



Town of Chatham
Department of Public Works
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TO: Honorable Select Board
Jill R. Goldsmith, Town Manager

FROM: Rob Faley, Director, Department of Public Works

DATE: August 2, 2024 (for the August 6, 2024 SB Meeting)

SUBJECT: Chatham Wells, PFAS, and Drinking Water Testing and Pumping Update

The following is a water supply update for the month of July 2024:

Water & Sewer Maintenance and Operations contract:

- Veolia began operations on July 1st.
- Transition going well. New technology and vehicles on board.
- Staffing: Project Manager on board to oversee both water and sewer. 2 additional Sewer Department employees are scheduled to begin in early-mid August. Additional employees being recruited.

Training Field Wells 5 and 8 - Permanent Treatment Facility

Temporary Treatment at Well 5:

- Well 5 continues in full operation using the temporary GAC filter for the summer.

Permanent Treatment Facility at Wells 5 & 8:

1. Project Update:
 - The foundation hole has been excavated.
 - Geotextile fabric, gravel base, and sub-foundation slab have been placed.
 - Concrete footings and slab work are being formed and reinforcing steel tied. We are planning for a large concrete pour (650 CY) around August 15th.



Mill Pond Wells 10 and 11 - Pumping & Treatment Update

Project Progress

1. Well #11 is on-line. The addition of this well has been noticeable this summer as the low-level alarms have been less severe in the standpipes.
2. An update on Well #10 from the Secretary of Energy and Environmental Affairs revealed that there is a substantial backlog in their office and the earliest any review can occur would be this Fall. Since we have already received approval from DEP to activate Well #10, we have sought town counsel opinion as to what our risk would be to do so.

Chatham Water Pumping Status:

For the month of July, wells have been running 8-18 hours a day.

The Water Storage Tanks hit the low-level alarm 4 times this month:

- 7/15 (Monday)
- 7/17 (Wednesday)
- 7/19 (Friday)
- 7/22 (Monday)

You can see that all the low-level alarms are still occurring on either a Monday, Wednesday, or Friday most likely due to irrigation systems.

