



HULL WATER POLLUTION CONTROL FACILITY

January
2020

MONTHLY OPERATING REPORT

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COMMITMENT & INTEGRITY DRIVE RESULTS



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Cover pictures:

[top] W&C Staff installing new basket strainer for plant water system.

[bottom] Pump Station #3 – Wetwell cleaning – W&C working with Hoadley Vactor truck.

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 January 2020.

- No lost-time incidents for the month of January
- There were 140 effluent samples taken in the month of January. Please see page (8) for details.
- There were no effluent permit violations.
- Plant average flows were significantly lower in January in comparison to previous month. The average daily flow for the month was 1.50 MGD. A total of 1.77 inches of rainfall was recorded.
- The plant and collection system odors were low [expected for this time of year]. The Bioxide system was not service. Worked on odor control planning for 2020 with Evoqua, for upgraded controls and better monitoring of chemical feed system.
- Asset Management Accounts checkbook for 05M is attached, and the updated planned expenses sheets also attached [latest update 2/17/20]. A review of the account status between W&C and Hull Sewer Dept. is an on-going process.
- There were no grinder pump call outs during the month of January.
- O&M staff continues to work with the Hull Sewer Department [HSD] helping & tracking of some of the equipment off the original "Critical Equipment List". Review of items on original list.
- W&C O&M continued to work with Engineering on multiple projects including Facility Planning & Pump Stations, Conditions Assessments, SSES yard piping, effluent room isolation issues, headworks and PS Structural, Gunrock/Atlantic Ave and Nantasket Ave lining projects.
- Attended multiple planning meetings with HSD to discuss capital projects and on-going projects with focus on budget planning and scheduling
- Assisted with pump station shutdowns as needed and force main drain backs as part of on-going sewer project work.
- Pump station wet wells cleaned – PS A,3, & 5.
- To note: since the bulk of the GMPS interceptor cleaning has been completed, no additional RAS pump cleaning was necessary in Jan.
- "AI" CEC grant work progressing – transducers installed for various pumps and systems with connections into SCADA.

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

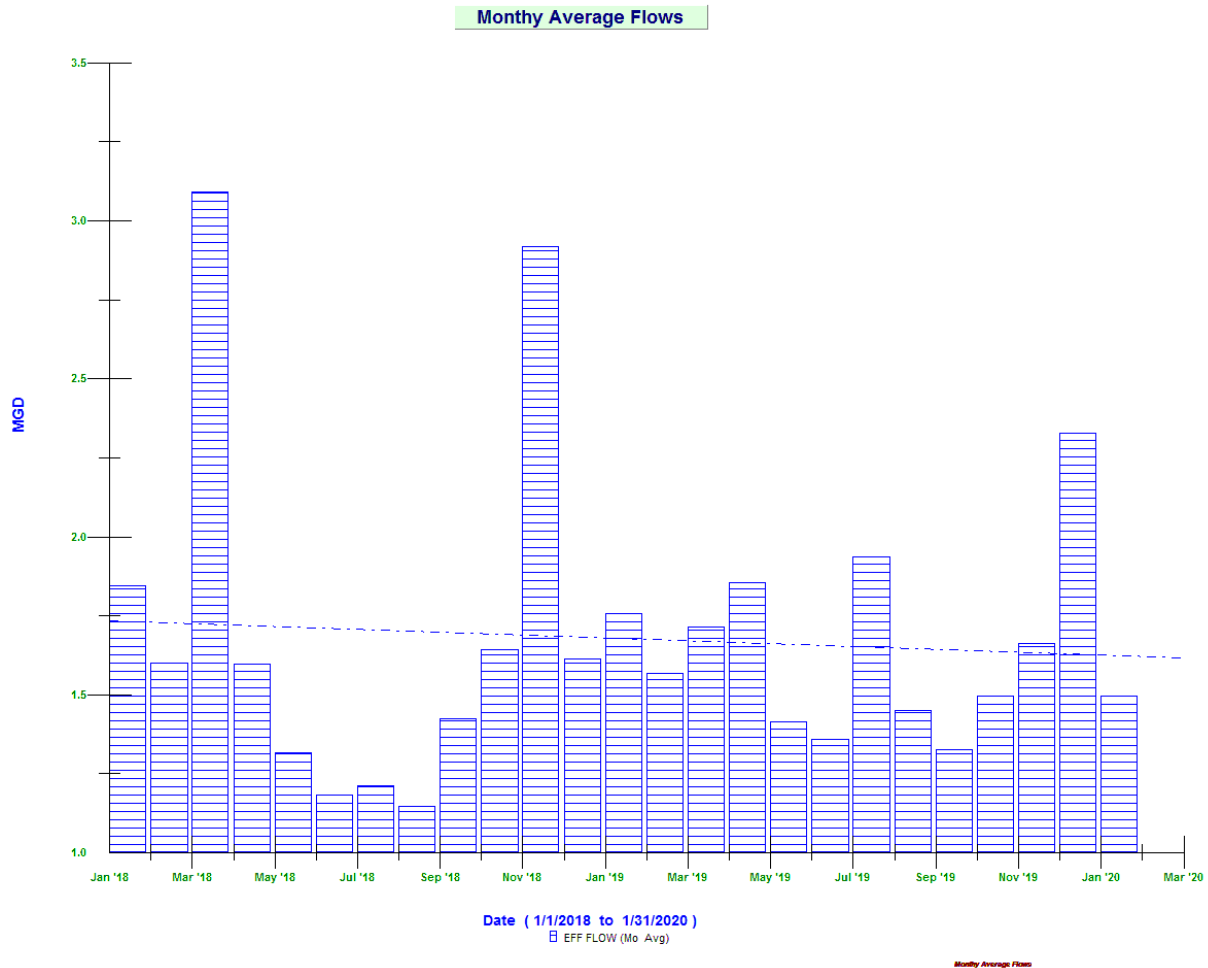


Average Daily Flows and Loadings for the Month:

	Eff Flow MGD	Inf Flow MGD	Inf BOD LBS	Inf TSS LBS	Eff BOD LBS	EFF TSS LBS
Jan 2018	1.845	1.794*	2518	2553	201	299
Jan 2019	1.755	1.968 *	1051	1679	123	170
Jan 2020	1.495	1.713*	1377**	3691**	36	110

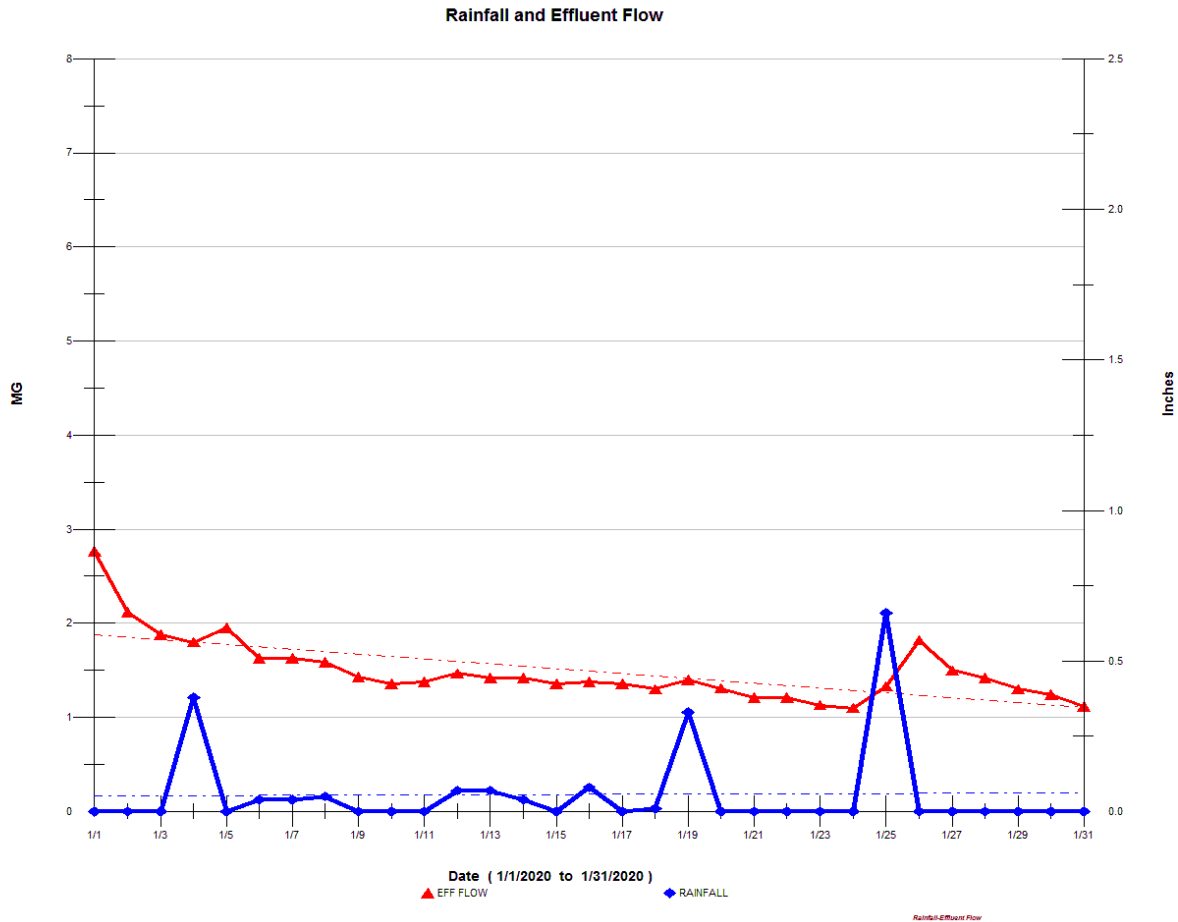
* Meter drift – influent flow meters are strap on doppler flow meters, and the internal pipe condition prevents getting a strong signal. The staff adjusts accordingly and utilizes the area velocity meter in the aeration tank inlet channel as needed. All loadings are based on the effluent flow meter. There is an additional flow meter installed in the headworks over the Parshall flume that is monitoring influent sewage flows. This meter is now tied into the Scada system so that influent flows can be monitored from this location also.

2.1 AVERAGE EFFLUENT MONTHLY FLOWS – TWO YEAR COMPARISON

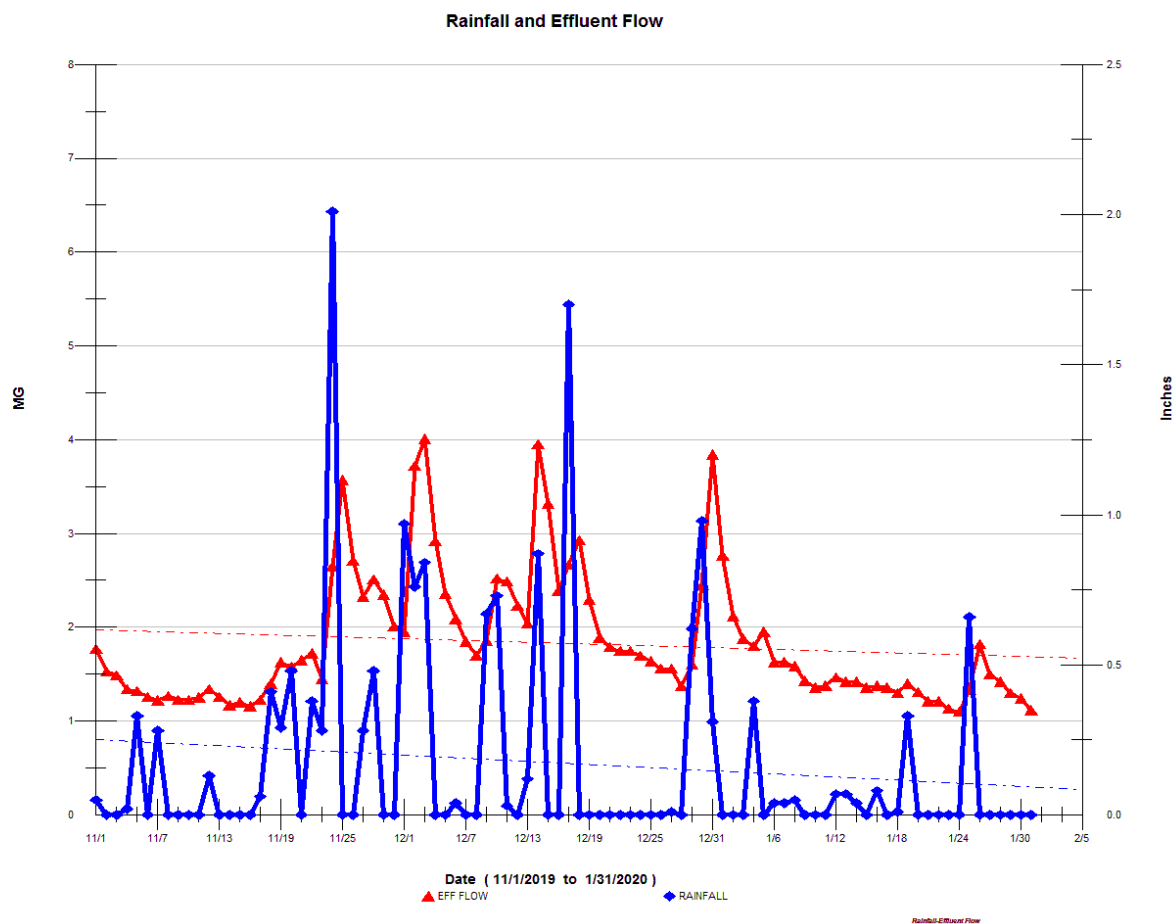


Monthly average flow for December was 1.50 MGD, about 50%+ lower than the previous month. There were only a few wet weather events in January. The total precipitation for the month was 1.77 inches. The graph shows a 2-year summary of the monthly average flows.

