

# CMMCP WEEKLY SURVEILLANCE REPORT



**EPI week #34**  
**Aug. 20-26, 2023**

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**Central Mass. Mosquito Control Project**  
**Weekly Report- 8/20/23-8/26/23**  
**EPI Week #34**

**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
<b>No. Pools</b>	329	496	41	354	873	4344
<b>Total Specimens</b>	4723	23690	109	6274	23682	75499
<b>No. Pools WNV +</b>	0	0	0	0	5 <sup>†</sup>	5 <sup>†</sup>
<b>No. Pools EEE +</b>	0	0	0	0	0	0

†Pool of WNV+ *Culex* collected in Worcester on 7/7/23

†Pool of WNV+ *Culex* collected in Worcester on 7/20/23

†Pool of WNV+ *Culex* collected in Chelmsford on 8/10/23

†Pool of WNV+ *Culex* collected in Northbridge on 8/10/23

†Pool of WNV+ *Culex* collected in Milford on 8/16/23

**Weather Summary (Northborough, MA):** The weather for this particular week averaged 69.07°F with a recorded high temperature of 86.30°F and a recorded low temperature of only 51.90°F. For this week there was also a total of 1.48 inches of rain observed. Compared to the previous week, it was approximately 1.03°F cooler on average, and rained about 1.29 inches less. There has been 6.28 inches of rain accumulated in August, after 9.98 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>	+228.3%	+2564%	Wilmington, Natick
<i>Coquillettidia perturbans</i>	+29.83%	-43.18%	Lowell, Westford
<i>Culiseta melanura</i>	+800.0%	-86.06%	Ayer, Acton
<i>Ochlerotatus canadensis</i>	+24.24%	+390.1%	Acton, Webster, Natick
<i>Culex</i> Species	-60.53%	+620.1%	Westford, Wilmington
All Species	+11.04%	+66.59%	Wilmington, Acton

The predominant mosquito for the week was *Psorophora ferox* followed by *Coquillettidia perturbans*.

**General narrative:**

The temperatures for EPI week 34 averaged approximately 1.03°F cooler than the previous week, with 1.48 inches of precipitation observed. Overall surveillance trap collections increased this period compared to the last, with all target mosquitoes increasing except for *Culex*. Only *Coquillettidia perturbans* and *Culiseta melanura* remain at lower levels compared to this point last season. *Psorophora ferox* was the most abundant mosquito species, followed by *Coquillettidia perturbans*. *Aedes albopictus* surveillance using ovitraps has continued, with 5,177 eggs previously collected in EPI

week 33. Supplemental control measures continue to be taken in response to the collection of *Aedes albopictus* eggs and adult specimens in Ayer. One mosquito pool submitted to MDPH in EPI week 33 tested positive for West Nile virus. It was a collection of *Culex* collected from Milford on 8/16/23.

*Ae. albopictus* egg collections:

Epi week#	# eggs Collected	Epi week#	# eggs Collected
23	0	32	5,246
24	0	33	5,177
25	649	34	
26	3,306	35	
27	4,928	36	
28	3,563	37	
29	8,560	38	
30	5,019	39	
31	7,049	40	
	<b>TOTAL</b>	<b>43,497</b>	
<b>9 ATM detections to date</b>			

