

# CMMCP WEEKLY SURVEILLANCE REPORT



**EPI week #32**  
**Aug. 6-12, 2023**

*Frank Cornine, Staff Biologist*  
*Curtis Best, Staff Entomologist*  
*Timothy McGlinchy, Director of Operations*  
*Timothy Deschamps, Executive Director*

**Central Mass. Mosquito Control Project  
Weekly Report- 8/6/23-8/12/23  
EPI Week #32**

**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>	275	421	34	305	729	3598
<b>Total Specimens</b>	3843	21608	99	5902	19393	64050
<b>No. Pools WNV +</b>	0	0	0	0	2 <sup>†</sup>	2 <sup>†</sup>
<b>No. Pools EEE +</b>	0	0	0	0	0	0

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

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

**Weather Summary (Northborough, MA):** The weather for this particular week averaged 71.53°F with a recorded high temperature of 89.10°F and a recorded low temperature of only 55.00°F. For this week there was also a total of 2.01 inches of rain observed. Compared to the previous week, it was approximately 3.76°F warmer on average, and rained about 1.82 inches more. There has been 2.03 inches of rain accumulated in August, after 9.98 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>	+57.35%	+4677%	Gardner, Northborough, Natick
<i>Coquillettidia perturbans</i>	-45.26%	-47.51%	Billerica, Hudson, Devens
<i>Culiseta melanura</i>	-88.89%	-88.11%	Ayer
<i>Ochlerotatus canadensis</i>	-61.88%	+356.8%	Lancaster, Berlin, Auburn
<i>Culex</i> Species	+14.08%	+567.5%	Westford, Littleton
All Species	-10.37%	+46.22%	Westford, Littleton, Billerica

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

**General narrative:**

The temperatures for EPI week 32 averaged approximately 3.76°F warmer than the previous week, with 2.01 inches of precipitation observed. Overall surveillance trap collections decreased this period compared to the last, with all target species decreasing except for *Aedes vexans* and *Culex*. Only *Coquillettidia perturbans* and *Culiseta melanura* are remain at lower levels compared to this point last season. *Culex* is now the most abundant mosquito, followed by *Coquillettidia perturbans*. *Aedes albopictus* surveillance using ovitraps has continued, with 7049 eggs previously collected in EPI week 31. Supplemental control measures continue to be taken in response to the collection of *Aedes albopictus* eggs and adult specimens in Ayer. All mosquito pools submitted in EPI week 31 to MDPH for arbovirus testing were negative.

*Ae. albopictus* egg collections:

Epi week#	# eggs Collected	Epi week#	# eggs Collected
23	0	32	
24	0	33	
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>33,074</b>	
<b>3 ATM detections to date</b>			

