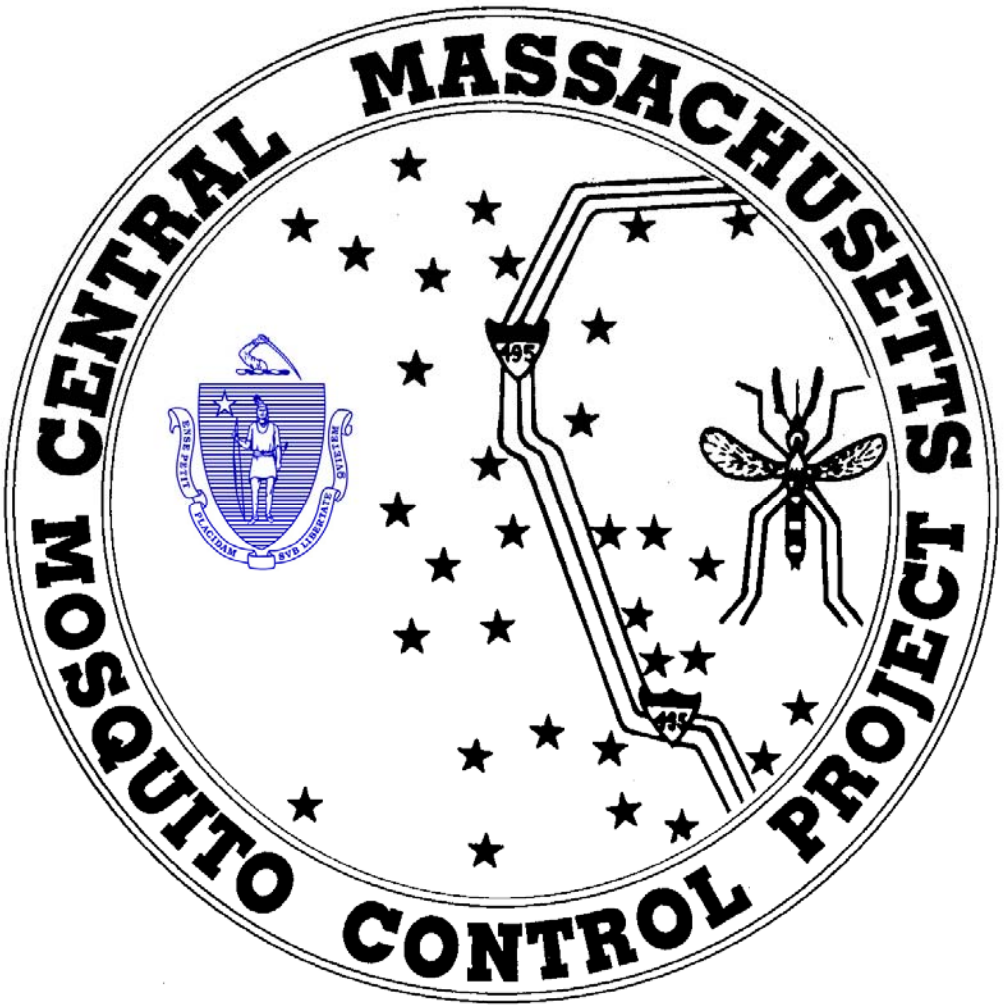
CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #33
Aug. 13-19, 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- 8/13/17-8/19/17
EPI Week #33

Cumulative Surveillance Summary

Target Species	*Ae. vex*	*Cq. per*	*Cs. mel*	*Oc. can*	*Culex*	All Species
No. Pools	59	342	54	191	753	2687
Total Specimens	307	16090	152	3342	14774	42618
No. Pools WNV +	0	0	0	0	7†	7†
No. Pools EEE +	0	0	0	0	0	0

†Pool of WNV+ *Culex* species collected in Milford on 7/27/17
†Pool of WNV+ *Culex* species collected in Ashland on 7/27/17
†Pool of WNV+ *Culex* species collected in Chelmsford on 8/1/17
†Pool of WNV+ *Culex* species collected in Millbury on 8/4/17
†Pool of WNV+ *Culex* species collected in Webster on 8/8/17
†Pool of WNV+ *Culex* species collected in Sturbridge on 8/8/17
†Pool of WNV+ *Culex* species collected in Millbury on 8/11/17

Weather Summary (Northborough, MA): The weather for this particular week averaged 71.21°F with a recorded high temperature of 88.70°F and a recorded low temperature of only 52.00°F. For this week there was also a total of 0.05 inches of rain observed. Compared to the previous week, it was approximately 2.30°F warmer on average, and rained about 0.07 inches less. There has been 0.80 inches of rain accumulated in August, after 2.04 inches for the month of July.

