

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #27
June 30 – July 6, 2019

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Central Mass. Mosquito Control Project
Weekly Report- 6/30/19-7/6/19
EPI Week #27

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 | 41 | 216 | 91 | 147 | 284 | 1406 |
| Total Specimens | 266 | 19507 | 736 | 3338 | 3694 | 29953 |
| 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 75.49°F with a recorded high temperature of 95.70°F and a recorded low temperature of only 59.90°F. For this week there was also a total of 1.91 inches of rain observed. Compared to the previous week, it was approximately 1.19°F warmer on average, and rained about 1.49 inches more. There has been 1.68 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) |
|----------------|---------------------|---------------------|--------------------------|
|----------------|---------------------|---------------------|--------------------------|

| | | | |
|----------------------------------|---------|---------|---------------------------------|
| <i>Aedes vexans</i> | -96.04% | +888.9% | Devens, Dracut |
| <i>Coquilleltidia perturbans</i> | -20.33% | +61.41% | Tewksbury, Southborough, Dracut |
| <i>Culiseta melanura</i> | +00.00% | +832.9% | Tewksbury, Gardner, Leominster |
| <i>Ochlerotatus canadensis</i> | -56.78% | +93.28% | Gardner, Lunenburg |
| <i>Culex</i> Species | -45.59% | -72.59% | Gardner, Westford |
| All Species | -29.26% | +0.500% | Tewksbury, Southborough, Dracut |

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

General statement: The temperatures for EPI week 27 averaged approximately 1.19°F warmer than the previous week, with 1.91 inches of precipitation observed. Unexpectedly, none of the target species were observed in greater numbers than the previous week. *Coquilleltidia perturbans* was once again the most abundant mosquito species for the week, followed by *Culex*. Continued emergence of *Coquilleltidia perturbans* should contribute to higher overall collections moving forward. 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. There were no egg papers collected for *Aedes albopictus* surveillance during EPI week 27.

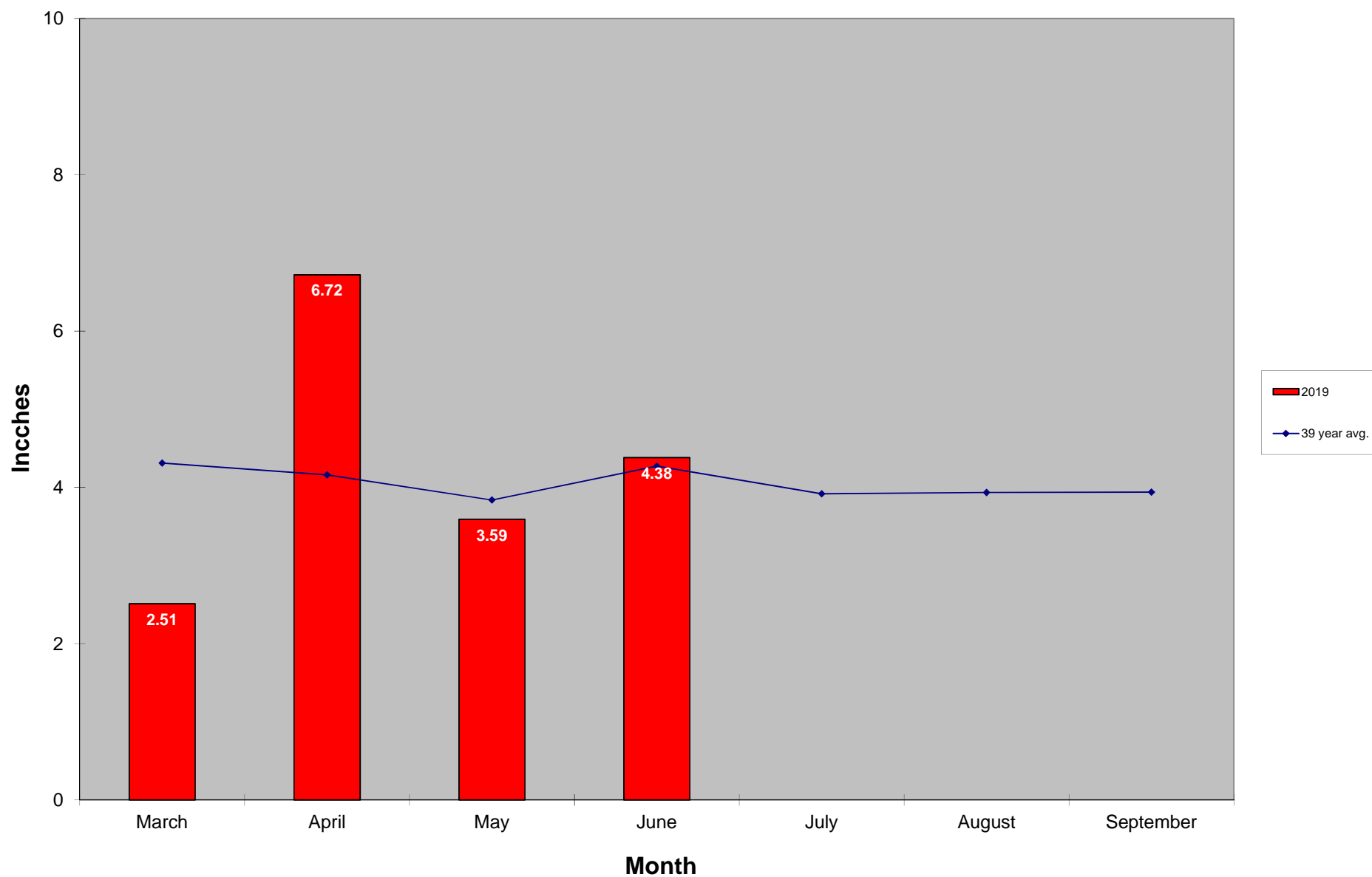
Service requests are 62.4% greater than the 16 year average (6,454 vs. 10,485) but 12.4% lower than 2018 numbers (11,789 vs. 10,485). With the holiday shortened week,

