

# CMMCP WEEKLY SURVEILLANCE REPORT



**EPI week #35**  
**Aug. 27 – Sept. 2, 2017**

**Frank Cornine, *Field Biologist***  
**Curtis Best, *Staff Entomologist***  
**David Mullins, *Field Biologist***  
**Marco Notarangelo, *Surveillance Technician***  
**Tim McGlinchy, *Director of Operations***  
**Tim Deschamps, *Executive Director***

**Central Mass. Mosquito Control Project**  
**Weekly Report- 8/27/17-9/2/17**  
**EPI Week #35**

**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>	76	356	67	197	921	3233
<b>Total Specimens</b>	333	17369	196	3421	16808	47604
<b>No. Pools WNV +</b>	0	0	0	0	12 <sup>†</sup>	12 <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

**Weather Summary (Northborough, MA):** The weather for this particular week averaged 59.91°F with a recorded high temperature of 77.20°F and a recorded low temperature of only 40.70°F. For this week there was also a total of 0.03 inches of rain observed. Compared to the previous week, it was approximately 9.18°F cooler on average, and rained about 0.29 inches less. There has been 1.15 inches of rain accumulated in August, after 2.04 inches for the month of July.

**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>
<i>Aedes vexans</i>	+83.33%	-48.37%	Holliston, Natick
<i>Coquillettidia perturbans</i>	+00.00%	-65.22%	Ayer
<i>Culiseta melanura</i>	-90.91%	-69.56%	Marlborough
<i>Ochlerotatus canadensis</i>	-100.0%	-34.52%	N/A
<i>Culex</i> Species	-42.75%	+42.97%	Webster, Milford
All Species	-32.27%	-39.77%	Webster, Milford, Fitchburg

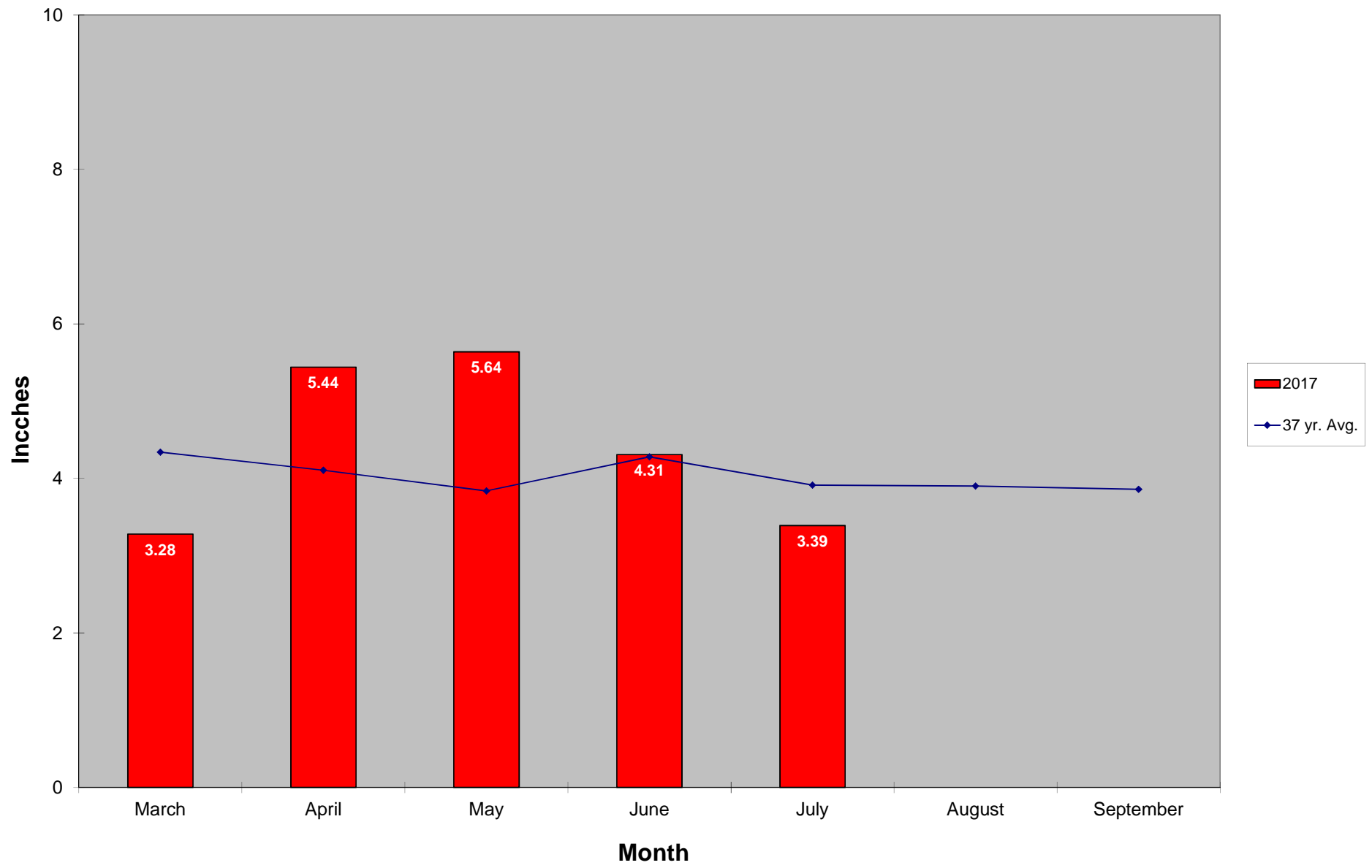
The predominant mosquito for the week was *Culex*,  
followed by *Ochlerotatus triseriatus*.