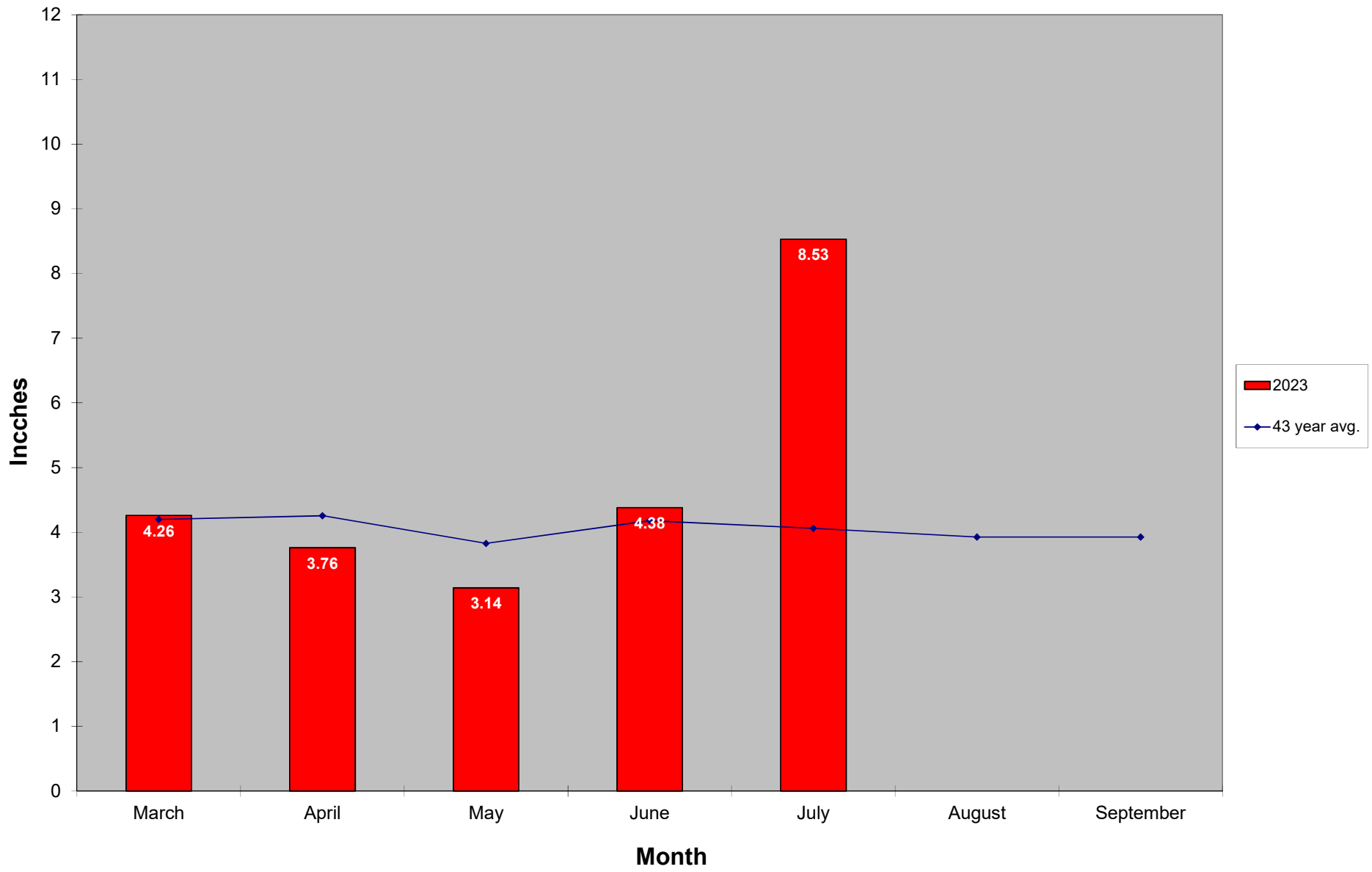
**Operational notes:**

Service requests are 10.7% below the 20-year average and a 7.3% decrease over 2022 numbers to date. Request numbers decreased 41.6% from the week prior. Work crews began performing catch basins treatments for *Culex* control on May 22. 5,388 basins were treated in Epi week 32, with 81,588 catch basins treated to date intended to suppress *Culex* populations and lower risk of transmission from WNV by this species.

With the confirmation on July 25 of WNV in the Burncoat section of Worcester again, CMMCP coordinated with local health officials and the area received ULV spraying on July 27, 2023 after sunset. Field crews surveyed this area on August 4 and noted 4 abandoned swimming pools. 2 residents were contacted and their pools treated, the other 2 residents were pesticide exclusions and we were not able to contact them directly. Worcester public health officials were informed and we request their assistance. Update: one resident has removed their pool, the other has not contacted us yet.

