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COMMITMENT & INTEGRITY DRIVE RESULTS

# HULL WATER POLLUTION CONTROL FACILITY

JUNE  
2023

## MONTHLY OPERATING REPORT



NPDES NO. MAG590037

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# 1 EXECUTIVE SUMMARY

**This Monthly Operating Report provides a summary of the pertinent information and activities that occurred at Hull WPCF during the month of June 2023.**

- No lost-time incidents for the month of June.
- There were 153 effluent samples taken in June.
- There were no after-hours alarm calls that required a response by W&C staff.
- The Asset Management Accounts summaries for contract year #9 attached- the latest revision date is 6/5/2023.
- There were 3 calls from residents for E-One grinder pump issues.
- W&C's O&M continued its efforts to support the various ongoing engineering projects and upgrades at the plant- see the projects section.
- W&C staff continues to fulfill the weekly BioBot Covid-19 wastewater sampling & monitoring program for Hull.

***Mike Sullivan – Plant Manager  
Town of Hull WPCF  
8/10/2023***

**Woodard & Curran strives to deliver a high-quality operations service and is responsive to our customers' concerns. Please feel free to request any modifications to the format or content of this report.**

## 2 FLOWS AND LOADINGS



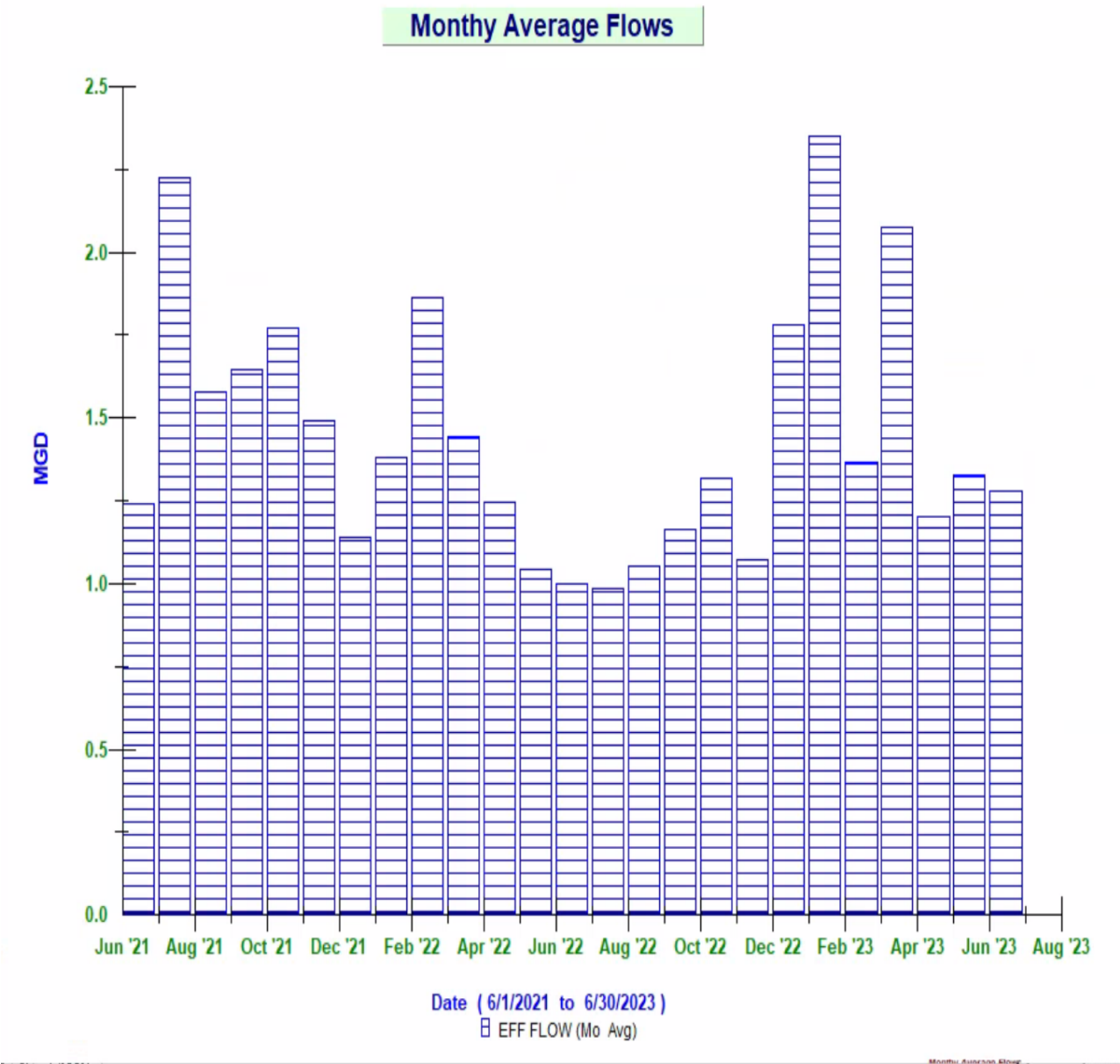
### Average Daily Flows and Loadings for *June* 2023

Month / Year	Eff Flow	Inf Flow	Inf BOD	Inf TSS	Eff BOD	EFF TSS
	MGD	MDG	LBS	LBS	LBS	LBS
Jun '21	1.24	1.27	1,646.65	3,029.91	45.65	90.70
Jun '22	1.00	1.04	1,438.86	1,775.11	50.14	92.47
Jun '23	1.28	1.36	1,553.74	2,183.04	46.12	91.80

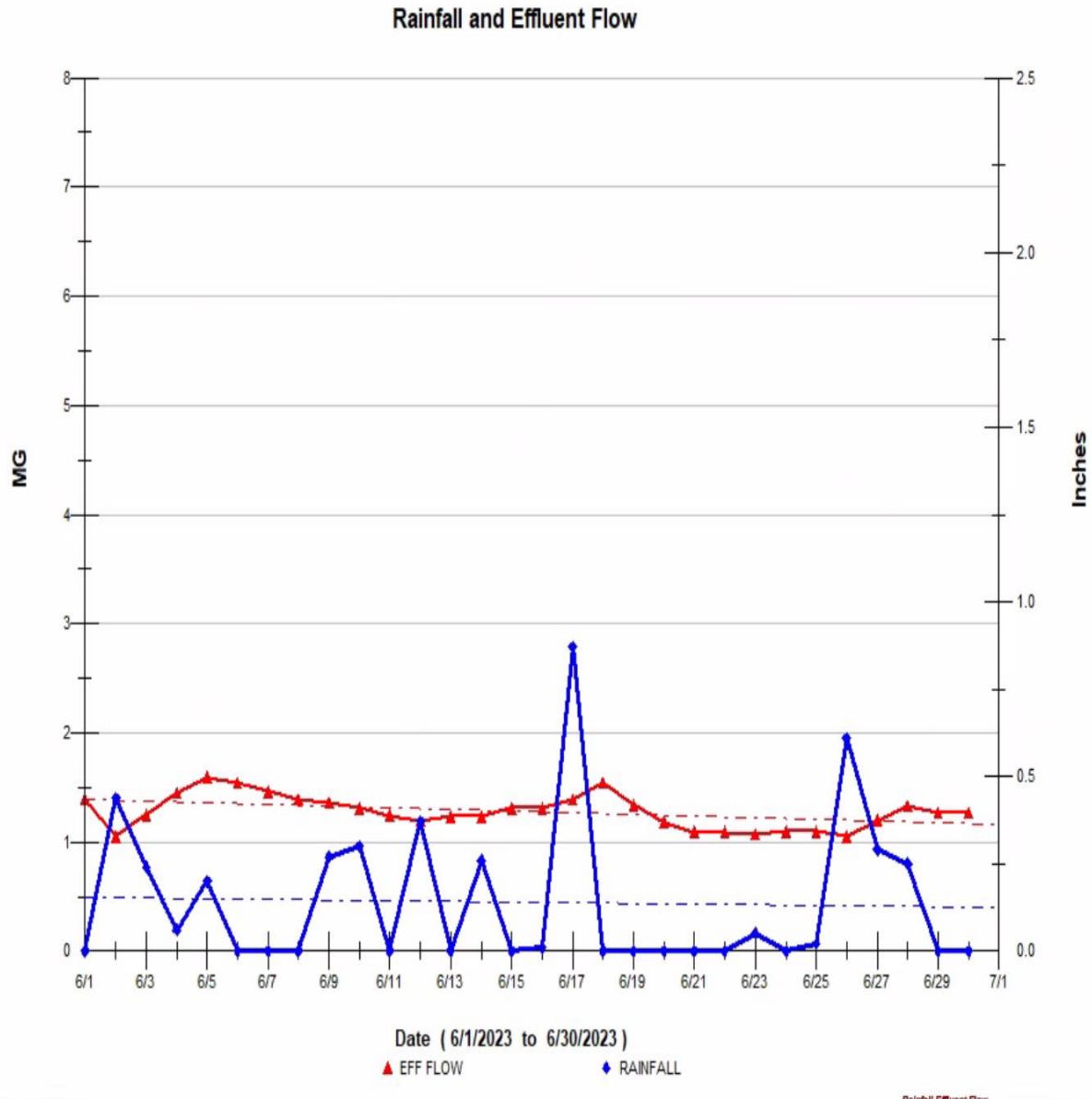
\* On-Going -the existing influent flow meters are strap-on doppler flow meters, and the existing pipe condition prevents getting a strong signal. An area velocity meter in the aeration tank inlet channel is used as well as the headworks influent Parshall Flume meter to monitor influent flows. All reported loadings are based on the effluent flow meter [new mag meter April 2021]. All meters are tied into the Scada system so that influent flows can be monitored.