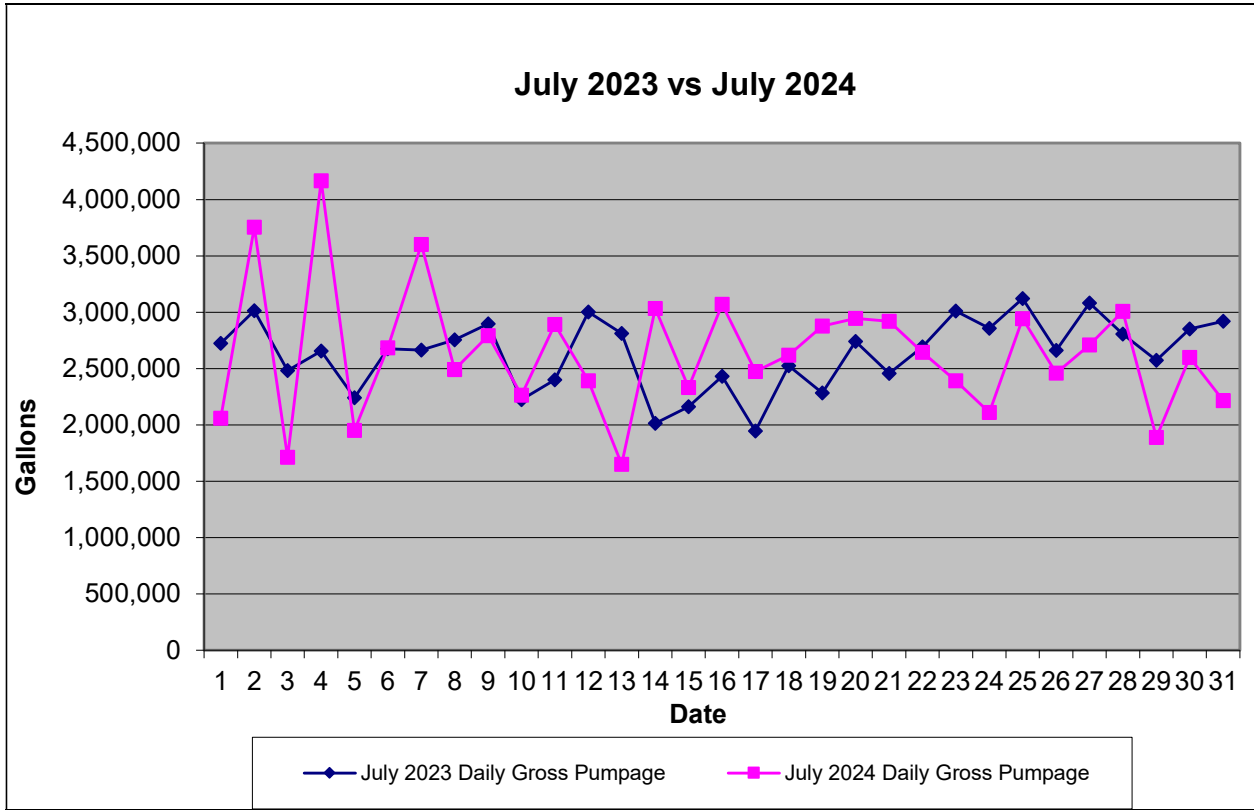
Water Sampling

- 30 bacteria samples were taken for the month of July from the distribution system and the results reported to DEP. All samples were free of bacteria.
- PFAS6 samples were taken from Wells 4 & 5 and the results submitted to DEP. The site was non-detect.
- Third quarter samples for volatile organic contaminants, nitrate, synthetic organic contaminants, radium 226 & 228 and gross alpha were taken from Mill Hill Treatment Plant.
- The first round of UCMR5 (unregulated contaminant monitoring rule 5) was taken from the Mill Hill Treatment Plant.

