

February 2021

Monthly Operating Report





March 11, 2021

Mr. David Taylor

Rockland Sewer Superintendent

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—February 2021

Dear Mr. Taylor,

Please see the enclosed February 2021 Monthly Operating Report (MOR) for the Suez Operations and Maintenance contract.

Please contact me at your convenience should you have any questions regarding this report.

Sincerely,

Rick Kotouch

SUEZ Project Manager

CC: Walter Simmons

Charles Heshion

Ronald Savicke

FEBRUARY 2021 MONTHLY OPERATING REPORT

1. SUMMARY:

- The facility will be reporting **1** exceedance for the month of February 2021 for Monthly Avg. Flow
- Monthly Average flow was **3.307**, NPDES Limit is **2.5**
- There were no lost time / first aid injuries throughout the month
- The total rainfall for this reporting period was **5.06"**
- I&I Work is ongoing
- **165** work orders were closed in February, with **19** as corrective maintenance work orders, **6** of the 19 were emergency call outs, while **1** was related to the collection system.
- New permit still pending from EPA

2. STAFFING:

Current Employee Licenses as of 2/1/2021										
		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					
Kevin Fennell	Operator In Training									

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 continues, SUEZ at the Rockland facility has downgraded to Threat Level 2 guidelines as follows:

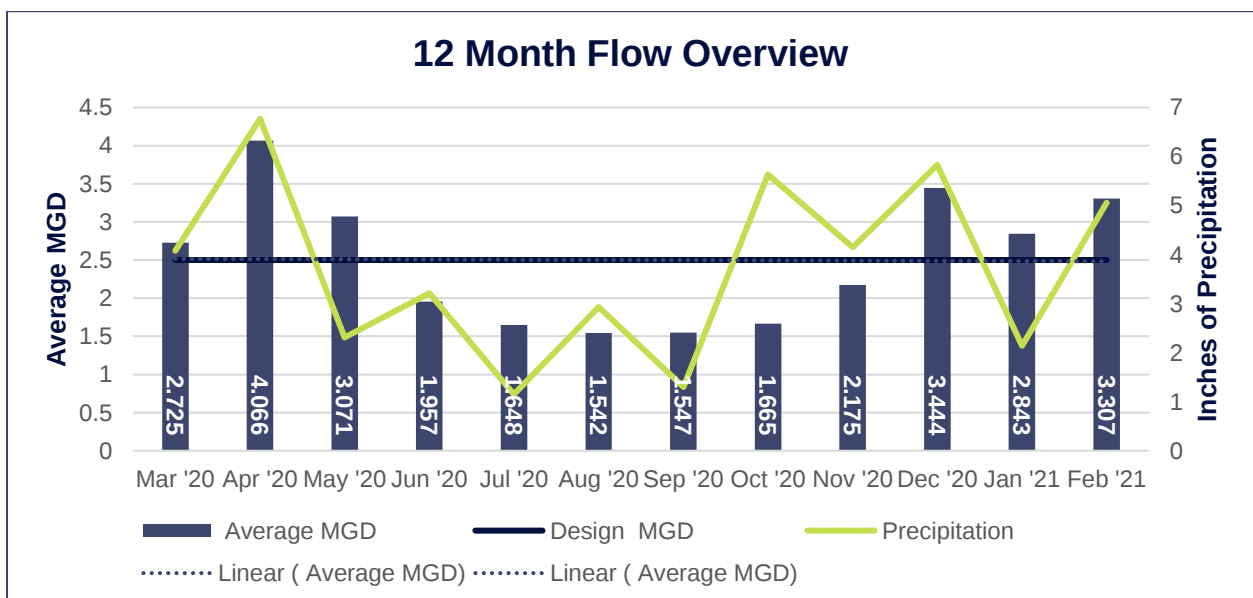
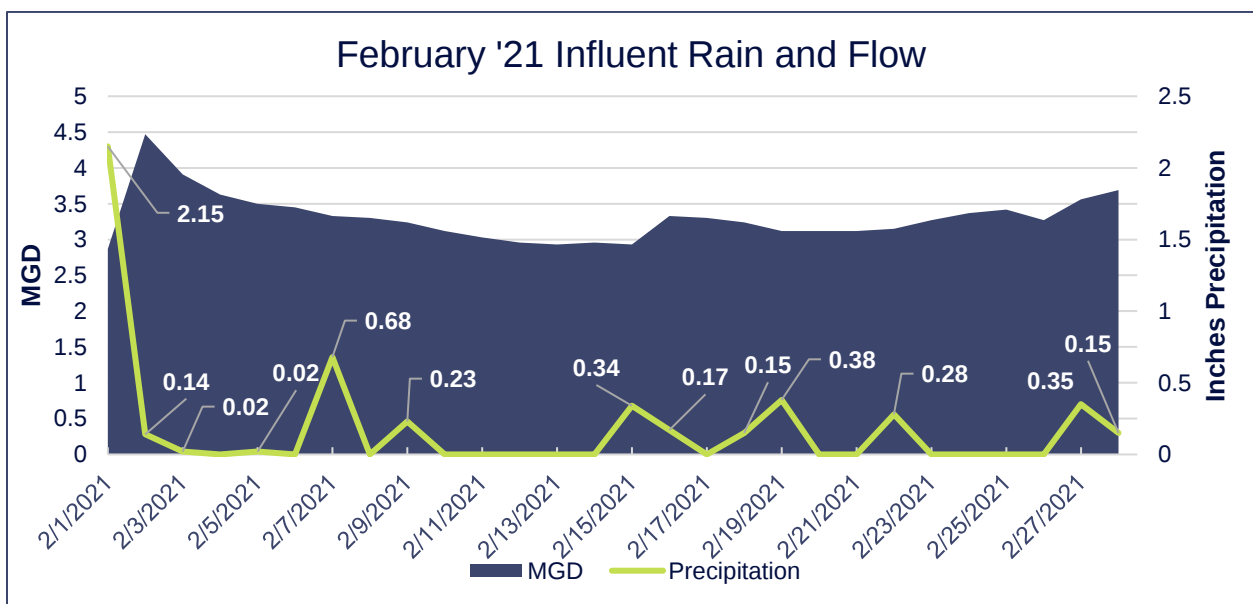
1. Due to the COVID-19 (Coronavirus) pandemic to prevent the entire SUEZ staff from becoming infected the following measures will continue to be taken to keep the wastewater treatment plant operating, pump stations inspected and NPDES permit required samples collected
2. As the Town of Rockland COVID-19 infection rate per thousand residents has decreased, the SUEZ Rockland facility is back to its normal schedules. All social distancing of a minimum of 6' and mandatory mask requirements are still in place at the facility with visitors still limited by an appointment only.



