

Comments for
Marco Island Association of Condominiums
March 26, 2024
Introducing:

Clean Marco Waters, LLC 
Citizens For Cleaner Water

<https://cleanmarcowaters.com/>

Who We Are

**David M Rasmussen, Engineer
Co- Manager.**

**Bob Roth, Engineer
Co-Manager**

**Andrew Tyler, PhD Chemistry
Co-Manager**

**Rick Woodworth, Real Estate
Development and Management
Co-Manager**

Clean Marco Waters, LLC


- Mission statement
- **“Dedicated to restoring, preserving and protecting Marco Island’s and surrounding communities’ canals, marine ecosystems and habitats through community outreach, public education, science-based research and advocacy.”**



Green Marco Yards Leads to Green and Brown Canals



Algal Bloom in Marco Canal 2021 and Every Year Since



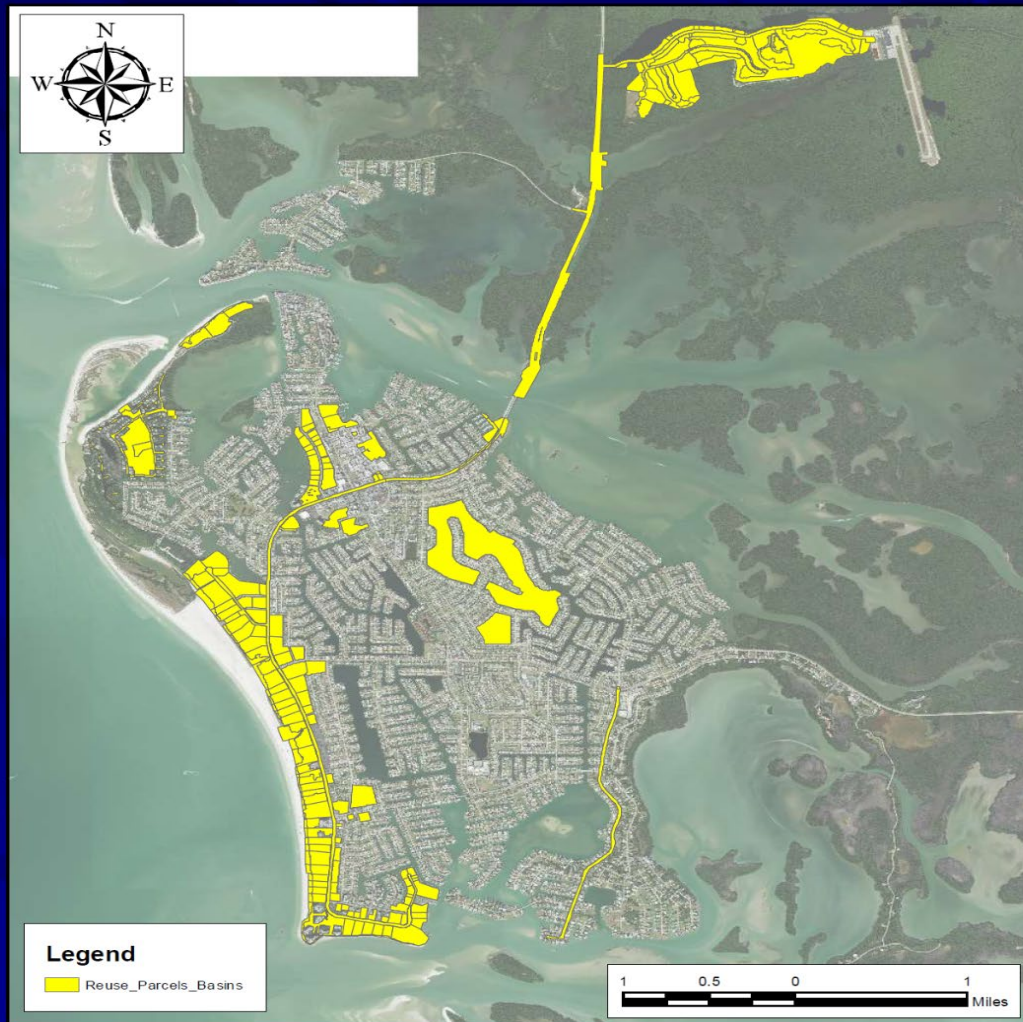
More Marco Algae in 2022



Marco Grass Clippings and Vegetative Debris 2023 Brown Algae

Get an Idea of How Big of a Polluter Marco's Reuse "Poop" Water Is!

