Quincy 1.2 W	1.93" 1.97"
0109000109		MA-NF-32	Quincy 1.8 WSW	
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-NF-68	Quincy 1.5 SSE	2.07"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-NF-39	Weymouth 2.3 N	2.32"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-PL-36	Hingham 0.8 ESE	2.69"
01090002	Cape Cod	144 DI 57	100	2.46!!
0109000201	North River - Frontal Massachusetts Bay	MA-PL-57	Hanson 1.8 N	3.16"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-5	Kingston 3.3 WNW	3.31"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-48	Marshfield 1.5 NNW	3.72"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-47	Plymouth 1.1 NNW	2.20"
0109000201	North River - Frontal Massachusetts Bay	MA-PL-2	Sagamore Beach 1.0 NW	1.80"
0109000202	Cape Cod	MA-BA-2	Falmouth 3.1 NNW	1.51"
0109000202	Cape Cod	MA-BA-57	Falmouth 5.7 N	1.46"
0109000202	Cape Cod	MA-BA-87	Falmouth 1.5 NNW	1.44"
0109000202	Cape Cod	MA-BA-17	East Falmouth 1.2 WNW	1.52"
0109000202	Cape Cod	MA-BA-19	East Falmouth 0.7 NW	1.87"
0109000202	Cape Cod	MA-BA-46	East Falmouth 0.2 ESE	2.18''
0109000202	Cape Cod	MA-BA-3	Falmouth 3.0 E	2.87"
0109000202	Cape Cod	MA-BA-83	Mashpee 2.5 W	1.58"
0109000202	Cape Cod	MA-BA-18	Waquoit 0.6 SSW	2.42"
0109000202	Cape Cod	MA-BA-47	Mashpee 2.4 WSW	1.63"
0109000202	Cape Cod	MA-BA-45	Sandwich 0.9 NNE	3.26"
0109000202	Cape Cod	MA-BA-64	Sandwich 1.5 SSE	1.60"
0109000202	Cape Cod	MA-BA-79	Mashpee 0.8 SSW	1.81''
0109000202	Cape Cod	MA-BA-78	Mashpee 4.6 S	2.56"
0109000202	Cape Cod	MA-BA-10	East Sandwich 2.3 SE	1.60"
0109000202	Cape Cod	MA-BA-59	Barnstable 3.6 W	2.31"
0109000202	Cape Cod	MA-BA-60	Hyannis 0.7 WNW	1.81"
0109000202	Cape Cod	MA-BA-76	Barnstable 0.7 NE	1.78"
0109000202	Cape Cod	MA-BA-22	Yarmouth 0.9 NNW	1.51"
0109000202	Cape Cod	MA-BA-72	Yarmouth 2.0 S	1.61"
0109000202	Cape Cod	MA-BA-77	South Dennis 1.0 NW	1.69"
0109000202	Cape Cod	MA-BA-52	Truro 0.8 E	1.49"
0109000202	Cape Cod	MA-BA-27	Wellfleet 0.7 NW	1.63"

Page 17

0109000202	Cape Cod	MA-BA-68	Eastham 1.9 WSW	1.64"
0109000202	Cape Cod	MA-BA-42	Orleans 1.8 S	1.79"
0109000202	Cape Cod	MA-BA-51	Orleans 3.0 S	1.34"
0109000202	Cape Cod	MA-BA-30	Eastham 0.6 SW	2.02"
0109000202	Cape Cod	MA-BA-43	Chatham 0.4 WSW	1.19"
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-14	Dartmouth 2.5 SSW	2.11"
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-52	New Bedford 4.3 N	1.33"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-5	Little Compton 1.7 NW	2.06"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-17	Tiverton 4.4 SSE	1.43"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-7	Little Compton 0.6 E	2.13"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-21	Chilmark 0.9 E	1.61"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-5	West Tisbury 2.9 N	2.36"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-9	West Tisbury 0.4 S	1.75"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-2	Vineyard Haven 0.8 WSW	2.60"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-18	Oak Bluffs 0.1 SW	2.08"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-22	Edgartown 1.3 WNW	1.92"
0109000207	Nantucket Island	MA-NT-1	Nantucket 3.8 WNW	1.53"
0109000207	Nantucket Island	MA-NT-9	Nantucket 5.9 ESE	1.25"
01090003	Blackstone			
0109000301	Upper Blackstone River	MA-WR-41	Auburn 2.6 SW	2.87"
0109000301	Upper Blackstone River	MA-WR-43	Leicester 2.4 ESE	1.56"
0109000301	Upper Blackstone River	MA-WR-98	Worcester 2.2 NW	1.46"
0109000301	Upper Blackstone River	MA-WR-97	Worcester 1.0 WSW	1.91"
0109000301	Upper Blackstone River	MA-WR-81	Worcester 1.6 SE	2.41"
0109000301	Upper Blackstone River	MA-WR-100	Douglas 1.9 NNE	3.31"
0109000301	Upper Blackstone River	MA-WR-100	Douglas 1.9 NNE	5.77"
0109000301	Upper Blackstone River	MA-WR-70	Grafton 1.5 W	2.65"
0109000301	Upper Blackstone River	MA-WR-69	Northbridge 1.7 WNW	2.08"
0109000302	Lower Blackstone River	RI-PR-50	Harrisville 1.2 SSE	3.69"
0109000302	Lower Blackstone River	MA-WR-90	Upton 0.4 NE	2.56"
0109000302	Lower Blackstone River	RI-PR-28	North Smithfield 0.7 SE	3.13"
0109000302	Lower Blackstone River	RI-PR-45	Manville 0.4 WSW	2.86"
0109000302	Lower Blackstone River	MA-NF-26	Bellingham 2.4 S	3.84"
0109000302	Lower Blackstone River	RI-PR-59	Cumberland Hill 0.9 NW	3.08"
0109000302	Lower Blackstone River	RI-PR-55	Cumberland Hill 3.6 NNE	3.06"
0109000302	Lower Blackstone River	RI-PR-106	Valley Falls 1.1 W	2.38"
01090004	Narragansett			
0109000401	Upper Taunton River	MA-BR-30	Taunton 3.9 N	2.79"
0109000401	Upper Taunton River	MA-NF-31	Stoughton 1.2 E	2.64"
0109000401	Upper Taunton River	MA-PL-22	East Bridgewater 0.3 WSW	3.57"
0109000401	Upper Taunton River	MA-PL-15	Abington 1.2 NNE	3.28"