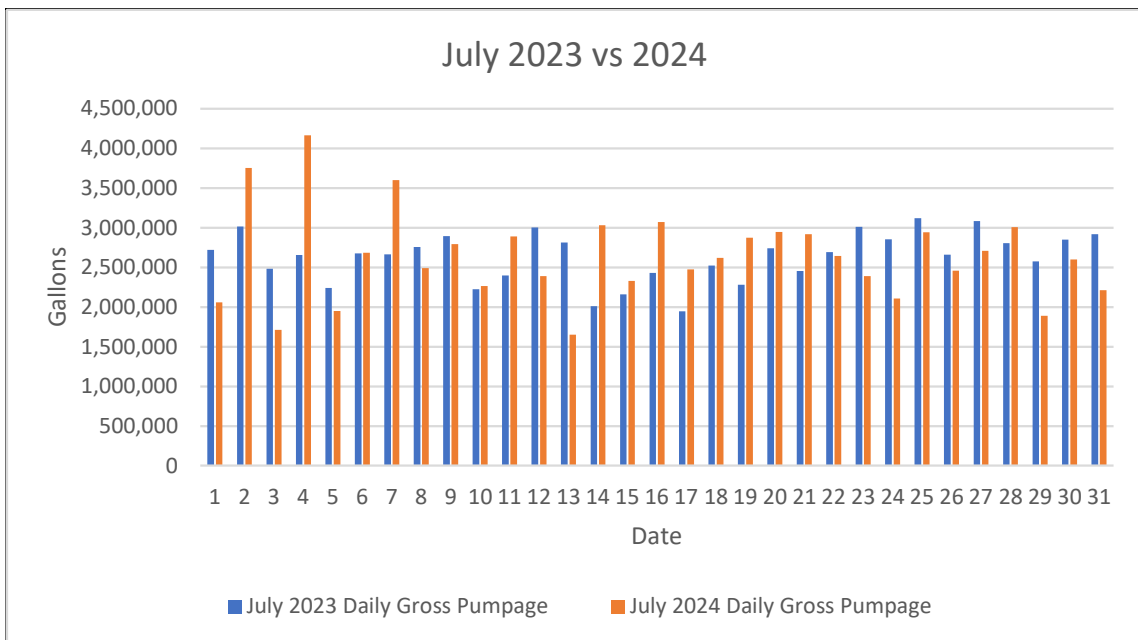
Pumping Comparison July 2023 vs 2024

DATE	July 2023 Daily Gross Pumpage	July 2024 Daily Gross Pumpage	July 2023 vs. July 2024 Increase / Decrease (Gallons)	July 2023 vs July 2024 Increase / Decrease (Percent)
1	2,722,800	2,060,000	(662,800)	-24%
2	3,014,100	3,753,800	739,700	25%
3	2,483,900	1,714,100	(769,800)	-31%
4	2,655,700	4,167,500	1,511,800	57%
5	2,240,900	1,950,900	(290,000)	-13%
6	2,675,400	2,683,400	8,000	0%
7	2,664,400	3,600,200	935,800	35%
8	2,756,000	2,492,300	(263,700)	-10%
9	2,895,900	2,793,100	(102,800)	-4%
10	2,225,400	2,264,100	38,700	2%
11	2,399,600	2,890,700	491,100	20%
12	3,003,500	2,390,300	(613,200)	-20%
13	2,812,400	1,650,400	(1,162,000)	-41%
14	2,012,700	3,032,700	1,020,000	51%
15	2,161,100	2,331,700	170,600	8%
16	2,432,400	3,071,000	638,600	26%
17	1,946,100	2,474,300	528,200	27%
18	2,524,700	2,619,600	94,900	4%
19	2,283,500	2,876,300	592,800	26%
20	2,741,000	2,946,500	205,500	7%
21	2,456,600	2,919,500	462,900	19%
22	2,691,700	2,644,600	(47,100)	-2%
23	3,010,200	2,392,300	(617,900)	-21%
24	2,856,400	2,109,400	(747,000)	-26%
25	3,120,200	2,941,700	(178,500)	-6%
26	2,662,000	2,461,000	(201,000)	-8%
27	3,082,900	2,710,000	(372,900)	-12%
28	2,805,300	3,009,100	203,800	7%
29	2,574,600	1,889,900	(684,700)	-27%
30	2,850,600	2,599,900	(250,700)	-9%
31	2,920,800	2,214,400	(706,400)	-24%
Total	81,682,800	81,654,700	(28,100)	0.0%

