

Summary of Proposed WAC Discussion Items and Recommendations 2025

- 1. Recommend to City Council they promptly issue an RFP for an outside engineering firm to study the alternatives and cost of implementing higher levels of potable and sewage treatment to reduce nitrogen and phosphorus in city sold water products. (Reuse water)**
- 2. Recommend Marco proactively enforce its current Fertilizer Ordinance. Make sure all fertilizer vendors are properly registered with the City and actually stick to controlled application rates. Regularly randomly check and test the vendors fertilizer product for phosphorus and nitrogen. Stop landscapers from blowing lawn debris into canals and canal drains. Fine violators. Fund Code Enforcement to patrol canals for violators. Have City stop overspray of reuse water on Collier medians.**
- 3. Recommend Marco form a “Department of the Environment and Stormwater Management” as a separate City department to focus on these issues and hire a licensed engineer to run the department.**
- 4. Investigate adopting and implementing a “Stormwater Utility District” to assess modest fees and provide a dedicated funding source for water quality improvement. Over 165 Florida cities and counties already have a stormwater utility district.**
- 5. Recommend Marco implement a one-year ban on fertilizer application. Alternatively encourage all landowners to voluntarily reduce fertilizer application by at least 50% and progressively reduce in future years.**
- 6. Monitor and evaluate Marco Islands MS4 and 4E plans and reporting to FDEP.**
- 7. Monitor results of street sweeping program and publish results.**
- 8. Recommend to City Council that it amend or replace the existing “Stormwater Ordinance” to include all new and substantially rehabilitated single family homes providing for stormwater treatment. At present on Marco Island, stormwater discharges from new and redeveloped commercial and industrial construction activities to MS4 or regulated waters and stormwater from areas of any commercial or industrial activity shall be controlled, treated, and managed on-site using BMP’s so as not to cause an illicit or illegal discharge to the city’s MS4 or regulated waters. However, the construction of residential development, including**

single-family homes, on lots of less than one acre in size, is exempted from the city's MS4 regulations.

9. Encourage Florida natural ground covers in landscaping that require much less watering and no added fertilizer. There are "green" alternatives for landscape beautification that are drought tolerant and require little or no added fertilizer. Get support from the Beautification Committee and Collier County to develop sustainable plantings. Increase use of Florida friendly landscaping in medians.
10. Encourage homeowners and landscapers to check sprinkler water rain detectors to avoid over irrigation of lawns during rain. Excess irrigation encourages insect pests and fungus which then require added chemical applications which leach into our canals.
11. Ramp up public education on fertilizer and irrigation. Include information in monthly water bills.
12. Install rain sensors on all reuse water users including the City of Marco Island property to stop overwatering or "fertigation" on rainy days.
13. Investigate possible increased use of deep injection wells when supply exceeds demands until reuse is cleaned up.
14. Continue to conduct annual water quality reviews with outside water quality consultants to monitor and review data, trends and provide future input.
15. Conduct a more comprehensive hydraulic study by an outside professional engineering firm to identify optimum areas for interconnecting culverts to increase circulation to increase oxygen levels in waterways and evaluate possible effectiveness before pursuing interconnect project.
16. Hire an outside public relations consultant to improve public education on water quality issues.
17. Address recommendations from Jacobs Report 1:

"Jacobs provides the following recommendations for the City to consider in addressing the findings of the reuse irrigation assessment:

- 1. Conduct additional soil sampling of representative public access areas and golf courses to assess current available and total P levels and P Capacity Indexes.**
- 2. Consider installing additional shallow groundwater monitoring wells in representative areas to assess actual potential impacts to groundwater quality and nutrient levels.**
- 3. Continue with the updating of irrigated area for all reuse customers to provide more accurate tracking of irrigation and nutrient loading rates.**
- 4. For reuse customers with automatic irrigation controllers, promote the use of the IFAS Urban Irrigation Scheduler App (http://fawn.ifas.ufl.edu/tools/urban_irrigation/), or other similar irrigation scheduling tools, to help adjust irrigation controller run times based on historical weather data.**
- 5. Consider/promote the use of soil moisture monitoring sensors on existing and new irrigation systems with smart automatic controllers to provide more precise control over irrigation operations. The soil moisture sensor will allow irrigation only if water is required.**
- 6. To control/minimize overspray and water loss in median areas, consider converting spray heads/rotors to subsurface drip or microspray systems. For medians that are irrigated with water trucks, consider installing drip or microspray systems to minimize application of reuse water to road surfaces and other impervious areas.”**