AVERAGE EFFLUENT MONTHLY FLOWS – 2+ YEAR COMPARISON

The monthly average flow for June was 1.28 MGD, a bit less than the 1.33 MGD seen in May. The total precipitation for June was 4.24 inches, very similar to May's 4.31 inches, and with no impact on the plant's process conditions. The graph below shows the 2-plus year summary of the monthly average flows.



## TWO MONTH SUMMARY OF RAINFALL AND THE INFLUENCE ON EFFLUENT FLOWS



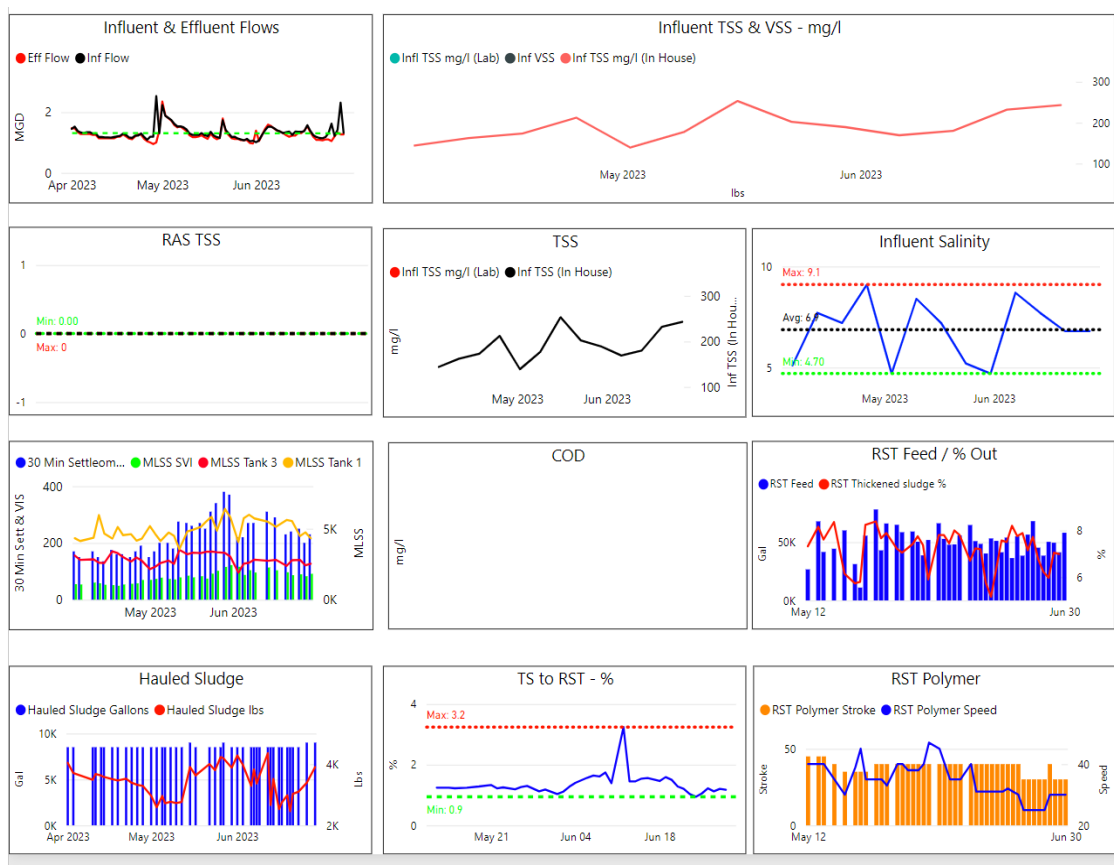
This graph shows the days where precipitation occurred [rainfall] [Blue Peaks].

# 3 COMPLIANCE



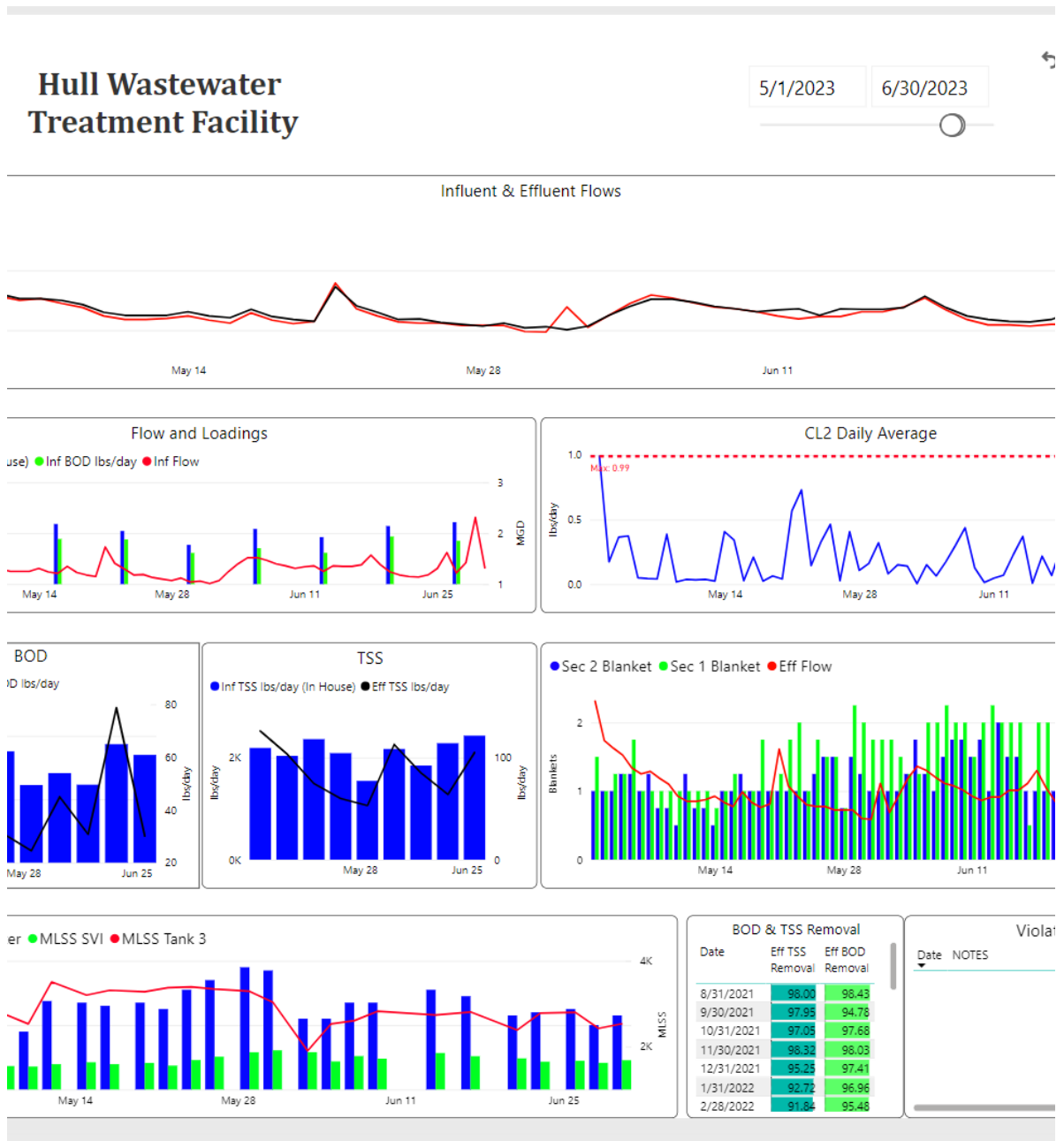
## ➤ Plant Effluent

- The plant process conditions throughout June were steady.



