

Monthly Operating Report

FEBRUARY 2022



Rockland, MA WWTP





March 15, 2022

Mr. David P. Taylor

Rockland Interim Sewer Superintendent

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—February 2022

Dear Mr. Taylor,

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

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

Sincerely,

Rick Kotouch

SUEZ Project Manager

CC: Charles Heshion
Dan Duross

FEBRUARY 2022 MONTHLY OPERATING REPORT

1. SUMMARY:

- 1) The facility will be reporting **1** exceedances for the month of February 2022.
- 2) There were no lost time / first aid injuries throughout the month
- 3) The facility treated a total of **113.620** Million Gallons. The average daily flow was **4.058** MGD.
- 4) The total rainfall for this reporting period was **5.49"**.
- 5) I&I Work is ongoing
- 6) **163** work orders were closed in January, with **6** as corrective maintenance work orders, **3** of the 6 were emergency call outs, while **1** was related to the collection system.
- 7) New NPDES Permit was issued and received in November 2021.

2. STAFFING:

Current Employee Licenses as of 11/17/2021

		Hoisting		Wastewater			NEWEA Collections			NEWEA Laboratory
Employee	Title	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:

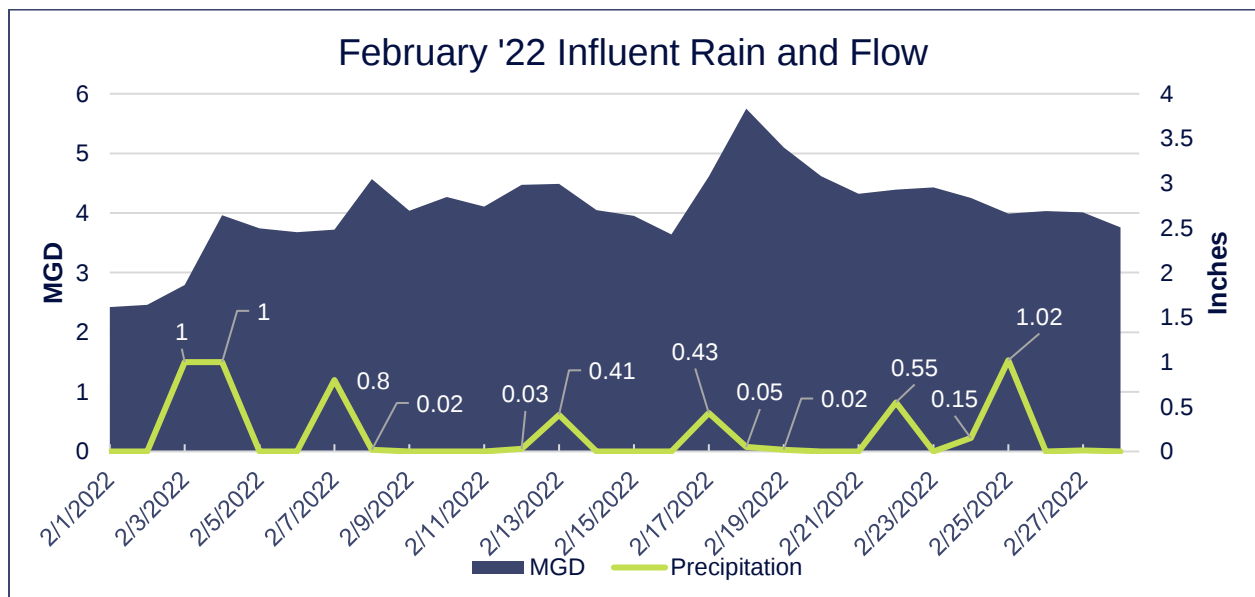
Throughout the COVID-19 (Coronavirus) pandemic in an attempt to continue to serve the Town of Rockland with reliable operations and protect the staff of the Rockland team, SUEZ has implemented numerous procedures to ensure continuity of the operations. As the COVID-19 Delta variant and Omicron rates decreases, SUEZ at the Rockland facility has downgraded to a Threat Level 1 guideline as follows:

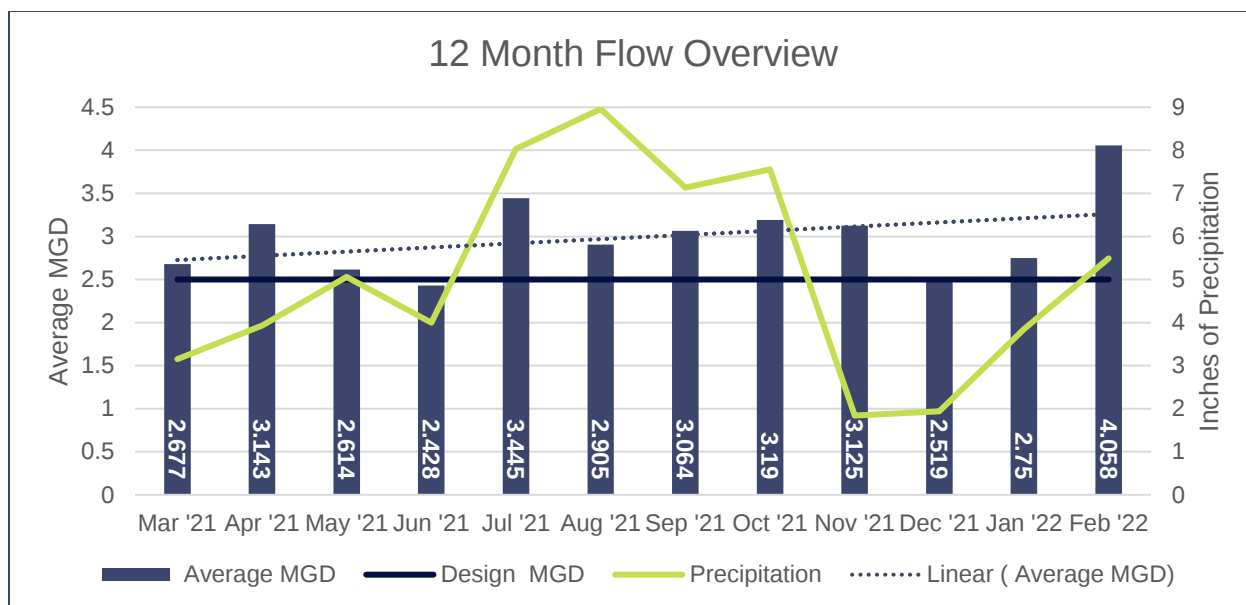
All essential personnel are required to be screened before entering the premises and meet the Covid visitor guidelines. Use of common areas/dining areas, in-person meetings and training are permitted, venue must accommodate social distancing and use of face coverings unless everyone is vaccinated.

4 FOWS AND LOADINGS:

4.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **113.620** MG during the month. The daily average flow was **4.058** MGD. This was **0.751** MGD greater than the previous February monthly average, which was recorded at **3.307** MGD. The highest **peak** flow was recorded on February 18 as **6.180** MGD. The lowest instantaneous flow was **1.150** MGD, recorded February 4.
- The highest daily flow was recorded on February 18 as **5.750** MGD. The lowest daily flow was recorded on February 1 as **2.420** MGD.
- A total of **5.49"** of precipitation was received at the facility. The highest single day precipitation total was recorded on February 25 as **1.02"**
- The coldest day was February 15 at **4°F**. The warmest day was February 23 at **64°F**.





4.1 INFLUENT BOD AND TSS LOADINGS

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
Mar '21	2.677	2,907	3,256	2.495	3,043	3,860
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	2.750	3,909	3,676	2.931	3,103	3,774
Feb '22	4.058	3,910	3,913	2.993	3,158	3,755

