

# CMMCP WEEKLY SURVEILLANCE REPORT



**EPI week #37**  
**Sept. 13-19, 2015**

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**Central Mass. Mosquito Control Project**  
**Weekly Report- 9/13/15-9/19/15**  
**EPI Week #37**

**Cumulative Surveillance Summary**

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	242	602	148	230	927	3796
Total Specimens	2076	35520	1113	4818	17574	74506
No. Pools WNV +	0	0	0	0	4 <sup>†</sup>	4 <sup>†</sup>
No. Pools EEE +	0	0	0	0	0	0

<sup>†</sup>Pool of WNV+ *Culex pipiens/restuans* complex collected in Hudson on 8/27/15

<sup>†</sup>Pool of WNV+ *Culex pipiens/restuans* complex collected in Lowell on 9/4/15

<sup>†</sup>Pool of WNV+ *Culex pipiens/restuans* complex collected in Millbury on 9/9/15

<sup>†</sup>Pool of WNV+ *Culex pipiens/restuans* complex collected in Millville on 9/10/15

**Weather Summary (Northborough, MA):** The weather for EPI Week 37 averaged 67.6°F with a recorded high temperature of 87.3°F and a recorded low temperature of only 53.2°F. There was 0.30 inches of precipitation observed this week. Compared to the previous week, it was approximately 5.1°F cooler on average, and rained about 1.2 inches less. There has been 1.83 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)
<i>Aedes vexans</i>	-93.75%	-00.00%	Westborough, Auburn
<i>Coquillettidia perturbans</i>	-90.24%	-60.00%	Dracut, Milford, Webster
<i>Culiseta melanura</i>	-71.43%	-33.33%	Tewksbury, Millville
<i>Ochlerotatus canadensis</i>	-00.00%	-00.00%	N/A
<i>Culex</i> Species	-77.78%	-78.95%	Boxborough, Natick
All Species	-89.62%	-75.56%	Boxborough, Natick

The predominant mosquito for the week was *Culex* spp.  
followed by *Aedes vexans*.

