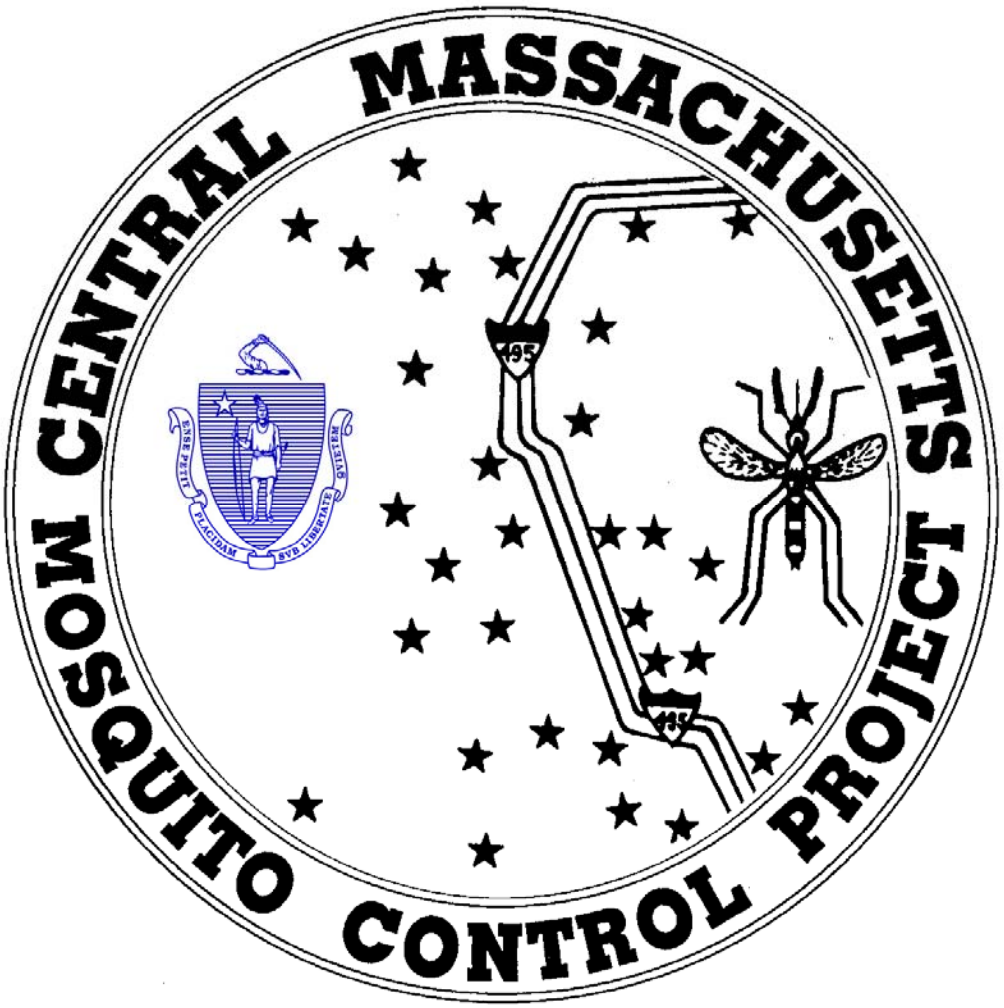
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #34
Aug. 23-26, 2017

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Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 8/20/17-8/26/17
EPI Week #34

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	65	355	66	196	844	2965
Total Specimens	320	17368	195	3420	16265	45038
No. Pools WNV +	0	0	0	0	9†	9†
No. Pools EEE +	0	0	0	0	0	0

