

Monthly Operating Report

MARCH 2022



Rockland, MA WWTP





April 13, 2022

Mr. David P. Taylor

Rockland Interim Sewer Superintendent

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—March 2022

Dear Mr. Taylor,

Please see the enclosed March 2022 Monthly Operating Report (MOR) for the Veolia Operations and Maintenance contract.

Please contact me soon as possible should you have any questions regarding this report.

Sincerely,

Rick Kotouch

Veolia Project Manager

CC: Charles Heshion

Dan Duross

Sherri Vallie

MARCH 2022 MONTHLY OPERATING REPORT

1. SUMMARY:

- 1) The facility will be reporting **1** exceedance for the month of March 2022
- 2) There was **1** lost time / first aid injuries throughout the month
- 3) The facility treated a total of **106.190** Million Gallons. The average daily flow was **3.425** MGD
- 4) The total rainfall for this reporting period was **3.15"**
- 5) I&I Work is ongoing
- 6) **208** work orders were closed in March, with **1** as corrective maintenance work order and **3** were emergency call outs
- 7) The new NPDES Permit was issued in November 2021 and became effective in February 2022

2. STAFFING:

Current Employee Licenses as of 11/17/2021

Employee	Title	Hoisting		Wastewater			NEWEA Collections			NEWEA Laboratory
		1C Forklift	1B Boom Truck & Forklift	4M	5C	7C	I	II	IV	I
Rick Kotouch	Project Manager					X			X	
Edwin McAuliffe	Asst. Project Manager		X			X		X		X
Steven Butts	Lab Technician					X				X
Chuck Amaral	Maintenance Foreman		X		X			X		
Megan Kelly Lynch	Operator	X				X				
Shaun Chaponis (Part Time Weekends)	Operator				X		X			
Garry Murrill	Operator				X			X		
Dan Sullivan-Xenos	Operator				X					

3. EMPLOYEE HEALTH AND SAFETY:

An employee slipped on black ice in the parking lot on 3/2/2022. Employee taken to an Urgent Care facility that resulted in a Lost Time Accident. Employee was out of work for 14 days and returned back to work on 3/21/22 with job duty restrictions.

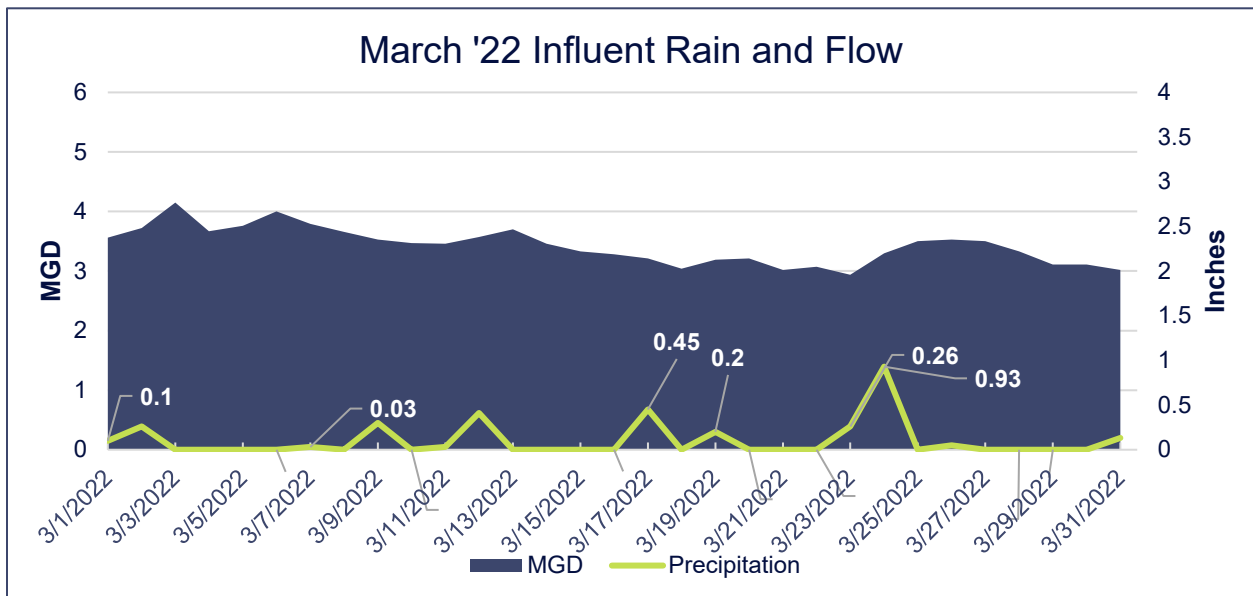
Throughout the COVID-19 (Coronavirus) pandemic in an attempt to continue to serve the Town of Rockland with reliable operations and protect the staff of the Rockland team, Suez/Veolia has implemented numerous procedures to ensure continuity of the operations. As the COVID-19 Delta variant and Omicron rates decreases, Veolia at the Rockland facility has downgraded to a Threat Level 0 guideline as follows:

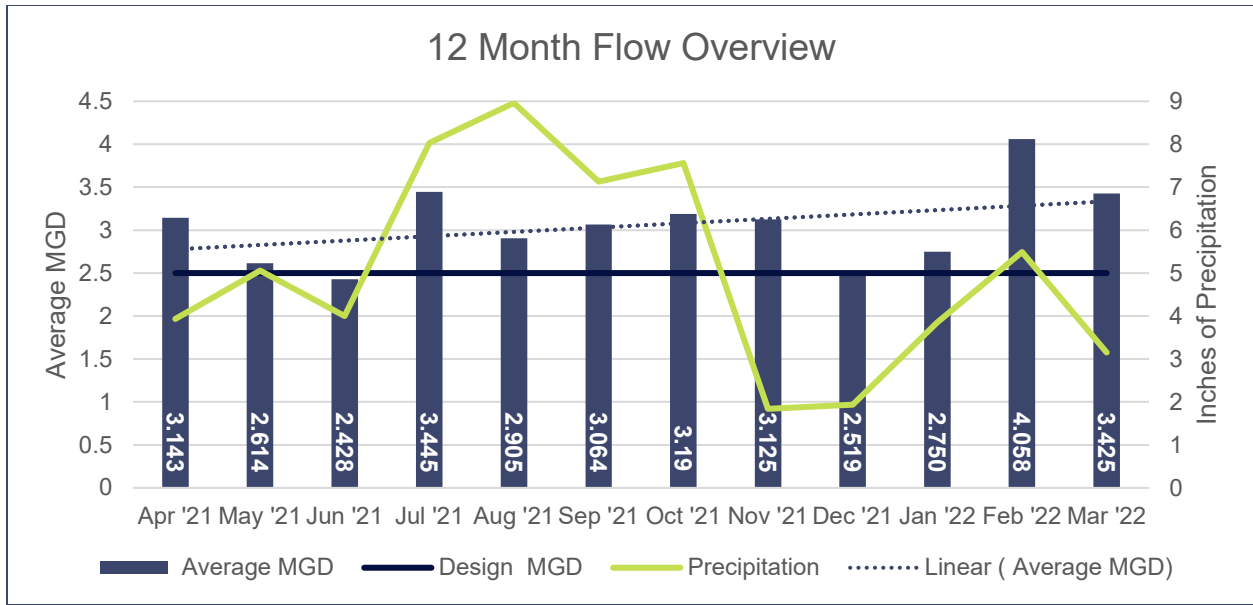
All essential personnel are required to be screened before entering the premises and meet the Covid visitor guidelines. Use of common areas/dining areas, in-person meetings and training are now permitted.

4 FOWS AND LOADINGS:

4.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **106.190** MG during the month. The daily average flow was **3.425** MGD. This was **0.748** MGD more than the previous March monthly average, which was recorded at **2.677** MGD. The highest **peak** flow was recorded on March 3 as **4.57** MGD. The lowest instantaneous flow was **1.790** MGD, recorded March 24.
- The highest daily flow was recorded on March 3 as **4.150** MGD. The lowest daily flow was recorded on March 23 as **2.940** MGD.
- A total of **3.15** of precipitation was received at the facility. The highest single day precipitation total was recorded on March 24 as **0.93"**
- The coldest day was March 1 at **9°F**. The warmest day was March 18 at **72°F**.





