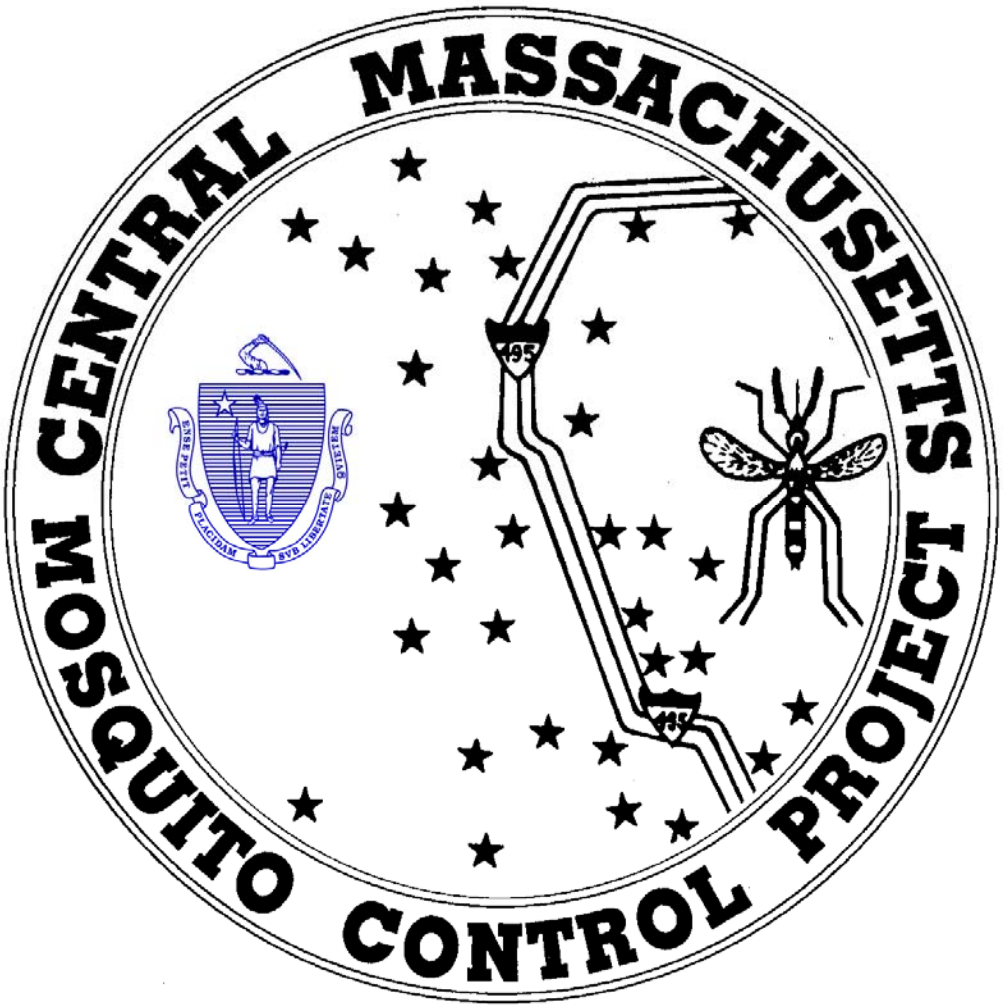
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #36
Sept. 6-12, 2015

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

Central Mass. Mosquito Control Project
Weekly Report- 9/6/15-9/12/15
EPI Week #36

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	219	592	145	229	855	3610
Total Specimens	1983	35499	1109	4816	16871	73406
No. Pools WNV +	0	0	0	0	1†	1†
No. Pools EEE +	0	0	0	0	0	0

†Pool of WNV+ *Culex pipiens/restuans* complex collected in Clinton on 8/27/15

Weather Summary (Northborough, MA): The weather for EPI Week 36 averaged 72.8°F with a recorded high temperature of 94.7°F and a recorded low temperature of only 53.3°F. There was 1.53 inches of precipitation observed this week. Compared to the previous week, it was approximately 0.03°F cooler on average, and rained about 1.5 inches more. There has been 1.53 inches of rain accumulated in September, after 1.45 inches for the month of August.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	+1600%	+1600%	Leominster, Berlin
Coquillettidia perturbans	-48.75%	-26.79%	Littleton, Berlin, Webster
Culiseta melanura	+16.67%	-30.00%	Tewksbury, Holliston
Ochlerotatus canadensis	+00.00%	+00.00%	N/A
Culex Species	-63.27%	-50.00%	Wilmington, Chelmsford
All Species	-22.63%	+0.950%	Wilmington, Chelmsford