0109000401	Upper Taunton River	MA-PL-60	Abington 1.7 ESE	3.83"
0109000401	Upper Taunton River	MA-PL-23	Pembroke 2.8 SW	3.49"
0109000402	Middle Taunton River	MA-PL-31	Bridgewater 1.8 SE	3.04"
0109000402	Middle Taunton River	MA-PL-17	Plympton 0.9 NNE	3.18"
0109000403	Threemile River	MA-NF-19	Foxborough 1.8 SSW	2.52"
0109000403	Threemile River	MA-BR-55	NWS Boston/Norton 2.5 ESE	3.38"
0109000404	Ten Mile River	RI-PR-119	Pawtucket 2.6 SSE	2.87"
0109000404	Ten Mile River	MA-BR-23	Attleboro 0.9 ENE	2.45"
0109000405	Wonnasquatucket River-Moshassuck River	RI-PR-33	Greenville 0.7 NNW	2.87"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-51	North Smithfield 0.6 S	3.15"
0109000406	Pawtuxet River	RI-KN-51	Coventry 3.7 W	2.15"
0109000406	Pawtuxet River	RI-KN-36	Coventry 2.5 NW	2.70"
0109000406	Pawtuxet River	RI-KN-21	Coventry 1.9 NE	3.13"
0109000406	Pawtuxet River	RI-KN-58	Coventry 1.0 E	2.79"
0109000407	Palmer River	MA-BR-2	Rehoboth 2.1 N	3.21"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-NF-73	Foxborough 3.1 E	2.44"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-61	Mansfield 2.4 ENE	2.25"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-3	Norton 1.8 NNE	3.25"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-71	Fall River 2.9 WSW	1.50"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-16	Somerset 0.4 SSE	2.06''
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-72	Somerset 2.3 NNE	2.22''
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-58	Dighton 3.3 NNW	3.79"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-8	Dighton 1.1 WSW	2.12"
0109000409	Narragansett Bay	RI-KN-17	East Greenwich 1.2 NNE	3.18"
0109000409	Narragansett Bay	RI-WS-54	North Kingstown 2.7 WSW	2.21"
0109000409	Narragansett Bay	RI-WS-31	Kingston 7.5 NNE	1.93"
0109000409	Narragansett Bay	RI-KN-15	Warwick 4.3 SSW	3.14"
0109000409	Narragansett Bay	RI-WS-66	Narragansett 2.9 N	1.87"
0109000409	Narragansett Bay	RI-KN-40	Warwick 1.5 NW	3.12"
0109000409	Narragansett Bay	RI-KN-2	East Greenwich 2.3 ESE	3.30"
0109000409	Narragansett Bay	RI-KN-23	Warwick 3.2 NNE	3.71"
0109000409	Narragansett Bay	RI-KN-31	Warwick 0.8 ENE	2.91"
0109000409	Narragansett Bay	RI-KN-37	Warwick 2.3 NNE	3.13"
0109000409	Narragansett Bay	RI-PR-67	Providence 1.6 NE	2.75"
0109000409	Narragansett Bay	RI-KN-38	Warwick 3.9 NNE	3.46"
0109000409	Narragansett Bay	RI-PR-104	Providence 2.1 NE	2.60"
0109000409	Narragansett Bay	RI-PR-84	Providence 2.7 NNE	2.40"
0109000409	Narragansett Bay	RI-NW-18	Jamestown 0.3 SSE	2.02"
0109000409	Narragansett Bay	RI-KN-56	Warwick 2.8 E	2.76"
0109000409	Narragansett Bay	RI-PR-108	East Providence 0.8 SSW	3.70"
0109000409	Narragansett Bay	RI-NW-30	Jamestown 0.7 NNE	2.08"

