




Utility Department Monthly Update

MEETING DATE: December 10, 2019

TO: Honorable Mayor and City Councilmembers

FROM: Daniel Saus, Utility Director 

THROUGH: Charles Lindsey, City Manager

SUBJECT: **November 2019 Utility Department Update**

A. Wastewater Treatment Plants

1. General Issues

- a. The king tides were still causing increased flows and salinities at some of the plants in October. We now know that a great many damaged air inlets that are likely latent hurricane Irma damage either from the storm or from the ensuing cleanup effort. We have performed a multitude of repairs and have sent many letters to the affected owners but are getting good compliance.

2. Odor Complaints / Mitigation

- a. We received two odor complaints for the wastewater treatment facilities at Area 3 plant. The air line that runs from the blower room to the treatment plant corroded and failed allowing all of the air to escape to the outside before reaching the plant. Although the piping was repaired in a timely manner some odors were created due to the lack of air in the process for a short time. The new piping was epoxy coated and wrapped in plastic to avoid a future occurrence of this same problem.

3. Effluent Quality Report/Plant Performance

The October 2019 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
Wastewater Treatment Plant
Performance Data for:**

OCTOBER 2019

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	0.230	1.0	2.51	3.37	2.24	1.83	2.24	0.262	0.877
AREA 4	0.400	0.338	1.0	2.7	3.3	1.82	0.376	1.34	0.30	0.68
AREA 5	0.450	0.393	1.0	1.24	2.97	1.15	0.82	1.85	0.236	0.367
AREA 6	0.200	0.077	2.28	1.72	1.43	0.63	2.2	1.96	0.163	0.154
AREA 7	0.200	0.072	3.33	2.03	1.27	0.65	0.232	1.53	0.216	0.131

B. Collection System

1. The month of October hit our area with extreme King Tides and showed weaknesses in the Vacuum as well as the Gravity Collection System that greatly impacted the system being hydraulically taxed. We found issues with 4 Vacuum Pit sumps being compromised as well as many other Saltwater Inflow and Intrusion problems along the Gravity Laterals on the Homeowner, Business and City side of the Collections System. We identified many of these issues troubleshooting the System late at night and investigating the high salinity readings the next day. We are working with Property Owners and Contractors as fast as time allows to correct these problems. And will continue to pursue more issues as the tides come back in higher at the end of the month of November.

2. Vacuum Station Salinities for June:
 - a. August's vacuum station salinities were at as follows (in parts per thousand): SA3: 5.5; SA4: 5.4; SA5: 5.2; SA6: 2.9 and SA7: 3.1. This indicates a moderate amount of saltwater intrusion into our system from the king tides. 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 19 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 in some point in the foreclosure process.

5. Call-Outs

- a. From October 1st to October 31st there were 61 documented Call outs for the entire Collections System. Of these, 49 were system generated, typically low vacuum detected at one of our Vacuum Stations. These 49 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. 10-2-19: Backup Area 5. JJ's Doghouse and Sports Bar. 10700 O/S Hwy. The Establishment called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit to be operational. Establishment issue.
- ii. 10-4-19: Backup Area 5. 800 105th St. The Resident called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit no-hub to have fallen off. The Technician reattached the no-hub and put the Pit back into operation. No damage to property.
- iii. 10-9-19: Backup Area 4. 675 69th St. The Resident called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit to be operational. Homeowner issue.
- iv. 10-11-19: Backup Area 4. 3649 Gulfview Ave. The Resident called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit to be operational. Homeowner issue.
- v. 10--19: Backup Area 3. 520 12th St. Street. The Resident called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit to have low vacuum, Vacuum Main was water logged. The

Technician purged the line of water and put the Pit back into operation. No damage to property.

- vi. 10-13-19: Backup Area 4. Dockside. 35 Sombrero Blvd. The Dockmaster called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit to be overwhelmed with Saltwater from a break in the 2 inch drain line from the kitchen area. The Pit was disconnected until after the next couple of days when the Property Owner had the issue resolved. We then reconnected the Pit and put it back into service. No damage to property.
- vii. 10-14-19: Backup Area 3. 7 Mile Grill. 1240 O/S Hwy. The Establishment called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Buffer Tank full of water. The Technician checked the vacuum at the Pit and found the line to be water logged. He proceeded to put the Vacuum Pumps in manual mode at the Area 3 Vac Station and purged the line of water. After a few minutes the Business called back to report that they could hear the Buffer Tank firing and emptying of water. No damage to property
- viii. 10-20-19: Backup Area 3. Castaways. 1406 Oceanview Ave. The Establishment called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit to be overwhelmed with water. He emptied the Pit of water and put the Pit back into operation. No damage to property.
- ix. 10-20-19: Backup Area 3. Castaways. 1406 Oceanview Ave. The Establishment called again a short while later to report that the property was backing up again. The Technician came back and reinspected the Pit more closely and found that the Sensor Tube was clogged with grease not allowing the Pit to fire automatically. He completely cleaned and replaced the sensor tube, valve, and surge suppressor. Then the Pit was put back into operation. No damage to property.
- x. 10-22-19: Backup Area 7. 57742 Morton St. The Resident called the MOD phone about a backup at the residence. The Technician arrived and found that both Grinder Pumps needed to be rebuilt. He rebuilt both pumps and put the Station back into operation. No damage to property.
- xi. 10-25-19: Backup Area 5. 10731 3rd Ave. The Resident called the MOD afterhours phone about a backup at the property. The Technician arrived to troubleshoot the Vacuum Pit and found that the Suction Tube was clogged with debris. He cleared the debris and put the pit back into operation. No damage to property.
- xii. 10-26-19: Backup Area 5. 8050 Gulfstream Ave. The Resident called the afterhours MOD phone about a backup at the property. The Tech arrived and found the Vacuum Pit to be operational. Homeowner issue.

6. Odor Complaints / Mitigation

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

C. Service Plant upgrades & Construction

1. The Area 5 WWTP upgrades are nearly completed. The final punch list items are completed at this time. Reynolds is completing extra maintenance work that we requested them to perform while they are still mobilized.
2. The design for the sludge facility at Area 6 is on hold at this time.
3. The design for the Area 3 to 4 re-pump and force main design is in progress.
4. The design for the Area 3 WWTP expansion is underway at this time.

D. Grants Update Summary

1. LP44041 17 Million dollar Grant – No major changes this month.
 - i. Finance is working on the next draw at this time.
2. Regarding the ACOE PCA: We received a grant for \$948,000.00 for the fiscal year 2019-2020. We are currently preparing a work plan for this grant money.