

June 2021

Monthly Operating Report





July 15, 2021

Mr. Keith Nastasia

Rockland Sewer Superintendent

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—June 2021

Dear Mr. Nastasia,

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

Please contact me at a suitable time should you have any questions regarding this report.

Sincerely,

Rick Kotouch

SUEZ Project Manager

CC: Charles Heshion

Dan Duross

JUNE 2021 MONTHLY OPERATING REPORT

1. SUMMARY:

- The facility will be reporting **0** exceedances for the month of June 2021.
- There were no lost time / first aid injuries throughout the month
- The facility treated a total of **72.8** Million Gallons with a daily average flow of **2.438** MGD.
- The total rainfall for this reporting period was **4.00"**
- I&I Work is ongoing
- **186** work orders were closed in June, with **9** as corrective maintenance work orders, **4** of the 9 were emergency call outs, while **0** were related to the collection system.
- New permit still pending from EPA

2. STAFFING:

Current Employee Licenses as of 2/1/2021

Employee	Title	Hoisting		Wastewater			NEWEA Collections			NEWEA Laboratory
		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 COVID-19 continues, SUEZ at the Rockland facility has downgraded to Threat Level 1 guidelines as follows:

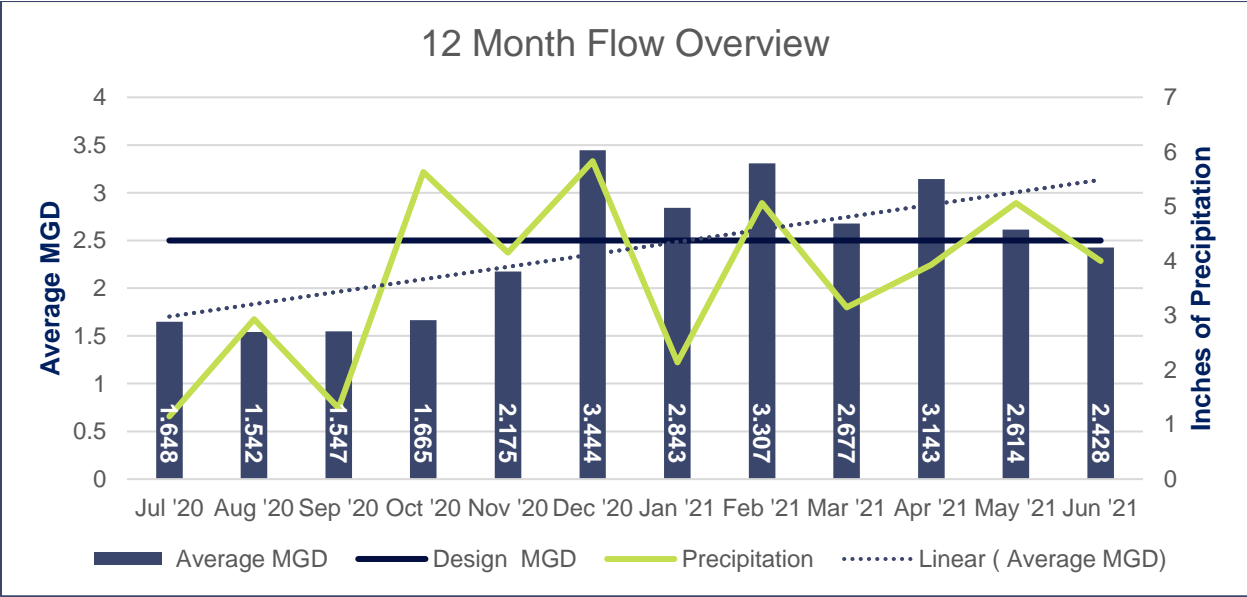
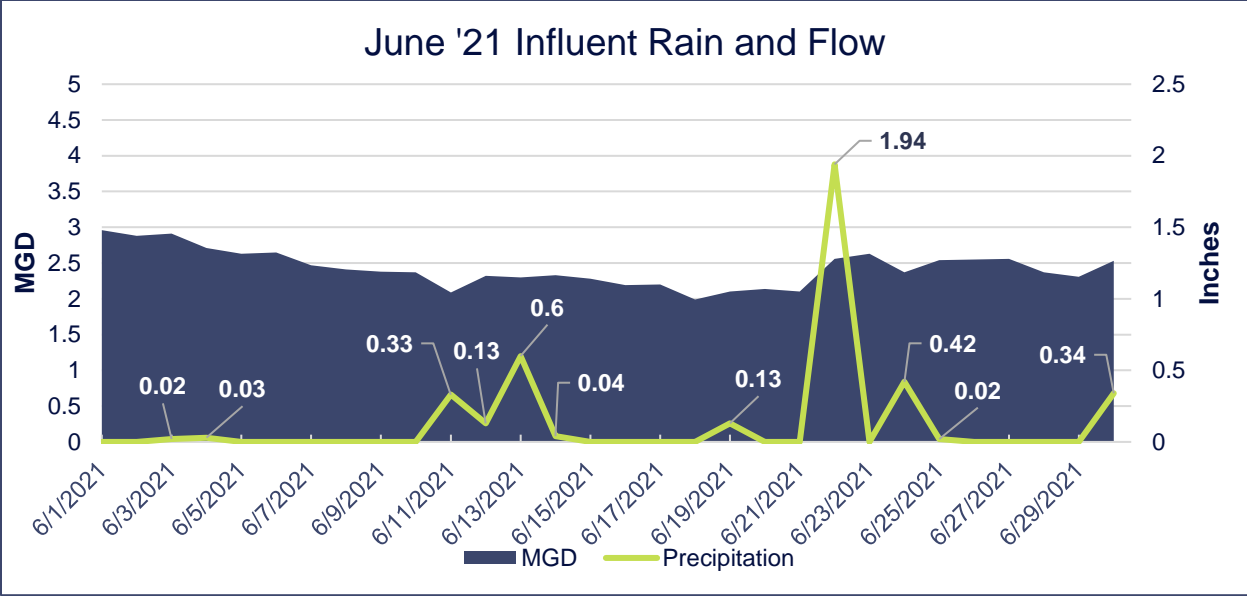
Fully vaccinated SUEZ employees may now resume normal activities without wearing a mask or socially distancing. We still do ask that visitors to the facility check in and meet the COVID visitor guidelines and continue to wear masks unless fully vaccinated.

