

# PFAS in Middleboro - July, 2024

Maximum Contaminant Levels (MCL) per **current state law<sup>1</sup>** and **superseding federal regulation<sup>2</sup>**

PFAS family chemicals typically come from industrial/manufacturing sites, and are also found in textiles, pesticides, and many other products. Unfortunately, consumption in drinking water is linked to immune effects, fetal growth effects, certain types of cancers, an increased risk of cardiovascular disease or liver disease<sup>3</sup>, and thyroid, liver, or developmental health effects<sup>4</sup>.

Mizaras Well			
Supplies 6.2% of town water			
Contaminant	1/9/24	4/1/24	7/1/24
PFAS6	16.6	12.4	18.5
PFOS	*5.03	*4.3	*5.77
PFOA	*11.6	*8.07	*10.4
PFHxS	1.34	1.1	1.49
PFNA	.83	0	.648
PFHpA	1.86	1.76	2.32
PFDA	0	0	0
Hazard Indx			

E Main St Plant, 4 Wells			
Supplies 22.8% of town water			
Contaminant	2021	1/9/24	7/1/24
PFAS6	0	0	0
PFOS	.74	.866	1.05
PFOA	1.48	1.41	1.97
PFHxS	.529	0	.627
PFNA	0	0	0
PFHpA	.564	0	.723
PFDA	0	0	0
Hazard Indx			

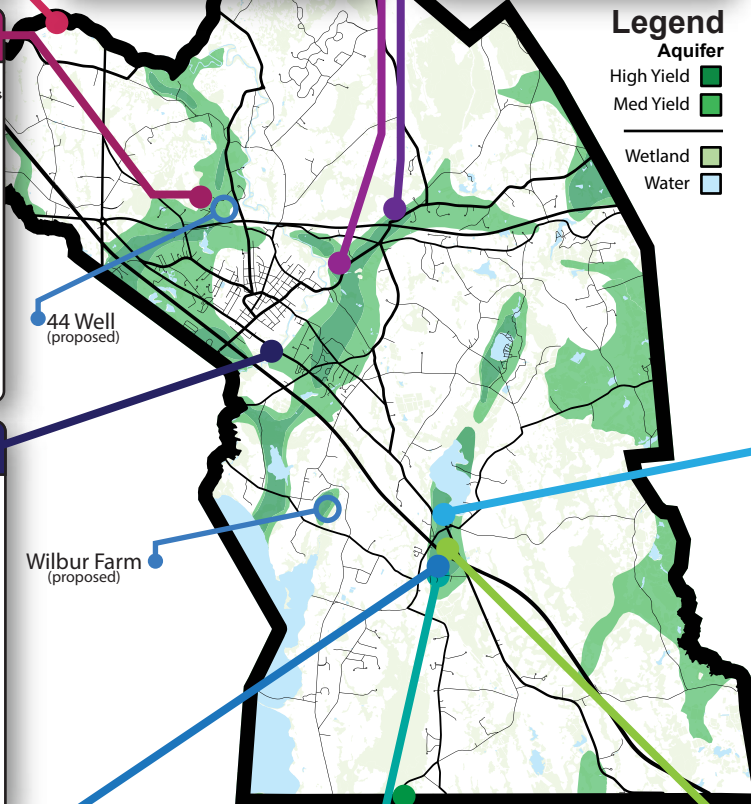
Plympton St Well			
Supplies 6.9% of town water			
Contaminant	2021	1/9/24	7/1/24
PFAS6	0	0	2.27
PFOS	1.16	1.6	2.27
PFOA	0	.639	.965
PFHxS	.942	1.06	1.28
PFNA	0	0	0
PFHpA	0	0	0
PFDA	0	0	0
Hazard Indx			