2.2 MONTHLY SUMMARY OF RAINFALL AND THE INFLUENCE ON EFFLUENT FLOWS



This graph shows the days where plant flows were higher due to some rainfall [Blue Peaks]. This graph provides the time where flows increased slightly due to the wet weather conditions. There were only three [3] notable wet weather events in January where the rainfall caused a slight rise in plant flows. Inflow and Infiltration out in the collection system has been noted in the past with the increased effluent flow values when it rains.



This graph shows the last 3 months Nov, Dec, Jan and the impacts of rainfall/precipitation on plant flows. The current winter season so far, has not had significant precipitation.

3 COMPLIANCE



➤ Plant Effluent

- There were no permit exceedances for the month of January.

Plant process conditions continued to be maintaining well, with the aeration tank solids inventory remaining consistent. There were little or no impacts from the Nantasket interceptor cleaning. Wasting rates were unchanged. Effluent clarity remained very good with results less than 5 NTU [turbidity units]. Both secondary clarifiers and the primary clarifier were on-line for the entire month. Plant flows were lower due to less wet weather conditions. Sludge settleability remained good and no chlorination of the RAS was needed. The aeration process mode remained in contact stabilization mode, with a limited flow into aeration tank #1. There were no changes in the current flow splits. The aeration blower mode was in “timed ON-OFF” mode [full-time] with air being cycled due to the over-sized blower, less oxygen demand, and to conserve on electrical power use. Also, some of the air is being fed to the #2 sludge holding tank, part of last year’s energy grant. This allows for the small aeration blower to stay offline.



Aeration tank #1- moderate foam



Aeration Tank #3



Secondary Clarifier

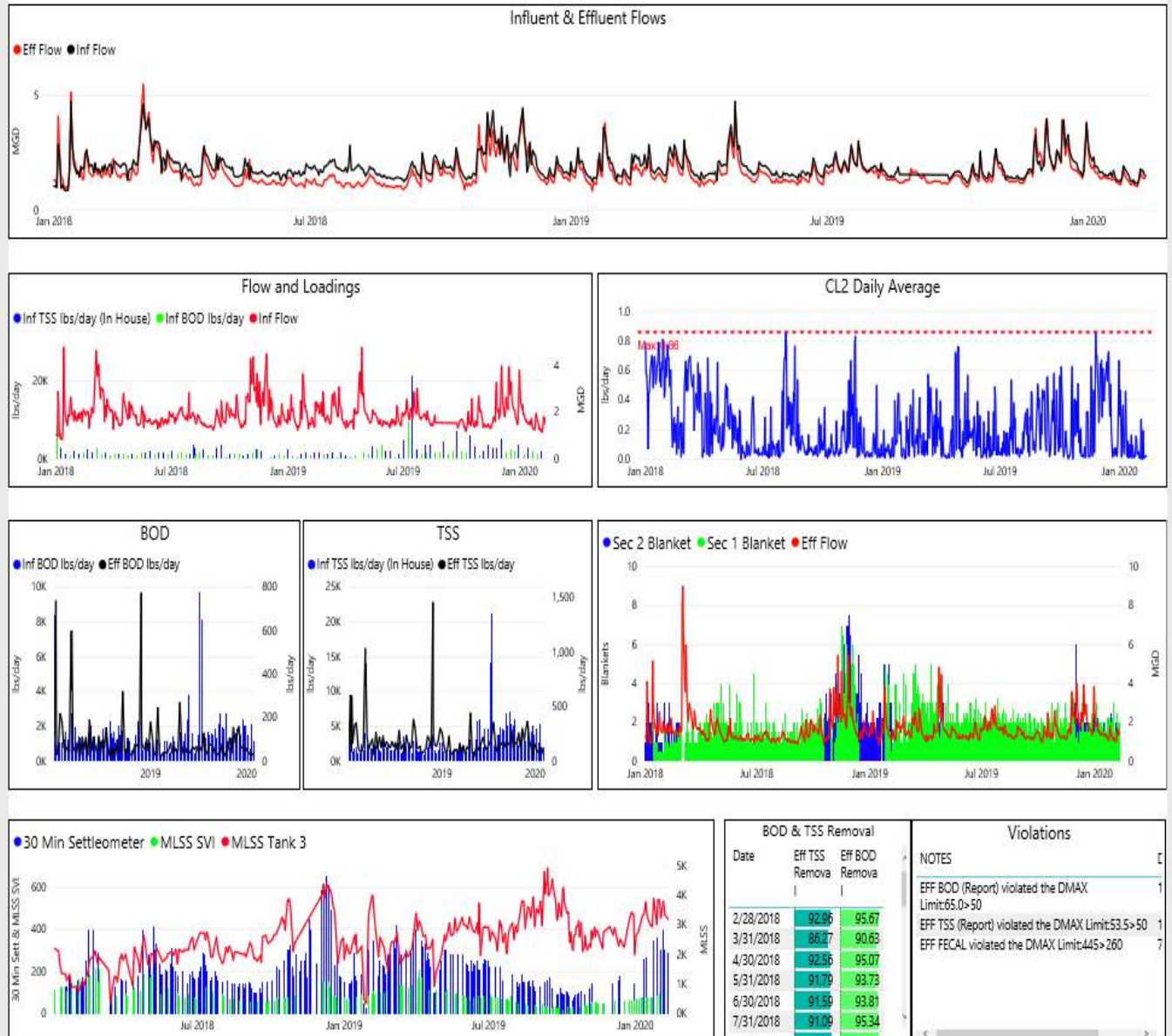
- A Copy of the NPDES report for January 2020 was submitted to the EPA & DEP and then forwarded to the Hull Sewer Dept.
- Corporate team [Frank C & Alan F] continued work with the Scada to Hach Wims data management computer data export and transitioning data sharing between SCADA, HACH, and Power BI for analysis. This also supports additional energy tracking work for the AI project setup. Example of the data graphs available in Power BI.



Hull Wastewater Treatment Facility

1/1/2018

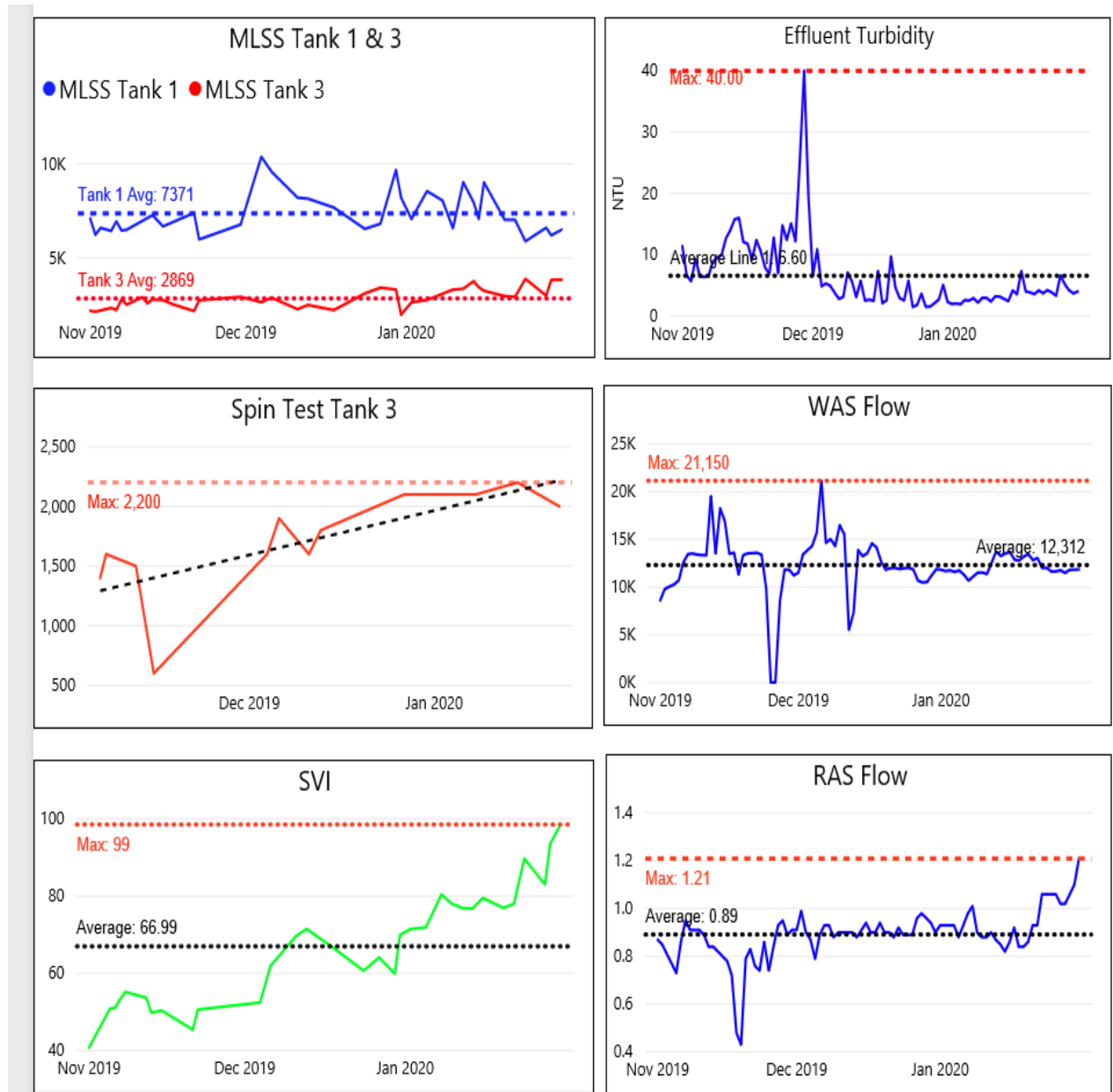
12/30/2020



Graphs shown above are for a two-year period. The range can be varied, and there are many other variables that are being tracked.

- The Use of Drylet continued. The additive continues to show improved secondary effluent quality and bacterial augmentation of the process. This observation was seen during the heavier loaded days and during higher flow periods. Also, the clarity of the facility effluent has increased. The costs for use of the Drylet product is being paid for by W&C. The goal to be achieved is that the

product costs will be offset by the lower sludge generation and lower sludge disposal costs. The daily dose of Drylet product was decreased to “1 scoop” dosed (1 pound), since the primary clarifier is back online, and the amount of food [loading] to the aeration system is lower.