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

*Seasonal numbers may contribute to these comparisons being not as significant as they appear

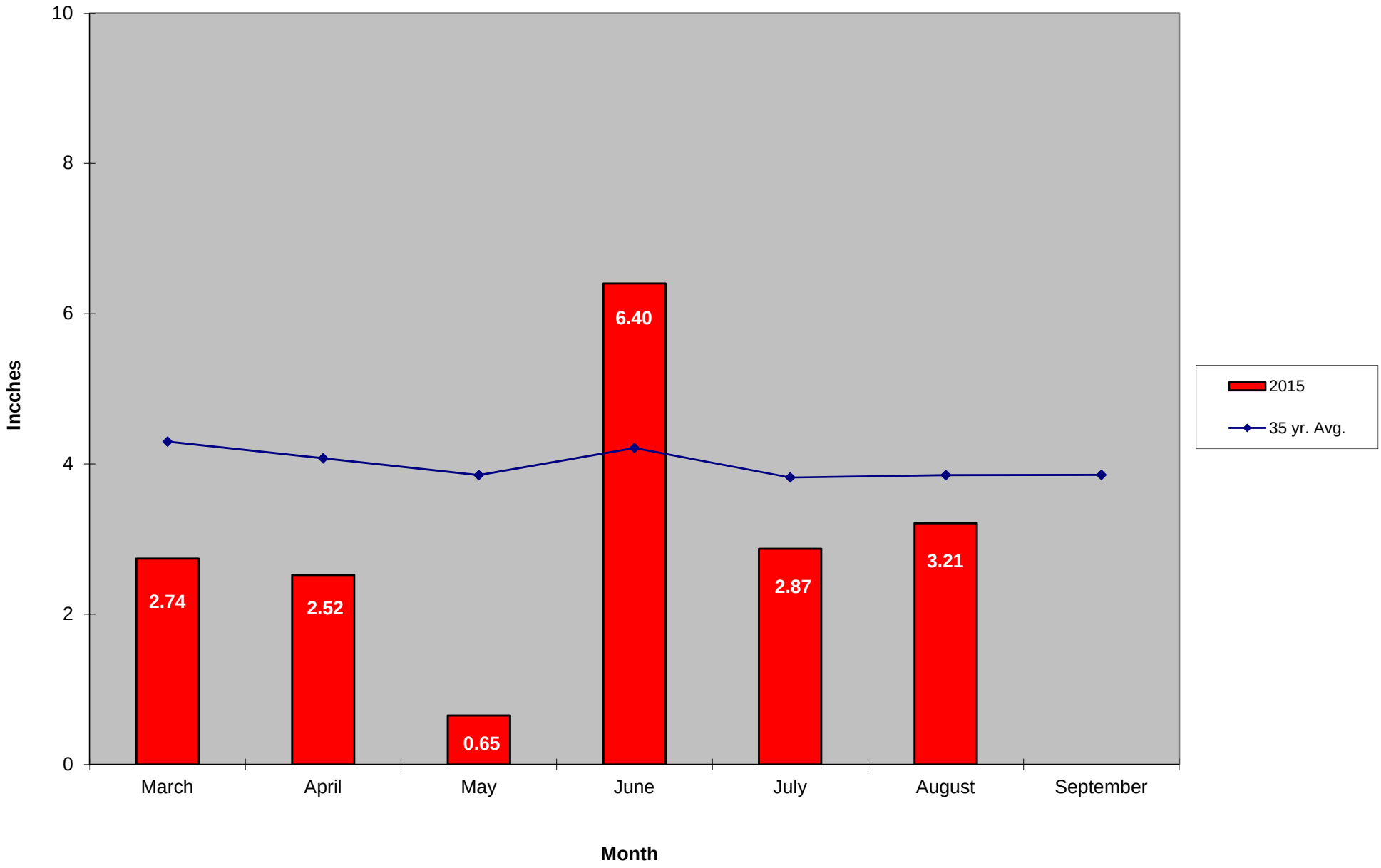
General narrative:

The temperatures for EPI Week 36 remained steady from the previous week, with almost 1.5 inches of precipitation observed. Overall collection numbers decreased by approximately 23% from EPI Week 35 at the historical surveillance trap sites. The continued decrease of *Coquillettidia perturbans* was the primary factor behind this reduction, along with a decrease in the *Culex* spp. population. *Aedes vexans* and *Culiseta melanura* experienced increases, while there were no *Ochlerotatus canadensis* observed this week. Compared to the 2014 season, the long-term surveillance locations showed a

slight increase of less than one percent. *Culex* spp. was the most abundant species in the CMMCP service area with *Cq. perturbans* second.

