

# Monthly Operating Report

**APRIL 2022**



***Rockland, MA WWTP***





May 15, 2022

Mr. David P. Taylor

Rockland Interim Sewer Superintendent

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—April 2022

Dear Mr. Taylor,

Please see the enclosed April 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

# APRIL 2022 MONTHLY OPERATING REPORT

## 1. SUMMARY:

- 1) The facility will be reporting **1** exceedance for the month of April 2022
- 2) There was **0** lost time / first aid injuries throughout the month
- 3) The facility treated a total of **82.960** Million Gallons. The average daily flow was **2.765** MGD
- 4) The total rainfall for this reporting period was **2.68"**
- 5) I&I Work is ongoing
- 6) **175** work orders were closed in April, with **8** 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 04/11/2022										
		Hoisting		Wastewater			NEWEA Collections			NEWEA Laboratory
Employee	Title	1C Forklift	1B Boom Truck & Forklift	3M	5C	7C	I	II	IV	I
Rick Kotouch	Project Manager					X			X	
Megan Kelly-Lynch	Asst. Project Manager	X				X				
Steven Butts	Lab Technician					X				X
Chuck Amaral	Maintenance Foreman				X			X		
Garry Murrill	Operator				X			X		
Dan Sullivan-Xenos	Operator				X					
Max Jackson	Operator			X						
Shaun Chaponis (Part Time Weekends)	Operator				X		X			

### 3. EMPLOYEE HEALTH AND SAFETY:

The employee that slipped on black ice in the parking lot on 3/2/2022 and returned back to work on 3/21/22 is still working with job duty restrictions.

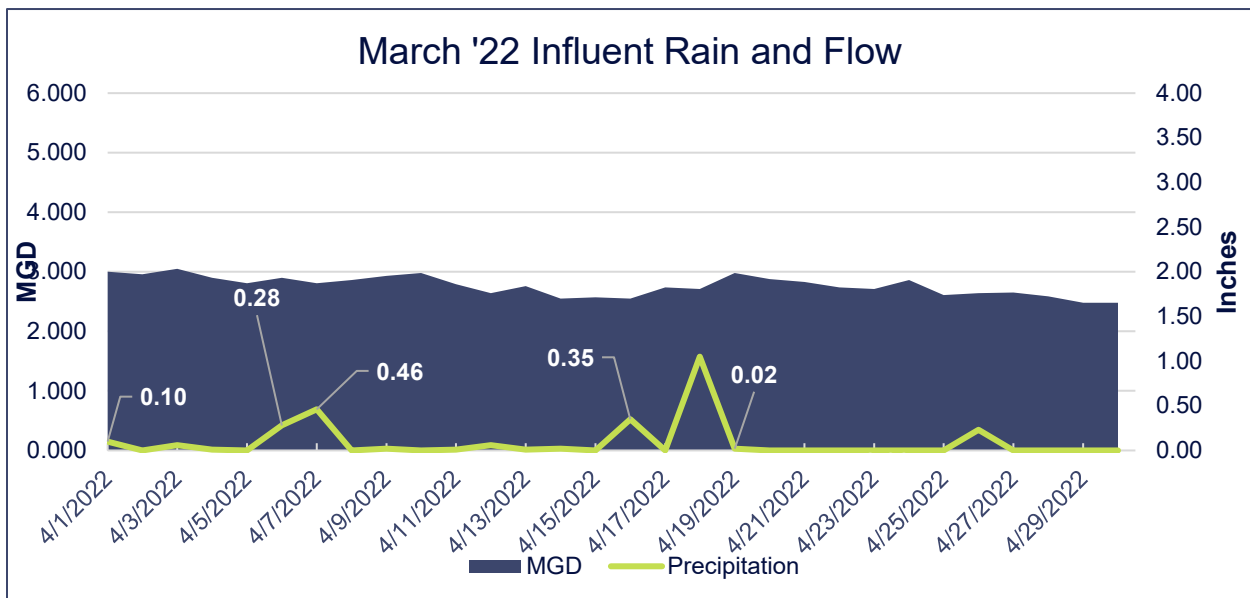
Throughout the COVID-19 (Coronavirus) pandemic in an attempt to continue to serve the Town of Rockland with reliable operations and protect the staff of the Rockland team, Suez/Veolia has implemented numerous procedures to ensure continuity of the operations. As the COVID-19 Delta variant and Omicron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