Visitors are still recommended to call ahead of time to set up appointments for in person visits at the site. All contractors and sales personnel will still be required to be screened before entering the premises.

4 FOWS AND LOADINGS:

4.0 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **72.830** MG during the month. The daily average flow was **2.428** MGD. This was **0.471** MGD less than the previous June monthly average, which was recorded at **1.957** MGD. The highest *peak* flow was recorded on June 22 as **3.53** MGD. The lowest instantaneous flow was **0.940** MGD, recorded June 19.
- The highest daily flow was recorded on June 1 as **2.96** MGD. The lowest daily flow was recorded on June 19 as **1.990** MGD.
- A total of **4.00"** of precipitation was received at the facility. The highest single day precipitation total was recorded on June 22 as **1.94"**
- The coldest day was June 1 at **49°F**. The warmest day was June 7 at **95°F**.



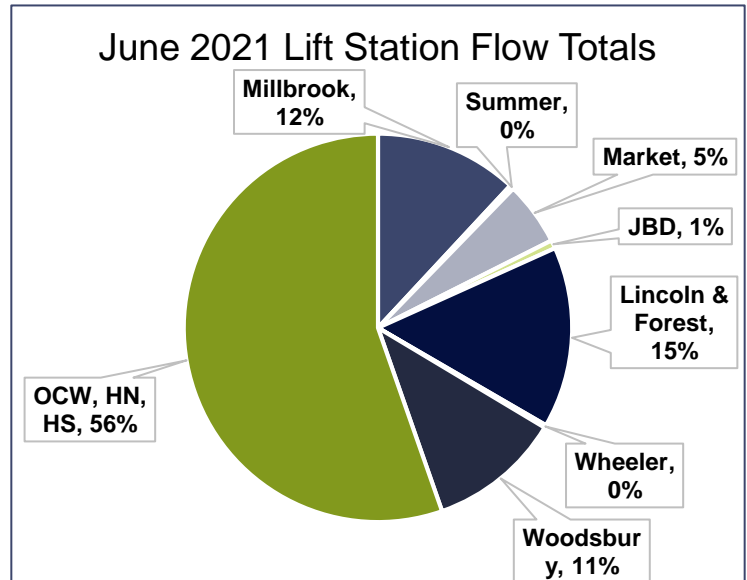
4.1 INFLUENT BOD AND TSS LOADINGS

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
Jul '20	1.648	2,737	3,438	2.51	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
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	2.38	3,064	3,802
Jun '21	2.428	3,874	3,572	2.419	3,112	3,790

