

# Monthly Operating Report

*JULY 2022*



***Rockland, MA WWTP***





August 12, 2022

Mr. David P. Taylor  
Rockland Interim Sewer Superintendent  
587 Rear Summer Street  
Rockland, MA 02370

RE: Rockland Wastewater Facility  
Monthly Report—July 2022

Dear Mr. Taylor,

Please see the enclosed July 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  
Daniel Duross  
Sherri Vallie

# JULY 2022 MONTHLY OPERATING REPORT

## 1. SUMMARY:

- 1) The facility will be reporting **0** exceedance for the month of July 2022
- 2) There was **0** lost time / first aid injuries throughout the month
- 3) The facility treated a total of **53.900** Million Gallons. The average daily flow was **1.739** MGD
- 4) The total rainfall for this reporting period was **0.91"**
- 5) I&I Work is ongoing
- 6) **161** work orders were closed in June, with **13** as corrective maintenance work order and **5** 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 07/31/2022										
		Hoisting		Wastewater			NEWEA Collections			NEWEA Laboratory
Employee	Title	1C Forklift	1B Boom Truck & Forklift	3M	5C	7C	I	II	IV	I
Richard Kotouch	Project Manager					X			X	
Megan Kelly-Lynch	Asst. Project Manager	X				X				
Steven Butts	Lab Technician					X				X
Charles Amaral	Maintenance Foreman				X			X		
Garry Murrill	Operator				X			X		
Maxwell 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.

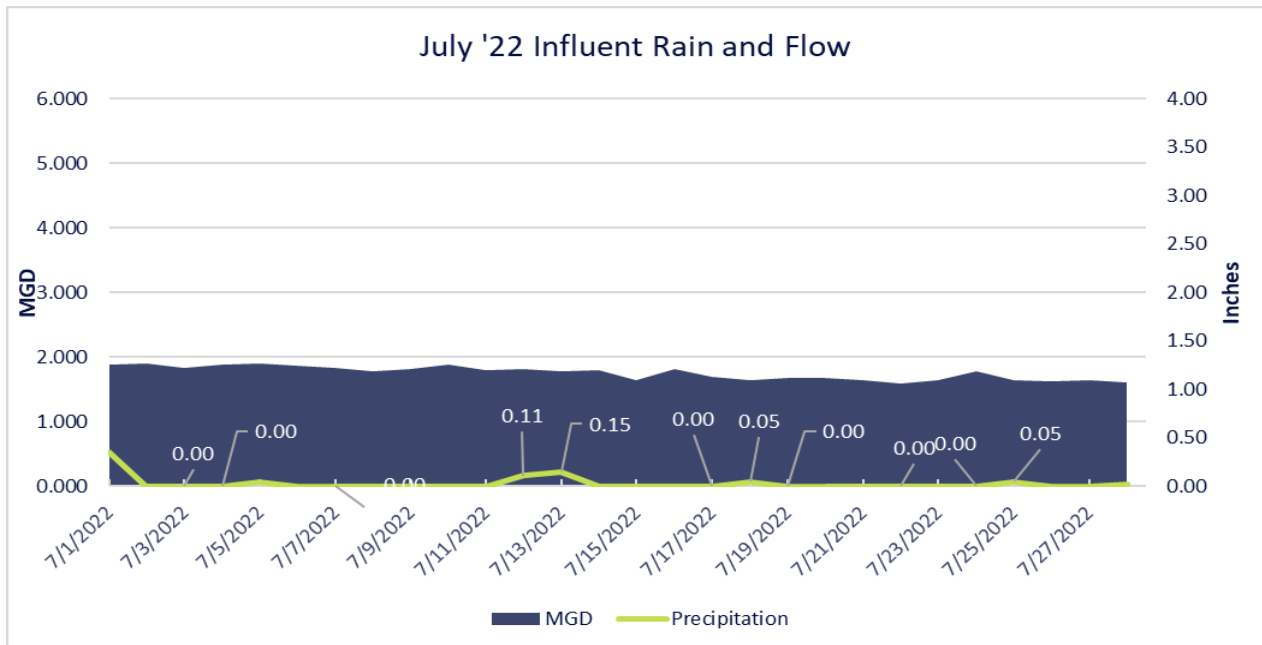
Throughout the COVID-19 (Coronavirus) pandemic in an attempt to continue to serve the Town of Rockland with reliable operations and protect the staff of the Rockland team, Veolia has implemented numerous procedures to ensure continuity of the operations. As the COVID-19 Delta variant and Omicron rates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