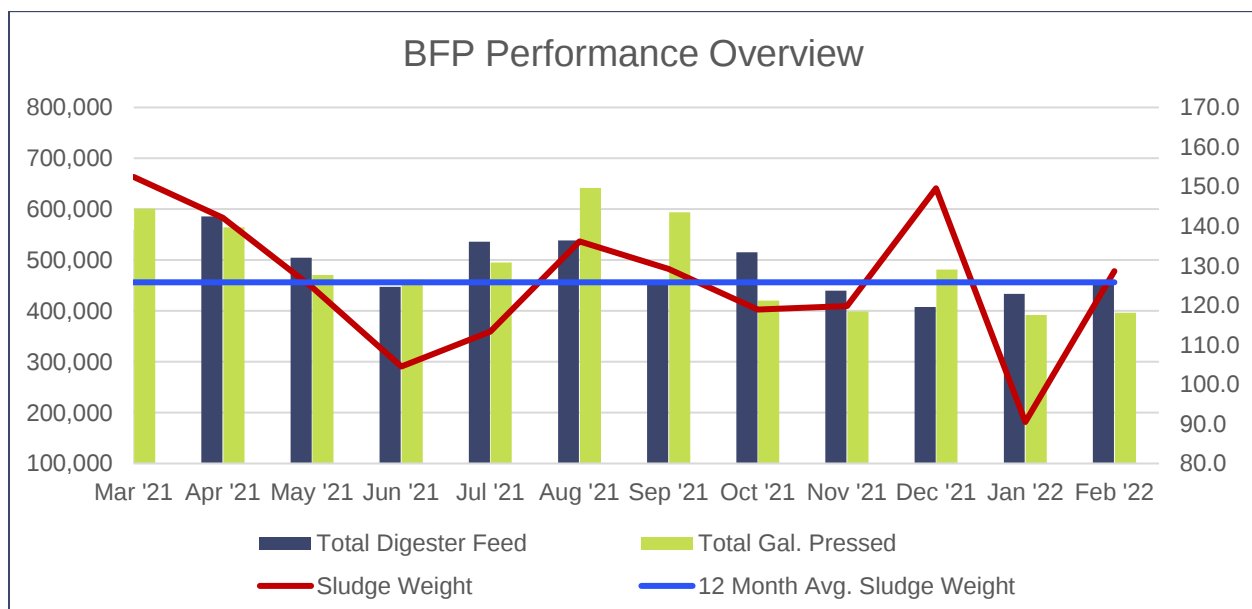
4.2 LIFT STATION FLOWS

Due to technical issues with the data collection system, the pump station estimated flow data was not available. Once this issue is corrected, the MOR will be updated accordingly.

5.0 SOLIDS HANDLING

The BFP was operated a total of **141** hours this month and a total of **396,361** gallons were processed producing **129** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **1.86%** and the BFP Cake average percent solids were **18.19%**. The digester feed to BFP differential was **41,411** gallons (overflow) for the month. 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
Mar '21	190.3	560,191	600,688	142.4	152.4	2.08	19.16	7.00	
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	90.5	1.86	18.19	6.00	
Feb '22	140.8	453,426	396,361	112.0	128.6	2.07	18.64	6.00	
Annual Total	1,774	5,881,894	5,915,800	1,360	1,510	****	****	79	4.00
Avg.	148	490,158	492,983	113	126	2.15	20.58	6.6	****



6.0 ENVIRONMENTAL COMPLIANCE

6.1 REGULATORY REPORTING

1. January 2022 EPA and MADEP NETDMR submitted on the CDX website on 03/10/2022
2. OSHA 300A posted on 02/01/2022
3. Tier II Emergency and Hazardous Chemical Inventory submitted online to the TIER II Manager and Rockland Fire Dept. Chief Scott Duffey on 02/07/2022

6.2 NPDES COMPLIANCE

The facility will be reporting (1) exceedances for the month of February 2022

- The monthly average flow was recorded at **4.058** MGD, the NPDES limit is 2.50 MGD.