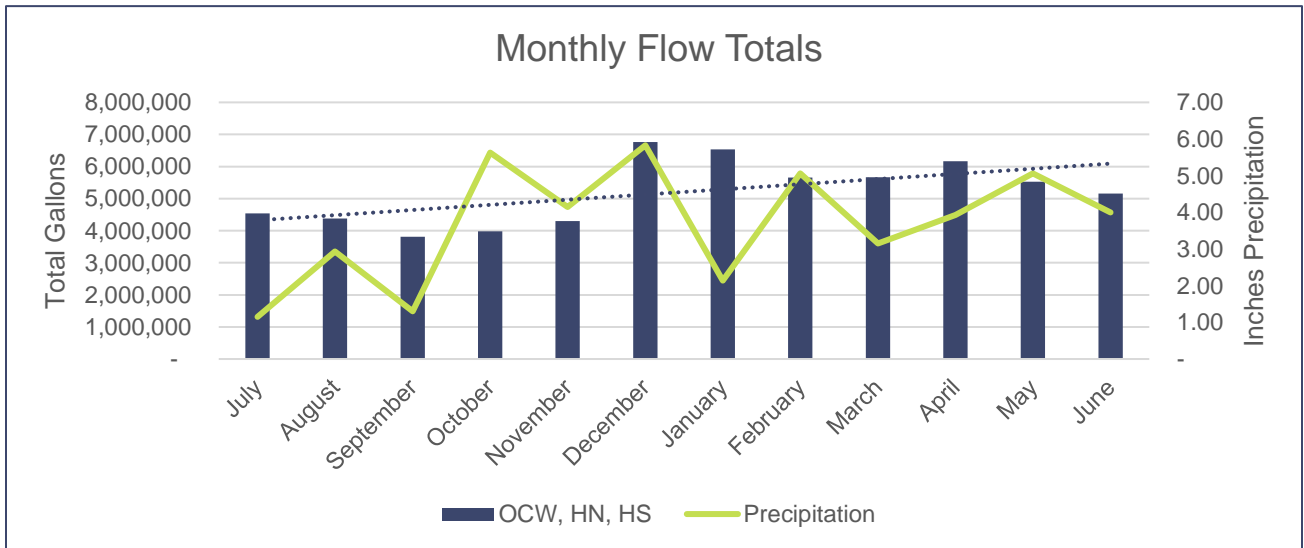
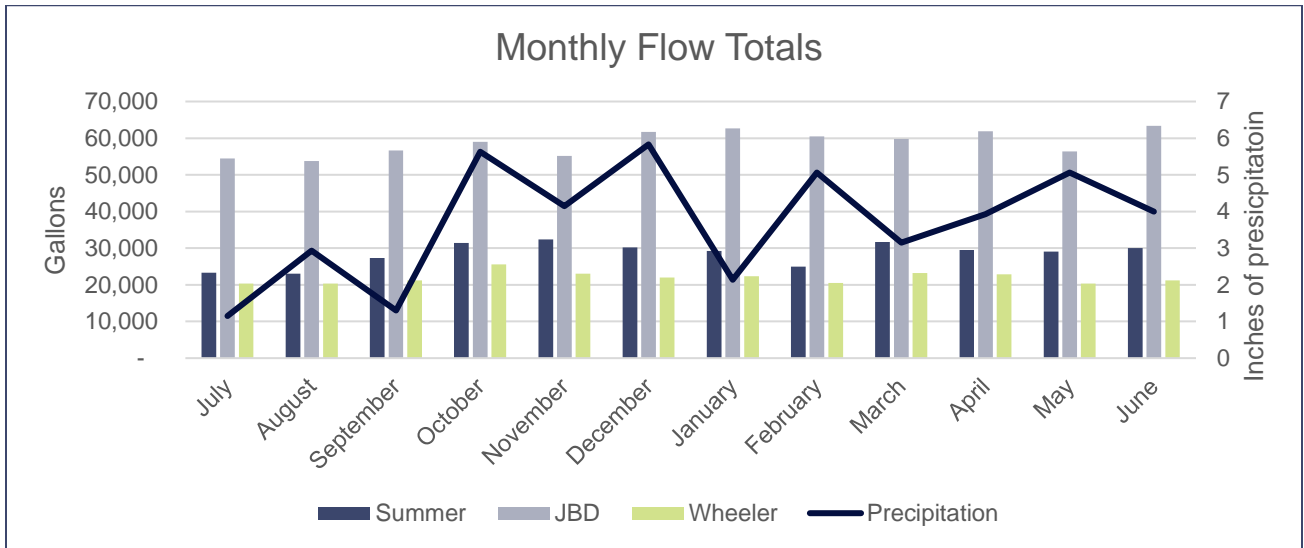