†Pool of WNV+ *Culex* species collected in Milford on 7/27/17
†Pool of WNV+ *Culex* species collected in Ashland on 7/27/17
†Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17
†Pool of WNV+ *Culex* species collected in Millbury on 8/4/17
†Pool of WNV+ *Culex* species collected in Webster on 8/8/17
†Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17
†Pool of WNV+ *Culex* species collected in Millbury on 8/11/17
†Pool of WNV+ *Culex* species collected in Billerica on 8/15/17
†Pool of WNV+ *Culex* species collected in Milford on 8/17/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 69.09°F with a recorded high temperature of 90.10°F and a recorded low temperature of only 47.10°F. For this week there was also a total of 0.32 inches of rain observed. Compared to the previous week, it was approximately 2.12°F cooler on average, and rained about 0.27 inches more. There has been 1.12 inches of rain accumulated in August, after 2.04 inches for the month of July.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	-86.00%	-7.88%	Hudson, Millville
Coquillettidia perturbans	-44.96%	-65.01%	Sturbridge, Holliston, Hopedale
Culiseta melanura	+43.33%	-69.68%	Holliston, Millville
Ochlerotatus canadensis	+16.18%	-34.53%	Millville, Hopedale
Culex Species	+39.49%	+50.22%	Wilmington, Sturbridge
All Species	-13.50%	-39.64%	Sturbridge, Wilmington

The predominant mosquito for the week was *Culex*,
followed by *Coquillettidia perturbans*.

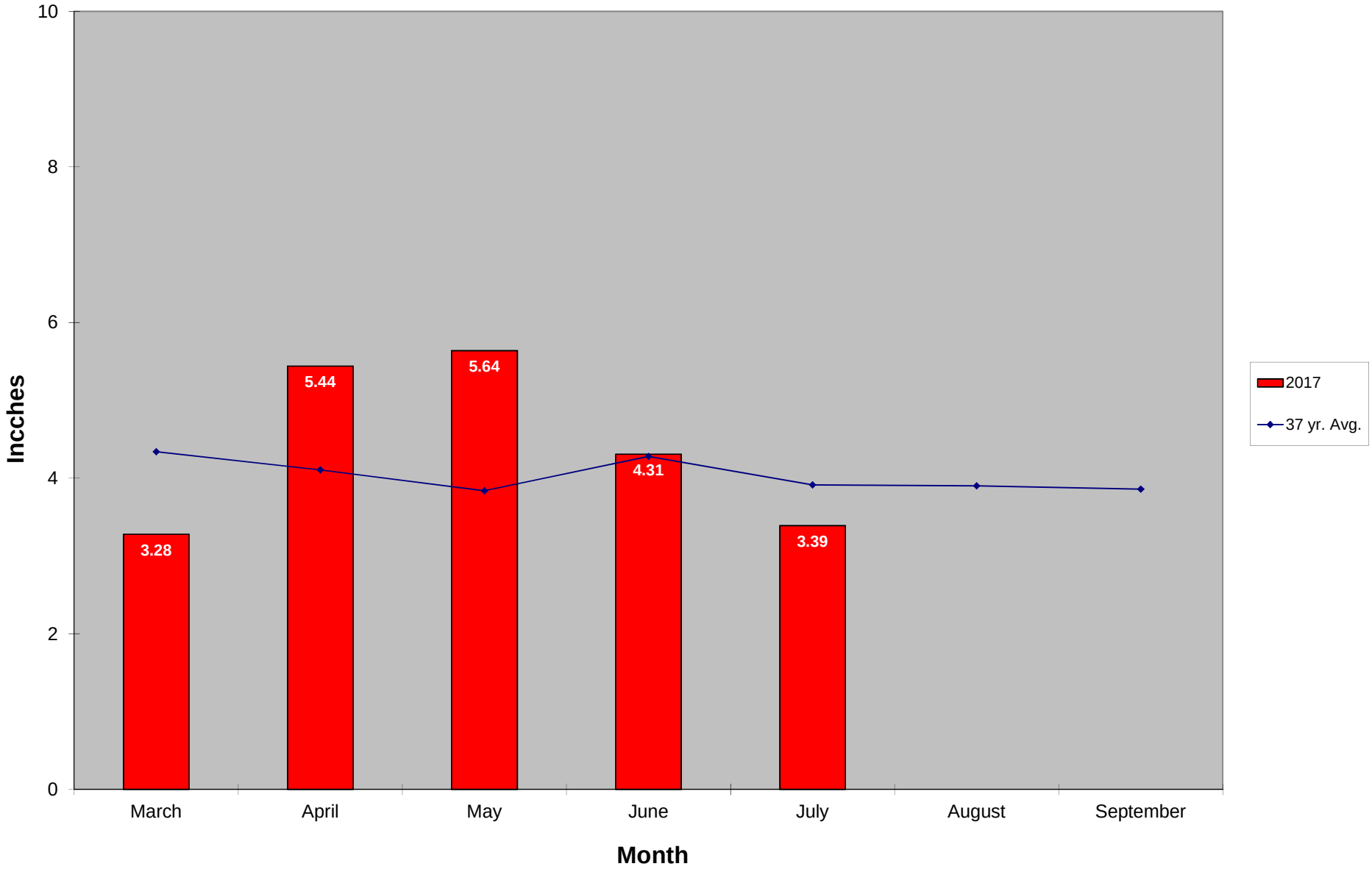
EPI Week 34 Narrative:

The temperatures for EPI week 34 averaged approximately 2.12 degrees cooler than the previous week, with only 0.32 inches of precipitation observed. Overall collection numbers decreased by 13.50% from EPI week 33. Despite the general decrease in

mosquito population, the only target mosquitoes collected in lower numbers from the prior surveillance period were *Aedes vexans* and *Coquillettidia perturbans*. To this point in the season, *Culex* is the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* has now become the most abundant mosquito in the CMMCP service area followed by *Cq*. *perturbans*, which should continue to decrease moving forward. Two additional mosquito pools collected in EPI week 33 were determined to be WNV positive. These two collections were both *Culex* mosquitoes, sourced from the towns of Billerica and Milford. Milford had a previous WNV positive collection in EPI week 30, but it was from a different trap site. Recent ovitrap collections from Lowell produced three individual Aedes albopictus eggs.

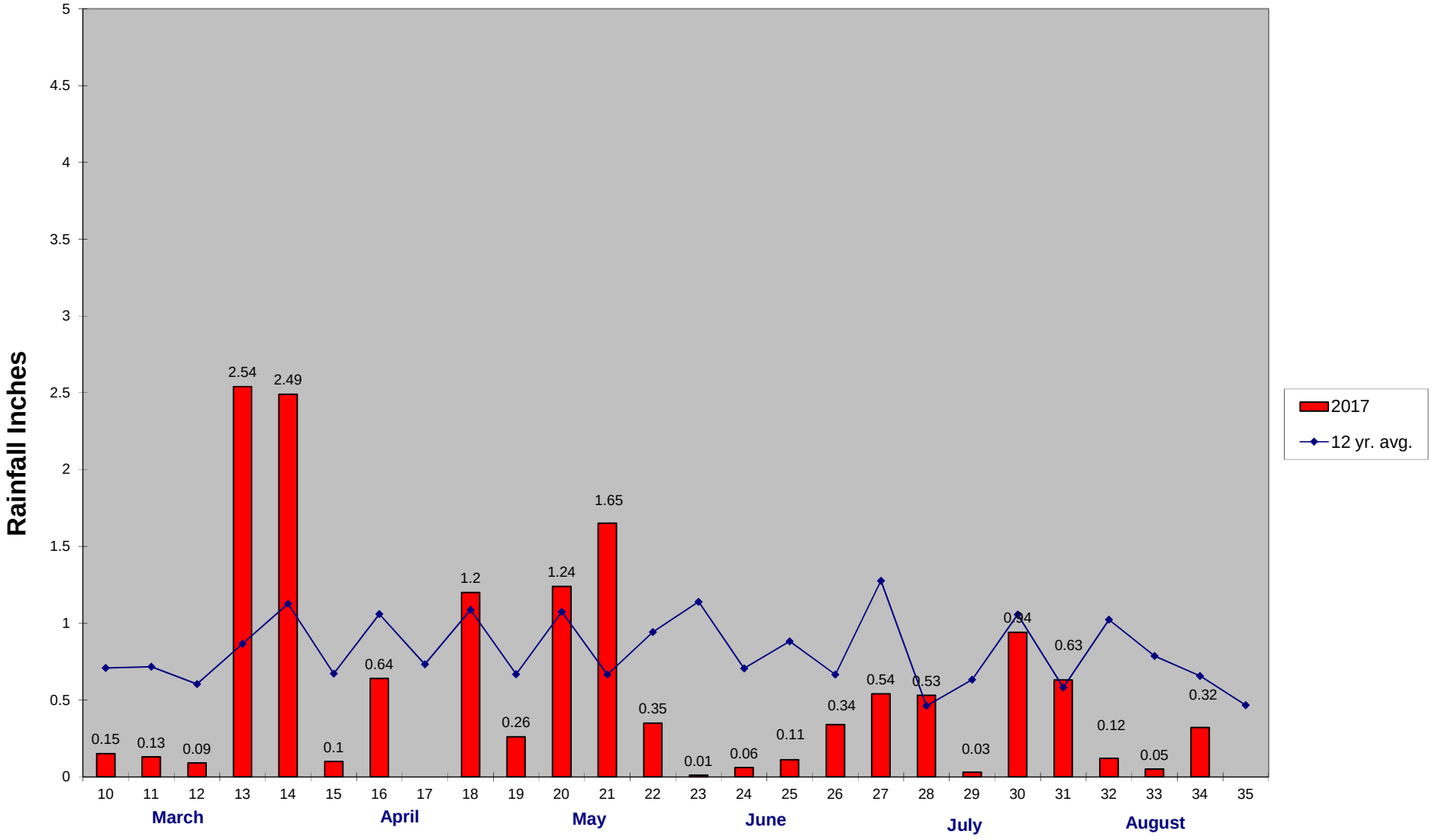
We have received 179% more service requests than the 14 year average (15,953 in 2017 v. 8,928 14 yr. avg.), and 3.7% more than this time in 2016 (15,580 in 2017 v. 15,020 in 2016). Service requests decreased 38% from Epi week 33. 373 service requests were received and 603 requests were performed in Epi week 34 with favorable weather conditions. Vector spraying was done after consultation with the LBOH in Billerica & Milford after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