0100000400	Nowaganast Day	חותה	Darwington 1 2 M/NIM/	2 70!!
0109000409	Narragansett Bay	RI-BR-5	Barrington 1.3 WNW	2.79"
0109000409	Narragansett Bay	RI-NW-27	Newport 1.3 SW	2.07"
0109000409	Narragansett Bay	RI-BR-12	Barrington 1.1 NNE	2.17"
0109000409	Narragansett Bay	RI-NW-4	Middletown 1.1 SW	1.93"
0109000409	Narragansett Bay	RI-NW-32	Portsmouth 5.2 SSE	1.56"
0109000409	Narragansett Bay	MA-BR-63	Swansea 2.1 W	2.02"
0109000409	Narragansett Bay	RI-NW-20	Tiverton 1.0 SSW	1.63"
01090005	Pawcatuck-Wood			
0109000501	Wood River	RI-WS-1	Hope Valley 3.7 S	1.91"
0109000501	Wood River	RI-WS-64	Hope Valley 1.8 NE	2.56"
0109000502	Upper Pawcatuck River	RI-WS-51	Richmond 2.4 SSE	1.46"
0109000502	Upper Pawcatuck River	RI-WS-42	Richmond 4.6 NNE	2.41"
0109000502	Upper Pawcatuck River	RI-WS-37	Kingston 2.4 SW	2.00"
0109000502	Upper Pawcatuck River	RI-WS-77	Kingston 0.7 WSW	1.66"
0109000503	Lower Pawcatuck River	CT-NL-40	Pawcatuck 1.8 SSE	1.68"
0109000503	Lower Pawcatuck River	CT-NL-52	Pawcatuck 0.8 SE	1.85"
0109000503	Lower Pawcatuck River	RI-WS-30	Westerly 2.4 NNW	1.91"
0109000503	Lower Pawcatuck River	RI-WS-47	Westerly 0.8 WNW	1.68''
0109000504	Frontal Block Island Sound	RI-WS-36	Charlestown 3.0 WSW	1.94"
0109000504	Frontal Block Island Sound	RI-WS-53	Charlestown 0.7 SE	1.46''
0109000504	Frontal Block Island Sound	RI-WS-71	Wakefield-Peacedale 5.0 SW	1.89"
0109000504	Frontal Block Island Sound	RI-WS-58	Kingston 0.3 SW	1.74"
0109000504	Frontal Block Island Sound	RI-WS-65	Wakefield-Peacedale 0.9 W	2.26"
0109000504	Frontal Block Island Sound	RI-WS-81	Wakefield-Peacedale 0.4 SW	2.45"
0109000504	Frontal Block Island Sound	RI-WS-83	Wakefield-Peacedale 0.4 NNW	2.26"
0109000504	Frontal Block Island Sound	RI-WS-55	Wakefield 0.8 ENE	2.06"
0109000504	Frontal Block Island Sound	RI-WS-70	Wakefield-Peacedale 1.7 NNE	2.08"
01100001	Quinebaug			
0110000102	French River	MA-WR-88	Leicester 2.5 WSW	1.41"
0110000102	French River	MA-WR-68	Oxford 0.9 SSW	2.53"
0110000103	Fivemile River	CT-WN-6	Dayville 2.0 ENE	2.85"
0110000105	Moosup River	CT-WN-8	Moosup 1.7 NE	4.26"
0110000105	Moosup River	CT-WN-26	Danielson 3.2 ESE	2.89"
0110000105	Moosup River	RI-KN-14	Greene 1.4 E	2.67"
0110000106	Pachaug River	CT-NL-21	Griswold 0.9 N	4.04"
01100002	Shetucket			
0110000201	Willimantic River	CT-TL-18	Hebron 5.3 NW	4.84"
0110000201	Willimantic River	CT-TL-40	Coventry 0.3 NNE	2.60"
0110000201	Willimantic River	CT-TL-24	Stafford Springs 0.8 NE	5.20"
0110000201	Willimantic River	CT-TL-2	Staffordville 0.4 NNW	3.32"
0110000202	Natchaug River	CT-TL-27	Willington 2.7 SE	3.32"

0110000202	Natchaug River	CT-TL-30	Mansfield Center 2.7 NE	2.54"
0110000203	Shetucket River	CT-WN-10	South Windham 1.3 NNE	3.09"