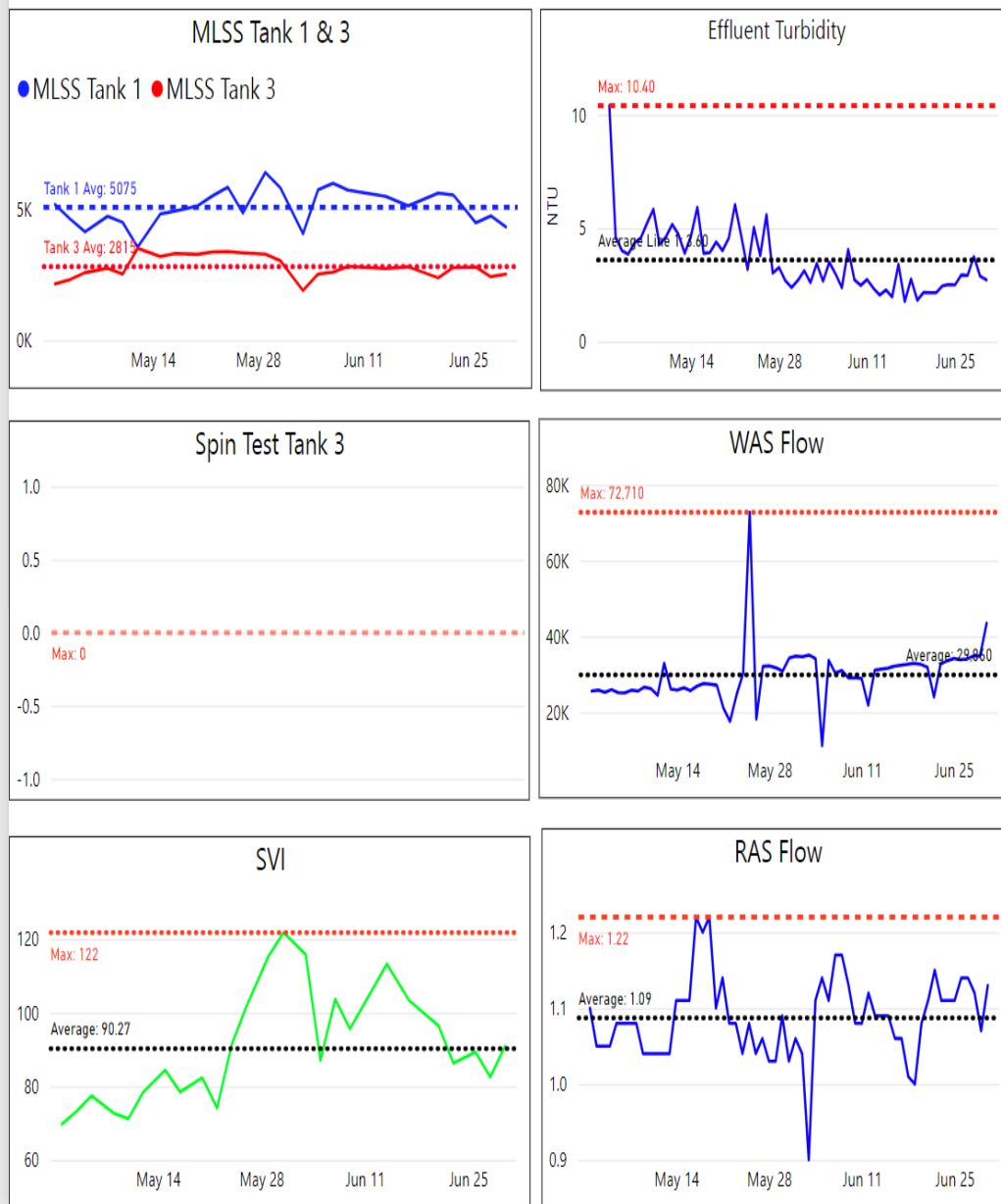
Monthly Process Summary graphs from power BI: April-May-June 2023

## ➤ SECONDARY PROCESSES – POWER BI GRAPHS



2-month period ending on 6/30/2023.





**Additional Power BI Graphs showing trends of various processes – 5/1/2023- 6/30/2023.**

## 4 KEY PERFORMANCE INDICATORS



<u>Permit Compliance</u>												
Parameter Info			Permit Requirements					Results				
Parameter	Hach WIMS Variable #	Units	Daily Max	Daily Min	Weekly Avg Max	Monthly Avg Max	Freq	Period Avg	Period Min	Period Max	# of Samples	# of Violations
Eff TSS	104 / 999081	MG/L	50		45	30	1 X Week	8.5	6.5	10.5	4	0
Eff TSS	184	LBS			1152	768	1 X Week	91.8	64.0	113.0	4	0
% TSS Rem	208	%		85			1 X Month	95.9			1	0
Eff BOD	108	MG/L	50		45	30	1 X Week	4.4	3.0	8.0	4	0
Eff BOD	185	LBS			1152	768	1 X Week	46.1	30.0	78.7	4	0
% BOD Rem	207	%		85			1 X Month	97.0			1	0
Eff Chlorine	142	MG/L	1			0.7	3 X Day	0.18	0.00	0.56	90	0
Eff Fecal	111	#/100 ML	260			88	1 X Week	10.0	10.0	10.0	13	0
Eff pH	136	SU	8.5	6.5			1X Daily	6.7	6.5	7.0	30	0
Enterococci	255	#/100 ML	276			35	1 X Week	13	10	30	4	0

There were 153 effluent samples taken in June.

## ➤ EFFLUENT COMPLIANCE POWER BI GRAPHS

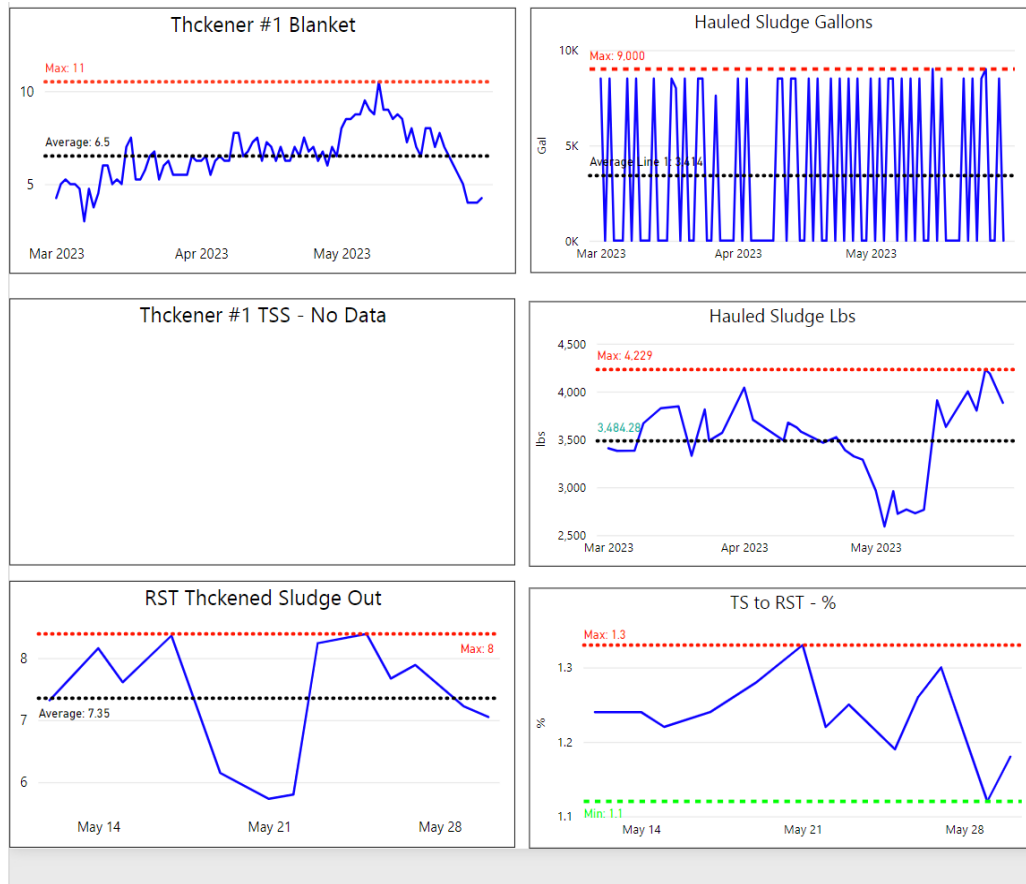


The quality of the effluent was satisfactory, and the turbidity (NTU) levels were normal.

### Sewage Gallons Treated vs Sludge Disposed

Month	Effluent Treated, MG	Sludge Disposed, Gals
June 2021	37.3	79,500
June 2022	30.0	43,500
June 2023	38.3	145,500

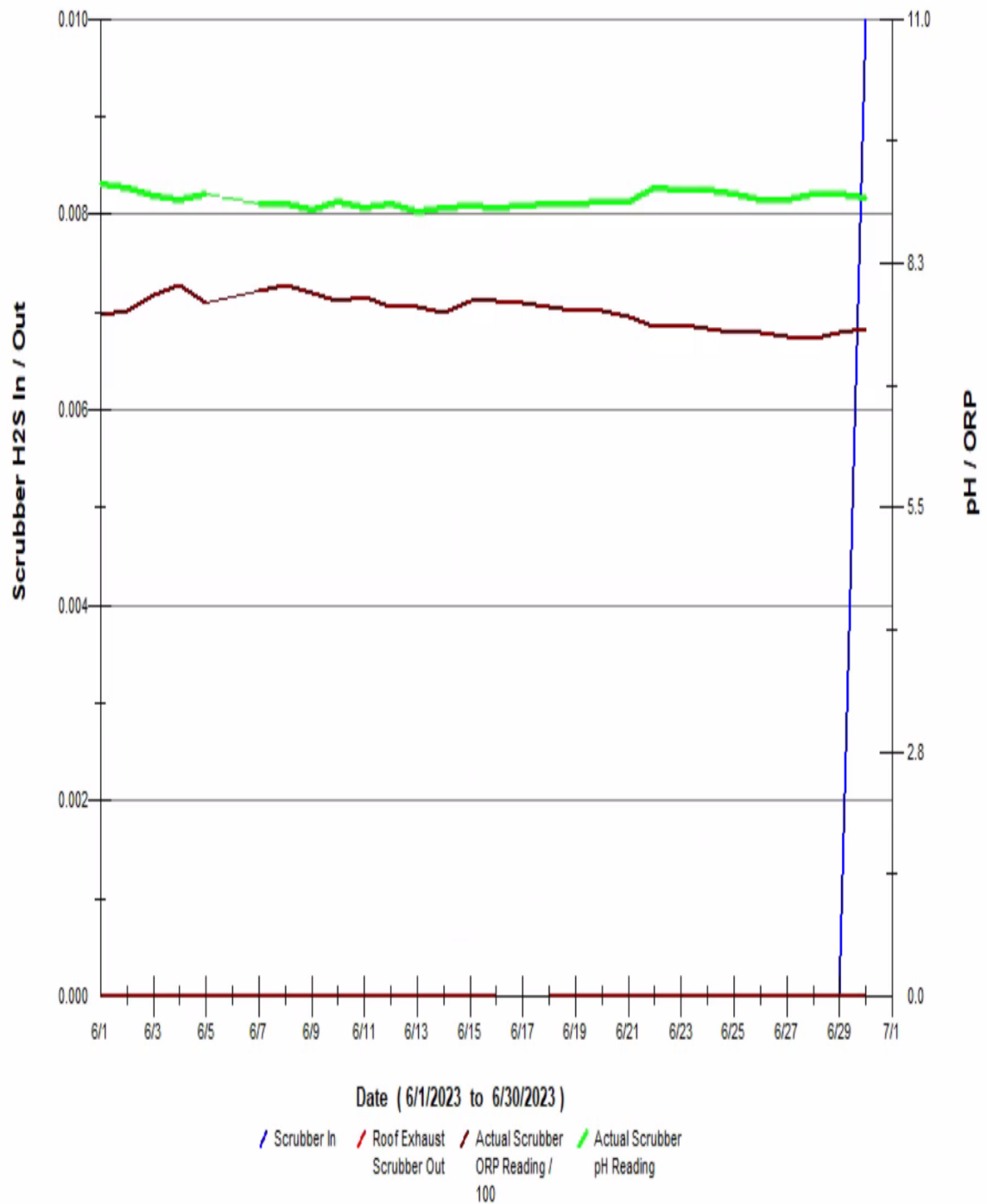
➤ **Additional Power BI graphs for sludge solids for 3-month period ending 6/30/2023.**