2017 Mass. Rainfall Data vs. 37 Year Average*

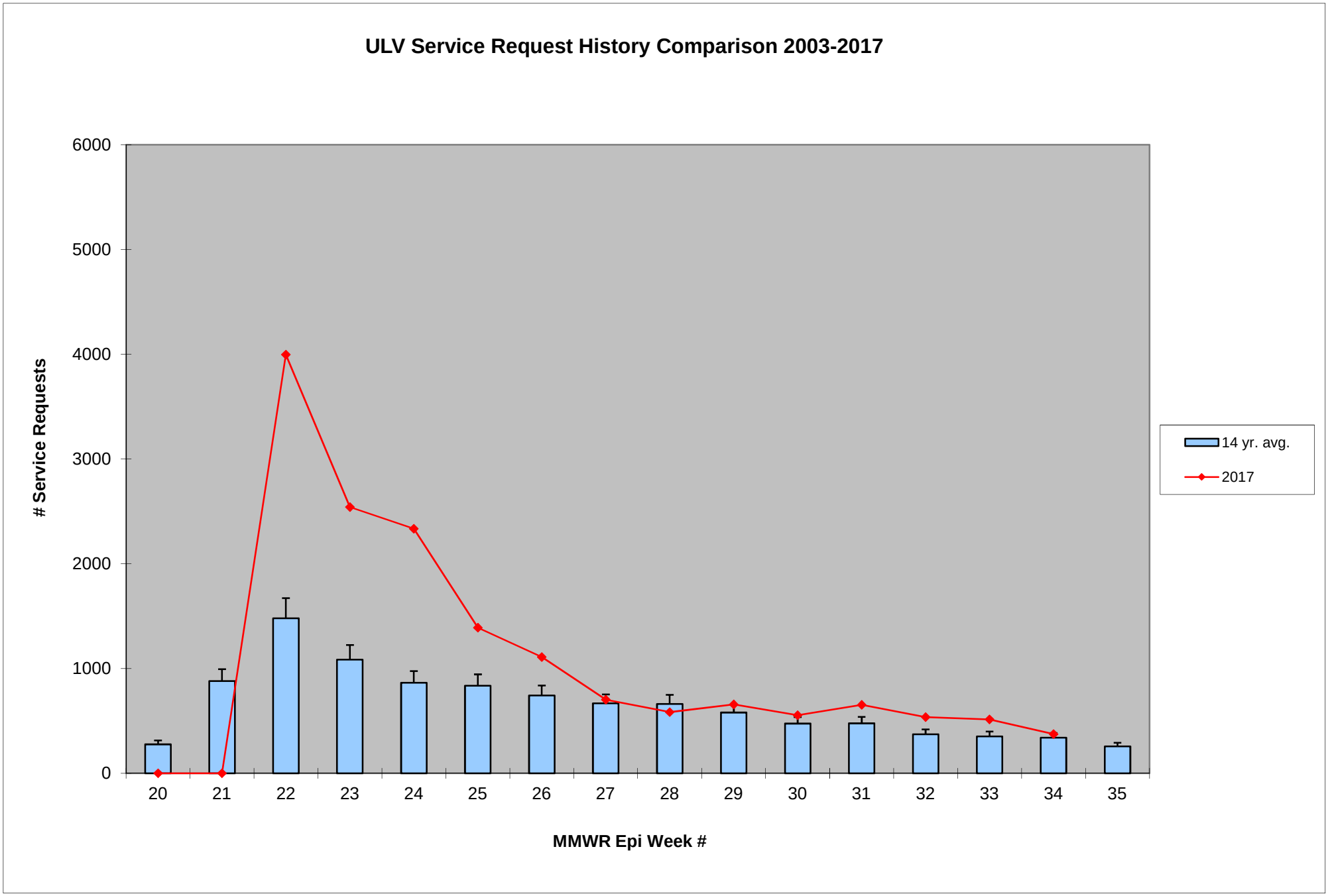