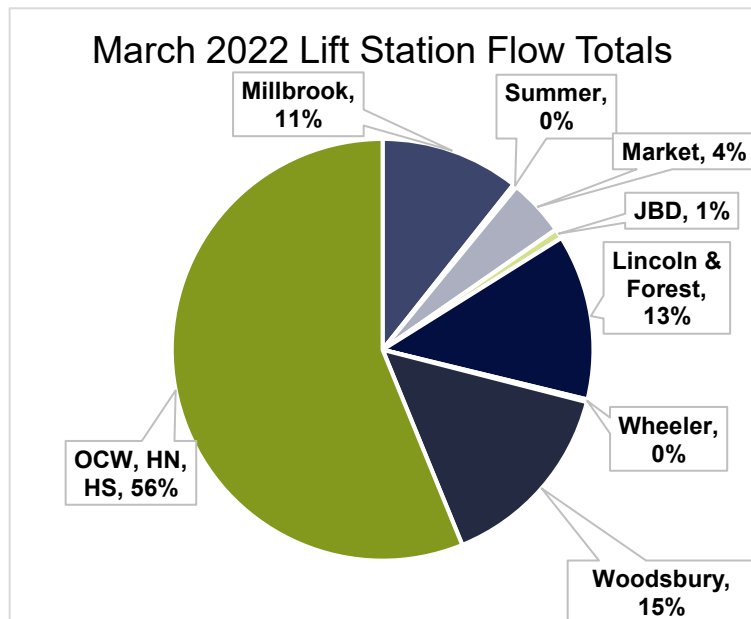
4.1 INFLUENT BOD AND TSS LOADING

ROCKLAND FLOW AND LOADINGS TRACKING						
Month/Yr	Inf. Flow	Inf BOD	Inf. TSS	Inf. Flow Mov. Avg.	Inf. BOD Mov. Avg.	Inf. TSS Mov. Avg.
	MGD	LBS	LBS	MGD	LBS	LBS
Apr '21	3.143	3,189	3,630	2.418	3,031	3,814
May '21	2.614	3,485	3,644	2.380	3,064	3,802
Jun '21	2.428	3,874	3,572	2.419	3,112	3,790
Jul '21	3.445	2,344	3,371	2.569	3,080	3,784
Aug '21	2.905	3,044	4,011	2.683	3,118	3,798
Sep '21	3.064	2,376	4,904	2.809	3,064	3,859
Oct '21	3.19	2,990	3,889	2.936	3,046	3,815
Nov '21	3.125	2,270	3,500	3.015	2,963	3,774
Dec '21	2.519	3,597	3,699	2.938	3,019	3,738
Jan '22	2.75	2,990	3,889	2.936	3,046	3,815
Feb '22	4.058	2,270	3,500	3.015	2,963	3,774
Mar '22	3.425	3,597	3,699	2.938	3,019	3,738

4.2 LIFT STATION FLOWS

The lift stations accounted for **9,597,239** gallons throughout the month, **11.3%** of the total plant flow. Please note that monthly lift station flow totals are purely estimates based off of pump run hours and estimated flow rates. Values are not intended to in any way be used as design capacity volumes for potential future rehab / replacement projects.

