

# CMMCP WEEKLY SURVEILLANCE REPORT



**EPI week #36**  
**Sept. 10-16, 2017**

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**Central Mass. Mosquito Control Project**  
**Weekly Report- 9/10/17-9/16/17**  
**EPI Week #37**

**Cumulative Surveillance Summary**

<b>Target Species</b>	<b><i>Ae. vex</i></b>	<b><i>Cq. per</i></b>	<b><i>Cs. mel</i></b>	<b><i>Oc. can</i></b>	<b><i>Culex</i></b>	<b>All Species</b>
<b>No. Pools</b>	97	400	79	210	1041	3682
<b>Total Specimens</b>	389	17648	244	3462	17757	49905
<b>No. Pools WNV +</b>	0	0	0	0	16 <sup>†</sup>	16 <sup>†</sup>
<b>No. Pools EEE +</b>	0	0	0	0	0	0

<sup>†</sup>Pool of WNV+ *Culex* species collected in Milford on 7/27/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Ashland on 7/27/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Millbury on 8/4/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Webster on 8/8/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Millbury on 8/11/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Billerica on 8/15/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Milford on 8/17/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Fitchburg on 8/22/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Leominster on 8/22/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Dracut on 8/25/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Acton on 8/31/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Natick on 8/31/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Billerica on 9/6/17

<sup>†</sup>Pool of WNV+ *Culex* species collected in Chelmsford on 9/6/17

**Weather Summary (Northborough, MA):** The weather for this particular week averaged 67.00°F with a recorded high temperature of 84.80°F and a recorded low temperature of only 44.60°F. For this week there was also a total of 0.05 inches of rain observed. Compared to the previous week, it was approximately 3.64°F warmer on average, and rained about 1.75 inches less. There has been 1.85 inches of rain accumulated in September, after 1.15 inches for the month of August.

**CMMCP Mosquito Summary-**

<b>Target Species</b>	<b>Δ From Last Week*</b>	<b>Δ From Last Year</b>	<b>Predominant Trap Site(s)</b>
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<i>Aedes vexans</i>	+55.56%	-63.21%	Littleton, Ayer
<i>Coquillettidia perturbans</i>	+250.0%	-64.70%	Littleton, Millbury
<i>Culiseta melanura</i>	+1300%	-62.13%	Ashland, Fitchburg, Hopkinton
<i>Ochlerotatus canadensis</i>	+73.33%	-33.64%	Millbury, Acton
<i>Culex</i> Species	+113.1%	+39.53%	Littleton, Chelmsford
All Species	+64.01%	-38.25%	Littleton