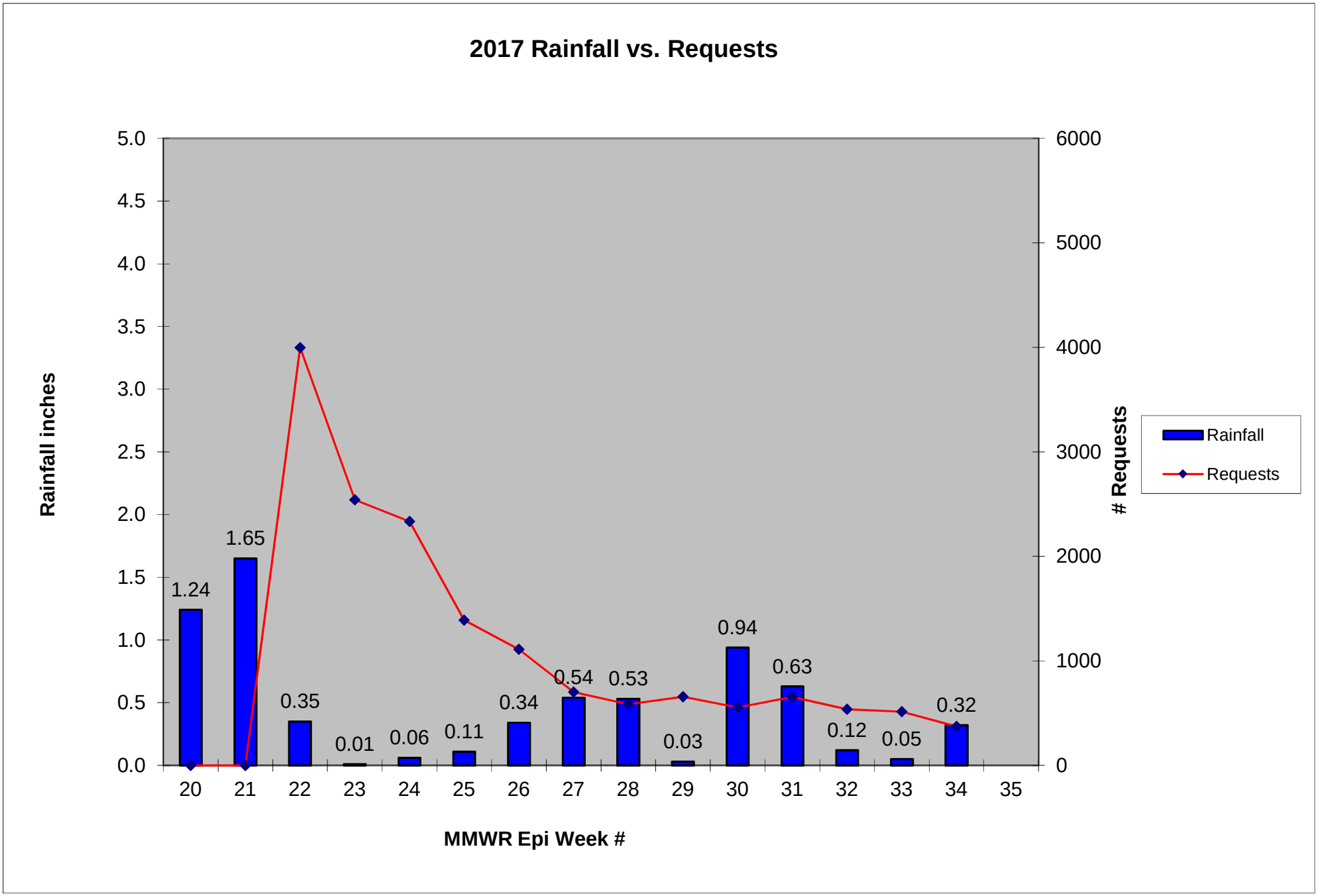
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