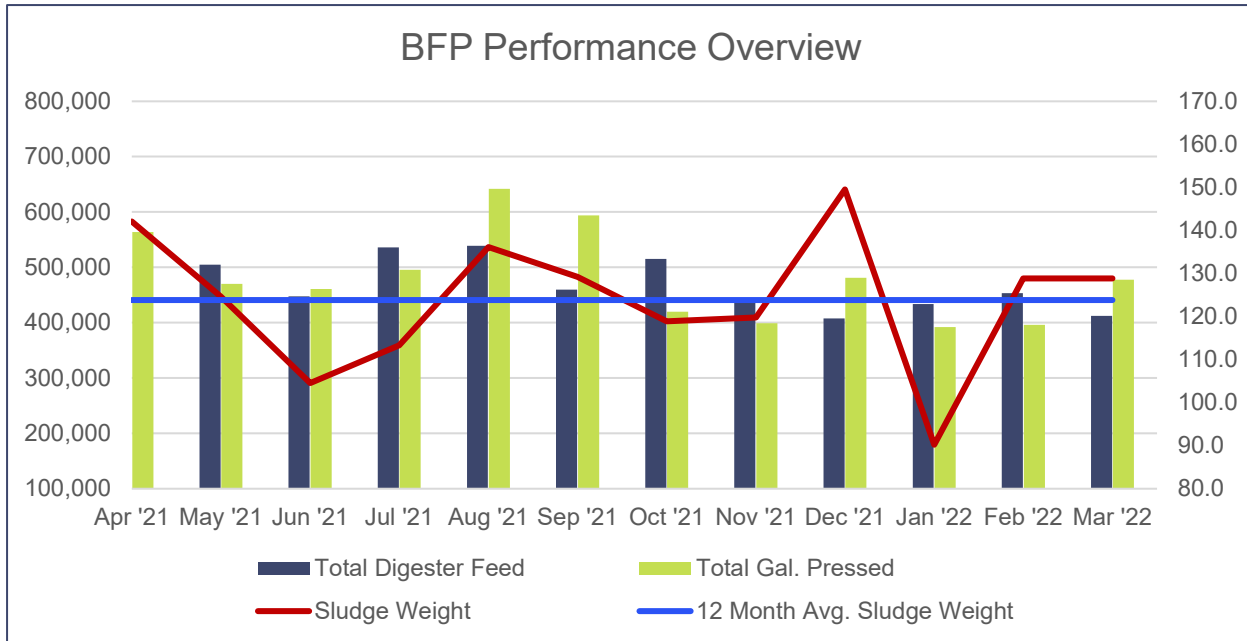
Total Flows for March 2022	
Station	Total Gallons
Millbrook	1,216,080
Summer	32,400
Market	500,999
John Burke	86,400
Lincoln, Forest	1,446,901
Wheeler	23,040
Woodsbury	1,692,002
OCW, HN, HS	6,404,398
Total:	11,402,220



Lift Station Monthly Average Daily Flows (GPD)											
Month	Millbrook	Summer	Market	John Burke	Lincoln	Forrest	Wheeler	Woodsbury	Old Country Way	Hingham North	Hingham South
GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD
Apr '21	34,020	984	17,450	2,064	2,280	41,580	762	51,720	63,770	160,920	205,560
May '21	33,876	968	16,950	1,880	2,160	37,590	678	36,060	59,220	152,640	184,320
June '21	34,272	1,000	16,400	2,112	5,020	46,410	708	33,720	51,240	153,360	172,080
July '21	33,166	952	17,226	2,183	4,684	54,126	732	36,813	68,894	199,974	227,845
Aug '21	30,345	968	16,887	2,563	2,826	53,042	761	44,594	62,797	169,839	190,568
Sept '21	30,348	968	17,000	2,560	2,840	52,990	768	44,700	63,070	170,460	191,160
Oct '21	29,822	898	15,339	2,121	3,252	51,552	639	50,458	65,303	163,568	187,084
Nov '21	30,924	1,000	15,800	2,296	3,600	46,200	660	48,780	62,930	159,120	188,280
Dec '21	31,459	929	15,677	1,881	3,232	42,339	703	49,355	59,206	157,994	182,555
Jan '22	31,494	983	15,387	2,036	2,555	39,223	691	44,187	56,429	154,684	175,587
Feb '22	31,459	929	15,677	1,881	3,232	42,339	703	49,355	59,206	157,994	182,555
Mar '22	31,494	983	15,387	2,036	2,555	39,223	691	44,187	56,429	154,684	175,587
Average	31,890	964	16,265	2,134	3,186	45,551	708	44,494	60,708	162,936	188,598

5.0 SOLIDS HANDLING 6.1 REGULATORY REPORTING

The BFP was operated a total of **163** hours this month and a total of **477,919** gallons were processed producing **129** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **1.79%** and the BFP Cake average percent solids were **18.32%**. The sludge processing Dry Tons conversion sheet is attached to this report.



