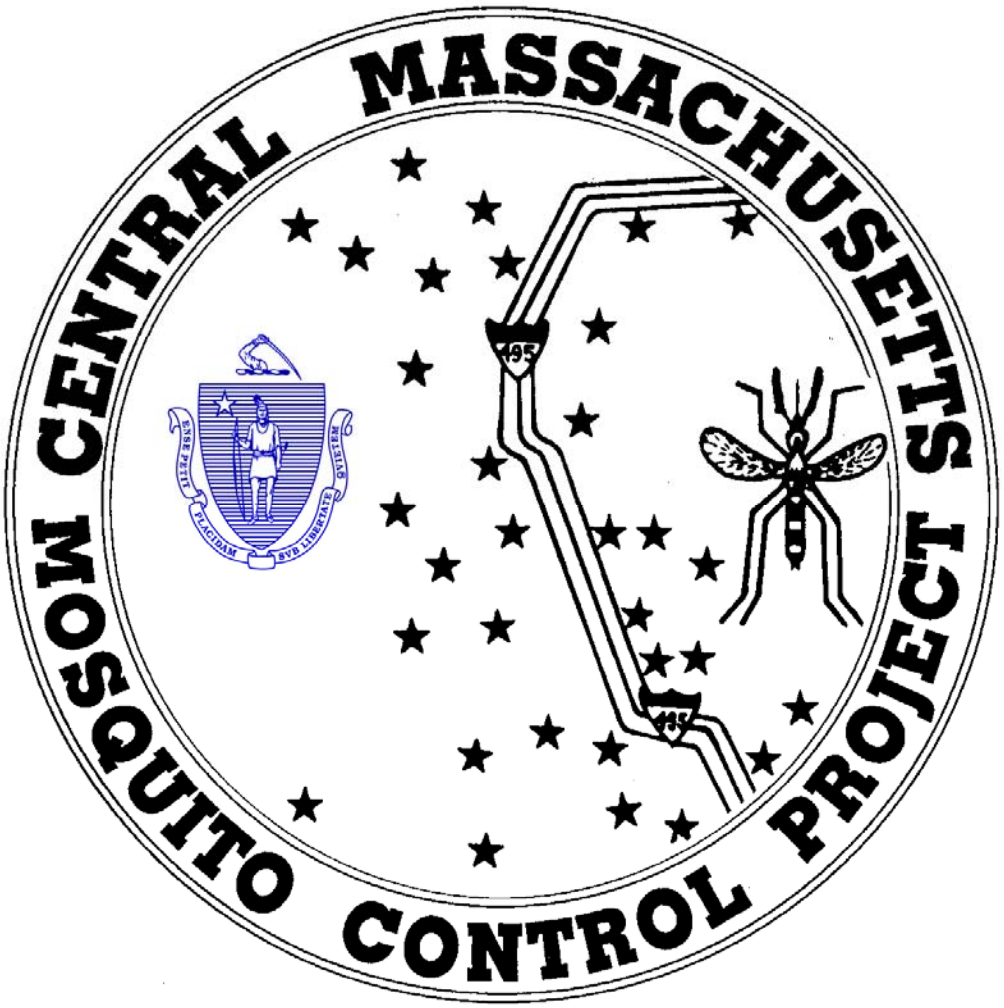
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #29
July 14-20, 2019

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Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 7/14/19-7/20/19
EPI Week #29

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	64	440	137	199	454	2,288
Total Specimens	337	79,590	859	4,095	6,316	94,870
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 76.87°F with a recorded high temperature of 98.60°F and a recorded low temperature of only 58.00°F. For this week there was also a total of 0.62 inches of rain observed. Compared to the previous week, it was approximately 2.53°F warmer on average, and rained about 0.39 inches less. There has been 3.31 inches of rain accumulated in July, after 3.04 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	-60.78%	+108.6%	Lancaster, Billerica
Coquillettidia perturbans	-10.48%	+185.4%	Milford, Natick
Culiseta melanura	+100.0%	+628.8%	Sherborn, Tewksbury
Ochlerotatus canadensis	-58.50%	+128.9%	Fitchburg, Webster
Culex Species	+33.69%	-70.77%	Stow, Hudson
All Species	-9.110%	+72.48%	Milford, Natick

