

# CMMCP WEEKLY SURVEILLANCE REPORT



**EPI week #25**  
**Jun. 18-24, 2017**

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**Central Mass. Mosquito Control Project**  
**Weekly Report- 6/18/17-6/24/17**  
**EPI Week #25**

**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       | 22             | 56             | 15             | 103            | 131          | 728         |
| Total Specimens | 77             | 1062           | 42             | 2293           | 1929         | 7664        |
| 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 74.59°F with a recorded high temperature of 90.50°F and a recorded low temperature of only 54.70°F. For this week there was also a total of 0.11 inches of rain observed. Compared to the previous week, it was approximately 2.59°F warmer on average, and rained about 0.05 inches more. There has been 0.20 inches of rain accumulated in June, after 4.68 inches for the month of May.

**CMMCP Mosquito Summary\*-**

| Target Species | Δ From<br>Last Week | Δ From<br>Last Year | Predominant Trap Site(s) |
|----------------|---------------------|---------------------|--------------------------|
|----------------|---------------------|---------------------|--------------------------|

|                                  |         |         |                       |
|----------------------------------|---------|---------|-----------------------|
| <i>Aedes vexans</i>              | +29.63% | +600.0% | Millbury              |
| <i>Coquillettidia perturbans</i> | +820.2% | -81.80% | Lowell, Littleton     |
| <i>Culiseta melanura</i>         | -76.92% | -97.73% | Hopkinton, Leominster |
| <i>Ochlerotatus canadensis</i>   | +120.0% | +47.53% | Lowell, Millbury      |
| <i>Culex</i> Species             | -7.330% | -5.810% | Berlin, Hopedale      |
| All Species                      | +52.98% | -52.30% | Lowell, Millbury      |