Date	BFP Run Hours	Total Digester Feed	Total BFP Feed	Polymer Used	Actual Sludge Weight	Average Press Feed Total Solids	Average Cake Total Solids	Sludge Pick Up	Grit Removed
	HRS	Gal.	Gal.	Gal.	Wet Tons	%	%	Dumpster	Tons
Apr '21	172.5	585,402	564,039	131.3	142.1	2.48	20.23	8.00	
May '21	161.5	504,683	470,321	108.0	124.6	2.62	21.62	7.00	
Jun '21	148.3	447,325	460,923	109.1	104.5	2.16	23.59	6.00	
Jul '21	129.3	536,074	495,343	90.4	113.3	2.33	21.29	7.00	
Aug '21	154.6	538,761	641,667	128.7	136.1	1.97	21.24	7.00	
Sep '21	154.3	459,723	594,127	133.0	129.2	1.75	21.08	6.00	4
Oct '21	108.5	515,074	420,101	86.6	118.9	2.67	21.17	5.00	
Nov '21	120.0	439,762	398,853	90.4	119.8	2.25	20.40	7.00	
Dec '21	152.8	407,825	481,140	126.2	149.5	1.56	20.29	7.00	
Jan '22	141.3	433,648	392,237	101.8	90.2	1.86	18.19	6.00	
Feb '22	140.8	453,426	396,361	112.0	128.9	2.07	18.64	6.00	
Mar '22	163.3	412,533	477,919	136.1	128.9	1.79	18.32	7.00	
Annual Total	1,747	5,734,236	5,793,031	1,354	1,486	****	****	79	4.00
Avg.	146	477,853	482,753	113	124	2.13	20.51	6.6	****

6.0 ENVIRONMENTAL COMPLIANCE

6.1 REGULATORY REPORTING

1. The EPA and MADEP March 22 NETDMR was submitted on the CDX website on 04/08/2022
2. The MADEP Watershed Bioassay report was mailed out on 04/09/2022

6.2 NPDES COMPLIANCE

The facility will be reporting (1) exceedances for the month of March 22

- The monthly average flow was recorded at **3.425** MGD, the NPDES limit is 2.50