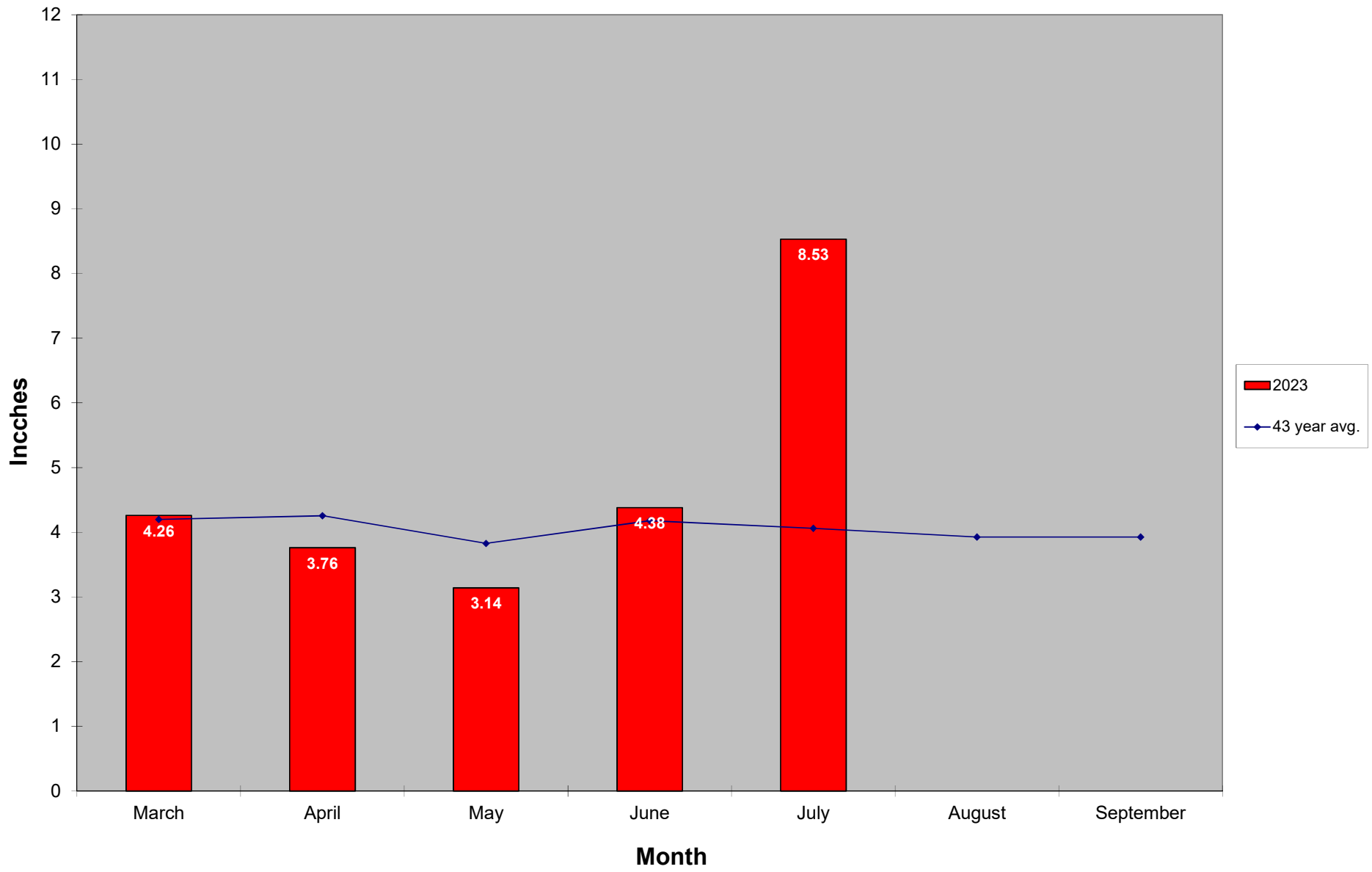
**Operational notes:**

Service requests are 7.5% below the 20-year average and a 1% increase over 2022 numbers to date. Request numbers decreased slightly from the week prior. Work crews began performing catch basins treatments for *Culex* control on May 22. 3,877 basins were treated in Epi week 34, with 88,846 catch basins treated to date intended to suppress *Culex* populations and lower risk of transmission from WNV by this species.

West Nile Virus was confirmed in Milford, and after consultation with local health officials these affected areas were ULV sprayed. This brings our total to date to 5 WNV confirmation, all in *Culex*.