service requests dropped 20.6% from Epi week 26 to 27 (1,059 vs. 878). 730 service requests were closed out in EPI week 27 over the 2 scheduled nights; 8,187 have been closed to date from a total of 10,503 received (28.2% open). Work crews have been performing catch basins treatments in all member communities for *Culex* control. 6,522 catch basins were treated in Epi week 27, bringing the total for the year to 61,005.

***Aedes albopictus* Surveillance Data**

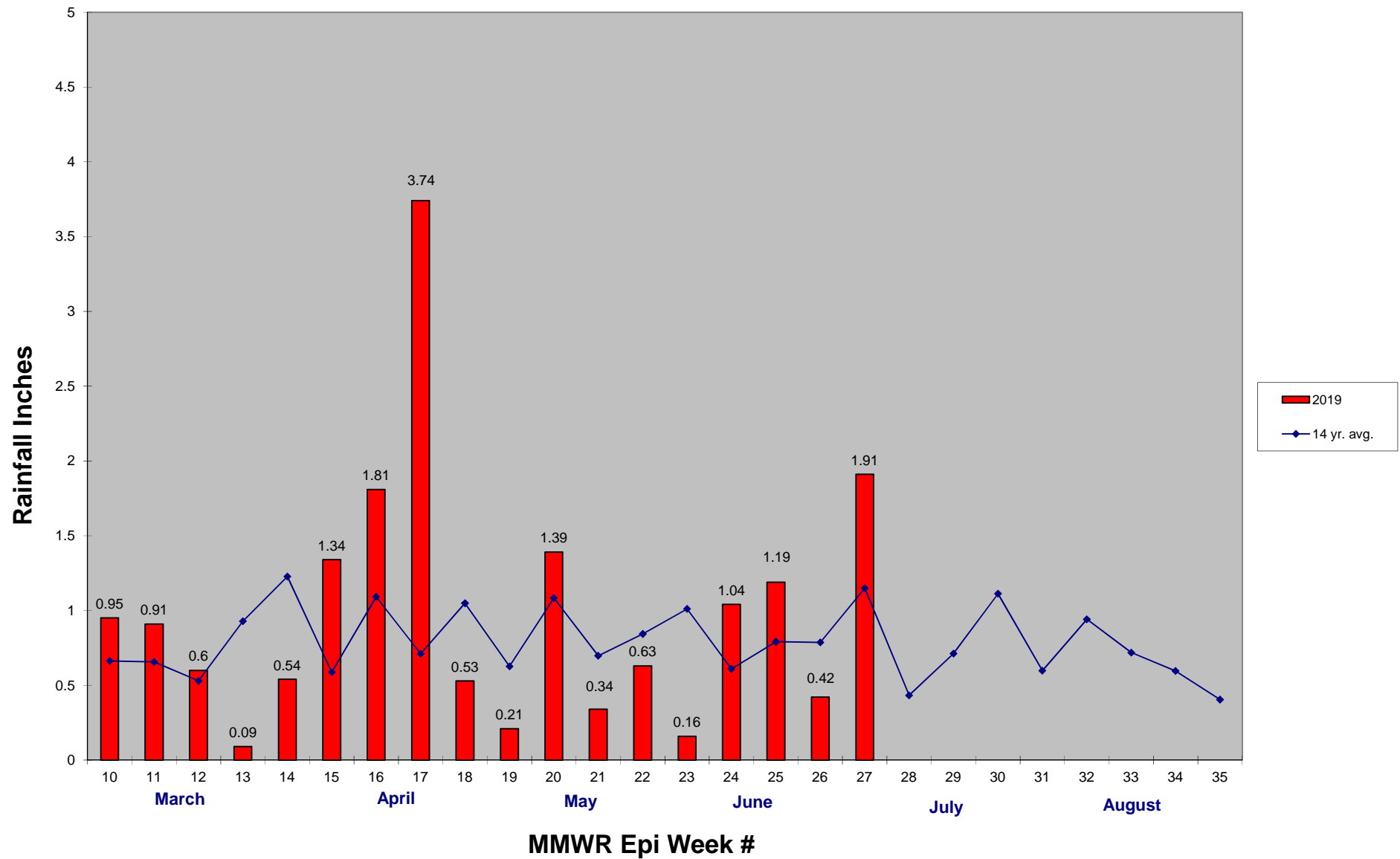
| | # Ovitraps | # Eggs |
|--------------|-------------------|---------------|
| EPI Week #22 | 31 | 4 |
| EPI Week #23 | 21 | 221 |
| EPI Week #24 | 33 | 530 |
| EPI Week #25 | 37 | 1294 |
| EPI Week #26 | 37 | 1100 |
| EPI Week #27 | - | - |