4 FLOWS AND LOADINGS:

4.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **92.590** MG during the month. The daily average flow was **3.307** MGD. This was **0.815** MGD more than the previous February monthly average, which was recorded at **2.492** MGD. The highest **peak** flow was recorded on February 2 as **4.86** MGD. The lowest instantaneous flow was **1.17** MGD, also recorded February 2.
- The highest daily flow was recorded on February 2 as **4.47** MGD. The lowest daily flow was recorded on February 1 as **2.87** MGD.
- A total of **5.06"** of precipitation was received at the facility. The highest single day precipitation total was recorded on February 1 as **2.15"**
- The coldest day was February 12 at **11°F**. The warmest day was February 24 at **49°F**.



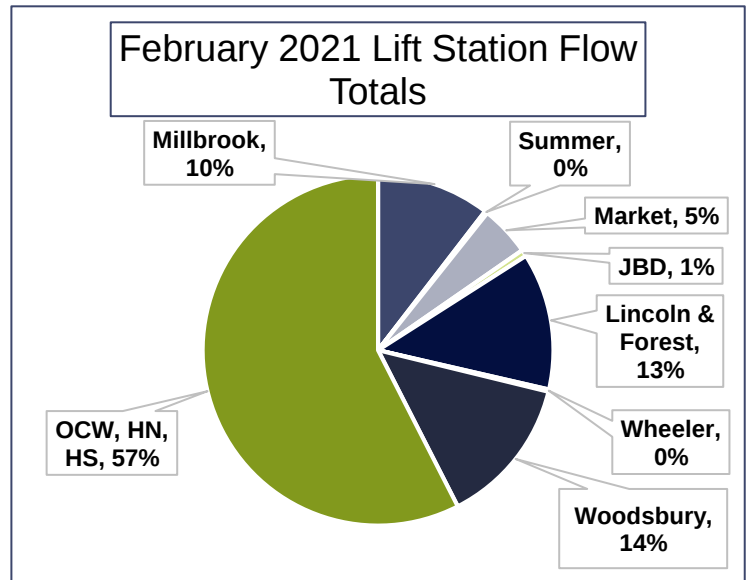
4.1 INFLUENT BOD AND TSS LOADINGS

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 '20	2.725	3,472	4,132	2.451	3,669	5,254
Apr '20	4.066	3,334	4,184	2.518	3,565	5,132
May '20	3.071	3,082	3,793	2.547	3,519	5,035
Jun '20	1.957	3,297	3,717	2.532	3,562	4,970
Jul '20	1.648	2,737	3,438	2.510	3,510	4,874
Aug '20	1.542	2,583	3,845	2.505	3,449	4,876
Sep '20	1.547	3,027	4,170	2.502	3,429	4,865
Oct '20	1.665	3,200	4,417	2.485	3,423	4,973
Nov '20	2.175	3,263	4,000	2.459	3,377	4,771
Dec '20	3.444	2,929	4,128	2.421	3,166	4,358
Jan '21	2.843	2,900	3,237	2.431	3,124	4,065
Feb '21	3.307	3,253	4,139	2.499	3,090	3,933