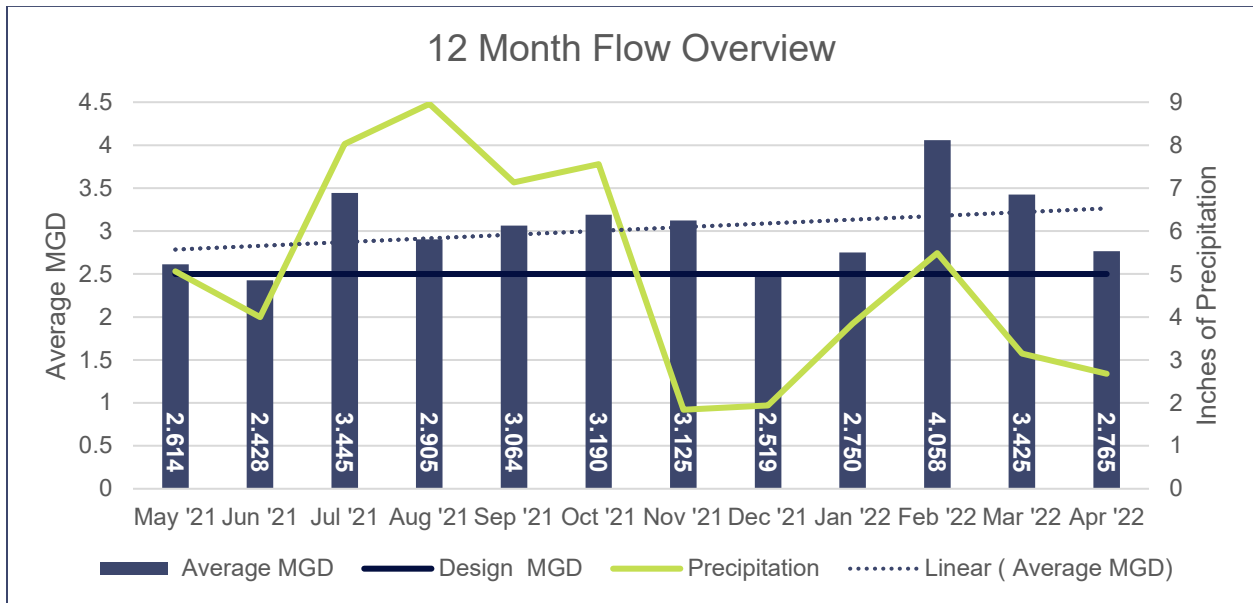
All essential personnel are required to be screened before entering the premises and meet the Covid visitor guidelines. Use of common areas/dining areas, in-person meetings and training are now permitted.

### 4 FLOWS AND LOADINGS:

#### 4.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **82.960** MG during the month. The daily average flow was **2.765** MGD. This was **0.331** MGD less than the previous April monthly average, which was recorded at **3.096** MGD. The highest **peak** flow was recorded on April 9 as **3.740** MGD. The lowest instantaneous flow was **1.081** MGD, recorded April 3.
- The highest daily flow was recorded on April 1 as **3.050** MGD. The lowest daily flow was recorded on April 29 as **2.480** MGD.
- A total of **2.68** of precipitation was received at the facility. The highest single day precipitation total was recorded on April 18 as **1.05"**
- The coldest day was April 3 at **29°F**. The warmest day was April 13 at **71°F**.