Pumping Comparison Graph



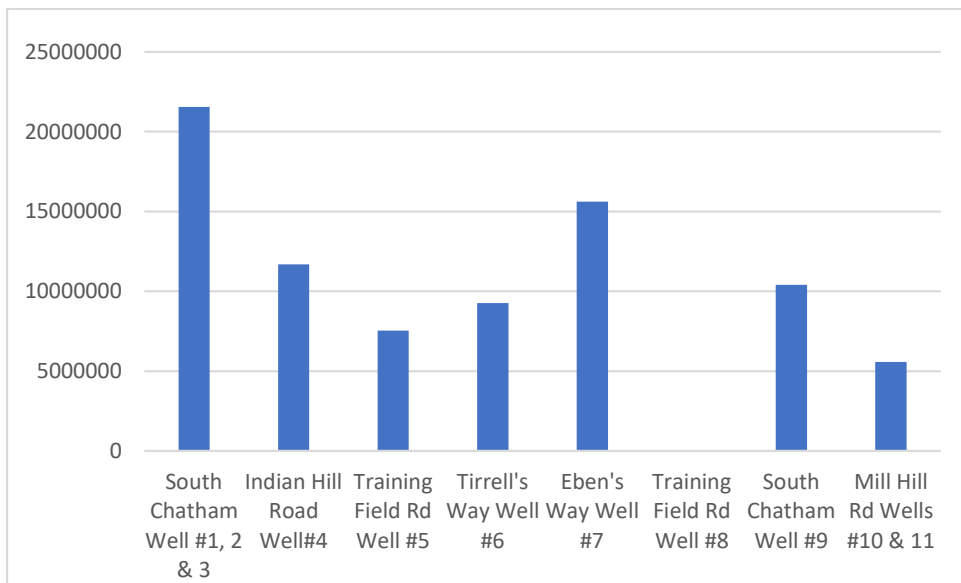
Pumping Comparison Bar Chart



July 2024 Pumping Report

Chatham Water Department MONTHLY PUMPAGE REPORT										JULY 2024	
DATE	DAY	South Chatham Well #1, 2 & 3	Indian Hill Road Well#4	Traning Field Rd Well #5	Tirrell's Way Well #6	Eben's Way Well #7	Traning Field Rd Well #8	South Chatham Well #9	Mill Hill Rd Wells #10 & 11	Daily Gross Pumpage	
1		597,600	267,500	184,400	240,500	401,200		368,800		2,060,000	
2		1,125,000	630,800	436,400	398,800	662,000		460,900	39,900	3,753,800	
3		477,900	277,300	184,900	137,700	239,900		142,000	254,400	1,714,100	
4		1,091,800	610,800	421,400	435,300	716,200		492,800	399,200	4,167,500	
5		388,600	289,900	194,800	238,500	388,800		245,000	205,300	1,950,900	
6		671,300	393,900	264,800	281,400	492,400		321,900	257,700	2,683,400	
7		987,900	533,300	344,000	367,300	608,400		427,200	332,100	3,600,200	
8		786,200		262,200	319,700	534,300		354,900	235,000	2,492,300	
9		574,200	416,800	258,800	330,900	549,400		365,800	297,200	2,793,100	
10		94,700	488,100	359,600	348,500	588,000		313,900	71,300	2,264,100	
11		908,300	398,700	247,400	259,600	443,100		402,000	231,600	2,890,700	
12		683,800	363,400	237,100	304,100	506,300		295,600		2,390,300	
13		499,400	264,800	176,400	180,300	310,700		207,200	11,600	1,650,400	
14		929,700	485,400	330,200	327,700	552,900		373,400	33,400	3,032,700	
15		613,800	334,000	214,400	247,200	419,000		269,500	233,800	2,331,700	
16		986,300	481,200	176,400	362,700	610,000		402,400	52,000	3,071,000	
17		687,000	406,700	280,200	247,500	419,700		276,800	156,400	2,474,300	
18		725,300	393,000	265,100	256,200	431,200		290,900	257,900	2,619,600	
19		801,200	416,200	271,900	335,500	567,700		371,000	112,800	2,876,300	
20		761,900	397,300	38,000	396,500	669,400		428,100	255,300	2,946,500	
21		514,800	257,600	184,600	474,400	795,600		510,800	181,700	2,919,500	
22		747,000	387,500	266,700	258,600	428,400		299,400	257,000	2,644,600	
23		692,800	376,400	253,100	272,200	466,100		275,700	56,000	2,392,300	
24		366,400	191,400	120,800	340,400	577,300		386,500	126,600	2,109,400	
25		728,700	429,700	280,200	316,100	532,000		317,400	337,600	2,941,700	
26		707,300	386,600	251,400	226,200	389,200		299,700	200,600	2,461,000	
27		671,900	393,600	258,400	291,000	510,400		323,800	260,900	2,710,000	
28		987,100	469,700	142,200	368,900	620,300		397,400	23,500	3,009,100	
29		485,100	251,500	182,600	183,000	310,100		218,000	259,600	1,889,900	
30		700,400	347,500	227,800	289,700	492,800		315,400	226,300	2,599,900	
31		551,600	352,800	220,900	229,700	391,800		251,800	215,800	2,214,400	
Total		21,545,000	11,693,400	7,537,100	9,266,100	15,624,600		10,406,000	5,582,500	81,654,700	

