

# Monthly Operating Report

**OCTOBER 2022**



***Rockland, MA WWTP***





November 15, 2022

Mr. Chuck Heshion

Rockland Sewer Commission Chairman

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—October 2022

Dear Mr. Heshion,

I have enclosed October's 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:

Daniel Duross

Sherri Vallie

# OCTOBER 2022 MONTHLY OPERATING REPORT

## 1. SUMMARY:

- 1) The facility will be reporting **0** exceedance for the month of October 2022
- 2) There was **0** lost time / first aid injuries throughout the month
- 3) The facility treated a total of **76.910** Million Gallons. The average daily flow was **2.481** MGD
- 4) The total rainfall for this reporting period was **6.57"**
- 5) I&I Work is ongoing
- 6) **172** work orders were closed in October, with **0** as corrective maintenance work order and **2** 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 10/31/2022										
		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						
Cristian Ryan	Operator									
Shaun Chaponis (Part Time Weekends)	Operator				X		X			

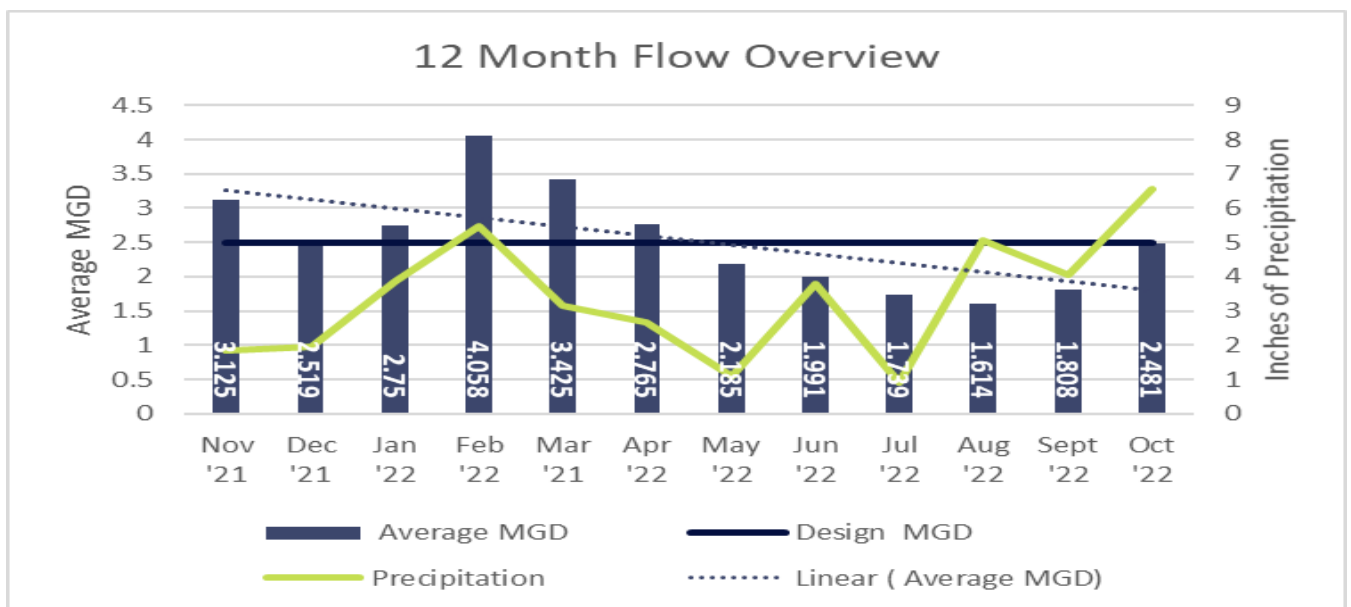
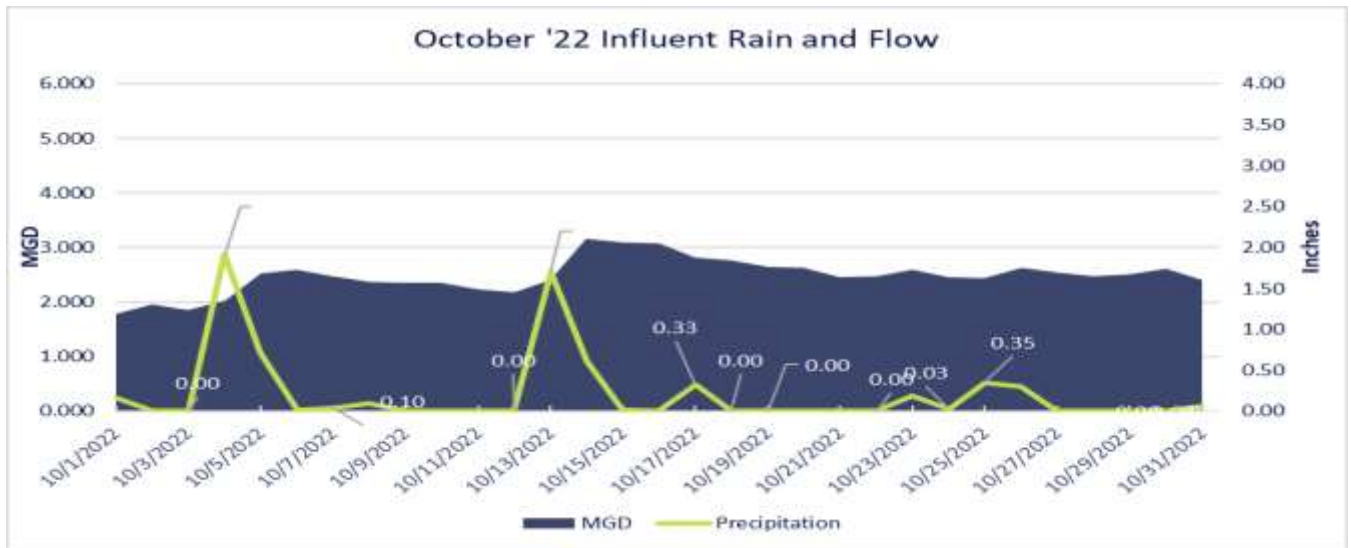
## 3. EMPLOYEE HEALTH AND SAFETY:

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 **76.910** MGD during the month. The daily average flow was **2.481** MGD. This was **0.709** MGD less than the previous October monthly average, which was recorded at **3.190** MGD. The highest daily flow was recorded on October 14th as **3.170** MGD. The lowest daily flow was recorded on October 1st as **1.780** MGD.
- The highest **peak** flow was recorded on October 16th as **3.640** MGD. The lowest instantaneous flow was **0.960** MGD, recorded October 5th.
- A total of **6.57"** of precipitation was received at the facility. The highest single day precipitation total was recorded on October 4th as **1.92"**
- The coldest day was October 30th at **30°F**. The warmest day was October 7th at **76°F**.



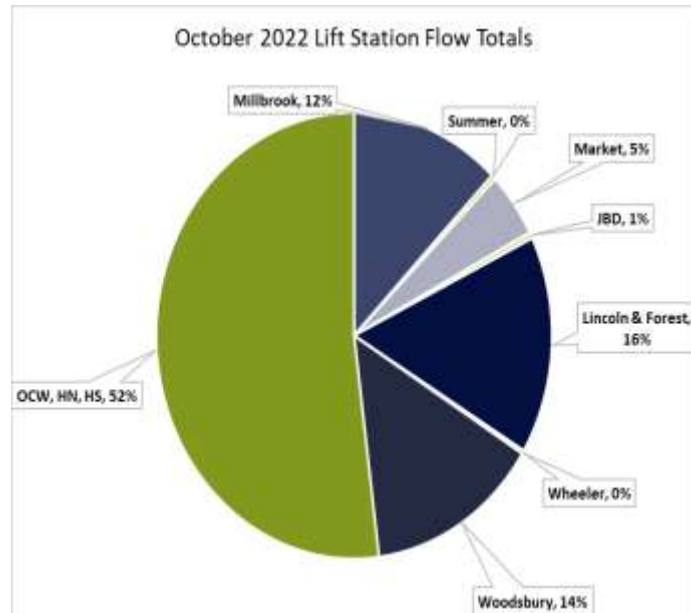
4.1 INFLUENT BOD AND TSS LOADING

<b>ROCKLAND FLOW AND LOADINGS TRACKING</b>						
<b>Month/Yr</b>	<b>Inf. Flow</b>	<b>Inf BOD</b>	<b>Inf. TSS</b>	<b>Inf. Flow Mov. Avg.</b>	<b>Inf. BOD Mov. Avg.</b>	<b>Inf. TSS Mov. Avg.</b>
	<b>MGD</b>	<b>LBS</b>	<b>LBS</b>	<b>MGD</b>	<b>LBS</b>	<b>LBS</b>
<b>Nov '21</b>	3.125	2,270	3,500	3.015	2,963	3,774
<b>Dec '21</b>	2.519	3,597	3,699	2.938	3,019	3,738
<b>Jan '22</b>	2.75	3,909	3,676	2.931	3,103	3,774
<b>Feb '22</b>	4.058	3,910	3,913	2.993	3,158	3,755
<b>Mar '22</b>	3.425	3,887	4,456	3.055	3,240	3,855
<b>Apr '22</b>	2.765	3,907	4,051	3.024	3,299	3,891
<b>May '22</b>	2.185	3,809	4,229	2.988	3,326	3,909
<b>Jun'22</b>	1.991	4,343	4,006	2.952	3,365	3,975
<b>Jul'22</b>	1.739	3,316	3,546	2.810	3,446	3,990
<b>Aug'22</b>	1.614	3,313	3,758	2.702	3,469	3,969
<b>Sep'22</b>	1.808	3,716	3,838	2.597	3,581	3,880
<b>Oct'22</b>	2.481	3,323	4,180	2.538	3,608	3,904