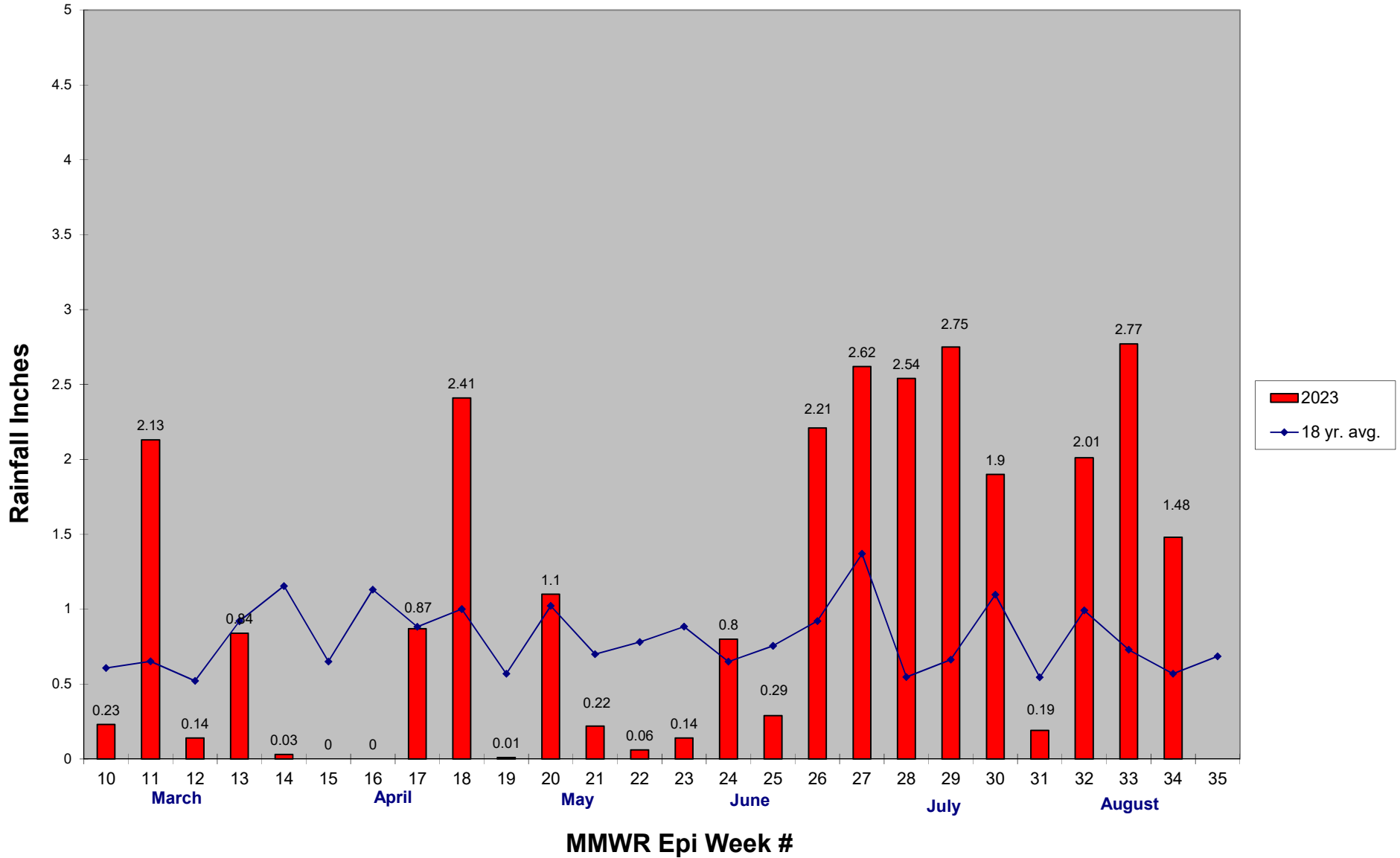
*Ae. albopictus* continues to be found in Ayer but the numbers may have peaked. We will continue surveillance and control efforts as long as possible.