0110000203	Shetucket River	CT-NL-10	Norwich 2.5 NNE	3.88"
01100003	Thames			
0110000301	Yantic River	CT-NL-53	Colchester 1.7 ENE	3.18"
0110000302	Thames River-Frontal New London Harbor	CT-NL-5	Oakdale 2.6 WNW	2.97"
0110000302	Thames River-Frontal New London Harbor	CT-NL-6	New London 1.0 NNW	1.20"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-38	Old Lyme 3.4 ESE	1.32"
0110000303	Mystic River - Fronter Fishers Island Sound	CT-NL-62	Salem 3.6 SE	3.13"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-29	East Lyme 0.5 SW	1.83"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-32	Niantic 1.1 SW	1.01"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-22	Central Waterford 2.7 SSW	1.19"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-46	Mystic 3.4 NW	1.57"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-37	Mystic 1.6 W	1.41"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-24	Stonington 1.4 NNW	1.41"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-18	Stonington 0.5 NNE	1.69"
01100004	Quinnipiac			
0110000401	Quinnipiac River	CT-NH-14	Prospect 1.9 ENE	1.34"
0110000401	Quinnipiac River	CT-HR-55	Southington 1.7 WNW	1.39"
0110000401	Quinnipiac River	CT-HR-83	Plainville 1.7 SW	1.60"
0110000401	Quinnipiac River	CT-HR-23	Southington 0.9 SSE	2.01"
0110000401	Quinnipiac River	CT-HR-76	Southington 1.0 ENE	1.70"
0110000401	Quinnipiac River	CT-NH-44	Wallingford Center 1.9 WNW	1.13"
0110000401	Quinnipiac River	CT-NH-43	Wallingford Center 3.3 NNW	1.07"
0110000401	Quinnipiac River	CT-NH-75	Meriden 2.8 WSW	1.17"
0110000401	Quinnipiac River	CT-NH-42	Wallingford Center 1.1 N	1.21"
0110000401	Quinnipiac River	CT-NH-72	Northford 0.8 SW	1.57"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-NH-21	East Haven 3.5 SSW	1.94"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-NH-56	Guilford Center 2.7 WSW	2.76"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-32	Killingworth 1.1 N	2.11"
0110000403	Mill River - Frontal Long Island Sound	CT-NH-39	West Haven 0.8 W	0.89"
01100005	Housatonic			
0110000501	Headwaters Housatonic River	MA-BE-11	Great Barrington 3.0 N	2.34"
0110000501	Headwaters Housatonic River	MA-BE-3	Stockbridge .2 NNE	3.19"
0110000501	Headwaters Housatonic River	MA-BE-20	Lee 3.7 SE	4.10''
0110000501	Headwaters Housatonic River	MA-BE-22	Dalton 2.9 SW	2.44"
0110000502	Williams River - Housatonic River	MA-BE-23	Sheffield 1.6 NW	1.40''
0110000503	Konkapot River-Housatonic River	CT-LT-28	Canaan 4.2 ESE	1.80''
0110000506	Candlewood Lake-Housatonic River	CT-LT-37	New Milford 3.1 WNW	1.16"
0110000507	Shepaug River	CT-LT-29	Goshen 0.5 NW	1.84"
0110000508	Still River - Housatonic River	CT-FR-41	Bethel 3.5 NNE	1.71"