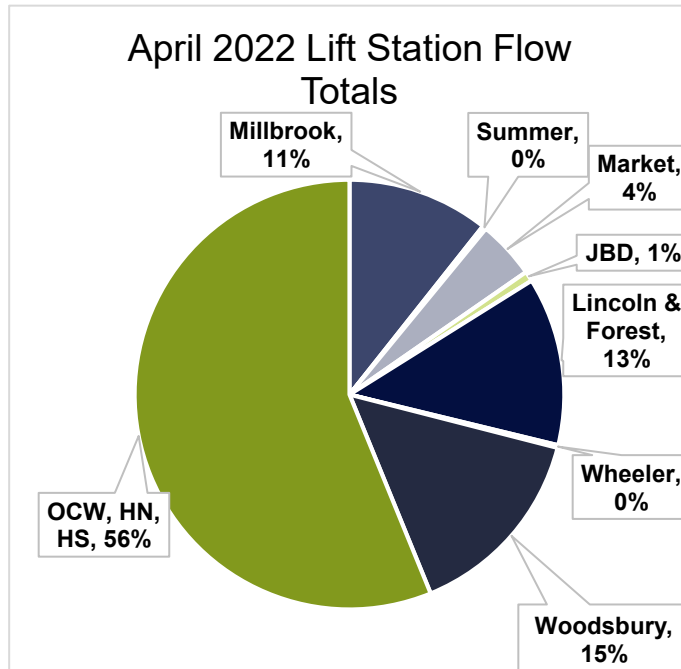
## 4.1 INFLUENT BOD AND TSS LOADING

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
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	3.190	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	2.750	3,909	3,676	2.936	3,103	3,774
Feb '22	4.058	3,910	3,913	2.993	3,158	3,755
Mar '22	3.425	3,887	4,456	3.055	3,240	3,855
Apr '22	2.765	3,907	4,051	3.024	3,299	3,891

## 4.2 LIFT STATION FLOWS

The lift stations accounted for **9,477,480** 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.

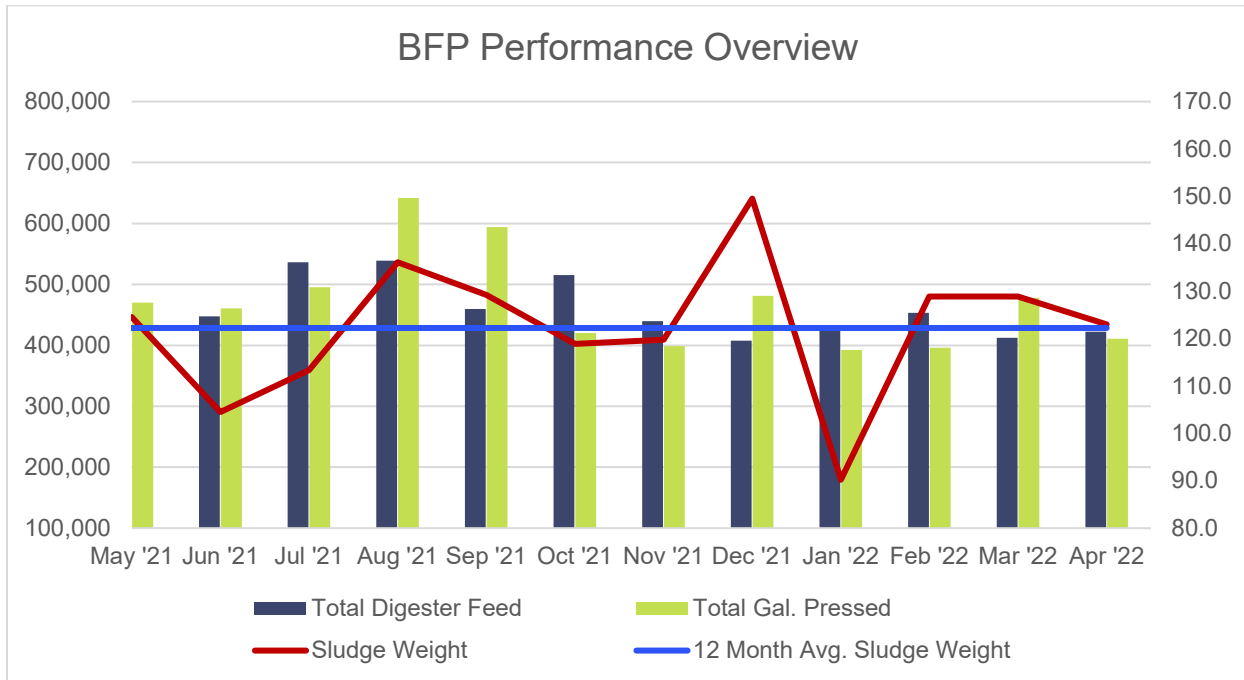
Total Flows for April 2022	
Station	Total Gallons
Millbrook	994,679
Summer	27,600
Market	484,501
John Burke	73,680
Lincoln, Forest	1,289,398
Wheeler	25,020
Woodsbury	1,398,601
OCW, HN, HS	5,184,000
<b>Total:</b>	<b>11,402,220</b>