Graphs shows trending of secondary processes using Power BI for 3-month period ending on 1/31/20. The SVI, sludge volume index, is trending up but it is still relatively stable, as the sludge settleability is slower in the winter months, and the solids inventory under aeration is typically higher, due to slower biological activity [colder water temperatures]. An ideal range is 50-100.

- SPCC: Regular monthly inspection of the new AST and fuel day tank, as well at container storage of waste oil. Updated file.
- Completed close out of EPA DMR QA Study #39 for lab compliance. [recordkeeping]
- Start work on Tier 2 report for site hazardous materials for reporting year 2019 [due by March 1st] Kristina Richards assisting with report preparation.
- Start work on annual sludge summary for reporting year 2019 [due February 19th]

4 KEY PERFORMANCE INDICATORS



4.1 WATER QUALITY – JANUARY 2019

Parameter Info		Permit Requirements					Results				
Parameter	Units	Daily Allowed Max in month	Min %	Weekly Avg. Max Allowed in month	Monthly Avg	Freq	Period Monthly Avg.	Period Weekly Min	Period Daily Max	# of Samples	# of Violations
Eff TSS	MG/L	50		45	30	1 X Week	9.5	7.0	13.0	4	0
Eff TSS	LBS			1152	768	1 X Week	110.3	82.9	131.2		0
% TSS Rem	%		85			1 X Month	97.0				0
Eff BOD	MG/L	50		45	30	1 X Week	3.0	3.0	3.0	4	0
Eff BOD	LBS			1152	768	1 X Week	35.5	30.3	40.8		0
% BOD Rem	%		85			1 X Month	97.5				0
Eff Chlorine	MG/L	1.0			0.7	3 X Day	0.12	0.01	0.47	93	0
Eff Fecal	#/100 ML	260			88	1 X Week	10	10	10	4	0
Eff pH	SU	8.5	6.5			1X Daily	6.8	6.5	7.5	31	0
Enterococci	#/100 ML	276			35	1 X Week	10	10	10	4	0

- There were 140 effluent samples taken in the month of January with zero [0] NPDES Permit exceedances.

Gallons Treated vs Sludge Disposed

Month	Effluent Treated, MG	Sludge Disposed, Gals
January 2018	57.21	135,000
January 2019	54.42	117,000
January 2020	46.34	132,000

* Some small impact from interceptor cleaning, increased solids processed/disposal quantity

5 ODOR CONTROL

There were no odor complaint calls during the month of January. The gravity thickener and primary clarifier both were on-line for the winter months due to higher flows and due to the shutdown of the rotary drum sludge thickener [RDT]. The above ground sludge storage tank and RDT remained offline in January. Other plant operations such as scum well pumping, tank cleaning, aeration trough flushing was conducted regularly to avoid odors. The portable Jerome meter is currently being repaired and expected back in mid-February. The permanent installation of H₂S sensors on the scrubber for the “in” and “out” monitoring is scheduled and planned for February.

The odor scrubber system was on-line for entire the month. The scrubber fan speed remains at the mid-range due to low levels of hydrogen sulfide production. The annual cleaning of the scrubber is planned for early February.

- As noted last month, the Evoqua 2020 plan will be to utilize bioxide again, with new “Vapor Link” system controls for remote monitoring and chemical feed adjustment. The newer system components will be installed in April 2020.
- “In-Pipe” bacteria addition continued with all 24 dosing stations operational. The inspection/replacement with full bottles took place on 1/23/20. No kick-start vegetable protein/ bacteria supplement was added in January, as we were waiting for new stock material. The plan for the kick-start program is to follow along with the monthly plan, with the addition of more bacteria to the collection system. All work being tracked on the Utility Cloud [UC].
- Continued the bi-weekly change outs of the bacteria bottles at three lift stations Microbe Dosing Stations (MDU's) with installation just in front of the three largest pump stations [in the wet wells or manhole just prior to the station. [PS 3, PS 5, PS 9] The re-load plan is delivering an additional 5.4 liters per month in total (1.8 liters x 3 locations). Unsure of the overall effectiveness, but to date no additional costs to the Town.
- Mixing systems/aerators all functional at the pump stations, except for pump station #3. New Medora Gridbee mixing system for PS 3 not installed yet. Mixer/Aerators at PS 1, PS4. PS6 & PS 9 are on timed control through SCADA.

6 MAINTENANCE SUMMARY

6.1 TASKS COMPLETED THIS MONTH

The SEMS monthly work order summary for January is compiled and attached for review.

Key items of note are listed below.

- 1) In-Pipe units – battery change out, dosing unit cleaning and inspection and circuit board troubleshooting and replacement as needed.
- 2) Block heater for Generator at PS 5 replaced. Typically, the heater will last 2-3 years.
- 3) Repairs to remaining E-1 grinder pumps completed by FR Mahony. Spare unit stock of new and repaired units back up to “full” status of 8 pumps.
- 4) Comm Fail issues for pump stations – due to Verizon problems. Additional station checks and monitoring/scada checking after hours until problems corrected.
- 5) Met National Grid at PS9 [1/10/20] so that they could replace the gas valve, cock assembly, meter, and related outside piping due to gas leak detected and reported to HFD, Test run generator twice after pressure testing and work was completed. W&C had responded to a few calls in the days prior to this, with the Hull Fire Dept.
- 6) Pump Station #3 work - isolate wetwell by plugging the upstream manhole on Access Rd. A bypass pump was set up to pump the flow from the wetwell to the bypass connection to the force main. The Hoadley vactor truck was onsite and pumped down the wetwell so that the wet well could be cleaned/vactored out. This also allowed for a backflushing of pump #1 into the wetwell to flush back a trapped 8" PVC cap that had become lodged in the pipe suction line. [source: construction in area]. The accumulated rags/debris were also removed from the wet well. [pictures showing bypass pumping of the station, while CSE is completed by Jody S into the wet well]



- 7) There were no grinder pump calls in January.
- 8) On-going issue – continuing to add oil to sec clarifier gear boxes and gravity thickener unit. All the existing Amwell units have leaks, previously documented [lower gear box seals are no good]. The only exception is primary clarifier #2 – running ok. Continuing to use a flowable grease product that is thicker and lessens the amount of oil leakage. The estimated use of product with SC1, SC2, and GT1 on-line is currently at 5-6 gallons per week. The gravity thickener drive unit is also experiencing more labored operation and is being closely monitored.
- 9) Weekly exercise without loads and Monthly load tests completed on all generators including the portable generator and pump stations.
- 10) Sludge holding tank #1 [SHT1] was entered to evaluate the equipment and tank condition for the upcoming SSES work. What was found was a large amount of solids/debris in the tank, the old/failed equipment, and deteriorating concrete surfaces with exposed rebar. The tank has been unused for many years [prior to W&C]. Some cleaning and removal of the tank solids was performed to allow entry. The facility is not equipped to handle the remaining solids removal & disposal. Pictures show existing failed equipment and solids, and concrete condition.





- 11) Ladder replacement at Pump Station #4 completed by Boston Forging & Welding. Picture shows new upper section.



- 12) Scrubber fan unit maintenance – monthly maintenance performed – belts and motor are good.
- 13) All pump station wet wells and alarms checked/inspected on 1/2/20. Wet wells at PS, 3, PS 5, and LS A cleaned in January. Also, the plant primary scum tank was cleaned out. Attached pictures show LS A and PS 5 wet wells and the primary scum well at the plant.



- 14) CSE into wet well at Lift Station A to clear blocked sump pump discharge line
- 15) Install PVC piping for polymer solution line to sludge pump room, replacing hose that had been set up temporarily.
- 16) Primary sludge pump #1 – volute corroded and leaking – temporarily patched with ceramic coating. Future disassembly will be necessary to evaluate and repair internally.
- 17) Effluent pump room: Heater installation completed. New heater and power source disconnect switch by Hi-Voltage Associates.



- 18) Pump Station #3 – Cleaned out pump #2 due to reduced output flow. Pump Station flow trend on Scada alerted staff of the condition. Rags & debris found in the impeller.
- Hull Water Pollution Control Facility
Monthly Operating Report



- 19) PS #6 – re-install interceptor transducer in Nantasket Ave manhole. The unit was removed so that GMPS work could be done.
- 20) Plant Water System – new strainer installed to replace the old and corroded unit. A gantry hoist was borrowed from nearby W&C project. Preparation for unit changeout and rigging of equipment in and out of sub-basement area was completed by Hull staff and O&M Tech Support [Jody St George]. Pictures show W&C staff crew installing the new unit and the completed installation.



- 21) On-going gas meter calibration and repairs as needed for portable and fixed gas monitoring units.
- 22) Replace sensors on dissolved oxygen probes – aeration tank #1 & #3 and repair/seal probe body & holder assemblies.



Please see the attached summary of the Asset Management accounts for contract year (5). Most recent through **02/17/20**

**Updates & notes made to the planned expenditures list.
Items grouped by task – 101A, 102B, 103A**

While the projected costs and actual costs combined total still exceeds the 05M budget, adjustments and decisions are being made on a regular basis based upon priorities and unforeseen costs. The planned list was set up to layout a planned budget for the contract year. There are some items are shaded in the comment section that are targeted for next contract year [06M]

When capital project is completed, the cost to complete is noted under “final cost.” All the capital “102B” items have been listed together in the planned expenditures list for easier review.

7 SAFETY



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

- No lost time incidents reported for January.
- Coronavirus update
- Ongoing - Daily safety briefing meetings, review site safety policies with sub-contractors, safety tailgate topics. Pure Safety topic– January – *Continuously Improve for Safety Excellence*.
- PPE- eye and face protection
- Monthly staff safety meeting conducted on 1/30/20 - AV and RH presented.
- Reminders for daily safety briefing topics and discussion points & documentation. Review "Lessons Learned" from December 2019 - Near misses and incidents from other company projects.
- OSHA form 300A posted – discussed summary with staff
- Winter safety discussed – cold temperatures, slippery conditions, etc.
- Work boots – authorizations for 2020 available
- Noise monitoring of various areas at plant and pump stations completed. Summary of all areas updated and placed in site specific safety binder.
- Safety Data Sheets [SDS] program updated for 2020.
- Plymouth Fire Extinguisher Company onsite for inspection of all extinguishers at the plant and pump stations.
- Hull PD assisted where requested for multiple manhole cover cushion rings were installed.
- Notify HFD [multiple occasions] when confined space entry [CSE] work is to take place. [pictured below: CSE entry into PS3 wetwell.



8 STAFF DEVELOPMENT

Training is an important part of any operation to ensure employee health and safety is assured, quality standards are maintained, 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:

- Monthly staff Safety training – completed – Pure Safety and monthly safety meeting. W&C “near-miss” incidents at all projects for November discussed.
- Regular operational updates and process control discussions, pump station operations, especially with all sewer projects going on in the town, dig-safes, etc.
- Off-site training – Aram & Bill attended NEWEA Winter conference in Boston [1-day].
- Ryan H sat for and passed the MA Grade 4M wastewater exam.
- Intern – Declan Baggett from Mass Maritime – completed first month of his internship & operations – receiving operations and maintenance on-the-job training.

Staffing related items:

- Continued involvement with Mass Maritime [MM] internship program/career fair for future interns.
- Sunday rotation schedule in place with Jim Gagliard working every other Sunday, and remaining weekends being filled by Roger B., Aram V., and Bill B. When Bill is not scheduled for a Sunday, he will be on a Monday-Friday schedule.
- Supplementing staff needs with O&M tech support where needed. Jody S providing coverage when staff levels are lower due to sickness, vacation, or training. Richard [Dick] Gould from the Linden Ponds project is available for various fill-in coverage as needed.
- Aram V. was the recipient of the New England Water Environmental “Operator Safety Award” and received the award at the winter conference in Boston on 1/29/20. The award recognizes an operator for their safety initiative. The award reflects W&C corporate and staff’s dedication to safety in the workplace. Also to be noted is the Town’s support for safety initiatives completed. See picture below.