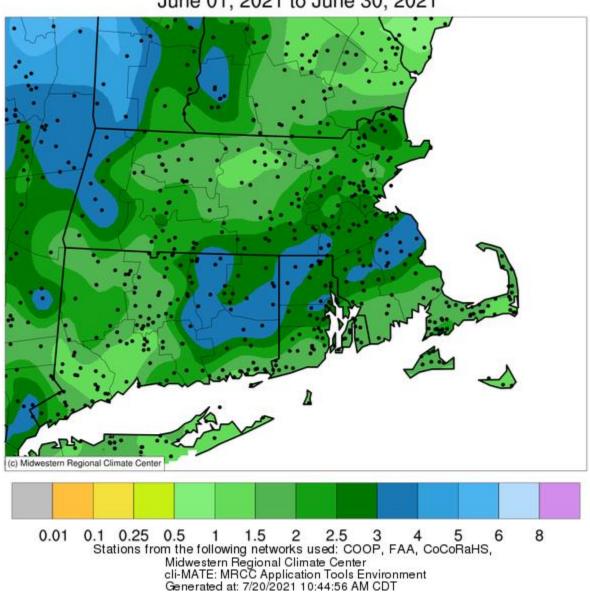
0110000508         Still River - Housatonic River         CT-R-9         Brookfield 3.3 SSE         1.22"           0110000512         Outler Naugatuck River         CT-NH-80         Seymour 1.2 WSW         1.26"           0110000512         Outlet Naugatuck River         CT-NH-67         Waterbury 1.3 WNW         2.45"           0110000512         Outlet Naugatuck River         CT-NH-45         Naugatuck 1.7 NNE         1.54"           0110000512         Outlet Naugatuck River         CT-NH-45         Naugatuck 1.7 NNE         1.54"           0110000513         Housatonic River - Frontal Long Island Sound         CT-RY-66         Strafford 0.2 ESE         1.24"           0110000513         Housatonic River - Frontal Long Island Sound         CT-RY-66         Strafford 0.2 ESE         1.24"           0110000613         Housatonic River - Frontal Long Island Sound         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000601         Saugatuck River - Frontal Norwalk Harbor         CT-R-64         Bethel 4.5 SSE         1.05"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-R-63         Wilton 1.9 NW         1.71"           0110000603         No			,		
0110000512         Outlet Naugatuck River         CT-NH-80         Seymour 1.2 WSW         1.26"           0110000512         Outlet Naugatuck River         CT-NH-67         Waterbury 1.3 WNW         2.45"           0110000512         Outlet Naugatuck River         CT-NH-45         Naugatuck 17 NNE         1.54"           0110000513         Housatonic River - Frontal Long Island Sound         CT-RF-23         Shelton 1.3 W         1.08"           0110000513         Housatonic River - Frontal Long Island Sound         CT-RF-23         Shelton 1.3 W         1.08"           011000061         Saugatuck         Saugatuck         -         -           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-63         Wilton 1.9 NW         1.71"           0110000603         Norwalk River - Frontal Long	0110000508	Still River - Housatonic River	CT-FR-9	Brookfield 3.3 SSE	1.22"
0110000512         Outlet Naugatuck River         CT-NH-67         Waterbury 1.3 WNW         2.45"           0110000512         Outlet Naugatuck River         CT-NH-45         Naugatuck 1.7 NNE         1.54"           0110000512         Outlet Naugatuck River         CT-NH-22         Prospect 0.5 SW         1.42"           0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-23         Shelton 1.3 W         1.08"           0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-46         Stratford 0.2 ESE         1.24"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-59         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Norwalk 2.9 NNW         2.19"           01100006	0110000509	Pomperaug River	CT-LT-34	Woodbury Center 1.5 SSW	3.17"
0110000512         Outlet Naugatuck River         CT-NH-45         Naugatuck 1.7 NNE         1.54"           0110000512         Outlet Naugatuck River         CT-NH-22         Prospect 0.5 SW         1.42"           0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-23         Shelton 1.3 W         1.08"           011000051         Housatonic River - Frontal Long Island Sound         CT-FR-46         Stratford 0.2 ESE         1.24"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Nilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-63         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Norwalk 2.9 NNW         1.33"	0110000512	Outlet Naugatuck River	CT-NH-80	Seymour 1.2 WSW	1.26"
0110000512         Outlet Naugatuck River         CT-NH-22         Prospect 0.5 SW         1.42"           0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-23         Shelton 1.3 W         1.08"           0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-46         Stratford 0.2 ESE         1.24"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-78         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Horwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-30         Frid General Sound         Trumbull	0110000512	Outlet Naugatuck River	CT-NH-67	Waterbury 1.3 WNW	2.45"
0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-23         Shelton 1.3 W         1.08"           0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-46         Stratford 0.2 ESE         1.24"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-59         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         New Canaan 1.9 ENE         2.07"           0110000603         Norwalk River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE	0110000512	Outlet Naugatuck River	CT-NH-45	Naugatuck 1.7 NNE	1.54"
0110000513         Housatonic River - Frontal Long Island Sound         CT-FR-46         Stratford 0.2 ESE         1.24"           01100006         Saugatuck         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-59         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-63         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000604	0110000512	Outlet Naugatuck River	CT-NH-22	Prospect 0.5 SW	1.42"
01100006         Saugatuck         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-59         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"      <	0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-23	Shelton 1.3 W	1.08"
0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-58         Ridgefield 3.6 N         1.43"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           011000604         Mianus River-Rippowam River         CT-FR-67         Trumbull 1.2 S         1.1	0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-46	Stratford 0.2 ESE	1.24"
0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-64         Bethel 4.5 SSE         1.05"           0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-59         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-8         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-83         Stamford 4.2 S         2.50"<	01100006	Saugatuck			
0110000601         Saugatuck River - Frontal Long Island Sound         CT-FR-78         Redding 1.4 E         1.37"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-59         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-65         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50" <td>0110000601</td> <td>Saugatuck River - Frontal Long Island Sound</td> <td>CT-FR-58</td> <td>Ridgefield 3.6 N</td> <td>1.43"</td>	0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-58	Ridgefield 3.6 N	1.43"
011000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-59         New Canaan 3.8 N         1.82"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000604         Mianus River-Rippowam River         CT-FR-26         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           011000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17" <t< td=""><td>0110000601</td><td>Saugatuck River - Frontal Long Island Sound</td><td>CT-FR-64</td><td>Bethel 4.5 SSE</td><td>1.05"</td></t<>	0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-64	Bethel 4.5 SSE	1.05"
0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-63         Wilton 1.9 NW         1.71"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stanford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"	0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-78	Redding 1.4 E	1.37"
0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-3         New Canaan 1.9 ENE         2.07"           0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000604         Mianus River - Frontal Long Island Sound         CT-FR-66         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"	0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-59	New Canaan 3.8 N	1.82"
