



City of Marco Island

Meeting Date: December 8, 2025

To: City Council

From: Jeffrey E. Poteet, General Manager- Water & Sewer

Through: Casey Lucius, Interim 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.

Cost Update - NWTP Lime Sludge Press Replacement

In the November Water and Sewer Department report, the cost of the lime sludge press replacement was estimated at \$376,343. During further review, staff identified several missing cost items in the manufacturer's proposal. A revised, comprehensive proposal was requested and received, increasing the total project cost to \$452,078.00.

The updated scope now includes removal and disposal of the existing press, purchase and installation of the new unit, freight, commissioning/start-up services, an extended warranty, and a 10% Owner's Contingency. Staff will present the updated purchase request to the City Council for consideration at an upcoming meeting.

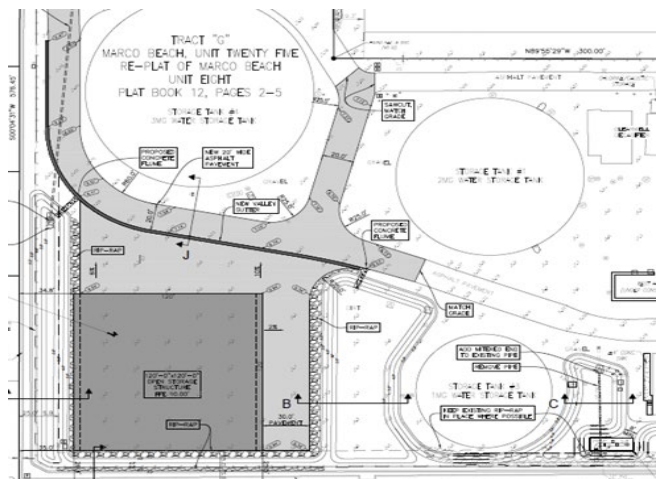


South Water Treatment Plant Portable Generator Building

The Water & Sewer Department maintains a fleet of portable emergency power generators that provide essential backup power to lift stations and groundwater wells during electrical outages. These generators ensure the City can continue delivering uninterrupted drinking water and sewer services to the community during emergency events.

At present, the generators are temporarily stored at the North Water Treatment Plant. To improve storage, accessibility, and operational readiness, the City Council has approved the design of an open storage building capable of housing 60 of those portable generators at the South Water Treatment Plant.

The design phase of the project has been completed. Because the site modification exceeds 10%, the changes must be presented to the Planning Board, with the presentation scheduled for December 5,

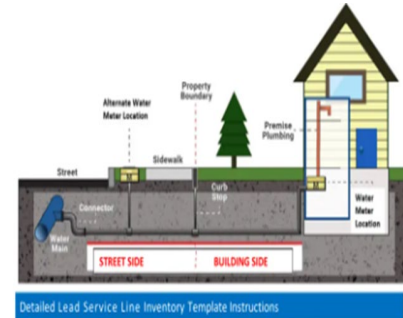


2025. Once the required approvals are obtained, the Department will issue a public notice to bid for the construction of the facility. After evaluating all submitted proposals, the Department will recommend the lowest and most responsible bidder to the City Council for final approval.

Informational Letter Regarding Unknown Service Line Material

As required by the Environmental Protection Agency (EPA) under the Revised Lead and Copper Rule, water utilities must provide annual notifications to customers whose service line material is identified as lead or classified as “unknown.” This requirement went into effect last year, prompting the us to send approximately 4,900 letters to customers whose service line material could not be confirmed.

At this time, no properties within the City’s service area have been identified as having lead service lines. However, to remain in full compliance with EPA regulations, the utility will issue a second round of notifications to the same group of customers whose service lines are still listed as “unknown.”



It is important to understand that an “unknown” classification does not mean the service line contains lead or copper. It simply indicates that the utility does not yet have enough information to determine the pipe material.

Florida banned the use of lead materials for service lines in 1989, meaning lead service lines are typically found only in properties built before that year. To date, none have been found within our system.