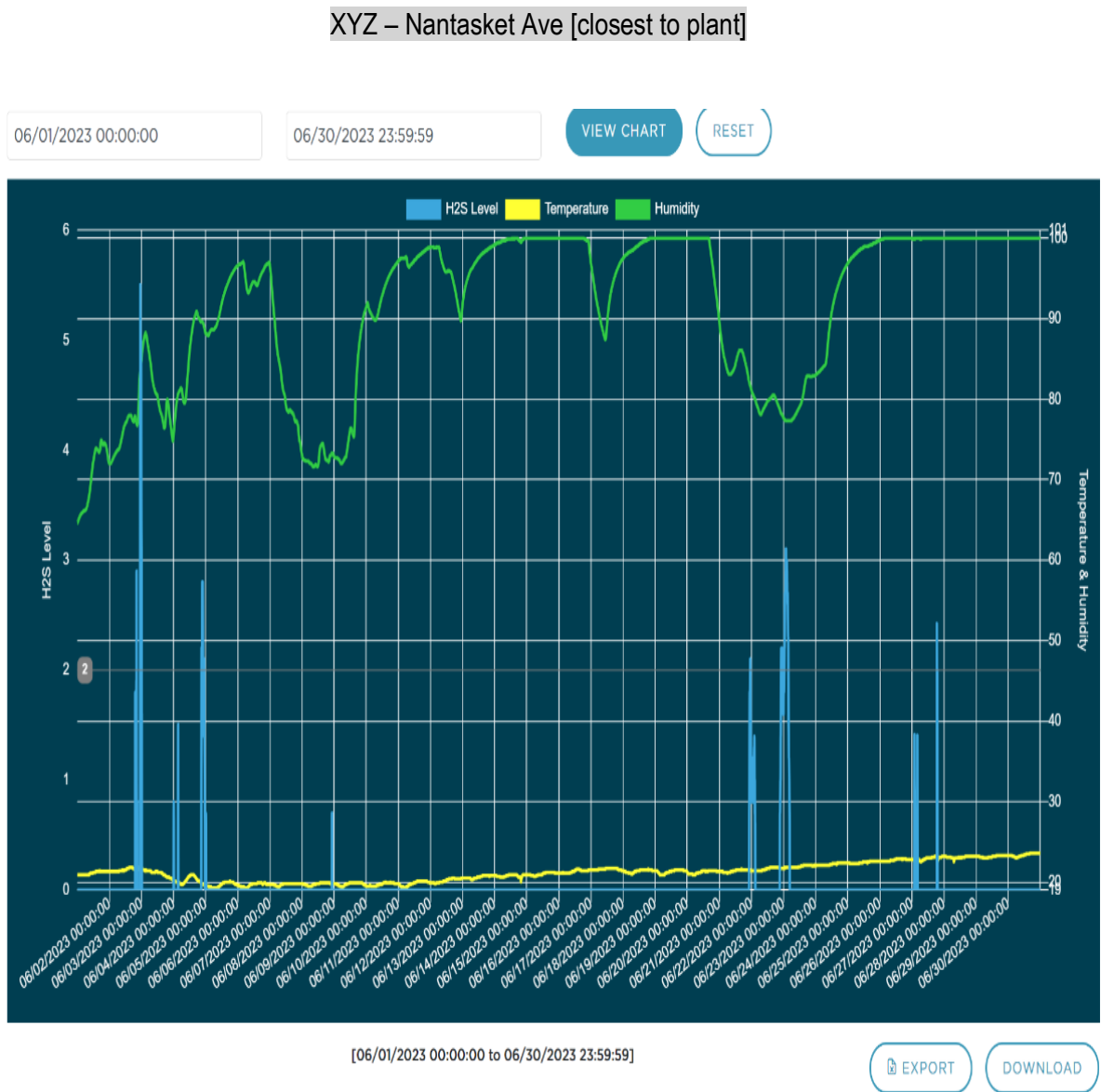
The Bioxide system was on, but the feed rates were minimal, as normal seasonal temperatures were cooler. Monthly graphs are attached below, and the daily average Bioxide use for June was about 70.4 gallons per day.

- The “In-Pipe” bacteria releasing containers in the collection system manholes were changed out on June 22nd.
- Slight changes - Hydrogen sulfide (H<sub>2</sub>S) monitoring units were recording and trending on the odor scrubber. [inlet and outlet]. Increased scrubber fan speed slightly. See graph below:

## Scrubber H2S, pH and ORP



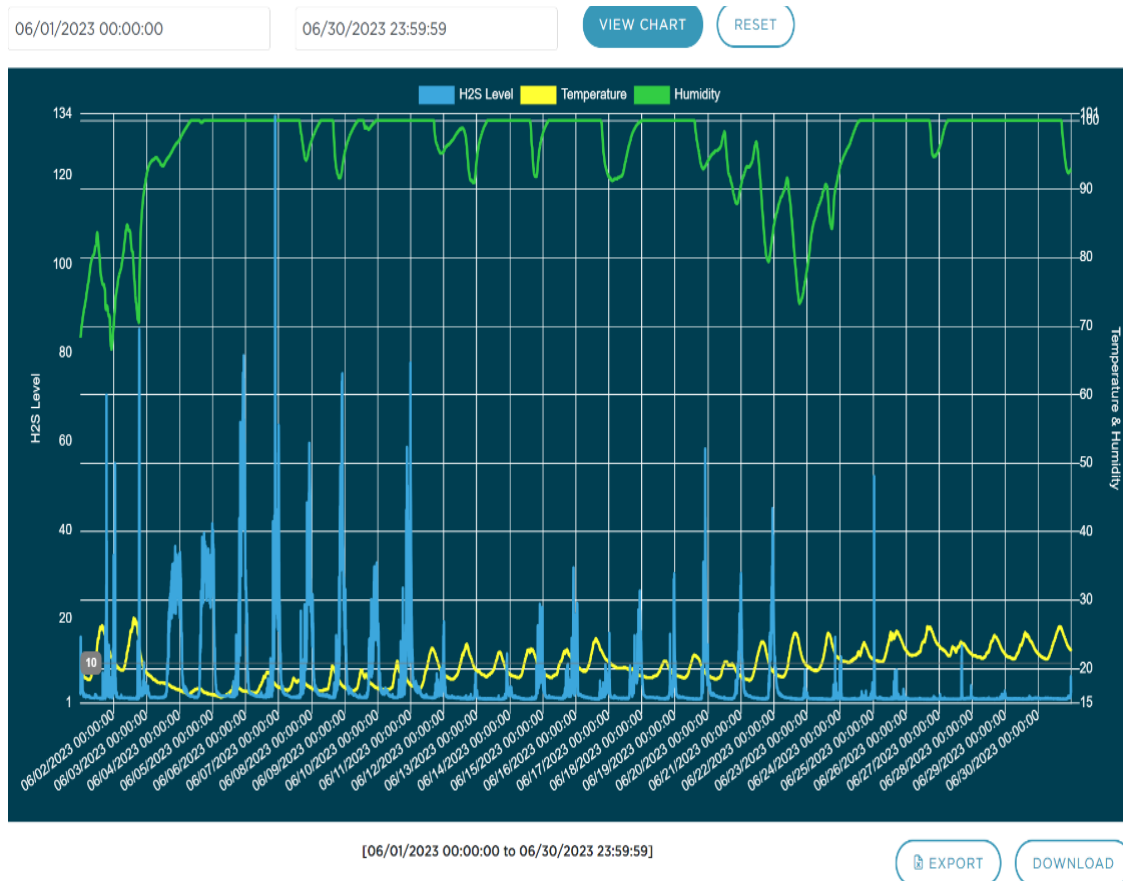
[pictured below: Scrubber trend and trending graphs for H2S levels recorded from the vapor link system cellular at XYZ Street/Nantasket Ave and Nantasket Ave/Water Street manholes.



The odor data logging unit at XYZ monitoring the overall H2S levels close to the plant. From the graph, the daily pattern of H2S levels see a rise in the mid-afternoon until late evening/early AM.