CMMCP Mosquito Summary*-

Target Species	Δ From Last Week	Δ From Last Year	Predominant Trap Site(s)
Aedes vexans	+36.99%	+60.22%	Westford, Stow, Milford
Coquillettidia perturbans	-13.94%	-67.28%	Devens, Hopkinton
Culiseta melanura	+15.38%	-77.18%	Stow
Ochlerotatus canadensis	-75.89%	-36.17%	Sturbridge, Acton, Westford
Culex Species	-60.09%	+57.85%	Shrewsbury, Gardner
All Species	-38.63%	-42.90%	Devens, Hopkinton

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

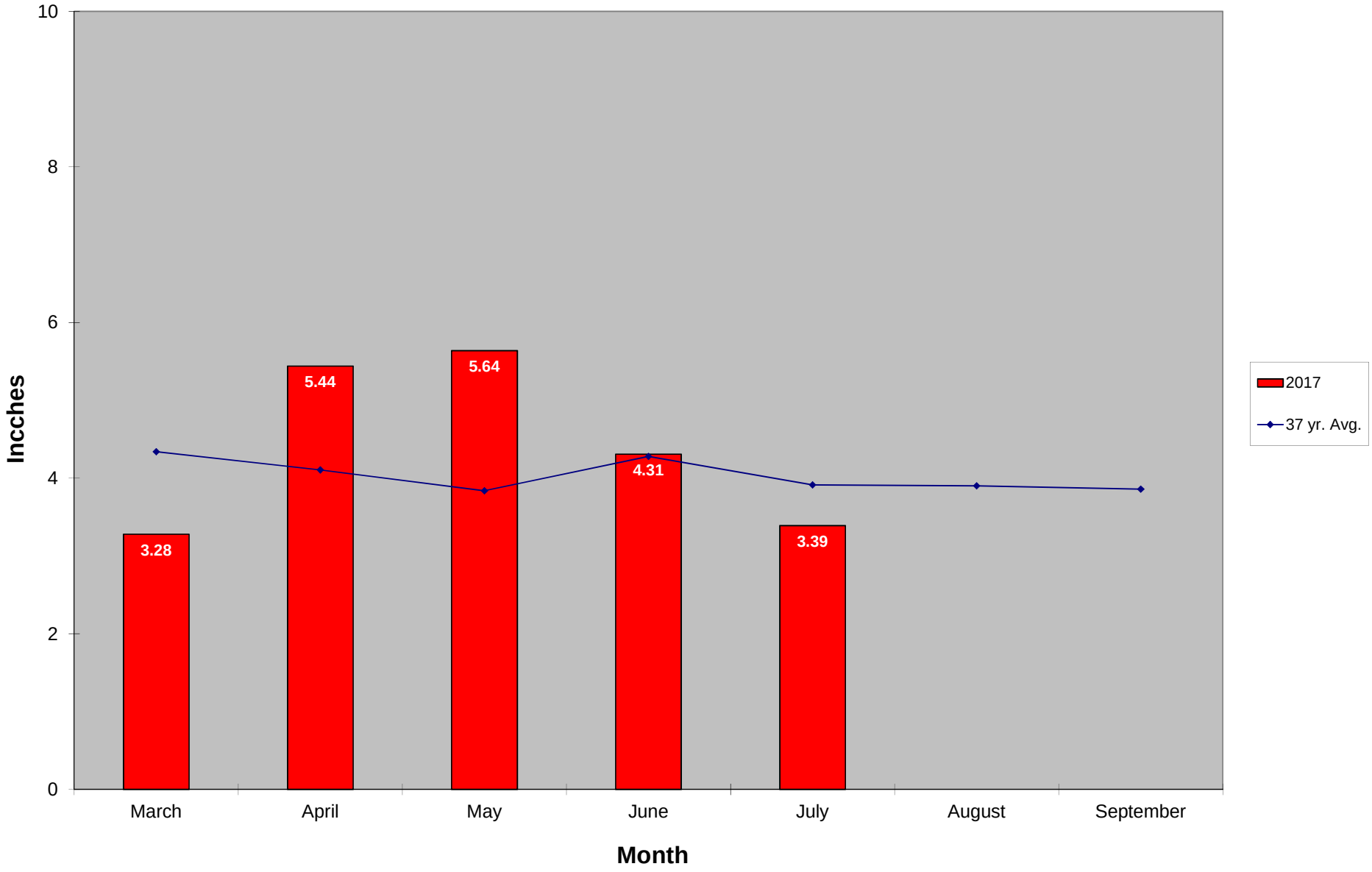
Epi Week 33 Narrative:

The temperatures for EPI week 33 averaged approximately 2.30 degrees warmer than the previous week, with only 0.05 inches of precipitation observed. Overall collection numbers decreased by 38.63% from EPI week 32. The only target mosquitoes to increase from the prior collection period were *Aedes vexans* and *Culiseta melanura*. To this point in the season, all target species have been collected in lower numbers

compared to 2016 aside from *Ae*. *vexans* and *Culex*. This week *Coquillettidia perturbans* was the most abundant mosquito in the CMMCP service area followed by *Culex*, although it is predicted that *Cq*. *perturbans* will continue to decrease as the season progresses. Three additional mosquito pools collected in EPI week 32 were determined to be WNV positive. These collections were all *Culex* mosquitoes from the towns of Webster, Sturbridge, and Millbury, which also had a WNV positive collection in EPI week 31, albeit from a different trap site.