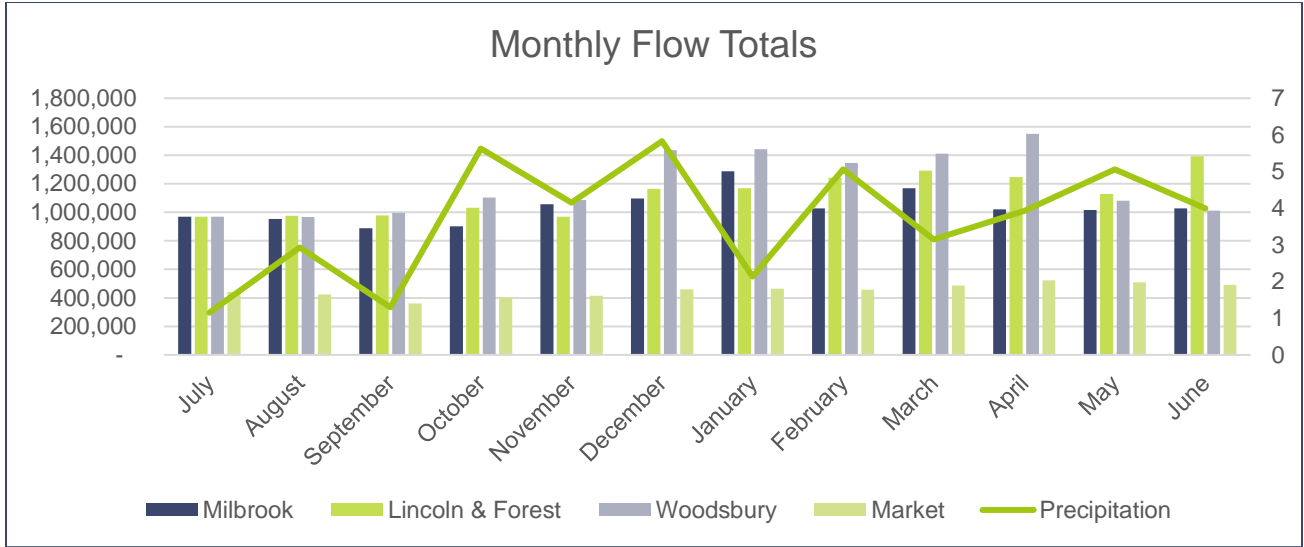
4.2 LIFT STATION FLOWS