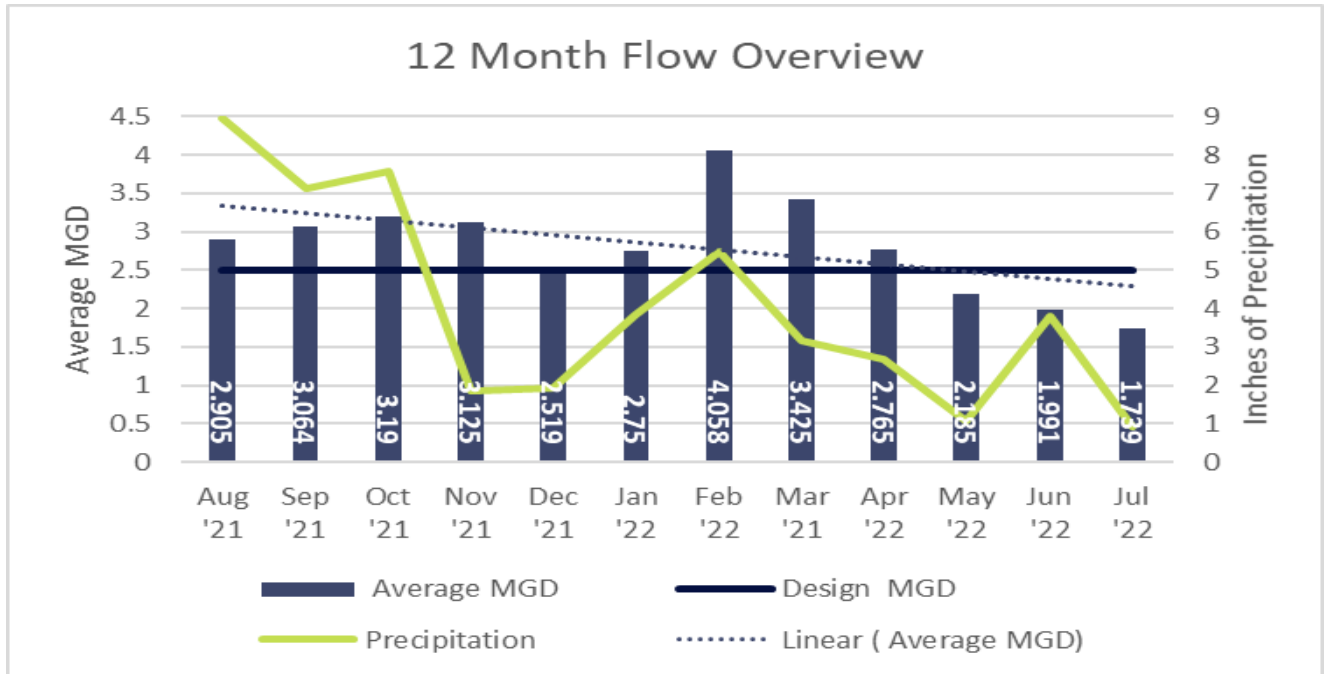
All essential personnel, contractor's and visitor's are screened before entering the premises if they have Covid like symptoms or have been exposed to someone having Covid. Use of common areas/dining areas, in-person meetings and training are now permitted.