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

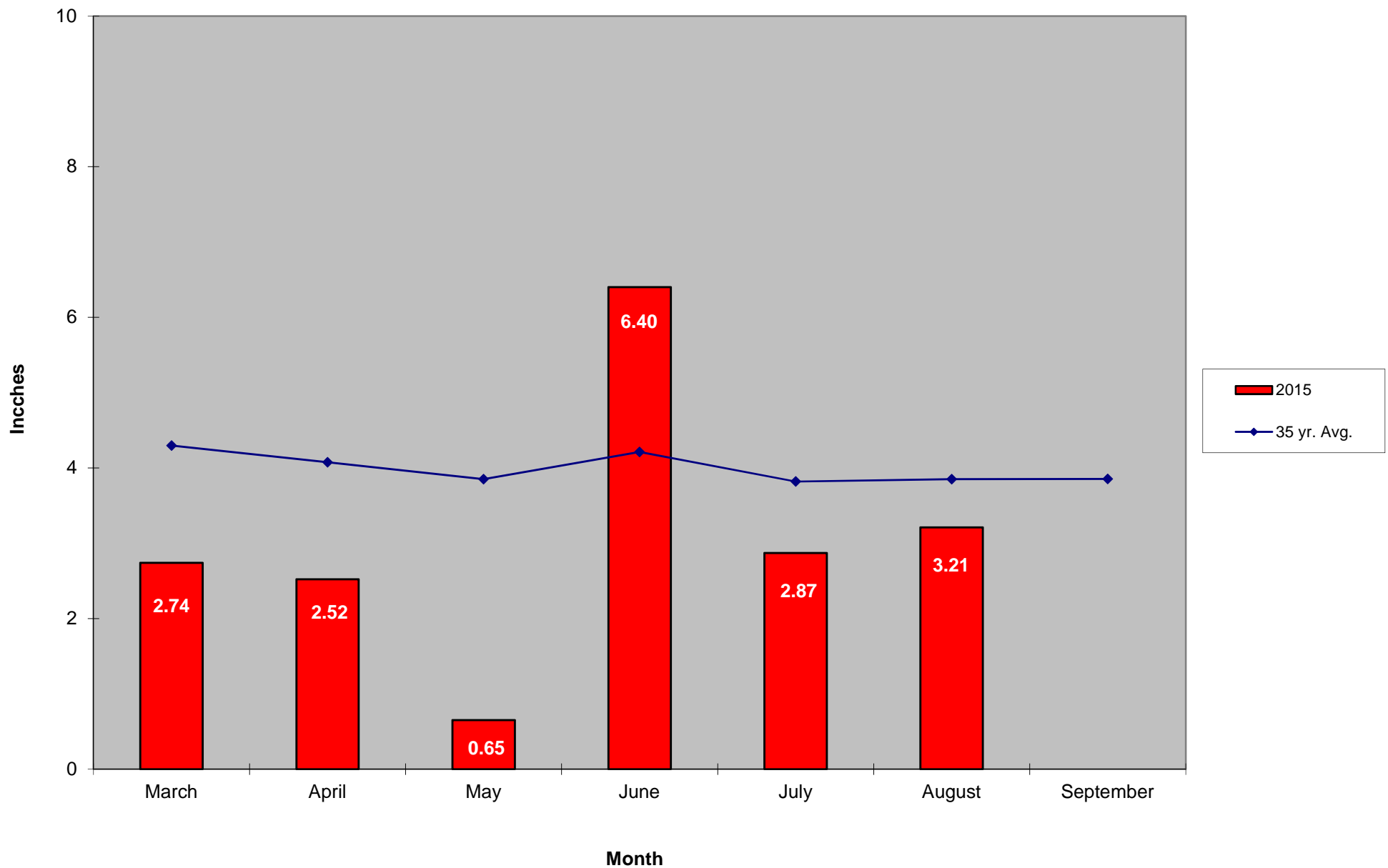
**General narrative:**

The temperatures for EPI Week 37 dropped approximately 5°F from the previous week, with almost 0.30 inches of precipitation observed. Overall collection numbers decreased by approximately 89.6% from EPI Week 36 at the historical surveillance trap sites. The *Coquillettidia perturbans* population for this season is nearly extinguished, while *Culex* spp. population also experienced a significant decrease. All other target species either had a weekly reduction or remained the same. Compared to the 2014 season, the long-

term surveillance locations showed a decrease of approximately 75.6%. *Culex* spp. was the most abundant species in the CMMCP service area with *Aedes vexans* second.

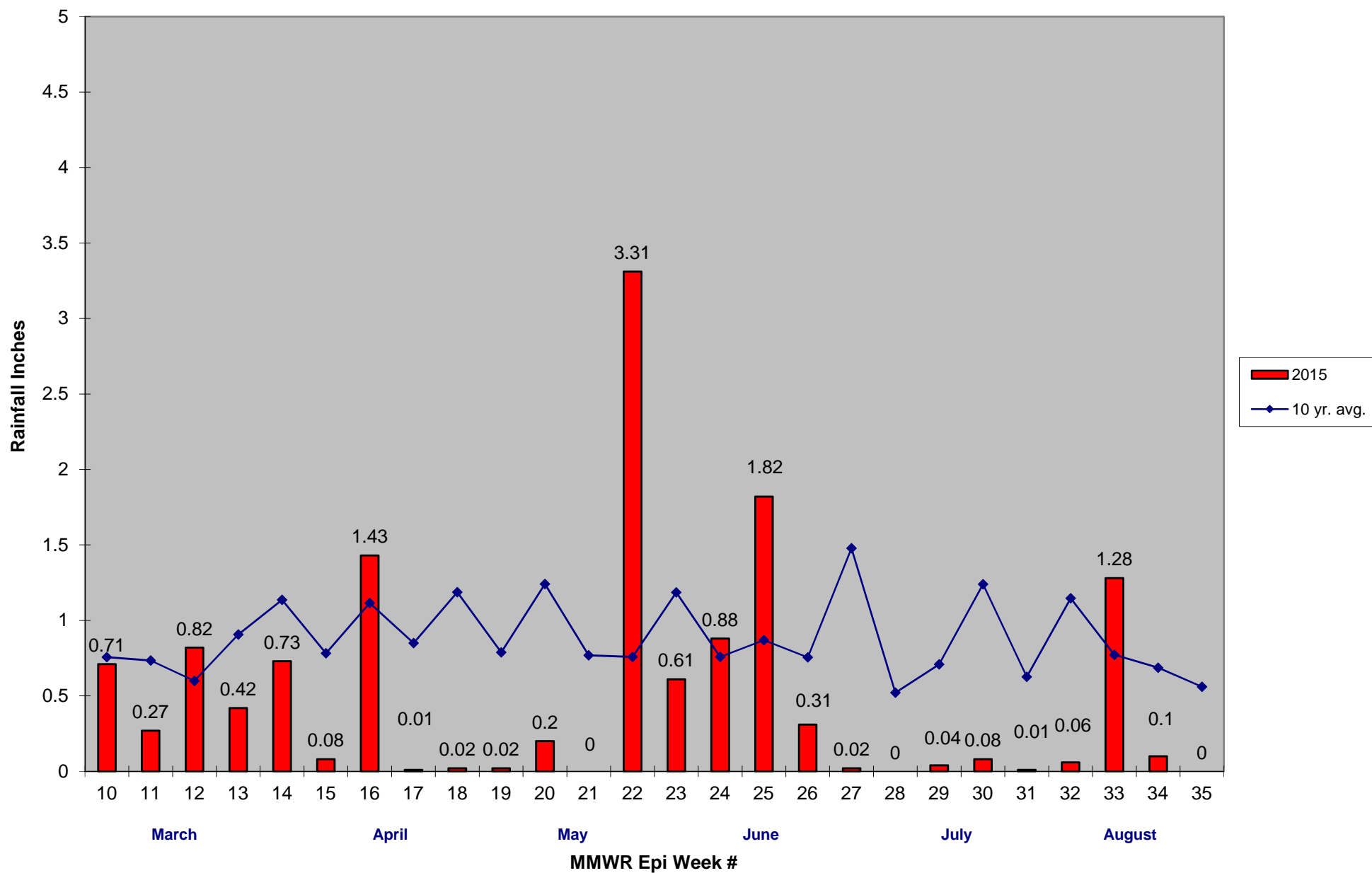
For the year we received 173% more service requests than average; 15,477 requests compared to the 12 year average of 8,901. 15,561 service calls have been completed despite weather conditions earlier in the season that cancelled or postponed operations. Catch basin treatments continue in some member 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\*



