

# CMMCP WEEKLY SURVEILLANCE REPORT



**EPI week #32**  
**Aug. 6-12, 2017**

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**Central Mass. Mosquito Control Project**  
**Weekly Report- 8/6/17-8/12/17**  
**EPI Week #32**

**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	48	296	45	182	671	2396
Total Specimens	206	13762	122	3274	13681	38343
No. Pools WNV +	0	0	0	0	4 <sup>†</sup>	4 <sup>†</sup>
No. Pools EEE +	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

**Weather Summary (Northborough, MA):** The weather for this particular week averaged 68.91°F with a recorded high temperature of 88.20°F and a recorded low temperature of only 54.50°F. For this week there was also a total of 0.12 inches of rain observed. Compared to the previous week, it was approximately 2.78°F cooler on average, and rained about 0.51 inches less. There has been 0.75 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)
<i>Aedes vexans</i>	+192.0%	+100.0%	Lunenburg, Lowell, Westford
<i>Coquillettidia perturbans</i>	-25.08%	-71.22%	Tewksbury, Westford, Billerica
<i>Culiseta melanura</i>	+73.33%	-82.31%	Hopkinton, Lowell, Ayer
<i>Ochlerotatus canadensis</i>	+193.8%	-37.51%	Acton, Westford, Lowell
<i>Culex</i> Species	-22.91%	+85.44%	Westford, Webster
All Species	-13.91%	-46.20%	Westborough, Westford, Tewksbury