## 4.2 LIFT STATION FLOWS

The lift stations accounted for **8,317,863** gallons throughout the month, **8%** 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 October 2022		
Station	Total Gallons	
Millbrook	1,181,520	
Summer	33,840	
Market	457,500	
Butternut	24,000	
John Burke	62,160	
Lincoln, Forest	1,524,600	
Wheeler	23,040	
Woodsbury	1,360,800	
OCW, HN, HS	5,011,203	
<b>Total:</b>	<b>8,317,863</b>	

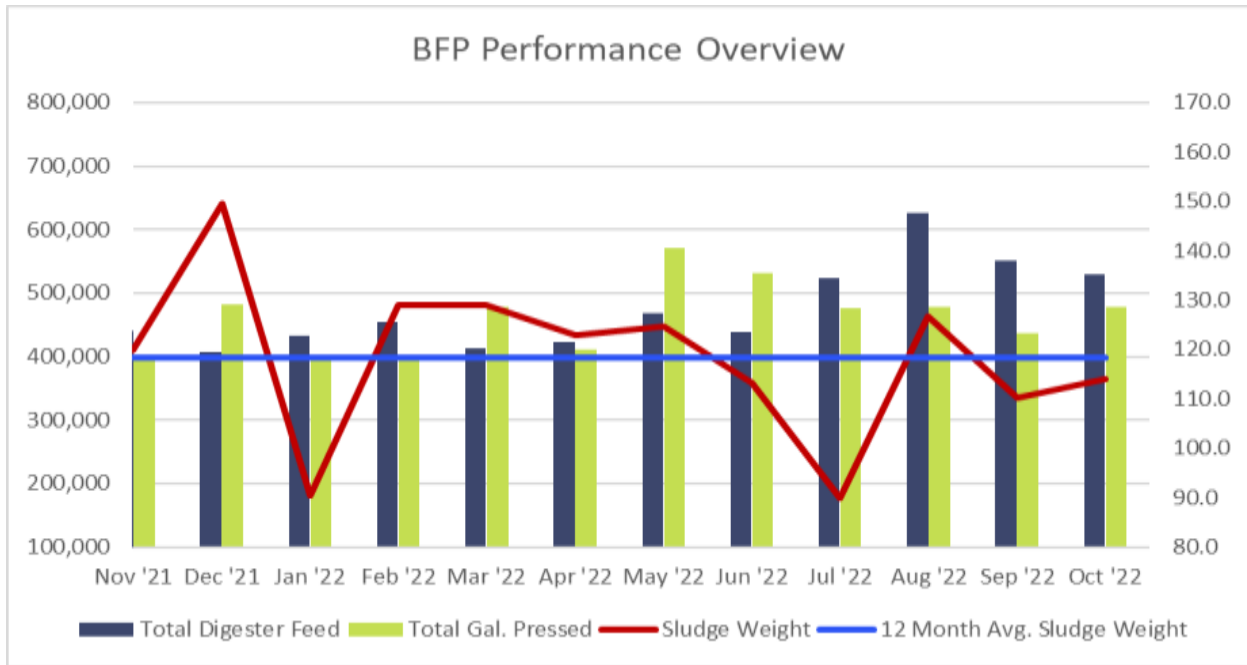


### Lift Station Monthly Average Daily Flows (GPD)

Month	Millbrook	Summer	Market	Butternut	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
Nov '21	33,156	920	16,150	Old System	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	
Aug '22	31,459	1,076	15,581	695	2,145	2,439	40,442	703	38,265	44,100	134,843	113,574
Sep '22	29,628	976	15,400	408	1,816	2,389	45,990	732	45,660	42,350	134,460	141,480
Oct '22	38,114	1,092	14,758	774	1,386	2,419	49,181	743	43,897	46,810	149,807	161,652
<b>Average</b>	<b>32,176</b>	<b>988</b>	<b>15,571</b>	<b>1,877</b>	<b>2,109</b>	<b>2,578</b>	<b>42,118</b>	<b>746</b>	<b>44,584</b>	<b>53,119</b>	<b>141,285</b>	<b>170,328</b>

