



City of Marco Island

Meeting Date: July 6, 2026
To: City Council
From: Jeffrey E. Poteet, General Manager- Water & Sewer
Through: Casey Lucius, City Manager
Re: Water and Sewer (W&S) Departmental Report

Both the City's drinking water and wastewater operations follow Florida Department of Environmental Protection (FDEP) regulations and all other regulatory entity requirements. The W&S Department is operating within the approved budget. Below is a summary of department activities during the past month.

The 2025 CCR Water Quality Report for the City of Marco Island

The City of Marco Island 2025 Water Quality Report for the Marco Island Service area is now posted on the City of Marco Island website. View the report at <https://www.cityofmarcoisland.com/ccr2025/>

Caught in the Act

On June 14, 2026, at 2:00 a.m., Arturo Ramos received an emergency call regarding a significant water leak at 218 Waterway Court. After speaking with the resident and gathering the necessary information, Arturo responded immediately, arrived on site, and repaired the leak.

The resident, who had just returned home from a late flight, was surprised and impressed that assistance was provided in the middle of the night, expecting the issue would have to wait until the next business day. Arturo explained that the Water and Sewer Department operates 24 hours a day, 7 days a week, 365 days a year, to serve the community.

The following day, the resident contacted the Water and Sewer Department to commend Arturo's professionalism, responsiveness, and dedication to customer service. His actions exemplify our commitment to providing exceptional service, delivering high-quality drinking water, and protecting the environment.

Congratulations to Arturo for his outstanding efforts and making the Water and Sewer Department stand out above the rest. Arturo received a Caught in the Act certificate and a \$100.00 gift card for his service.



Injection Well #1 Mechanical Integrity Test (MIT)

The City's water and wastewater treatment infrastructure includes two deep injection wells (IW-1 and IW-2) that are used to dispose of treated effluent from the Reclaimed Water Production Facility and concentrate, generated by the South Water Treatment Plant. Concentrate is the high-

salinity byproduct produced during the reverse osmosis treatment process, containing the dissolved minerals and salts removed from the brackish groundwater source. These deep injection wells provide a safe and environmentally sound method for disposing of these residual streams thousands of feet below underground sources of drinking water.

As required by the Florida Department of Environmental Protection (FDEP) operating permits, each injection well must undergo a Mechanical Integrity Test (MIT) every five years to verify the structural integrity of the well and confirm that injected fluids remain confined within the permitted disposal zone. In February, City Council approved the issuance of a purchase order in the amount of \$128,500 to perform the required testing. The MIT for Injection Well No. 1 was successfully completed during the first week of June, ensuring continued compliance with regulatory requirements, protecting underground sources of drinking water, and confirming the well's continued operational integrity.

Source Water Facility Brush Fire Incident – June 23, 2026

On June 23, 2026, a passing motorist reported observing smoke coming from an area within the City's Source Water Facility (SWF), located approximately nine miles north of Marco Island. Upon receiving the report, emergency responders were notified. Although the City of Marco Island Fire Rescue Department was contacted, the incident was ultimately responded to by Greater Naples Fire Rescue due to the facility's location.

Fire personnel arrived promptly on scene and were able to quickly contain and extinguish the fire, preventing it from spreading to facility infrastructure or equipment. The fire affected an estimated 400 square feet of vegetation and ground cover within the site.

No injuries were reported, and there was no impact to the operation of the Source Water Facility or the City's potable water supply. At this time, the cause of the fire remains undetermined, and no evidence has been identified to establish its origin.



Staff will continue to monitor the area and coordinate with fire officials should any additional information regarding the cause of the incident become available. The event serves as a reminder of the importance of public vigilance and the rapid response capabilities of local emergency services in protecting critical infrastructure.

Advance Metering Instructure (AMI)

The Advanced Metering Infrastructure (AMI) Project continues to make excellent progress, with approximately 85% of the overall work now complete. Most of the larger commercial and master meters have been successfully installed throughout the City of Marco Island and Marco Shores. This significant modernization effort is supported by an \$11.6 million capital investment, of which \$7.6 million was financed through a lease agreement with Bank of America.