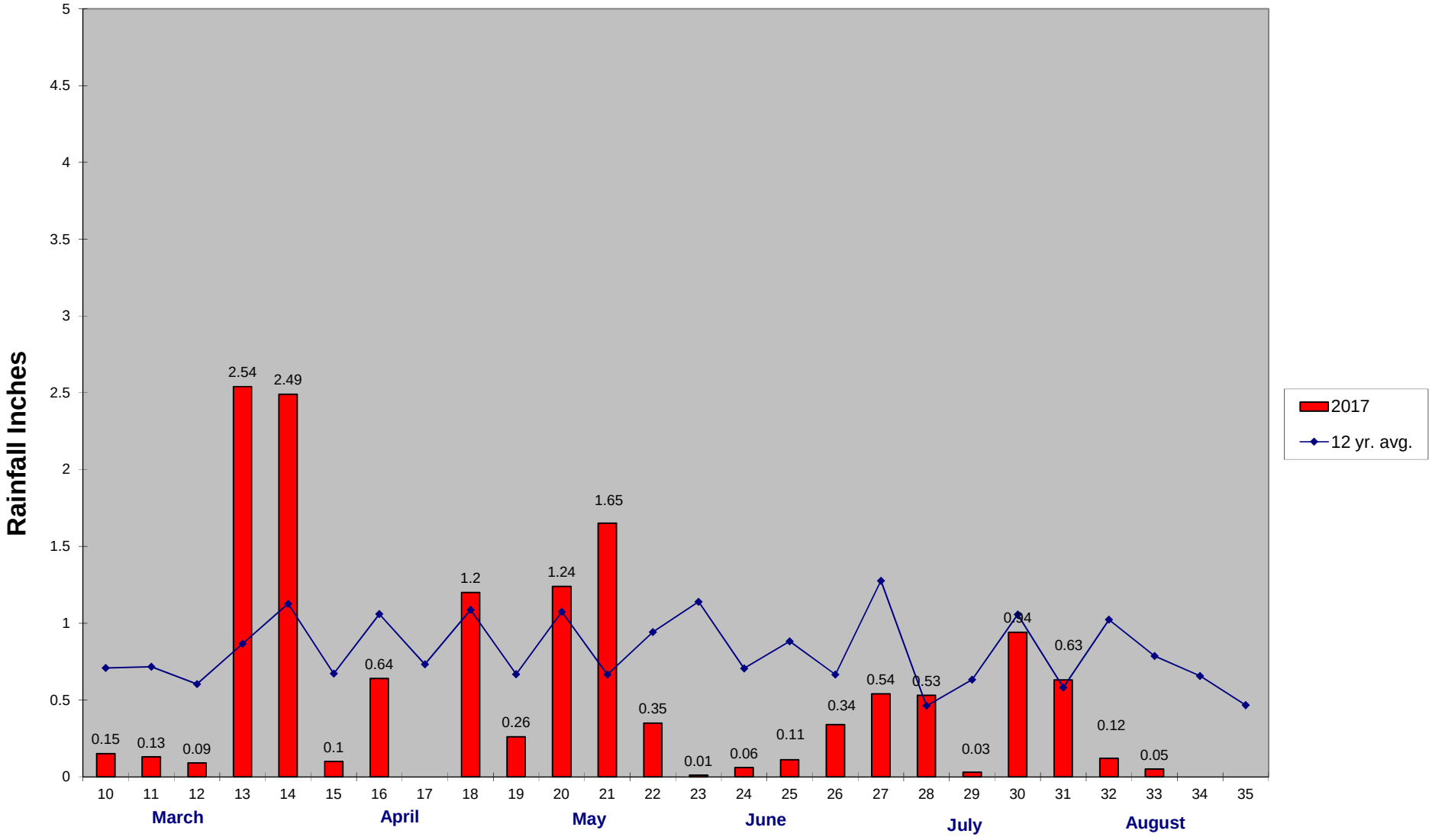
We have received 181% more service requests than the 14 year average (15,580 in 2017 v. 8,588 14 yr. avg.), and 6.3% more than this time in 2016 (15,580 in 2017 v. 14,646 in 2016). Service requests decreased 4.27% from Epi week 32. 518 service requests were received and 432 requests were performed in Epi week 33 with favorable weather conditions. Wide area spraying was done after consultation with the LBOH in Auburn due to concerns about WNV spillover from the city of Worcester. Vector spraying was done in Millbury, Sturbridge and Webster after confirmation of WNV in *Culex* and coordination with local health officials. Monitoring continues at the site where *Ae. albopictus* was identified.