9 COLLECTION SYSTEM

9.1 WET WELL CLEANING

The actual schedule for wet well cleaning: May 2019 to April 2020:

(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, 2019				X	X			
June, 2019								
July, 2019								
Aug., 2019	X			X	X		X	
Sept. 2019								
Oct.,2019	X		X	X				
Nov, 2019								
Dec., 2019								
Jan., 2020	X		X		X			
Feb., 2020								
March 2020								
April 2020								

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

9.2 COLLECTION SYSTEM MAINTENANCE

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

- Co-ordinate with GMPS for shutdown of PS6 as needed due to Interceptor project - BB coordinated with GMPS and Resident engineer for station operation and shut down. Multiple days.
- BB assist Brian - investigating cross country sewer from Andrew to Western with push camera and dye test,
- Hydrant hit on Central Ave some low pressure in water for short period - BB mark out nearby house service

- Meridian and Pt Allerton – Confined Space Entry [CSE] to remove cluster of bricks and mortar in manhole.
- CSE in MH at Farina Rd and able to remove brick that was in pipe causing obstruction.
- 1/17/20 – Call from Police Dispatch saying detour signs are backwards throughout town - ES and Declan out to inspect signage.
- 1/20/20 - Check out 14 Glover; back-up call. Sarno Drain was there - ES stopped by. Clog was cleared while ES on site – issue on homeowner side near house.
- 1/21/20 - Multiple backup call ins: 28 Park Ave and 12 Brewster, Street flow normal at both locations

Manholes:

- Staff responded to several rattling manhole covers, as a result of on-going work by GMPS. Many manhole cover cushion rings were installed along Nantasket Ave.

Dig Safe mark outs:

- Many Dig-Safe mark outs were completed throughout the Town of Hull in order to assist/facilitate emergency gas repairs, broken water mains, other town projects.

Collection system work is being documented and tracked in Utility Cloud and a summarized report for the month of December has been included as an attachment with the Monthly Operating Report.

10 PROJECT MANAGEMENT & ADMINISTRATION



10.1 ON-GOING PROJECTS AND SUPPORT ITEMS

- The current summary 02/14/20 for the account status for and the year 5 asset management accounts, and the 05M checkbook spreadsheet with proposed maintenance task plan for the year are attached to this monthly report. The plan is regularly updated to reflect changes in the spending plan, with adjustments made as projects are completed, and priorities changed. Unexpected work and expenses are also factored in. [i.e. sub-contractors, goods and services, etc.]
- On-going assistance to the sewer department with various items for purchase from encumbered funds, dealing primarily with items on the critical spares list. AV & BB reviewed the critical spares list providing updates on projects completed, pending, and those considered for future funded projects and facilities planning.
- Contacted the contractors selected for the Amwell gear drives installation and confirmed installation plan, and potential spring 2020 start dates. Also, discussed emergency planning, in the event of a failure of existing equipment.
- The portable generator, that the HSD purchased through the “Sourcewell” purchasing contract is currently in production. The generator delivery is expected in late February/early March.
- The procurement of D Street equipment and services continues – the new pumps and electrical VFD’s are ready to be installed. The piping plan and piping materials list was been finalized and those items are in the process of being purchased. The portable trash pump remained set up at the station, ready for service, equipped with float control for remote starting. As temperatures varied during the month, there were times that the pump was drained out to prevent freezing. The pump was reprimed, when temperatures moderated, and was available for rain events or high tide periods. The pump was not needed in January.

- W&C continued to assist the HSD and Tighe & Bond with regular review and answering of questions, as the final plans for the HVAC plan get closer to completion. Areas of assistance included: operations building layout changes, future electrical room & architectural questions, assisting T&B engineers and affiliated Peer PC engineers [building assessments].
- W&C working with the HSD to finalizing PS5 bypass isolation valve installation and piping modifications. Reviewing construction plan and sub-contractor set-up for funding under 05M.
- Bill has continued work on the best approach for effluent pump room isolation in the event necessary and for flow isolation to allow for valve and check valve replacements. We received a quote from Lydon Millwrights for the labor to replace one of the Forcemain isolation Knife gates in the sub-basement and a quote from valve manufacturer, Orbinox, for a 16-inch knife gate valve. The quote is currently under review. Bill, W&C team, and the Town also discussed larger efforts potentially going through an engineering contract to have this work done in conjunction with the pump replacement work at PS#5.
- Roofing repair work – scheduling with contractor - Tecta America [TA] to get the repairs and inspection of building roofs done in mid to late February. Tecta's schedule did not allow for an earlier completion. TA was pre-qualified by W&C with an approved safety plan.
- Planned ladder replacements at LS A [one section]; PS 6 [one section] for late February/early March. The replacements are being done under the 05M asset management account. There remaining ladders are on hold – PS 5 and PS 9 due to future upgrades planned at the pump stations.
- Preparations underway for scrubber H₂S sensors for the inlet and outlet hydrogen sulfide monitoring. Preliminary installation was started, and the electrical work is expected to be completed in late February/early March.
- With the winter shutdown of the rotary drum thickener [RDT] - items to be addressed while the unit is off-line include the drive sprocket and chain replacement, installation of PVC piped polymer solution line to the sludge pump room, replacement of the corroded thickened sludge hopper corroded. The polymer piping line was completed in January.
- The Town and its engineers Hatch & Woods Hole group have continued conversation and meetings on the flood berm project and involvement with the regulating agencies. Bill has continued to assist coordination efforts on behalf of the site / O&M as needed.
- Ongoing support for conditional assessment of plant equipment, and facility planning. Provide information and feedback. Attend facility planning meetings/discussions.
- SSES and WWTF yard piping conditional assessment efforts. Provide information and feedback on yard piping access, location of proposed test pits at the plant, and alternatives to excavation. Provide information on various sewersheds within the town that have the highest I&I potential for inspection.

- Continued work on MassCEC Aquasight project. The transducer cables were connected into the first-floor control box. There was an issue with one of the signal conditioner units, which had to be returned to the factory for new firmware programming. This has been resolved. Steve Rose and Bill B. were at the facility on Saturday 1/18/20 to link in the equipment and system pressure transducers and make the necessary SCADA programming updates.

Asset Management Accounts - Year 5							
		Actual to date			Projected for Final Estimate		
Account		Budgeted Amount	Spent to Date	Delta	Projected costs and incl PO's	Final est	Delta
05M-101A	Preventive Maint	\$206,323.41	\$122,311.58	\$84,011.83	\$17,870.00	\$140,181.58	\$66,141.83
05M-102B	Capital and Major Repairs	\$140,000.00	\$143,975.49	(\$3,975.49)	\$21,300.00	\$165,275.49	(\$25,275.49)
05M-103A	Major Sub Contractors	\$174,785.44	\$161,438.47	\$13,346.97	\$62,550.00	\$223,988.47	(\$49,203.03)
blank					\$0.00		
	Asset Management	\$521,108.86	\$427,725.54	\$93,383.32	\$101,720.00	\$529,445.54	(\$8,336.68)

\$93,383.32

Budget expended	Time Status	
	NOW=	2/17/2020
	Start	5/1/2019
59.3%	80.1%	20.8%
102.8%	80.1%	-22.7%
92.4%	80.1%	-12.3%
82.1%	80.1%	-2.0%

05S	D Street	\$7,500.00	\$5,203.04	\$2,296.96	\$0.00	\$5,203.04	\$2,296.96
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69.4%	80.1%	10.7%
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FOR JAN 2020 M.O.R.

Hull 2019 - 05M Projects, Tasks, and Needs - 04-23-2019 (RS)

Maintenance Account - Year 5 - 05_01_19 to 04_30_20

\$101,720.00

2/17/2020 8:16

Priority	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Mechanical Work Labor	On Going		101A	\$5,000.00			Jody St. George, Jim Gagliard, and WC Support Staff; orig budget \$40,000; approx \$3300/mo.
1	Pump and Motor Repairs	On Going		101A	\$4,000.00			to keep existing equipment running - utilize various outside contractor repair shops; orig budget \$25,000; approx \$2000/mo budgeted. [updated monthly] incl \$2,000 for Vaghan parts for PSL pumps.
1	Lubricants	On Going		101A	\$500.00			Various Suppliers for oil and grease, orig budget 4500; adj budget 1/20/20
1	Generator Repairs [see item - line #92]	Pending		101A				General Repair Work - Placeholder , accounting for work done to date; received quote from Highland Power for heat exchg Pm, and other. \$4450 will be on a purchase order.
1	Fire Alarm Inspections and Service	Completed		101A				Semi Annual - Hart Security completed in October
1	Fire Alarm Inspections and Service	Pending		101A	\$650.00			Semi Annual - Hart Security [April]
1	Fire Alarm Inspections and Service - Central Station	Completed		101A				Annual - Hart Security [deleted est cost of \$264]
1	Service the Snowplow	Completed		101A				Annual - Fal 2019 - pcard charge will apply \$1,500
1	Service the Forklift	Pending		101A	\$400.00			Annual
1	Overhead Hoist Inspection	Pending		101A	\$1,500.00			Annual - Applied Dynamics - PO usually is issued in April, but last insp was done May 2019
1	Flow meter verification and calibration	Completed		101A				Annual - Ray Ferland 1 visit sept 2019; Orig budget \$1,000
1	Facility Building - Roof Inspection	On Going		101A				Annual - Established contract with Tecta America [year 2] PO in system as of 2/6/20 # 100823 - \$2850]
1	Pump Station #9 - Repairs Immediate	pending		101A				New valve, new check valve, replace pump assembly - Jody St. G. to assist; items rec'd [used up approx 50% of orig 4,000]; pending to be used if needed.
1	Jerome H2S Meter Inspection	Pending		101A	\$1,100.00			Annual inspection - sent out includes annual service & calibration, unit no longer under service agreement, due to unit's age. As of 2/6 - committed to repairs.
1	Portable Generator Spill Containment - SPCC	completed		101A		\$10,980.00		proposal by Vortex - supply and install; PO issued for \$11,000; orig budget \$5,500; on purchase order # 100510.
1	Godwin Pump Spill Containment - SPCC	Completed		101A				proposal by Vortex [see above]
1	Godwin Pump Inline Screening - Honeybucket	Completed		101A				proposal by Vortex - [see above]
1	Install an 1 1/2" water connection (?) from generator room to the outside for hose	Completed		101A				materials & Jody S time [deleted est cost of \$500]
1	Janitorial Supplies	On Going		101A				Estimated annual expenditures Orig budget \$750
1	Backflow device testing	On Going		101A	\$220.00			\$220 per Qtr, per water supplier [orig budget \$880]
1	Manhole Inspections	On Going		101A				As required, and/or scheduled

FOR JAN 2020 M.O.R.

Hull 2019 - 05M Projects, Tasks, and Needs - 04-23-2019 (RS)