0110000602         Norwalk River - Frontal Norwalk Harbor         CT-FR-25         Norwalk 2.9 NNW         2.19"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-66         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-26         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Upper Hoosic River         MA-BE-21         Cheshire 0.5 NNW         2.55"           020200060 <t< td=""><td>0110000602</td><td>Norwalk River - Frontal Norwalk Harbor</td><td>CT-FR-63</td><td>Wilton 1.9 NW</td><td>1.71"</td></t<>	0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-63	Wilton 1.9 NW	1.71"
0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-60         Fairfield 1.5 NE         1.50"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000604         Mianus River-Rippowam River         CT-FR-26         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         TO-FR-66         Norwalk 1.4 ENE         2.55"           020200060         Middle Hudson         MA-BE-21         Cheshire 0.5 NNW         2.55"           020200060         Winnerts Kill - Hudson River         N	0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-3	New Canaan 1.9 ENE	2.07"
0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-32         Monroe 0.8 W         1.33"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-26         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-35         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         TO-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Upper Hoosic River         MA-BE-21         Cheshire 0.5 NNW         2.55"           020200060         Middle Hudson         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hanc	0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-25	Norwalk 2.9 NNW	2.19"
0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-70         Bridgeport 2.9 NNW         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-26         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-35         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         MA-BE-21         Cheshire 0.5 NNW         2.55"           02020003         Upper Hoosic River         MA-BE-21         NWS Albany         3.20"           0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           0190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW	0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-60	Fairfield 1.5 NE	1.50"
0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-67         Trumbull 1.2 S         1.18"           0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-26         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-35         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         MA-BE-21         Cheshire 0.5 NNW         2.55"           02020006         Middle Hudson         NY-AB-21         NWS Albany         3.20"           0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-32	Monroe 0.8 W	1.33"
0110000603         Pequonnock River - Frontal Long Island Sound         CT-FR-26         Stratford 0.9 W         1.28"           0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-35         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         Toleshire 0.5 NNW         2.55"           020200060         Middle Hudson         MA-BE-21         Cheshire 0.5 NNW         2.55"           020200060         Middle Hudson         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-70	Bridgeport 2.9 NNW	1.18"
0110000604         Mianus River-Rippowam River         CT-FR-39         Stamford 4.2 S         2.50"           0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-35         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic <ul> <li>Upper Hoosic River</li> <li>MA-BE-21</li> <li>Cheshire 0.5 NNW</li> <li>2.55"</li> </ul> 02020006         Middle Hudson <ul> <li>WY-AB-21</li> <li>NWS Albany</li> <li>3.20"</li> </ul> 0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           020302030         Long Island Sound         MA-BE-24         Hancock 3.6 NNE         4.02"           020302030         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre	0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-67	Trumbull 1.2 S	1.18"
0110000604         Mianus River-Rippowam River         CT-FR-83         Darien 2.4 NW         1.89"           0110000604         Mianus River-Rippowam River         CT-FR-35         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         ————————————————————————————————————	0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-26	Stratford 0.9 W	1.28"
0110000604         Mianus River-Rippowam River         CT-FR-35         Darien 1.8 ENE         2.32"           0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         Cheshire 0.5 NNW         2.55"           02020006         Middle Hudson         Cheshire 0.5 NNW         2.55"           0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0110000604	Mianus River-Rippowam River	CT-FR-39	Stamford 4.2 S	2.50"
0110000604         Mianus River-Rippowam River         CT-FR-66         Norwalk 1.4 ENE         2.17"           02020003         Hudson-Hoosic         Cheshire 0.5 NNW         2.55"           02020006         Middle Hudson         Vialuation         MA-BE-21         Cheshire 0.5 NNW         2.55"           0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0110000604	Mianus River-Rippowam River	CT-FR-83	Darien 2.4 NW	1.89"
02020003         Hudson-Hoosic         Cheshire 0.5 NNW         2.55"           02020006         Middle Hudson         NY-AB-21         NWS Albany         3.20"           0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0110000604	Mianus River-Rippowam River	CT-FR-35	Darien 1.8 ENE	2.32"
0202000306         Upper Hoosic River         MA-BE-21         Cheshire 0.5 NNW         2.55"           02020006         Middle Hudson         NY-AB-21         NWS Albany         3.20"           0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0110000604	Mianus River-Rippowam River	CT-FR-66	Norwalk 1.4 ENE	2.17"
02020006         Middle Hudson         NY-AB-21         NWS Albany         3.20"           0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	02020003	Hudson-Hoosic			
0202000603         Wynants Kill - Hudson River         NY-AB-21         NWS Albany         3.20"           0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0202000306	Upper Hoosic River	MA-BE-21	Cheshire 0.5 NNW	2.55"
0202000606         Kinderhook Creek         MA-BE-24         Hancock 3.6 NNE         4.02"           02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	02020006	Middle Hudson			
02030203         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         Cache La Poudre         0.49"	0202000603	Wynants Kill - Hudson River	NY-AB-21	NWS Albany	3.20"
0203020300         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	0202000606	Kinderhook Creek	MA-BE-24	Hancock 3.6 NNE	4.02"
0203020300         Long Island Sound         NY-SF-114         Fishers Island 0.5 NE         1.20"           10190007         Cache La Poudre         CO-LR-273         FCL 2.2 NW         0.49"           19020401         Anchorage         CO-LR-273         FCL 2.2 NW         0.49"	02030203	Long Island Sound			
10190007         Cache La Poudre	0203020300		NY-SF-114	Fishers Island 0.5 NE	1.20"
19020401 Anchorage	10190007				
19020401 Anchorage	1019000708	Horsetooth Reservoir - Cache La Poudre River	CO-LR-273	FCL 2.2 NW	0.49"
	19020401	Anchorage			
	1902040107		AK-AB-55	Anchorage 7.6 SSE	0.35"

