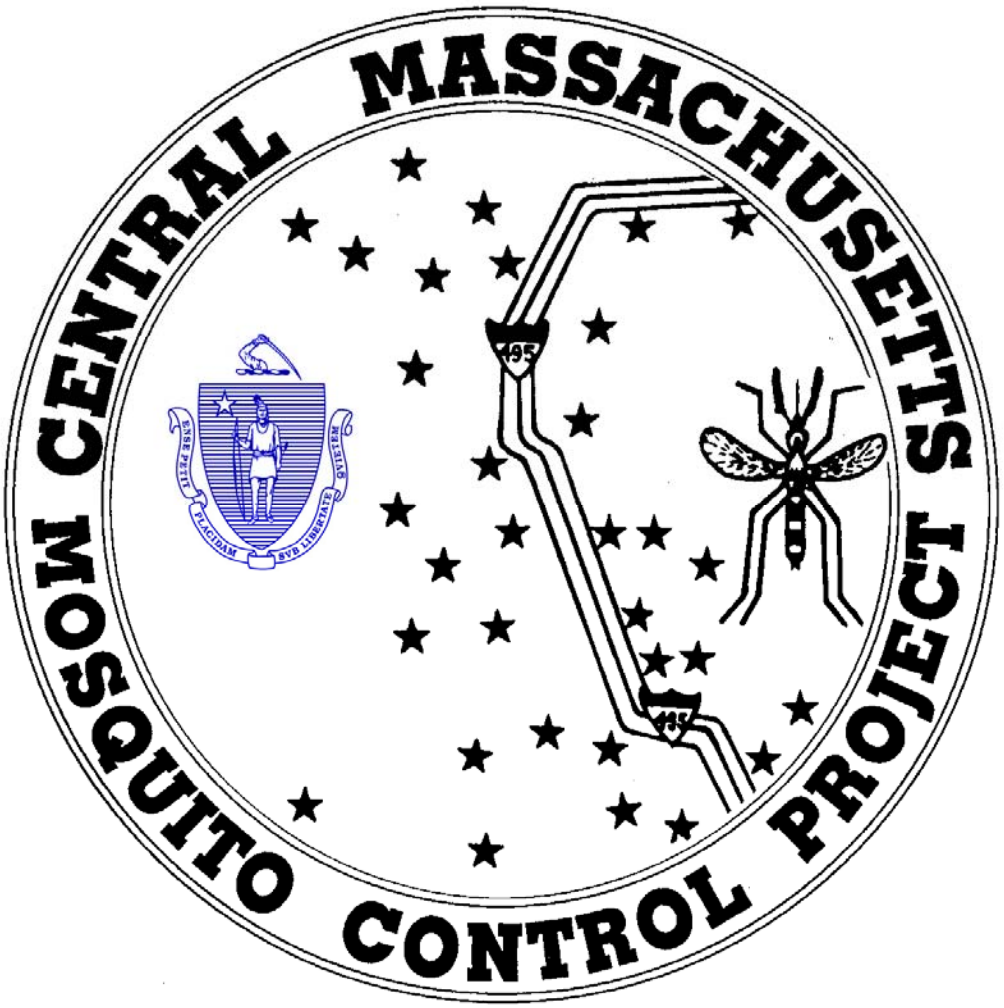
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #29
Jul. 16-22, 2017

Frank Cornine, *Field Biologist*
Curtis Best, *Staff Entomologist*
David Mullins, *Field Biologist*
Marco Notarangelo, *Surveillance Technician*
Tim McGlinchy, *Director of Operations*
Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 7/16/17-7/22/17
EPI Week #29

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	30	136	24	145	402	1492
Total Specimens	98	4890	64	2855	5009	16284
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 76.66°F with a recorded high temperature of 91.80°F and a recorded low temperature of only 61.20°F. For this week there was also a total of 0.03 inches of rain observed. Compared to the previous week, it was approximately 6.97°F warmer on average, and rained about 0.50 inches fewer. There has been 1.10 inches of rain accumulated in July, after 0.54 inches for the month of June.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	-100.0%	+485.7%	N/A
Coquillettidia perturbans	-71.43%	-86.54%	Chelmsford, Hudson, Boxborough
Culiseta melanura	-58.33%	-92.25%	Wilmington, Lunenburg, Millbury
Ochlerotatus canadensis	-50.00%	-44.16%	Ashland
Culex Species	+33.22%	+5.08%	Ashland, Stow, Southborough
All Species	+56.54%	-70.78%	Stow, Ashland

The predominant mosquito for the week was *Culex* species.