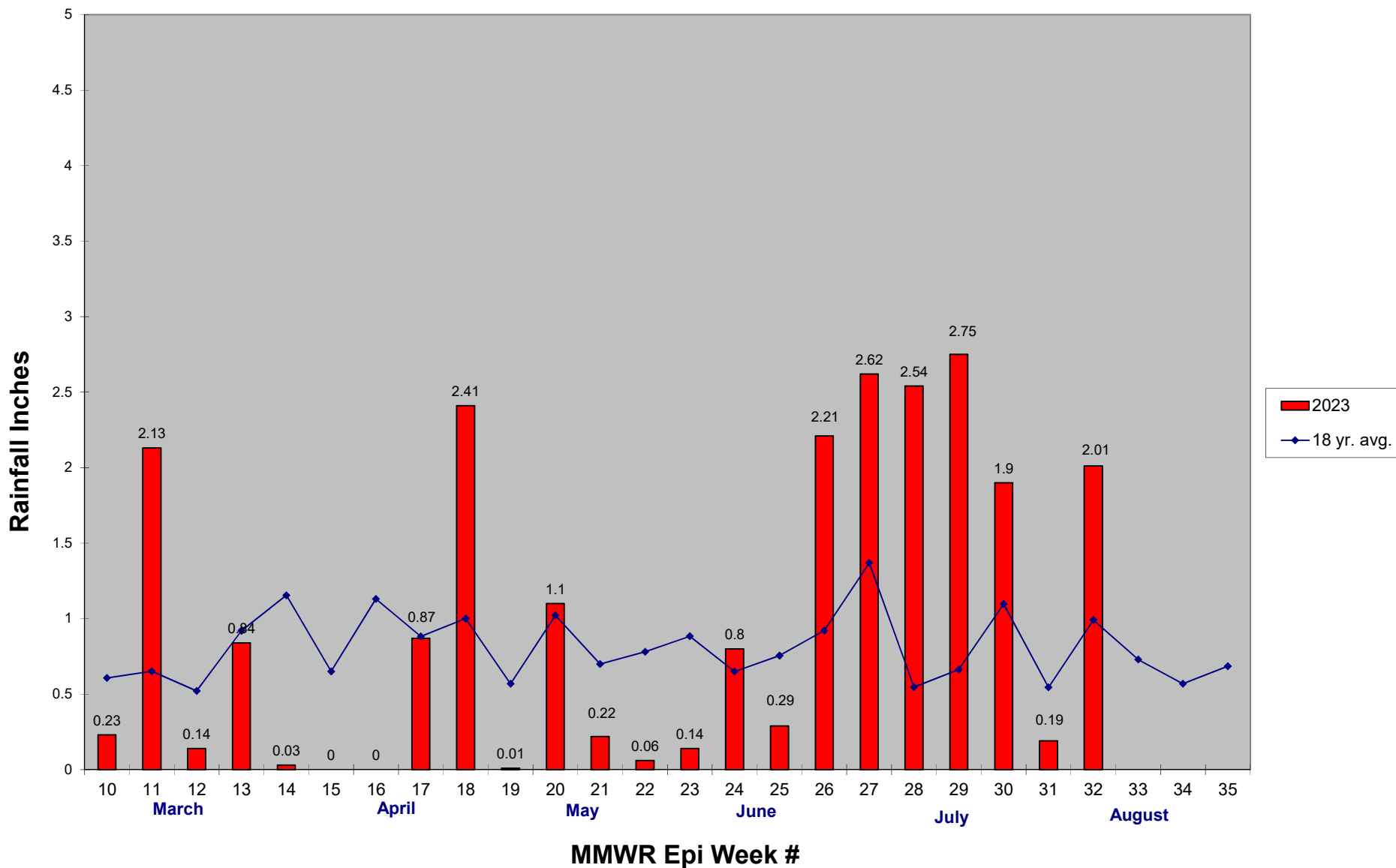
With the continued confirmations of *Aedes albopictus* (ATM) in Ayer, we ULV sprayed the area on July 20, 24 and 31 and followed up with barrier spraying on August 10. Field crews scouted the area on July 21 and noted several areas of larval activity that were treated with Bti. Additional ovitraps as well as light traps are being deployed in the area to determine if we have a possible established colony. Larval control will be repeated as necessary. Containers have been dumped or treated with long term Bti products. Discussions are underway internally to treat the area with our barrier sprayer again using deltamethrin when weather conditions allow.