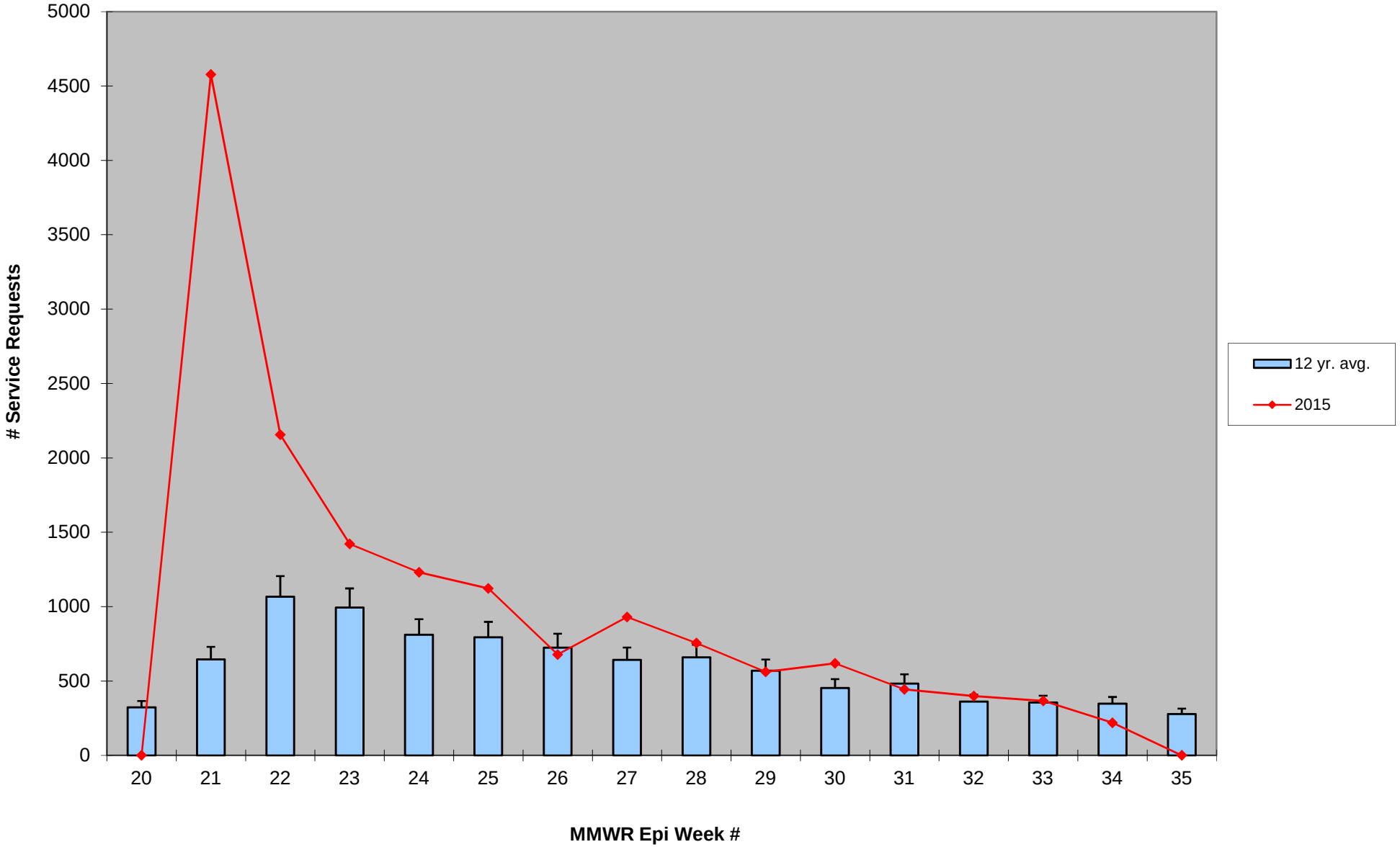
For the year we received 173% more service requests than average; 15,477 requests compared to the 12 year average of 8,901. 15,561 service calls have been completed despite weather conditions earlier in the season that cancelled or postponed operations. Catch basin treatments continue in some member communities as a preemptive control for *Culex* and West Nile Virus. Our tire collection and ditch maintenance programs have restarted as time and personnel allow.