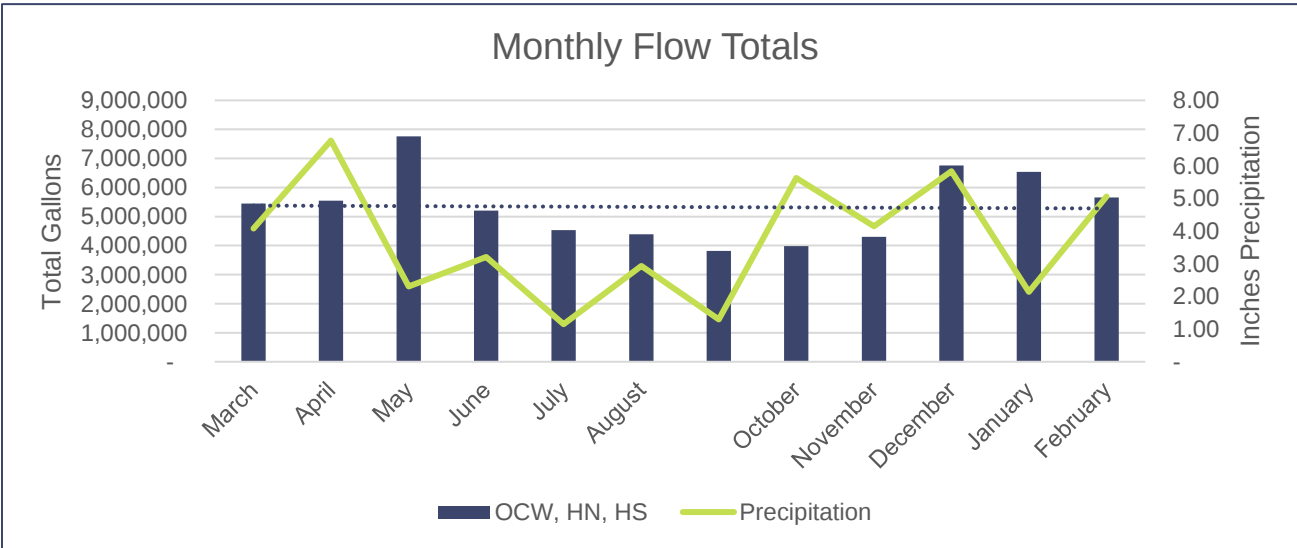
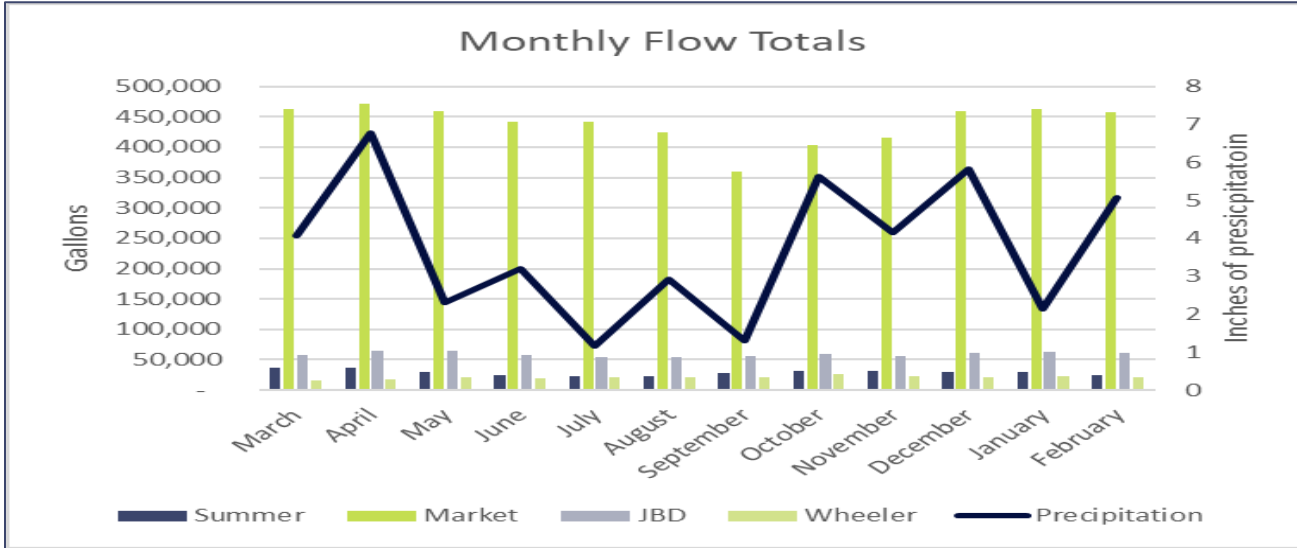
