

August 25, 2026



VIA ELECTRONIC MAIL

Tim Rach
Florida Department of Environmental Protection
Division of Water Resource Management
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

Re: Comments of Sustainable Water Infrastructure Group, LLC on Proposed Chapter 62-332, F.A.C., Water Quality Enhancement Areas

Dear Mr. Rach:

Sustainable Water Infrastructure Group, LLC (“SWIG”) appreciates the opportunity to provide comments regarding the Florida Department of Environmental Protection’s (“DEP” or “Department”) proposed rules governing Water Quality Enhancement Areas (“WQEAs”). SWIG supports the Legislature’s expansion of the WQEA program and believes WQEAs can become an important tool for achieving measurable nutrient reductions throughout Florida.

SWIG designs and deploys **nature-based water treatment systems** that remove nutrients and other pollutants from stormwater and surface waters. SWIG’s systems use proprietary engineered granular media to enhance natural treatment processes and provide passive, scalable treatment for phosphorus, nitrogen, suspended solids, metals, bacteria, and other pollutants. Depending upon the application, SWIG’s technology can be incorporated into bioswales, rain gardens, stormwater ponds, treatment wetlands, field-scale treatment systems, and other water-quality infrastructure.

SWIG’s Pollutant Elimination System (“PES”), for example, uses engineered media to remove particulate and soluble phosphorus as water passes through the treatment system. SWIG also provides media and system configurations capable of addressing nitrogen and other water-quality constituents. The systems can be designed around site-specific pollutant loads, hydraulic conditions, treatment objectives, available land area, and project life. Because these nature-based systems can achieve substantial nutrient removal within a relatively small footprint, they can supplement or provide an alternative to more land-intensive water-quality treatment approaches.

SWIG’s technology to be a nature-based solution. Its systems can combine vegetation and biological processes with passive media filtration and can provide ecological benefits while enhancing pollutant removal. The technology does not depend upon chemical dosing to achieve nutrient removal. SWIG’s systems can also be integrated into existing stormwater infrastructure to improve water-quality performance without necessarily requiring the construction of substantially larger treatment facilities.

SWIG has practical experience implementing these technologies in Florida, including projects involving nutrient removal for public water-resource agencies and utilities. That experience gives SWIG a direct interest in ensuring that Florida’s WQEA regulatory framework accommodates innovative nature-based treatment approaches capable of providing measurable and verifiable nutrient reductions.

SWIG therefore strongly recommends that DEP implement section 373.4134, Florida Statutes, through a technology-neutral and performance-based regulatory framework. The rules should focus

on whether a WQEA produces reliable, measurable, and durable pollutant reductions rather than favoring one physical treatment methodology, facility configuration, or land-intensive approach over another.

SWIG offers the following comments on the proposed rules.

I. THE WQEA RULES SHOULD PROVIDE A LEVEL PLAYING FIELD FOR ALL QUALIFYING WATER-QUALITY TREATMENT SYSTEMS.

The Legislature created WQEAs to facilitate measurable water-quality improvements through the generation and use of enhancement credits. The effectiveness of a WQEA should therefore be determined primarily by its demonstrated pollutant reduction and its ability to maintain that reduction—not by the particular treatment technology used to achieve it.

This principle is especially important for innovative nature-based treatment technologies. A system capable of reliably removing a specified number of pounds of nitrogen or phosphorus should not receive less favorable regulatory treatment simply because it achieves that removal using less land, engineered media, enhanced natural processes, or a different hydraulic configuration than a conventional stormwater treatment facility.

The final rules should expressly preserve flexibility for WQEAs to employ different scientifically supported treatment approaches. DEP should avoid requirements that effectively assume that every WQEA will resemble a conventional mitigation bank, stormwater treatment area, or other land-intensive regional treatment facility.

II. WQEAs SHOULD BE TREATED CONSISTENTLY WITH REGIONAL STORMWATER MANAGEMENT SYSTEMS.

SWIG is particularly concerned about ensuring a level playing field between WQEAs and regional stormwater management systems authorized under Florida's ERP program and the ERP Applicant's Handbook.

Regional stormwater management systems and WQEAs may perform substantially similar water-quality functions. Both can receive water from multiple sources, provide treatment, reduce nutrient loading, and generate water-quality benefits that can be relied upon by other projects. There is no sound policy basis for imposing substantially more restrictive requirements on a WQEA merely because the treatment is provided through the WQEA program.

This issue is especially significant for SWIG because its nature-based technology can be incorporated into both new and existing stormwater infrastructure. SWIG technology can enhance treatment within stormwater ponds and other systems and can provide substantial nutrient removal without requiring the acreage that may otherwise be necessary to achieve the same level of treatment.