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

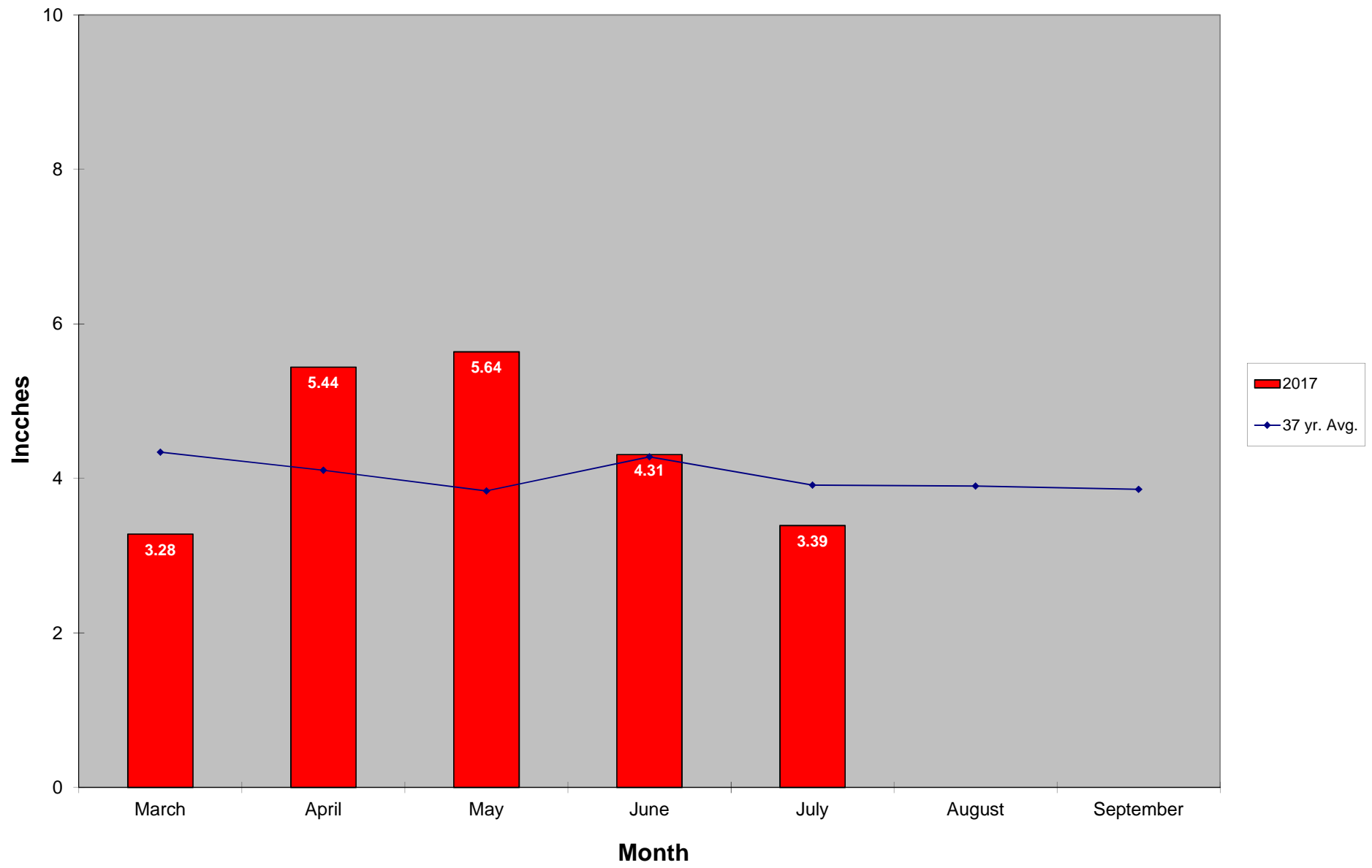
**EPI Week 32 Narrative:**

The temperatures for EPI week 32 averaged approximately 2.78 degrees cooler than the previous week, with 0.12 inches of precipitation observed. Overall collection numbers decreased by 13.91% from EPI week 31. The only target mosquitoes not to increase from the prior collection period were *Coquillettidia perturbans* and *Culex*. 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 *Cq. perturbans* was the most abundant mosquito in the CMMCP service area followed by *Culex*. *Cq. perturbans* may continue to decrease as the season progresses. Two additional mosquito pools collected in EPI

week 31 were determined to be WNV positive. One collection was from a trap site in Chelmsford, with the other originating from Millbury. Additionally, *Aedes albopictus* was detected in Ayer through mosquito eggs collected in CMMCP ovitraps.

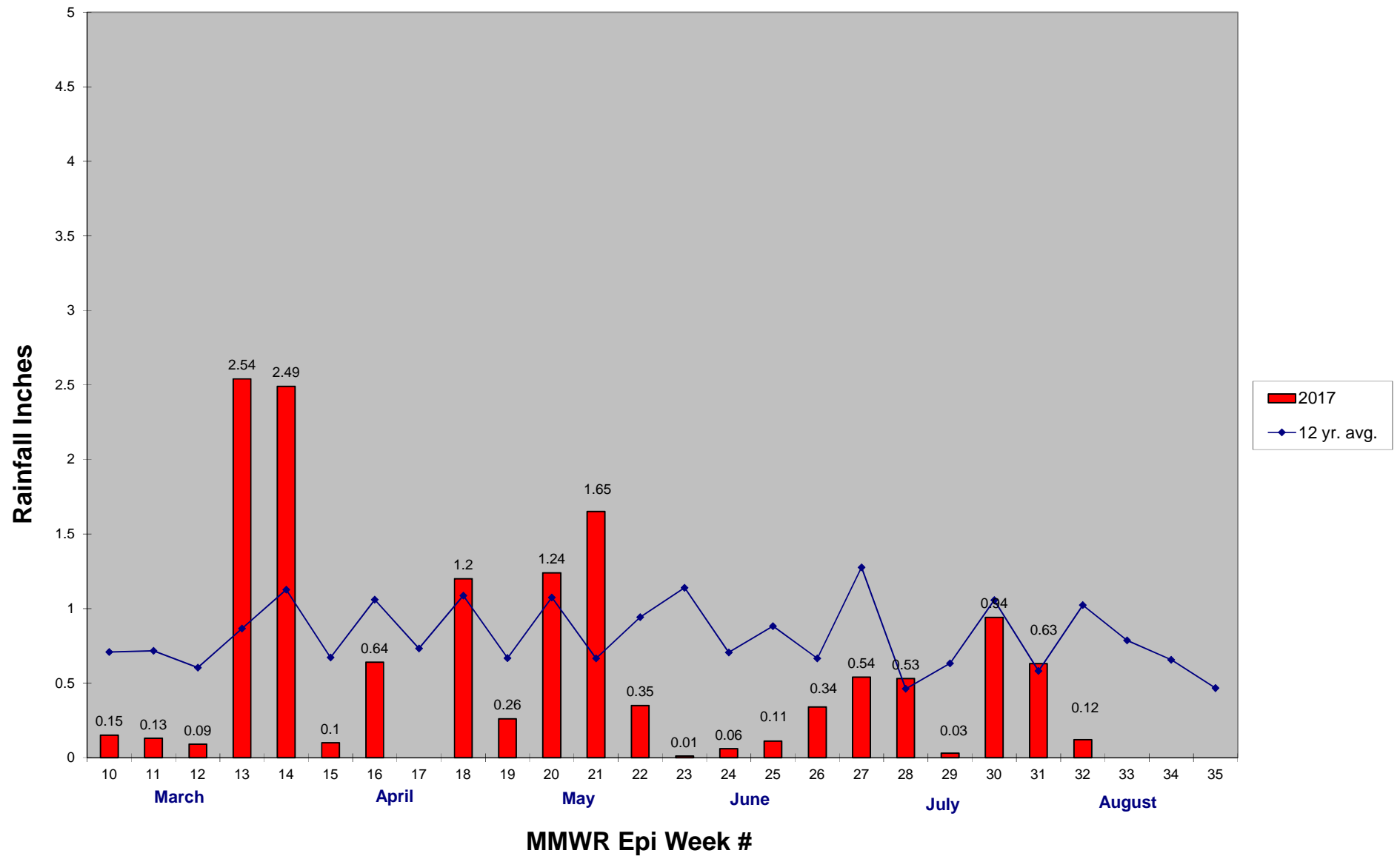
We have received 183% more service requests than the 14 year average (15,065 in 2017 v. 8,236 14 yr. avg.), and 5% more than this time in 2016 (15,065 in 2017 v. 14,340 in 2016). Service requests decreased 2.17% from Epi week 31. 537 service requests were received and 630 requests were performed in Epi week 32 with favorable weather conditions. Vector spraying was done in Chelmsford on August 9 after confirmation of WNV in *Culex* and coordination with local health officials.