### 2023 Mass. Rainfall Data vs. 43 Year Average\*



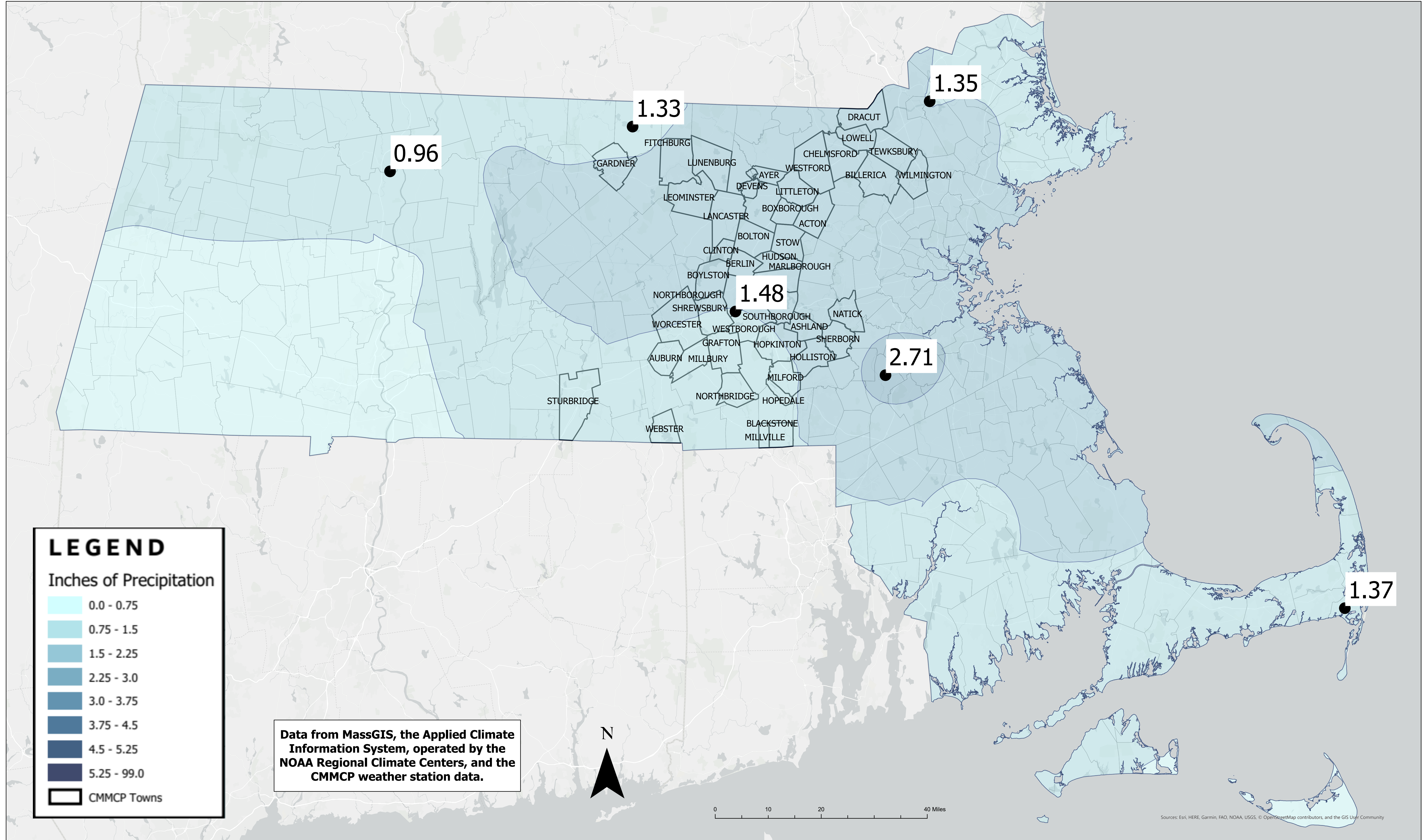
\*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

