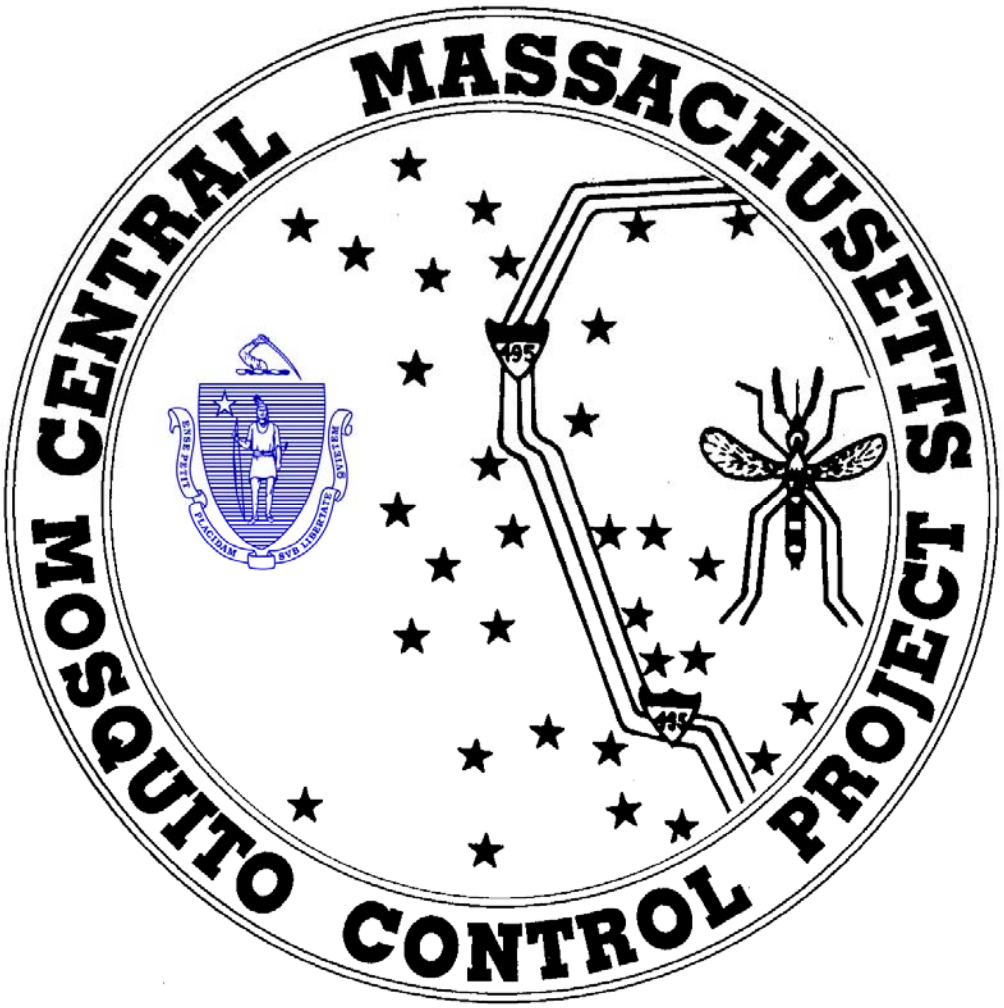
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #23
June 1-7, 2014

Frank Cornine, *Field Biologist*
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Tim McGlinchy, *Director of Operations*
Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 6/1/14-6/7/14
EPI Week #23

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	0	1	8	6	16	101
Total Specimens	0	2	44	54	36	335
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The temperatures for EPI week 23 were several degrees higher than the previous week, which allowed for mosquito activity in the evening hours. This was reflected in the surveillance trap collections being much larger than during EPI week 22. Continued emergence of early season mosquito species also likely played a role in these observations. The weather for this particular week averaged 65.01°F with a recorded high temperature of 87.7°F and a recorded low temperature of only 40.6°F. For this week there was also a total of 0.59 inches of rain observed. Compared to the previous week, it was approximately 6.95°F warmer on average, and rained about 0.19 inches more. There has been 0.59 inches of rain accumulated in June, while the total rainfall for the month of May was 1.79 inches at the CMMCP weather station (3.64" statewide avg.).