The lift stations accounted for **9,201,066** gallons throughout the month, **12.6%** 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 June 2021		
Station	Total Gallons	% Off 12 Month Avg.
Millbrook	1,028,160	-1%
Summer	30,000	6%
Market	482,000	9%
John Burke	63,360	9%
Lincoln, Forest	1,392,301	26%
Wheeler	21,240	0%
Woodsbury	1,011,600	-17%
OCW, HN, HS	5,162,405	-1%
Total:	9,201,066	0%



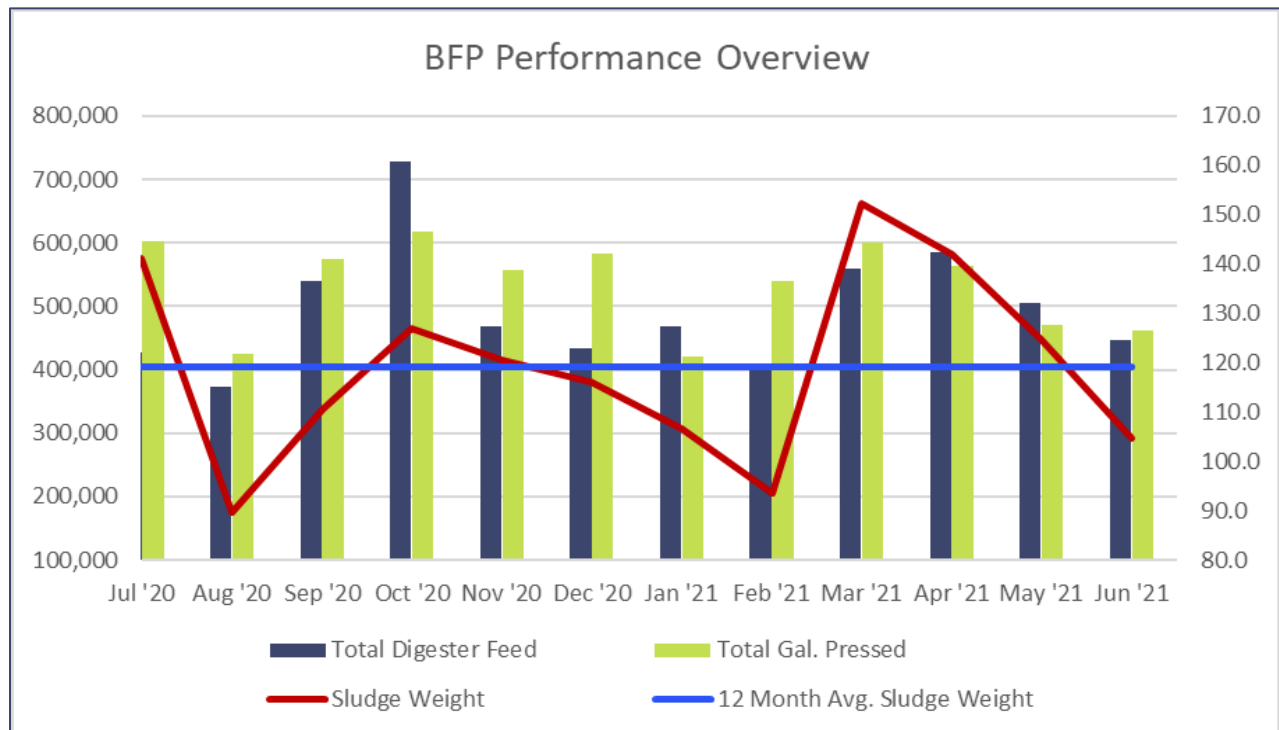
Lift Station Monthly Average Daily Flows (GPD)											
Month	Millbrook	Sumer	Market	John Burke	Lincoln	Forrest	Wheeler	Woodsbury	Old Country Way	Hingham North	Hingham South
	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD
July '20	31,285	751	14,226	1,757	1,781	31,297	656	31,297	46,539	130,297	146,323
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	34,272	832	15,250	2,016	2,100	41,440	684	44,880	59,850	148,500	188,640
Mar '21	37,656	1,024	15,700	1,928	2,260	41,650	738	45,540	58,800	148,500	183,960
Apr '21	34,020	984	17,450	2,064	2,280	41,580	762	51,720	63,770	160,920	205,560
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
Average	33,923	938	14,877	1,928	2,207	37,095	719	39,306	53,940	137,408	171,011



5.0 SOLIDS HANDLING

The BFP was operated a total of **148.3** hours this month and a total of **460,923** gallons were processed producing **104.5** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **2.16%** and the BFP Cake average percent solids were **23.59%**. The digester feed to BFP differential was **-13,598** 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
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	
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	
Annual Total	1,937	5,937,044	6,416,878	1,454	1,429	****	****	78	9.50
Avg.	161	494,754	534,740	121	119	2.47	21.37	6.5	****



6.0 ENVIRONMENTAL COMPLIANCE

6.1 REGULATORY REPORTING

- EPA NETDMR submitted on the CDX website on 07/12/2021
- MADEP MOR mailed on 07/09/2021