2015 Mass. Rainfall Data vs. 35 Year Average*



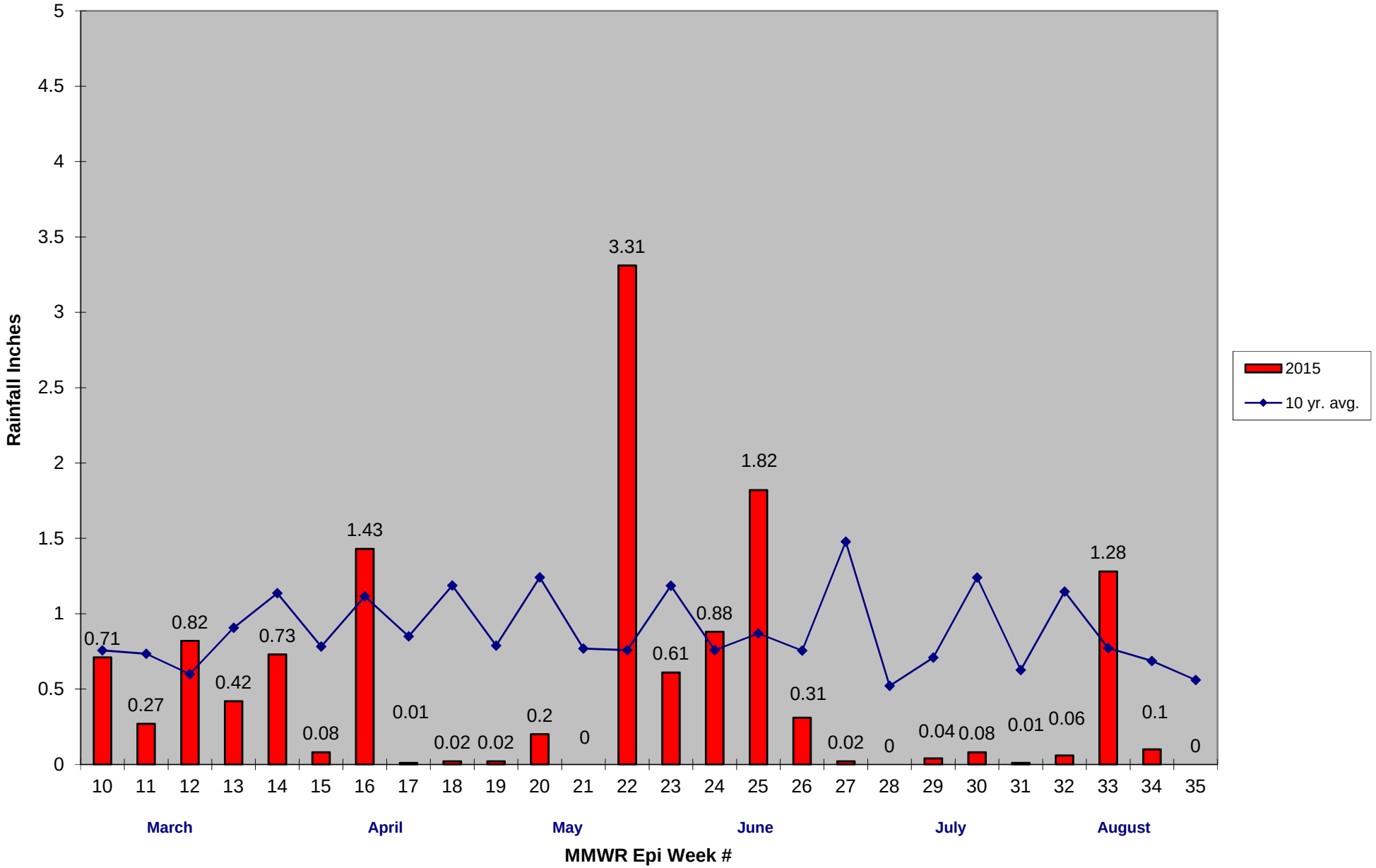
*Source: http://www.nrcc.cornell.edu/page_summaries.html

ULV Service Request History Comparison 2003-2015



Error bars show approx. number of requests if we had 40 communities over the 12 year average

2015 CMMCP Weekly Rainfall vs. 10 Year Average*



*Source: CMMCP weather station - Northborough, MA 01532

2015 Rainfall vs. Requests