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

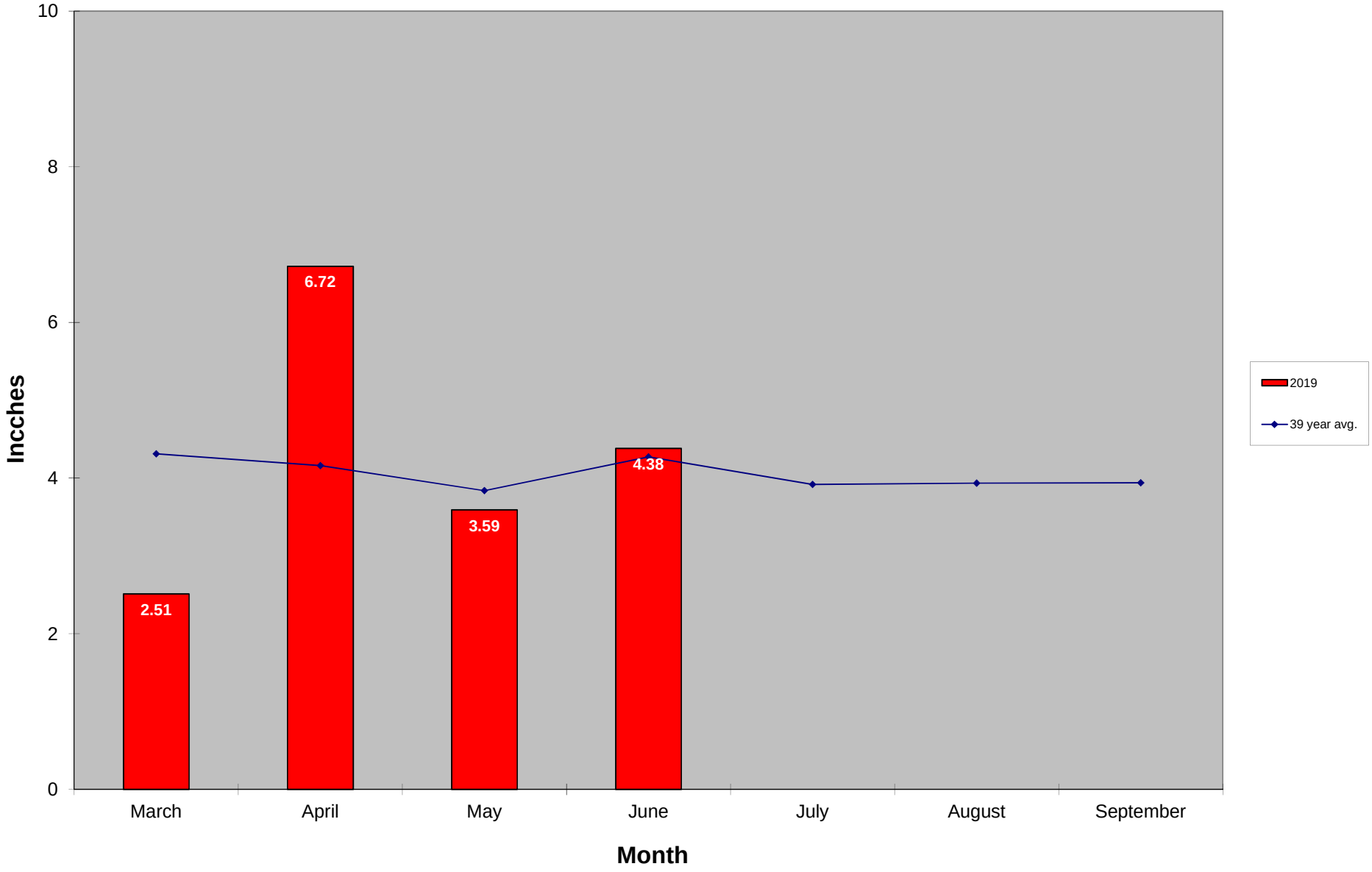
General statement: The temperatures for EPI week 29 averaged approximately 2.53°F warmer than the previous week, with 0.62 inches of precipitation observed. The only target mosquitoes that experienced significant increases this week were *Culiseta* melanura and *Culex*. *Coquillettidia perturbans* was once again the most abundant mosquito species for the week, followed by *Culex*. The peak of *Coquillettidia perturbans* emergence may have already been observed. All target species have all been collected in higher numbers this year compared to last, except for *Culex*. There have been zero mosquito pools from the CMMCP service area that have tested positive for mosquito-borne disease. Thirty-five egg papers, containing 1,481 eggs, were collected for *Aedes albopictus* surveillance during EPI week 29. No positive identifications have been confirmed to date.