The project budget includes two contingency allocations designed to address potential unforeseen costs during implementation:

1. **Tariff Contingency – \$246,941:** This contingency was established to mitigate the potential impact of international trade tariffs on project materials and equipment. Due to actual tariff-

related costs incurred during procurement, \$224,576 of the contingency has been utilized, leaving a remaining balance of \$22,365.

2. Owner's Contingency – \$220,000: This contingency was established to address unforeseen project conditions and field modifications. To date, approximately \$41,500 has been allocated for meter box adjustments and other installation-related modifications encountered during construction. In addition, the contractor has submitted a request for approximately \$100,000 to address direct-connect service conversions and necessary valve replacements identified during meter installations. If approved, these expenditures would leave an estimated remaining Owner's Contingency balance of approximately \$78,500.

As part of this investment, approximately 11,500 aging water meters throughout the service area are being replaced. To date, roughly 85% of these meters have been upgraded to state-of-the-art solid-state ultrasonic smart meters. These advanced meters provide significantly improved accuracy, reliability, and operational efficiency, benefiting both residential and commercial customers while enhancing the City's ability to manage its water distribution system.

The benefits of the AMI Project are already being realized by both customers and the utility. Through the AMI customer portal, numerous property owners have identified leaks and abnormal water usage that may have otherwise gone undetected, allowing them to take corrective action before incurring significant water loss or costly utility bills. In addition, based on unaudited financial data, total water and sewer revenues during the first eight months of the fiscal year have increased by approximately \$4 million compared to the same period in the previous year. While several factors can influence utility revenues, a significant portion of this increase is believed to be attributable to the improved accuracy of the new ultrasonic smart meters and the replacement of aging meters that were under-registering water consumption. As the remaining meters are installed and activated, staff will continue to monitor and evaluate the long-term operational, customer service, and financial benefits of the AMI system.



In addition to meter replacements, the contractor is conducting a comprehensive field survey of 4,871 water service lines that were previously identified as having an unknown material classification under the Florida Department of Environmental Protection (FDEP) Lead and Copper Rule requirements. This effort is critical to verify that the City's water distribution system and customer service lines do not contain lead materials. Utilities are required to complete this inventory and verification process by 2027, and the City is well ahead of schedule due to the work being performed as part of the AMI Project. To support these efforts, two summer interns have joined the Water and Sewer Department and are assisting with data collection and verification through the contractor's portal. During each meter replacement, the pipe material on both sides of the meter is identified and documented, providing valuable information for the City's compliance efforts.

The new AMI technology is already providing substantial benefits to customers by enabling near real-time water usage monitoring and faster identification of potential leaks. Residents, businesses, and homeowner associations can register through the City's customer portal to access detailed water consumption information and receive automated alerts when unusual usage patterns or potential leaks are detected. The registration process is simple and user-friendly, allowing customers to actively monitor their water usage and address issues before they become costly problems. City Customer Service staff are available to assist users with registration and navigation of the portal, ensuring that customers can fully utilize the capabilities of this new technology.

South Water Treatment Plant (SWTP) Reverse Osmosis Membranes Replacement

The South Water Treatment Plant (SWTP) uses a reverse osmosis (RO) process to produce high-quality drinking water by forcing raw brackish groundwater through semi-permeable membranes that remove dissolved salts, minerals, and other impurities. The SWTP contains six membrane racks, each housing 180 membrane elements. Over time, these membranes become fouled and lose efficiency, requiring replacement approximately every 8 to 10 years.



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In February, City Council approved the purchase of 180 new RO membrane elements at a cost of \$83,452.36 to replace the membranes in the plant's oldest rack. Replacing these membranes is a critical maintenance activity that helps ensure continued operational efficiency, water quality, and reliability of the treatment process.