Date	Plant Flow	BOD	BOD	TSS	TSS	NH3	Total P	Ph	Fecal Coliform	Aluminum	Copper	Dissolved Oxygen	Limits	Monthly Avg.	Weekly Avg.	Daily Max
	MGD	Mg/L	Lbs./Day	Mg/L	Lbs./Day	Mg/L	Mg/L	Ph	CFU/100 ml	Ug/L	Ug/L	Mg/L				
BOD																
Tue, Mar 01	3.560	5.3	157	6.0	178	0.23	0.60	7.23	19	37	24.0		Oct. 1 - April 30	20 Mg/L 417 lbs/day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day
Wed, Mar 02	3.720							7.22								
Thur, Mar 03	4.150	3.0	104	5.3	183	0.26	0.65	7.20					May 1 - Sept. 30	6 Mg/L 125 lbs/Day	6 Mg/L 125 lbs/Day	10Mg/L 209 lbs/day
Fri, Mar 04	3.670							7.44								
Sat, Mar 05	3.760							7.25								
TSS																
Sun, Mar 06	4.000							7.38	28				Oct. 1 - April 30	20 Mg/L 417 lbs/Day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day
Mon, Mar 07	3.790							7.25	46							
Tue, Mar 08	3.660	4.5	137	5.3	162	0.10	0.53	7.44	48				May 1 - Sept. 30	10 Mg/L 209 lbs/Day	10 Mg/L 209 lbs/Day	15Mg/L 313 lbs/day
Wed, Mar 09	3.530							7.23								
Thur, Mar 10	3.470	5.7	165	6.0	174	0.89	0.77	7.26								
NH3																
Fri, Mar 11	3.460							7.23					Oct.1 - Mar. 31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L
Sat, Mar 12	3.570							7.39								
Sun, Mar 13	3.700							7.39	44				Apr. 1 - May 31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l
Mon, Mar 14	3.646	3.4	98	6.0	173	0.27	0.53	7.26	69							
Tue, Mar 15	3.330							7.17	21				June 1 - Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L
Wed, Mar 16	3.280	3.2	88	2.7	74	0.12	0.36	7.14								
Thur, Mar 17	3.210							7.13								
Total Phosphorus																
Fri, Mar 18	3.040							7.03					Apr. 1 - Oct. 31	0.2 Mg/L	*****	*****
Sat, Mar 19	3.190							7.32								
Sun, Mar 20	3.210							7.24	30				Nov. 1 - Mar. 31	1.0 Mg/L	*****	*****
Mon, Mar 21	3.020							7.31	33							
Tue, Mar 22	3.070	3.0	77	3.3	84	1.10	0.17	7.30	20							
Ph																
Wed, Mar 23	2.940							7.40								
6.5 - 8.3																
Thur, Mar 24	3.300	3.0	83	5.3	146	0.32	0.17	7.29								
Fecal																
Fri, Mar 25	3.500							7.06					*****	200 CFU/100ml	*****	400 CFU/100ml
Sat, Mar 26	3.530							7.13								
Sun, Mar 27	3.500							7.13	9							
Aluminum																
Mon, Mar 28	3.330							7.29	8				*****	88 ug/l	*****	*****
Tue, Mar 29	3.110	3.0	78	4.7	122	0.17	0.13	7.25	14							
Copper																
Wed, Mar 30	3.110							7.19					*****	12 ug/l	*****	*****
Thur, Mar 31	3.020	2.0	50	4.0	101	0.10	0.14	7.18								
Dissolved Oxygen																
Daily Max	2.790	4.70	92.90	3.70	82.39	1.50	0.58	7.48	82	*****	*****	*****	May 1 - Sept. 30	> 7.4 mg/L		
Daily Min.	2.300	*****	*****	*****	*****	*****	*****	6.71	*****	*****	*****			Plant Flow		
Month Avg.	2.519	3.37	70.22	2.59	54.33	0.71	0.52	7.29	42.33	8	5.6	*****		2.5 MGD		

7.0 ENERGY CONSUMPTION

7.1 ELECTRICAL OVERVIEW

The following data is for electrical consumption during the **March 2022** operating period. The department used a total of **139,564 KWH** for the month of Mar. 2022. Of this total, the lift stations accounted for **12.3%**, using **17,164 KWH**. The Main Plant accounted for the remaining **122,400 KWH**. The KWH/ MG treated was **1,153** for the month, which is **14.5%** lower than the previous 12-month average of **1,349 KWH/MG**. The KWH/Lb. BOD Removed was **1.0 KWH/Lb.** for the month, which is **21%** lower than the previous 12-month average of **1.32 KWH/Lb.**

Monthly Energy Consumption										
Month	Plant Average Daily Flow (NO HFMP)	Plant Total Influent Flow	Plant KWH (Total Billed)	KWH/MG Treated (Plant)	Plant Lbs BOD Removed	KWH/Lb BOD Removed (Plant)	Off Peak Demand (Plant)	Peak Demand (Plant)	Total Lift Station KWH	Total KWH (Plant & Stations)
	MGD	MG	KWH	KWH/MG	Lbs	KWH/Lb	KW	KW	KWH	KWH
Apr '21	3.1	92.87	130,200	1,402	93,957	1.39	219	219	22,735	152,935
May '21	2.61	81.02	99,000	1,222	106,715	0.93	186	189	19,293	118,293
Jun '21	2.43	72.83	111,600	1,532	114,694	0.97	219	228	18,800	130,400
July '21	3.43	106.47	125,400	1,178	70,944	1.77	222	249	16,048	141,448
Aug '21	2.91	90.06	132,600	1,472	92,787	1.43	249	255	15,528	148,128
Sep '21	3.05	91.41	110,400	1,208	69,519	1.59	204	231	12,161	122,561
Oct '21	3.18	98.51	107,100	1,087	90,595	1.18	231	234	12,858	119,958
Nov '21	3.12	93.74	132,900	1,418	65,739	2.02	201	216	13,555	146,455
Dec '21	2.52	78.08	120,600	1,545	109,345	1.1	201	213	13,316	133,916
Jan '22	2.75	85.26	139,500	1,636	118,805	1.17	225	264	11,923	151,423
Feb '22	4.06	113.62	142,500	1,254	116,417	1.22	234	261	13,538	156,038
Mar '22	3.43	106.19	122,400	1,153	117,284	1.04	222	222	17,164	139,564
Average	3.05	92.51	122,850	1,342	97,233	1.32	218	232	15,577	138,427