Service requests are 58.6% greater than the 16 year average (7,701 vs. 12,216) but 7.3% lower than 2018 numbers (13,117 vs. 12,216). Service requests decreased 22.2% from Epi week 28 to 29 (952 vs. 779). 1,283 service requests were closed out in EPI week 29; 10,908 have been closed to date from a total of 12,290 received (12.6% open). Work crews have been performing catch basins treatments in all member communities for *Culex* control. 7,201 catch basins were treated in Epi week 29, bringing the total for the year to 75,711.

***Aedes albopictus* Surveillance Data**

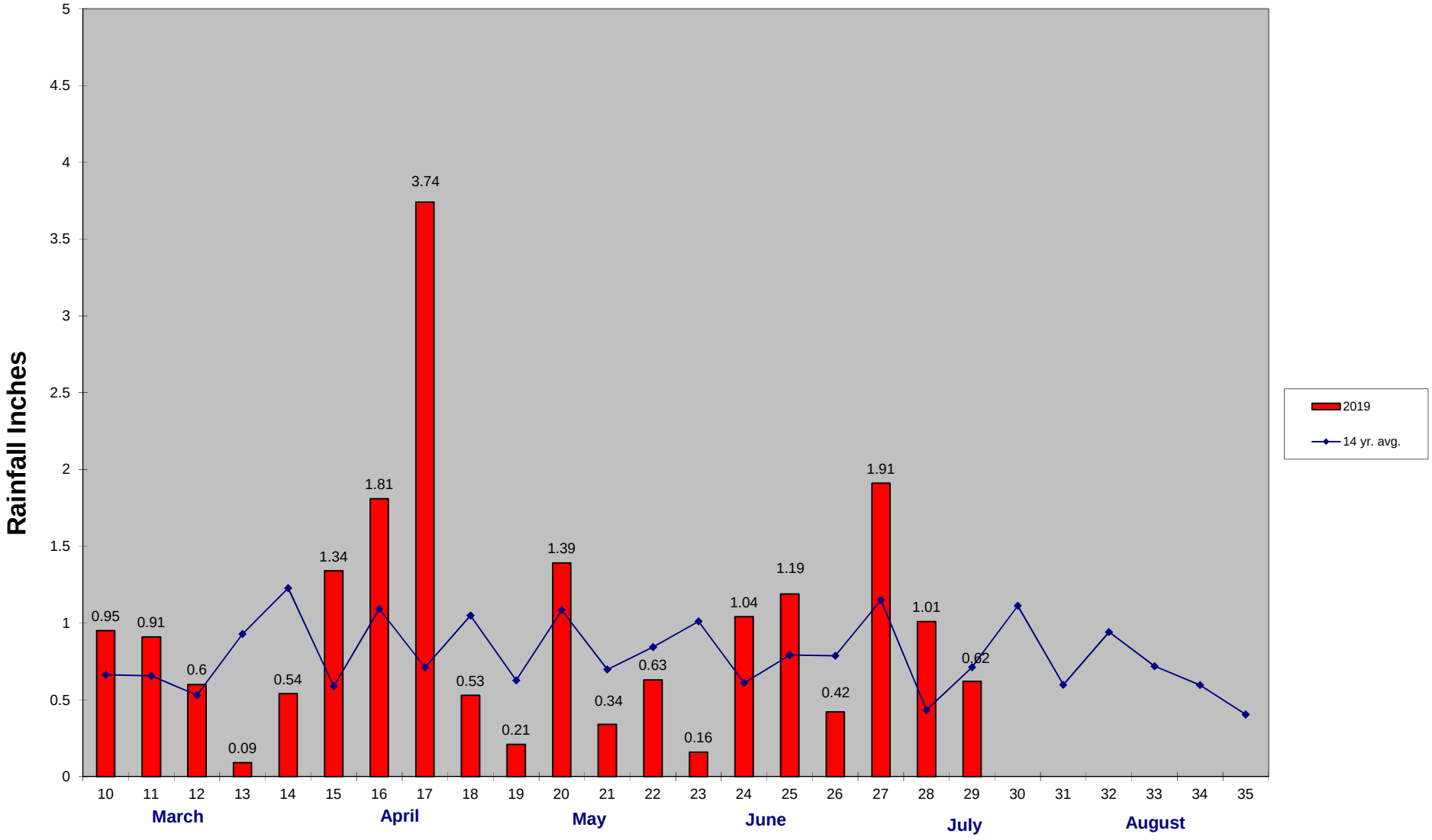
	# Ovitraps	**# Eggs**
EPI Week #22	31	4
EPI Week #23	21	221
EPI Week #24	33	530
EPI Week #25	37	1294
EPI Week #26	37	1100
EPI Week #27	-	-
EPI Week #28	35	3527
EPI Week #29	35	1481