6.2 NPDES COMPLIANCE

The facility will be reporting (0) exceedances for the month of June 2021

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, Jun 01	2.960	2.0	49	3.7	91	0.20	0.14	7.44	39	10	4.7	9.2	BOD			
Wed, Jun 02	2.880							7.52				9.1	Oct. 1 - April 30	20 Mg/L 417 lbs/day	20 Mg/L 417 lbs/Day	30 Mg/L 626 lbs/Day
Thu, Jun 03	2.910	2.0	49	3.3	80	0.20	0.17	7.55				9.4	May 1 - Sept. 30	6 Mg/L 125 Lbs/Day	6 Mg/L 125 lbs/Day	10Mg/L 209 Lbs/day
Fri, Jun 04	2.710							7.44				9.1				
Sat, Jun 05	2.630							7.51				9.6	TSS			
Sun, Jun 06	2.650							7.52	24			9.0	Oct. 1 - April 30	20 Mg/L 417 Lbs/Day	20 Mg/L 417 Lbs/Day	30 Mg/L 626 lbs/Day
Mon, Jun 07	2.470							7.55	27			9.3	May 1 - Sept. 30	10 Mg/L 209 Lbs/Day	10 Mg/L 209 lbs/Day	15Mg/L 313 Lbs/day
Tue, Jun 08	2.410	2.0	40	5.3	107	0.27	0.13	7.44	32			8.7				
Wed, Jun 09	2.380							7.47				8.7	NH3			
Thu, Jun 10	2.370	2.0	40	2.0	40	0.20	0.16	7.52				9.2	Oct.1 - Mar. 31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L
Fri, Jun 11	2.090							7.56				9.4				
Sat, Jun 12	2.320							7.55				10.7	Apr. 1 - May 31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l
Sun, Jun 13	2.300							7.51	12			9.3				
Mon, Jun 14	2.330							7.57	32			8.8	June 1 - Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L
Tue, Jun 15	2.280	2.0	38	2.0	38	0.20	0.13	7.40	21			8.9				
Wed, Jun 16	2.190							7.55				8.3	Total Phosphorus			
Thu, Jun 17	2.200	2.0	37	4.3	79	0.20	0.11	7.47				9.0	Apr.1 - Oct.31	0.2 Mg/L	*****	*****
Fri, Jun 18	1.990							7.35				9.4				
Sat, Jun 19	2.100							7.46				9.5	Nov. 1 - Mar. 31	1.0 Mg/L	*****	*****
Sun, Jun 20	2.140							7.53	24			8.7				
Mon, Jun 21	2.100							7.48	26			8.0	Ph			
Tue, Jun 22	2.560	2.0	43	2.0	43	0.34	0.14	7.53	24			9.2	6.5 - 8.3			
Wed, Jun 23	2.630							7.46				8.7	Fecal			
Thu, Jun 24	2.370	6.3	125	2.0	40	0.20	0.10	7.46				8.8	*****	200 CFU/100ml	*****	400 CFU/100ml
Fri, Jun 25	2.540							7.32				9.2	Aluminum			
Sat, Jun 26	2.550							7.43				11.3	*****	88 ug/l	*****	*****
Sun, Jun 27	2.560							7.52	44			8.8	Copper			
Mon, Jun 28	2.370							7.44	148			8.7	*****	12 ug/l	*****	*****
Tue, Jun 29	2.310	2.0	39	3.30	64	0.22	0.12	7.54	284			10.4	Dissolved Oxygen			
Wed, Jun 30	2.530							7.45				8.2	May 1 - Sept. 30	> 7.4 mg/L		
Daily Max	2.960	6.30	124.52	5.30	106.53	0.34	0.17	7.57	284.00	*****	*****	*****	Plant Flow			
Daily Min.	1.990	*****	*****	*****	*****	*****	*****	7.32	*****	*****	*****	8.00	2.5 MGD			
Month Avg.	2.428	2.48	51.11	3.10	64.67	0.23	0.13	7.48	56.692	10	4.7	*****				