The replacement effort was completed over a five-day period and involved 13 Water & Sewer Department employees who collectively dedicated 58 labor hours to the project. Representatives from the City's engineering consultant and the membrane manufacturer were also on-site to provide technical oversight and assistance throughout the process.

The work included disassembling the membrane rack, removing the existing membrane elements, pressure washing and cleaning the rack, verifying serial numbers, organizing the new membrane elements in the required loading sequence, and installing the new membranes into the pressure vessels. Once installation was complete, staff performed the necessary startup procedures and collected the required bacteriological samples to ensure the system met all regulatory requirements.



Laboratory results confirmed that no bacterial contamination was present, and the newly refurbished membrane rack was successfully returned to service. The project was completed safely, on schedule, and without disruption to the City's potable water supply.

| Water Service Interruptions with Boil Water Notice (BWN) | | | |
|--|--|---------------------|--|
| Month | Number of Service Calls Resulting in a BWN | Number of Customers | Large Interruptions 50 Customer or More |
| June-25 | 3 | 37 | |
| July-25 | 3 | 367 | Smokehouse Bay-349 |
| Aug-25 | 3 | 291 | Smokehouse Bay, Sandollar, Westview |
| Sept-25 | 6 | 236 | Court Yard Towers-12 |
| Oct-25 | 7 | 216 | |
| Nov-25 | 2 | 84 | 667 Thrush Ct. |
| Dec-25 | 4 | 760 | Cape Marco 733 |
| Jan-26 | 7 | 556 | 132 Gulfstream, 280 S. Collier, 600 S. Collier |
| Feb-26 | 2 | 256 | 52 Habitat, 204 Tradewinds |
| March-26 | 6 | 627 | TradeWinds-204, Marco Villas-80, Eagles Nest-96 (Twice), 719 Barfield-119 |
| April-26 | 8 | 681 | Plantation 79, Stevens Landing 72, 890 S. Collier 96, 999 Anglers Cove 320 |
| May-26 | 4 | 1148 | Somerset of Marco, 122, 780 S. Collier. Marriot, 729, 400 S. Collier, Gulfview, 58 N. Collier, 265 units |





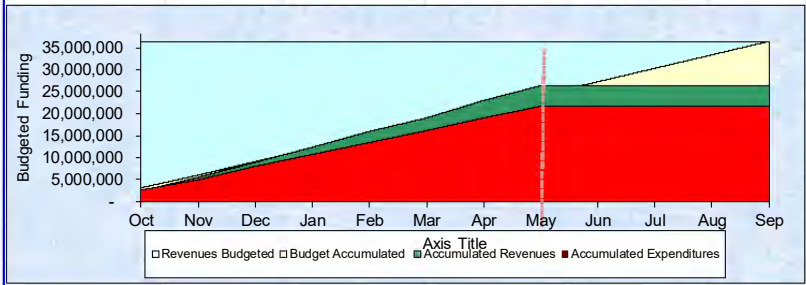
**CITY OF MARCO ISLAND
WATER & SEWER FLASH REPORT**

UNAUDITED- WITHOUT ENCUMBRANCES

| | |
|--|---------------|
| Last Month of the Reporting Period: | May-26 |
| Percentage of Year Completed: | 66.7% |

| WATER & SEWER FUNDS | | | | | |
|--------------------------------|----------------|------------|------------|------------------------------|-------------------|
| Utility Fund | REVISED BUDGET | BUDGET YTD | Actual YTD | ACTUAL OVER/UNDER YTD BUDGET | Percent Spent YTD |
| Revenues - Operations | 36,453,300 | 24,302,200 | 26,379,394 | 2,077,194 | 72% |
| Expenditures | | | | | |
| Operations | 36,694,932 | 24,302,200 | 23,220,292 | (1,081,908) | 63% |