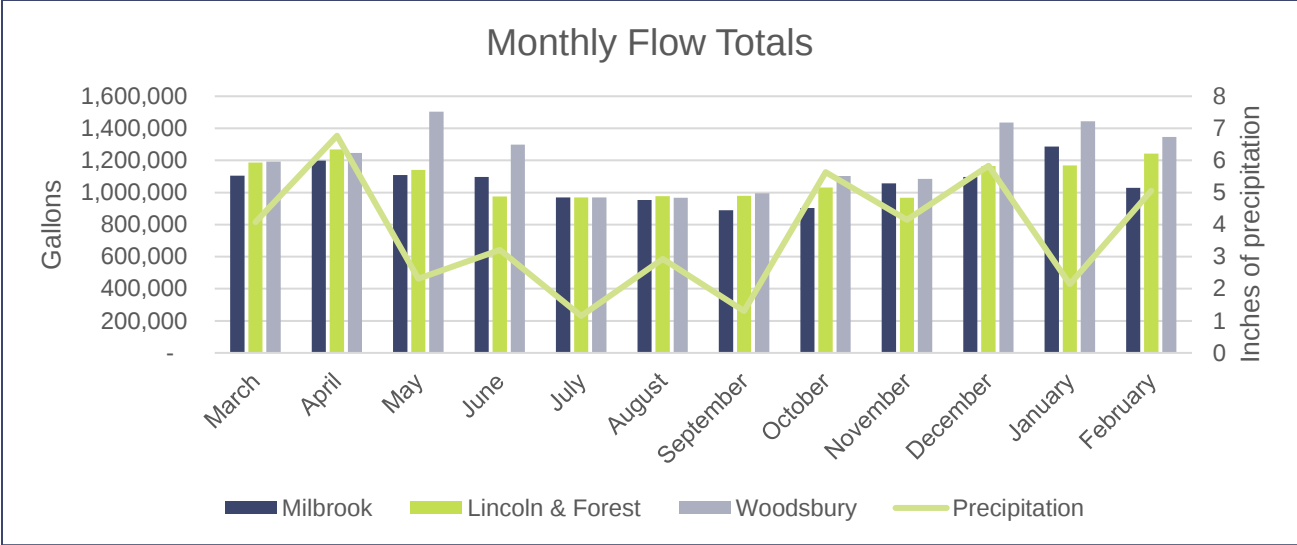
4.2 LIFT STATION FLOWS