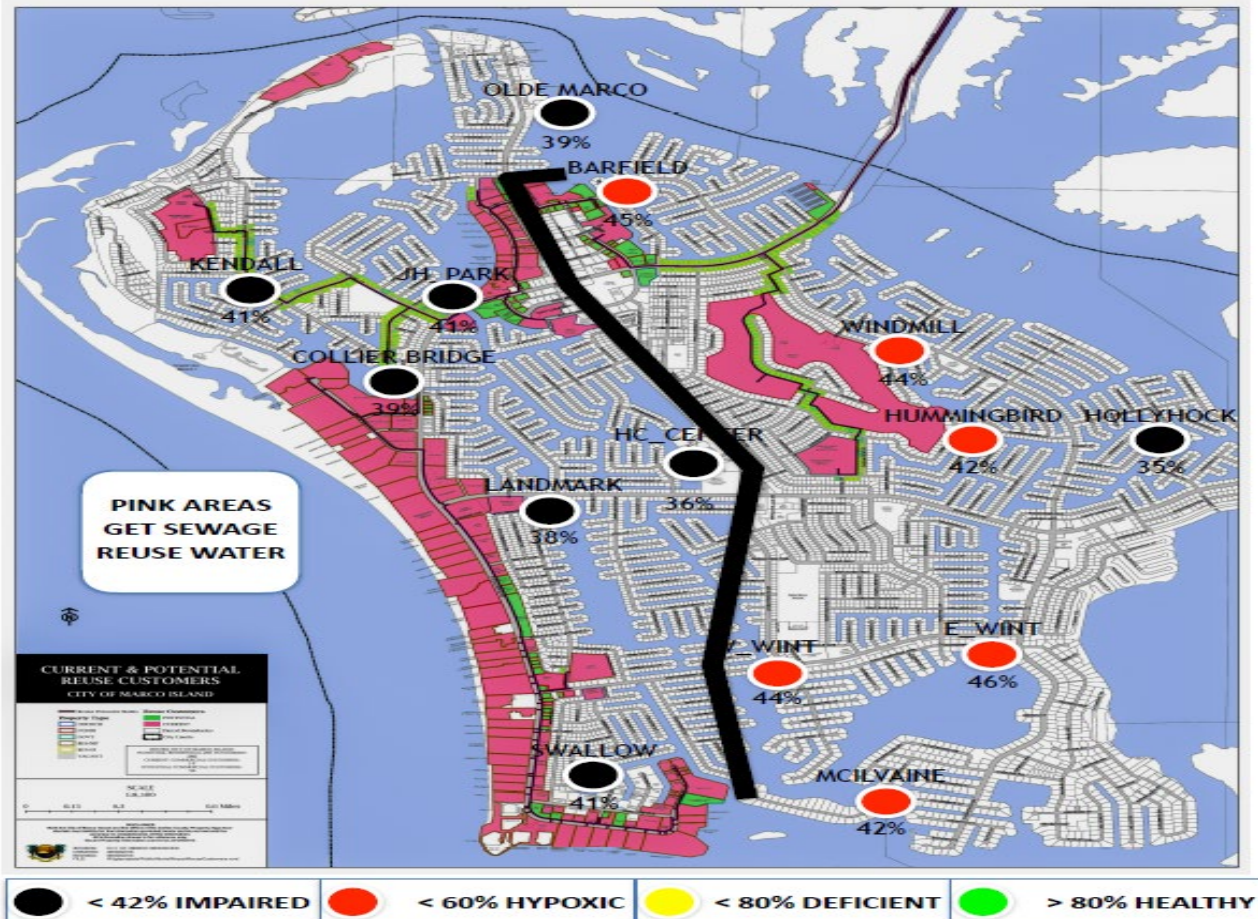
Revised Active Reuse Areas



Phosphorous Is Killing Marco Waters It is About 10X Stronger to Grow Algae

Marco Oxygen Saturation % Status - August 2023

Source: City of Marco Island, Water Quality Sampling Reports



All locations deficient for oxygen; 8 are impaired

City of Marco Island Stormwater Management Program Major Drain Basins



Legend

- Stormwater Manhole
- Stormwater Inlet (With Filter) - 1324
- Stormwater Inlet (Without Filter) - 540
- Stormwater Outfall - 393
- Drainage Pipe
- Stormwater Basin Boundary

1 inch = 3,000 feet

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Get an Idea of How Big of a Polluter Reuse "Poop" Water Is!

2023 Pollution Numbers from Nutrient Rich "Poop" Water

Gallons of Reuse Water = 900,000,000 = 900 Million Gallons

Pounds of Nitrogen from Reuse = 64,700#. If sold in typical 20# lawn fertilizer bags = 32,300 bags

Pounds of Phosphorus from Reuse = 32,700#. If sold in typical 20# lawn fertilizer bags=41,000 bags

Five Recommendations for Reversing the Declines in our Waterways

- Based on the “Recommended Management Options for Marco Island “ matrix presented in the conclusion of the ERD report, and as discussed with in the Position Paper prepared by Clean Marco Waters LLC, **there are five major points we believe that, if adopted, would contribute to improving the quality of the waters surrounding Marco Island.**
- We also believe that these five points represent the minimum that the City should put in place ASAP, and that certain other practical recommendations within the ERD report be considered and implemented.
- We also met with all but one active councilor. While most agreed with us, **they have not acted on any of them.**
- The Waterways Advisory Committee agreed with us and forwarded their recommendation to council last spring. **No response to date.**
- We met with City Manager and reviewed our 5 points. **He has not adopted any of them.**

#1 Reuse Irrigation

- Reuse water is a chronic source of nutrients that is damaging Our Waterways.