### 4 FLOWS AND LOADINGS:

#### 4.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **53.900** MG during the month. The daily average flow was **1.739** MGD. This was **1.696** MGD less than the previous July monthly average, which was recorded at **3.435** MGD. The highest daily flow was recorded on July 2 and 5 as **1.900** MGD. The lowest daily flow was recorded on July 30 as **1.550** MGD.
- The highest **peak** flow was recorded on July 9 as **2.440** MGD. The lowest instantaneous flow was **0.550** MGD, recorded July 26.
- A total of **0.91** of precipitation was received at the facility. The highest single day precipitation total was recorded on July 1 as **0.36"**
- The coldest day was July 9 at **58°F**. The warmest day was July 24 at **99°F**.





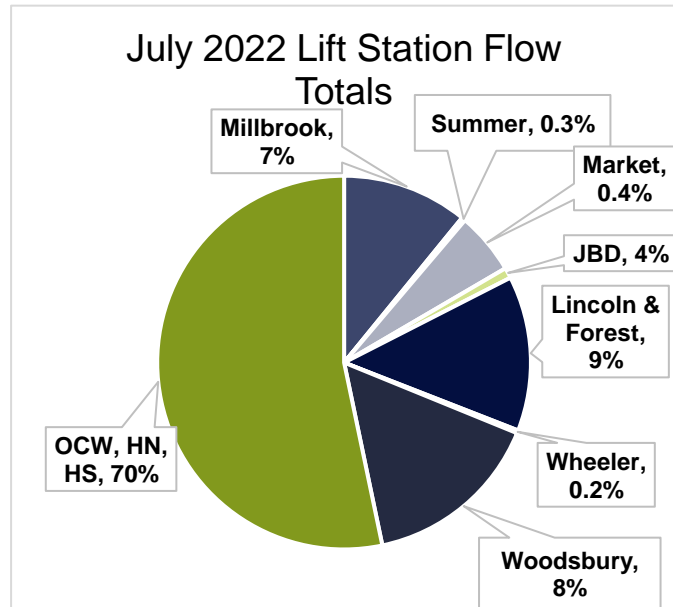
#### 4.1 INFLUENT BOD AND TSS LOADING

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
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	2.750	3,909	3,676	2.931	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
May '22	2.185	3,809	4,229	2.988	3,326	3,909
Jun '22	1.991	4,343	4,006	2.952	3,365	3,975
Jul '22	1.739	3,316	3,546	2.810	3,446	3,990

## 4.2 LIFT STATION FLOWS

The lift stations accounted for **12,055,326** gallons throughout the month, **22%** 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.

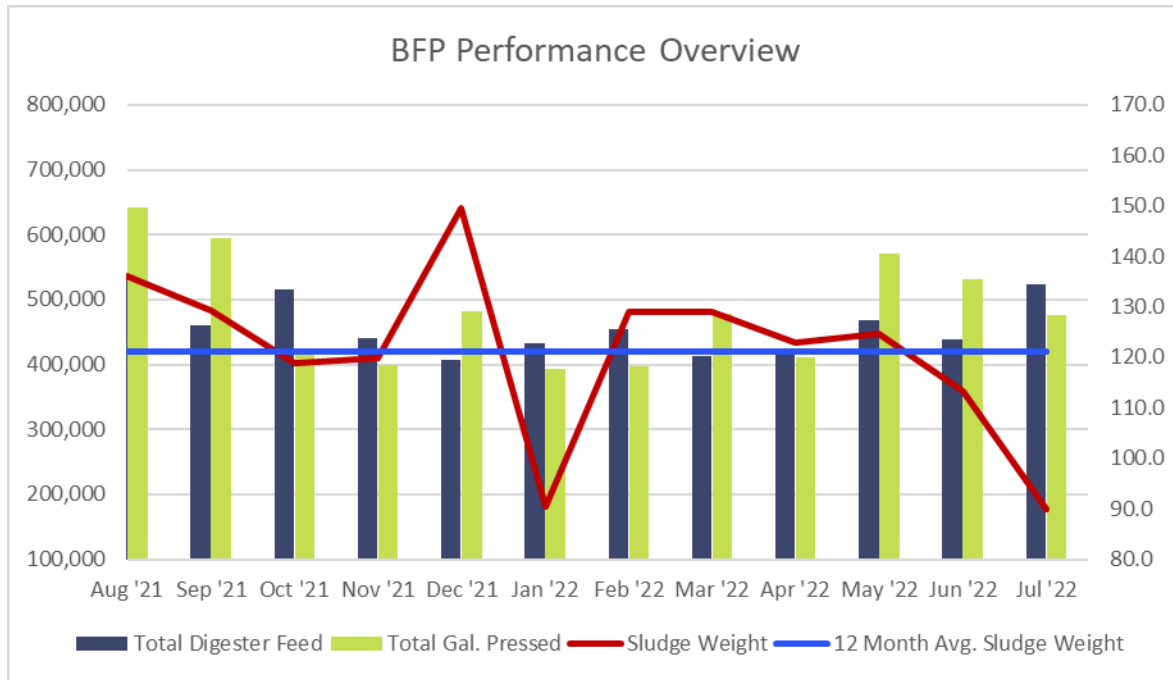
Total Flows for July 2022	
Station	Total Gallons
Millbrook	867,240
Summer	37,920
Market	443,850
Butternut	6,360
John Burke	50,976
Lincoln, Forest	1,134,000
Wheeler	18,180
Woodsbury	1,018,800
OCW, HN, HS	8,478,000
<b>Total:</b>	<b>12,055,326</b>