The lift stations accounted for **9,840,416** gallons throughout the month, **10.6%** 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 February 2021		
Station	Total Gallons	% Off 12 Month Avg.
Millbrook	1,028,158	-3%
Summer	24,960	-16%
Market	457,500	5%
John Burke	60,480	2%
Lincoln, Forest	1,243,202	16%
Wheeler	20,520	0%
Woodsbury	1,346,401	12%
OCW, HN, HS	5,659,195	7%
Total:	9,840,416	22%



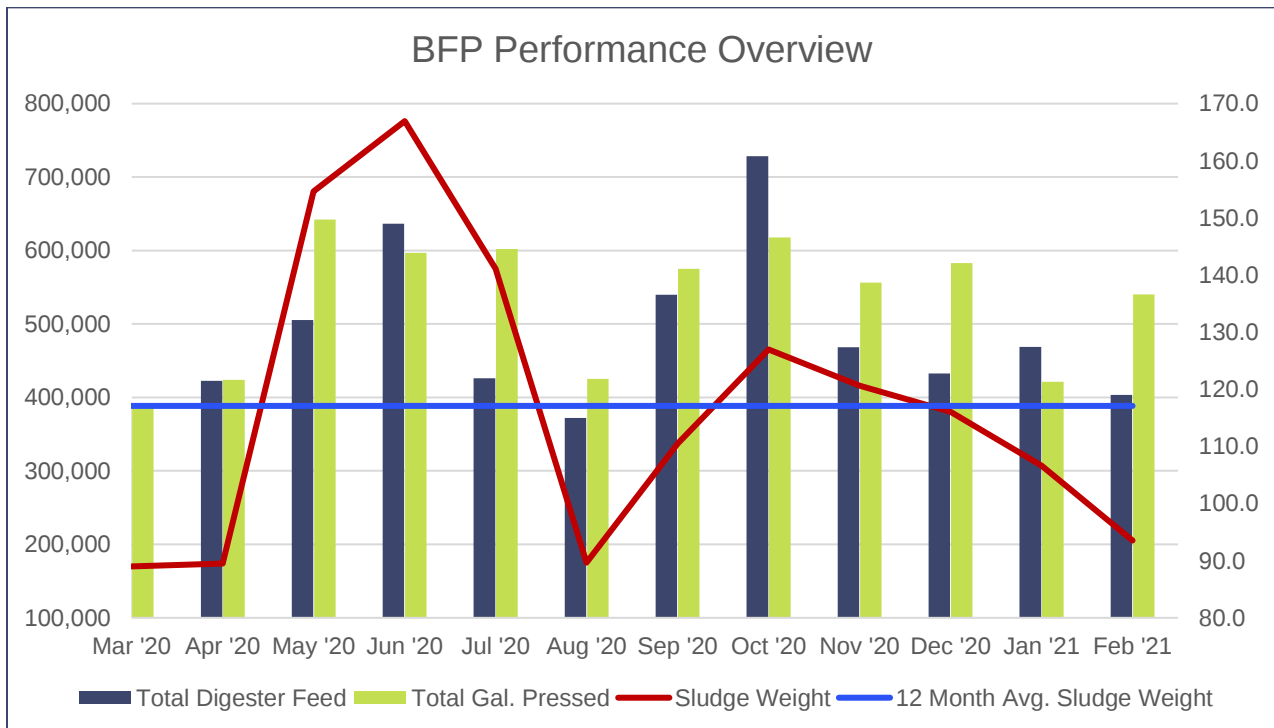
Lift Station Monthly Average Daily Flows											
Month	Millbrook	Sumer	Market	John Burke	Lincoln	Forrest	Wheeler	Woodsbury	Old Country Way	Hingham North	Hingham South
	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD
March '20	35,640	1,192	14,903	1,889	2,090	38,274	540	38,497	60,765	139,355	175,587
April '20	39,924	1,240	15,700	2,168	1,620	42,280	594	41,580	73,080	141,840	185,040
May '20	35,779	991	14,806	2,098	1,394	36,784	679	48,542	65,710	140,226	250,490
June '20	36,540	840	14,700	1,904	1,400	32,480	648	43,260	56,840	132,660	173,520
July '20	31,285	751	14,226	1,757	1,781	31,297	656	31,297	46,539	130,297	146,323
Aug '20	30,728	743	13,694	1,734	1,819	31,500	656	31,181	46,132	126,116	141,445
Sept '20	29,628	912	12,000	1,888	1,880	32,620	708	33,180	42,980	115,200	127,080
Oct '20	29,124	1,024	13,050	1,904	1,980	33,320	828	35,400	44,520	115,200	128,520
Nov '20	35,208	1,080	13,850	1,840	2,080	32,270	768	36,180	51,800	124,920	143,280
Dec '20	35,316	984	14,900	1,992	1,580	37,660	714	46,140	62,300	136,440	219,240
Jan '21	41,688	952	15,050	2,024	1,540	37,800	726	46,380	60,130	136,800	211,680
Feb '21	39,959	960	15,000	2,160	2,400	46,200	1,080	57,600	71,401	145,801	216,000
Average	35,068	972	14,323	1,947	1,797	36,040	716	40,770	56,850	132,071	176,517



5.0 SOLIDS HANDLING

The BFP was operated a total of **146** hours this month and a total of **540,139** gallons were processed producing **93.5** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **2.00%** and the BFP Cake average percent solids were **19.19%**. The digester feed to BFP differential was **-136,771** 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 '20	134.3	393,120	386,861	85.6	89.0	2.69	17.20	5.00	
Apr '20	131.8	422,607	424,043	103.2	89.5	2.89	18.88	6.00	
May '20	180.8	505,318	642,038	137.6	154.6	1.75	20.13	8.00	
Jun '20	170.3	636,743	596,834	123.2	166.9	3.01	20.96	9.00	
Jul '20	174.0	426,114	601,924	127.6	141.1	2.99	22.25	8.00	
Aug '20	143.8	371,974	425,400	101.6	89.7	2.92	23.20	5.00	
Sep '20	183.3	539,761	575,031	142.4	110.5	2.96	23.51	5.00	
Oct '20	161.8	728,414	617,960	134.2	127.0	2.21	22.84	8.00	9.50
Nov '20	149.8	468,303	556,363	124.0	120.6	3.24	21.62	6.00	
Dec '20	177.0	432,663	582,869	137.8	116.1	1.52	20.00	7.00	
Jan '21	129.0	468,846	421,221	103.2	106.6	2.44	19.27	5.00	
Feb '21	146.0	403,368	540,139	92.0	93.5	2.00	19.19	6.00	
Annual Total	1,882	5,797,231	6,370,683	1,412	1,405	*****	*****	78	9.50
Avg.	157	483,103	530,890	118	117	2.55	20.75	6.5	*****