2019 Mass. Rainfall Data vs. 39 Year Average*



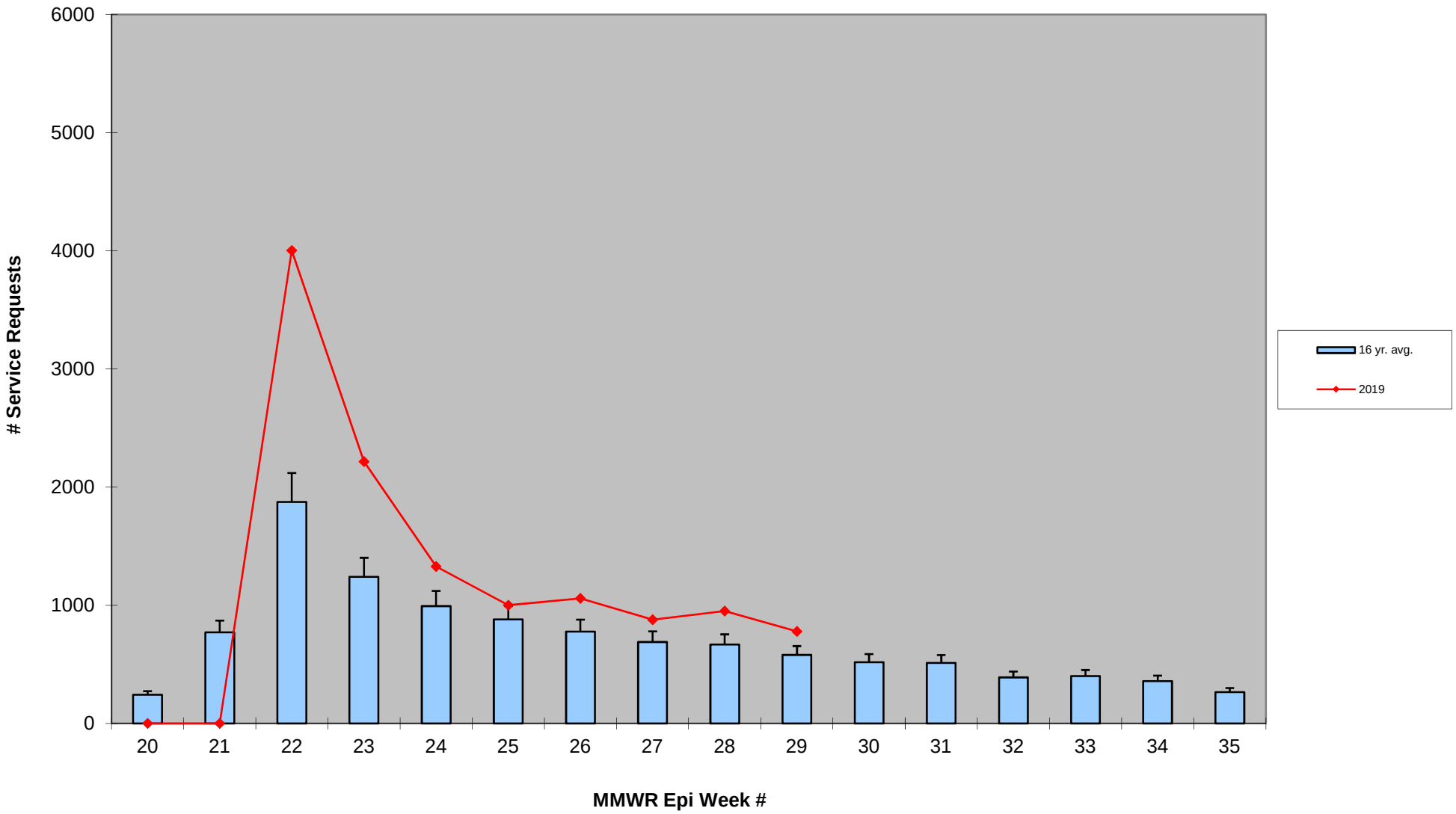
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