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
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	27,975	1,223	14,318	1,644	2,110	36,581	586	32,865	51,755	73,335	273,484
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	31,738	937	15,677	2,655	2,400	39,155	726	45,348	53,110	144,540	155,380
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
May '22	31,738	937	15,677	2,655	2,400	39,155	726	45,348	53,110	142,142	155,380
Jun '22	33,073	994	15,640	1,872	2,520	41,300	828	45,060	53,900	144,540	159,480
Jul '22	27,975	1,223	14,318	1,644	2,110	36,581	586	32,865	51,755	73,335	273,484
<b>Average</b>	<b>31,298</b>	<b>989</b>	<b>15,777</b>	<b>2,227</b>	<b>2,623</b>	<b>42,702</b>	<b>741</b>	<b>44,112</b>	<b>56,816</b>	<b>140,828</b>	<b>190,204</b>

## 5.0 SOLIDS HANDLING 6.1 REGULATORY REPORTING

The BFP was operated a total of **138** hours this month and a total of **525,233** gallons were processed producing **90** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **2.04%** and the BFP Cake average percent solids were **22.05%**. 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
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	
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	90.5	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	533.0	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	
May '22	174.3	468,083	571,658	154.1	124.7	1.89	21.14	8.00	
June '22	151.3	439,371	530,756	132.9	113.3	2.26	21.92	6.00	
July '22	137.5	524,233	475,614	119.6	89.8	2.04	22.05	5.00	
<b>Annual Total</b>	<b>2,102</b>	<b>5,514,753</b>	<b>5,791,226</b>	<b>1,445</b>	<b>1,453</b>	<b>****</b>	<b>****</b>	<b>76</b>	<b>0.00</b>
<b>Avg.</b>	<b>175</b>	<b>459,563</b>	<b>482,602</b>	<b>120</b>	<b>121</b>	<b>2.06</b>	<b>20.34</b>	<b>6.3</b>	<b>****</b>