### 2023 CMMCP Weekly Rainfall vs. 18 Year Average\*



\*source: CMMCP weather station Northborough, MA

# Precipitation in CMMCP Towns for EPI Week 34 (8/20-8/26/2023)



0.96

1.33

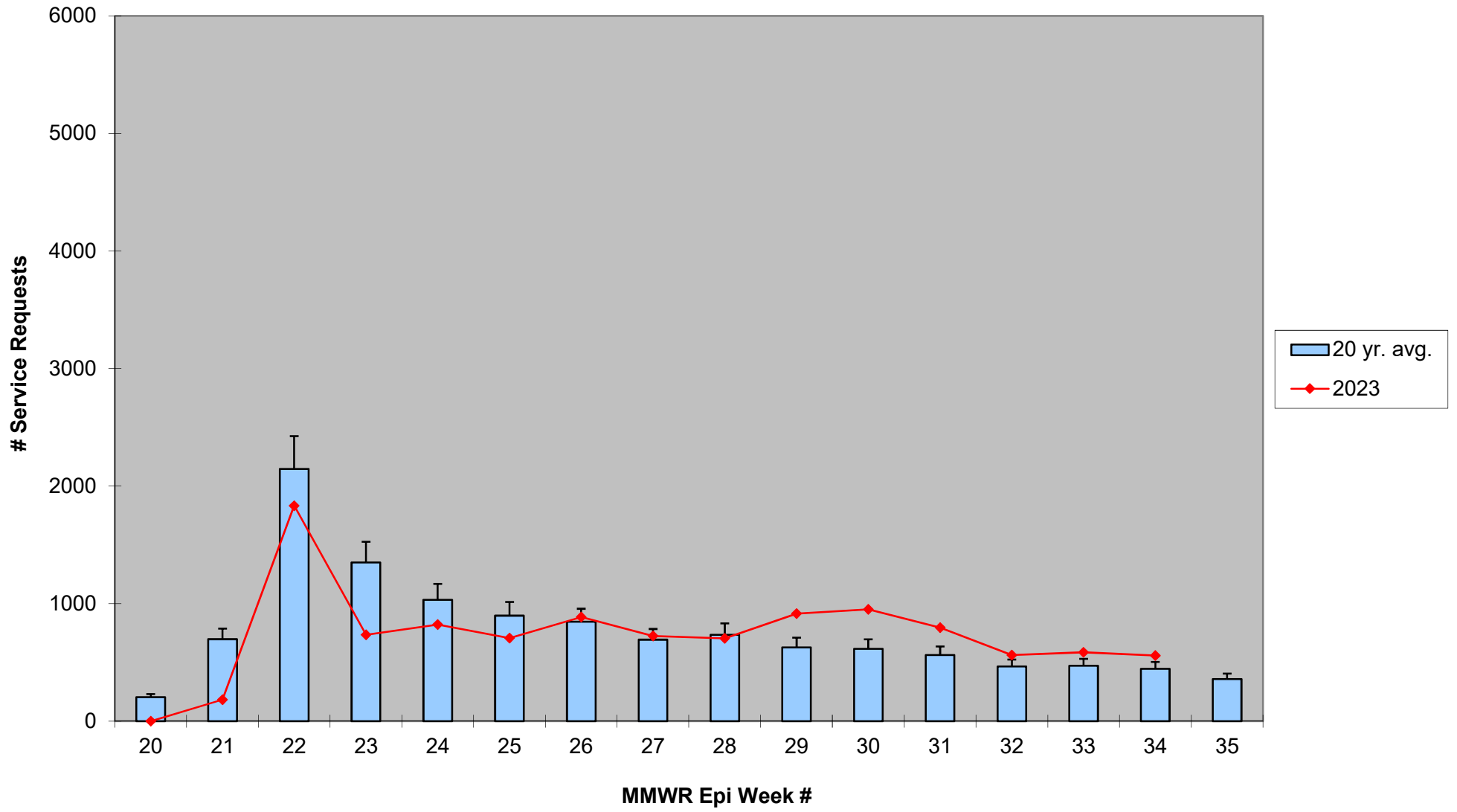
1.35

1.48

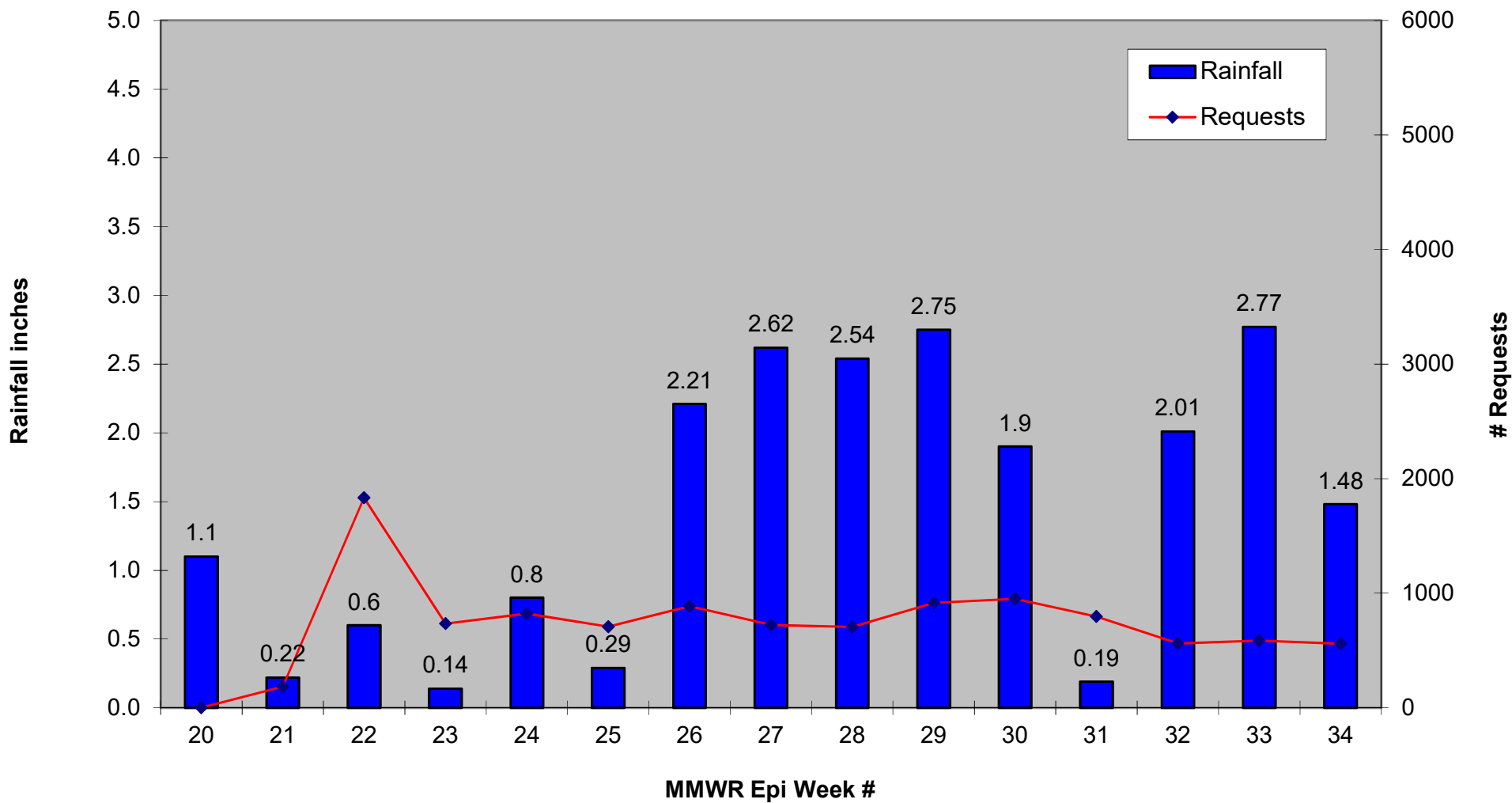
2.71

1.37

### ULV Service Request History 