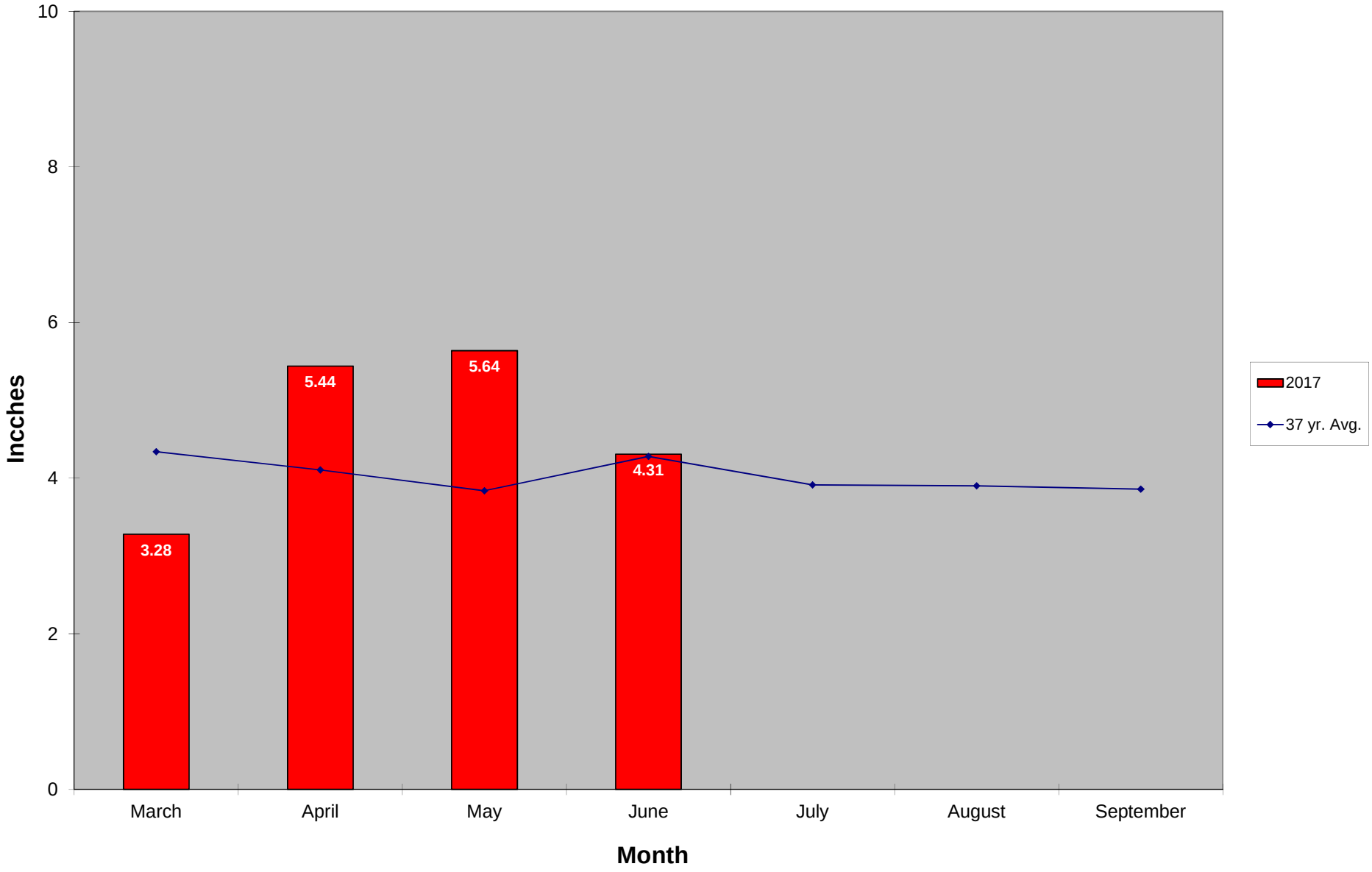
Epi week #29 narrative:

The temperatures for EPI week 29 averaged approximately 6.97 degrees warmer than the previous week, with 0.03 inches of precipitation observed. Overall collection numbers increased by 56.54% from EPI week 28, although the only target mosquito increasing from the prior collection period was *Culex*. To this point in the season, all target species have been collected in lower numbers compared to 2016 aside from *Aedes vexans* and *Culex*. This week *Culex* was the most abundant mosquito in the CMMCP service area. It is anticipated that *Cq. perturbans* will become the most abundant mosquito for EPI week 30. Ovitraps collected by CMMCP this week produced 259 eggs for *Aedes albopictus* (ATM) surveillance – no ATM have been identified in the CMMCP service area in 2017.

We have received 193% more service requests than the 14 year average (13,319 in 2017 v. 6,913 14 yr. avg.), and 3.7% more than this time in 2016 (13,319 in 2017 v. 12,838 in

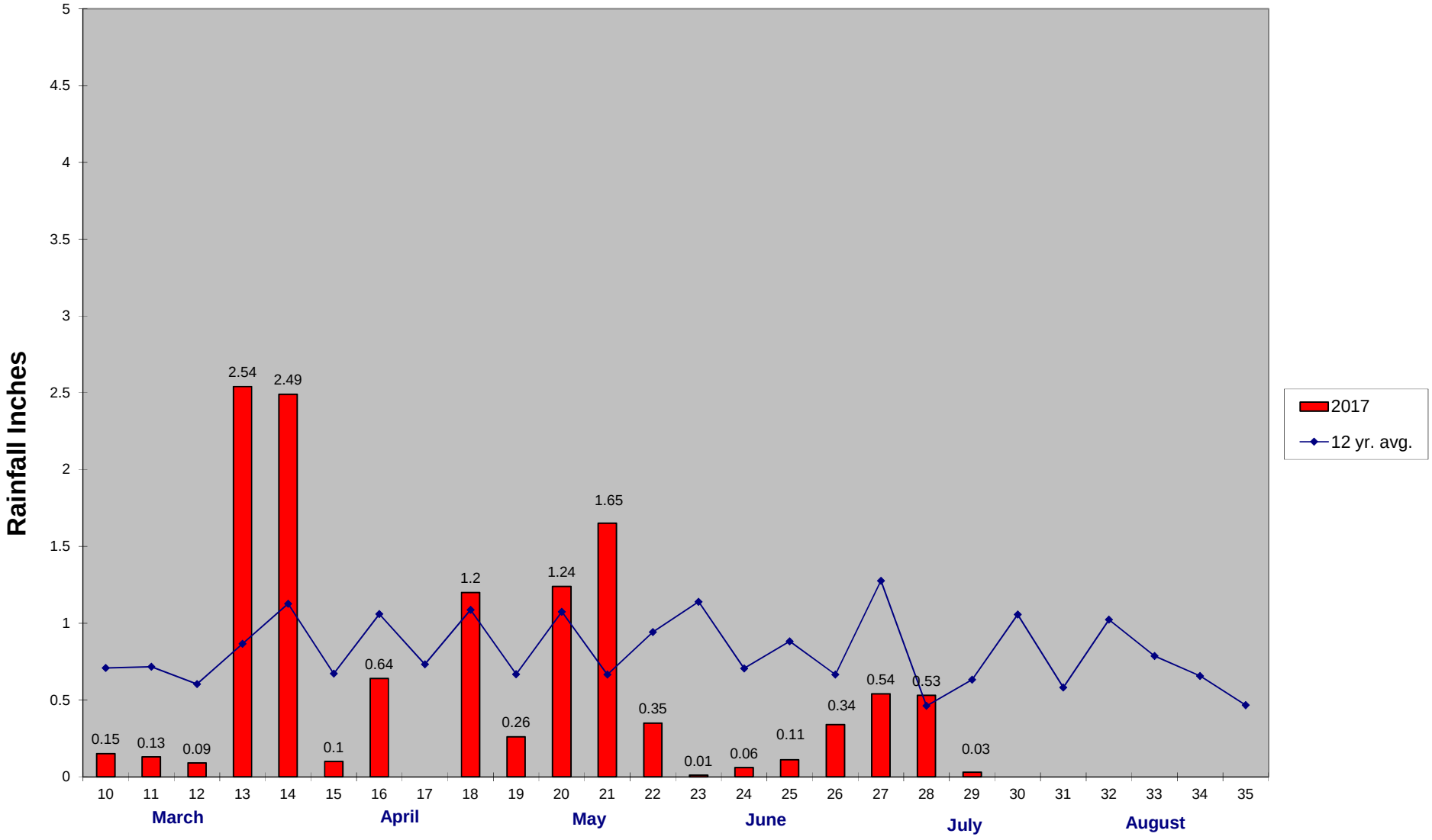
2016). Service requests increased 12.3% from Epi week 29 v week 28. 657 service requests were received and 1,508 requests were performed in Epi week 29 with favorable weather conditions all week.