7.0 ENERGY CONSUMPTION

7.1 ELECTRICAL OVERVIEW

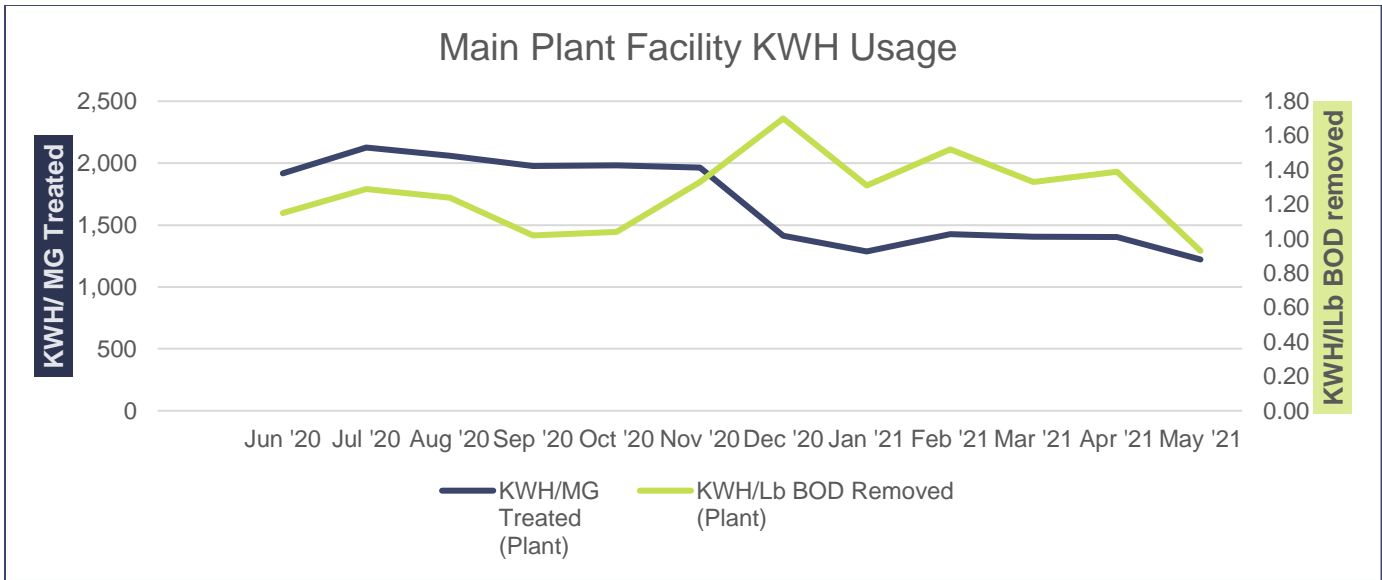
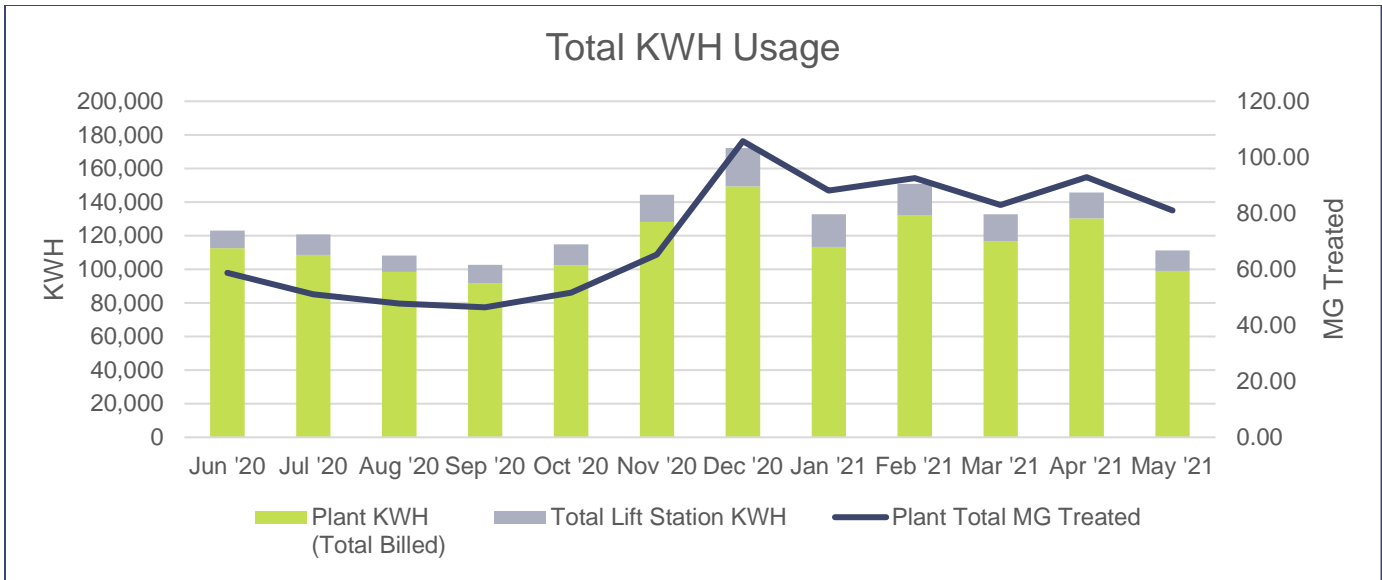
Due to billing cycle timing, all electrical data in the MOR will be one month behind. The following data is for electrical consumption during the **May 2021** operating period.

The department used a total of **111,161 KWH** for the month of May 2021. Of this total, the lift stations accounted for **10.9%**, using **12,161 KWH**. The Main Plant accounted for the remaining **99,000 KWH**.

The KWH/ MG treated was **1,222** for the month, which is **28%** lower than the previous 12-month average of **1,693 KWH/MG**. The KWH/Lb. BOD Removed was **0.93 KWH/Lb.** for the month, which is **30%** lower than the previous 12-month average of **1.31 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
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
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	3.10	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
Average	2.37	72.02	115,200	1,682	91,283	1.27	199	214	14,733	129,933

Monthly Lift Station KWH														
Month	Hingham North	Hingham South	Spruce	Butternut	Old Country Way	Market	Woodsbury	Lincoln	Forest	Wheeler	Summer	Milbrook	John Burke	Total
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
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
Average	3,125	4,617	163	441	1,086	728	1,138	236	1,587	58	61	1,343	150	14,733



8.0 MAINTENANCE

8.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	160	643
Corrective Maintenance	9	60
Emergency Call Outs Total	4	20