Several spring *Aedes* and *Ochlerotatus* species displayed large increases, as well as *Oc. canadensis*. There were a few individual *Coquillettidia perturbans* specimens as well, although this species will likely not emerge in large numbers for a couple more weeks. *Culiseta melanura* is lower than at this point last year, while *Oc. canadensis* has spiked when compared to 2013. Currently *Oc. excrucians* is the predominant species in the CMMCP service area, with *Oc. canadensis* second. Continued increases in temperature coupled with possible emergence are apt to cause surveillance collection numbers to increase in the upcoming weeks.

For the year we have received 46% more requests than average; 4,271 requests to date compared to the 11 year average of 2,915. Requests were 274% more than the 2013 totals for the same time frame, 867 in 2013 against 2,384 in 2014. Service requests increased 26% from EPI week 22 to Epi week 23 for 2014 (1,887 vs. 2,384).

CMMCP Mosquito Summary*-

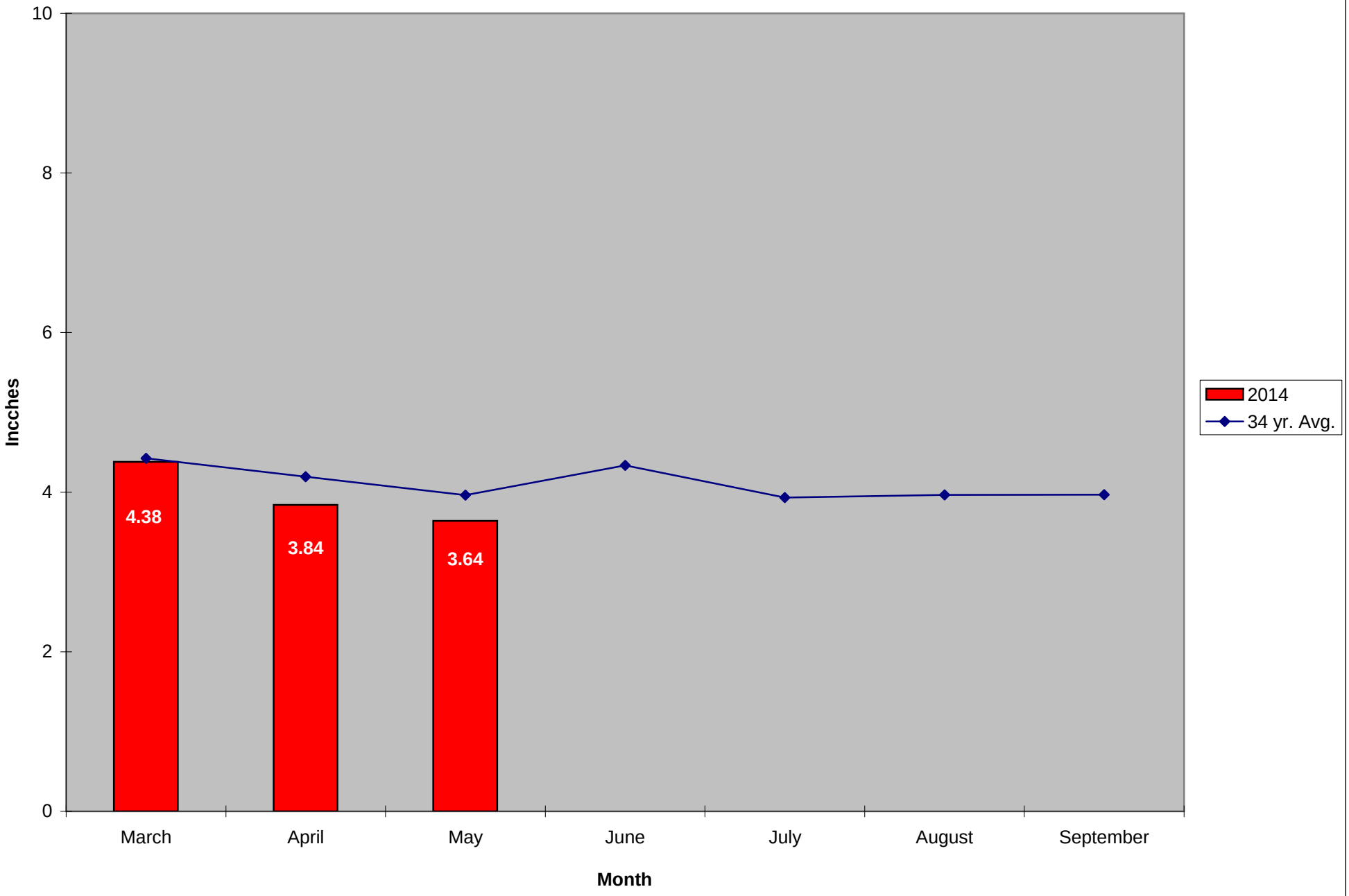
Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	+00.00%	+00.00%	N/A