### **Epi week #35 narrative:**

The temperatures for EPI week 35 averaged approximately 9.18 degrees cooler than the previous week, with only 0.03 inches of precipitation observed. Overall collection numbers decreased by 32.27% from EPI week 34. All target mosquitoes were collected in equal or lower numbers from the prior surveillance period except *Aedes vexans*. To this point in the season, *Culex* is the only target mosquito that has been collected in higher numbers compared to 2016. *Culex* has remained the most abundant mosquito in the CMMCP service area, followed by *Ochlerotatus triseriatus* this week. Three additional mosquito pools collected in EPI week 34 were determined to be WNV positive. These collections were all *Culex* mosquitoes, sourced from the towns of Dracut, Fitchburg, and Leominster. Surveillance has increased in these areas of mosquito-borne disease.

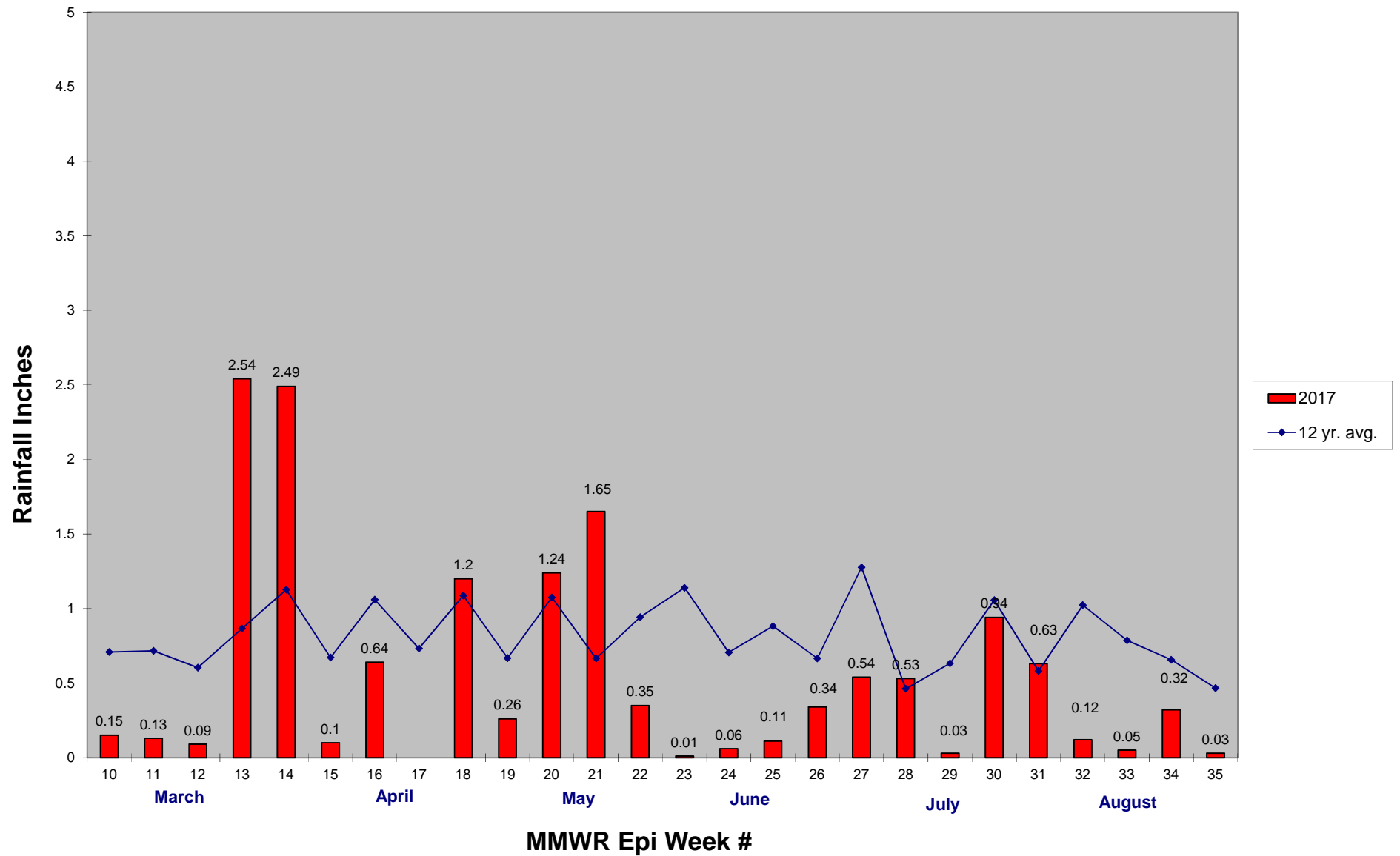
We received 175% more service requests than the 14 year average (16,108 in 2017 v. 9,185 14 yr. avg.), and 5.4% more than 2016 (16,108 in 2017 v. 15,281 in 2016). Service requests decreased 170% from Epi week 34. 155 service requests were received and 445 requests were performed in Epi week 34 with favorable weather conditions. Vector spraying was done August 31 after consultation with the LBOH in Dracut, Fitchburg & Leominster after confirmation of WNV in *Culex*. Monitoring continues at the sites where *Ae. albopictus* was identified.