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



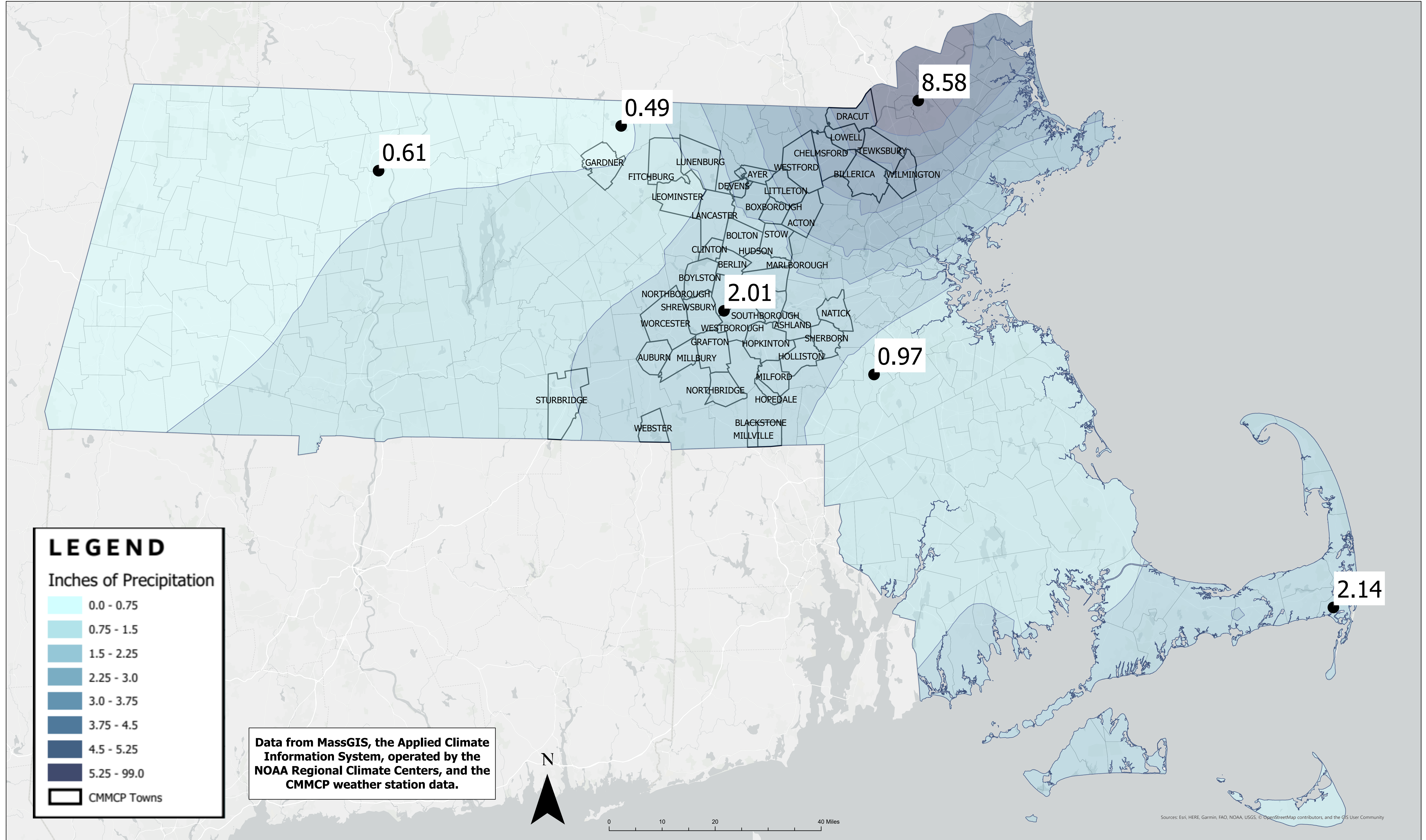
\*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