2017 Mass. Rainfall Data vs. 37 Year Average*

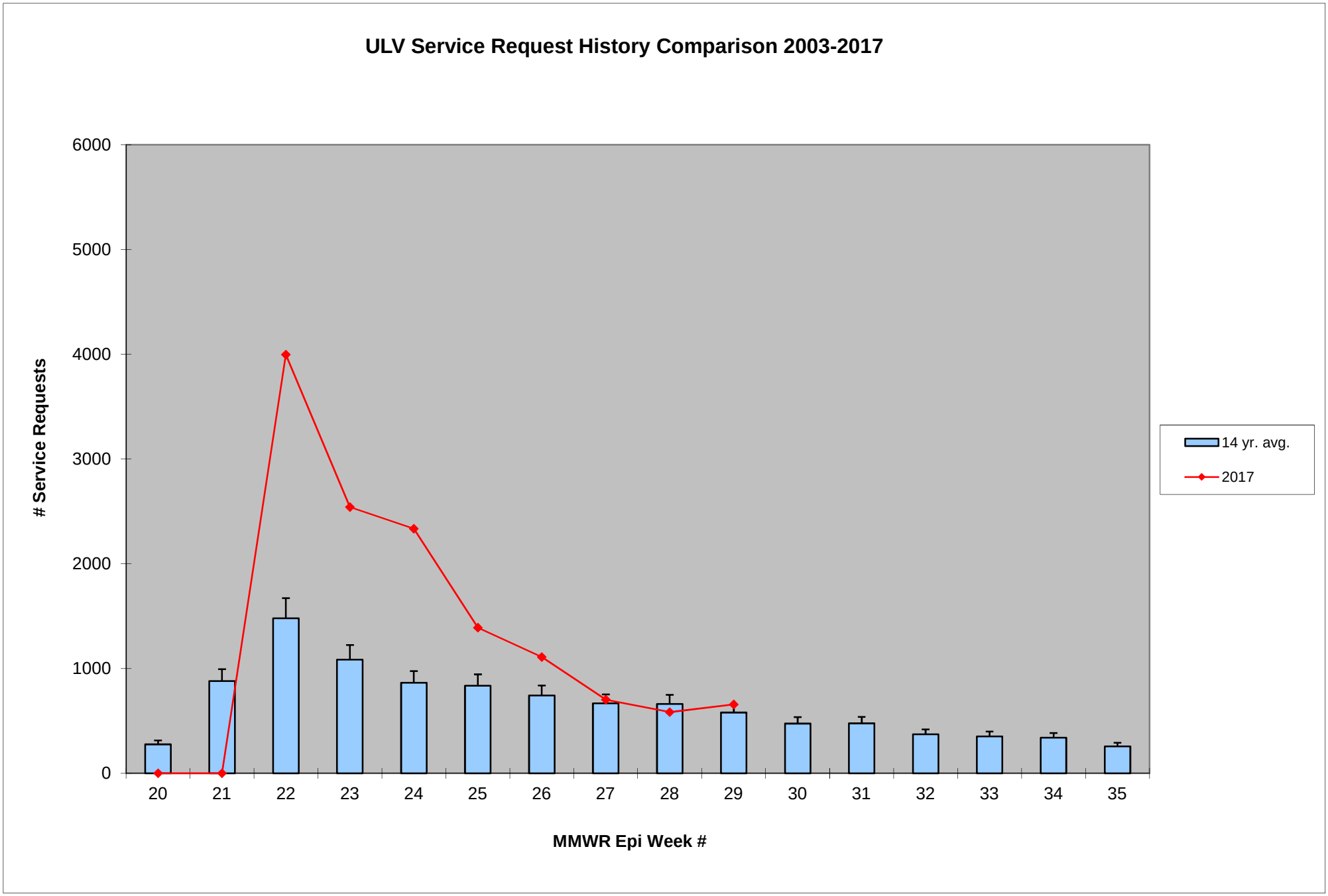


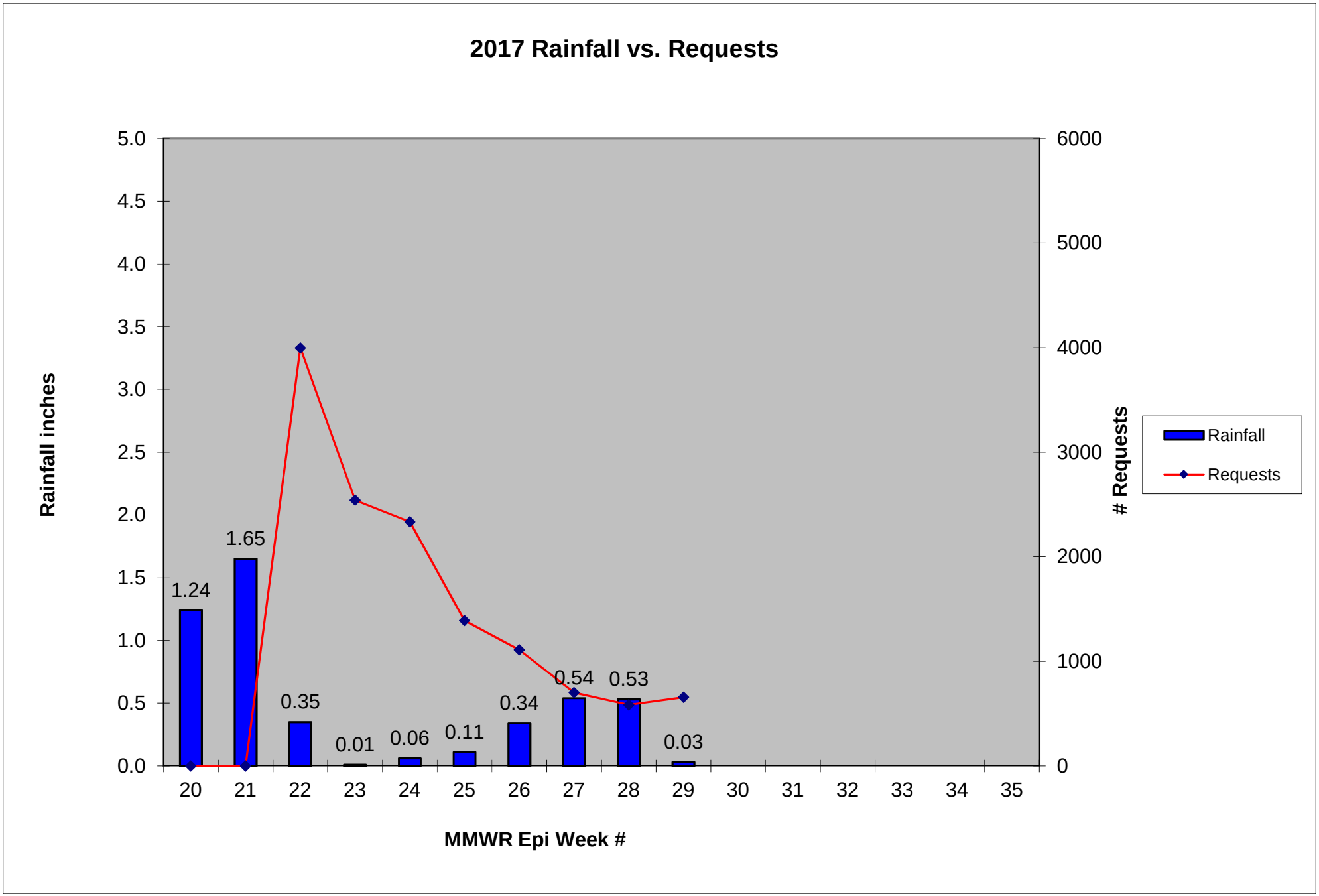
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

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
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35