2019 Mass. Rainfall Data vs. 39 Year Average*



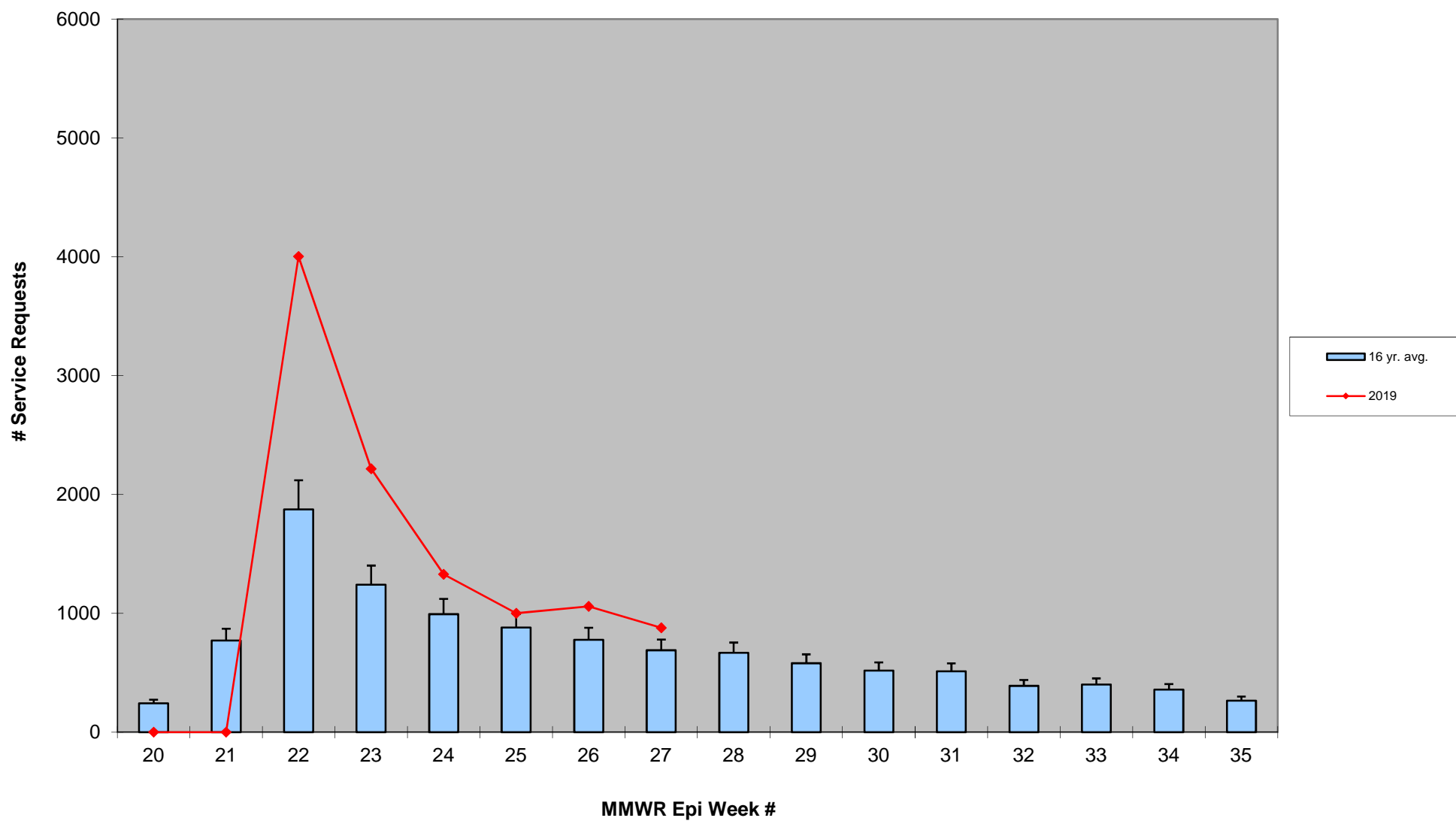
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