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



\*source: CMMCP weather station Northborough, MA

# Precipitation in CMMCP Towns for EPI Week 32 (8/6-8/12/23)



0.61

0.49

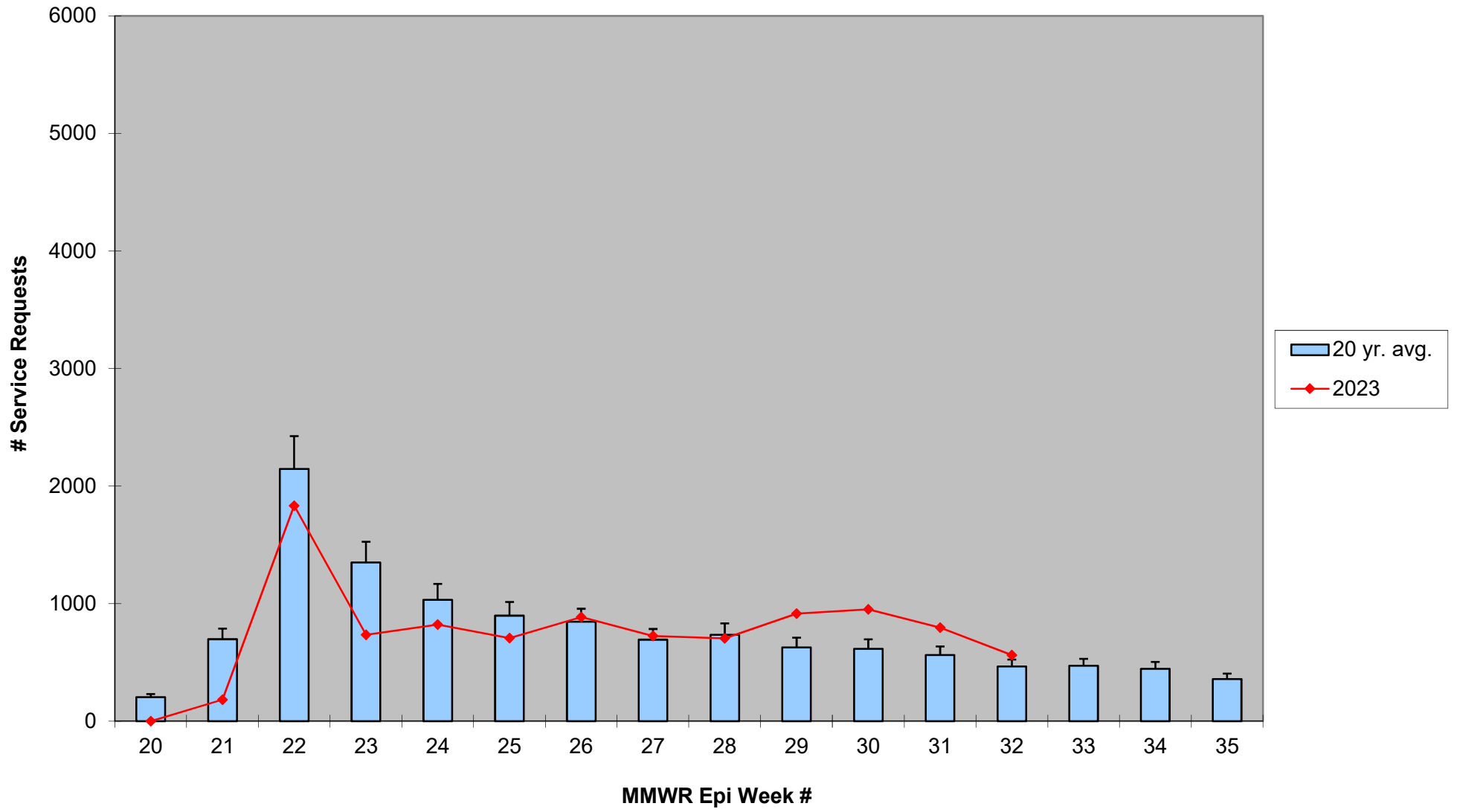
8.58

2.01

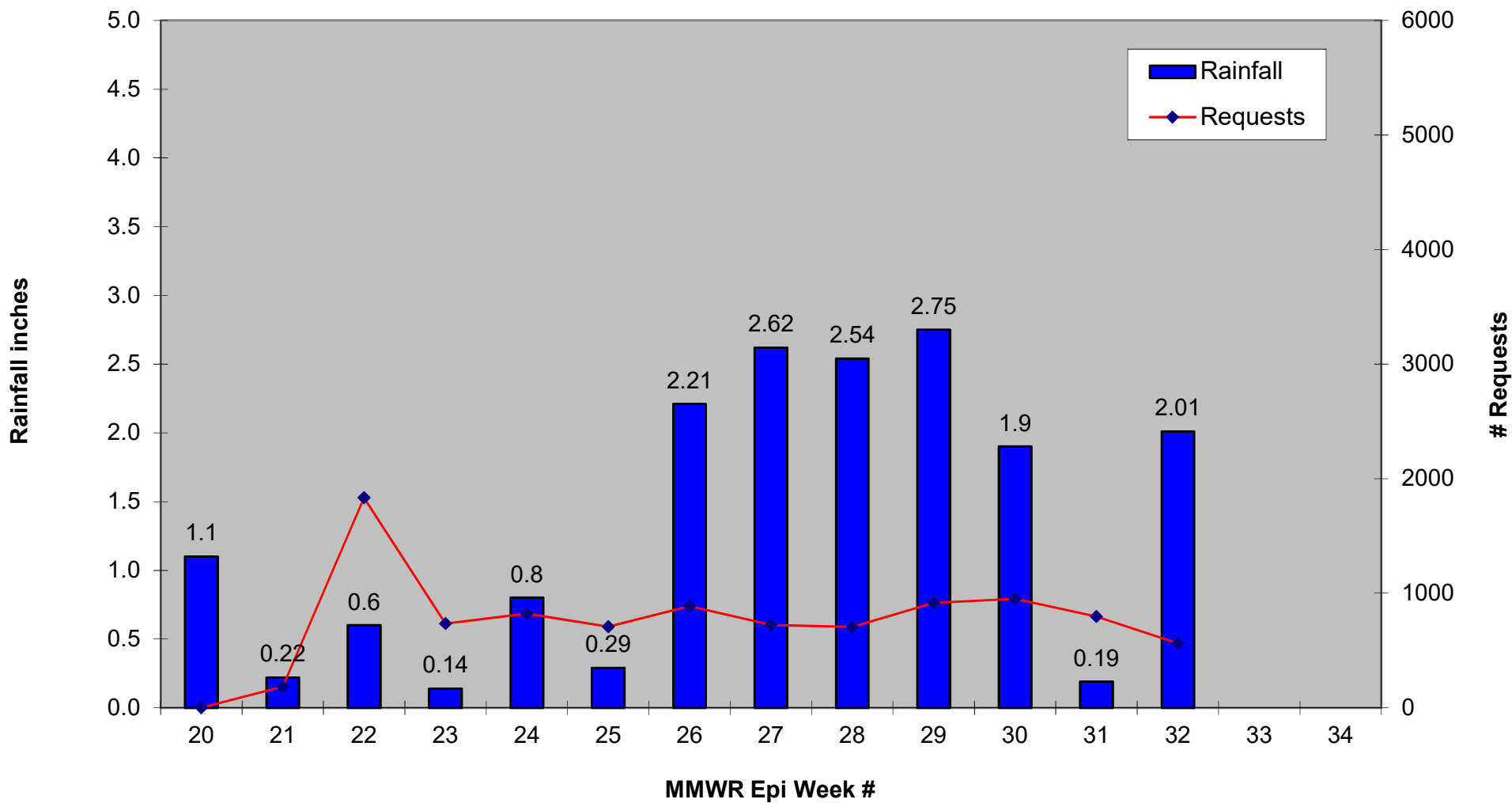
0.97

2.14

### ULV Service Request History 