Coquillettidia perturbans	+100.0%	-50.00%	Holliston
Culiseta melanura	-38.46%	-69.23%	Holliston
Ochlerotatus canadensis	+340.0%	+633.3%	Webster
Culex Species	+20.00%	-53.85%	Webster
All Species	+216.7%	+80.95%	Webster

The predominant mosquito for the week was *Ochlerotatus excrucians* followed by *Ochlerotatus canadensis*.

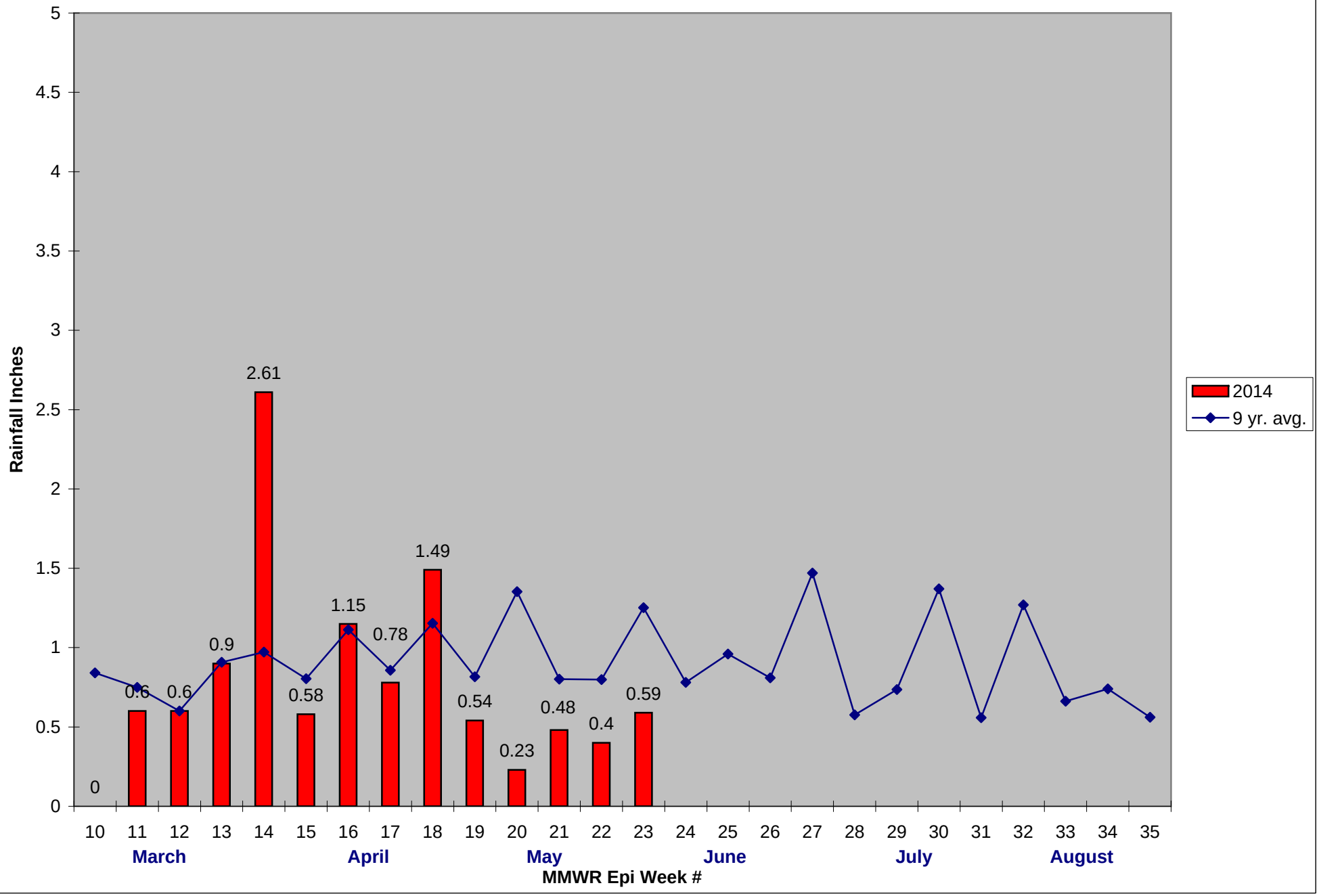
*Low early season numbers may contribute to these comparisons being not as significant as they appear