Maintenance Account - Year 5 - 05_01_19 to 04_30_20

\$101,720.00

2/17/2020 8:16

Priority	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
2	General mechanical and electrical items/supplies	On Going		101A	\$2,000.00			Grainger, FWWWebb, EJP,Hoadley, mcMasterCarr, etc. Orig budget \$20,000; reduce budget by expenses posted approx 40%; reduce monthly by \$2,000; adj on 2/6/20 as we have PO for RDT parts with Parkson [\$1,000]
2	Vibration Analysis Survey	Pending		101A				Annual - 2 to 3 Days - Aeration System Blowers, Pump Station Pumps, etc./tbd; 1500/day; 10/21 read; budget to \$4500 - 06M target - remove \$4500 on 2/6/20
2	Valves	Pending		101A				Replacements and/or Service - On-Going - As Needed; Orig budget est \$4000; move costs to 06M
2	Hoses	On Going		101A				Replacements and/or Service - On-Going - As Needed; Orig budget est \$3000; unless needed wait until after 5/1/20
2	Sump Pumps	On Going		101A				Replacements and/or Service - On-Going - As Needed - orig budget \$2500.00; ytd = 1200
2	Install 6" or 8" drop pipes in secondary clarifier #1 and #2	Pending		101A				In-house staff to fabricate, could be item moved to 06M and go to 8" pipe? [delete the \$2,000 on 2/6/20]
2	Duperon Site Visit	Completed		101A				Coordinate a site visit with Service Tech when in the area [deleted est cost of \$1,500]; actual cost was \$2400.
2	Roof Exhaust Fan Motor Baldor EM3615T	Completed		101A				Need a spare [deleted est cost of \$600]
2	Misc. Materials	On Going		101A	\$500.00			Hardware Store - \$200.00 per month - reoccurring expense, orig total budget \$2400; reduce by monthly YTD
2	Rotating Sludge Thickener - Booster Pump	Completed		101A				Purchase (1) new replacements \$1000 each [deleted est cost of \$1,000]
2	PS 1 impellers/flow	Pending		101A				look at increasing size of impellers, after Gunrock work completed
2	Lift Station A	Pending		101A				Pump efficiency lower than desired
2	Lift Station A	On Going		101A				Emerg building repairs due to building settling and door frame deterioration; temporary repairs appear to be holding up well. [Done by Jody S]
3	Install new aeration channel angle iron for a slide gate or pri scrapers fabricate	Completed		101A				Jody St. George to install; pri clar scrapers completd. Channel slide gates still pending \$3000 est,
3	Install a flow meter on the generator cooling water system - plant water	Pending		101A				Have an estimate [Oct 2018]; possible after 5/1/20
3	Lockers for the staff - Install	Pending		101A				Orig est - \$600; Additional lockers to replace those removed years ago; may wait until after 5/1/20
3	Purchase (2) spare Euro drives for the RST; 1 new unit for thickened sludge pump	On Going		101A				spare part items - currently do not have; orig budget \$2500; 1 drive for the thickened sludge pump purchased Aug2019 [deleted est cost of \$1,250] Still no spare unit for drum drive or condit tank. May wait until 5/1/20
3	Purchase an LMI pump for the RST	Pending		101A				spare part items - currently do not have, May wait until after 5/1/20 \$1,600
3	Purchase an equipment lift or gantry	Pending		101A				planned cost \$2,500 for moving elec hoists around, & other equip - possiblyould wait until after 5/1/20
2 of 5	Dehudifiers for pump stations	Completed		101A				ordered 2 for 2 pump stations [5 left to do]; orig budget for 2= \$2200.00 - paid for already

2019_05_1_05M_Checkbook_YTD

05M Planned Costs

Hull 2019 - 05M Projects, Tasks, and Needs - 04-23-2019 (RS)

Maintenance Account - Year 5 - 05_01_19 to 04_30_20

\$101,720.00

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Priority	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
	Vaughan Pump parts for PC pumps #1 & 2	On Going		101A	\$2,000.00			Parts for repairs ordered, and received. Invoice pending
	Parkson - parts for RDT - drive sprocket, chain, motor sprocket	On Going		101A				PO in system for \$956.00
1	Pump Station #5 Discharge Pipe - Replace with C900 Pipe and Install a the force main Isolation valve	Pending		102B				Being looked at currently Dec/Jan - TDB if funds to come from 05M - Best time to complete - Insert the estim budget. On a PO # \$29,450.
1	(GT) Steel rake mechanism inspection and needed repairs	Pending		102B				place holder estimate (2) guys for (3) days - welding and materials - coating - ?? If these would remain under 05M or go under bond account. Orig cost estimate \$7,500. Chg to spring 2020.
1	(SC#1) Steel rake mechanism inspection and needed repairs	Pending		102B				place holder estimate (2) guys for (3) days - welding and materials - coating - ?? If these would remain under 05M or go under bond account, Orig cost estimate \$7,500. Chg to spring 2020.
1	(SC#2) Steel rake mechanism inspection and needed repairs	Pending		102B				place holder estimate (2) guys for (3) days - welding and materials - coating - ?? If these would remain under 05M or go under bond account. Orig cost estimate \$7,500. Chg to spring 2020.
1	New Stander type Lawn Mower	Completed		102B		\$7,764.60		Purchase replacement off of State bid list [PO was issued in late October]Trade in greatDane
1	Odor Scrubber Sensors purchase	Completed		102B		\$5,027.55		Purchase one for the influent and effluent of scrubber. PO issued 1000484
1	Odor Scrubber Sensors - Installation Cost	Pending		102B	\$3,500.00			Electrician's Labor - 2 to 3 days. [planning for late Jan 2020] Glenn F
1	Dynablend System is obsolete - mixing valve worn - need in kind or like system	Pending		102B				May or may not proceed with replacement, since unit still functioning. and polymer addition point changed and yielding good results. Removed cost \$11,000
2	Facility Building - Roof Repairs	On Going		102B				two stairwell roofs - South Shore Roofing not approved, since approval process not completed, Change to Tecta America.POI system as of 2/6/20 - \$29890]
2	Pump Station Ladders	On Going		102B	\$5,000.00			Orig budget \$42,000. Contracted Project - Bids - Initiated work with Boston Welding & Forging]; 11/19/19 Update: PS #1 is complete, PS3 in process, part of this budget may wait until pstat structural work done and after 5/1/20; expect completed work at PS1,3,5,A in year 5; as of 2/6/20 - 1 project left to do under 05M
2	Sludge Holding Tank #1 - tank needs to be cleaned, evaluate condition, & replace the aeration system piping	Pending		102B				Assess Needs, determine labor, remove old equipment, replace the aeration line to the tank
2	Replace 6" potable water valve in basement and misc. valves	Pending		102B				While doing project check/replace 1 1/4 valves as needed - Requires a water shutdown, may hold until after 5/1/20; orig planned cost \$3,000.
2	Purchase and Install (4) additional yard hydrants	On Going		102B	\$12,800.00			hydrants purchased, and materials & contractor installation [2 days]; hoadley parts & exp \$2600; hydrants rec's \$4700 removed; update 2/6/20 - could wait until after 5/1/20 for 06M?
2	PS 4 valves, check valves, install FM isolation valve	Pending		102B				After structural work, replace. FM isolation valve installed already [outside]
3	Influent Distribution Box Gate Repairs	Pending		102B				Contracted Project - During Headworks Bypass or possibly move to after May 1st 2020
3	Influent Distribution Box - Aerate Primary/Influent D-Box/Overflow Project	Pending		102B				Contracted Project - need State Approval - Facility/Process modification. Facilities Plan possible modification
3	Odor log data loggers & calibr kit	Pending		102B				Current units obsolete and not supported by company, possibly look at under 05C if funds avail; remove the \$6,000 on 2/6/20 - 05C or 06M
1	Hellan Strainer	Completed		102B		\$18,502.00		Confirming quotes in order to get order in place; PO in system: 100421 for \$19,000; unit installed Jan2020, waiting for invoice.
	Rotating Sludge Thickener - Thickened Sludge Pump	Completed		102B		\$4,137.00		recommended new pump hopper purchase; PO issued 10/25/19, part on order; item received 02/11/20 - \$4,137.00; installation planned in mid-Feb 2020.

Hull 2019 - 05M Projects, Tasks, and Needs - 04-23-2019 (RS)

Maintenance Account - Year 5 - 05_01_19 to 04_30_20

\$101,720.00

2/17/2020 8:16

Priority	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
	hoses for new 8-inch portable pump	Completed		102B		\$18,349.00		purchase from Vortex, on order - PO#100591 [\$18,349.00]
	Effluent Pump Room heater & installation	Completed		102B		\$5,327.00		New 3ph heater, breaker at panel, conduit, wiring, etc. Work to be done by High Voltage Assoc. Estim cost \$6500. [heater \$1650, labormat \$4800]; work completed Jan 2020. waiting for final bill. All costs are in [2/6/20]
	Roof mats - for walkway	On Going		102B				to be done at time of roof insp. Feb 2020; PO in system as of 2/6/20 - \$2920;
1	Electrical Work	On Going		103A	\$5,000.00			Electricians: Pioneer Electric - Glen Fellows, other; orig budget \$50,000; ytd = \$12000; approx \$4000/mo budgeted. Adjust ytd - adjust down 2/6/20 - placeholder
1	SCADA Work	On Going		103A	\$7,500.00			Steve Rose and the SCADA Support Team; orig budget \$30,000; adj YTD; adj remaining budget on 2/6/20 to 7500 - placeholder.
1	E-One Repairs and Replacement	On Going		103A	\$3,000.00			Based on 2017 and 2018 Costs - E1 repairs where cost-effective & new replacement pumps; orig budget \$25,000; reduce budget to budget left based upon YTD costs 2/6/20
1	Generator inspection and servicing	Completed		103A				Annual - Highland Power - Generator PM/Service work - due November; 11/19 update - work completed in early Nov. [waiting for invoice]
1	Automatic Transfer Switch inspection and servicing	On Going		103A	\$2,400.00			Annual Service planned for April 2020 - Highland Power - NETS - Transfer Switch; PO to be issued
1	Wetwell Inspections and Cleaning - Pump Stations	On Going		103A	\$4,500.00			As Required - \$2500 per day; orig budget \$12,500; reduce to \$10,000; Adj Jan 2020; adj Feb 2020
1	Wetwell Inspection and Cleaning- Plant	Pending		103A				Annual - pending until HW project gets underway; Orig budget \$4500; remove from targeted expenses 10/21/19.
1	Sewer Line Cleaning - Emergencies	On Going		103A	\$6,000.00			As required by various sub-contractors; orig budget \$25,000; readj budget down to 12,500 on 10/21; adj to 10,000 on 1/20/20; adj to \$6,000 on 2/6/20
1	Collection System - CCTV work	On Going		103A				Currently under BMC purchase order. Work with Peter Lyons to coordinate activities [used up approx 50% of orig 20,000]
1	Collection System - Jetting Work	On Going		103A				Currently under BMC purchase order. Work with Peter Lyons to coordinate activitiesDetermine how many Linear Feet and Locations to address [used up approx 50% of orig 20,000]
1	Pump Station #4 - camera work, cleaning and pumping	Completed		103A				National Water Main Rosano-Davis & WWSI [deleted est cost of \$5,155]
1	Aeration Blower PLC Upgrade - Hardware	Pending		103A	\$14,200.00			Equipment purchase to come from 05M on the Critical Spare List; based on latest quote from Doug Tirrel.
	Aeration Blower PLC Upgrade - Installation	Pending		103A	\$11,500.00			labor to come from 05M on the Critical Spare List; based on latest quote from Doug Tirrel.
2	Low pressure sewer valve box insp & mtce	Pending		103A				placeholder for contractor inspections and potential repairs; still working to line up a contractor; 2/6/20 may investigate internally, move budget to 06M [delete the \$10,000]
2	Gridbee Aeration System - Pump Station #1	Completed		103A				Electrical wiring and tie into the SCADA system - Glen Fellows [deleted est cost of \$1,500]
2	Gridbee Aeration System - Pump Station #9	Completed		103A				Tie into the SCADA system - Glen Fellows [deleted est cost of \$1,500]
2	Regen Aeration System - Pump Station #5	Pending		103A				Orig est \$1,500 -Tie into the SCADA system - Glen Fellows; may wait until after 5/1/20
2	Sludge Holding Tank #1 - Clean Tank	Pending		103A				Orig budget - \$5,000 for Vac Truck, CSE Team, Debris disposal & O&M tech support; Some work done by W&C staff 1/16/20; disposal of debris an issue TBD; eval after 5/1/20
2	FRM - Control Panel for E-One & other spare parts	On Going		103A				for inventory if needed - orig budget \$2,000
4 of 5 2/17/2020	Generators - Load Bank Testing	Pending		103A	2019_05_1_05M_Checkbook_YTD			Look at under 06M - PS#1, PS#3, PS#4, PS#5, PS#6, and PS#9 [\$3,000] 05M Planned Costs

Hull 2019 - 05M Projects, Tasks, and Needs - 04-23-2019 (RS)
Maintenance Account - Year 5 - 05_01_19 to 04_30_20

2/17/2020 8:16

Priority	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
	Rosano-Davis Pumping for NWM Atlantic Ave MH rehab	Completed		1032A				per HSD - 8 days at 9 hrs/day - \$1,800 per day rate, orig est \$14,400 readjusted down to actuals - estim; remaining funds, all bill are in 1/20/20.
	Engineering \$\$ to OSM	On Going		1032A				TBD; YTD costs will post to detail report approx \$12,000 spent as of 10/21; Tim H, Nick V, Seif, Patrick H.
	pump & haul for PS 5 work - planned for Jan/Feb 2020	Pending		1032A	\$4,000.00			2 pump trucks for 1 day pumping -
	Grit Pump room cleaning Vac & labor Jody S.	Completed		1032A				Clean grit pump room - grit on floor from recent blockages in system
	Highland Power - Servicing the heat exchangers, fuel filters, etc	Pending		1032A	\$4,450.00			Per proposal \$4,450.00
1	Replace the Gravity Thickener Drive							From Critical Spare SRF - Installation Funding to come from Bond Acct - estimate \$30,000
1	Replace the Secondary Clarifier #2 Drive							From Critical Spare SRF - Need installation money from 05m or other bond money? Funding from Bond Acct - estimate \$30,000
1	Replace the Secondary Clarifier #1 Drive							From Critical Spare SRF - Need installation money from 05m or other bond money? Funding from Bond Acct - estimate \$30,000
TOTAL					\$101,720.00			