2017 Mass. Rainfall Data vs. 37 Year Average*

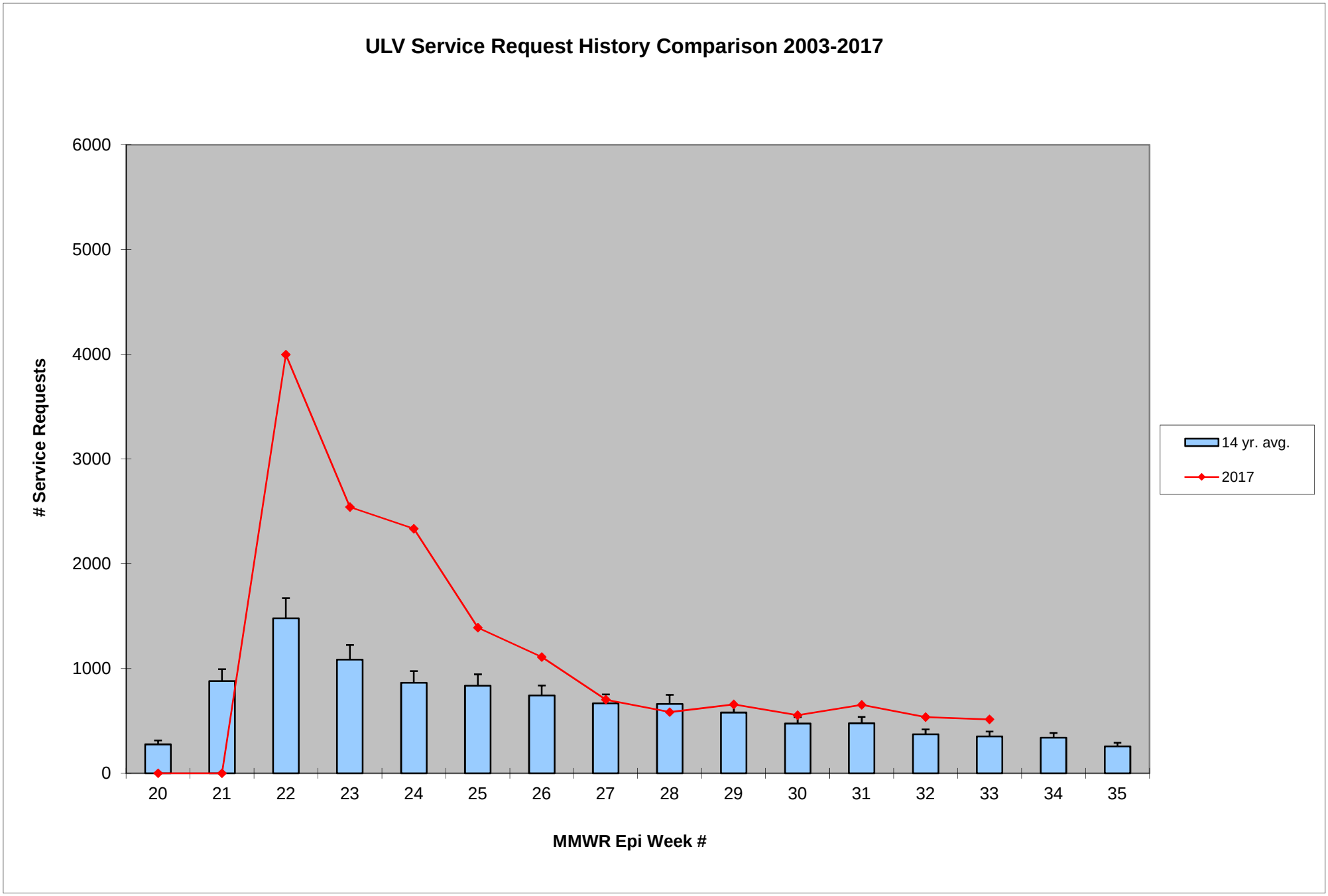


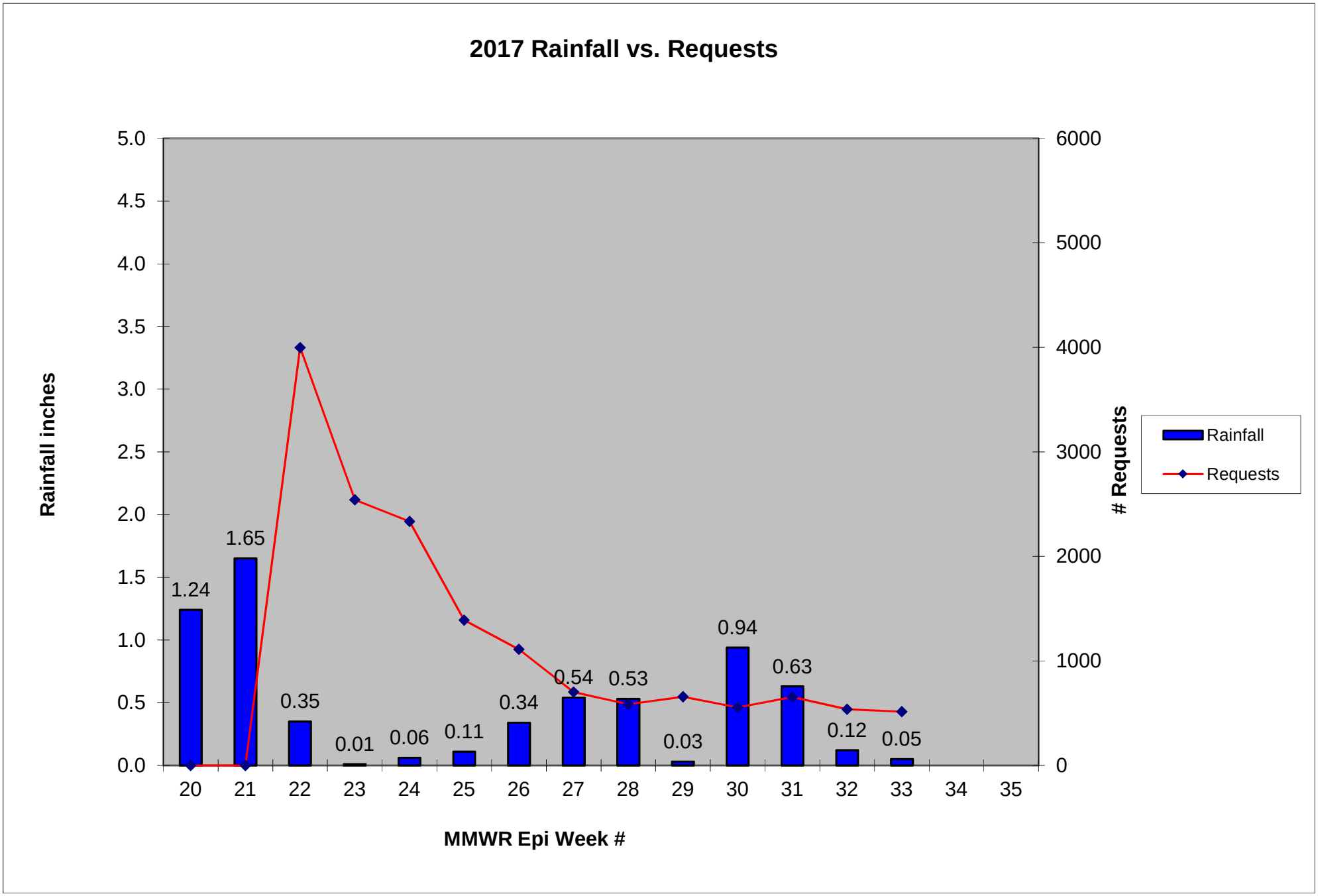