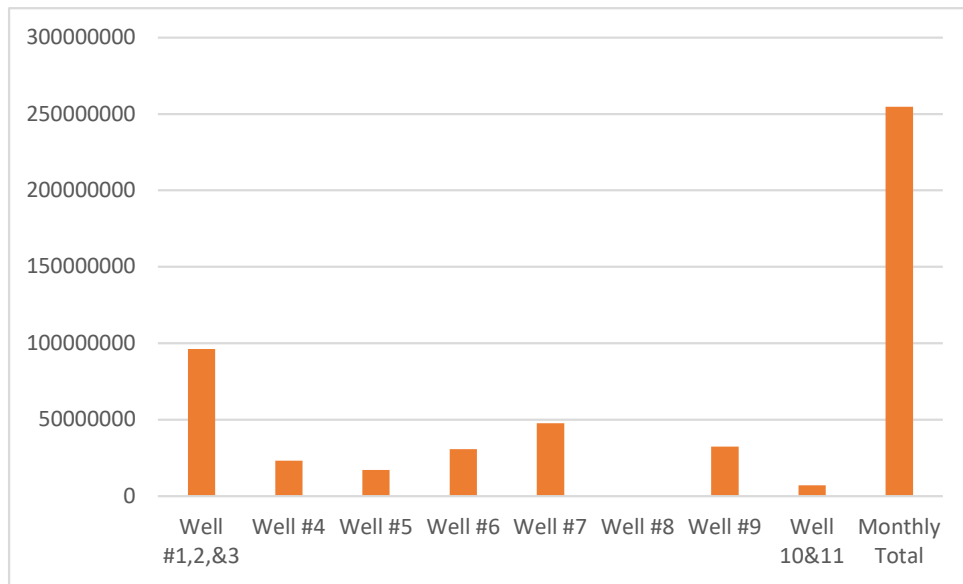
July 2024 Pumping Graph



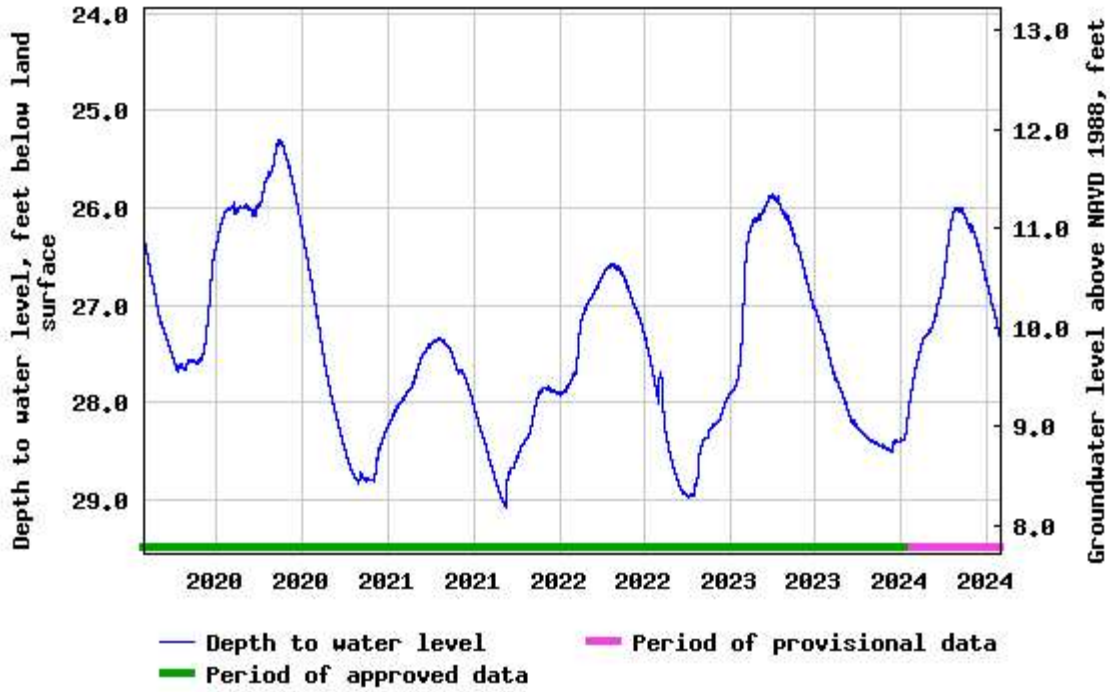
2024 YTD Pumping

	Well #1,2,&3	Well #4	Well #5	Well #6	Well #7	Well #8	Well #9	Well 10&11	Monthly Total	Last Years Pumping	Variance
January	13,524,300	198,400	0	1,076,200	988,300	0	788,400	0	16,575,600	17,179,500	-603,900
February	10,556,600	12,400	0	1,482,600	1,583,000	0	1,061,000	0	14,695,600	17,798,000	-3,102,400
March	5,107,800	55,000	0	3,571,000	4,877,400	0	3,321,700	0	16,932,900	17,807,500	-874,600
April	9,948,800	34,400	1,494,800	2,658,000	4,258,000	0	3,080,100	305,700	21,779,800	21,827,900	-48,100
May	15,017,600	1,666,000	3,970,600	4,242,600	6,460,900	0	4,615,500	1,277,200	37,250,400	49,497,500	-12,247,100
June	20,518,600	9,500,600	4,218,100	8,445,900	13,943,400	0	9,242,600	0	65,869,200	67,742,100	-1,872,900
July	21,545,000	11,693,400	7,537,100	9,266,100	15,624,600	0	10,406,000	5,582,500	81,654,700	81,682,800	-28,100
August									0		0
September									0		0
October									0		0
November									0		0
December									0		0
Totals	96,218,700	23,160,200	17,220,600	30,742,400	47,735,600	0	32,515,300	7,165,400	254,758,200	273,535,300	-18,777,100

2024 YTD Pumping Graph



USGS 414181070011801 MA-CGM 138R CHATHAM, MA



USGS 414632070014901 MA-BMW 22R BREWSTER, MA