Service line inspections will begin this month as part of the City’s approved meter replacement program. It is anticipated that all service line materials will be identified by September 2026, well ahead of the 2035 deadline. While no lead service lines are expected to be discovered based on historical information, any confirmed lead service line will result in immediate notification to the property owner and resident.

Update - Advanced Metering Infrastructure (AMI)

The City’s AMI modernization program continues to advance on schedule. Following City Council approval in June, staff and Johnson Controls, Inc. (JCI) have been preparing the systems, equipment, and infrastructure needed for full deployment. Most small and large meters have now been delivered, and integration work with the Tyler Munis billing system is well underway to ensure a smooth transition once installations begin.



All agreements for the AMI communication network have been finalized, including tower rentals, and installation of the three data collectors is scheduled for December 2025. The project remains on track to mobilize on December 8, with the first 170 meters scheduled for replacement between December 10 and January 8. Multiple installation crews will then be deployed, with full system installation expected by late summer or early fall 2026.

As mentioned in the Revised Lead and Copper Rule report, the service line material survey, required under the EPA’s Lead and Copper Rule, will be completed at the same time as the meter replacements. Public notifications will be issued before work begins in each area.

The project remains on schedule, within budget, and progressing toward full installation modernization.

Wastewater Treatment Plant Permit Renewal

The Florida Department of Environmental Protection (FDEP) has issued the renewal of the City of Marco Island's Wastewater Treatment Plant operating permit (No. FLA014167-027-DW1P), authorizing continued operation of the Reclaimed Water Production Facility (RWPF). The renewed permit becomes effective February 2, 2026, and will remain in effect through February 2, 2031.

The facility is permitted as an Advanced Secondary Wastewater Treatment plant utilizing the Modified Ludzac–Ettinger (MLE) biological nutrient removal process, with authorization to treat up to 4.92 million gallons per day (MGD) based on the three-month average daily flow (TMADF) of domestic wastewater. The facility has two permitted effluent disposal methods: deep well injection and public access reclaimed water irrigation.

The City's primary and preferred disposal method is public access reuse irrigation, where highly treated effluent is distributed for landscape irrigation and other beneficial uses throughout the community. This reclaimed water meets all applicable state and federal standards for water quality and is a key component of the City's long-standing water conservation and environmental stewardship practices.

The permit renewal reflects no significant changes to facility operations or effluent quality standards. Most updates relate to administrative and regulatory clarifications, including references to current Florida Administrative Code provisions, expanded electronic reporting requirements, and updated guidance on monitoring and recordkeeping procedures.

On November 14, 2025, the city received notice that Clean Marco Waters, LLC filed a Petition for Administrative Hearing with FDEP challenging the issuance of the renewed wastewater treatment plant permit (FLA014167-027-DW1P). The petition was submitted by Douglas "Rick" Woodworth, Managing Member of Clean Marco Waters, LLC, and formally requests a hearing under Sections 120.569 and 120.57, Florida Statutes.

The petition alleges that reclaimed water used for irrigation on Marco Island contributes to elevated nutrient concentrations in surface waters and may be linked to degraded canal water quality, algal blooms, and low dissolved oxygen conditions. The filing references water sampling results and claims that the facility should be required to meet Advanced Wastewater Treatment (AWT) standards rather than the current Advanced Secondary classification.

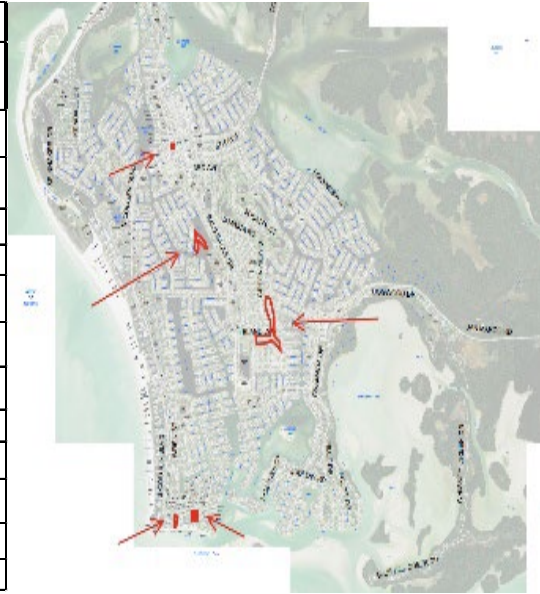
The petition further requests that FDEP reconsider the permit renewal and require the city to upgrade the facility to AWT-level treatment performance. The Department of Environmental Protection has not yet issued a determination on the petition. The city will coordinate closely with FDEP's South District Office and the City Attorney to monitor the process and respond as appropriate.