The predominant mosquito for the week was *Culex*,

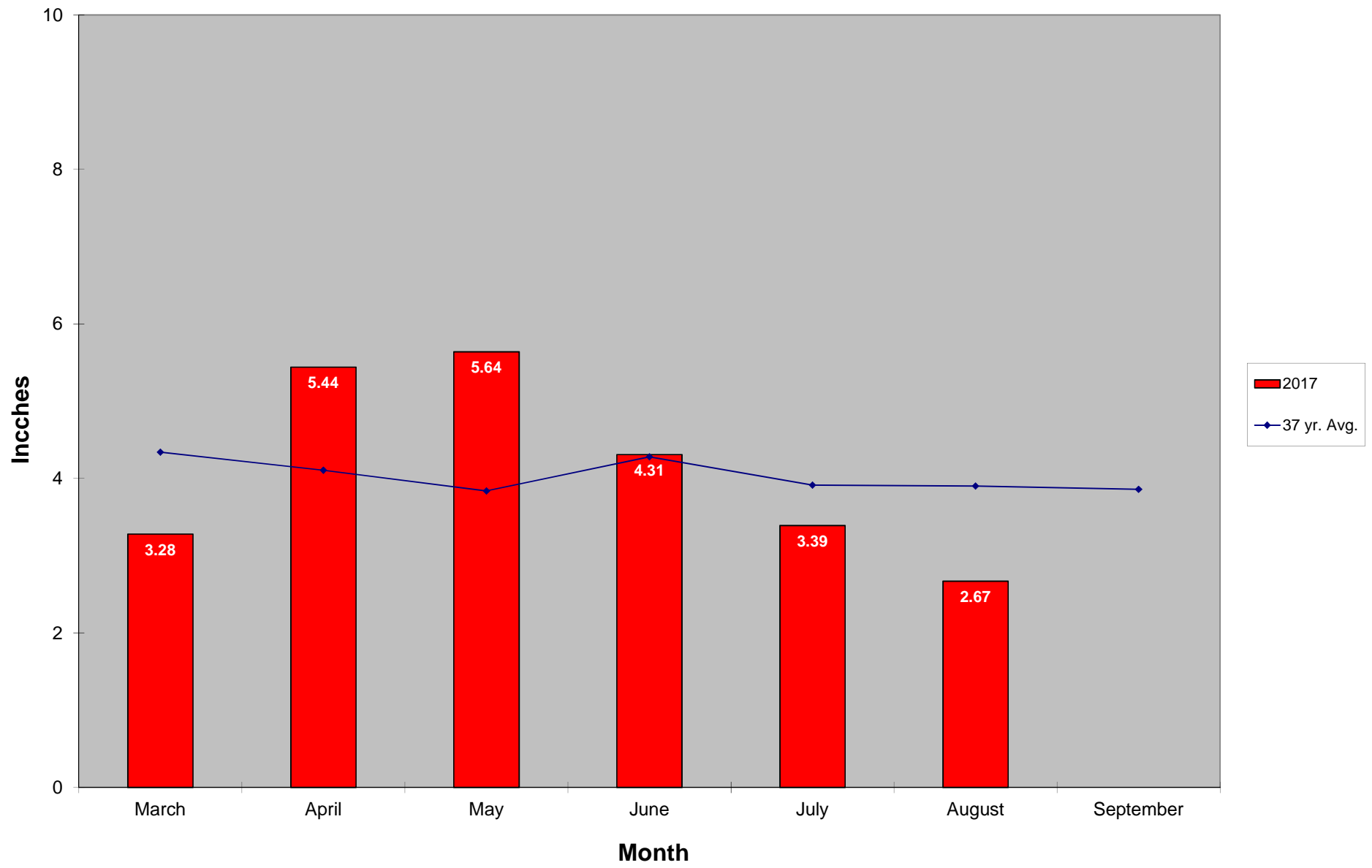
followed by *Coquillettidia perturbans*.

\*Low late season numbers may contribute to these comparisons being not as significant as they appear

**Epi week 37 narrative:** The temperatures for EPI week 37 averaged approximately 3.64 degrees warmer than the previous week, with only 0.05 inches of precipitation observed. Overall collection numbers increased by 64.01% from EPI week 36. All target mosquito species were collected in higher numbers from the prior surveillance period, likely due in part to the elevated temperatures. To this point in the season, *Culex* remains the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* is still the most abundant mosquito in the CMMCP service area, followed this week by *Coquillettidia perturbans*. Two additional mosquito pools collected in EPI week 36 were determined to be WNV positive. These collections were all *Culex* mosquitoes, sourced from the towns of Billerica and Chelmsford. It was the second WNV positive collections for each of these towns this season.

