

Utility Department Monthly Update

MEETING DATE: February 9, 2021

TO: Honorable Mayor and City Councilmembers

FROM: Daniel Saus, Utility Director

THROUGH: George Garrett, City Manager

SUBJECT: January 2020 Utility Department Update

A. Wastewater Treatment Plants

1. General Issues

a. The only large issue in January was the vacuum main going out to 120th St gulf. This line has given us problems in the past but has been working well for several years. The new vacation rentals on Vaca cut backed up twice so we dug up the line and did some exploratory work looking for issues. We found a restriction in the line near the intersection of US1 and 120th Gulf which we repaired. We also found that by doing a slight modification to the line we can reduce the amount of static loss in the line. The engineers are designing the modification now and I will be bringing a resolution for that work, hopefully, to the next meeting. I am hopeful that will be the final resolution to the problem. If not, we do have several other options that we are considering.

2. Odor Complaints / Mitigation

a. We received no odor complaints for the wastewater treatment facilities in the last several months.

3. Effluent Quality Report/Plant Performance

The December 2020 wastewater facility performance chart is shown below because the January numbers are just being tabulated. The plant permits now require AWT compliance and the operations staff is doing an amazing job as reflected in our effluent quality as shown below. (Effluent results are always a month behind due to sampling, shipping, & lab reporting)

City of Marathon WWTP's Plant Performance Data for:

DECEMBER 2020

	Parameters:		CBOD mg/L		TSS mg/L		TN mg/L		TP mg/L	
WWTP	Permit (MGD)	MADF (MGD)	Monthly Average (6.25)	Annual Average (5.0)	Monthly Average (6.25)	Annual Average (5.0)	Monthly Average (3.75)	Annual Average (3.0)	Monthly Average (1.25)	Annual Average (1.0)
AREA 3	0.250	0.182	1.0	1.7	0.85	1.0	1.46	2.37	0.395	0.588
AREA 4	0.400	0.285	1.0	1.7	1.4	1.6	1.46	1.5	0.181	0.4
AREA 5	0.450	0.331	1.0	1.2	1.3	1.2	1.35	1.1	0.42	0.3
AREA 6	0.200	0.084	1.0	2.6	1.5	1.0	2.43	1.37	0.557	0.268
AREA 7	0.200	0.036	1.0	2.3	0.5	0.5	2.48	2.39	0.46	0.254

B. Collection System

1. The month of December was relatively quiet, and flows were normal for this time of year.

2. Vacuum Station Salinities for December:

a. August's vacuum station salinities were at as follows (in parts per thousand): SA3: 2.0; SA4: 1.99; SA5: 4.38; SA6: 0.9 and SA7: 1.08. This indicates a minimal amount of saltwater intrusion into our system from the king tides except for SA5 where we continue to find issues. We now know it is latent hurricane damage and we are actively pursuing air intake repairs on private property as stated above in in general issues,

3. Wastewater System Connections

a. The City's wastewater system parcel connection rate is currently standing at approximately 100%. (Only customers that are in code or do not have a certificate of occupancy are not connected)

4. Code Compliance

a. There are currently 15 open code cases in process for failure to connect to the City's central wastewater system, code violations, or expired permits. Most of them are residential properties at some point in the foreclosure process.

5. Call-Outs

a. From December 1st to December 31st there were 46 documented Call outs for the entire Collections System. Of these, 35 were system generated typically a low vacuum detected at one of our Vacuum Stations. These 35 call outs did not result in any inconvenience to our customers in any way as the problems were detected and remedied by Collections/Maintenance City Staff before these problems could become a nuisance to the homeowners or residents at these locations.

b. The other call outs were as follows:

- i. 12-7-20: Backup Area 5. 104 Bruce Ct. The MOD phone received a call about a backup at the property. The tech responded and inspected the vacuum pit and found the unit to be in good working order. He let the homeowner know to call a plumber. No damage to property.
- ii. 12-8-20: Backup Area 5. Driftwood Pizza, 10875 O/S Hwy. The MOD phone received a call about a backup at the property. The tech responded and inspected the vacuum pit and the cleanout. He found the vac pit was overwhelmed with water. The tech manually fired the unit to empty the water and put the vac pit back into service. No damage to property.
- iii. 12-8-20: Backup Area 3. Burdines, 1200 Oceanview Ave. The MOD phone received a call about a backup at the property. The Tech responded and inspected the Vacuum Pit and found the no hub connector had come off of the valve. He replaced the no hub with a Fernco fitting and then put the Vac Pit back into service. No damage to property.
- iv. 12-10-20: Backup Area 7. 79752 Paradise Place. The MOD phone received a call about an alarm light flashing at the property. The tech responded. He found the wet well full of water and called in the pump truck to help pull the water down to be able to work on the station. He found the on/off switches were bad on the pumps in the station. He pulled the pumps and repaired the switches. He then proceeded to put the station back into service. No damage to property.
- v. 12-11-20: Backup Area 7. 58350 Morton Rd. The MOD phone received a call about an alarm light flashing at the property. The tech responded. He found the wet well full of water and called in the pump truck to help pull the water down to be able to work on the station. He proceeded to troubleshoot the station and found the check valves were bad and tearing up the pump's stators. He replaced the check valves and

stators then proceeded to put the station back into service. No damage to property

- vi. 12-12-20: Backup Area 4. 3982 Washington St. The MOD phone received a call about a backup at the property. The tech responded and inspected the vacuum pit and the cleanout. He found the vac pit was overwhelmed with water. The tech manually fired the vac pit to empty the water and put the vac pit back into service. No damage to property.
- vii. 12-17-20: Backup Area 7. 58336 O/S Hwy. The MOD phone received a call about a backup at the property. The tech responded and inspected the vacuum pit and found the unit to be in good working order. He let the homeowner know to call a plumber. No damage to property.
- viii. 12-27-20: Backup Area 6. 324 Sombrero Bch. Rd. The MOD phone received a call about a backup at the property. The tech responded and inspected the vacuum pit and found the controller and valve were bad. The tech replaced the controller and valve then proceeded to put the vac pit back into service. No damage to property.
- ix. 12-26-20: Backup Area 4. 121 Mockingbird Ln. The MOD phone received a call about a backup at the property. The tech responded and inspected the vacuum pit and found the no hub connector had fallen off of the valve. He replaced the no hub with a Fernco fitting and then put the Vac Pit back into service. No damage to property.
- x. 12-29-20: Backup Area 6: 11890 Vaca Cut. The MOD phone received a call about a backup at the property. The tech responded and found the Vacuum Main waterlogged and no vacuum at the end of the line. This particular area has had the same recurring issue for quite a while in years past. Troubleshooting the Vac Main in that area we found a partial blockage at the intersection of Overseas Hwy and 120th Street. We cleared the blockage and Weiler Engineering is now in the process of reengineering the Vacuum Main to correct a construction defect that has been present in that line since it was originally built to remedy any further problems in the future. No damage to property.

6. Odor Complaints / Mitigation

b. We received no odor complaints in December for the collection system.

C. Plant Upgrades & Construction Projects

- 1. The design for the sludge facility at Area 6 is still on hold at this time awaiting funding.
- 2. The construction for the Area 3 to 4 force main is about 75% completed. A redesign was required once we determined the survey information was not accurate. The force main now crosses US1 and will now tie-in in front of Gulfside Village on oceanside.
- 3. The design for the Area 3 WWTP expansion is nearly completed and permitting through FDEP is underway at this time. An unexpected major RAI (request for additional information) was received by FDEP in late October. This will require geotechnical investigations and work from a licensed Geologist for a proper response. That work has been approved and is underway.

D. Grants Update Summary

- 1. LP44041 17 Million dollar Grant This grant has been closed out.
- 2. In January we were informed we are receiving \$1,700,000 from ACOE for fiscal year 20/21!
- 3. Regarding the ACOE PCA: in August we received a reimbursement of \$1,245,000.00 from ACOE for FKWQIP for fiscal year 19/20.