The variable nature of precipitation is on display. Areas of 3"-4" along with less than 2". A month of below normal precip. Hah! Wait until we see July's map!

Rain does not fall the same on all.

### Accumulated Precipitation (in)

June 01, 2021 to June 30, 2021



#### "We do not live at the airport"

An average of 2.13" of precip in this list for June. Our list of complete stations averaged 2.24". A small difference, but yet again, our observers continue to average higher.

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

Location	Station ID	June 2021 Precip	June departure from normal	Apr- May- Jun Precip	3 month departure from normal	Jan- Jun Precip	6 month departure from normal	Jul- Jun Precip	12 month departure from normal
White Plains NY	HPN	3.98"	-0.27''	11.91"	-0.86''	18.60"	-5.46''	41.12"	-8.23"
Danbury CT	DXR	1.08"	-3.40''	5.58"	-7.58"	11.19"	-12.20''	38.04"	-11.83"
New Haven CT	HVN	1.56"	-2.46''	9.63"	-3.00"	16.21"	-6.79''	35.47"	-11.64"
Meriden CT	MMK	0.93"	-3.09''	8.79''	-3.84"	16.98"	-6.02''	40.71"	-6.40''
Hartford CT	HFD	1.50"	-2.49''	7.49''	-4.27''	14.44"	-6.69''	36.70"	-6.90''
Willimantic CT	IJD	2.72"	-1.33"	10.16''	-2.31"	15.41"	-7.91''	32.59"	-15.83"
New London CT	GON	1.22"	-2.89"	8.50''	-3.87"	17.89"	-4.77''	35.39"	-11.10"
Westerly RI	WST	1.54"	-2.14"	7.91''	-4.20''	14.49"	-8.84''	32.82"	-14.57''
Newport RI	UUU	1.72"	-2.10"	9.52"	-2.37"	17.13"	-6.06''	38.18"	-8.15"
New Bedford MA	EWB	1.44''	-2.51"	6.80''	-5.34"	14.75"	-9.87''	28.73"	-19.63"
Hyannis MA	HYA	1.50"	-2.05"	8.58''	-2.98"	16.53"	-7.55"	32.85"	-14.84''
Nantucket MA	ACK	1.05"	-2.44"	7.15"	-3.50"	13.56"	-7.67''	30.89"	-13.53"
Marthas Vineyard MA	MVY	1.69"	-1.63"	9.99''	-0.48''	17.88"	-3.73"	31.99"	-13.17"
Taunton MA	TAN	2.95"	-0.68''	11.64''	-0.19''	19.59"	-4.89''	40.74"	-9.00''
Plymouth MA	PYM	2.15"	-1.80''	11.72"	-0.56''	22.69"	-2.13"	45.11"	-4.04"
Norwood MA	OWD	2.66"	-1.29''	11.41"	-0.41''	19.32"	-3.63"	40.66"	-6.40''
Bedford MA	BED	3.39"	-0.53"	13.40''	1.54"	19.87"	-2.72"	39.56"	-6.15"
Lawrence MA	LWM	3.22"	-0.85''	8.66''	-2.99''	13.82"	-7.62"	36.18"	-6.98''
Fitchburg MA	FIT	0.88"	-3.37"	9.32"	-3.11"	15.74"	-7.42"	35.06"	-12.08"
Orange MA	ORE	1.57"	-2.86''	7.69''	-3.90''	14.47"	-5.97''	34.74"	-7.81''
Westfield MA	BAF	4.07"	-0.28''	13.71"	0.55"	20.07"	-3.28"	43.19"	-5.20"
North Adams MA	AQW	4.07"	-0.89''	11.89''	-1.01''	17.48"	-4.20''	38.20"	-8.41"

#### Rulers of the Snow

We are the Rulers of the Snow. No automated piece of equipment can do what we can do with each daily report!.

A list of 83 stations in June, plus a little extra with our friends, who reported snow fall and snow depth for all days. 663 stations across the entire network did the same, so this list equates to **13% of all stations** that did so across the entire network in June.

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

June, July & August may be the only three months of the entire year where there is no measurable snow on Nolan's Farm in Fort Collins. Stay sharp! Keep watch for Nolan!

Station	Name	June 2021 Snowfall	Station	Name	June 2021 Snowfall
MA-BE-21	Cheshire 0.5 NNW	0.0''	RI-WS-31	Kingston 7.5 NNE	0.0"
CT-LT-34	Woodbury Center 1.5 SSW	0.0''	RI-WS-37	Kingston 2.4 SW	0.0"
CT-LT-44	Winsted 1.0 WSW	0.0''	RI-WS-42	Richmond 4.6 NNE	0.0"
CT-LT-9	New Hartford Center 3.2 SW	0.0''	RI-WS-47	Westerly 0.8 WNW	0.0"
CT-FR-3	New Canaan 1.9 ENE	0.0''	RI-NW-18	Jamestown 0.3 SSE	0.0"
CT-FR-9	Brookfield 3.3 SSE	0.0''	RI-NW-7	Little Compton 0.6 E	0.0"
CT-NH-43	Wallingford Center 3.3 NNW	0.0''	MA-BR-23	Attleboro 0.9 ENE	0.0"
CT-NH-72	Northford 0.8 SW	0.0''	MA-BR-3	Norton 1.8 NNE	0.0"
MA-FR-10	Conway 0.9 SW	0.0''	MA-BR-55	NWS Boston/Norton 2.5 ESE	0.0"
MA-FR-12	Sunderland 1.3 SE	0.0''	MA-BR-61	Mansfield 2.4 ENE	0.0"
MA-FR-13	Conway 2.9 NW	0.0''	MA-MD-115	Hudson 1.4 NW	0.0"
MA-FR-17	Buckland 1.8 ESE	0.0''	MA-MD-119	Watertown 1.1 W	0.0"
MA-HS-26	Easthampton 0.5 SW	0.0''	MA-MD-12	Acton 1.3 SW	0.0"
MA-HS-45	Westhampton 0.4 WNW	0.0''	MA-MD-125	Tewksbury 3.6 SSE	0.0"
MA-HS-48	Easthampton 1.0 E	0.0''	MA-MD-126	Melrose 0.5 NE	0.0"
MA-HS-7	Plainfield 2.2 SW	0.0''	MA-MD-158	Sherborn 1.1 NW	0.0"
MA-HD-30	Hampden 2.0 NW	0.0''	MA-MD-42	Holliston 0.8 S	0.0"
CT-HR-22	East Hartford 1.3 E	0.0''	MA-MD-47	West Townsend 0.5 W	0.0''