2014 Mass. Rainfall Data vs. 34 Year Average*



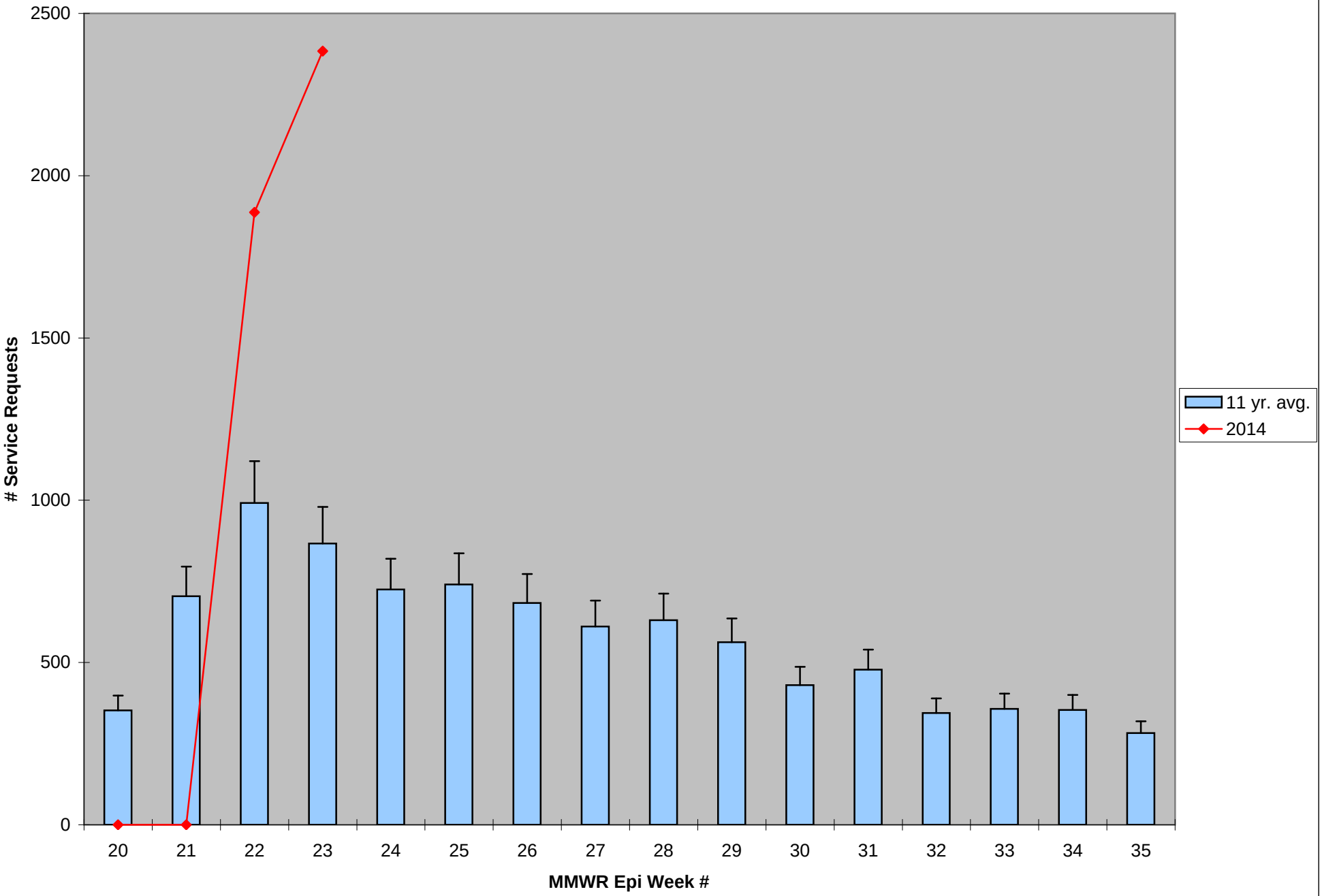
*Source: Northeast Regional Climate Center: http://www.nrcc.cornell.edu/page_summaries.html