## 5.0 SOLIDS HANDLING 6.1 REGULATORY REPORTING

The BFP was operated a total of **154.30** hours this month and a total of **478,215** gallons were processed producing **113.99** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **2.48%** and the BFP Cake average percent solids were **22.86%**. 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
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	
Aug '22	152.6	626,023	477,850	132.8	126.8	2.15	23.45	7.00	
Sep '22	140.6	550,718	436,908	118.4	110.0	2.46	24.43	7.00	
Oct '22	154.3	528,474	478,215	142.4	114.0	2.48	22.86	6.00	
Annual Total	2,132	5,706,410	5,528,304	1,490	1,419	****	****	78	0.00
Avg.	178	475,534	460,692	124	118	2.12	20.95	6.5	****

## 6.0 ENVIRONMENTAL COMPLIANCE

### 6.1 REGULATORY REPORTING

1. The EPA and MADEP October 22 NETDMR was submitted on the CDX website on 11/14/2022

### 6.2 NPDES COMPLIANCE

The facility will be reporting (0) exceedance(s) for the month of October 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				
Sat Oct 1	1.780							7.06					Oct. 1 - April 30	20 Mg/L 417 lbs/day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day
Sun Oct 2	1.960							7.37	34							
Mon Oct 3	1.860							7.46	98							
Tues Oct 4	2.030	2.0	34	6.3	107	0.10	0.13	7.44	89	23	5.2		May1 - Sept. 30	6 Mg/L 125 lbs/Day	6 Mg/L 125 lbs/Day	10Mg/L 209 lbs/day
Wed Oct 5	2.520							7.46								
Thu Oct 6	2.590	2.4	52	2.0	43	0.11	0.10	7.37					Oct. 1 - April 30	20 Mg/L 417 lbs/Day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day
Fri Oct 7	2.470							7.23								
Sat Oct 8	2.370							7.16					May1 - Sept. 30	10 Mg/L 209 lbs/Day	10 Mg/L 209 lbs/Day	15Mg/L 313 lbs/day
Sun Oct 9	2.360							7.10	60							
Mon Oct 10	2.360							7.09	49				<b>NH3</b>			
Tues Oct 11	2.240	2.0	37	2.5	47	0.10	0.07	7.10	210				Oct.1 - Mar. 31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L
Wed Oct 12	2.190							6.98								
Thu Oct 13	2.400	2.0	40	4.0	80	0.13	0.09	7.08					Apr. 1 - May 31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l
Fri Oct 14	3.170							6.90								
Sat Oct 15	3.090							7.03					June1 - Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L
Sun Oct 16	3.080							7.07	74							
Mon Oct 17	2.820							7.26	204				<b>Total Phosphorus</b>			
Tues Oct 18	2.770	2.0	46	4.7	109	0.11	0.11	6.82	76				Apr.1 - Oct.31	0.2 Mg/L	*****	*****
Wed Oct 19	2.650							6.60								
Thu Oct 20	2.630	2.0	44	3.7	81	0.48	0.09	7.17					Nov. 1 - Mar. 31	1.0 Mg/L	*****	*****
Fri Oct 21	2.450							6.88								
Sat Oct 22	2.470							6.96					<b>Ph</b>			
Sun Oct 23	2.590							7.24	84				6.5 - 8.3			
Mon Oct 24	2.450							7.48	382				<b>Fecal</b>			
Tues Oct 25	2.440	2.0	41	4.3	88	0.46	0.08	7.58	112				*****	200 CFU/100ml	*****	400 CFU/100ml
Wed Oct 26	2.630							7.55					<b>Aluminum</b>			
Thu Oct 27	2.550	2.0	43	2.5	53	0.10	0.01	7.41					*****	88 ug/l	*****	*****
Fri Oct 28	2.470							7.44					<b>Copper</b>			
Sat Oct 29	2.500							7.45								
Sun Oct 30	2.610							7.39	26							
Mon Oct 31	2.410							7.61	374							
Daily Max	3.170	2.40	51.84	6.30	108.58	0.48	0.13	7.61	382	*****	*****	*****	May 1 - Sept. 30	> 7.4 mg/L		
Daily Min.	1.780	*****	*****	*****	*****	*****	*****	6.60	*****	*****	*****	7.70		<b>Plant Flow</b>		
Month Avg.	2.481	2.05	42.13	3.75	76.00	0.20	0.09	7.22	133.714	23	5.2	*****	2.5 MGD			



