




Utility Department Monthly Update

MEETING DATE: June 14, 2022

TO: Honorable Mayor and City Councilmembers

FROM: Daniel Saus, Utility Director 

THROUGH: George Garrett, City Manager

SUBJECT: May 2022 Utility Department Update

A. Wastewater Treatment Plants

1. General Issues

- a. The work continues for the Chemical Feed Upgrades project. Support pilings are installed and the equipment is ordered.
- b. We had the FKEC drill through our vacuum main on Sombrero Blvd. on May 22nd at 4:00AM. Apparently, some wind knocked down a pole. Unfortunately, they failed to call for locates before drilling for the new pole (yes, we do it in the middle of the night as needed) and caused an unbelievable amount of headache and damage to our system. Details are shown below in the call out section under May 22nd.

2. Odor Complaints / Mitigation

- a. We received no odor complaints for the treatment plants in May.

3. Effluent Quality Report/Plant Performance

The April 2022 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)

Note: Several values are missing for the Area 3 plant because of laboratory issues.

City of Marathon WWTP's Plant Performance Data for:

April 2022

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	0.195	<2.0	<2.0	0.85	<1.0				
AREA 4	0.400	0.301	<2.0	<2.0	<1.0	<1.0	0.96	0.90	0.16	0.22
AREA 5	0.450	0.335	<2.0	<2.0	1.0	<1.0	0.74	1.0	0.33	0.30
AREA 6	0.200	0.062	1.89	<2.0	<1.0	<1.0	0.77	1.29	0.27	0.40
AREA 7	0.200	0.038	<2.0	<2.0	<1.0	<1.0	0.87	0.94	0.17	0.23

B. Collection System

1. The month of May had average flows for this time of year.
2. Vacuum Station Salinities for May:
 - a. Vacuum station salinities at the plants were as follows (in parts per thousand):

A3: 2.25 SA4: 3.03; SA5: 4.75; SA6: 0.84 and SA7: 0.83. These values show minimal infiltration.

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 still currently 5 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 May 1st to May 31st there were 39 documented Call outs for the entire Collections System. Of these, 31 were system generated, typically low vacuum detected at one of our Vacuum Stations. These 31 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. 5-2-22: Backup Area 7. 58326 O/S Hwy. The MOD phone received a call about a backup at the property. The Tech responded and informed the property owner that the grinder pump station that serves his property was a privately owned station. He also informed him to call a private service provider. Property owner issue.

- ii. 5-9-22: Backup Area 6. 501 122nd St. The MOD phone received a call about a backup at the property. The Tech responded and inspected the vacuum pit and cleanout and found the city equipment in good working order. It was a homeowner issue.

- iii. 5-9-22: Backup Area 4. 229 Sombrero Bch. Rd. The MOD phone received a call about a backup at the property. The Tech responded and inspected the vacuum pit and cleanout and found the city equipment in good working order. It was a homeowner issue.

iv. 5-11-22: Alarm Light Flashing Area 7. 59742 Paradise Place. The resident called about the alarm light flashing on the control panel of the station. The Tech responded and found that both grinder pumps were bad. He replaced both pumps and put the station back into operation. No damage to property.

v. 5-12-22: Backup Area 5. 175 114th 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 controller and valve were bad. The Tech replaced the controller and valve with new ones and put the vac pit back into service. No damage to property.

vi. 5-22-22: Backup Area 4. 839 Copa D'Oro. The MOD phone received a call about a backup at the property. The Tech responded and found no vacuum in the entire area of Flamingo Isles. He found that the vacuum level dropped off after Skipjacks along Sombrero Blvd. He assumed the vacuum main was waterlogged and proceeded to purge the line of water by turning on all of the vacuum pumps at our Area 4 Vacuum Station. After a couple of hours without improvement of the vacuum in the main past Skipjack's, he called other Techs to assist with the situation. After a few more hours of troubleshooting the area, one of the Techs noticed that there seemed to be a new power pole installed along Sombrero Blvd. He reached out to an FKEC worker who confirmed that there was a new Power Pole installed along the road due to high winds toppling the existing power pole the night before. The FKEC had drilled directly into the 10-inch Vacuum Main along Sombrero Blvd. that served Flamingo Isles area causing numerous backups in that area. We mobilized our equipment to affect a repair of the vacuum main and got the system back up and running. It took all night to get the system's vacuum pits back to operating properly after changing numerous controllers and valves needed replaced. The situation also caused problems at our Area 4 Vacuum Station filling the sewage tank with rock/debris, burning up one of the sewage pumps and contamination of the oil in two of the four vacuum pumps over the next couple of days. We cleaned the debris out of the sewage tank, pulled the sewage pump and sent it out for repair and drained the oil in the vacuum pumps and put new filters/oil in the units. The system is back operating normally at this time.

vii. 5-22-22: Backup Area 4. 860-840 Copa D'Oro. The MOD phone received a call about a backup at the property. This issue was caused by the same situation outlined above.

viii. 5-23-22: Backup Area 4 Remote. 118 Calle Ensueno. The MOD phone received a call about a backup at the property. The Tech responded and inspected the vacuum pit and the cleanout and found the City equipment in good working order. It was a homeowner issue.

6. Odor Complaints / Mitigation

b. We received no odor complaints in May 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. Design is at approx. 90%. We are required to perform a complete environmental assessment which has slowed our progress considerably.
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 the required response which is now due May 9, 2022.
4. We received an RAI for Area 6 WWTP permit renewal similar to the one for Area 3. We responded February 16th and expected a response from FDEP by April 15th. It has not yet been received.

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. We are hoping for another larger award next year.