

# PFAS in Middleboro

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 6.7% of town water			
Contaminant	11/23	1/9	4/23
PFAS6	19.4	16.6	
PFOS	*5.5	*5.03	
PFOA	*11.4	*11.6	
HFPO-DA	0	0	
PFBS	9.1	7.46	
PFNA	.828	.83	
PFHxS	1.37	1.34	
Hazard Indx	.239	.235	

E Main St Plant, 4 Wells			
Supplies 21.9% of town water			
Contaminant	2020	2021	1/9/24
PFAS6	0	0	0
PFOS	.898	.74	.866
PFOA	1	1.48	1.41
HFPO-DA	0	0	0
PFBS	.829	1.02	.659
PFNA	0	0	0
PFHxS	.414	.529	0
Hazard Indx	.046	.059	0

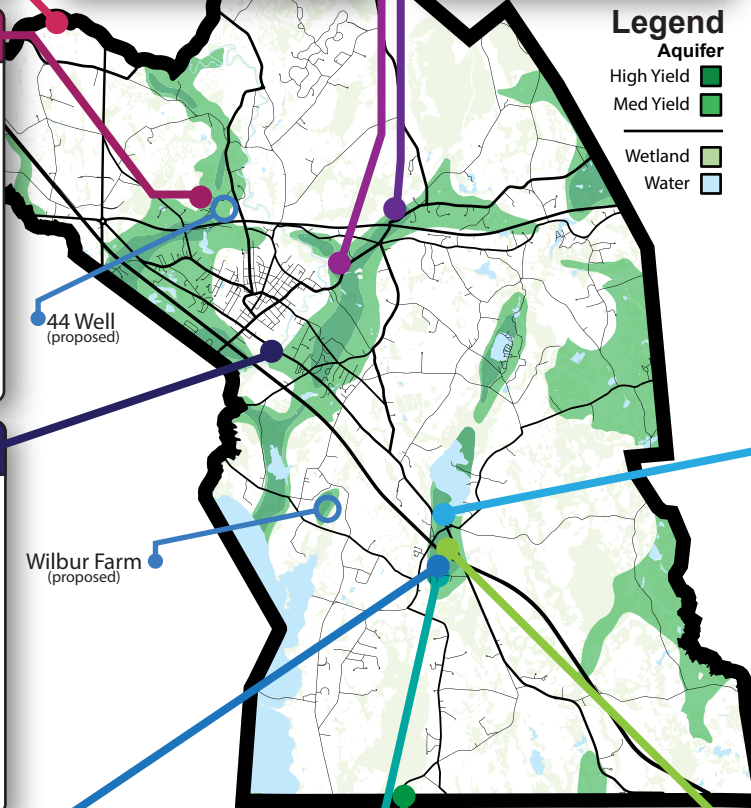
Plympton St Well			
Supplies 8.6% of town water			
Contaminant	2020	2021	1/9/24
PFAS6	0	0	0
PFOS	1.56	1.16	1.6
PFOA	0	0	.639
HFPO-DA	N/A	0	0
PFBS	N/A	1.2	1.67
PFNA	0	0	0
PFHxS	.763	.942	1.06
Hazard Indx	N/A	.105	.119

## 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 six PFAS compounds
- The new superseding federal regulation uses a max of 4ppt for PFOS and PFOA, and for the remaining 4 PFAS family compounds, uses a 10ppt max for any single compound found, and uses a weighted sum when 2 or more 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 =  $x/10 \text{ HFPO-DA} + x/10 \text{ PFNA} + x/10 \text{ PFHxS} + x/2000 \text{ PFBS}$

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

Cross St GP Well			
Supplies 5.2% of town water			
Contaminant	2021	2022	2023
PFAS6	3.02	3.3	2.79
PFOS	.922	.853	.964
PFOA	3.02	3.3	2.79
HFPO-DA	0	0	0
PFBS	1.88	1.48	1.79
PFNA	0	0	0
PFHxS	.959	.742	.857
Hazard Indx	.107	.083	.096



E Grove St Dug Well			
Supplies 0.1% of town water			
Contaminant	1/9	2/5	3/19
PFAS6	*23	*25	*20.2
PFOS	*5.54	*5.87	*4.45
PFOA	*11.4	*11.5	*9.35
HFPO-DA	0	0	0
PFBS	2.18	2.75	2.55
PFNA	1.34	1.5	1.04
PFHxS	2.04	2.44	2.01
Hazard Indx	.362	.422	.328

Tispaquin GP Well #2			
Supplies 0.4% of town water			
Contaminant	7/23	10/23	1/9/24
PFAS6	11.1	9.02	13.2
PFOS	*5.16	*4.46	*5.56
PFOA	*5.96	*4.56	*7.6
HFPO-DA	0	0	0
PFBS	1.6	1.6	1.35
PFNA	0	0	.67
PFHxS	1.56	1.25	1.7
Hazard Indx	.174	.140	.257

Rock Village GP Well 2			
Supplies 12.9% of town water			
Contaminant	2021	2022	2023
PFAS6	3.36	3.11	3.31
PFOS	1.92	1.41	1.73
PFOA	3.36	3.11	3.31
HFPO-DA	1.66	.847	.864
PFBS	1.73	3.21	2.59
PFNA	0	0	0
PFHxS	.886	.777	.792
Hazard Indx	.265	.173	.176

Rock Village GP Well 1			
Supplies 12.3% of town water			
Contaminant	12/21	1/22	2023
PFAS6	6.76	3.87	3.3
PFOS	2.04	1.86	1.67
PFOA	*4.72	3.87	3.3
HFPO-DA	0	0	.835
PFBS	3.42	1.86	2.43
PFNA	0	0	0
PFHxS	1.04	1.06	.798
Hazard Indx	.117	.119	.173

Spruce St GP Well			
Supplies 7.9% of town water			
Contaminant	2020	2021	1/9/24
PFAS6	0	0	2.09
PFOS	.97	.915	1.13
PFOA	.624	.951	2.09
HFPO-DA	0	0	0
PFBS	0	.387	0
PFNA	0	0	0
PFHxS	0	0	0
Hazard Indx	0	.0002	0

Miller St GP Well			
Supplies 23.9% of town water			
Contaminant	2021	2022	2023
PFAS6	5.52	5.35	4.65
PFOS	2.46	2.16	2.06
PFOA	3.06	3.19	2.59
HFPO-DA	0	0	0
PFBS	1.32	1.22	1.24
PFNA	0	0	0
PFHxS	.854	.695	0
Hazard Indx	.095	.08	.0006

These data were downloaded on April 10th, 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 Q1 2024; % of town water values are seasonal and change with demand, maintenance, and other operational demands.