8.2 SIGNIFICANT CORRECTIVE WORK ORDERS FOR THE MONTH

CM Description	WO #
1. Primary Scum Well Mixer Blade Repair and Installation	13566
2. Nite Ferric Pump 1 Tube Replaced	19465
3. Influent Wash Press PLC Replaced	19466
4. Secondary Clarifier 2 Isolated and Weirs Cleaned	19468
5. Hypo Pump #2 Pump Replaced and Pump Calibrated	19464

8.3 SIGNIFICANT OPEN WORK ORDERS

Open CM Description	WO #
1. Woodsbury Pump 2 Inspect and Repair	14917
2. Hingham South Pump #1 Repair / Replacement	17427
3. Lime Unloader # 3 shaft repair	13568
4. Hoist #11 Chain Replacement	19431
5. Effluent Pumps "HAND" control repair	14840
6. OCW, Woodsbury, and Lincoln valve exercising	
7. Chopper Pump 1 VFD Fan Installation	19471
8. WAS Pump 1 Mechanical Seal Replacement	19467

8.4 EMERGENCY CALL OUTS FOR THE MONTH

Type	Total this Month	Total this Year
Sewer Back Up / Collection System	0	2
Pump Station	4	11
Plant	0	9
Odor	0	0
Power Outages	0	7
Total:	4	29

1. Spruce St. 6/5/21
 - a. Loss of air at 11:15, GM out, cleaned probe and reset.
2. John Burke Drive 6/19/21
 - a. DS Called in at 2:45 for low wet well. Found level indicator not accurate. Pulled transducer, cleaned, back online, and reading properly.
3. Butternut Ln 6/19/21
 - a. GM called in at 12 AM, 6 AM, and 9 AM for loss of air.
 - b. 6/21/21 – EM and CA out to troubleshoot, found loose connection on pot firing relay-causing unit to not operate properly, re-secured relay.
4. Loss Of Power 6/30/21
 - a. 8:00 PM Loss of Power at Hingham North, Forest, Spruce, Wheeler. EM and KF monitored remotely via SCADA. Power restored to all stations by 9 PM.

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:

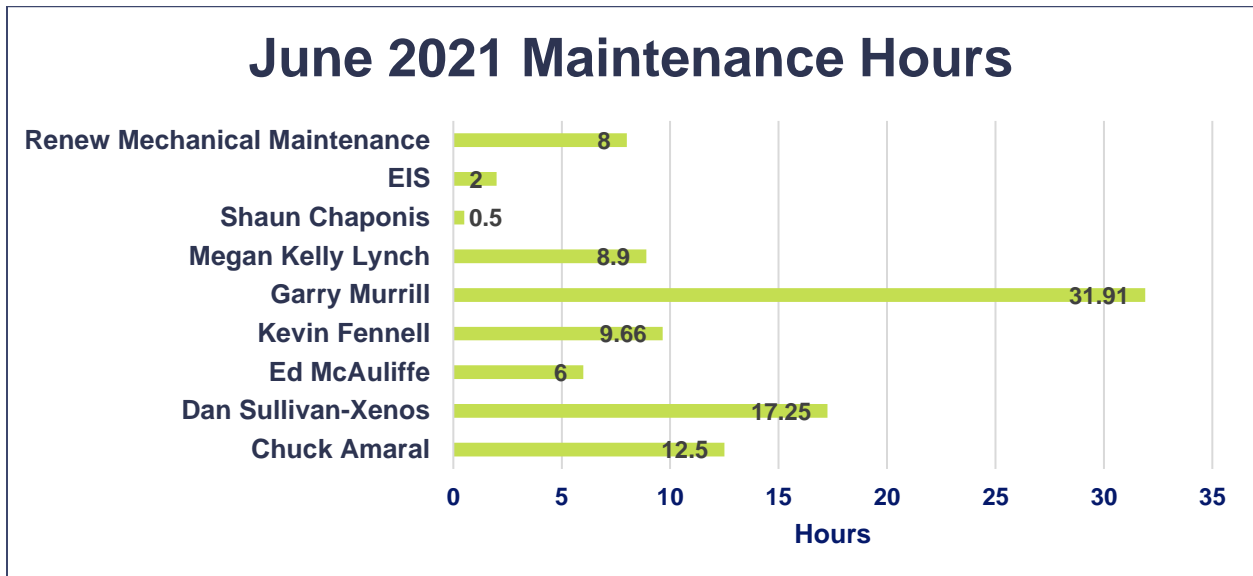
Type	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	0	0
Sewer Location mark Outs	0	0
Sewer Back Up	0	0

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



9.0 ATTACHED REPORTS

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