*source: http://www.nrcc.cornell.edu/regional/tables/tables.html

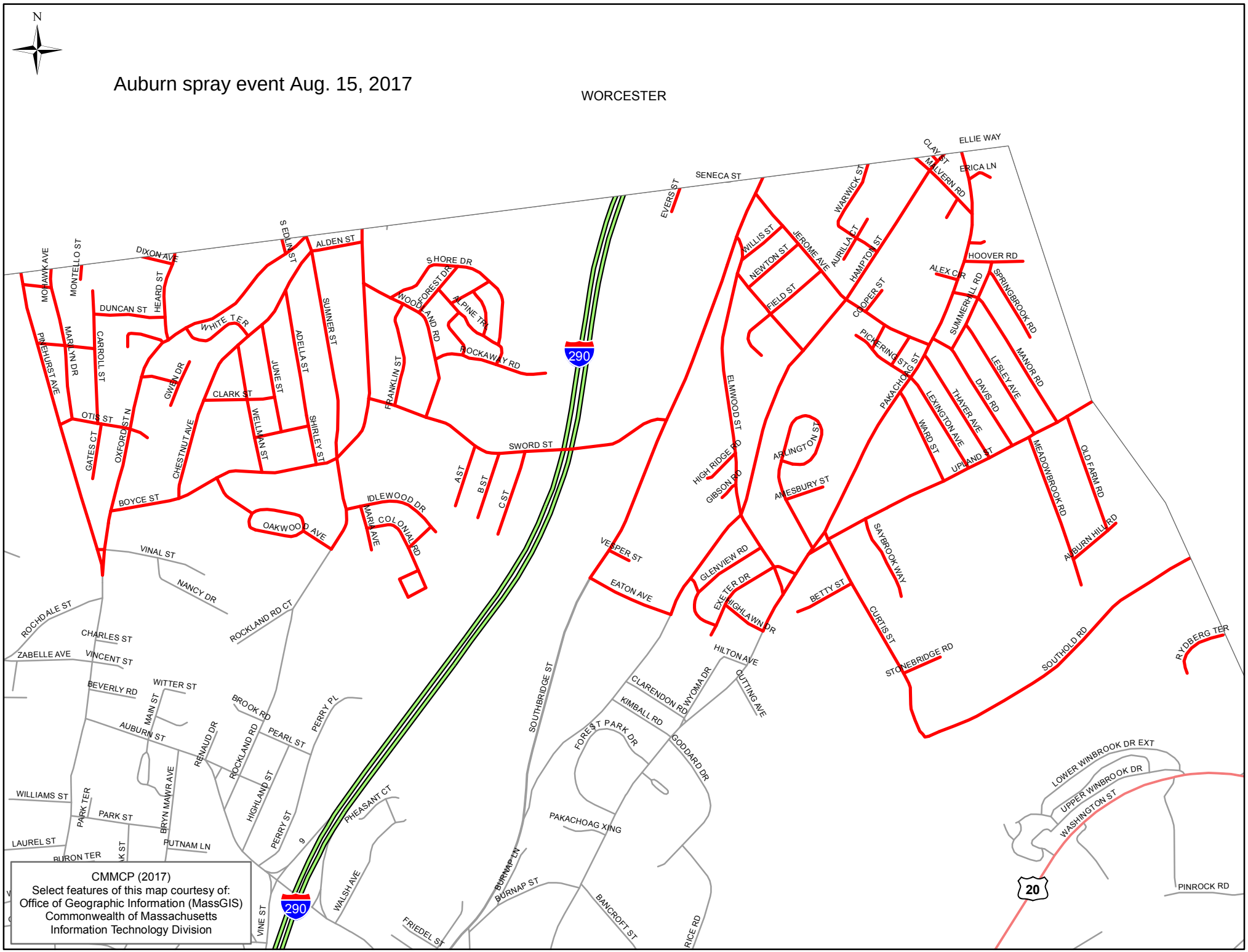
2017 CMMCP Weekly Rainfall vs. 12 Year Average*