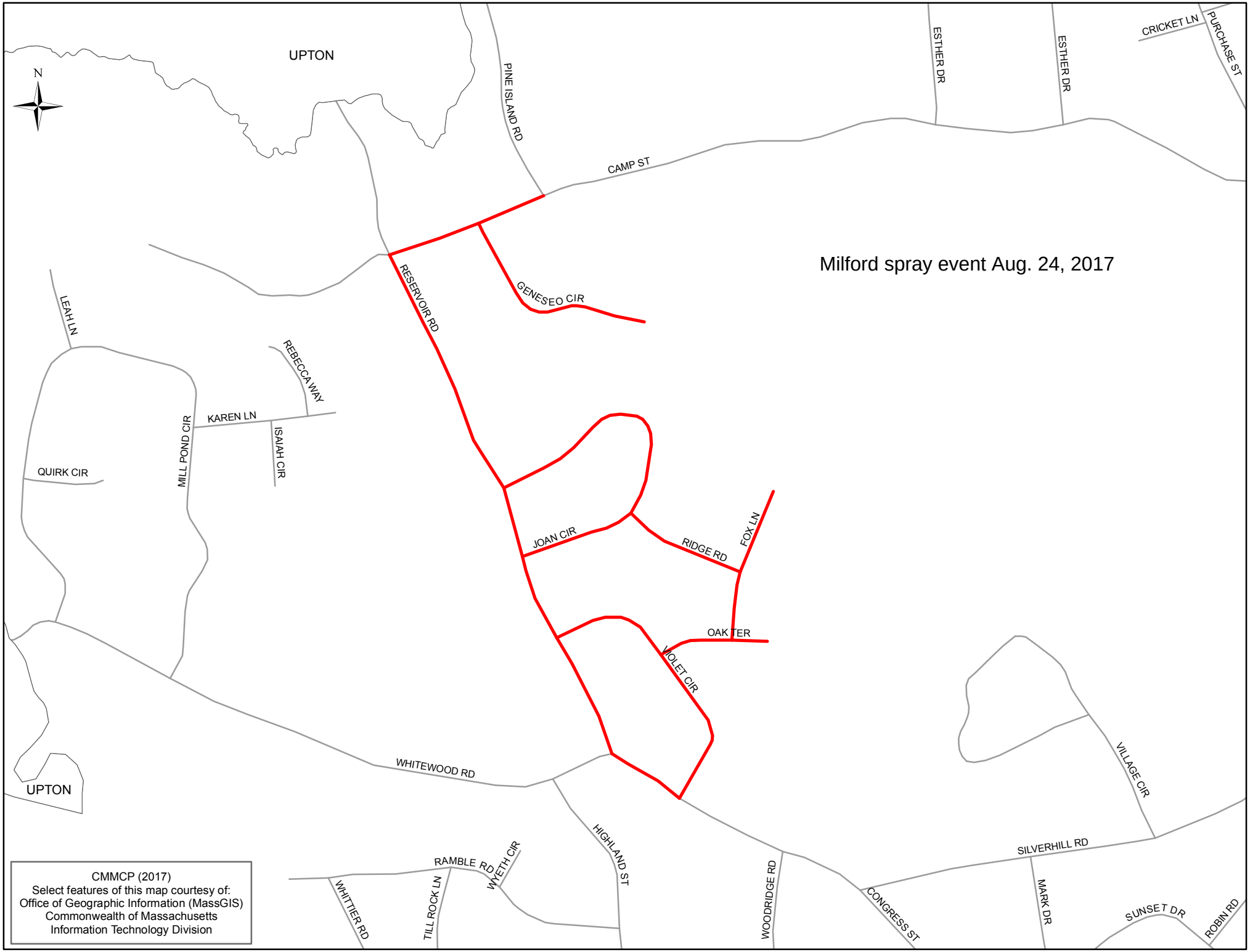
2017 CMMCP Weekly Rainfall vs. 12 Year Average*