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



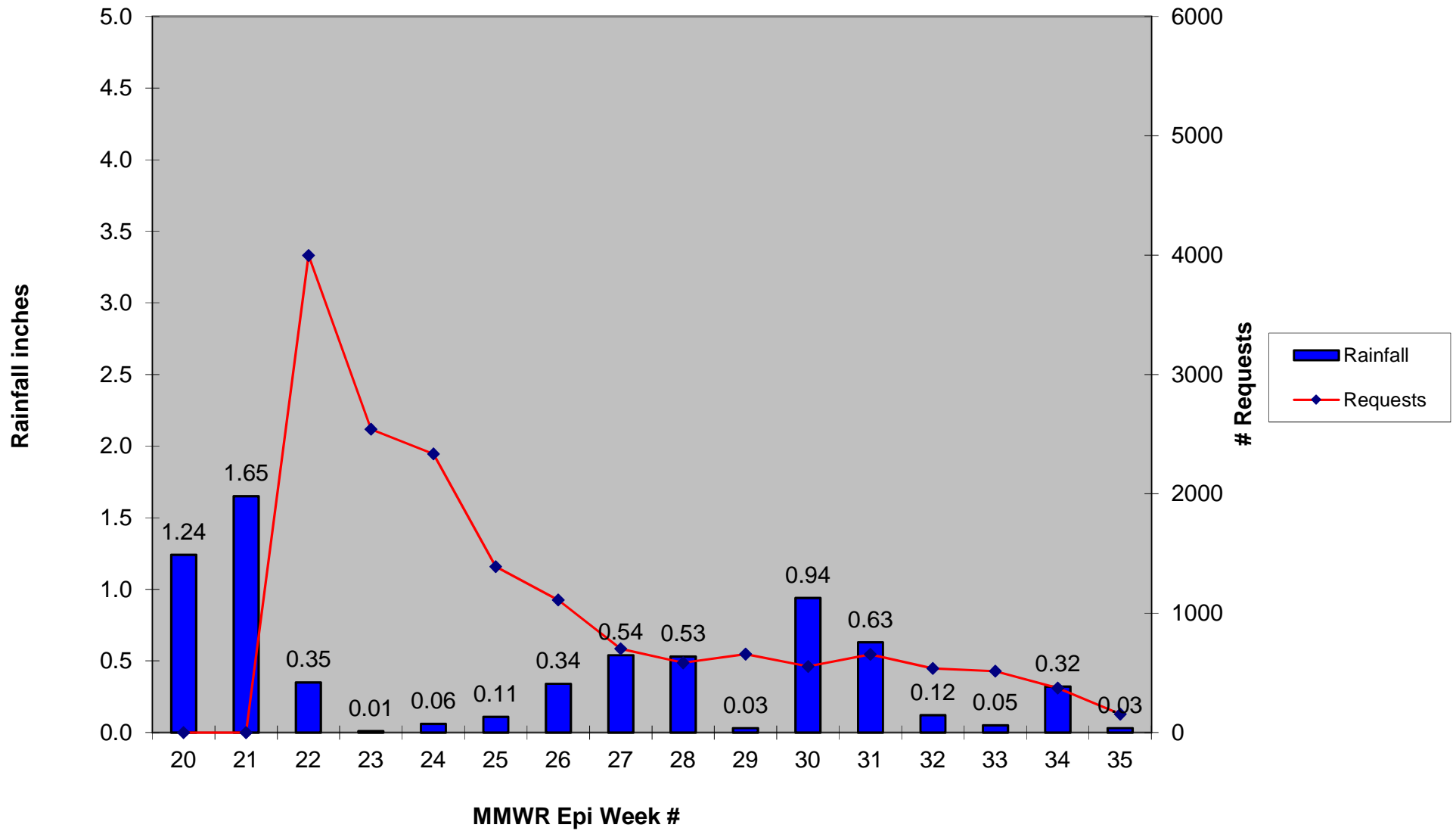
\*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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