2014 CMMCP Weekly Rainfall vs. 9 Year Average*

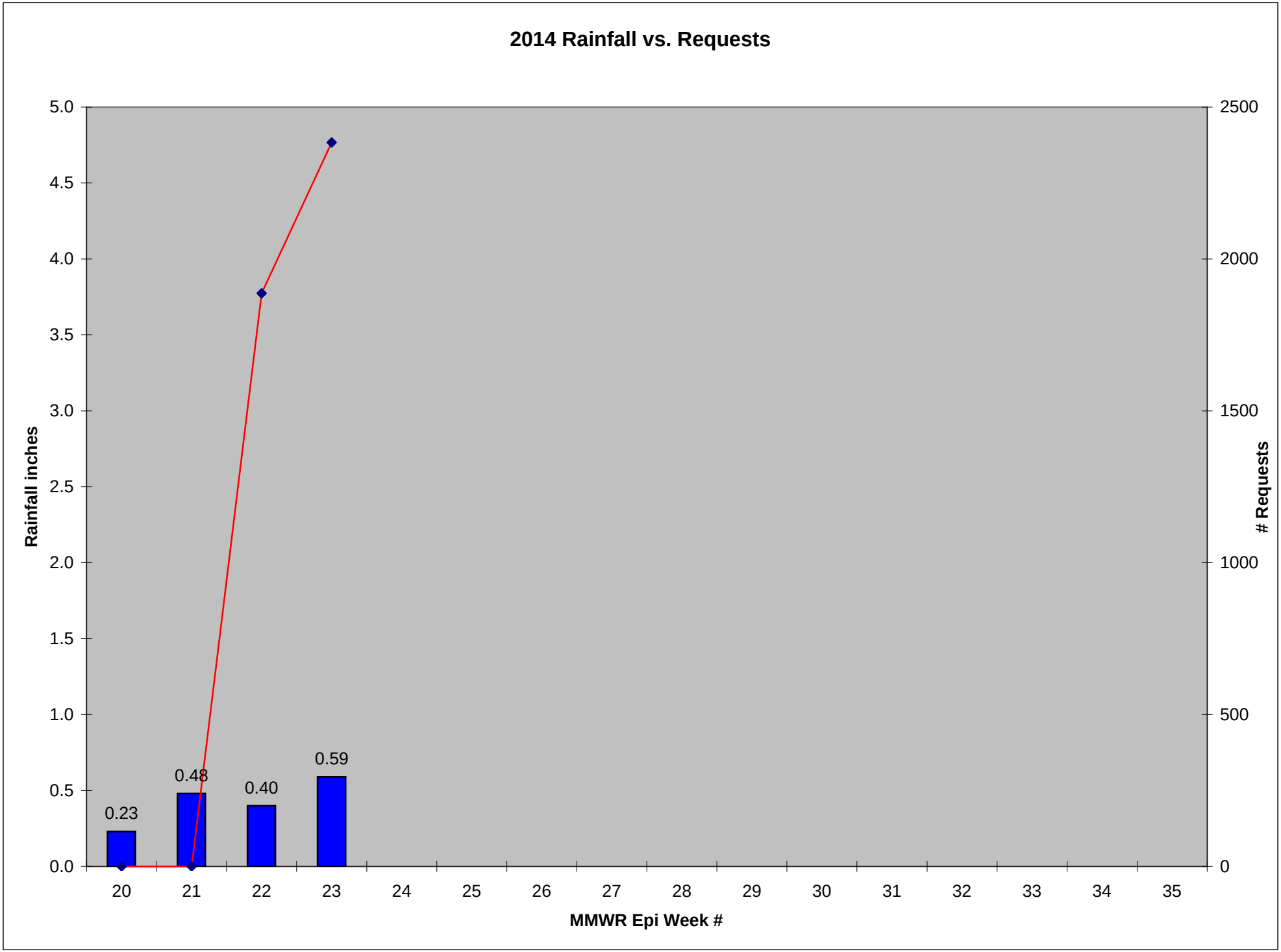


*Source: CMMCP Weather Station - Northborough, MA

ULV Service Request History Comparison 2003-2014



Error bars show approx. number of requests if we had 40 cities and towns over the 10 year average


2014 Rainfall vs. Requests
Rainfall inches
Requests
MMWR Epi Week #
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2500
2000
1500
1000
500
0
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
0.23
0.48
0.40
0.59