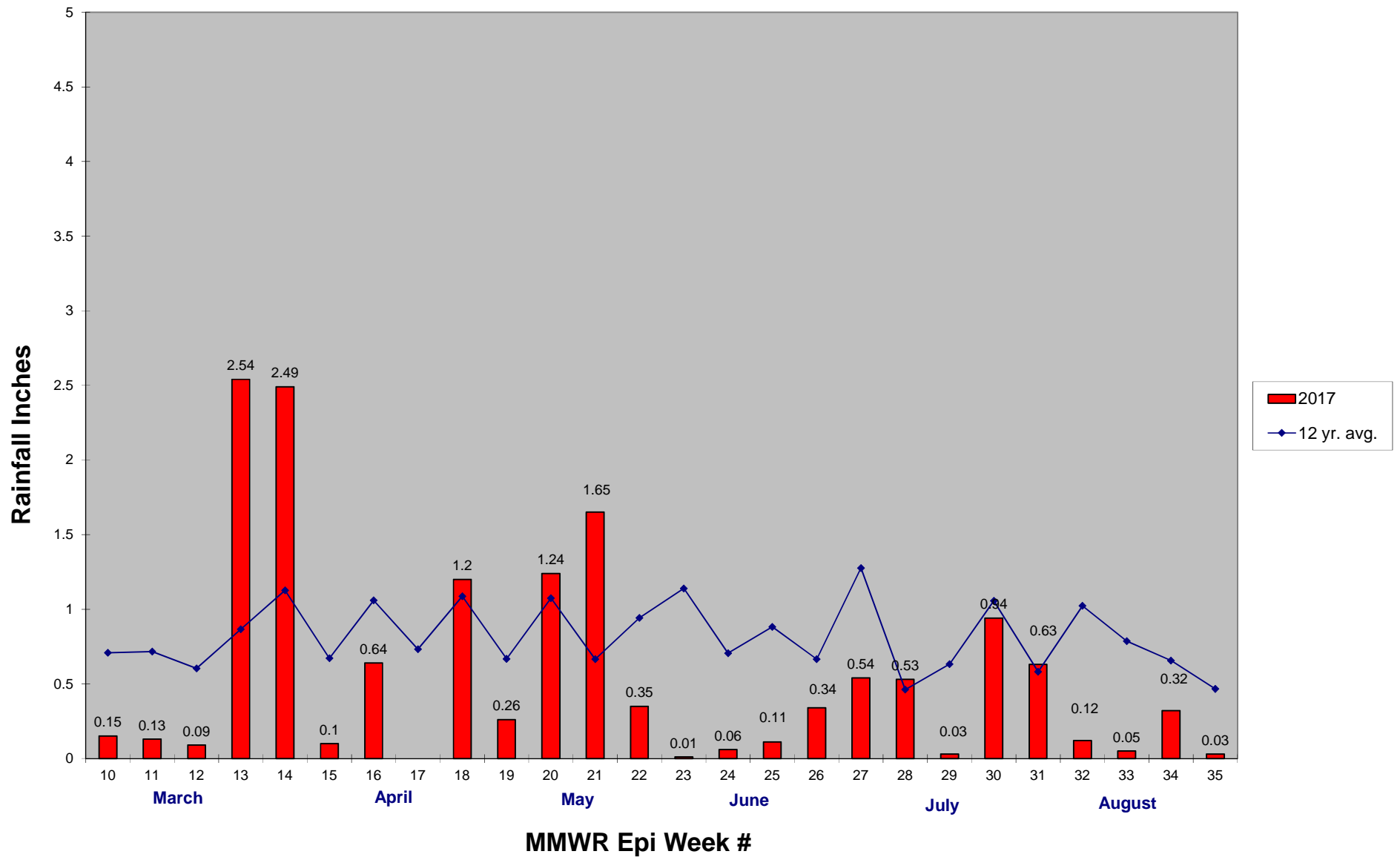
For the year, we received 175% more service requests than the 14 year average (16,108 in 2017 v. 9,185 14 yr. avg.), and 5.4% more than 2016 (16,108 in 2017 v. 15,281 in 2016). The standard adulticiding program has ended due to lower nighttime temperatures, declining mosquito populations and fewer service requests. Vector spraying was done September 13 after consultation with the LBOH in Billerica and Chelmsford after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