- > 2.4-3 million gallons per day (mgd) of partially treated wastewater is produced by the sewer plant and cannot be disposed of on vegetation 365 days / year, especially in rainy season and winter, when plants can't use it.
- Install rain sensors to direct excess reuse water into the existing deep injection wells.
- Improve the sewer plant to produce a cleaner reuse water product versus the minimum standard required by the State.

#2

Fertilizer Ordinance

- Significantly reduce the present **over application of fertilizers** and herbicides on Marco Island.
- Strengthen the existing law and enforce it. **The City ignores it.**
- Collect nutrient rich grass clippings and dispose of with other cuttings.
- Make sure all landscapers and fertilizer applicators are registered. **Not Enforced**
- **Set a goal.** Reduce fertilizer use by X% in Y years. Direct the Stormwater utility to see to it.

3 Public Education

- Increase public contact through the City web site, social and printed media.
- Conduct programs to inform residents of the link between personal activities and water pollution.
- Encourage adjacent communities to follow Marco's lead in environmental advocacy.
- Encourage the elimination of septic systems in adjacent communities by connections to the sewer system.

#4 Water Quality Monitoring

- Continue current waterways quality monthly monitoring program and expand coverage to monitor adjacent areas.
- Retain outside expertise to help monitor status and to conduct additional investigations as may be warranted.

#5 – Stormwater Utility

- **Create a municipal stormwater utility for all of Marco Island.**
- **Hire true stormwater environmental staff, funded by the future district revenue to create a new City Dept. of the Environment.**
- **As per the ERD report, it is likely that such a utility district will have access to grant money otherwise not available to Marco in its current structure. Grants for sewer plant upgrades were not applied for.**
- **Over 160 other similar-sized Florida cities already have a similar utility district and dedicated staffing.**

Thank you!

<https://cleanmarcowaters.com/>