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



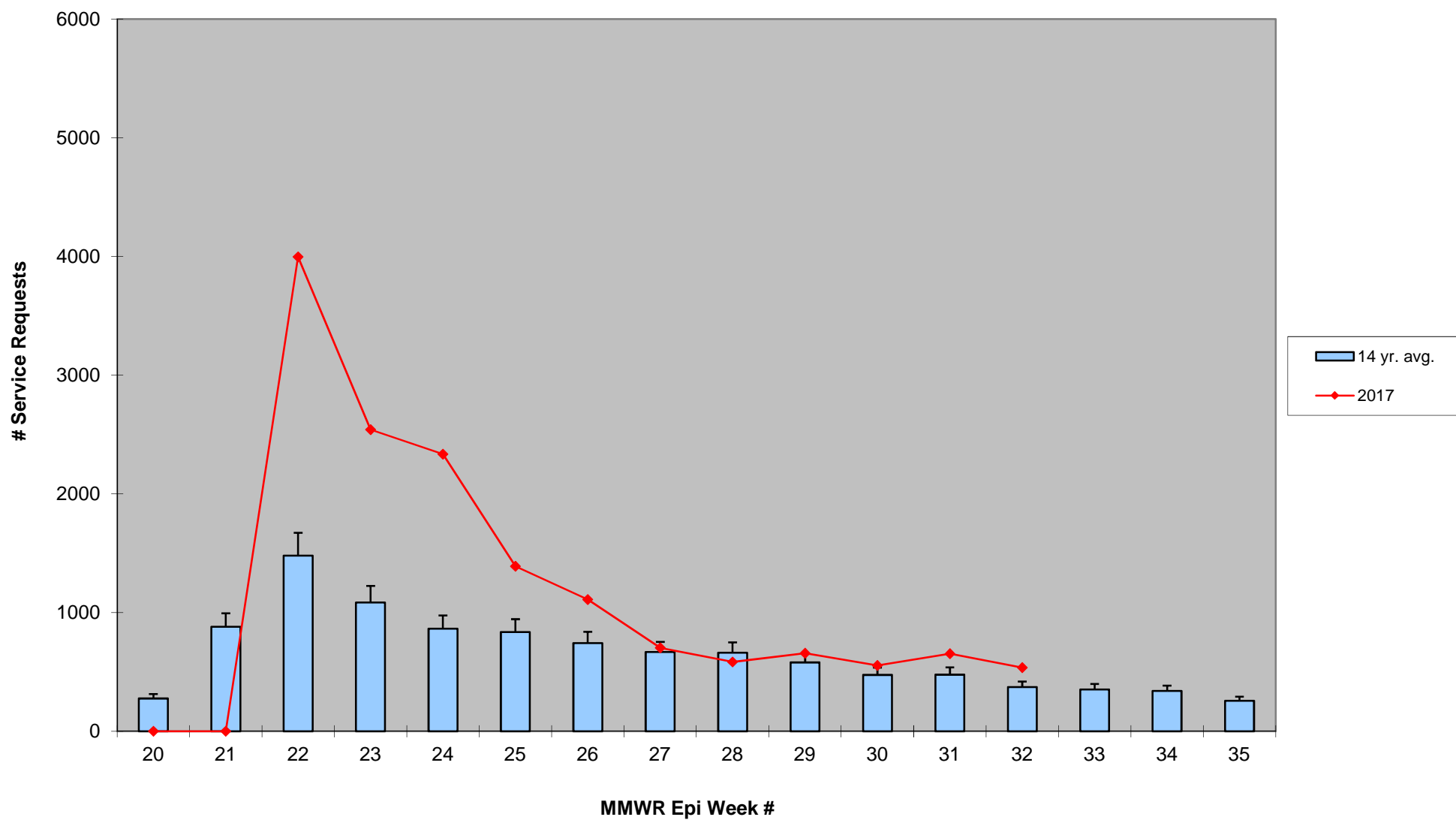
\*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

## 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