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



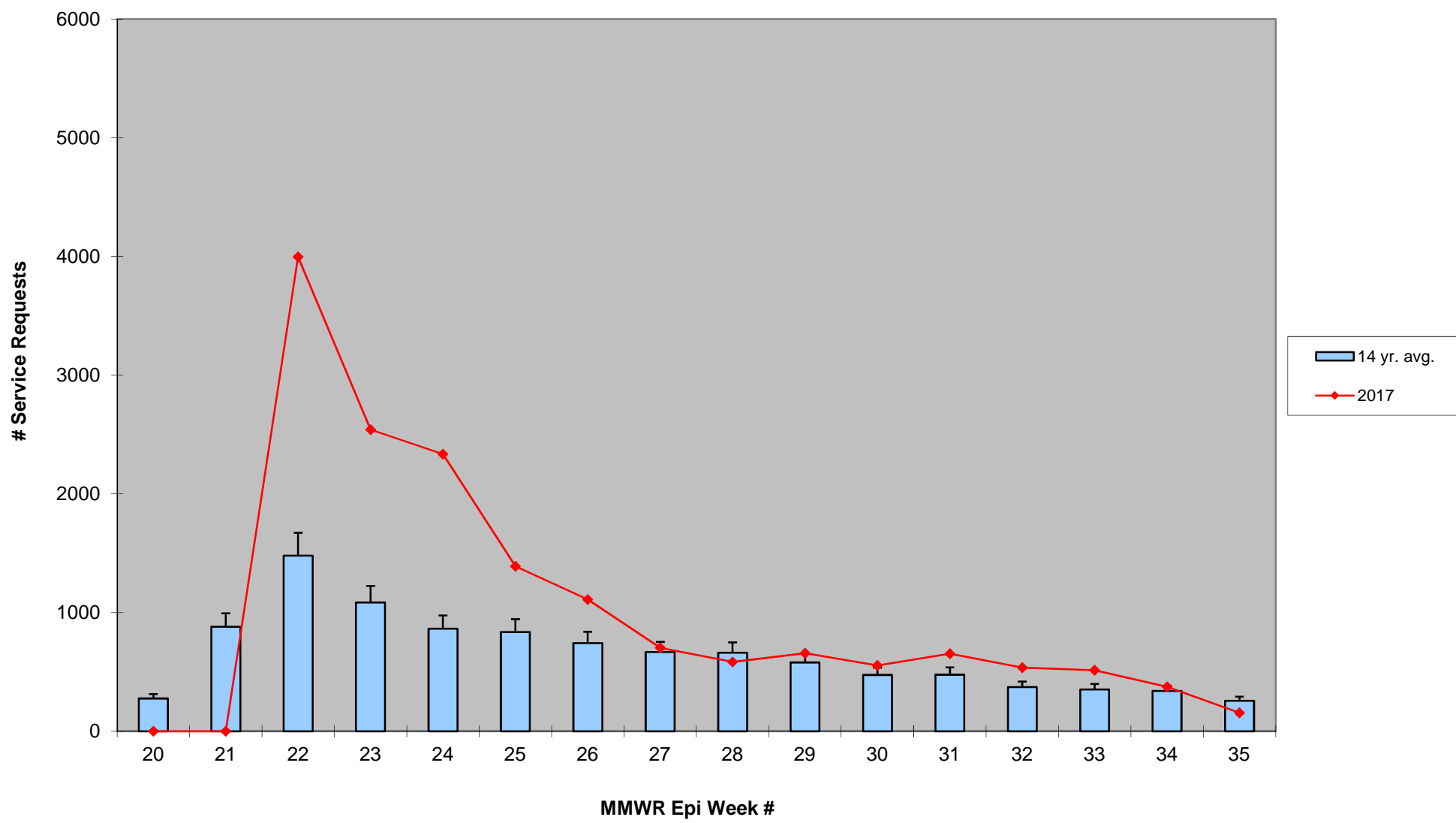
\*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