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					
Tue, Feb 01	2.420	6.9	139	4.0	81	3.00	0.80	7.16	21	14	6.6		Oct. 1 - April 30	20 Mg/L 417 bs/day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day	
Wed, Feb 02	2.460							7.33									
Thu, Feb 03	2.790	3.7	86	2.0	47	0.60	0.53	7.29						May1 - Sept. 30	6 Mg/L 125 Lbs/Day	6 Mg/L 125 lbs/Day	10Mg/L 209 Lbs/day
Fri, Feb 04	3.960							7.23									
Sat, Feb 05	3.740							7.17									
Sun, Feb 06	3.680							7.12	48				Oct. 1 - April 30	20 Mg/L 417 Lbs/Day	20 Mg/L 417 lbs/Day	30 Mg/l 626 lbs/Day	
Mon, Feb 07	3.720							7.24	35								
Tue, Feb 08	4.570	3.8	145	5.3	202	0.13	0.47	7.26	42				May1 - Sept. 30	10 Mg/L 209 Lbs/Day	10 Mg/L 209 lbs/Day	15Mg/L 313 Lbs/day	
Wed, Feb 09	4.040							7.23									
Thu, Feb 10	4.270	2.6	93	4.0	142	0.15		6.95					NH3				
Fri, Feb 11	4.110							7.25					Oct.1 - Mar. 31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L	
Sat, Feb 12	4.470							7.34									
Sun, Feb 13	4.490							7.14	51				Apr. 1 - May 31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l	
Mon, Feb 14	4.050							7.26	48								
Tue, Feb 15	3.950	6.5	214	2.3	76	0.99	0.59	7.29	76				June1 - Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L	
Wed, Feb 16	3.640							7.23									
Thu, Feb 17	4.610	5.7	219	4.0	154	1.00		7.34					Total Phpsphorus				
Fri, Feb 18	5.750							7.12					Apr.1 - Oct.31	0.2 Mg/L	*****	*****	
Sat, Feb 19	5.100							7.04									
Sun, Feb 20	4.620							7.24	43				Nov. 1 - Mar. 31	1.0 Mg/L	*****	*****	
Mon, Feb 21	4.320							7.17	28								
Tue, Feb 22	4.390	6.6	242	7.3	267	0.69	0.67	7.17	33				Ph				
Wed, Feb 23	4.430							7.20					6.5 - 8.3				
Thu, Feb 24	4.250	2.8	99	4.0	142	0.10		7.16					Fecal				
Fri, Feb 25	3.990							7.14					*****	200 CFU/100ml	*****	400 CFU/100ml	
Sat, Feb 26	4.030							7.24									
Sun, Feb 27	4.010							7.22	31				Aluminum				
Mon, Feb 28	3.760							7.24	32				*****	88 ug/l	*****	*****	
													Copper				
													*****	12 ug/l	*****	*****	
													Dissolved Oxygen				
Daily Max	5.750	6.90	241.64	7.30	267.27	3.00	0.80	7.34	76	*****	*****	*****	May 1 - Sept. 30	> 7.4 mg/L			
Daily Min.	2.420	*****	*****	*****	*****	*****	*****	6.95	*****	*****	*****	*****	Plant Flow				
Month Avg.	4.058	4.83	154.63	4.11	138.88	0.83	0.61	7.21	40.67	14	6.6	*****	2.5 MGD				