*source: CMMCP weather station Northborough, MA


ULV Service Request History Comparison 2003-2017
Service Requests
6000
5000
4000
3000
2000
1000
0
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
MMWR Epi Week #
14 yr. avg.
2017


2017 Rainfall vs. Requests
Rainfall inches
Requests
MMWR Epi Week #
Rainfall
Requests
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6000
5000
4000
3000
2000
1000
0
1.24
1.65
0.35
0.01
0.06
0.11
0.34
0.54
0.53
0.03
0.94
0.63
0.12
0.05
0.32
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35


Milford spray event Aug. 24, 2017
UPTON
N
PINE ISLAND RD
CAMP ST
ESTHER DR
ESTHER DR
CRICKET LN
PURCHASE ST
RESERVOIR RD
GENESEO CIR
LEAH LN
REBECCA WAY
KAREN LN
ISAIAH CIR
MILL POND CIR
QUIRK CIR
JOAN CIR
RIDGE RD
FOX LN
OAK TER
VIOLET CIR
WHITEWOOD RD
UPTON
VILLAGE CIR
SILVERHILL RD
HIGHLAND ST
RAMBLE RD
WYETH CIR
WHITTIER RD
TILL ROCK LN
WOODRIDGE RD
CONGRESS ST
MARK DR
SUNSET DR
ROBIN RD
CMMCP (2017)
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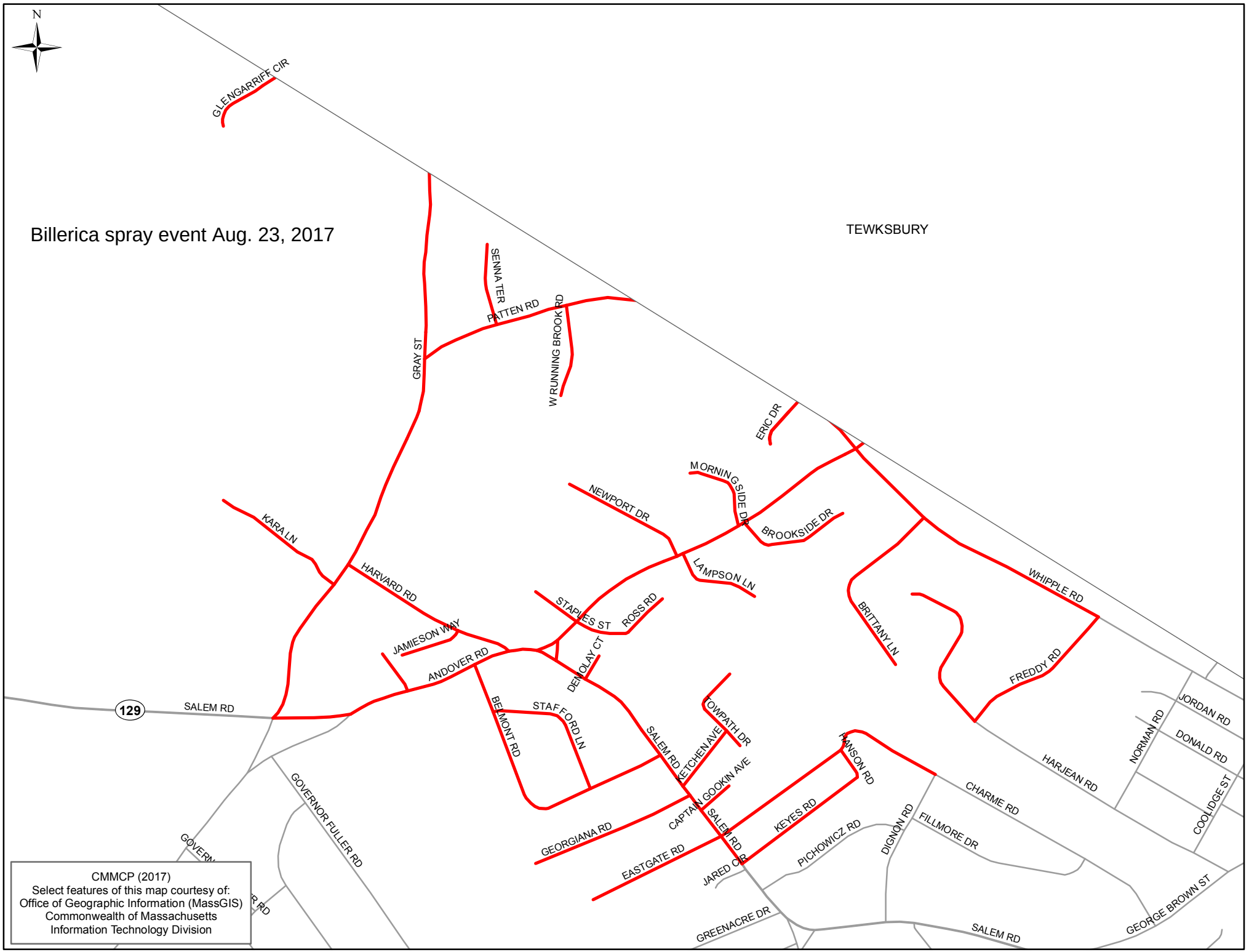
N
Billerica spray event Aug. 23, 2017
TEWKSBURY
GLENGARRIFF CIR
SENNA TER
PATTEN RD
W RUNNING BROOK RD
GRAY ST
ERIC DR
MORNINGSIDE DR
NEWPORT DR
BROOKSIDE DR
KARA LN
HARVARD RD
LAMPSON LN
WHIPPLE RD
BRITTANY LN
FREDDY RD
STAPLES ST
ROSS RD
JAMIESON WAY
ANDOVER RD
DEMOLAY CT
129
SALEM RD
BELMONT RD
STAFFORD LN
TOWPATH DR
KETCHEN AVE
SALEM RD
HANSON RD
CAPTAIN GOOKIN AVE
GEORGIANA RD
KEYES RD
SALEM RD
EASTGATE RD
JARED CIR
PICHOWICZ RD
DIGNON RD
FILLMORE DR
CHARME RD
HARJEAN RD
NORMAN RD
JORDAN RD
DONALD RD
COOLIDGE ST
GOVERNOR FULLER RD
GREENACRE DR
SALEM RD
GEORGE BROWN ST
CMMCP (2017)
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