7.0 ENERGY CONSUMPTION

7.1 ELECTRICAL OVERVIEW

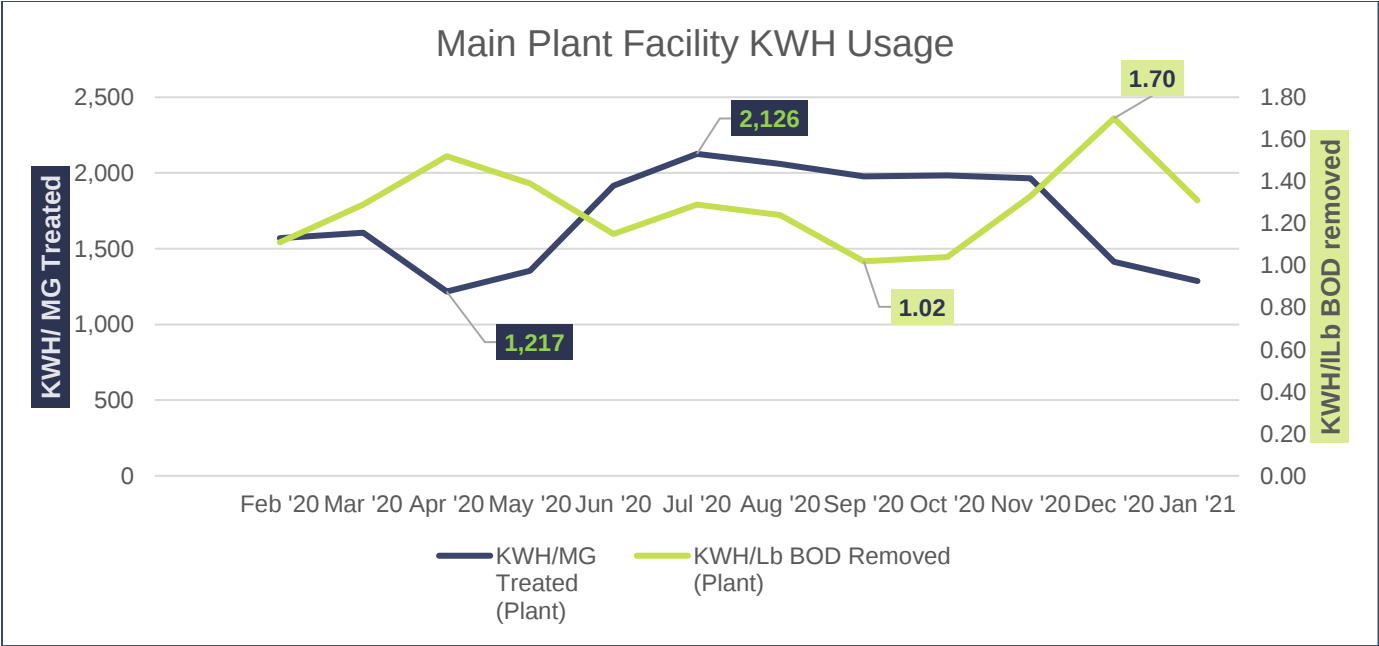
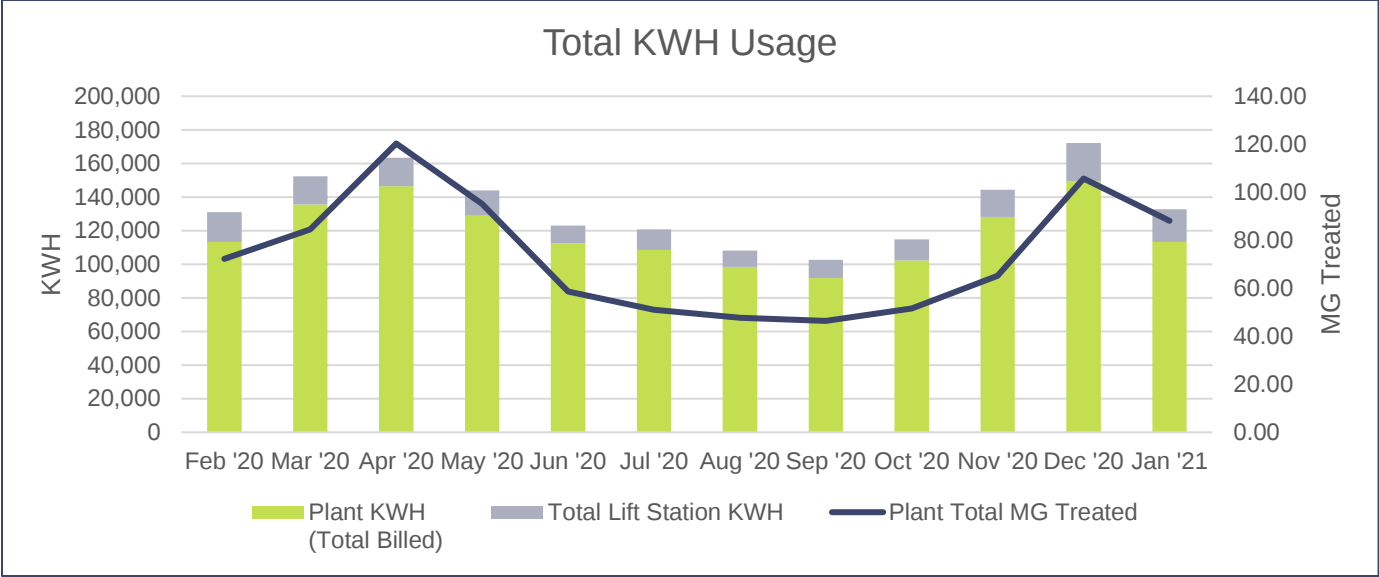
Due to billing cycle timing, all electrical data in the MOR will be one month behind. The following data is for electrical consumption during the **January 2021** operating period.