7.0 ENERGY CONSUMPTION

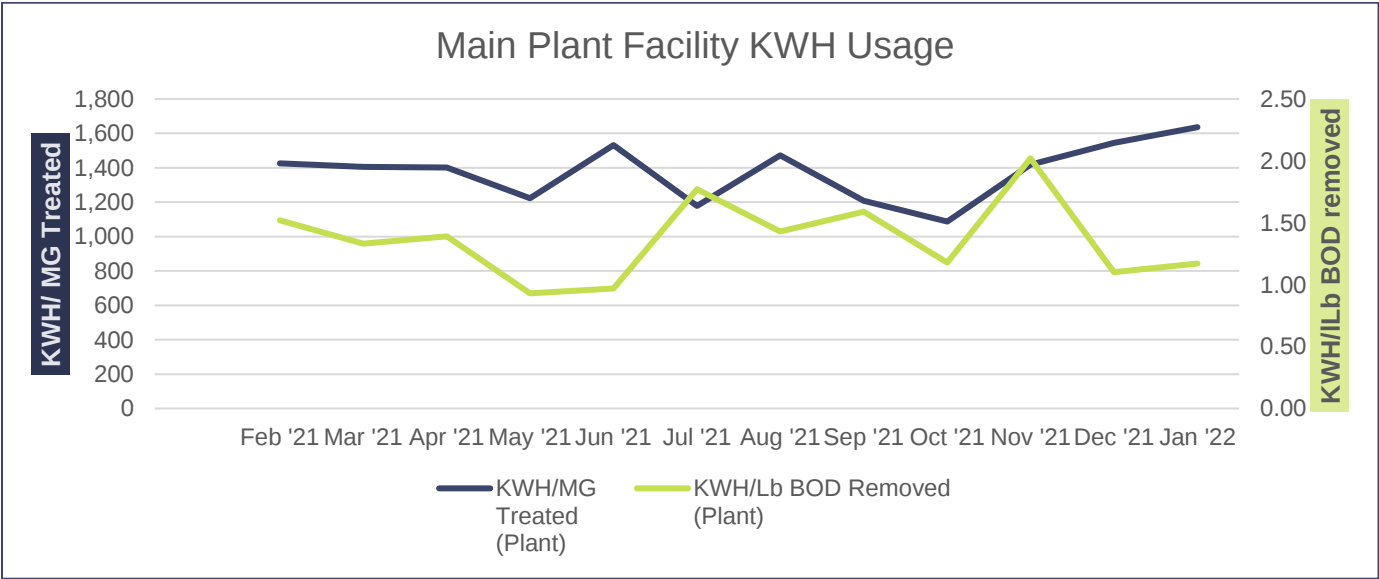
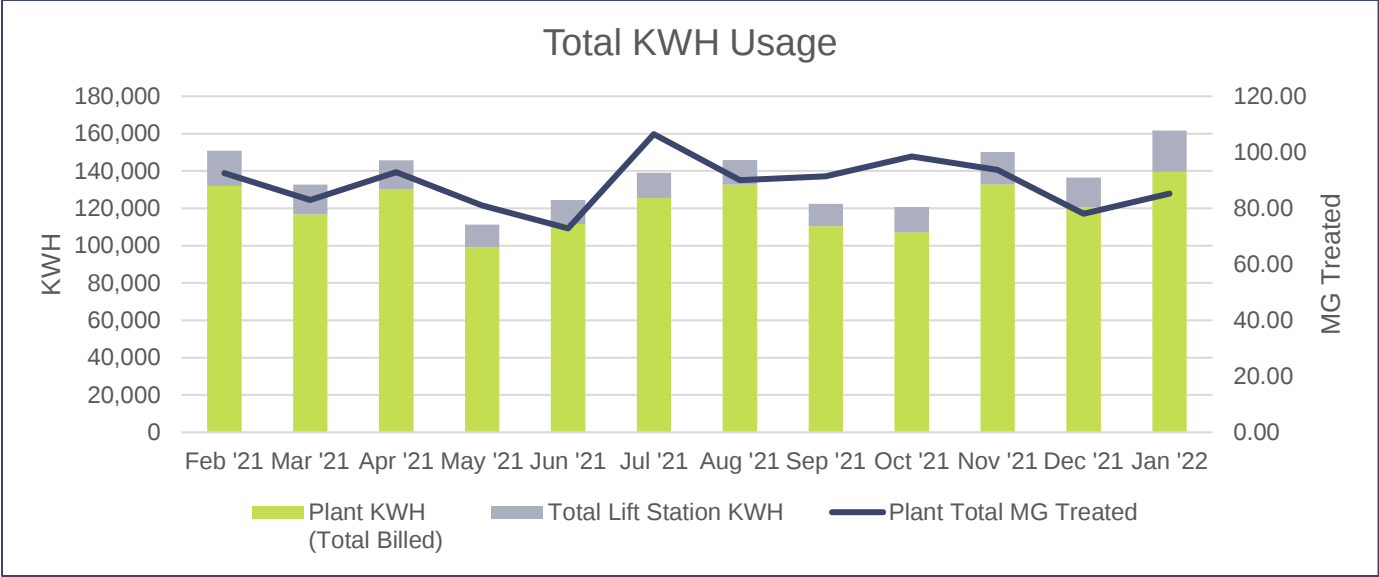
7.1 ELECTRICAL OVERVIEW