2003-2023

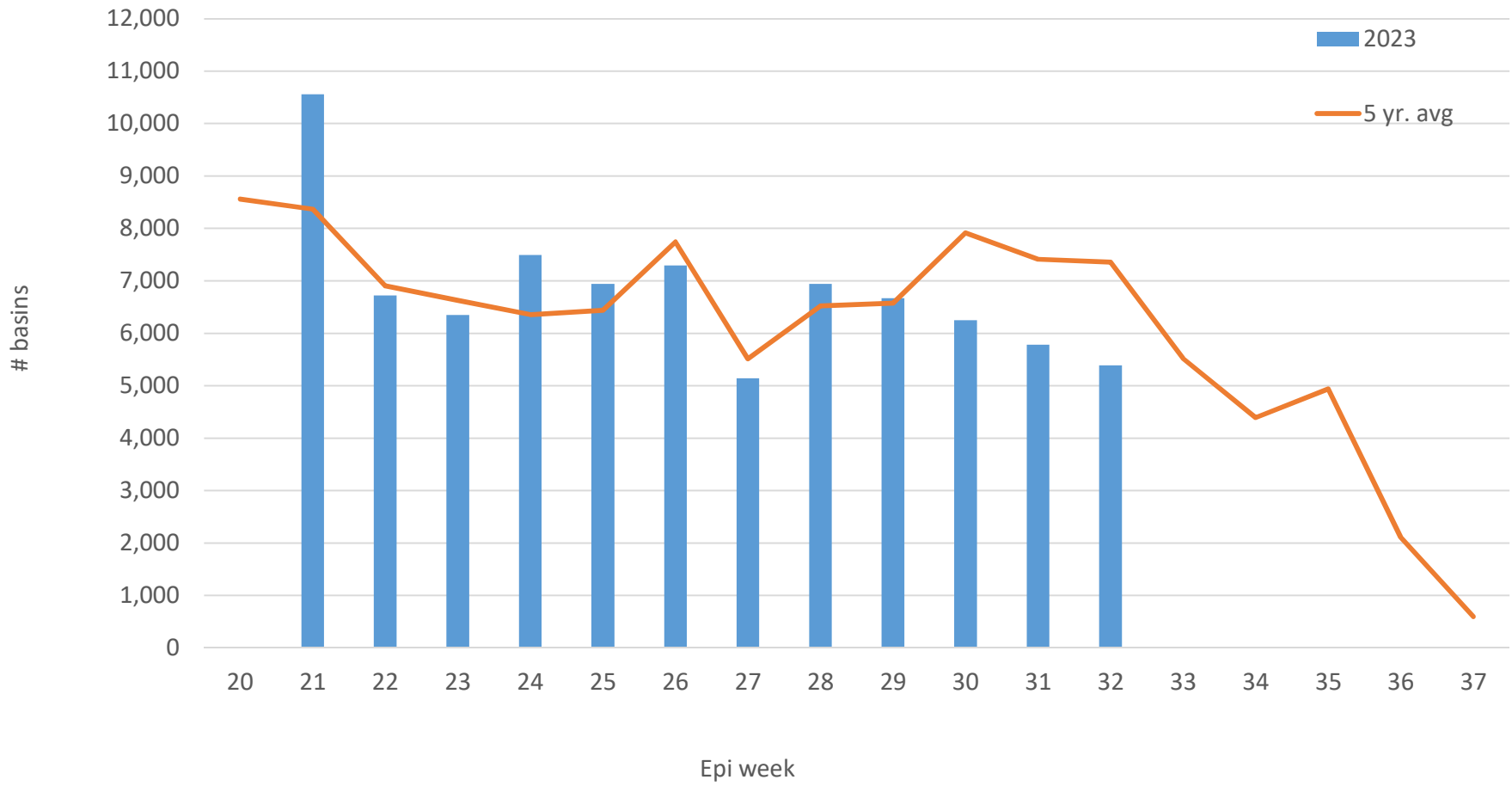


### 2023 Rainfall vs. Requests





2023 basins treated vs. 5 yr. avg.



### 2023 Catch Basins Treated