## Nantasket Ave/Water Street [ at end of PS 3 force main and PS 4 discharge]

Pump station #3 - H2S is monitored at the end of the force main in the manhole at Nantasket Ave & Water Street. Bioxide is added to allow excess nitrate in the sewage system to treat the additional H2S added from other parts the system – such as PS #4, contributions from lines feeding the interceptor - PS #5, PS #6, PS #9, Spinnaker Island, etc., all the way to the wastewater plant. H2S levels through March were minimal with generally mild temps for wintertime, and adjustments for substantially less Bioxide feed were made. The average daily use of Bioxide in the collection system through June was 70.4 gallons per day.



Nantasket Ave

# 5 MAINTENANCE SUMMARY

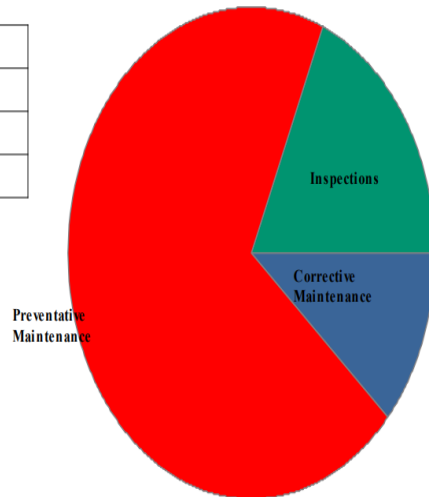


## Maintenance History Report Hull Wastewater

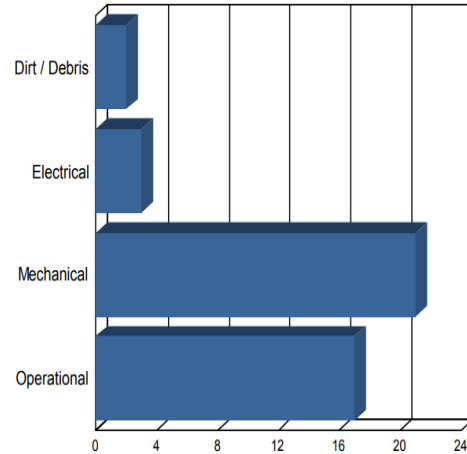
Start Date: 6/1/2023  
End Date: 6/30/2023

Work Order History By Type

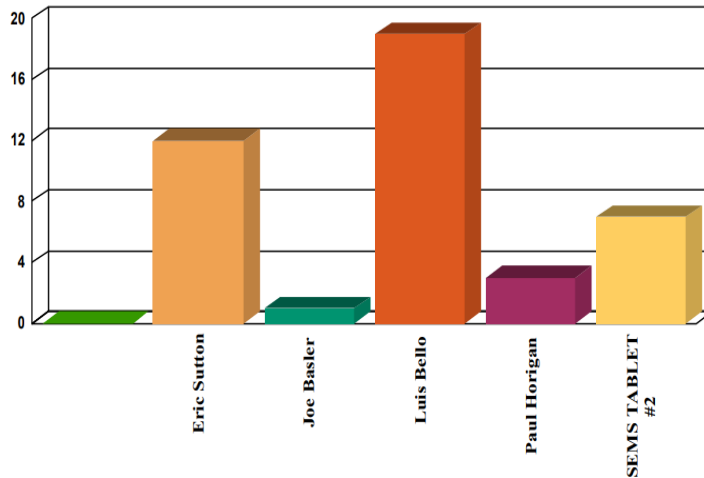
Corrective Maintenance	5
Inspections	8
Preventative Maintenance	30
<b>Total Work Orders</b>	<b>43</b>



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Eric Sutton	12	4
Joe Basler	1	0
Luis Bello	19	0
Paul Horigan	3	0
SEEMS TABLET #2	7	0
Unassigned	1	1
<b>Totals</b>	<b>43</b>	<b>4</b>



## 6 SAFETY



It is Woodard & Curran's policy to maintain a safe and healthy working environment for all employees and to comply with all applicable occupational health & safety regulations.

- No lost time incidents were reported for June.
- Monthly PM's - emergency eyewash and shower inspections, fire extinguishers, and emergency lighting inspections completed.
- Monthly calibrations were performed on all MX4 & Max XT11 gas meters.
- W&C's Pure Safety topic for June was heat stress.
- The monthly W&C SPARKS safety meeting was held on June 29, including a review of W&C's monthly "Lessons Learned!" from May.
- W&C's monthly safety inspection checklist for the plant was completed.

## 7 STAFF DEVELOPMENT

**Training is an important part of any operation to ensure employee health and safety is assured, quality standards are supported, staff skills are improved, career opportunities become available, and higher productivity is achieved.**

**Listed is a general outline of training that the staff received over the course of the month:**

- All staff completed W&C's monthly Pure Safety training module and our monthly safety meeting was held on June 29. Topics discussed were the coming summer heat & humidity, the effects on our body, lightweight clothing & shade, and proper hydration. Staff also reviewed W&C's "near-miss" incidents occurring at all projects during the month of May in "Lessons Learned!"
- Regular, usually daily, operational updates and process control discussions, pump station operations, Dig Safes called for, and the Phase 2 project work scope ongoing at the plant. Daily safety briefings and PPE updates at start of day's shift.

### **Staffing related items:**

- Plant continued to have weekend coverage supplemented with part-time staffers Roger Boltrushek and Ryan Holman, in addition to Mike S, Joe B, Luis B, Eric S.
- O&M Specialists Paul Horigan and Jody St George continue to assist as needed with plant O&M projects.
- Ben Porcher joined the staff as an Operator- with a MA WW Grade V license, on June 12- WELCOME Ben!

## 8 COLLECTION SYSTEM

### A. WET WELL CLEANING

The actual schedule for wet well cleaning: May 2023 to April 2024:

(X-Cleaned) - (Orange – Inspected) - (Green – See notes) - (blank – no work done)

Frequency of cleaning	Pump Station							
	A	1	3	4	5	6	9	D
May, 2023								
June, 2023	X			X				
July, 2023								
Aug., 2023								
Sept. 2023								
Oct., 2023								
Nov, 2023								
Dec., 2023								
Jan., 2024								
Feb., 2024								
March 2024								
April 2024								

All pump stations except for Pump Station 3 and Station D have an aerator/mixer in the wet wells.

## **B. COLLECTION SYSTEM MAINTENANCE**

**Collection system work is being documented and tracked in Utility Cloud [UC] and a summarized report for June has been included as an attachment with the Monthly Operating Report.**

**Woodard & Curran assisted/conducted camera work and sewer system support in the Hull collection system at the following areas during the month of June.**

**Ongoing backup and blockage call outs requiring an increase in labor and time to support.**

**Below summarizes W&C's efforts at the various call out locations.**

There were three calls for E-One Grinder pump service by residents– see the attached UC summary. The EOne job at 52 Nantasket Avenue required W&C staff to call in Rosano-Davis Pumping to clean out the unit's tank. Apparently, it was not in use for several months as the house was vacant. This period of no usage allowed the solid still in the tank to harden up of sorts and required a septage pump truck to remove. W&C staff were also called to replace EOne units at 44 Chatham Street and 18 Logan Avenue .

- Pump station and plant's back-up power emergency generator testing- consisting of weekly no load running and a monthly loaded running- as if it was in service during a power outage,
- All Pump station wet wells were inspected in June- the monthly station inspections are completed and combined with the monthly station PM's.
- Upload new or updated tie-cards to the UC as required.
- Dig-Safe mark outs are completed throughout the Town of Hull as needed to assist and facilitate scheduled and emergency gas repairs, broken water mains, roadway paving projects, and other residential and town projects. All are listed in the UC summary.

## 9 PROJECT MANAGEMENT & ADMINISTRATION



### A. ON-GOING PROJECTS AND SUPPORT ITEMS

#### June updates:

- Phase 1 construction work in the operations building is mostly complete, but with some minor punch list tasks being addressed. Phase 2 lead contractor Barletta Engineering of Canton, MA has been onsite periodically.
- Plant Manager Mike S. and Assistant Plant Manager Joe B. continue to meet weekly with John S. to discuss the Hull Sewer Department operations, any treatment plant issues, collection system maintenance, and any upcoming projects.
- On June 19 a sewer backup was reported by the homeowner at 80 Atlantic Avenue. A local plumber was onsite, and W&C staff checked the sewer lines via CCTV. Cement debris from installing new sewer manhole frames was found to be obstructing the lines. Sewer contractor Truax was called onsite to vactor out and jet about 1500 feet of sewer line in order to remove the debris and clear out the lines to restore proper flow.
- On June 28 the homeowner at 8 Edgewater Road reported a sewer backup. Upon investigation by Tucker Plumbing of Hull and W&C staff line jetting was deemed necessary- sewer contractor BMC Corp was called onsite. It was subsequently determined that some 110 feet of the sewer main line going from the house at #8 Edgewater Road out to Nantasket Avenue had collapsed. Utility contractors Aqualine were promptly called onsite to undertake the job of replacing the line.