The facility used a total of **132,693 KWH** for the month of January 2020. Of this total, the lift stations accounted for **14.5%**, using **19,293 KWH**. The Main Plant accounted for the remaining **113,400 KWH**.

The KWH/ MG treated was **1,287** for the month, which is **25%** lower than the previous 12-month average of **1,730 KWH/MG**. The KWH/Lb. BOD Removed was **1.31 KWH/Lb.** for the month, which is **2%** higher than the previous 12-month average of **1.28 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 '20	2.49	72.27	113,400	1,569	102,056	1.11	204	213	17,583	130,983
Mar '20	2.73	84.48	135,600	1,605	104,853	1.29	270	270	16,713	152,313
Apr '20	4.01	120.31	146,400	1,217	96,567	1.52	237	267	16,939	163,339
May '20	3.07	95.21	129,000	1,355	92,608	1.39	231	231	14,938	143,938
Jun '20	1.96	58.70	112,500	1,917	97,906	1.15	183	195	10,488	122,988
Jul '20	1.65	51.09	108,600	2,126	84,003	1.29	174	195	12,168	120,768
Aug '20	1.54	47.79	98,400	2,059	79,230	1.24	171	186	9,781	108,181
Sep '20	1.55	46.42	91,800	1,978	89,861	1.02	162	186	10,919	102,719
Oct '20	1.66	51.60	102,300	1,983	98,117	1.04	174	216	12,588	114,888
Nov '20	2.17	65.24	128,100	1,964	96,589	1.33	231	246	16,289	144,389
Dec '20	3.41	105.75	149,400	1,413	87,985	1.70	246	246	22,735	172,135
Jan '21	2.84	88.12	113,400	1,287	86,723	1.31	222	240	19,293	132,693
Average	2.42	73.92	119,075	1,706	93,042	1.28	209	224	15,036	134,111

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 '20	3,421	5,800	182	466	1,697	885	1,223	311	1,793	47	67	1,501	190	17,583
Mar '20	3,270	5,100	190	581	1,398	869	1,365	277	1,817	48	72	1,527	199	16,713
Apr '20	3,341	5,500	196	596	1,408	853	1,320	243	1,711	55	69	1,476	171	16,939
May '20	2,995	5,100	173	450	1,066	687	1,229	191	1,422	59	63	1,380	123	14,938
Jun '20	2,242	3,200	119	350	1,139	319	829	127	1,048	53	51	922	89	10,488
Jul '20	2,835	4,100	111	444	805	379	905	140	1,223	57	58	1,017	94	12,168
Aug '20	2,161	3,000	97	434	829	311	771	135	1,035	50	51	829	78	9,781
Sep '20	3,200	2,306	106	347	870	553	910	175	1,197	56	58	1,043	98	10,919
Oct '20	2,673	3,700	110	292	930	784	1,013	236	1,322	59	62	1,272	135	12,588
Nov '20	3,274	5,000	271	454	1,097	928	1,232	300	1,731	65	74	1,679	184	16,289
Dec '20	4,677	8,300	235	626	1,225	1,061	1,456	361	2,386	65	79	2,011	253	22,735
Jan '21	4,504	6,100	202	541	1,243	987	1,318	312	2,173	57	61	1,577	218	19,293
Average	3,216	4,767	166	465	1,142	718	1,131	234	1,572	56	64	1,353	153	15,036



8.0 MAINTENANCE

8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	146	310
Corrective Maintenance	19	31
Emergency Call Outs Total	5	13

8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO #
1. 1-2 DO Probe Wireless Signal Install	13570
2. Woodsbury Flush Valve Repair	17636
3. DTSP #1 New Seepex Pump Install	18103
4. Woodsbury Pump (Slot 2) Install	18586
5. Lime Slurry Tank 1 Mixer Motor Replacement	18643
6. BFP Poly Feed Pump Motor Replacement	18644
7. Backflow Preventer 2 Repair	18645
8. Spruce St. Loss of Air	18651
9. Primary Ferric Pump 2 Tube and Roller Replacement	18653
10. HS Intermittent False Low Level Alarm	18654
11. BFP Polymer Blending Unit Cleaning	18656
12. Woodsbury Pump 3 (Slot 2) Pull and Clean	18656
13. SCADA Work – Influent pH Scaling	18656



New DSTP #1 Install

8.3 SIGNIFICANT OPEN WORK ORDERS

Open CM Description	WO #
1. Woodsbury Pump 2 Inspect and Repair	14917
2. Hingham South Repair / Replacement	17427
3. OCW Mixer Starting Relay Replacement	14917
4. Lime Unloader # 3 shaft repair	13568
5. Primary Scum Mixer Blade Replacement	10091
6. Main Plant Generator Water Pump	18658
7. Effluent Pumps "HAND" control repair	14840
8. OCW, Woodsbury, and Lincoln valve exercising	
9. DSTP #2 Mechanical Seal Replacement	18660
10. Backflow Prevention Valve #2 Replacement	18646