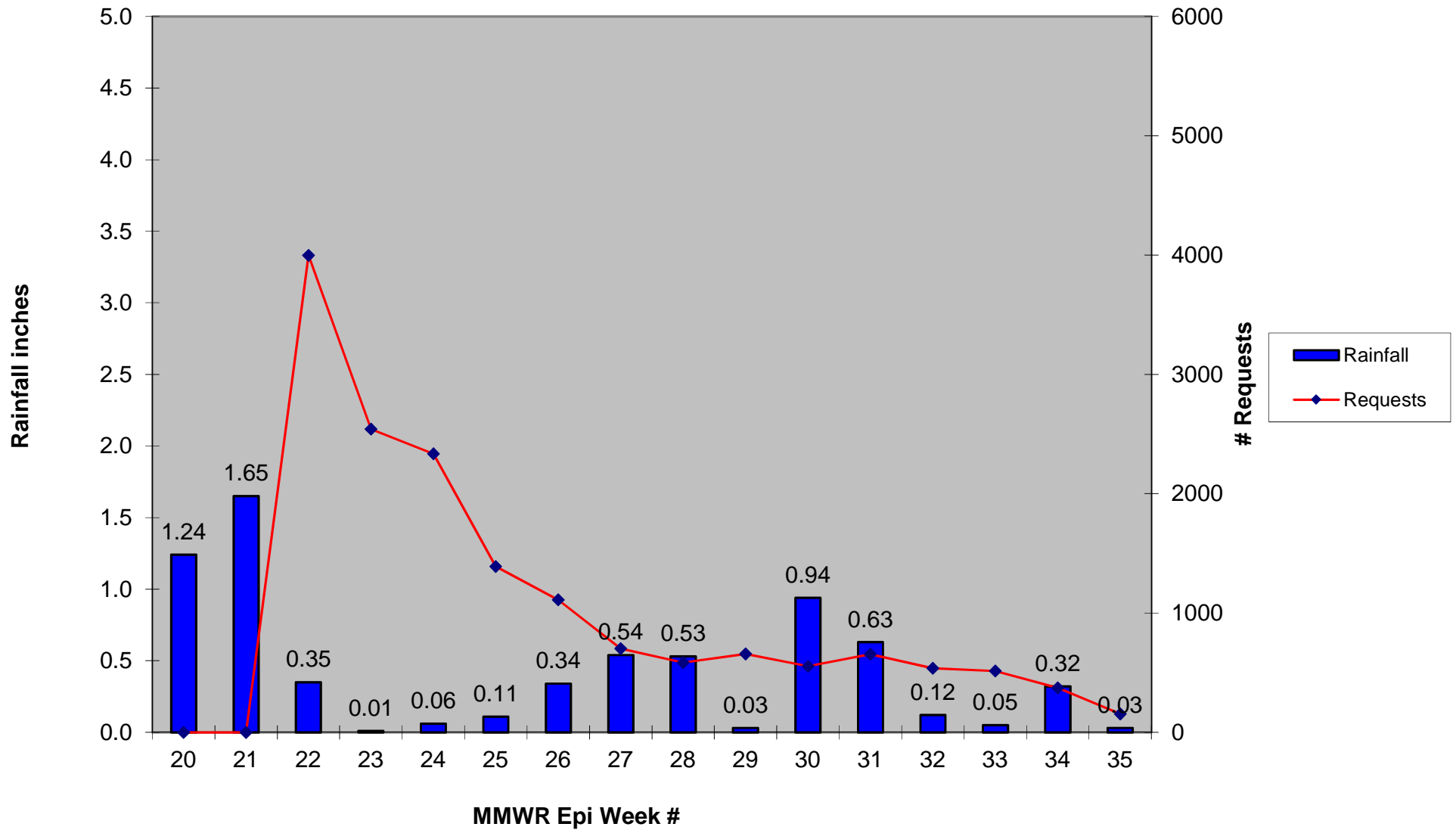


\*source: CMMCP weather station Northborough, MA

### ULV Service Request History Comparison 2003-2017

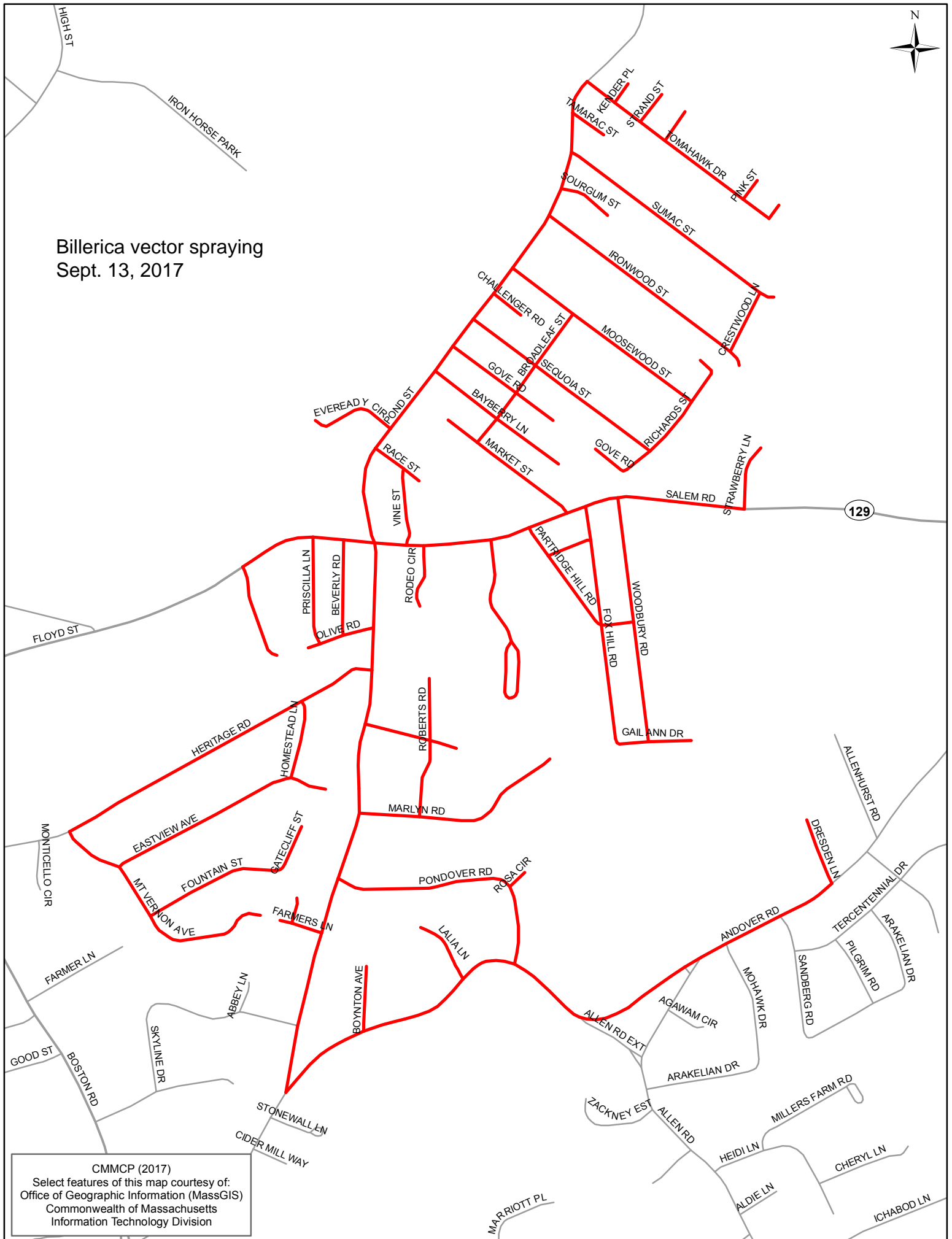


2017 Rainfall vs. Requests





Billerica vector spraying  
Sept. 13, 2017



CMMCP (2017)  
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Chelmsford vector spraying  
Sept. 13, 2017

LOWELL

WESLEY ST  
JEAN AVE  
32  
3  
SMITH ST  
BELLEVUE ST  
PLEASANT ST  
BALSAM DR  
JOYCE ST  
STEVENS ST  
PARKHURST RD  
MANWELL RD  
CLAUDE RD  
GREGORY RD  
RAINBOW AVE  
COLONIAL DR  
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WIGGIN ST  
SUNRISE AVE  
MOONBEAM AVE  
STARLIGHT AVE  
ECLIPSE AVE  
MATTHEW LN  
WAVERTY AVE  
RUTLEDGE AVE  
ST NICHOLAS AVE  
HOSKATONIC AVE  
BOWL RD  
CLINTON AVE  
FULLER RD  
DELWOOD RD  
SYLVAN AVE  
BAYBERRY DR  
MELODY LN  
STEDMAN ST  
SUBWAY AVE  
HIDDEN WAY  
PINE HILL AVE  
DANE LN  
BUCKMAN DR  
SCOTT DR  
LARSEN CIR  
CROSBY LN  
MEETING HOUSE RD  
ALPINE LN  
EMERSON AVE  
CHELMSFORD ST  
INDEPENDENCE DR  
BOYDS LN  
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JEAN AVE

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