CT-HR-57	Suffield Depot 3.3 NNE	0.0''	MA-MD-51	Maynard 0.7 ESE	0.0''
CT-HR-63	West Hartford 1.1 NNE	0.0''	MA-MD-62	Chelmsford 1.2 E	0.0''
CT-HR-8	North Granby 1.3 ENE	0.0''	MA-MD-85	Wilmington 2.2 WNW	0.0"
CT-TL-18	Hebron 5.3 NW	0.0''	MA-ES-12	Boxford 2.4 S	0.0"
CT-TL-2	Staffordville 0.4 NNW	0.0''	MA-ES-4	Groveland 0.5 WSW	0.0"
CT-TL-24	Stafford Springs 0.8 NE	0.0''	MA-ES-41	Danvers 0.8 ESE	0.0"
CT-TL-27	Willington 2.7 SE	0.0''	MA-ES-48	Andover 0.6 E	0.0"
CT-MD-23	Higganum 0.7 N	0.0''	MA-ES-58	Middleton 1.4 SSW	0.0"
MA-WR-41	Auburn 2.6 SW	0.0''	MA-NF-1	Norwood 1.3 NW	0.0"
MA-WR-42	Northborough 2.3 N	0.0''	MA-NF-54	Quincy 1.2 W	0.0''
MA-WR-44	Westminster 0.6 WSW	0.0''	MA-PL-60	Abington 1.7 ESE	0.0"
MA-WR-69	Northbridge 1.7 WNW	0.0''	MA-BA-2	Falmouth 3.1 NNW	0.0''
MA-WR-75	Warren 2.4 WSW	0.0''	MA-BA-3	Falmouth 3.0 E	0.0"
MA-WR-88	Leicester 2.5 WSW	0.0''	MA-BA-47	Mashpee 2.4 WSW	0.0"
CT-WN-26	Danielson 3.2 ESE	0.0''	MA-BA-51	Orleans 3.0 S	0.0"
CT-NL-10	Norwich 2.5 NNE	0.0''	MA-BA-57	Falmouth 5.7 N	0.0"
CT-NL-21	Griswold 0.9 N	0.0''	MA-BA-60	Hyannis 0.7 WNW	0.0''
CT-NL-24	Stonington 1.4 NNW	0.0''	MA-BA-72	Yarmouth 2.0 S	0.0''
CT-NL-29	East Lyme 0.5 SW	0.0''	MA-BA-76	Barnstable 0.7 NE	0.0''
CT-NL-32	Niantic 1.1 SW	0.0''	MA-BA-77	South Dennis 1.0 NW	0.0''
CT-NL-6	New London 1.0 NNW	0.0''	MA-DK-2	Vineyard Haven 0.8 WSW	0.0''
RI-PR-33	Greenville 0.7 NNW	0.0''	MA-DK-22	Edgartown 1.3 WNW	0.0''
RI-PR-50	Harrisville 1.2 SSE	0.0''	NY-SF-114	Fishers Island 0.5 NE	0.0"
RI-PR-55	Cumberland Hill 3.6 NNE	0.0''	CO-LR-273	FCL 2.2 NW	0.0''
RI-KN-14	Greene 1.4 E	0.0''	AK-AB-55	Anchorage 7.6 SSE	0.0''

June 2021 as a calendar. Bright magenta for the highest number of reports. Green for the lowest number of reports.

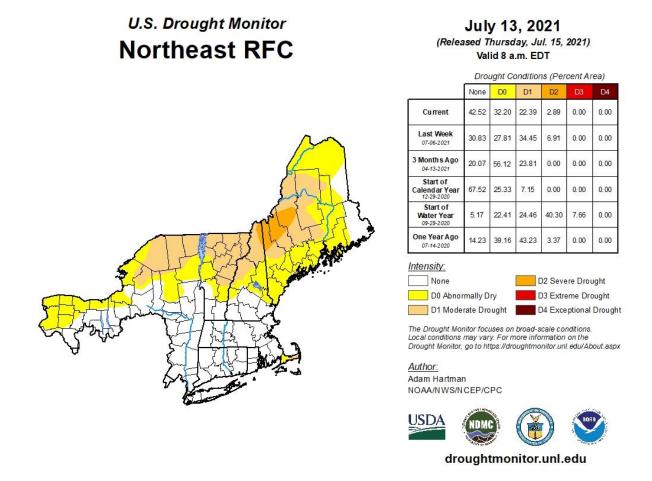
463 Reports per Day was our reporting average for June 2021.

June 2021							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1 468	2 475	3 466	4 482	5 474	
445	445 445	456 456	9 492	10 453	11 442	12 477	
13 444	460	507	16 473	17 464	18 454	19 456	
20 478	21 454	22 461	23 502	24 457	25 480	26 445	
27 443	28 444	29 441	30 466				

The large rains we received in July have helped.

Please continue to report the conditions where you are. Strive to be a "Consistent Station" by submitting over 20 Condition Monitoring Reports in a 52-week period.

Every drop counts and zeros do too!



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

# Wrap up



**CREEKSIDE PARK - FORT COLLINS CO** 

July 28<sup>th</sup> will mark the 24<sup>th</sup> year since the Spring Creek Flood in Fort Collins Colorado, the significant event that gave CoCoRaHS its start.

Yes, the water was that high.

Over 14" of rain fell on the hillslopes west of town. The raging torrent of water flowed east to this park, causing a loss of life and property.

We submit Significant Weather Reports, because our ears and eyes are a valuable part of the weather warning process. We can and do provide the ground truth in real time.

Collectively, you continue to impress in a dry month of June as well as in a wet month of July.

Whether you are new or long standing with our network, for this tragic anniversary, please take the 2 minutes to review the CoCoRaHS story video.

We believe that precipitation is important and highly variable. Our low cost tools continue to have high value results.

This Newsletter concludes the 6<sup>th</sup> year of Monthly Newsletters. On we go to the 7<sup>th</sup> year.

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