Lift Station Monthly Average Daily Flows (GPD)											
Month	Millbrook	Sumer	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
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	33,156	920	16,150	2,456	2,600	42,980	834	46,620	57,960	151,920	172,800
Dec '21	31,459	929	15,677	1,881	3,232	42,339	703	49,355	59,206	157,994	182,555
Jan '22	39,228	1,045	16,161	2,787	2,806	46,674	743	54,581	66,319	166,355	206,593
Feb '22	33,156	920	16,150	2,456	2,600	42,980	834	46,620	57,960	151,920	172,800
Mar '22	31,459	929	15,677	1,881	3,232	42,339	703	49,355	59,206	157,994	182,555
Apr '22	33,156	920	16,150	2,456	2,600	42,980	834	46,620	57,960	151,920	172,800
<b>Average</b>	<b>32,787</b>	<b>951</b>	<b>16,314</b>	<b>2,278</b>	<b>3,154</b>	<b>46,333</b>	<b>745</b>	<b>44,958</b>	<b>60,761</b>	<b>162,329</b>	<b>186,930</b>

## 5.0 SOLIDS HANDLING 6.1 REGULATORY REPORTING

The BFP was operated a total of **134** hours this month and a total of **410,793** gallons were processed producing **123** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **2.66%** and the BFP Cake average percent solids were **19.69%**. 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
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	
Oct '21	108.5	515,074	420,101	86.6	118.9	2.67	21.17	5.00	4
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	
Apr '22	133.8	422,314	410,793	123.4	123.0	2.66	19.69	6.00	
<b>Annual Total</b>	1,708	5,571,148	5,639,785	1,346	1,467	****	****	77	4.00
<b>Avg.</b>	142	464,262	469,982	112	122	2.14	20.46	6.4	****