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

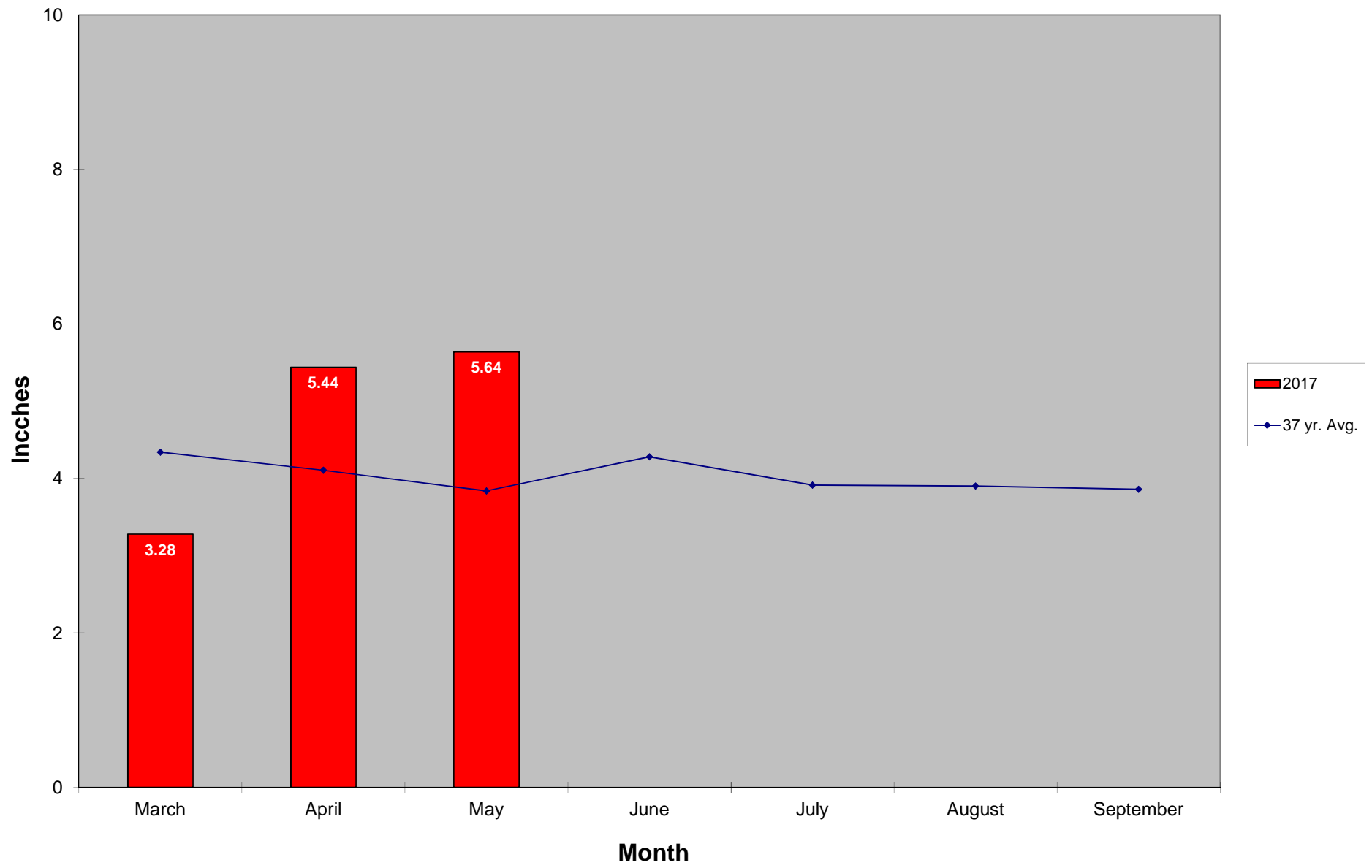
**Week 25 narrative:**

The temperatures for EPI week 25 averaged approximately 2.59 degrees warmer than the previous week, with only 0.11 inches of precipitation observed. Overall collection numbers increased by 52.98% from EPI week 24, with *Aedes vexans*, *Coquillettidia perturbans*, and *Ochlerotatus canadensis* displaying increases from the prior collection period. *Culiseta melanura* and *Culex* were collected in lower number from EPI week 24. *Oc. canadensis* is now the most abundant species in the CMMCP service area, with *Cq. perturbans* becoming the second most abundant. Continued *Cq. perturbans* emergence should result in an overall increase of mosquitoes in the CMMCP service area. Several early spring mosquito species have begun to decline as the season moves forward. *Aedes vexans*, a floodwater species, are much higher this year than in the drought plagued 2016 season.

We have received 240% more service requests than the 15 year average (10,263 in 2017 v. 4,263 15 yr. avg.), and 4.8% more than this time in 2016 (10.263 in 2017 v. 9,784 in 2016). Service requests dropped 67.9% from Epi week 25 v week 24. 1,390 service requests were received and 1,812 requests were performed in Epi week 25 despite rain that cancelled some spray operations.

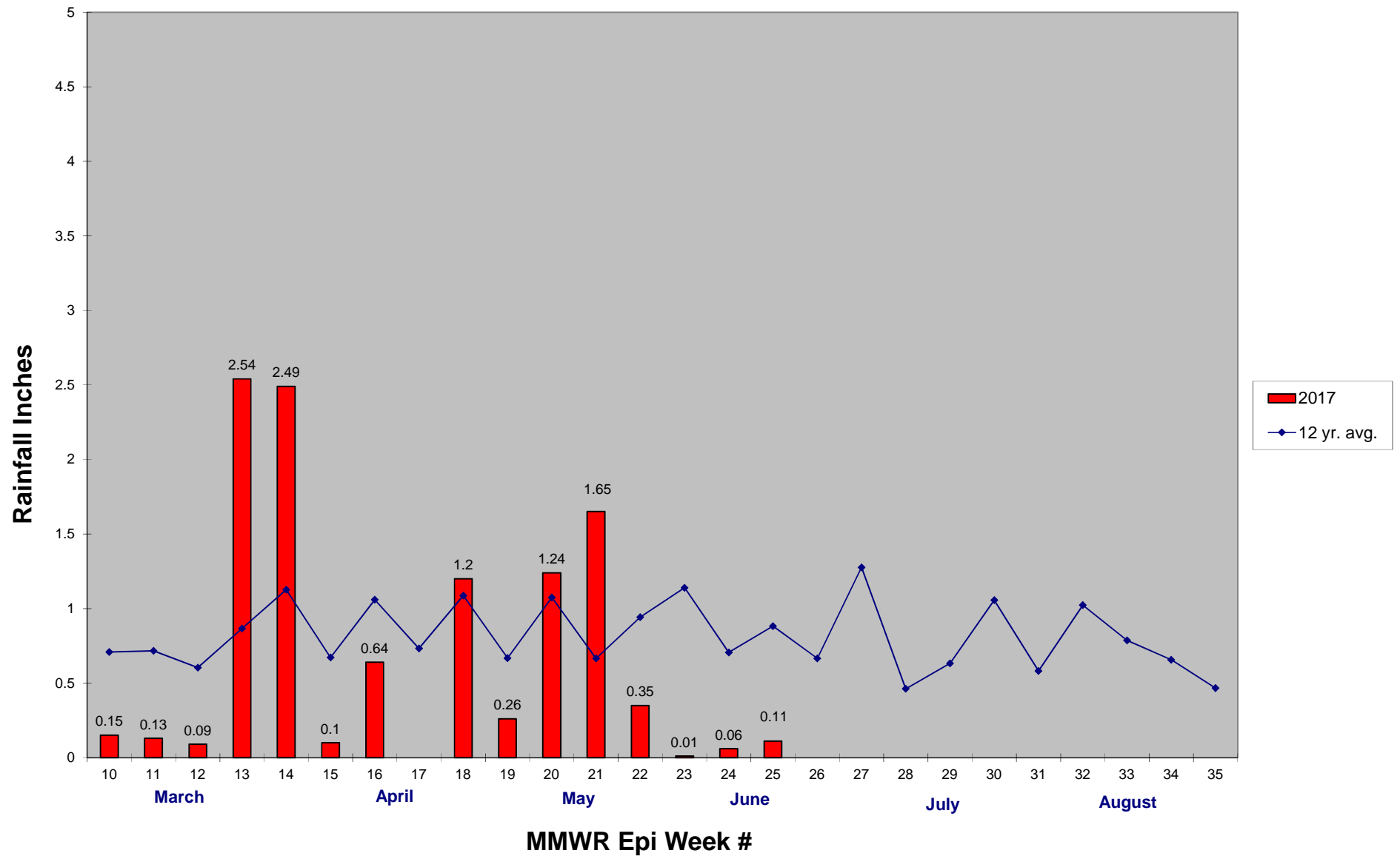
Early season catch basin treatments totaling 28,308 have ended in all member communities. We applied in last year's WNV areas and continued into our urban centers. Standard in-season treatments will begin in a few weeks. Our tire program is on hiatus, but we collected 1,432 tires so far this year. Our ditch maintenance and beaver mitigation programs are also on hiatus but a few projects are planned for this summer.