## 6.0 ENVIRONMENTAL COMPLIANCE

### 6.1 REGULATORY REPORTING

1. The EPA and MADEP July 22 NETDMR was submitted on the CDX website on 08/11/2022

### 6.2 NPDES COMPLIANCE

The facility will be reporting (0) exceedance(s) for the month of July 2022

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, Jul 01	1.890							7.60				8.6	Oct. 1 - April 30	20 Mg/L	20 Mg/L	30 Mg/l
Sat, Jul 02	1.900							7.64				8.6		417 lbs/day	417 lbs/Day	626 lbs/Day
Sun Jul 03	1.830							7.65	56			8.2	May 1 - Sept. 30	6 Mg/L	6 Mg/L	10Mg/L
Mon, Jul 04	1.890							7.66	110			8.4		125 lbs/Day	125 lbs/Day	209 lbs/day
Tues, Jul 05	1.900	2.0	32	2.0	32	0.23	0.04	7.60	380	5	4.4	8.3	<b>TSS</b>			
Wed, Jul 06	1.860							7.57				8.2	Oct. 1 - April 30	20 Mg/L	20 Mg/L	30 Mg/L
Thu, Jul 07	1.830	2.0	31	2.2	34	0.10	0.05	7.52				8.2		417 lbs/Day	417 lbs/Day	626 lbs/Day
Fri, Jul 08	1.780							7.63				8.3	May 1 - Sept. 30	10 Mg/L	10 Mg/L	15Mg/L
Sat, Jul 09	1.820							7.44				8.7		209 lbs/Day	209 lbs/Day	313 lbs/day
Sun Jul 10	1.880							7.50	29			8.8	<b>NH3</b>			
Mon, Jul 11	1.800							7.53	52			8.6	Oct.1 - Mar. 31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L
Tues, Jul 12	1.820	2.0	30	2.0	30	0.10	0.02	7.52	60			8.6				
Wed, Jul 13	1.780							7.50				8.3	Apr. 1 - May 31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l
Thu, Jul 14	1.790	2.0	30	2.0	30	0.53	0.02	7.50				8.4				
Fri, Jul 15	1.650							7.50				8.8	June 1 - Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L
Sat, Jul 16	1.820							7.42				8.1				
Sun Jul 17	1.700							7.50	44			8.2	<b>Total Phosphorus</b>			
Mon, Jul 18	1.650							7.50	190			7.8	Apr. 1 - Oct.31	0.2 Mg/L	*****	*****
Tues, Jul 19	1.680	2.4	34	6.0	84	0.44	0.12	7.48	132			8.6				
Wed, Jul 20	1.670							7.60				7.6	Nov. 1 - Mar. 31	1.0 Mg/L	*****	*****
Thu, Jul 21	1.640	2.0	27	2.0	27	0.10	0.11	7.64				9.1				
Fri, Jul 22	1.590							7.75				8.2	<b>Ph</b>			
Sat, Jul 23	1.640							7.60				8.7	6.5 - 8.3			
Sun Jul 24	1.780							7.68	44			8.2	<b>Fecal</b>			
Mon, Jul 25	1.640							7.71	190			7.9	*****	200 CFU/100ml	*****	400 CFU/100ml
Tues, Jul 26	1.620	2.0	27	8.0	108	0.15	0.10	7.61	132			7.9	<b>Aluminum</b>			
Wed, Jul 27	1.650							7.52				8.1	*****	88 ug/l	*****	*****
Thu, Jul 28	1.600	2.0	27	2.2	29	0.10	0.08	7.41				8.3	<b>Copper</b>			
Fri, Jul 29	1.580							7.39				7.6				
Sat, Jul 30	1.550							7.34				7.5				
Sun Jul 31	1.670							7.39	13			7.8	*****	12 ug/l	*****	*****
Daily Max	2.180	3.90	66.03	4.00	67.72	1.10	0.12	7.77	200	*****	*****	*****	May 1 - Sept. 30	> 7.4 mg/L		
Daily Min.	1.820	*****	*****	*****	*****	*****	*****	7.20	*****	*****	*****	7.50	<b>Plant Flow</b>			
Month Avg.	1.991	2.46	40.89	2.69	44.67	0.38	0.08	7.45	50.583	6	6.0	*****	2.5 MGD			