## 6.0 ENVIRONMENTAL COMPLIANCE

### 6.1 REGULATORY REPORTING

1. The EPA and MADEP April 22 NETDMR was submitted on the CDX website on 05/11/2022

### 6.2 NPDES COMPLIANCE

The facility will be reporting (1) exceedance(s) for the month of April 22

- The monthly average flow was recorded at **2.765** 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				
Fri, Apr 01	3.000							7.14					<b>BOD</b>			
Sat, Apr 02	2.960							7.10					Oct. 1 - April 30	20 Mg/L 417 lbs/day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day
Sun, Apr 03	3.050							7.11	6				May 1 - Sept. 30	6 Mg/L 125 lbs/Day	6 Mg/L 125 lbs/Day	10Mg/L 209 lbs/day
Mon, Apr 04	2.900							7.18	11				<b>TSS</b>			
Tues, Apr 05	2.810	1.6	37	3.3	77	0.10	0.15	7.25	7	13	5.9		Oct. 1 - April 30	20 Mg/L 417 lbs/Day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day
Wed, Apr 06	2.900							7.22					May 1 - Sept. 30	10 Mg/L 209 lbs/Day	10 Mg/L 209 lbs/Day	15Mg/L 313 lbs/day
Thu, Apr 07	2.810	1.1	26	2.5	59	0.10	0.14	7.20					<b>NH3</b>			
Fri, Apr 08	2.860							7.13					Oct.1 - Mar. 31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L
Sat, Apr 09	2.930							7.16					Apr. 1 - May 31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l
Sun, Apr 10	2.980							7.23	7				June1 - Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L
Mon, Apr 11	2.790							7.34	14				<b>Total Phosphorus</b>			
Tues, Apr 12	2.640	2.0	44	3.2	81	0.19	0.12	7.38	10				Apr.1 - Oct.31	0.2 Mg/L	*****	*****
Wed, Apr 13	2.760							7.28					Nov. 1 - Mar. 31	1.0 Mg/L	*****	*****
Thu, Apr 14	2.550	2.0	43	3.2	68	0.10	0.12	6.94					<b>Ph</b>			
Fri, Apr 15	2.570							7.11					6.5 - 8.3			
Sat, Apr 16	2.550							7.24					<b>Fecal</b>			
Sun, Apr 17	2.740							7.45	6				*****	200 CFU/100ml	*****	400 CFU/100ml
Mon, Apr 18	2.710							7.34	4				<b>Aluminum</b>			
Tues, Apr 19	2.980	2.0	50	3.3	82	0.12	0.13	7.46	23				*****	88 ug/l	*****	*****
Wed, Apr 20	2.880							7.49					<b>Copper</b>			
Thu, Apr 21	2.830	2.0	47	4.0	94	0.15	0.10	7.47					*****	12 ug/l	*****	*****
Fri, Apr 22	2.740							7.40					<b>Dissolved Oxygen</b>			
Sat, Apr 23	2.710							7.48					May 1 - Sept. 30	> 7.4 mg/L		
Sun, Apr 24	2.860							7.29	4				<b>Plant Flow</b>			
Mon, Apr 25	2.610							7.44	8				2.5 MGD			
Tues, Apr 26	2.640	2.0	44	3.7	81	0.10	0.10	7.49	6							
Wed, Apr 27	2.650							7.54								
Thu, Apr 28	2.590	2.0	43	3.3	71	0.15	0.10	7.55								
Fri, Apr 29	2.480							7.37								
Sat, Apr 30	2.480							7.53								
Daily Max	3.050	2.00	49.71	4.00	94.41	0.19	0.15	7.55	23	*****	*****	*****				
Daily Min.	2.480	*****	*****	*****	*****	*****	*****	6.94	*****	*****	*****	*****				
Month Avg.	<b>2.765</b>	1.84	41.75	3.38	76.63	0.13	0.12	7.31	8.83	13	5.9	*****				



## 7.0 ENERGY CONSUMPTION

### 7.1 ELECTRICAL OVERVIEW

Due to the billing cycle timing, all electrical data in the MOR will be one month behind. The following data is for electrical consumption during the **March 2022** operating period.

The department used a total of **155,644 KWH** for the month of Mar. 2022. Of this total, the lift stations accounted for **11.7%**, using **16,322 KWH**. The Main Plant accounted for the remaining **139,322 KWH**. The KWH/ MG treated was **1,483** for the month, which is **14.2%** lower than the previous 12-month average of **1,349 KWH/MG**. The KWH/Lb. BOD Removed was **1.29 KWH/Lb.** for the month, which is **23%** lower than the previous 12-month average of **1.37 KWH/Lb.**