### 2017 Mass. Rainfall Data vs. 37 Year Average\*



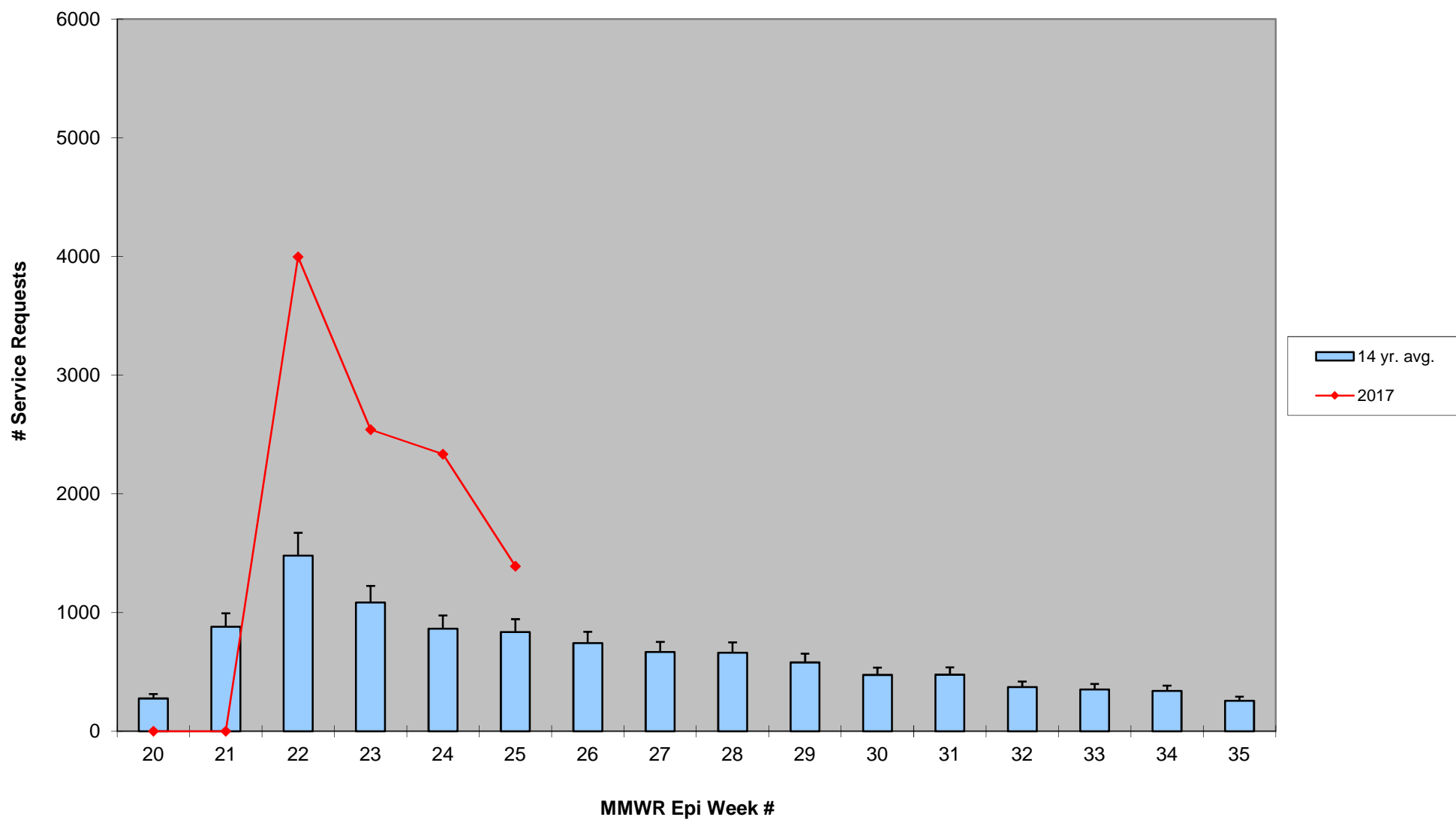
\*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

## 2017 CMMCP Weekly Rainfall vs. 12 Year Average\*



\*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2017



## 2017 Rainfall vs. Requests