Monthly Lift Station KWH														
Month	Hingham North	Hingham South	Spruce	Butternut	Old Country Way	Market	Woodsbury	Lincoln	Forest	Wheeler	Summer	Milbrook	John Burke	Total
Apr '21	4,677	8,300	235	626	1,225	1,061	1,456	361	2,386	65	79	2,011	253	22,735
May '21	4,504	6,100	202	541	1,243	987	1,318	312	2,173	57	61	1,577	218	19,293
Jun '21	3,994	6,000	180	540	1,550	935	1,400	308	2,060	55	55	1,508	215	18,800
July '21	2,749	4,900	190	482	1,234	907	1,669	288	1,813	62	61	1,520	173	16,048
Aug '21	2,812	5,000	191	459	1,088	910	1,297	272	1,725	63	65	1,490	156	15,528
Sep '21	2,384	3,800	144	319	1,027	665	858	175	1,330	52	57	1,247	103	12,161
Oct '21	2,809	4,300	177	335	887	362	901	253	1,719	65	62	883	105	12,858
Nov '21	2,969	4,800	159	415	987	347	1,112	152	1,454	54	62	914	130	13,555
Dec '21	2,740	4,700	170	486	1,044	344	892	159	1,630	58	62	908	123	13,316
Jan '22	2,648	3,900	150	421	885	397	836	185	1,395	52	53	892	109	11,923
Feb '22	2,754	4,000	179	529	908	697	1,142	225	1,667	49	57	1,215	116	13,538
Mar '22	3,279	4,900	188	654	1,244	970	1,416	363	2,116	61	70	1,666	237	17,164
Average	3,193	5,058	180	484	1,110	715	1,191	254	1,789	58	62	1,319	162	15,577

8.0 MAINTENANCE

8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	204	204
Corrective Maintenance	1	1
Emergency Call Outs Total	3	3

8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO #
1. Installed new Final Ferric Pump #1	21182
2. Installed New Final Ferric Pump #2	21185
3. Replaced Roller on Primary Ferric Pump #1	21178
4. Replaced Tube on Primary Ferric Pump #2	21173

8.3 SIGNIFICANT OPEN WORK ORDERS

CM Description	WO #

8.4 EMERGENCY CALL OUTS FOR THE MONTH

Type	Total this Month	Total this Year
Sewer Back Up / Collection System	1	1
Pump Station	2	2
Plant	0	0
Odor	0	0
Power Outages	0	0
Total:	3	3

8.5 INSPECTIONS / ANNUAL PMS COMPLETED DURING THE MONTH

1. All pump station alarms checked
2. Spruce and Butternut probes cleaned weekly
3. Eye wash inspections completed weekly
4. Fire extinguisher inspections completed monthly

8.6 COLLECTION SYSTEM AND IPP ASSISTANCE PERFORMED BY VEOLIA

COLLECTION SYSTEM ASSISTANCE:

Type	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	0	0
Sewer Location mark Outs	1	1
Sewer Back Up	1	1

8.7 WORK ORDER STATISTICS

There were **110.6** total reported maintenance hours during the month. Of this total, outside contractors accounted for **22%** with **24** hours recorded.

March 2022 Maintenance Hours