2003-2023

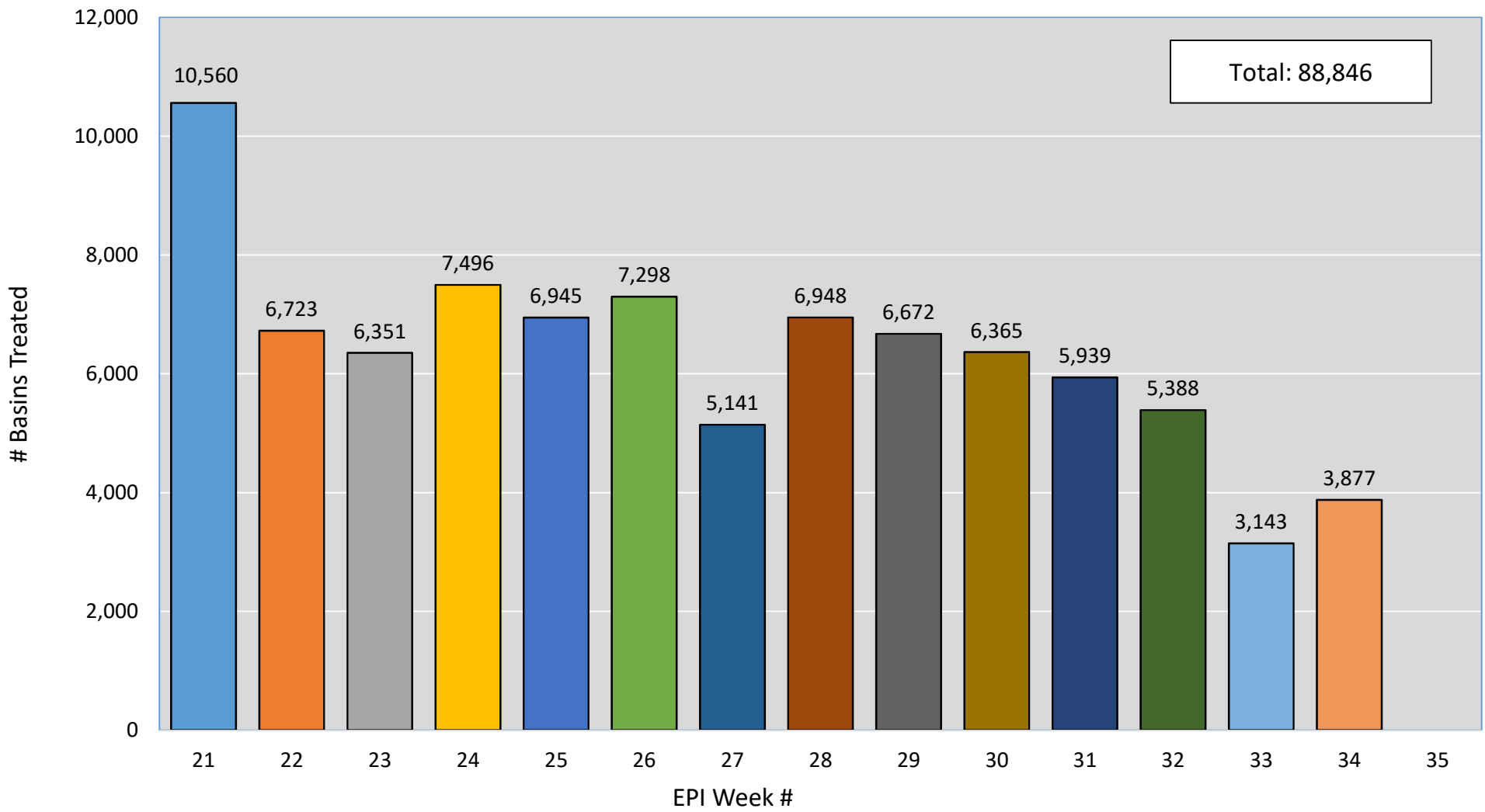


### 2023 Rainfall vs. Requests





### 2023 Catch Basins Treated



2023 basins treated vs. 5 yr. avg.