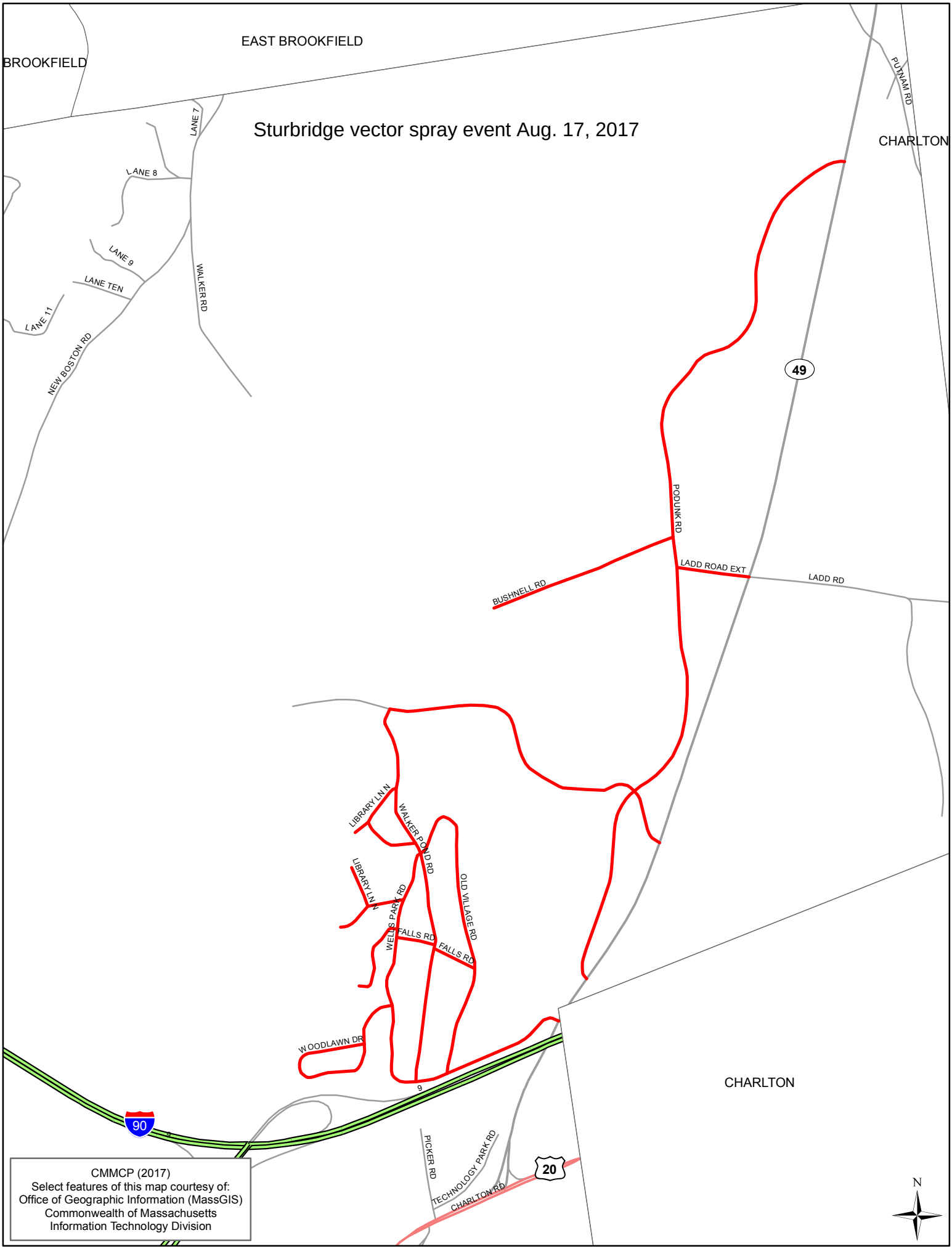
*source: CMMCP weather station Northborough, MA