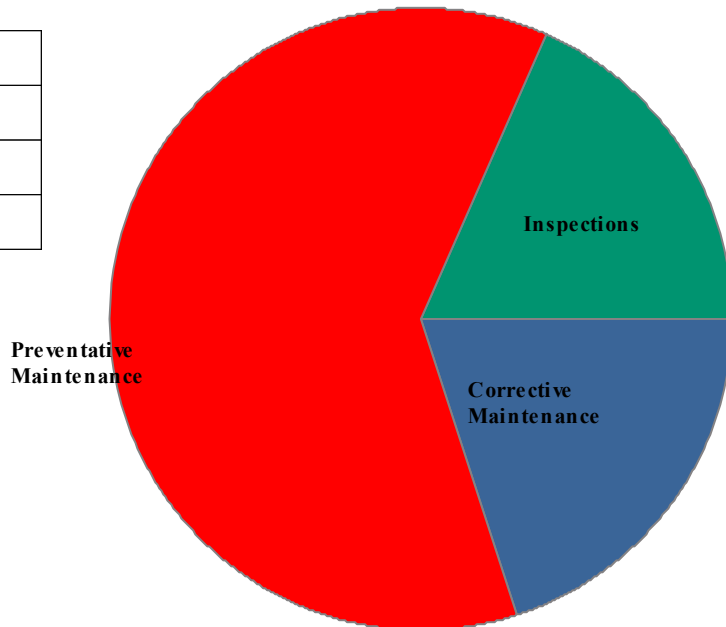
Maintenance History Report

Hull Wastewater

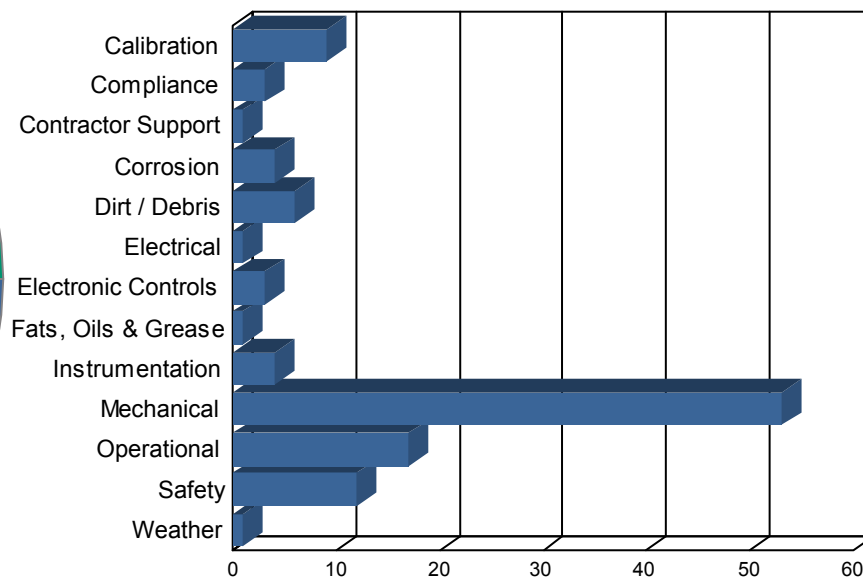
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End Date: 1/31/2020

Work Order History By Type

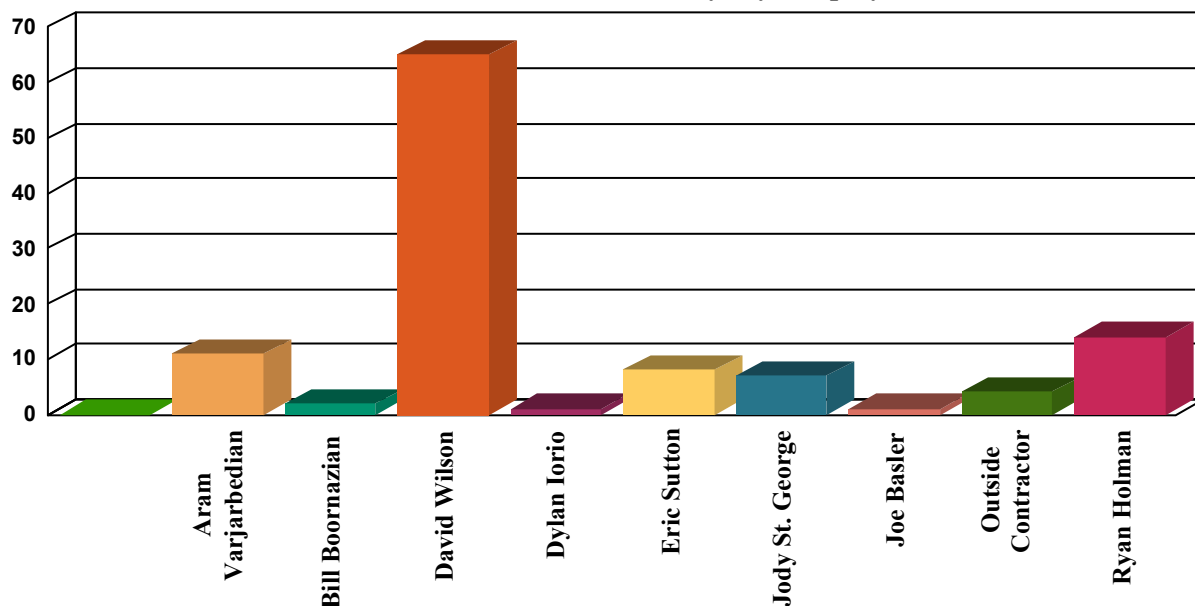
Corrective Maintenance	23
Inspections	21
Preventative Maintenance	71
Total Work Orders	115



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Aram Varjarbedian	11	11
Bill Boornazian	2	43
David Wilson	65	36
Dylan Iorio	1	1
Eric Sutton	8	11
Jody St. George	7	25
Joe Basler	1	1
Outside Contractor	4	15
Ryan Holman	14	9
Unassigned	2	1

Totals	115 152

Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/2/20	11400	23 - WW Pump Stations	Communication loss	Commfail alarms since mid day at all stations. Intermittent, but now at PS4,6,9. Verizon contacted and out to inspect and verify that their construction crew is needed. They will return on Friday. AV, RH	Aram Varjarbedian	1/2/20	Completed
1/2/20	11401	23 - WW Pump Stations	Commfail issues pstat 4,6 9	AV , RH chk pstat 4,6,9 at approx 5pm. All ok. AV remotely chk scada for station status and got comm back between 8p a d 9p. Had calls from verizon at 1020p and 1130p to recheck status on scada. All continued to be ok. Work Tickets closed out by verizon.	Aram Varjarbedian	1/3/20	Completed
1/5/20	11402	PS 5 Generator	Block heater failure	Checked block temp during station checks and found block heater not working. Coolant loss in radiator through block heater.	David Wilson	1/5/20	In Process
1/6/20	11404	PS 5 Generator	Replace engine block heater	Completed	Jody St. George	1/6/20	Completed
1/8/20	11405	Influent Composit Sampler	Sample line clogged	AV and JB, pull sample line up. Separate and clean and reposition, due to recent 14" godwin pipe work	Aram Varjarbedian	1/8/20	Completed
1/8/20	11406	PS 1 Exhaust Fan	Replace motor	Completed	Jody St. George	1/8/20	Completed
1/8/20	11407	SCADA	PLC1 ups issue	Follow up gen. transfer to check UPS on PLC1, due to ups shutdown during yesterday's test. All ok, sensaphone called out ok yesterday and today ok. Staff, AV,BB, JB, DW	Aram Varjarbedian	1/8/20	Completed
1/8/20	11408	PS 4 Building	Ladder Demo and New Install	Utilized Boston forging and welding. New custom aluminum ladders for upper level and mid to lower lever installed. Old residential ladders demolished.	Outside Contractor	1/8/20	Completed
1/10/20	11410	Primary Clarifier 2	Vac out grease from scum pit PC2	Es/bb/intern work with Hoadly vactor truck onsite. Clean scum pit out. Apx 24 ft3 removed.	Outside Contractor	1/10/20	Completed
1/10/20	11409	PS 9 Generator	NGrid replace outside gas equipment	Hull fire got a report of gas smell from a resident behind ps9. Ngrid checked out and found cock assembly corroded. New cock piping and meter installed. W&C test ran generator upon completion while ngrid pressure tested. No issues.	Outside Contractor	1/10/20	Completed
1/14/20	11413	PS A Sump Pump	Clear obstruction in discharge line.	Dw/JS/ES Confined space work in wet well. Reamed out discharge line from inside of wet well. Obstruction was at end of discharge and was about 6-9 inches long. Cleared with 5/8" x 6" threaded rod.	David Wilson	1/14/20	Completed
1/14/20	11414	RST Polymer System	Hard pipe polymer line to sub level into sludge feed pump to RST	Completed	Jody St. George	1/14/20	Completed
1/16/20	11415	Odor Control System	Install plates for installation of probes in intake & exhaust ducts.	Complete and ready for probe installation	Jody St. George	1/16/20	Completed
1/16/20	11416	36 - WW Effluent Process	Install anchors & bracing to stabilize injection point piping	Completed	Jody St. George	1/16/20	Completed

Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/16/20	11419	Primary Sludge Pump 1	Volute failure	Isolated primary sludge pump 1 and drained volute. Stripped away paint and exposed multiple holes in volute. Prepped surface for steel putty to cap side of volute. Applied coating and allowed to cure. Cleaned and painted area to prevent additional corrosion.	David Wilson	1/19/20	Completed
1/17/20	11417	PS 3 Pump 1	Remove debris from pump 1 suction	W/C Es,DB,Jsg,B.B., Hull police detail,Hoadley victor truck on site. Plugged MH stopped flow to station, 6" by pass pump set up, vactored and cleaned wetwell,ran pump backwards debris was extracted (6" pvc sewer cap removed from suction line.	Eric Sutton	1/15/20	Completed
1/18/20	11418	PS 3 Wet Well	Plugged and Cleaned wet well and CSE	Utilized Hoadly vactor truck. BB DW ES JS set up bypass from street vactor wet well completely. Confined space cut rags off transducer. Reset transducer in still pipe. Flushed pump 1 backwards and got out 8inch PVC cap , had to get cap out via CSE. Jody entrant. Very efficient planning and execution done in 4 hours.	Outside Contractor	1/15/20	Completed
1/24/20	11420	PS D - DPW Stormwater Pump Station	Primed 4" trash pump do to weather	Primed and ran 4" trash pump do to inclement weather over the weekend	Eric Sutton	1/24/20	Completed
1/26/20	11422	Truck 2 - 2009 Chevy 2500 HD	Install EVAP purge pump.	Uninstalled failed purge pump and hoses. Installed new parts and cleared out codes.	David Wilson	1/27/20	Completed
1/27/20	11423	PS 3 Pump 2	Impeller inspection	DW/ES/JS/ DB Isolated pump 2 and verified. Removed pump and motor assembly. Removed rag ball and reassembled. Verified flow. 440gpm to 850gpm	David Wilson	1/27/20	Completed
1/27/20	11421	PS 6 SCADA Panel	Mount and wire interceptor level transducer	BB/JS/DW CSE into manhole to mount transducer. Ran wiring into pump station scada panel.	Bill Boornazian	1/27/20	Completed
1/29/20	11425	Plant Water System	Replace Hellan duplex basket strainer	Demo existing failed PW strainer and install new hellan duplex strainer, same unit except this new one is epoxy coated. 4 people for 3 hours for install. Additional 8 hours of setup and break down and borrowing gantry from linden ponds. At least 16 hours extra admin coordination time by av/bb each for ordering and shop drawing reviews.	Bill Boornazian	1/29/20	Completed
1/29/20	11424	Buildings	Light bulb out.	Changed light bulb going down to influent pump room. Located on the 2nd landing above the influent pump room.	Ryan Holman	1/29/20	Completed

Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/2/20	10991	PS 1	PS #1 Inspection - Monthly	Inspected wet well, fire extinguisher and pump assemblies. Tested sump pump and high level alarm.	David Wilson	1/2/20	Completed
1/2/20	10997	PS A	PS #A Inspection - Monthly	Inspected wet well, fire extinguisher and pump assemblies. Tested sump pump and high level alarm.	David Wilson	1/2/20	Completed

Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/2/20	10992	PS 3	PS #3 Inspection - Monthly	Inspected wet well, fire extinguisher and pump assemblies. Tested sump pump and high level alarm.	David Wilson	1/2/20	Completed
1/2/20	10993	PS 4	PS #4 Inspection - Monthly	Inspected wet well, fire extinguisher and pump assemblies. Tested sump pump and high level alarm.	David Wilson	1/2/20	Completed
1/2/20	10994	PS 5	PS #5 Inspection - Monthly	Inspected wet well, fire extinguisher and pump assemblies. Tested sump pump and high level alarm.	David Wilson	1/2/20	Completed
1/2/20	10995	PS 6	PS #6 Inspection - Monthly	Inspected wet well, fire extinguisher and pump assemblies. Tested sump pump and high level alarm.	David Wilson	1/2/20	Completed
1/2/20	10996	PS 9	PS #9 Inspection - Monthly	Inspected wet well, fire extinguisher and pump assemblies. Tested sump pump and high level alarm.	David Wilson	1/2/20	Completed
1/7/20	11036	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Inspected all fire extinguishers. No issues found.	Ryan Holman	1/6/20	Completed
1/7/20	10946	Eyewash Stations	WWTF Eyewash Inspection - Weekly	Inspected and tested all fixed and portable eye wash stations. Recharged portable units.	Ryan Holman	1/5/20	Completed
1/9/20	10950	Emergency Lighting & exit signs	Emergency Lighting Inspection - Monthly	Tested all emergency lighting throughout the plant	Ryan Holman	1/8/20	Completed
1/12/20	11057	Truck 4 - 2015 Nissan Frontier	Monthly vehicle inspection on do-Forms	Checks all good. 94600 miles. Recent oil chg and rear brakes and tire rotation at 94k.	Aram Varjarbedian	1/6/20	Completed
1/14/20	11039	Truck 1 - 2010 Dodge Ram 1500	Monthly vehicle inspection on do-Forms	Checked all fluid levels. Topped off oil(+.5 qt), windshield washer fluid(+.75 gal), set tire pressure, and tested all indicators. Drivers seat upholstery is ripped and some minor paint issues on the body. Overall good.	David Wilson	1/6/20	Completed
1/14/20	11574	Truck 1 - 2010 Dodge Ram 1500	Perform vehicle inspection	Inspected vehicle - See doFORMS report for full details.		1/14/20	Completed
1/15/20	10947	Eyewash Stations	WWTF Eyewash Inspection - Weekly	Tested and inspected all emergency eye wash/ shower stations	Ryan Holman	1/12/20	Completed
1/19/20	11575	Truck 3 - 2015 Chevy 3500 HD	Perform vehicle inspection	Inspected vehicle - See doFORMS report for full details. Oil level low. Idler pulley squeals when cold. Trailer fuse blown.		1/19/20	Completed
1/19/20	11056	Truck 3 - 2015 Chevy 3500 HD	Monthly vehicle inspection on do-Forms	Inspected vehicle. Set tire pressures and added power steering fluid. Oil and filter change is due. Tested all indicators.	David Wilson	1/6/20	Completed
1/25/20	10948	Eyewash Stations	WWTF Eyewash Inspection - Weekly	Tested all emergency eye wash and shower stations.	Ryan Holman	1/19/20	Completed
1/28/20	10949	Eyewash Stations	WWTF Eyewash Inspection - Weekly	Inspected and tested all emergency eye wash stations.	Ryan Holman	1/26/20	Completed
1/30/20	11051	Universal waste area	Universal Waste Storage Area Inspection	Inspected.	Aram Varjarbedian	1/14/20	Completed
1/30/20	11050	Waste Oil Storage	Waste Oil Area Inspection	Inspected ok	Aram Varjarbedian	1/14/20	Completed
1/30/20	11065	AST- Above Ground Storage tank for diesel fuel	Monthly Inspections of Tanks	Insp ok, forms completed	Aram Varjarbedian	1/1/20	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/2/20	10966	Influent Pump 1	Semi Annual - ARI air release valve insp and cleaning	Isolated and relieved pressure. Disassembled for cleaning and inspection. Test as good. Reassembled and returned to service.	David Wilson	1/1/20	Completed
1/2/20	10967	Influent Pump 2	Semi Annual - ARI air release valve insp and cleaning	Isolated and relieved pressure. Disassembled for cleaning and inspection. Tested as good. Reassembled and returned to service.	David Wilson	1/1/20	Completed
1/2/20	10968	Influent Pump 2	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling. Slight wear. No dust accumulation since last inspection.	David Wilson	1/1/20	Completed
1/2/20	10969	Influent Pump 3	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling. Thighs fit. No dust accumulation since last inspection.	David Wilson	1/1/20	Completed
1/2/20	10970	Influent Pump 3	Semi Annual - ARI air release valve insp and cleaning	Isolated and relieved pressure. Disassembled for cleaning and inspection. Tested as good. Reassembled and returned to service.	David Wilson	1/1/20	Completed
1/2/20	10973	Influent Pump 5	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling. Slight wear. No dust accumulation since last inspection.	David Wilson	1/1/20	Completed
1/2/20	10974	Influent Pump 5	Semi Annual - ARI air release valve insp and cleaning	Isolated and relieved pressure. Disassembled for cleaning and inspection. Tested as good. Reassembled and returned to service.	David Wilson	1/1/20	Completed
1/4/20	10959	Influent Sluice Isolation Gate	Weekly operate through full range	Operated sluice gate in hand.	Ryan Holman	1/1/20	Completed
1/5/20	11070	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY	Topped off online clarifier gearbox. GT1-3gal PC2-good, SC1-2qt, SC2-1qt.	David Wilson	1/5/20	Completed
1/5/20	11055	Chlorine probe AT1	Change electrolyte	Cal chk ok, recall and good slope	Aram Varjarbedian	1/1/20	Completed
1/5/20	11066	Generators "All Pump Station"	Generator - Monthly Load Test	Inspected and tested all station generators. No issues found.	Jody St. George	1/5/20	Completed
1/6/20	10985	RST Feed Pump 1	Monthly Check Pump Couplings	Inspected hubs and coupling. Freed up shafts.	David Wilson	1/1/20	Completed
1/6/20	10990	Sludge Transfer Pump 2	Monthly Check Pump Couplings	Inspected hubs and coupling. No issues found.	David Wilson	1/1/20	Completed
1/6/20	10988	Primary Sludge Pump 2	Monthly Check Pump Couplings	Inspected hubs and coupling. No issues found.	David Wilson	1/1/20	Completed
1/6/20	10987	Primary Sludge Pump 1	Monthly Check Pump Couplings	Inspected hubs and coupling. No issues found.	David Wilson	1/1/20	Completed
1/6/20	11403	MH 20328	Uninstalled interceptor level transducer in MH 20328-1	Confined space entry to uninstall transducer.	David Wilson	1/6/20	Completed
1/6/20	11038	GODWIN Portable Pump	Test Run Godwin Pump-Monthly	Checked all fluid levels. Brought up to operating temp. No issues found. Emptied water from containment area.	David Wilson	1/1/20	Completed
1/6/20	10986	RST Feed Pump 2	Monthly Check Pump Couplings	Inspected hubs and coupling. No issues found.	David Wilson	1/1/20	Completed
1/6/20	10989	Sludge Transfer Pump 1	Monthly Check Pump Couplings	Inspected hubs and coupling. Coupling shows signs of wear. Possible alignment issue.	David Wilson	1/1/20	Completed
1/7/20	11034	Plant Water Pump 1	Monthly Check Pump Couplings	Direct drive. No hubs or coupling.	David Wilson	1/1/20	Completed
1/7/20	11035	Plant Water Pump 2	Monthly Check Pump Couplings	Direct drive. No hubs or coupling.	David Wilson	1/1/20	Completed
1/7/20	11063	Recirculation pump #1	Monthly Check Pump Couplings	Direct drive. No hubs or coupling.	David Wilson	1/1/20	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/7/20	11064	Recirculation Pump #2	Monthly Check Pump Couplings	Direct drive. No hubs or coupling.	David Wilson	1/1/20	Completed
1/7/20	10954	Generator #1- Emergency Kohler 750	Generator - Monthly Load Test	Checked all fluid levels. Performed load test and transfer of power. Logged all run data. No issues found.	David Wilson	1/5/20	Completed
1/7/20	10964	Mechanical Screen & Washpress System	Monthly Maintenance	Cleaned all scrapers. Inspected all components.	David Wilson	1/6/20	Completed
1/7/20	11058	High level floats	Weekly High Float Alarm test	Tested all high level floats. No issues found.	Ryan Holman	1/5/20	Completed
1/8/20	10960	Influent Sluice Isolation Gate	Weekly operate through full range	BB operated the sluice gate from SCADA while RH was in headworks observing the gate.	Ryan Holman	1/8/20	Completed
1/9/20	10971	Influent Pump 4	Semi Annual - ARI air release valve insp and cleaning	Isolated air release. Relieved pressure and disassembled. Cleaned and inspected. Reassembled, tested and returned to service.	David Wilson	1/1/20	Completed
1/9/20	11043	PS Trailer Mounted Generator	Generator - Monthly Load Test		Jody St. George	1/5/20	Completed
1/9/20	10972	Influent Pump 4	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling. Slight wear. No new dust accumulation.	David Wilson	1/1/20	Completed
1/9/20	10945	Portable Generator - Honda	Portable Generator Inspection - Monthly	Checked fluid levels and brought up to operating temp. No issues found.	David Wilson	1/1/20	Completed
1/9/20	10980	Wet Scrubber Fan	Scrubber Exhaust Fan PM - Monthly	LOTO of equipment. Lubed and inspected all bearing. Inspected and adjusted drive belts. Returned to service. No unusual noises or vibration.	David Wilson	1/8/20	Completed
1/9/20	11037	Meters - 4 Gas Confined Space #1	4 gas meter calibration - monthly	Inspected and tested calibration. Meter 1 replaced with number 9.	David Wilson	1/1/20	Completed
1/9/20	11062	Meters - 4 Gas Confined Space #2	4 gas meter calibration - monthly	Inspected and tested calibration. No issues found.	David Wilson	1/1/20	Completed
1/12/20	11071	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY	Inspected and set all gearbox fluid levels. GT1-3 gal, PC2- good, SC2- 2 qt, SC1- 1 qt. Metallic dust from unknown failed part mixed in SC1 gearbox fluid. No unusual noises or vibration.	David Wilson	1/12/20	Completed
1/12/20	11053	Chlorine probe ATI	Weekly calibration	Caliber ok vs lab, slope 333	Aram Varjarbedian	1/6/20	Completed
1/12/20	10981	RAS Pump 1	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling. No issues found.	David Wilson	1/1/20	Completed
1/12/20	10983	RAS Pump 3	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling. No issues found.	David Wilson	1/1/20	Completed
1/12/20	10982	RAS Pump 2	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling. No issues found.	David Wilson	1/1/20	Completed
1/12/20	10977	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly	Removed from process. Cleaned probe assembly. Installed new cap and grommet. Sealed damaged fittings with wonder tape. Performed cap calibration followed by air calibration. Returned to process.	David Wilson	1/7/20	Completed
1/12/20	10978	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly	Removed from process. Cleaned and inspected probe. Performed air calibration. Returned to process.	David Wilson	1/7/20	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/13/20	11411	PS 5 Wet Well	Clean and inspect wet well.	Shut off pumps and aerator. Removed wet well cover and removed aerator. No issues found. Coordinate with BMC to vacuum out fat balls and surface solids. Returned yo service.	Dylan Iorio	1/13/20	Completed
1/13/20	11412	PS A Wet Well	Clean and inspect wet well.	Disconnected generator and moved up the street. Turned off aerator and pumps. Removed wet well cover and removed aerator. No issues found. Coordinated with BMC to vacuum out surface solids. Returned to service.	David Wilson	1/13/20	Completed
1/14/20	10955	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load	Inspected all fluids. Recorded all run data. No issues found.	David Wilson	1/13/20	Completed
1/15/20	10961	Influent Sluice Isolation Gate	Weekly operate through full range	Operated the gate from SCADA while RH watched the gate from headworks	Ryan Holman	1/15/20	Completed
1/15/20	11059	High level floats	Weekly High Float Alarm test	Tested all plant floats / alarms	Ryan Holman	1/12/20	Completed
1/19/20	11072	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY	Inspected and set all online clarifier gearbox fluid levels.. GT1-3 gal, PC-2 good, SC1- 1 qt, SC2- 2 qt.	David Wilson	1/19/20	Completed
1/21/20	11067	Generators "All Pump Station"	Generator Weekly - Test Run no load		Eric Sutton	1/13/20	Completed
1/21/20	11040	PS Trailer Mounted Generator	Generator Weekly - Test Run no load		Eric Sutton	1/13/20	Completed
1/21/20	11068	Generators "All Pump Station"	Generator Weekly - Test Run no load		Eric Sutton	1/20/20	Completed
1/21/20	11041	PS Trailer Mounted Generator	Generator Weekly - Test Run no load		Eric Sutton	1/20/20	Completed
1/21/20	10956	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load	Inspected all fluids and recorded all run data. No issues found.	David Wilson	1/20/20	Completed
1/21/20	10952	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load	Inspected all fluids and recorded all run data. No issues found. Cleaned strainer basket.	David Wilson	1/20/20	Completed
1/25/20	11061	High level floats	Weekly High Float Alarm test		Ryan Holman	1/26/20	Completed
1/25/20	11060	High level floats	Weekly High Float Alarm test	RH/JB completed weekly alarm checks	Joe Basler	1/19/20	Completed
1/25/20	10962	Influent Sluice Isolation Gate	Weekly operate through full range	RH,JB operated sluice gate full range from SCADA no issues.	Ryan Holman	1/22/20	Completed
1/26/20	11073	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY	Inspected all online gearbox fluid levels. GT1- 3gal, PC2- good, SC1- 1qt, SC 2- 2qt.	David Wilson	1/26/20	Completed
1/28/20	10953	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load	Checked all fluid levels. Recorded all run data. No issues found. Cleaned strainer basket.	David Wilson	1/27/20	Completed
1/28/20	10976	Aeration Blower 2	Aeration Blower #2 Air Filter Inspection - Monthly	Inspected filter assembly. Good	David Wilson	1/23/20	Completed
1/28/20	10975	Aeration Blower 1	Aeration Blower #1 Air Filter Inspection - monthly	Inspected filter assembly. Cleaned dirty air filters.	David Wilson	1/28/20	Completed
1/28/20	10957	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load	Checked all fluid levels. Recorded all run data. No issues found.	David Wilson	1/27/20	Completed
1/28/20	10979	Effluent Pumps	Effluent Pump - Monthly	Pump 3 output is reduced from 4mgd to 2mgd. Pump 2 runs loud but still has the same output. Sound has not increased. Pumps 1&4 are quiet and have good output.	David Wilson	1/15/20	Completed
1/28/20	11042	PS Trailer Mounted Generator	Generator Weekly - Test Run no load		Eric Sutton	1/27/20	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
1/28/20	11069	Generators "All Pump Station"	Generator Weekly - Test Run no load		Eric Sutton	1/27/20	Completed
1/30/20	11052	Confined Space 4 Gas Meter	monthly calibration	No issues found.	David Wilson	1/30/20	Completed
1/30/20	11048	Meter #6 - 4 Gas	4 Gas Meter #6 Calibration - Monthly	Out of service. Cost of replacement is less than cost to repair.	David Wilson	1/30/20	Completed
1/30/20	11044	Meter #2 - 4 Gas	4 Gas Meter #2 Calibration - Monthly	No issues found	David Wilson	1/30/20	Completed
1/30/20	11045	Meter #3 - 4 Gas	4 Gas Meter #3 Calibration - Monthly	No issues found.	David Wilson	1/30/20	Completed
1/30/20	11046	Meter #4 - 4 Gas	4 Gas Meter #4 Calibration - Monthly	No issues found.	David Wilson	1/30/20	Completed
1/30/20	11047	Meter #5 - 4 Gas	4 Gas Meter #5 Calibration - Monthly	No issues found	David Wilson	1/30/20	Completed
1/30/20	11054	Chlorine probe AT1	Weekly calibration	Tracking ok, no chugs	Aram Varjarbedian	1/20/20	Completed