## 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 **June 2022** operating period.

The department used a total of **127,023 KWH** for the month of June 2022. Of this total, the lift stations accounted for **9.5%**, using **12,123 KWH**. The Main Plant accounted for the remaining **114,900 KWH**. The KWH/ MG treated was **1,923** for the month, which is **27.25%** higher than the previous 12-month average of **1,399 KWH/MG**. The KWH/Lb. BOD Removed was **0.89 KWH/Lb.** for the month, which is **31.5%** lower than the previous 12-month average of **1.30 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
Jul '21	3.43	106.47	125,400	1,178	70,944	1.77	222	249	12,858	138,258
Aug '21	2.91	90.06	132,600	1,472	92,787	1.43	249	255	13,555	145,916
Sep '21	3.05	91.41	110,400	1,208	69,519	1.59	204	231	13,316	122,323
Oct '21	3.18	98.51	107,100	1,087	90,595	1.18	231	234	11,923	120,638
Nov '21	3.12	93.74	132,900	1,418	65,739	2.02	201	216	13,538	150,064
Dec '21	2.52	78.08	120,600	1,545	109,345	1.10	201	213	17,164	136,450
Jan '22	2.75	85.26	139,500	1,636	118,805	1.17	225	264	15,850	161,569
Feb '22	4.06	113.62	142,500	1,254	116,417	1.22	234	261	22,069	164,569
Mar '22	3.43	106.19	122,400	1,153	117,284	1.04	222	222	19,576	141,976
Apr '22	2.77	82.96	123,000	1,483	115,947	1.06	198	204	16,322	139,322
May '22	2.19	67.74	123,000	1,816	116,352	1.06	183	198	15,055	138,055
June '22	1.99	59.74	114,900	1,923	129,049	0.89	189	201	12,123	127,023
Average	2.95	89.48	124,525	1,431	101,065	1.29	213	229	15,279	140,514

#### Monthly Lift Station KWH

Month	Hingham North	Hingham South	Spruce	Butternut	Old Country Way	Market	Woodsbury	Lincoln	Forest	Wheeler	Summer	Milbrook	John Burke	Total
Jul '21	2,809	4,300	177	335	887	362	901	253	1,719	65	62	883	105	12,858
Aug '21	2,969	4,800	159	415	987	347	1,112	152	1,454	54	62	914	130	13,555
Sep '21	2,740	4,700	170	486	1,044	344	892	159	1,630	58	62	908	123	13,316
Oct '21	2,648	3,900	150	421	885	397	836	185	1,395	52	53	892	109	11,923
Nov '21	2,754	4,000	179	529	908	697	1,142	225	1,667	49	57	1,215	116	13,538
Dec '21	3,279	4,900	188	654	1,244	970	1,416	363	2,116	61	70	1,666	237	17,164
Jan '22	3,246	4,600	187	554	1,270	854	1,264	309	1,742	56	58	1,501	209	15,850
Feb '22	5,072	6,800	230	438	1,573	1,185	1,605	373	2,434	59	68	1,989	243	22,069
Mar '22	3,783	6,200	194	515	1,647	946	1,683	319	2,259	55	61	1,717	197	19,576
Apr '22	2,995	5,100	246	434	1,260	851	1,353	283	1,915	58	67	1,524	236	16,322
May '22	3,149	5,000	215	161	257	964	1,332	280	1,809	72	69	1,562	185	15,055
June '22	2,540	4,300	109	63	853	347	892	168	1,371	59	74	1,234	113	12,123
Average	3,165	4,883	184	417	1,068	689	1,202	256	1,793	58	64	1,334	167	15,279

## 8.0 MAINTENANCE

### 8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
<b>Preventative Maintenance</b>	<b>193</b>	<b>1219</b>
<b>Corrective Maintenance</b>	<b>28</b>	<b>90</b>
<b>Emergency Call Outs Total</b>	<b>5</b>	<b>30</b>

### 8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO #

### 8.3 SIGNIFICANT OPEN WORK ORDERS

CM Description	WO #
<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>	2	9
<b>Plant</b>	2	3
<b>Odor</b>	0	0
<b>Power Outages</b>	2	6
<b>Total:</b>	<b>6</b>	<b>14</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
5. Sprinkler System inspected by Mass Fire Prevention
6. Cranes Aerial Truck Service inspected the boom truck and the forklift

## 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	50	53
Sewer Back Up	0	5

## 8.7 WORK ORDER STATISTICS

There were **140.21** total reported maintenance hours during the month. Of this total, outside contractors accounted for **34%** with **47** hours recorded.