## 7.0 ENERGY CONSUMPTION

### 7.1 ELECTRICAL OVERVIEW

The department used a total of **115,777 KWH** for the month of October 2022. Of this total, the lift stations accounted for **8.5%**, using **9,877 KWH**. The Main Plant accounted for the remaining **105,900 KWH**. The KWH/ MG treated was **1,525** for the month, which is **28.72%** higher than the previous 12-month average of **1,087 KWH/MG**. The KWH/Lb. BOD Removed was **1.15 KWH/Lb.** for the month, which is **2.54%** lower than the previous 12-month average of **1.18 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
Nov '21	3.12	93.74	132,900	1,418	65,739	2.02	201	216	13,538	120,638
Dec '21	2.52	78.08	120,600	1,545	109,345	1.10	201	213	17,164	150,064
Jan '22	2.75	85.26	139,500	1,636	118,805	1.17	225	264	15,850	136,450
Feb '22	4.06	113.62	142,500	1,254	116,417	1.22	234	261	22,069	161,569
Mar '22	3.43	106.19	122,400	1,153	117,284	1.04	222	222	19,576	162,076
Apr '22	2.77	82.96	123,000	1,483	115,947	1.06	198	204	16,322	138,722
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	12,380	135,380
July '22	1.74	53.90	106,800	1,981	101,883	1.05	198	216	12,123	127,023
Aug '22	1.61	50.02	123,300	2,465	101,859	1.21	177	195	9,326	116,126
Sept '22	1.81	54.23	105,900	1,953	110,510	0.96	186	210	10,344	133,644
Oct '22	2.48	76.91	117,300	1,525	101,712	1.15	195	201	9,877	115,777
Average	2.54	76.87	122,675	1,679	108,742	1.16	201	217	14,469	136,294

Monthly Lift Station KWH														
Month	Hingham North	Hingham South	Spruce	Butternut	Old Country Way	Market	Woodsbury	Lincoln	Forest	Wheeler	Summer	Milbrook	John Burke	Total
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	2,429	4,100	111	58	1,001	667	930	176	1,418	57	61	1,256	116	12,380
July '22	2,540	4,300	109	63	853	347	892	168	1,371	59	74	1,234	113	12,123
Aug '22	2,119	2,900	110	49	741	337	695	134	1,202	49	69	832	89	9,326
Sep '22	2,293	3,200	102	54	871	334	820	153	1,337	54	68	967	91	10,344
Oct '22	2,094	2,900	110	48	807	348	928	172	1,269	48	56	1,015	82	9,877
Average	2,979	4,500	165	296	1,036	708	1,172	246	1,712	56	65	1,373	160	14,469

## 8.0 MAINTENANCE

### 8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
<b>Preventative Maintenance</b>	<b>172</b>	<b>1742</b>
<b>Corrective Maintenance</b>	<b>13</b>	<b>109</b>
<b>Emergency Call Outs Total</b>	<b>2</b>	<b>34</b>

### 8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO #
<b>Pioneer Electric installed new leak detector for Influent Pump #1</b>	22526
<b>New England Generator Troubleshoot at Plant Generator</b>	22527
<b>EIS Installed Antenna located at contact chamber for SCADA</b>	22528
<b>Pioneer Electric disconnected pump at Lincoln Station</b>	22536
<b>New England Generator Troubleshoot at Millbrook Station Generator</b>	22537
<b>EIS Troubleshoot at Butternut</b>	22538
<b>Pioneer Electric installed Effluent Flow Meter Conduit</b>	22529
<b>Silverado dug trench for Flow Meter Conduit</b>	22534
<b>Seal &amp; Save Construction paved over the trench</b>	22535
<b>New England Environmental and EST installed New Effluent Flow Meter</b>	22530
<b>Pioneer Electric Replace Clarifier #1 Drive Motor</b>	22531
<b>EIS working on setting up bisulfite alarms to SCADA</b>	22532

### 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>	2	10
<b>Pump Station</b>	1	11
<b>Plant</b>	1	4
<b>Odor</b>	0	0
<b>Power Outages</b>	3	11
<b>Total:</b>	<b>7</b>	<b>32</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. Apollo Safety Quarterly inspection

## 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	95	285
Sewer Back Up	2	8

## 8.7 WORK ORDER STATISTICS

There were **122** total reported maintenance hours during the month. Of this total, outside contractors accounted for **37%** with **45** hours recorded.