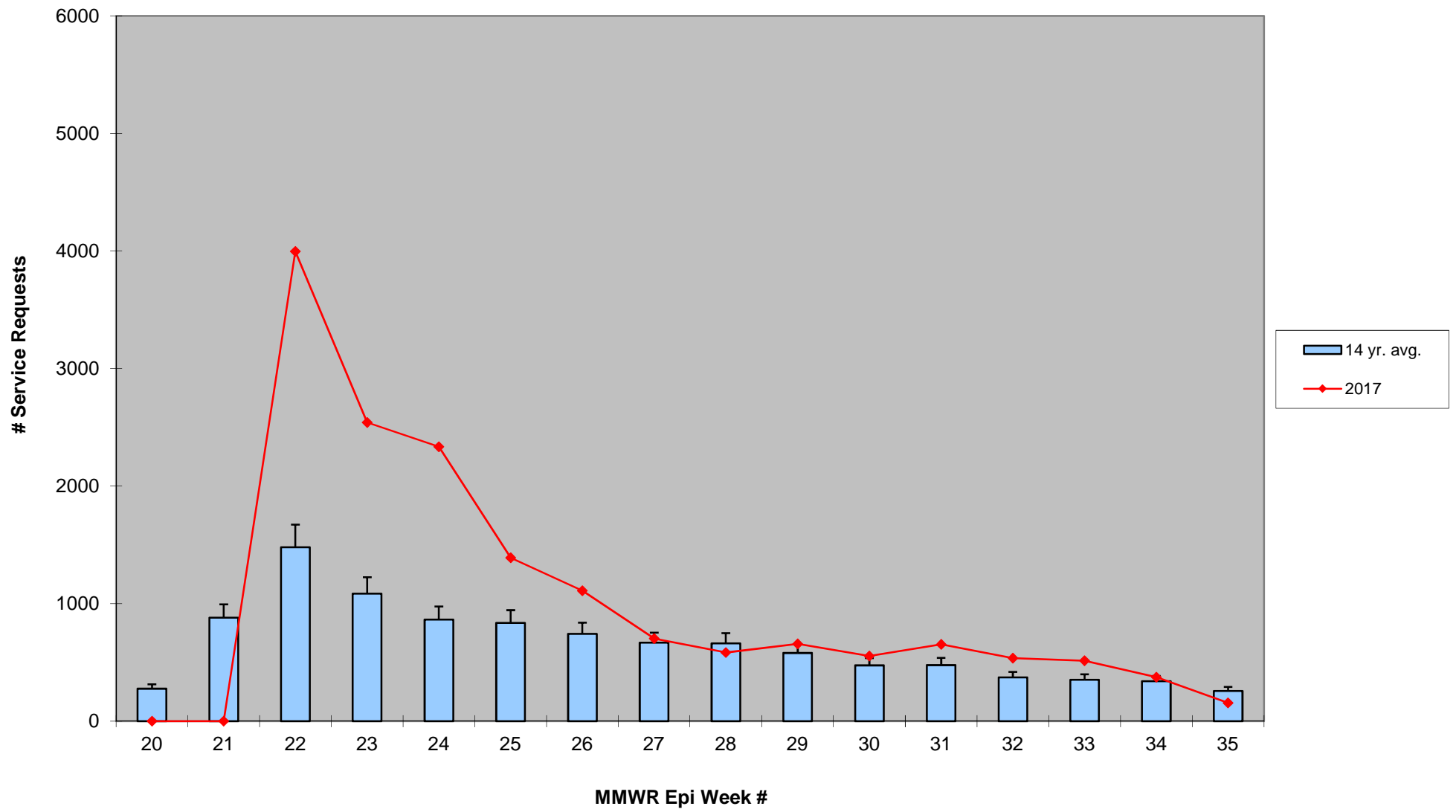


\*source: CMMCP weather station Northborough, MA

2017 Rainfall vs. Requests



ULV Service Request History Comparison 2003-2017





CHERRYWOOD DR

COLBURN AVE

DAY ST

SAVOY CT

MOUNTAIN VIEW DR

HAZEL AVE

MILTON AVE

TRUDEL AVE

PINEHURST AVE

BOLTON AVE

TURNER AVE

SLADEN ST

HILDRETH ST

MOORE AVE

CARRINGTON AVE