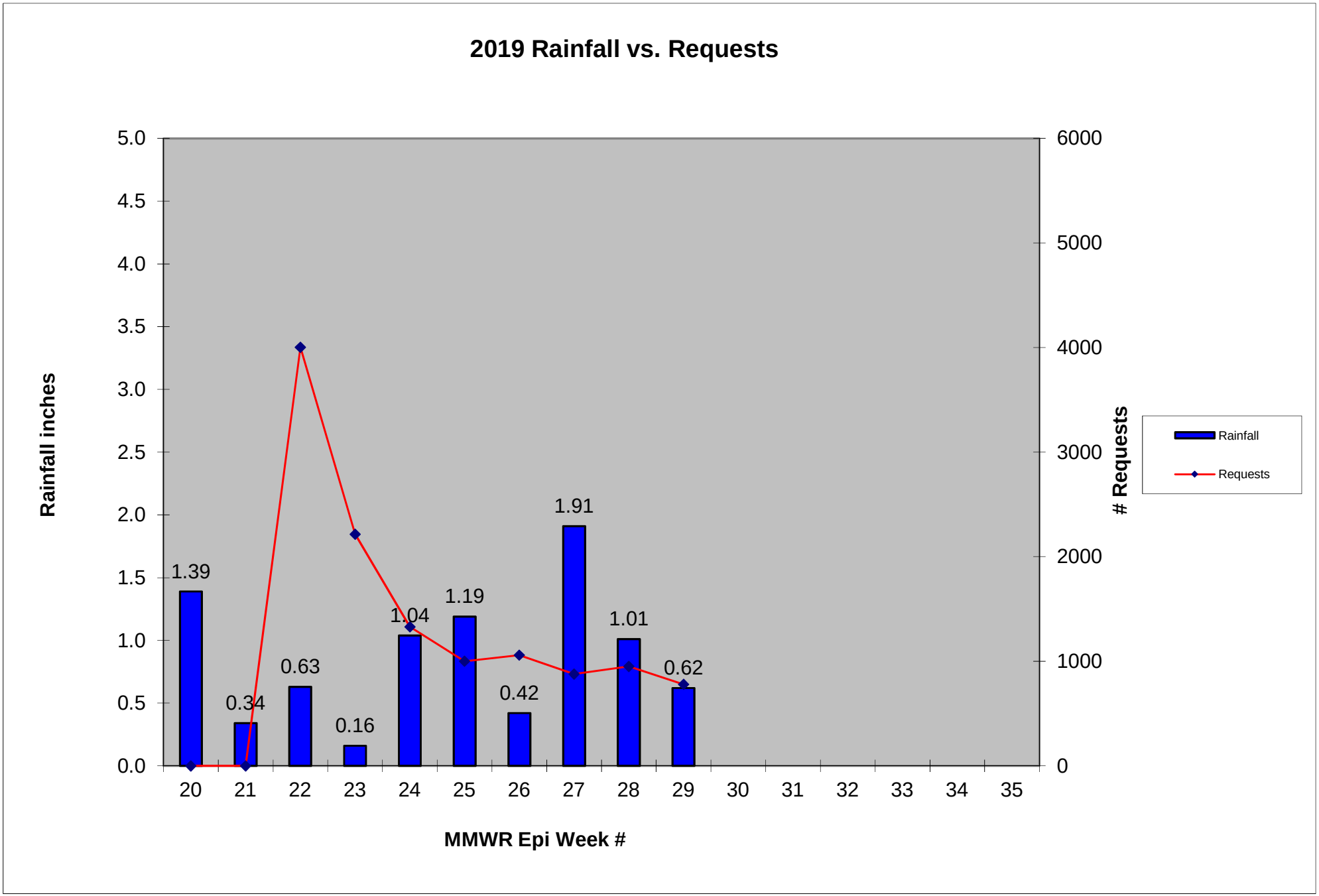
2019 CMMCP Weekly Rainfall vs. 14 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2019




2019 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
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
1.39
0.34
0.63
0.16
1.04
1.19
0.42
1.91
1.01
0.62