Date	Asset ID	Asset Description	Asset Class
6/12/2023 14:36	01-045	34 CHANNEL ST	Hull Parcels
6/8/2023 13:08	04-010	16 ANDREW AVE	Hull Parcels
6/13/2023 13:02	04-033	95 HIGHLAND AVE	Hull Parcels
6/29/2023 12:09	04-038	105 HIGHLAND AVE	Hull Parcels
6/8/2023 13:04	05-029	1 VAUTRINOT AVE	Hull Parcels
6/29/2023 9:33	05-029	1 VAUTRINOT AVE	Hull Parcels
6/8/2023 13:05	05-030	3 VAUTRINOT AVE	Hull Parcels
6/29/2023 9:35	05-030	3 VAUTRINOT AVE	Hull Parcels
6/8/2023 13:07	05-059	14 HIGHLAND AVE	Hull Parcels
6/8/2023 13:06	05-066	11 HIGHLAND AVE	Hull Parcels
6/29/2023 9:37	05-077	71 HIGHLAND AVE	Hull Parcels
6/29/2023 9:50	07-011	0 DUCK LANE	Hull Parcels
6/29/2023 7:56	10787	8" AC Pipe	Hull Sewer Main
6/21/2023 7:21	11020	10" PVC Pipe	Hull Sewer Main
6/21/2023 7:15	11021	10" PVC Pipe	Hull Sewer Main
6/5/2023 10:02	12-007	36 STANDISH AVE	Hull Parcels
6/29/2023 12:04	12-034	4 BEACON RD	Hull Parcels
6/29/2023 10:00	13-161	15 P STREET	Hull Parcels
6/29/2023 9:58	13-165	25 P STREET	Hull Parcels
6/21/2023 13:57	15-065	245 BEACH AVE	Hull Parcels
6/21/2023 13:56	17-042	197 BEACH AVE	Hull Parcels
6/14/2023 7:20	17-097	67 D STREET	Hull Parcels
6/7/2023 7:37	17-101	207 BEACH AVE	Hull Parcels
6/12/2023 14:34	17-128	221 BEACH AVE	Hull Parcels
6/13/2023 7:29	18 Logan Ave	18 Logan Ave Grinder Pump	Hull Grinder Pumps
6/21/2023 13:37	19-001	670 NANTASKET AVE	Hull Parcels
6/2/2023 12:21	21-005	131 BEACH AVE	Hull Parcels
6/21/2023 14:00	21-006	133 BEACH AVE	Hull Parcels
6/2/2023 12:20	21-065	101 MANOMET AVE	Hull Parcels
6/14/2023 7:10	21-104	141 SAMOSET AVE	Hull Parcels
6/16/2023 15:00	22-170	91 TOURAINE AVE	Hull Parcels
6/5/2023 15:11	24-068	25 WARFIELD AVE	Hull Parcels
6/29/2023 10:14	24-076	71 WARFIELD AVE	Hull Parcels
6/21/2023 13:47	26-076-A	21 REVERE ST	Hull Parcels
6/29/2023 7:48	27-132	8 EDGEWATER RD	Hull Parcels
6/12/2023 14:35	28-069	59 KINGSLEY RD	Hull Parcels
6/2/2023 12:07	30 N Truro St	30 N Truro St Grinder Pump	Hull Grinder Pumps
6/2/2023 12:10	30 N Truro St	30 N Truro St Grinder Pump	Hull Grinder Pumps
6/5/2023 15:03	32-056	86 CLIFTON AVE	Hull Parcels
6/10/2023 7:29	32-058	82 CLIFTON AVE	Hull Parcels
6/28/2023 7:10	34-008	25 BAY STREET	Hull Parcels
6/26/2023 14:04	35 Wyola Rd	35 Wyola Rd Grinder Pump	Hull Grinder Pumps
6/2/2023 12:18	36-017	47 BAY STREET	Hull Parcels

6/2/2023 12:16 39-184	20 ROCKLAND HOUSE RD	Hull Parcels
6/21/2023 7:09	40139 10" CIPP Pipe	Hull Sewer Main
6/7/2023 7:30 44 Chatham St	44 Chatham St Grinder Pump	Hull Grinder Pumps
6/21/2023 9:07 48-001	120 NANTASKET AVE	Hull Parcels
6/2/2023 12:13 48-002	288 ATLANTIC AVE	Hull Parcels
6/14/2023 14:25 48-014	25 STATE PARK RD	Hull Parcels
6/18/2023 8:44 49-048	96 NANTASKET AVE	Hull Parcels
6/2/2023 12:14 49-059	268 ATLANTIC AVE	Hull Parcels
6/2/2023 12:24 51-006	181 ATLANTIC AVE	Hull Parcels
6/28/2023 7:15 51-112	21 BURR RD	Hull Parcels
6/20/2023 14:49 52 Nantasket Ave	52 Nantasket Ave Grinder Pump	Hull Grinder Pumps
6/2/2023 12:27 52-011	168 ATLANTIC AVE	Hull Parcels
6/28/2023 7:12 52-060	4 GUN ROCK AVE	Hull Parcels
6/5/2023 15:09 53-019	127 ATLANTIC AVE	Hull Parcels
6/5/2023 15:10 53-020	137 ATLANTIC AVE	Hull Parcels
6/14/2023 7:18 54-032	12 DRIFTWAY	Hull Parcels
6/21/2023 7:29 54-045	80 ATLANTIC AVE	Hull Parcels
6/22/2023 15:02 Bateria UNIT #21	UNIT #21	Hull In Pipe Bateria Unit
6/22/2023 15:05 Bateria UNIT #22	UNIT #22	Hull In Pipe Bateria Unit
6/22/2023 14:54 Bateria UNIT # 8	UNIT # 8	Hull In Pipe Bateria Unit
6/22/2023 14:48 Bateria UNIT #1	UNIT #1	Hull In Pipe Bateria Unit
6/22/2023 14:55 Bateria UNIT #10	UNIT #10	Hull In Pipe Bateria Unit
6/22/2023 14:59 Bateria UNIT #11	UNIT #11	Hull In Pipe Bateria Unit
6/22/2023 15:03 Bateria UNIT #12	UNIT #12	Hull In Pipe Bateria Unit
6/22/2023 15:03 Bateria UNIT #13	UNIT #13	Hull In Pipe Bateria Unit
6/22/2023 15:02 Bateria UNIT #14	UNIT #14	Hull In Pipe Bateria Unit
6/22/2023 15:00 Bateria UNIT #15	UNIT #15	Hull In Pipe Bateria Unit
6/22/2023 15:00 Bateria UNIT #16	UNIT #16	Hull In Pipe Bateria Unit
6/22/2023 14:55 Bateria UNIT #17	UNIT #17	Hull In Pipe Bateria Unit
6/22/2023 14:57 Bateria UNIT #18	UNIT #18	Hull In Pipe Bateria Unit
6/22/2023 14:58 Bateria UNIT #19	UNIT #19	Hull In Pipe Bateria Unit
6/22/2023 14:48 Bateria UNIT #2	UNIT #2	Hull In Pipe Bateria Unit
6/22/2023 14:59 Bateria UNIT #20	UNIT #20	Hull In Pipe Bateria Unit
6/22/2023 15:05 Bateria UNIT #23	UNIT #23	Hull In Pipe Bateria Unit
6/22/2023 14:47 Bateria UNIT #24	UNIT #24	Hull In Pipe Bateria Unit
6/22/2023 14:56 Bateria UNIT #3	UNIT #3	Hull In Pipe Bateria Unit
6/22/2023 14:46 Bateria UNIT #4	UNIT #4	Hull In Pipe Bateria Unit
6/22/2023 14:49 Bateria UNIT #5	UNIT #5	Hull In Pipe Bateria Unit
6/22/2023 14:49 Bateria UNIT #6	UNIT #6	Hull In Pipe Bateria Unit
6/22/2023 14:54 Bateria UNIT #7	UNIT #7	Hull In Pipe Bateria Unit
6/22/2023 15:06 Bateria UNIT #9	UNIT #9	Hull In Pipe Bateria Unit
6/5/2023 15:06 MH-20165	SEMS_Asset	Sanitary Manhole
6/5/2023 15:08 MH-20165	SEMS_Asset	Sanitary Manhole
6/7/2023 7:41 MH-20485	SEMS_Asset	Sanitary Manhole

6/21/2023 13:54 MH-20488	SEMS_Asset	Sanitary Manhole
6/21/2023 13:51 MH-20600	SEMS_Asset	Sanitary Manhole
6/29/2023 8:01 MH-20759	SEMS_Asset	Sanitary Manhole



<b>Name</b>	<b>Workflow Class</b>	<b>View</b>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Sewer Main Cleaning & CCTV	<a href="#">View</a>
Sutton, Eric	Sewer Main Cleaning & CCTV	<a href="#">View</a>
Sutton, Eric	Sewer Main Cleaning & CCTV	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Sewer Backup	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
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Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Sewer Backup	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Sticker Replacement - Grinder Panels	<a href="#">View</a>
Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
Sutton, Eric	Hull - Sewer Backup	<a href="#">View</a>
Sutton, Eric	Generic WO	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>

Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Sewer Main Cleaning & CCTV	<a href="#">View</a>
Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Sewer Backup	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Generic WO	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
Sutton, Eric	Generic WO	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Sewer Backup	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
Sutton, Eric	Hull - Markout	<a href="#">View</a>
Sutton, Eric	Hull - Sewer Backup	<a href="#">View</a>
Sutton, Eric	Sewer Main Cleaning & CCTV	<a href="#">View</a>

Sutton, Eric	MH Frame & Cover Inspection	<a href="#">View</a>
Sutton, Eric	MH Frame & Cover Inspection	<a href="#">View</a>
Sutton, Eric	Generic WO	<a href="#">View</a>