Date	Asset ID	Asset Description	Asset Class	Name	Workflow Class	View
1/20/2020 12:07	09-070	14 GLOVER AVE	Hull Parcels	Sutton, Eric	Hull - Sewer Backup	View
1/6/2020 12:40	12-025	7 Y STREET	Hull Parcels	Boornazian, Bill	Hull - Markout	View
1/6/2020 15:44	12-053	17 Y STREET	Hull Parcels	Boornazian, Bill	Hull - Markout	View
1/10/2020 12:46	16-188	36 CENTRAL AVE	Hull Parcels	Boornazian, Bill	Hull - Markout	View
1/21/2020 11:28	19-124	12 BREWSTER ST	Hull Parcels	Sutton, Eric	Hull - Sewer Backup	View
1/22/2020 14:43	21-125	246 KINGSLEY RD	Hull Parcels	Boornazian, Bill	Hull - Markout	View
1/22/2020 14:39	21-131	98 LYNN AVE	Hull Parcels	Boornazian, Bill	Hull - Markout	View
1/8/2020 12:50	26-164	487 NANTASKET AVE	Hull Parcels	Boornazian, Bill	Hull - Markout	View
1/24/2020 14:02	28-009	442 NANTASKET AVE	Hull Parcels	Boornazian, Bill	Hull - Markout	View
1/21/2020 14:27	38-037	28 PARK AVE	Hull Parcels	Sutton, Eric	Hull - Sewer Backup	View
1/22/2020 11:52	59-100	1 OCEANSIDE DRIVE	Hull Parcels	Sutton, Eric	Hull - Markout	View
1/23/2020 15:05	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:09	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:09	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:10	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:12	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/7/2020 14:15	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	View
1/23/2020 15:07	Bacteria UNIT #22	UNIT #22	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:55	Bateria UNIT # 8	UNIT # 8	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:51	Bateria UNIT #1	UNIT #1	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:55	Bateria UNIT #10	UNIT #10	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:03	Bateria UNIT #11	UNIT #11	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:08	Bateria UNIT #12	UNIT #12	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:08	Bateria UNIT #13	UNIT #13	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:04	Bateria UNIT #14	UNIT #14	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:04	Bateria UNIT #15	UNIT #15	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:03	Bateria UNIT #16	UNIT #16	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:56	Bateria UNIT #17	UNIT #17	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:10	Bateria UNIT #18	UNIT #18	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:57	Bateria UNIT #19	UNIT #19	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:50	Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View

1/23/2020 15:13	Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:11	Bateria UNIT #20	UNIT #20	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:06	Bateria UNIT #23	UNIT #23	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:50	Bateria UNIT #24	UNIT #24	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:57	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:58	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:58	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:59	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:00	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:00	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:00	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:01	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:01	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:02	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:02	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/7/2020 14:25	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	View
1/23/2020 14:49	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/7/2020 14:43	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	View
1/23/2020 14:53	Bateria UNIT #5	UNIT #5	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:52	Bateria UNIT #6	UNIT #6	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 14:54	Bateria UNIT #7	UNIT #7	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/23/2020 15:06	Bateria UNIT #9	UNIT #9	Hull In Pipe Bacteria Unit	Boornazian, Bill	Hull - In Pipe Bacteria Units	View
1/10/2020 7:48	MH-20081	MH-20081	Sanitary Manhole	Boornazian, Bill	Sewer Main Cleaning & CCTV	View
1/10/2020 7:50	MH-20081	MH-20081	Sanitary Manhole	Boornazian, Bill	Generic WO	View
1/14/2020 10:35	MH-20081	MH-20081	Sanitary Manhole	Sutton, Eric	Generic WO	View
1/14/2020 10:38	MH-20174	MH-20174	Sanitary Manhole	Sutton, Eric	Generic WO	View
1/31/2020 9:17	MH-20458	MH-20458	Sanitary Manhole	Sutton, Eric	MH Frame & Cover Inspection	View
1/2/2020 15:30	MH-20885	MH-20885	Sanitary Manhole	Sutton, Eric	MH Frame & Cover Inspection	View

TOWN OF HULL, MA | WASTEWATER SYSTEM ORGANIZATION CHART

Personnel	Position	Contact
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Town of Hull			
Philip Lemnois	Town Manager	781.925.2000 (o)	-
	DPW Director	781.925.0900 (o)	-
Richard Matilla	Chairman	-	-
John Struzziery	Director of WW Operations	781.925.1207 (o)	781.738.7853 (c)
Brian Kiely	Assistant Director WW Operations	781.925.1207 (o)	781.490.2025 (c)
Carol O'Conner	Book Keeper / Clerk	781.925.1207 (o)	-
Terri Berardinelli	Facilities Coordinator	781.925.1207 (o)	-

W&C Operations and Management Staff			
Rob Scott	Area Manager	203.872.2547 (o)	860.204.7988 (c)
Aram Varjabedian	Project Manager	781.925.0906 (o)	339.214.8334 (c)
Bill Boornazian	Assistant Project Manager	781.925.0906 (o)	603.651.8773 (c)
Joe Basler	Lead Operator	-	339.214.8332 (c)
Eric Sutton	O&M Technician	-	339.214.8330 (c)
Dave Wilson	O&M Technician	-	339.214.8331 (c)
Ryan Holman	O&M Technician	-	339.205.8965 (c)

W&C Part Time Plant Staff			
Rodger Boltrushek	Weekend Support	-	508.272.2034 (c)
Dick Gould	Coverage Support	-	617.279.5741 (c)
Intern 1	Intern	-	-
Intern 2	Intern	-	-

W&C Engineering Support Staff			
Rosemary Blacquier	Client Manager	781.613.0644 (o)	-
Jason Kreil	Technical Manager	781.613.0469 (o)	-
Peter Lyons	Project Engineer	978.482.7901 (o)	-
Tim Harrison	Project Manager	925.627.4170 (o)	-

Woodard & Curran Support Staff	
<u>Frank Cavaleri Senior Vice President</u>	
781.613.0441 (o)	617.590.4571 (c)
<u>Linsay McAuliffe Human Resource</u>	
207.747.2505 (o)	
<u>Jeannie Duboise IT</u>	
860.253.2676 (o)	860.605.0358 (c)
<u>Alan Fabiano Technology</u>	
914.246.2927 (o)	914.456.3115 (c)
<u>Andy Crawford Asset Management Manager</u>	
609.608.0689 (o)	
<u>Steve Rose SCADA Support</u>	
508.280.6029 (c)	
<u>Jody St. George Sr. O&M Specialist</u>	
508.922.1599 (c)	
<u>Jim Gagliard Sr. O&M Specialist</u>	
508.280.6092 (c)	
<u>Shannon Eyler Director of Health and Safety</u>	
207.558.3803 (o)	207.807.0713 (c)
<u>Wendy Foreman Health and Safety Admin</u>	
207.558.3842 (o)	207.671.7919 (c)
<u>Kim Brierley Billing / Project Assistant</u>	
781.613.0087 (o)	
<u>Brenda Douglas Part Time Project Admin</u>	
781.383.0057 (o)	
<u>Jackie Smith Marketing Assistant</u>	
207.558.3726 (o)	207.749.4990 (c)