The regulatory framework should therefore focus on equivalent environmental outcomes. Where a WQEA and a regional stormwater management system provide equivalent documented nutrient reductions, the regulatory requirements applicable to those reductions should be comparable unless a specific statutory distinction requires otherwise.

DEP should review the proposed WQEA rules together with the ERP Applicant's Handbook requirements applicable to regional stormwater management systems and eliminate requirements that unnecessarily place WQEAs at a competitive or regulatory disadvantage.

III. CREDIT GENERATION SHOULD BE BASED ON VERIFIED POLLUTANT REDUCTION.

The fundamental commodity produced by a WQEA is a measurable water-quality improvement. Credit generation should therefore be tied as directly as practicable to demonstrated pollutant removal.

Nature-based treatment systems such as SWIG's can be designed to monitor influent and effluent water quality and flow, allowing pollutant mass removal to be calculated. Where reliable monitoring demonstrates the actual pounds of nitrogen, phosphorus, or another pollutant removed by a WQEA, that information should be given substantial weight in determining credit generation and continuing credit availability.

DEP should avoid methodologies that unnecessarily substitute generalized assumptions for reliable site-specific performance information. Conservative assumptions may be appropriate where direct measurement is unavailable, but they should not prevent a WQEA from demonstrating actual performance through scientifically defensible monitoring.

A performance-based approach will encourage innovation because providers will have an incentive to develop systems that remove greater quantities of pollutants more reliably and efficiently.

IV. DEP SHOULD AVOID REQUIREMENTS THAT CREATE UNNECESSARY BARRIERS TO ENTRY.

The WQEA program will succeed only if private and public entities are willing to invest in projects before there is certainty regarding the timing and quantity of future credit sales. WQEA providers will bear substantial upfront costs for land or site control, engineering, permitting, construction, monitoring, financial assurance, and long-term management.

Every unnecessary regulatory requirement increases the cost of the resulting credits. If those costs become too high, applicants will seek other compliance alternatives and the WQEA market will not develop as the Legislature intended.

This concern is particularly significant for innovative technologies capable of reducing nutrient-removal costs. The rules should encourage competition among treatment approaches and allow the market to identify the most efficient means of producing reliable water-quality improvements.

V. THE RULE SHOULD ENCOURAGE, RATHER THAN DISCOURAGE, INNOVATION.

Florida faces substantial and expensive water-quality challenges. Addressing those challenges will require more than reliance upon traditional treatment approaches.

The WQEA program provides an opportunity to encourage private investment in innovative water-quality solutions. A performance-based regulatory structure can create incentives for companies to

develop technologies that remove greater quantities of nutrients, require less land, reduce long-term operating costs, and provide additional ecological benefits.

SWIG's nature-based treatment systems illustrate why this flexibility matters. Technologies that enhance natural treatment processes through engineered media can complement treatment wetlands, stormwater ponds, regional stormwater systems, and other existing infrastructure. These approaches should be allowed to compete based upon demonstrated environmental performance.

The final rule should therefore avoid prescriptive requirements that lock the WQEA program into the treatment approaches available today. Instead, the rules should establish clear environmental performance standards and allow WQEA owners to determine the most effective means of satisfying them.

VI. CONCLUSION

SWIG strongly supports DEP's efforts to establish a workable WQEA program and believes that WQEAs can provide an important additional tool for addressing Florida's nutrient-impaired waters.

For the program to succeed, however, the final rules must allow a broad range of qualified water-quality treatment approaches to participate. SWIG therefore respectfully requests that DEP revise the proposed rules to:

1. establish a technology-neutral, performance-based regulatory framework;
2. provide comparable regulatory treatment for WQEAs and regional stormwater management systems that provide comparable water-quality benefits;
3. base enhancement credits on scientifically defensible and verifiable pollutant reductions;
4. replace subjective and open-ended regulatory standards with objective permitting criteria; and
5. preserve sufficient flexibility for new and improved water-quality treatment technologies to participate in the WQEA program as they develop.

These revisions would further the Legislature's objective of expanding the availability of effective water-quality solutions while protecting the integrity of enhancement credits and ensuring measurable environmental benefits.

SWIG appreciates DEP's consideration of these comments and looks forward to continuing to work with the Department as it implements the WQEA program.

Sincerely,

Vincent Seibold

Vincent Seibold, P.E. MBA
SWIG Director of Operations
51 Knight Boxx Rd
Orange Park, FL32065