




Utility Department Monthly Update

MEETING DATE: December 14, 2021

TO: Honorable Mayor and City Councilmembers

FROM: Daniel Saus, Utility Director 

THROUGH: George Garrett, City Manager

SUBJECT: November 2021 Utility Department Update

A. Wastewater Treatment Plants

1. General Issues

- a. Bids for the Chemical Feed Upgrades were received last month and came in substantially over the projection. I am coordinating with our engineer and the only bidder to see if we can find some substantial savings through value engineering. Once that process is completed, I will likely recommend the project for approval by Council at a future meeting. This project is funded by FEMA.
- b. We did experience Inflow and Infiltration problems during the rainstorm in our Area 4 from the extreme rain event we had in the middle of November. We have hired extra personnel to start addressing this issue soon starting in Area 4 and expanding the effort to other Areas in the City.

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 October 2021 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:**

October 2021

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	0.186	1.0	1.5	0.5	0.8	1.29	1.9	0.815	0.743
AREA 4	0.400	0.286	1.53	1.2	0.5	1.1	1.02	1.2	0.158	0.169
AREA 5	0.450	0.332	1.0	1.7	0.5	1.0	1.28	1.2	0.19	0.4
AREA 6	0.200	0.069	1.82	1.9	0.5	0.9	0.755	1.24	0.327	0.474
AREA 7	0.200	0.039	1.0	2.1	0.5	0.5	1.40	1.65	0.394	0.28

B. Collection System

1. The month of November presented a challenge with the huge rainfall event but the crews did an amazing job of minimizing back-ups.
2. Vacuum Station Salinities for November:
 - a. August's vacuum station salinities were at as follows (in parts per thousand): A3: 2.4 SA4: 3.5; SA5: 7.3; SA6: 1.6 and SA7: 1.7. These values show some infiltration but only Area 5 is really causing a problem. We continue to look for the outstanding issues in that system. We have hired additional staff to find and address these leaks, most still left over damages from Irma.

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 6 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 November 1st to November 30th there were 68 documented Call outs for the entire Collections System. Of these, 57 were system generated typically a low vacuum detected at one of our Vacuum Stations. These 57 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. **We did experience Inflow and Infiltration problems during the rainstorm in our Area 4 from the extreme rain event we had in the middle of November. We have hired extra personnel to start addressing this issue starting in Area 4 and expanding the effort to other Areas in the City.**

- b. The other call outs were as follows:

- i. 10-31-21: Backup Area 3: 2315 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 vac pit to empty the water and put it back into service. No damage to property.

- ii. 11-1-21: Backup Area 3: 544 30th Street. The MOD phone received a call about a backup at the property. The Tech responded and inspected the vacuum pit and cleanout. He found the unit to be in good working order. He let the Homeowner know to call a plumber.

- iii. 11-1-21: Backup Area 4: 17 Man O' War Dr. The MOD phone received a call about a backup at the property. The Tech responded and inspected the vacuum pit and cleanout. He found the unit to be in good working order. He let the Homeowner know to call a plumber.

- iv. 11-2-21: Backup Area 3: 2315 O/S Hwy. The MOD phone received a call about a backup at the property. The Tech responded and inspected the vacuum pit and

cleanout. He found the unit to be in good working order. He let the Homeowner know to call a plumber.

v. 11-13-21: Backup Area 4: 3 Ocean Dr. East. 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 it to empty the water and put the vac pit back into service. No damage to property.

vi. 11-14-21: Backup Area 4: 335 Sombrero Rd. 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 due to the service lateral being defective on the city side of the cleanout allowing rainwater to flow freely into the vacuum pit. This City problem is being rectified by our contractor to eliminate this issue in the future. No damage to property.

vii. 11-15-21: Backup Area 4: 977 Ocotillo Ln. 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 valve and controller to be defective. He replaced both and then proceeded to put the unit back into service. No damage to property.

viii. 11-16-21: Backup Area 5: 937 107th Street. 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 valve and controller to be defective. He replaced both and then proceeded to put the unit back into service. No damage to property.

ix. 11-16-21: Backup Area 7: 205 Guava Ave. The MOD phone received a call about a backup 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 grinder pump station. He troubleshooted the station and found the pumps stator and check valves all to be inoperable. He replaced both grinder pumps and check valves then proceeded to put the Station back into service. No damage to property.

x. 11-19-21: Backup Area 4: 1134 Bulivar de Palmas. The MOD phone received a call about a backup at the property. The Tech responded and inspected the vacuum pit and cleanout. He found the unit to be in good working order. He let the homeowner know to call a plumber.

xi. 11-19-21: Backup Area 4: 980 Ocotillo Ln. 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 valve and controller to be defective. He replaced both and proceeded to put the unit back into service. No damage to property.

xii. 11-20-21: Backup Area 5: 56 Pelican. 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 valve and controller to be defective. He replaced both and proceeded to put the unit back into service. No damage to property.

xiii. 8-23-21: Backup Area 3: 1779 O/S Hwy. Marathon Laundromat. 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 it back into service. No damage to property.

xiv. 11-24-21: Backup Area 5: 550 109th Street. 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 it back into service. No damage to property.

xv. 11-25-21: Backup Area 5: 58704 O/S Hwy. The MOD phone received a call about a backup 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 so as to be able to work on the grinder pump station. He troubleshot the station and found that both stators were bad. He replaced both stators then put the station back into service. No damage to property.

xvi. 11-25-21: Backup Area 5. 11585 6th Ave. Ocean. 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 no hub to have come off of the Valve. He replaced the no hub then to put the unit back into service. No damage to property.

xvii. 11-26-21: Backup Area 3. 206 12th Street. 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 it back into service. No damage to property.

6. Odor Complaints / Mitigation

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

C. Plant Upgrades & Construction Projects

- 1. The design for the sludge facility at Area 6 is back on track. The City received about \$3.5 million in Stewardship funding this year and plans to move this project forward. It is being prepared for bidding.

2. A CDBG-DR Grant has been received for electrical upgrades, vacuum monitoring system, and flood wall at Area 6 plant. The design work is in progress and the bids for the Chemical Feed Upgrade Project are due in two weeks.
3. The design for the Area 3 WWTP expansion is nearly completed and permitting through FDEP is underway at this time. Another unexpected RAI (request for additional information) was received by FDEP in September. Our response team is working on a proposal for this required response.

D. Grants Update Summary

1. We received notification of an award of \$3,500,000 for Stewardship this year! We plan to move the sludge handling facility forward with this grant money. It is expected to get to bid soon.