# Maintenance History Report

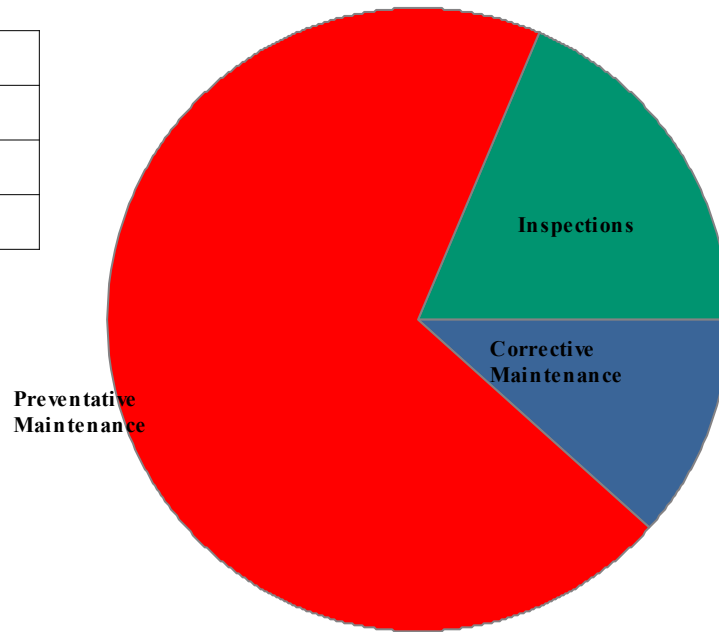
Start Date: 6/1/2023

End Date: 6/30/2023

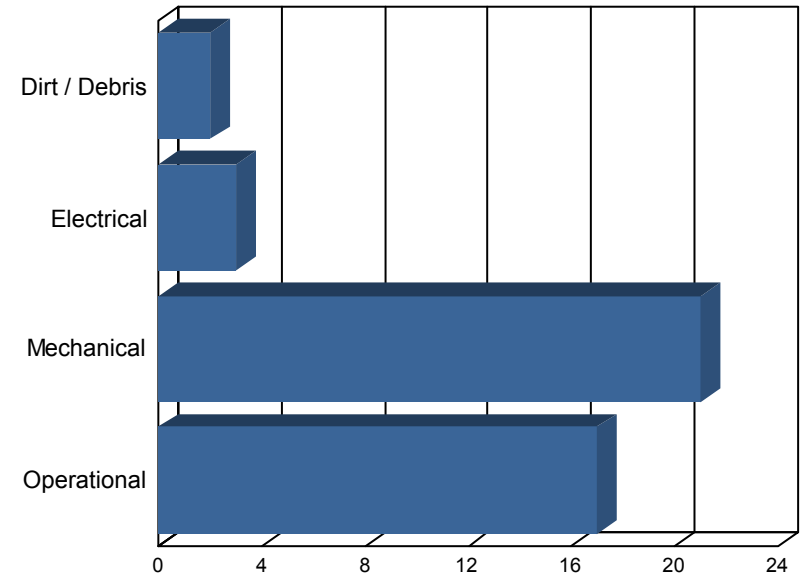
## Hull Wastewater

### Work Order History By Type

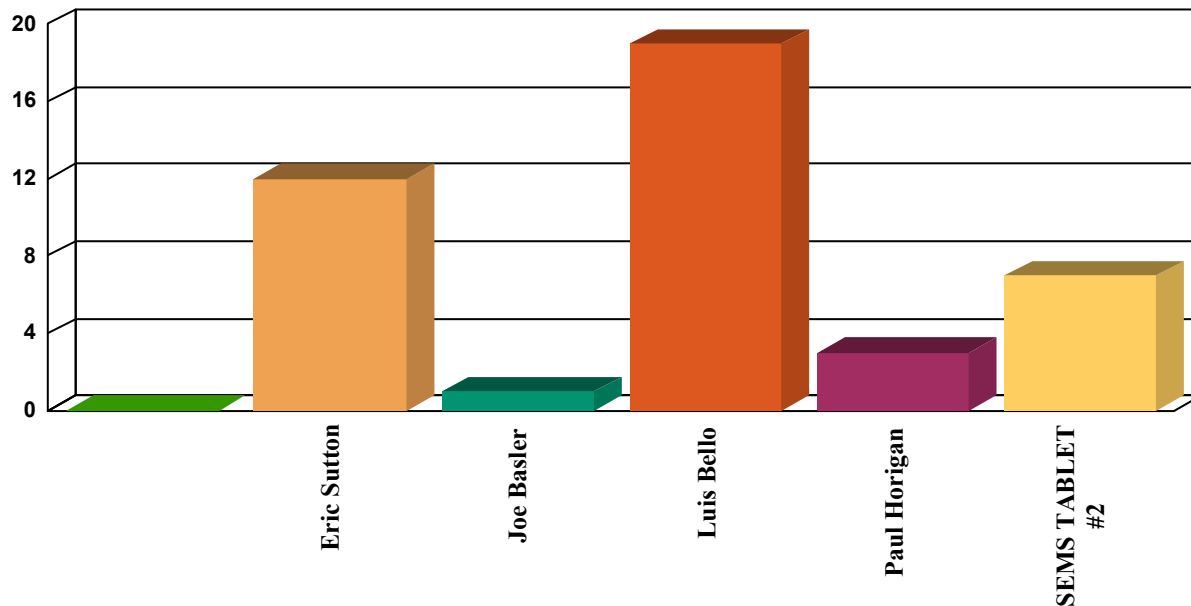
Corrective Maintenance	5
Inspections	8
Preventative Maintenance	30
Total Work Orders	43



### Work Order History by Reason



### Work Order History By Employee



Employee	WO Count	Labor Hours
Eric Sutton	12	4
Joe Basler	1	0
Luis Bello	19	0
Paul Horigan	3	0
SEMS TABLET #2	7	0
Unassigned	1	1
Totals	43	4

## Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
6/3/23	18042	RST unit	JB ES Replaced 2 wheels see picture.	JB ES replaced 2 wheels along the wall side of rst		6/3/23	Completed
6/5/23	18043	20 - WW - collections - general	Loose lamp at pump station #1	Light lamp needs to be re-adjusted to the connection.	Luis Bello	6/5/23	In Process
6/6/23	18044	20 - WW - collections - general	Loose lamp at pump station #1	Light lamp needs to be re-adjusted to the connection.	Luis Bello	6/6/23	In Process
6/7/23	18045	PS 1 Building	Lighting 1st floor	Es ph fixed 2light fixtures station 1	Eric Sutton	6/7/23	Completed
6/9/23	18046	Portable Equipment	New 6" trash pump exercise	Set up exercised 1 hr out of 100	Eric Sutton	6/10/23	Completed

## Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
6/6/23	17654	PS 1	PS #1 Inspection - Monthly		Luis Bello	6/1/23	Completed
6/7/23	17654	PS 1	PS #1 Inspection - Monthly		SEMS TABLET #2	6/1/23	Completed
6/7/23	17655	PS 3	PS #3 Inspection - Monthly		SEMS TABLET #2	6/1/23	Completed
6/7/23	17656	PS 4	PS #4 Inspection - Monthly		SEMS TABLET #2	6/1/23	Completed
6/7/23	17657	PS 5	PS #5 Inspection - Monthly		SEMS TABLET #2	6/1/23	Completed
6/7/23	17660	PS A	PS #A Inspection - Monthly		SEMS TABLET #2	6/1/23	Completed
6/8/23	17658	PS 6	PS #6 Inspection - Monthly		SEMS TABLET #2	6/1/23	Completed
6/8/23	17659	PS 9	PS #9 Inspection - Monthly		SEMS TABLET #2	6/1/23	Completed

## Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
6/6/23	17661	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly		Paul Horigan	6/7/23	Completed
6/6/23	17662	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		Paul Horigan	6/7/23	Completed
6/6/23	17292	Effluent Pumps	Effluent Pump Semi-Annual valve exercise		Luis Bello	4/7/23	Completed
6/6/23	17670	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly		Eric Sutton	6/7/23	Completed
6/6/23	17666	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		Eric Sutton	6/7/23	Completed
6/6/23	17671	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly		Eric Sutton	6/7/23	Completed
6/6/23	17672	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		Eric Sutton	6/7/23	Completed
6/7/23	17727	Generators "All Pump Station"	Generator - Monthly Load Test		Paul Horigan	6/4/23	Completed
6/7/23	17680	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly		Eric Sutton	6/7/23	Completed
6/7/23	17676	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		Eric Sutton	6/7/23	Completed

## Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
6/7/23	17690	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly		Eric Sutton	6/7/23	Completed
6/7/23	17686	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		Eric Sutton	6/7/23	Completed
6/7/23	17681	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly		Eric Sutton	6/7/23	Completed
6/7/23	17682	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		Eric Sutton	6/7/23	Completed
6/8/23	17731	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	6/4/23	Completed
6/8/23	17717	High level floats	Weekly High Float Alarm test		Luis Bello	6/4/23	Completed
6/11/23	17454	Secondary Clarifier 1	Clean Launder Screens - Quarterly		Luis Bello	5/1/23	Completed
6/11/23	17455	Secondary Clarifier 2	Clean Launder Screens - Quarterly		Luis Bello	5/1/23	Completed
6/13/23	17293	Effluent Pump 1	Isolation Valve Exercise		Luis Bello	4/7/23	Completed
6/13/23	17366	Effluent Pump #1 discharge valve	Isolation Valve Exercise		Luis Bello	4/7/23	Completed
6/13/23	17367	Effluent Pump #2 discharge valve	Isolation Valve Exercise		Luis Bello	4/7/23	Completed
6/13/23	17368	Effluent Pump #3 discharge valve	Isolation Valve Exercise		Luis Bello	4/7/23	Completed
6/15/23	17369	Effluent Pump #4 discharge valve	Isolation Valve Exercise		Luis Bello	4/7/23	Completed
6/15/23	17718	High level floats	Weekly High Float Alarm test		Luis Bello	6/11/23	Completed
6/15/23	17625	Influent Sluice Isolation Gate	Weekly operate through full range		Joe Basler	6/7/23	Completed
6/15/23	17732	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	6/11/23	Completed
6/16/23	17728	Generators "All Pump Station"	Generator Weekly - Test Run no load		Luis Bello	6/12/23	Completed
6/20/23	17619	Generator #1- Emergency Kohler 750	Generator - Monthly Load Test		Luis Bello	6/4/23	Completed
6/20/23	17620	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		Luis Bello	6/12/23	Completed
6/20/23	17616	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		Luis Bello	6/12/23	Completed