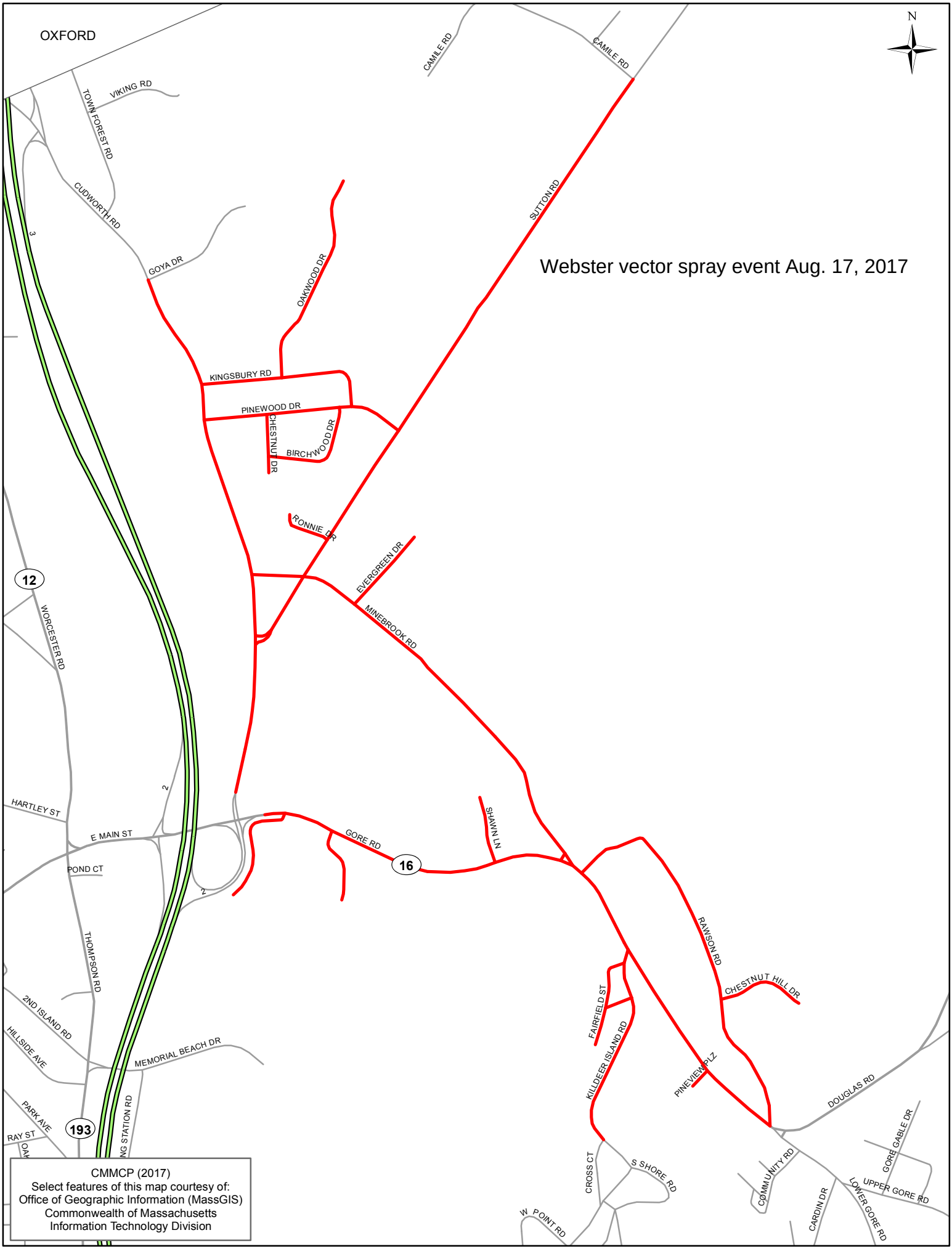

ULV Service Request History Comparison 2003-2017
Service Requests
6000
5000
4000
3000
2000
1000
0
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
MMWR Epi Week #
14 yr. avg.
2017


2017 Rainfall vs. Requests
Rainfall inches
Requests
MMWR Epi Week #
Rainfall
Requests
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6000
5000
4000
3000
2000
1000
0
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
1.24
1.65
0.35
0.01
0.06
0.11
0.34
0.54
0.53
0.03
0.94
0.63
0.12
0.05