| WATER & SEWERS EXPENSES | | | | | | | |
|------------------------------------|----------------|---------------------------|------------------|------------|-------------------|--------------|------------------------|
| Departments | REVISED BUDGET | Total Spending Difference | Percent Spending | Actual YTD | Budgeted Overtime | Overtime YTD | Percent Overtime Spent |
| NWTP | 3,980,724 | 1,456,100 | 63.4% | 2,524,624 | 60,000 | 38,007 | 63% |
| SWTP | 3,075,673 | 1,052,205 | 65.8% | 2,023,469 | 40,000 | 17,263.81 | 43% |
| RWPF | 3,610,887 | 1,852,373 | 48.7% | 1,758,514 | 45,000 | 22,733 | 51% |
| C&D | 2,952,960 | 999,045 | 66.2% | 1,953,915 | 70,000 | 58,091 | 83% |
| Maintenance | 1,974,549 | 786,500 | 60.2% | 1,188,048 | 95,000 | 83,394 | 88% |
| Administration | 17,801,973 | 6,163,531 | 65.4% | 11,638,442 | 3,000 | 1,163 | 39% |
| Customer Service | 1,098,166 | 431,553 | 60.7% | 666,613 | 20,000 | 14,067 | 70% |
| Transfers | 2,200,000 | 733,333 | 66.7% | 1,466,667 | NA | NA | NA. |
| | 36,694,932 | 13,474,641 | 63.3% | 23,220,292 | 333,000 | 234,718 | 70% |



| Treatment Plant Data | | | | | | |
|---------------------------------------|-----------|--|-------------------------------|----------|-----------|-----------|
| Starting Date: | 4/1/2026 | Rain Fall for Time Period | 2.00 Inches | | | |
| Ending Date: | 4/30/2026 | | | | | |
| Aquifer Storage & Recovery | | | Average Daily Flow (ADF) | | | |
| ASR - Injection Avg. Daily Flow | 0.00 MGD | Apr-26 | Million Gallons per Day (MGD) | | | |
| ASR - Recovery Avg. Daily Flow | 3.93 MGD | "U" Undetected - results below detection limit | | | | |
| Marco Island Drinking Water | | | | | | |
| Combined Consumer ADF | 10.98 MGD | Max Day | 4/18/2026 | Max Day | 12.40 MGD | Flow |
| NWTP Consumer ADF | 4.12 MGD | | 4/22/2026 | | 5.08 MGD | |
| SWTP Consumer ADF | 6.86 MGD | | 4/25/2026 | | 7.99 MGD | |
| Finished Water Testing | | | | | | |
| Minimum Chlorine Residual | | 3.50 mg/L | | | | |
| | Maximum | Minimum | Maximum | Minimum | | |
| Turbidity | 0.01 | 0.01 NTU | Chlorides | 139 | 120 | mg/L |
| Total Dissolved Solids | 434.00 | 28.00 mg/L | Color | 22 | 1 | mg/L |
| P-Alkalinity | 10.00 | 3.00 mg/L | Phosphate | 0.98 | 0.68 | mg/L |
| M-Alkalinity | 54.00 | 32.00 mg/L | Ammonia | 0.77 | 0.41 | mg/L |
| Cal-Hardness | 98.00 | 35.00 mg/L | Aluminum | 0.13 | 0.03 | mg/L |
| Total Hardness | 130.00 | 76.00 mg/L | pH | 9.06 | 8.67 | su |
| Apr-26 Wastewater - RWPF | | | Monthly Testing | | | |
| Average Flow | | Monthly Max Day | | Influent | Effluent | |
| Influent | 2.48 MGD | 4/4/2026 | 3.18 | BOD | 233.8 | 1.00 mg/L |
| Reuse | 1.92 MGD | 4/15/2026 | 2.5 | TSS | 295.2 | 1.9 mg/L |
| Deep Well | 0.529 MGD | 4/6/2026 | 1.67 | Total N | NA | 8.75 mg/L |
| | | | | Total P | 6.48 | 4.26 mg/L |