Asset Management Accounts - Year 9							
		Actual to date			Projected for Final Estimate		
Account		Budgeted Amount	Spent to Date	Delta	Projected costs and incl PO's	Final est	Delta
09M-101A	Preventive Maint	\$242,712.26	\$36,826.71	\$205,885.55	\$114,140.00	\$150,966.71	\$91,745.55
09M-102B	Capital and Major Repairs	\$140,000.00	\$20,815.35	\$119,184.65	\$70,500.00	\$91,315.35	\$48,684.65
09M-103A	Major Sub Contractors	\$206,459.14	\$53,512.04	\$152,947.10	\$179,000.00	\$232,512.04	(\$26,052.90)
blank							
	<b>Asset Management</b>	<b>\$589,171.40</b>	<b>\$111,154.10</b>	<b>\$478,017.30</b>	<b>\$363,640.00</b>	<b>\$474,794.10</b>	<b>\$114,377.30</b>

\$478,017.30

Budget expended	Time Status	
	NOW=	8/11/2023
	Start	5/1/2020
15.2%	328.1%	312.9%
14.9%	328.1%	313.2%
25.9%	328.1%	302.2%
18.9%	328.1%	309.2%

09S	D Street	\$7,500.00	\$2,640.00	\$4,860.00	\$0.00	\$2,640.00	\$4,860.00
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35.2%	328.1%	292.9%
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09C	Odor Control Chemicals	\$100,000.00	\$94,128.00	\$5,872.00	\$0.00	\$94,128.00	\$5,872.00
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94.1%	328.1%	234.0%
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\$483,889.30

Estimated total  
remaining 09M,  
09C \$120,249.30

Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			<a href="#">8/11/2023 14:32</a>
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Mechanical Work Labor by O&M specialists	Pending		101A	\$25,000.00			Placeholder for Jody St. George, Paul Horigan & WC Support Staff - Total budget \$25,000;
1	Pump and Motor Repairs/Replacements [invoiced and pcard]	Pending		101A	\$20,000.00			to keep existing equipment running - utilize various outside contractor repair shops, new purchases. orig budget \$20,000;
1	Lubricants	Pending		101A	\$1,000.00			Various Suppliers for oil and grease. Budgeted \$1000.
1	Generator Prev. Maintenance and Repairs	Pending		101A	\$21,698.61			Orig budget \$25,000. General PM and CM Repair Work - <b>Placeholder</b>
1	Fire Alarm Inspections and Service	Pending		101A	\$4,000.00			Original Budget \$4,000 - Semi Annual - Flight Alarm Co.Inspections, central station, and service calls
2	Universal waste disposal	Pending		101A	\$500.00			Placeholder - \$500
1	Service the Forklift	Pending		101A	\$400.00			Placeholder \$400 - Annual cost - outside vendor.
1	Overhead Hoist Inspection & repairs	Pending		101A	\$1,700.00			Annual task - Applied Dynamics - Inspection Work - due in spring/summer 2023
1	Flow meter verification and calibration	Pending		101A	\$1,200.00			Placeholder \$1,200 - Annual - Ray Ferland or other 1 visit annually -
1	Facility Building - Roof Inspection	Pending		101A	\$2,800.00			\$2800 Annual Placeholder - Established contract with Tecta America. Need for new proposal.
2	Jerome H2S Meter Inspection	Pending		102B	\$11,000.00			Placeholder if new meter is to be planned for. Factors for new meter replacement to be considered.
1	Janitorial Supplies	Pending		101A	\$3,000.00			Orig budget \$3,000 - Estimated annual expenditures
1	Manhole Inspections	Pending		101A				As required,and/or scheduled
2	General mechanical and electrical items/supplies	Pending		101A	\$20,000.00			Grainger, FWWebb, EJP,Hoadley, McMasterCarr, etc; orig budget \$20,000,
1	Thompson Pump repairs	Pending		101A				
2	Large Hoses & fittings	Pending		101A	\$3,000.00			Orig budget \$3,000. Replacements and/or Service - On-Going - As Needed.
1		Pending		102B				
3		Pending		101A				
		Pending		101A				



Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			<a href="#">8/11/2023 14:32</a>
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Lab Equip Calibration	Pending		101A	\$640.00			Annual service \$640
1		Pending		101A				
	Duperon Service Call	Pending		102B				recommended services per last visit, need repair report[s]
2		Pending		101A				
1		Pending		102B				
2	New Magnetic flow meters for RAS and WAS	Pending		102B	\$9,000.00			hardware - does not include installation [estimate for Equip - \$9,000] May or may not occur. Remove from planned projects for 09M.
2		Pending		102B				
1		Pending		102B				
1		Pending		102B				
1		Pending		102B				
3	Sanitaire hardware purchase for aer tk 1	Pending		102B				Purchase more hardware ??
1		Pending		102B				
2		Pending		102B				
2	Pump Station #3 - spare rotating, assy, or pump	Pending		102B				TBD- estimates being obtained
3	New 4-inch valves or 6-inch valves for pri building between the tanks & Installation	Pending		102B				Valves - cost: \$3000, sub-contracted labor - either WC or outside co.\$5,000 - <b>totl estim \$8,000</b>
3	Odor log data loggers & calibr kit	Pending		102B				if funds avail
3		Pending		102B				
3	Gravity Thickener #1 sandblasting/painting	Pending		102B				Estimate \$50,000+ - would need to go out for competitive bid request

Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			<a href="#">8/11/2023 14:32</a>
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
2		Pending		102B				
1	Grit classifier system parts	Pending		102B	\$4,500.00			Plan for additional tail shaft assy and housing & bushings. Pricing out items/costs by various vendors incl Mfr. 3/16 update - recommendations provided for spare parts
	Plant Water System [Pump and/or parts]	Pending		102B	\$6,000.00			consider spare motor or complete unit. Under review/hold [est \$6,000].
1		Pending		102B				
1	Electrical Work	Pending		103A	\$35,000.00			Orig budget \$35,000. Electricians: Glen Fellows, HiVoltage, or other;
1	SCADA Work - service calls, etc	Pending		103A	\$6,000.00			Steve Rose and the SCADA Support Team; budget \$6,000;
1	E-One Repairs and Replacement	Pending		103A	\$65,000.00			Orig budget: \$65,000. Based on historica/recent costs.
1	Automatic Transfer Switch inspection and servicing	Pending		101A	\$2,400.00			\$2400 - Annual Service planned for NETS - Transfer Switch
1	Wetwell Inspections and Cleaning - Plant/Pump Stations	Pending		103A	\$8,000.00			As required, plant or pump stations; orig budget \$8,000;
1	Sewer Line Cleaning - Emergencies, pump & haul	Pending		103A	\$10,000.00			Placeholder - As required for various sub-contractors; could be Hoadley, Truax, WindRiver, BMC, or other, collection system & plant; budget \$10,000
1	Collection System and plant - emerg & unplanned calls - Jetting & CCTV work - various contractors	Pending		103A	\$15,000.00			Budget - 15,000, Plan to be developed
1		Pending		102B				
3		Pending		103A				
3	SHT1 - demo of equip, air piping & diffuser install/materials	Pending		103A				demo concrete in tank - \$15,000 - sub-contractor and installation of new equip -additional new equip \$6,000; air piping to the tank \$10,000; Total estimate: \$31k to 35K ??. For consideration with outside contractor
4	Generators - Load Bank Testing Plant & Pump Stations	Pending		103A				Look at 09M -last done under 06M. SSGen - review cost estimates.
1	Generators and portable pumps - Annual repairs	Pending		103A	\$20,000.00			SSGen - \$20,000
1	MCC work at the Pump Stations & IR scan for plant and pump s	Pending		103A				Review recent propsal and develop plan
3	Low pressure sewer valve box insp & mtce	Pending		103A				placeholder for contractor O&M inspections and potential repairs; Looking at Rosano-Davis or another contractor & W&C to investigate;come up with plan to rempve covers and inspect
1	Grit screw installation	Pending		102B	\$40,000.00			\$40,000 placeholder installation.

Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			8/11/2023 14:32
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1		Pending		102B				
1		Pending		101A				
	HDWK fiberglass slide gate	Pending		101A	\$3,500.00			Soliciting estimates for at least one new slide gate. Placeholder [Jan 2023] \$3,000; Adjust estimate up to \$3,500 for one gate. No orders placed yet. 3/16 [AV]
1	SC #1 Structural Steel Repairs	Pending		103A	\$20,000.00			Based on T&M - center supports, scrapers, other - IPC Lydon.
TOTAL					\$360,338.61			