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

The department used a total of **161,569 KWH** for the month of Jan. 2022. Of this total, the lift stations accounted for **13.7%**, using **22,069 KWH**. The Main Plant accounted for the remaining **139,500 KWH**. The KWH/ MG treated was **1,636** for the month, which is **21.31%** higher than the previous 12-month average of **1,349 KWH/MG**. The KWH/Lb. BOD Removed was **1.17 KWH/Lb.** for the month, which is **15%** lower than the previous 12-month average of **1.38 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
Feb '21	3.31	92.59	132,000	1,426	86,598	1.52	216	228	18,800	150,800
Mar '21	2.68	83.00	116,700	1,406	87,712	1.33	198	216	16,048	132,748
Apr '21	3.1	92.87	130,200	1,402	93,957	1.39	219	219	15,528	145,728
May '21	2.61	81.02	99,000	1,222	106,715	0.93	186	189	12,161	111,161
Jun '21	2.43	72.83	111,600	1,532	114,694	0.97	219	228	12,858	124,458
Jul '21	3.43	106.47	125,400	1,178	70,944	1.77	222	249	13,555	138,955
Aug '21	2.91	90.06	132,600	1,472	92,787	1.43	249	255	13,316	145,916
Sep '21	3.05	91.41	110,400	1,208	69,519	1.59	204	231	11,923	122,323
Oct '21	3.18	98.51	107,100	1,087	90,595	1.18	231	234	13,538	120,638
Nov '21	3.12	93.74	132,900	1,418	65,739	2.02	201	216	17,164	150,064
Dec '21	2.52	78.08	120,600	1,545	109,345	1.1	201	213	15,850	136,450
Jan '22	2.75	85.26	139,500	1,636	118,805	1.17	225	264	22,069	161,569
Average	2.92	88.82	121,500	1,378	92,284	1.37	214	229	15,234	136,734

Monthly Lift Station KWH														
Month	Hingham North	Hingham South	Spruce	Butternut	Old Country Way	Market	Woodsbury	Lincoln	Forest	Wheeler	Summer	Milbrook	John Burke	Total
Feb '21	3,994	6,000	180	540	1,550	935	1,400	308	2,060	55	55	1,508	215	18,800
Mar '21	2,749	4,900	190	482	1,234	907	1,669	288	1,813	62	61	1,520	173	16,048
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
Jul '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
Average	3,121	4,808	179	469	1,141	714	1,199	255	1,757	57	61	1,311	160	15,234



8.0 MAINTENANCE

8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	148	305
Corrective Maintenance	1	7
Emergency Call Outs Total	4	7

8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO #
1. Ferric Pump #1 tube replaced	22315

8.3 SIGNIFICANT OPEN WORK ORDERS

Open CM Description	WO #
4. Woodsbury Pump 2 Inspect and Repair	14917
5. WAS Pump 1 Mechanical Seal Replacement	19467
6. Fire Alarm LED Outside Main MCC Replacement	20241
7. Men Restroom Fire Alarm Strobe Replacement	20240
8. Influent Pump 1 Rebuild	20248

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 SUEZ

COLLECTION SYSTEM ASSISTANCE:

Type	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	0	0
Sewer Location mark Outs	0	0
Sewer Back Up	3	4

- GM assisted DT wish resident backup at 106 Durbeck Lane on 1/06

INDUSTRIAL PRE TREATMENT ASSISTANCE:

Parameter	Monthly Total	Annual Total
Grease Trap Inspections	0	0
Bi-Annual Permit Renewals	0	0
Bi-Annual Permit Issuance	0	0
Annual IPP Final/Raw Sampling	0	0
EPA IPP Audit / Inspection	0	0

8.7 WORK ORDER STATISTICS

There were **97.91** total reported maintenance hours during the month. Of this total, outside contractors accounted for **20%** with **20** hours recorded.

