




## Utility Department Monthly Update

**MEETING DATE:** August 10, 2021

**TO:** Honorable Mayor and City Councilmembers

**FROM:** Daniel Saus, Utility Director 

**THROUGH:** George Garrett, City Manager

**SUBJECT:** July 2021 Utility Department Update

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### A. Wastewater Treatment Plants

#### 1. General Issues

- a. The only major issue in July is our struggle to keep the improperly remanufactured vacuum pumps at area 4 running properly. They should be replaced soon. See Call Out Report 5.a. later in this report.
- b. The work related to the ACOE grant money at the Area 3 plant is going well. Unfortunately, due to COVID related delays it is nearly 100% completed as expected. Jennifer requested that ACOE extend our reimbursement deadline to the end of August, and they approved that new deadline.

#### 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 June 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:

**JUNE 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	0.217	1.76	1.5	0.5	0.9	0.891	2.57	1.12	0.767
AREA 4	0.400	0.278	1.0	1.3	0.75	1.4	0.75	1.6	0.371	0.205
AREA 5	0.450	0.349	2.8	1.5	0.5	1.3	0.99	1.2	0.23	0.40
AREA 6	0.200	0.093	1.0	1.4	0.5	1.0	1.92	1.45	0.418	0.445
AREA 7	0.200	0.035	1.91	1.9	0.5	0.5	1.25	1.82	0.346	0.305

### B. Collection System

1. The month of July was relatively quiet with flows at the normal rate for this time of year.
2. Vacuum Station Salinities for July:
  - a. April's vacuum station salinities were at as follows (in parts per thousand): SA3: 2.1 SA4: 1.9; SA5: 3.6; SA6: 1.8 and SA7: 0.8. This indicates a minimal amount of saltwater intrusion into our system from the king tides except for SA5 where we continue to find issues on the private side of the system.
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 7 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 July 1st to July 31st there were 51 documented Call outs for the entire Collections System. Of these, 37 were system generated typically a low vacuum detected at one of our Vacuum Stations. These 37 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 are still dealing with a 40 hp Vacuum Pump that reached the end of its service life. When that Vacuum Pump was exchanged with what was supposed to be a rebuilt spare from our warehouse, it was discovered that the rebuilt unit was not fully operational from the supplier that did the work. We are no longer using that supplier since Jan. of 2021 because of the same issues in the past and have now been dealing with an OEM supplier since then. That new supplier is in the process of sending the City 2 brand new 40 hp Vacuum Pumps as backups. We are still waiting on those pumps to arrive due to a shipping problem from Germany to Virginia Beach Virginia. We hope to have these Vacuum Pumps delivered shortly as 8 of the 14 back up calls for this month can be attributed to the faulty Vacuum Pump operation during rain events.

- b. The other call outs were as follows:

- i. 7-3-21: Backup Area 4. 208 S. Anglers Dr. The MOD phone received a call about a backup at the property. The Tech responded. He inspected the vac pit and found the unit was overwhelmed. He proceeded to empty the sump firing the vac pit manually and put the pit back into service. No damage to property.

- ii. 7-3-21: Backup Area 7. 59763 Paradise Place. The MOD phone received a call about a backup at the property. The Tech responded to troubleshoot the problem. He found bad stators on the pumps at the grinder pump station. He replaced the stators and put the station back into service. No damage to property.

- iii. 7-5-21: Backup Area 4. 208 S. Anglers Dr. 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 to be overwhelmed with water. He manually fired the vac pit clearing the water

and also cleaned the sensor tube, surge suppressor, replaced the controller and valve putting the vac pit back into service. No damage to property.

iv. 7-12-21: Backup Area 4. 1134 Bulivar de Palmas. The MOD phone received a call about a backup at the property. The Tech responded to troubleshoot the problem. He found the vacuum main to be full of water, he manually purged the line of water and put the vac pit back into service. No damage to property

v. 7-17-21: Backup Area 5. 471 64th 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 controller in the vac pit to be bad. He replaced the controller and put the vac pit back into service. No damage to property.

vi. 7-18 -21: Backup Area 7. 58234 O/S Hwy. The MOD phone received a call about a backup at the property. The Tech responded to troubleshoot the problem. He found bad stators on the pumps in the station. He replaced both stators and put the station back into operation. No damage to property.

vii. 7-20-21: Backup Area 7. 57437 Morton St. The MOD phone received a call about a backup at the property. The Tech responded to troubleshoot the problem. He found bad stators on the pumps in the station. He replaced both stators and put the station back into operation. No damage to property.

viii. 7-20-21: Backup Area 4. 215 Sombrero Beach 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 controller in the vac pit to be bad. He replaced the controller and put the vac pit back into service. No damage to property.

ix. 7-23-21: Backup Area 4. 69 Tingler Ave. 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 to be overwhelmed with water. He manually fired the vac pit clearing the water. Then proceeded to put the vac pit back into service. No damage to property.

x. 7-24-21: Backup Area 4. 1160 Bulivar de Palma. The MOD phone received a call about a backup at the property. The Tech responded to troubleshoot the problem. He found the vacuum main to be full of water, he manually purged the line of water and put the vac pit back into service. No damage to property

xi. 7-24-21: Backup Area 7. 1147 Bulivar de Palmas. The MOD phone received a call about a backup at the property. The Tech responded to troubleshoot the problem. He found the Vacuum Main to be

full of water, he manually purged the line of water and put the vac pit back into service. No damage to property

xii. 7-25-21: Backup Area 6: 11890 1st Ave. 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 Controller in the Vac Pit to be bad. He replaced the Controller and Valve then put the Vac Pit back into service. No damage to property.

xiii. 7-27-21: Backup Area 3. Knight's Key Lift Station. The MOD phone received a call about an Alarm Light at the Lift Station. The Tech responded and inspected the Lift Station. He found the Station full of water. He called the Collections Supervisor to inform him of the situation. The Supervisor told him to clean the level transducer of grease and watch to see if the station started operating in automatic. The station was working in Automatic after cleaning the transducer and put back into service.

xiv. 7-28-21: Backup Area 4. 138 Calle Ensueno. The MOD phone received a call about a backup at the property. The Tech responded to troubleshoot the problem. He found the Vacuum Main to be full of water, he manually purged the line of water and put the Vac Pit back into service. No damage to property

6. Odor Complaints / Mitigation

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

## C. Plant Upgrades & Construction Projects

1. The design for the sludge facility at Area 6 is getting back on track. The City received about \$3.5 million in Stewardship funding this year and plans to move this project forward.
2. A CDBG-DR Grant has been received for electrical upgrades, vacuum monitoring system, and flood wall at Area 6 plant. The design work authorization is coming to Council soon.

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. Our response is nearly ready for the August deadline.

## 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.
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.