KIRKLAND AVE  
CREST AVE

SICARD AVE

OLD RD

DOYLE AVE

FREEMAN AVE

STEVENS ST

OLIVER DR

RADCLIFF RD

BANCROFT ST

CASS AVE

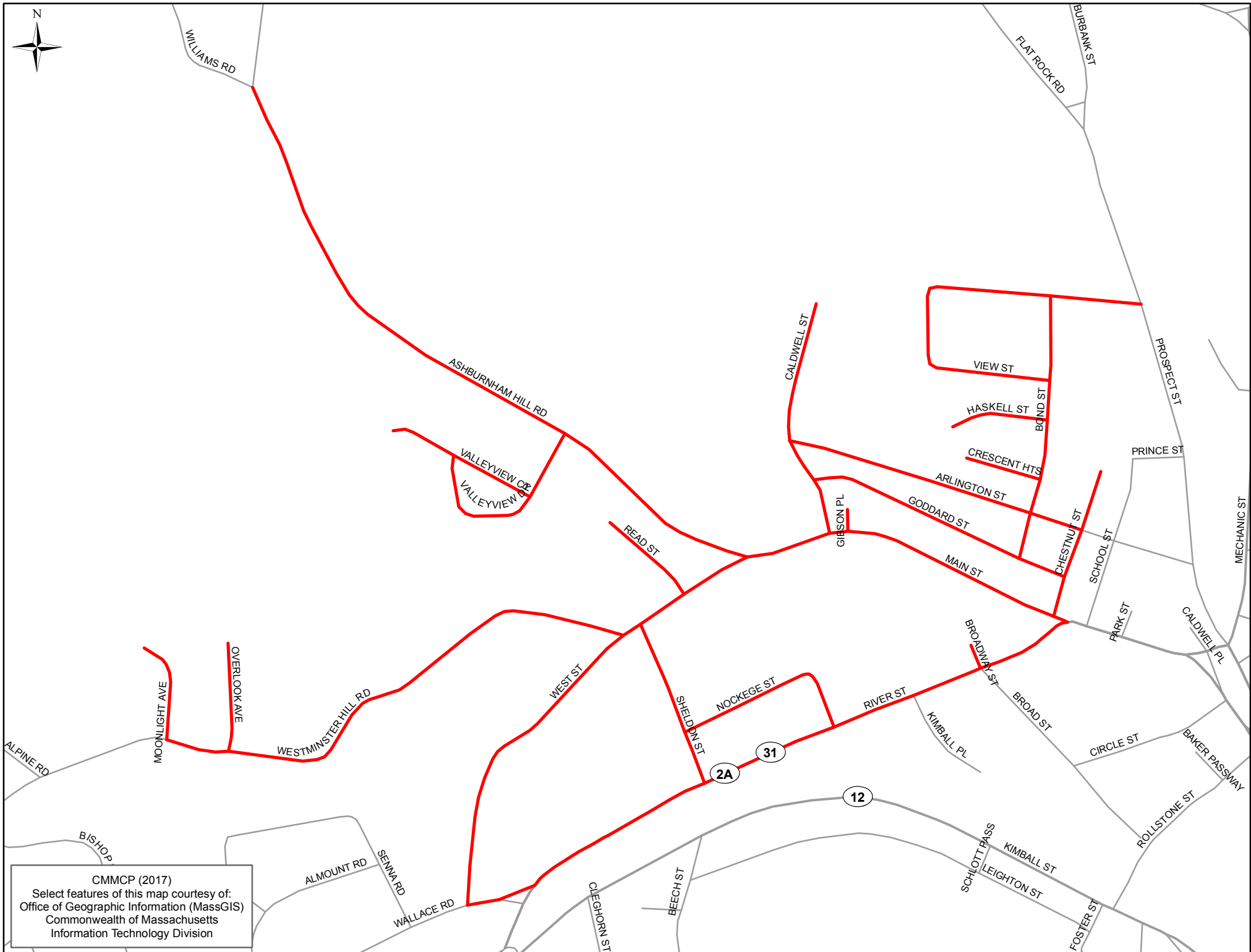
LEE RD

HILLSIDE RD

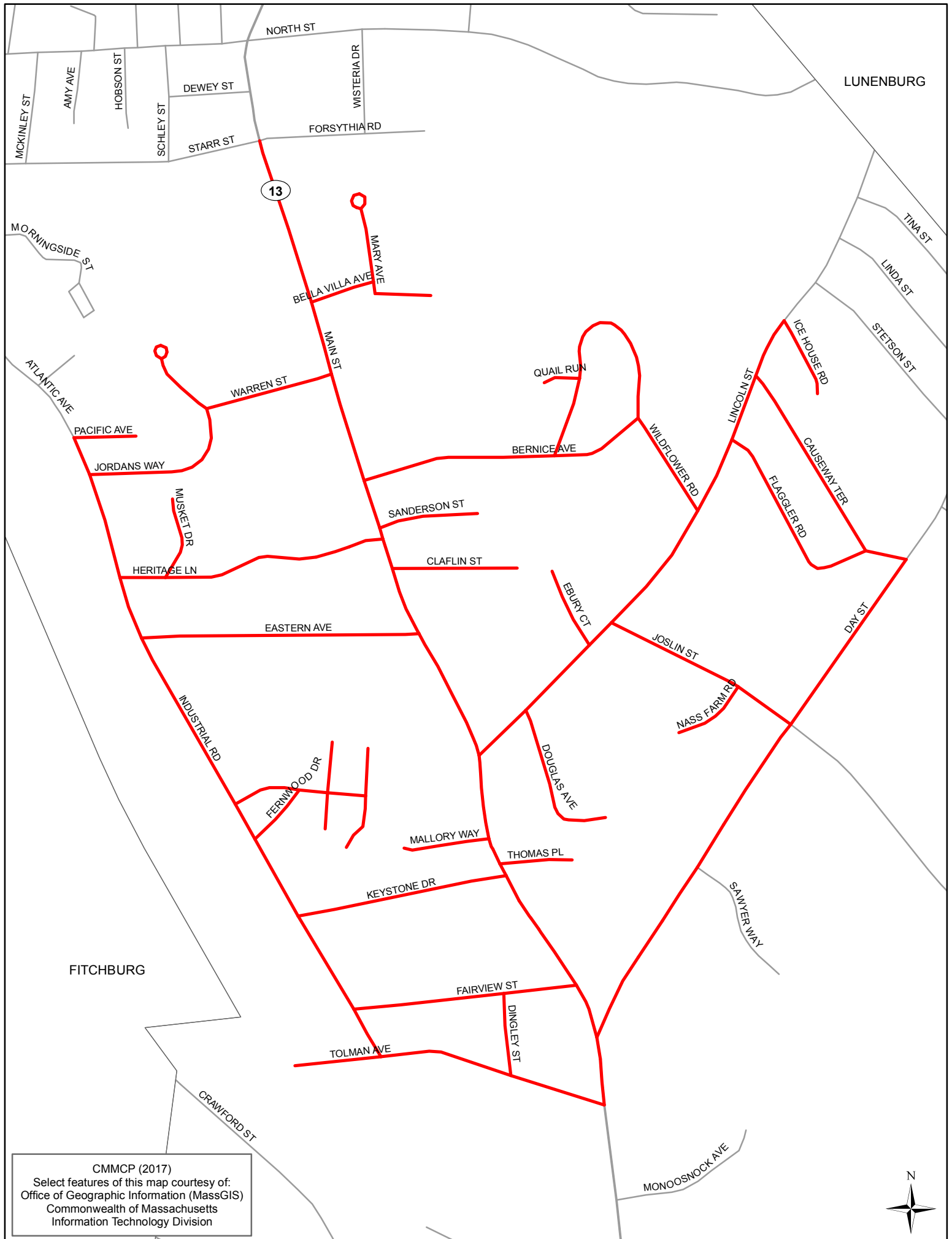
BURDETTE RD

CMMCP (2017)

Select features of this map courtesy of:  
Office of Geographic Information (MassGIS)  
Commonwealth of Massachusetts  
Information Technology Division



CMMCP (2017)  
Select features of this map courtesy of:  
Office of Geographic Information (MassGIS)  
Commonwealth of Massachusetts  
Information Technology Division



CMMCP (2017)  
Select features of this map courtesy of:  
Office of Geographic Information (MassGIS)  
Commonwealth of Massachusetts  
Information Technology Division