8.4 EMERGENCY CALL OUTS FOR THE MONTH

Type	Total this Month	Total this Year
Sewer Back Up / Collection System	1	2
Pump Station	1	2
Plant	1	5
Odor	0	0
Power Outages	3	5
Total:	6	14

1. 02/02/21 – Loss of Power
 - a. DS called in at 0245 AM for loss of power at Main Plant, Millbrook, JBD, and HN. Reset plant equipment and stations.
2. 02/07/21 – Loss of Power
 - a. MG called in at 845 PM for loss of power at HN station. Reset – OK.
3. 02/08/21 – Loss of Power
 - a. GM and DS called in for loss of power at Main Plant, Millbrook, Summer, Butternut, and Market. Reset all plant equipment and stations.
4. 02/09/21 – Influent Wash Press
 - a. GM called in at 2 AM for high debris level in influent wash press. Cleared grease and rag build up, back online.
5. 02/12/21 – Town Library Back up
 - a. GM out to assist DT for back up at Library. Confirmed flow in main line at street, backup identified to be inside library.
6. 02/28/21 – Spruce St.
 - a. DS called out at 830 PM for loss of air. Three-way valve stuck in the firing position. EM out to assist, reenergized station to release contacts causing three-way valve to stay in firing position, station back online after blowing back inlet and vent lines.

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:

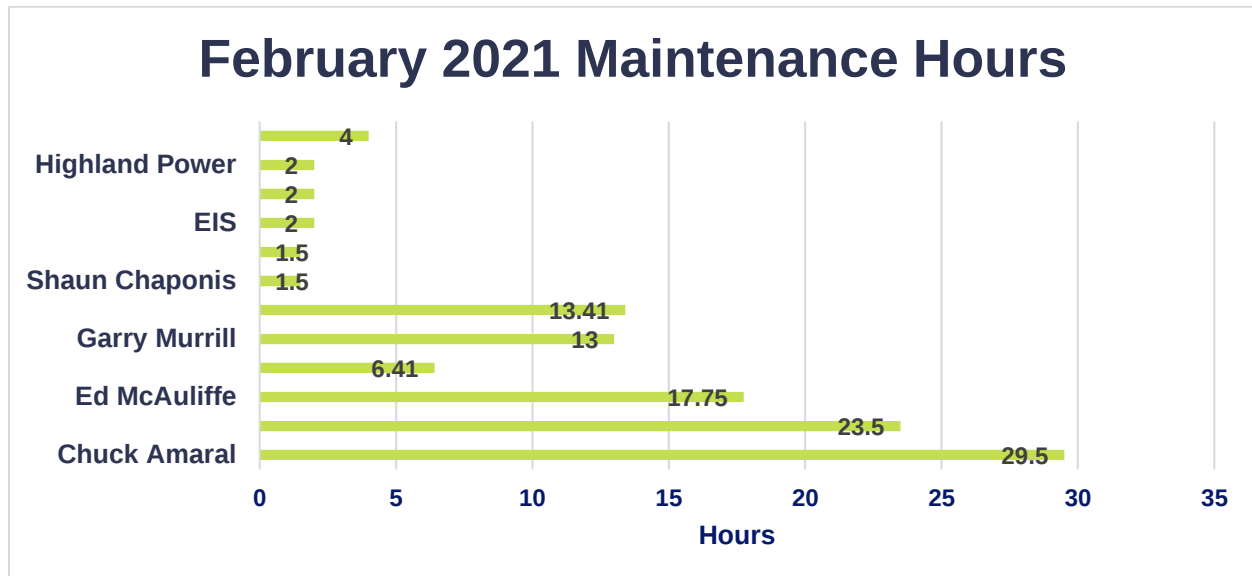
Type	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	0	0
Sewer Location mark Outs	0	0
Sewer Back Up	0	0

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 **116.57** total reported maintenance hours during the month. Of this total, outside contractors accounted for **18%** with **10** hours recorded.



9.0 FINANCIAL ACCOUNTING- REPAIR / MAINTENANCE (JULY '20 – JUNE '21)

Item	Budget	Spent Month	Spent Year	Remaining
R & M (Project)	\$100,000	\$8,088.32	\$70,123.54	\$29,876.46

9.1 SIGNIFICANT R&M PURCHASES

- Purchased Commercial Chipper for \$1,949.00
- John Hoadley & Sons rebuilt Backflow Preventer #2 for \$1,089.12
- Purchased BFP wash-down and booster motors for \$1,057.61

10.0 ATTACHED REPORTS

- Discharge Monitoring Report
- HACH Wims Data Reports
- Cumulative and Monthly Violation Reports
- Financial Reports
- Solids Removal Summary