In summary:

- Permit Effective Date: February 2, 2026
- Permit Expiration Date: February 2, 2031
- Permit Classification: Advanced Secondary Wastewater Treatment
- Status: Renewed; under administrative review following Clean Marco Waters' petition

The Water and Sewer Department remains committed to full compliance with FDEP regulations and to maintaining a high standard of environmental protection and reclaimed water quality. Updates regarding the administrative hearing process will be reported as new information becomes available.

| 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 |
| Nov-24 | 6 | 383 | 6000 Royal marco Way-78, Tradewinds |
| Dec-24 | 3 | 160 | 1771 Mainsail 100, 901 South Collier 52. |
| Jan-25 | 3 | 66 | |
| Feb-25 | 2 | 40 | |
| March-25 | 0 | 0 | NO PRECAUTIONARY BOIL WATER NOTICES |
| April-25 | 1 | 72 | 72 units at Stevens Landing |
| May-25 | 3 | 32 | Town Center-7 Units |
| 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 | |



| Treatment Plant Data | | | | | | | |
|---------------------------------|-----------|-----------------|---------|---|---------|--------------|---------|
| Starting Date: | | 9/1/2025 | | Rain Fall for Time Period | | 11.90 Inches | |
| Ending Date: | | 9/30/2025 | | Average Daily Flow (ADF) Million Gallons per Day (MGD) "U" Undetected - results below detection limit | | | |
| Aquifer Storage & Recovery | | | | | | | |
| ASR - Injection Avg. Daily Flow | | 6.66 MGD | | | | | |
| ASR - Recovery Avg. Daily Flow | | 0.00 MGD | | | | | |
| Marco Island Drinking Water | | | | | | | |
| | | | | Max Day | Max Day | Flow | |
| Combined Consumer ADF | | 9.2 MGD | | 9/29/2025 | 11.59 | MGD | |
| NWTP Consumer ADF | | 3.49 MGD | | 9/29/2025 | 4.29 | MGD | |
| SWTP Consumer ADF | | 5.71 MGD | | 9/29/2025 | 7.30 | MGD | |
| Finished Water Testing | | | | | | | |
| Minimum Chlorine Residual | | 0.50 mg/L | | | | | |
| | | Maximum | Minimum | | | Maximum | Minimum |
| Turbidity | 0.01 | 0.01 | NTU | Chlorides | 115 | 101 | mg/L |
| Total Dissolved Solids | 461.00 | 228.00 | mg/L | Color | 12 | 0 | mg/L |
| P-Alkalinity | 8.00 | 3.00 | mg/L | Phosphate | 0.89 | 0.28 | mg/L |
| M-Alkalinity | 58.00 | 33.00 | mg/L | Ammonia | 0.11 | 0 | mg/L |
| Cal-Hardness | 82.00 | 52.00 | mg/L | Aluminum | 1.04 | 0.06 | mg/L |
| Total Hardness | 106.00 | 80.00 | mg/L | pH | 8.9 | 7.6 | SU |
| Sep-25 Wastewater - RWPF | | | | Monthly Testing | | | |
| Average Flow | | Monthly Max Day | | Influent | | Effluent | |
| Influent | 2.30 MGD | 9/9/2025 | 4.77 | BOD | 214.8 | 6.43 | mg/L |
| Reuse | 1.41 MGD | 9/26/2025 | 2.05 | TSS | 172.5 | 0.6 U | mg/L |
| Deep Well | 0.907 MGD | 9/9/2025 | 4.182 | Total N | NA | 10.18 | mg/L |
| | | | | Total P | 3.9 | 3.45 | mg/L |