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	2.61	81.02	99,000	1,222	106,715	0.93	186	189	15,528	145,728
May '21	2.43	72.83	111,600	1,532	114,694	0.97	219	228	12,161	111,161
Jun '21	3.43	106.47	125,400	1,178	70,944	1.77	222	249	12,858	124,458
July '21	2.91	90.06	132,600	1,472	92,787	1.43	249	255	13,555	138,955
Aug '21	3.05	91.41	110,400	1,208	69,519	1.59	204	231	13,316	145,916
Sep '21	3.18	98.51	107,100	1,087	90,595	1.18	231	234	11,923	122,323
Oct '21	3.12	93.74	132,900	1,418	65,739	2.02	201	216	13,538	120,638
Nov '21	2.52	78.08	120,600	1,545	109,345	1.1	225	213	17,164	150,064
Dec '21	2.75	85.26	139,500	1,636	118,805	1.17	234	264	15,850	155,350
Jan '22	4.06	113.62	142,500	1,254	116,417	1.22	222	261	22,069	164,569
Feb '22	3.43	106.19	122,400	1,153	117,284	1.04	198	222	19,576	141,976
Mar '22	2.77	82.96	123,000	1,483	115,947	1.06	198	204	16,322	139,322
Average	3.02	91.68	122,250	1,349	99,066	1.29	216	231	15,322	138,372

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	2,812	5,000	191	459	1,088	910	1,297	272	1,725	63	65	1,490	156	15,528
May '21	2,384	3,800	144	319	1,027	665	858	175	1,330	52	57	1,247	103	12,161
Jun '21	2,809	4,300	177	335	887	362	901	253	1,719	65	62	883	105	12,858
July '21	2,969	4,800	159	415	987	347	1,112	152	1,454	54	62	914	130	13,555
Aug '21	2,740	4,700	170	486	1,044	344	892	159	1,630	58	62	908	123	13,316
Sep '21	2,648	3,900	150	421	885	397	836	185	1,395	52	53	892	109	11,923
Oct '21	2,754	4,000	179	529	908	697	1,142	225	1,667	49	57	1,215	116	13,538
Nov '21	3,279	4,900	188	654	1,244	970	1,416	363	2,116	61	70	1,666	237	17,164
Dec '21	3,246	4,600	187	554	1,270	854	1,264	309	1,742	56	58	1,501	209	15,850
Jan '22	5,072	6,800	230	438	1,573	1,185	1,605	373	2,434	59	68	1,989	243	22,069
Feb '22	3,783	6,200	194	515	1,647	946	1,683	319	2,259	55	61	1,717	197	19,576
Mar '22	2,995	5,100	246	434	1,260	851	1,353	283	1,915	58	67	1,524	236	16,322
Average	3,124	4,842	185	463	1,152	711	1,197	256	1,782	57	62	1,329	164	15,322

## 8.0 MAINTENANCE

### 8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
<b>Preventative Maintenance</b>	<b>167</b>	<b>680</b>
<b>Corrective Maintenance</b>	<b>8</b>	<b>24</b>
<b>Emergency Call Outs Total</b>	<b>3</b>	<b>17</b>

### 8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO #
1.	
2.	
3.	
4.	

### 8.3 SIGNIFICANT OPEN WORK ORDERS

CM Description	WO #
<b>Facility Fire Alarm Repair</b>	20240 & 20241
<b>Influent Pump #1 (Spare) Rebuild</b>	20248
<b>Lime Unloader #3 Corrective</b>	13568
<b>Hingham South Pump #1 Replacement</b>	17427

### 8.4 EMERGENCY CALL OUTS FOR THE MONTH

Type	Total this Month	Total this Year
<b>Sewer Back Up / Collection System</b>	0	5
<b>Pump Station</b>	3	5
<b>Plant</b>	0	0
<b>Odor</b>	0	0
<b>Power Outages</b>	0	0
<b>Total:</b>	<b>3</b>	<b>10</b>

## 8.5 INSPECTIONS / ANNUAL PMS COMPLETED DURING THE MONTH

1. All pump station alarms checked
2. Spruce probe 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	0	3
Sewer Back Up	0	5

## 8.7 WORK ORDER STATISTICS

There were **86.32** total reported maintenance hours during the month. Of this total, outside contractors accounted for **6%** with **5** hours recorded.