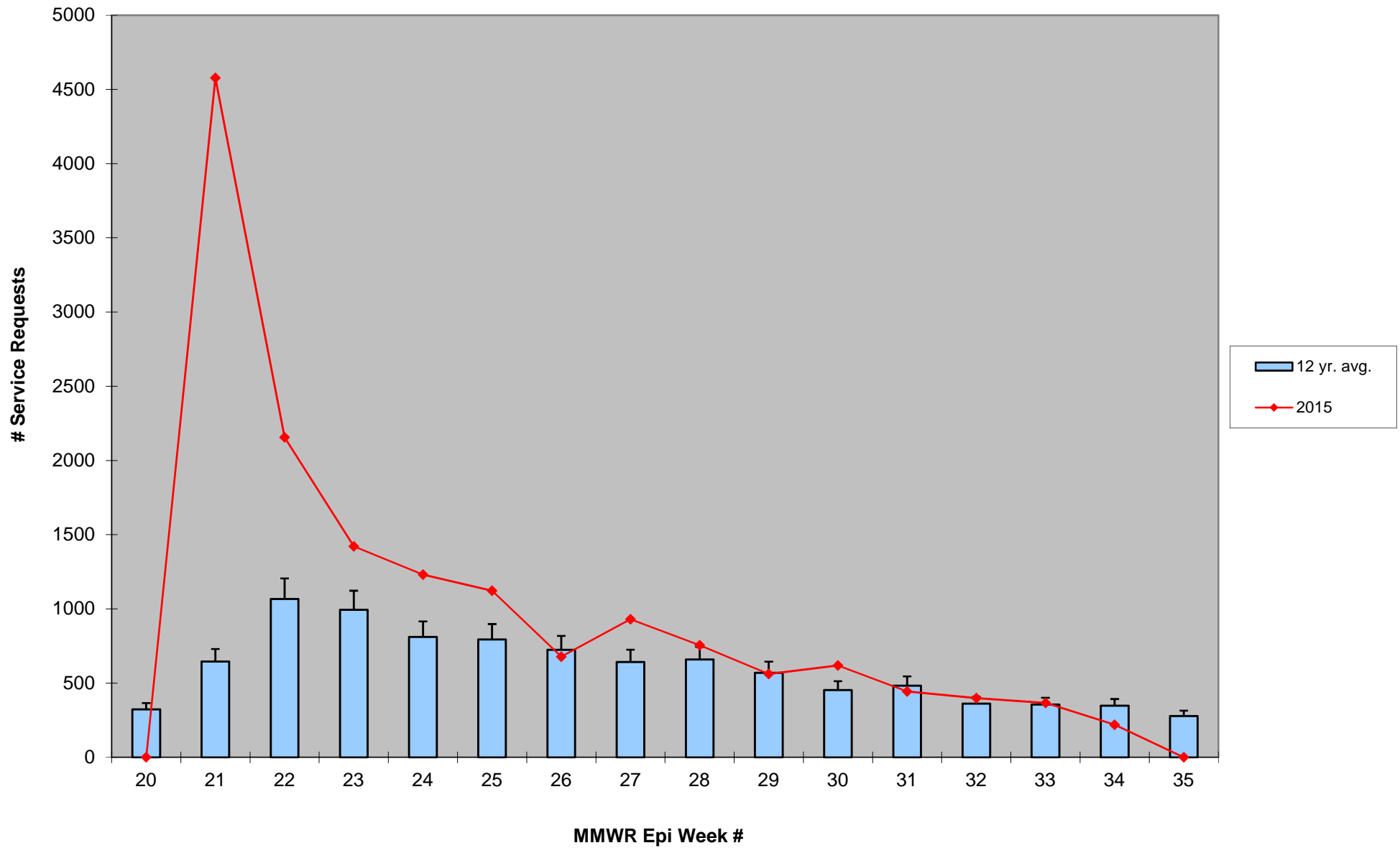
\*Source: [http://www.nrcc.cornell.edu/page\\_summaries.html](http://www.nrcc.cornell.edu/page_summaries.html)

## 2015 CMMCP Weekly Rainfall vs. 10 Year Average\*



\*Source: CMMCP weather station - Northborough, MA 01532

## 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 Rainfall vs. Requests