## How to read this document

- Each well has different test dates depending on its previous levels; high test results require more frequent testing.
- Mass. state law uses a maximum limit of 20ppt for "PFAS6" - the sum of PFOS, PFOA, PFHxS, PFNA, PFHpS, PFDA
- The new superseding federal regulation uses a max of 4ppt for PFOS and PFOA, and a 10ppt max for PFHxS, HFPO-DA, or PFNA when found alone, and uses a weighted sum when 2 or more plus PFBA are found, called a "Hazard Index"
- The Hazard Index is calculated by dividing the parts per trillion (ppt) of each compound by a respective "maximum": Hazard Index =  $x/10$  PFOS +  $x/10$  PFOA +  $x/10$  PFHxS +  $x/2000$  PFBS

Contaminant	MA	US
PFAS6	20	-
PFOS	-	4
PFOA	-	4
PFHpA	-	-
PFDA	-	-
PFNA	-	-
PFHxS	-	-
HFPO-DA	-	-
PFBS	-	-
1.0 Hazard Index		

Cross St GP Well			
Supplies 6.6% of town water			
Contaminant	2022	2023	7/1/24
PFAS6	3.3	2.79	3.72
PFOS	.853	.964	1.02
PFOA	3.3	2.79	3.72
PFHxS	.742	.857	.920
PFNA	0	0	0
PFHpA	1.37	1.14	1.3
PFDA	0	0	0
Hazard Indx			



E Grove St Dug Well			
Supplies 3.5% of town water			
Contaminant	5/7	6/4	7/1
PFAS6	*24.2	*28.2	13.5
PFOS	*5.59	*6.2	*4.12
PFOA	*10.9	*12.7	*6.7
PFHxS	2.43	2.82	1.68
PFNA	1.25	1.51	1.01
PFHpA	5.32	6.45	2.63
PFDA	0	0	0
Hazard Indx			

Tispaquin GP Well #2			
Supplies 0.8% of town water			
Contaminant	1/9/24	4/1/24	7/1/24
PFAS6	13.2	5.59	6.68
PFOS	*5.56	3.35	3.56
PFOA	*7.6	2.24	3.12
PFHxS	1.7	1.59	1.56
PFNA	.67	0	0
PFHpA	1.43	0	.741
PFDA	0	0	0
Hazard Indx			

Rock Village GP Well 2			
Supplies 12.4% of town water			
Contaminant	2022	2023	7/1/24
PFAS6	3.11	3.31	3.34
PFOS	1.41	1.73	1.53
PFOA	3.11	3.31	3.34
PFHxS	.777	.792	.704
PFNA	0	0	0
PFHpA	1.24	1.15	1.01
PFDA	0	0	0
Hazard Indx			

Rock Village GP Well 1			
Supplies 11.3% of town water			
Contaminant	1/22	2023	7/1/24
PFAS6	3.87	3.3	3.69
PFOS	1.86	1.67	1.85
PFOA	3.87	3.3	3.69
PFHxS	1.06	.798	.742
PFNA	0	0	0
PFHpA	1.09	1.12	1.07
PFDA	0	0	0
Hazard Indx			

Spruce St GP Well			
Supplies 8.6% of town water			
Contaminant	2021	1/9/24	7/1/24
PFAS6	0	2.09	0
PFOS	.915	1.13	1.16
PFOA	.951	2.09	1.21
PFHxS	0	0	0
PFNA	0	0	0
PFHpA	0	0	0
PFDA	0	0	0
Hazard Indx			

Miller St GP Well			
Supplies 23.6% of town water			
Contaminant	2022	2023	7/1/24
PFAS6	5.35	4.65	5.85
PFOS	2.16	2.06	2.25
PFOA	3.19	2.59	3.6
PFHxS	.695	0	.732
PFNA	0	0	0
PFHpA	1.18	.676	1.15
PFDA	0	0	0
Hazard Indx			

These data were downloaded on July 27, 2024 from the Energy & Environmental Affairs Data Portal for PWSID 4182000, Middleborough Water Supply, PFAS contaminant group search terms. \*Mass State Law 310 CMR 22.07G; <sup>2</sup> <sup>3</sup> <sup>4</sup>Federal EPA Drinking Water Standard Final Rule April 10, 2024. For colorblind individuals, indications are as follows: levels above \*state and \*federal regulations. Well % of town water provided by the Town of Middleboro for Q3 2024; % of town water values are seasonal and change with demand, maintenance, and other operational demands.