N
Auburn spray event Aug. 15, 2017
WORCESTER
SENECA ST
EVERS ST
ELLIE WAY
CLAY ST
MALVERN RD
ERICA LN
WARWICK ST
WILLIS ST
NEWTON ST
FIELD ST
JEROME AVE
AURILLA CT
HAMPTON ST
COOPER ST
ALEX CIR
HOOVER RD
SUMMERHILL RD
SPRINGBROOK RD
PICKERING ST
PAKACHOAG ST
LESLEY AVE
MANOR RD
DAVIS RD
THAYER AVE
LEXINGTON AVE
WARD ST
UPLAND ST
MEADOWBROOK RD
OLD FARM RD
AUBURN HILL RD
ELMWOOD ST
HIGH RIDGE RD
GIBSON RD
ARLINGTON ST
AMESBURY ST
SAYBROOK WAY
BETTY ST
CURTIS ST
STONEBRIDGE RD
SOUTHOLD RD
RYDBERG TER
GLENVIEW RD
EXETER DR
HIGHLAWN DR
HILTON AVE
QUTTING AVE
CLARENDON RD
WYOMA DR
KIMBALL RD
GODDARD DR
FOREST PARK DR
SOUTHBRIDGE ST
VESPER ST
EATON AVE
LOWER WINBROOK DR EXT
UPPER WINBROOK DR
WASHINGTON ST
PINROCK RD
20
290
S EDLIN ST
ALDEN ST
SUMNER ST
DIXON AVE
MOHAWK AVE
MONTELLO ST
HEARD ST
DUNCAN ST
WHITE TER
PINEHURST AVE
MARILYN DR
CARROLL ST
GWEN DR
CLARK ST
JUNE ST
ADELLA ST
WELLMAN ST
SHIRLEY ST
OTIS ST
OXFORD ST N
GATES CT
CHESTNUT AVE
BOYCE ST
OAKWOOD AVE
IDLEWOOD DR
MARIA AVE
COLONIAL RD
A ST
B ST
C ST
SWORD ST
FRANKLIN ST
S SHORE DR
WOODLAND RD
FOREST DR
ALPINE TR
ROCKAWAY RD
VINAL ST
NANCY DR
ROCKLAND RD CT
ROCHDALE ST
CHARLES ST
ZABELLE AVE
VINCENT ST
BEVERLY RD
WITTER ST
MAIN ST
AUBURN ST
BROOK RD
PERRY PL
PEARL ST
RENAUD DR
ROCKLAND RD
HIGHLAND ST
PERRY ST
WILLIAMS ST
PARK TER
PARK ST
BRYN MAWR AVE
LAUREL ST
BURON TER
PUTNAM LN
PHEASANT CT
WALSH AVE
VINE ST
FRIEDEL ST
PAKACHOAG XING
BURNAP LN
BURNAP ST
BANCROFT ST
RICE RD
9
CMMCP (2017)
Select features of this map courtesy of:
Office of Geographic Information (MassGIS)
Commonwealth of Massachusetts
Information Technology Division


N
Millbury vector spray event Aug. 17, 2017
WORCESTER
LATTI FARM RD
WALES ST
MILLBURY ST
SOUTHWEST CUTOFF
JOHNSON ST
HEATHER AVE
HIGHLAND AVE
HOLLYWOOD AVE
AZALEA CIR
AMARYLLIS DR
PRIMROSE LN
90
20
NIPPNAPP TRL
ROUTE 20 CONN
WELDON DR
PARK HILL AVE
HOLMAN RD
10A
146
GREENWOOD ST
CHUNIS AVE
N MAIN ST EXT
CMMCP (2017)
Select features of this map courtesy of:
Office of Geographic Information (MassGIS)
Commonwealth of Massachusetts
Information Technology Division


Sturbridge vector spray event Aug. 17, 2017
BROOKFIELD
EAST BROOKFIELD
CHARLTON
CHARLTON
LANE 7
LANE 8
LANE 9
LANE TEN
LANE 11
WALKER RD
NEW BOSTON RD
PUTNAM RD
49
PODUNK RD
LADD ROAD EXT
LADD RD
BUSHNELL RD
LIBRARY LN N
LIBRARY LN
WALKER POND RD
WELLS PARK RD
OLD VILLAGE RD
FALLS RD
FALLS RD
WOODLAWN DR
90
20
PICKER RD
TECHNOLOGY PARK RD
CHARLTON RD
CMMCP (2017)
Select features of this map courtesy of:
Office of Geographic Information (MassGIS)
Commonwealth of Massachusetts
Information Technology Division
N


Webster vector spray event Aug. 17, 2017
OXFORD
N
CAMILE RD
CAMILE RD
VIKING RD
TOWN FOREST RD
CUDWORTH RD
GOYA DR
OAKWOOD DR
SUTTON RD
KINGSBURY RD
PINEWOOD DR
CHESTNUT DR
BIRCHWOOD DR
RONNIE DR
EVERGREEN DR
MINEBROOK RD
12
WORCESTER RD
HARTLEY ST
E MAIN ST
POND CT
THOMPSON RD
2ND ISLAND RD
HILLSIDE AVE
MEMORIAL BEACH DR
PARK AVE
RAY ST
193
NG STATION RD
GORE RD
16
SHAWN LN
FAIRFIELD ST
KILLDEER ISLAND RD
RAWSON RD
CHESTNUT HILL DR
PINEVIEW PLZ
DOUGLAS RD
CROSS CT
S SHORE RD
W POINT RD
COMMUNITY RD
CARDIN DR
GORE GABLE DR
UPPER GORE RD
LOWER GORE RD
CMMCP (2017)
Select features of this map courtesy of:
Office of Geographic Information (MassGIS)
Commonwealth of Massachusetts
Information Technology Division