



MODERNIZING FLORIDA'S STORMWATER RULES

John Coates

Director, Division of Water Resource Management
Florida Department of Environmental Protection
Blue-Green Algae Task Force Meeting | Jan. 24, 2024



CLEAN WATERWAYS ACT

OVERVIEW

Senate Bill 712 (2020) focused on remedial action and improvements to regulations to improve water quality protections.

This legislation served as the foundation for implementing necessary actions related to nutrient reduction by the department, local governments and the regulated community, including:

- Contingency plans for power outages – to prevent spills from sanitary sewers, etc.
- Financial provisions for needed upgrades/maintenance at sewage disposal facilities.
- Biosolids land application requirements to reduce nutrient impairments.
- Regulation of onsite sewage treatment and disposal systems (OSTDS).
- Updated stormwater rules and design criteria.



WASTEWATER COLLECTION SYSTEMS

STATUS: COMPLETE

DEP adopted several rules which did not require ratification:

- Rule 62-620.610, Florida Administrative Code (F.A.C.), became effective Sept. 14, 2021.
 - Revised reporting and submittal requirements for noncompliance events related to sanitary sewer overflows.
- Rules 62-604.100, .130, .200, .300, .400, .500, .550, .600, and .700, F.A.C., became effective Oct. 4, 2021.
 - Required systems to be operated to minimize infiltration, inflow, and leakages; also required corrective actions.
- Rules 62-600.410, .680, .700, and .735, F.A.C., became effective Dec. 6, 2021.
 - Added required annual reports for facilities subject to SB 64.
- Rules 62-600.200, .300, .400, and .520, F.A.C., became effective Jan. 6, 2022.
 - Updated guidance documents related to collection system rehabilitation.



WASTEWATER COLLECTION SYSTEMS

STATUS: COMPLETE

- Rule 62-600.405, F.A.C.:
 - Requires system flows be reviewed as part of the collection system action plans required in Rule 62-600.705, F.A.C.
- Rule 62-600.705, F.A.C.:
 - Requires utilities to develop collection system pipe assessment, repair and replacement action plans.
 - Requires utilities to develop power outage contingency plans.
 - Requires annual progress reports for facilities implementing action plans.
- Rule 62-600.720, F.A.C.:
 - Requires facilities to address cybersecurity in emergency response plans.



BIOSOLIDS

STATUS: COMPLETE

Chapter 62-640, F.A.C. amendments ensure the proper management, use and land application of biosolids to protect waters of the state from nutrient pollution and in a manner that minimizes the migration of nutrients to prevent the impairment of waterbodies.

DEP is implementing the new statutory and rule requirements, including working with the Florida Department of Agriculture and Consumer Services (DACS) to enroll biosolids land application sites in the DACS Best Management Practices (BMPs) program.





ONSITE SEWAGE STATUS: COMPLETE



- Several OSTDS Rules did not require legislative ratification, including:
 - Setback distances.
 - Additional options for Enhanced Nutrient Reduction (ENR) OSTDS.
 - NSF 245 aerobic treatment units (ATUs) allowances.
 - ATU product approval application process updates.
 - Clarification of lot size calculations.
 - Updates to technical standards.



ONSITE SEWAGE STATUS: COMPLETE

- Rule 62-6.001, F.A.C.:
 - Requires development and implementation of OSTDS remediation plans within Basin Management Action Plans (BMAPs) by July 1, 2025.
 - Expands application of OSTDS remediation plans to other priority focus areas, not limited to Outstanding Florida Springs.
 - Makes OSTDS remediation plan requirements effective for OSTDS permitting.
 - If OSTDS remediation plan requires, applicant must install ENR OSTDS for not only new OSTDS, but also repair or modification of OSTDS.
 - Allows for variance under certain conditions.



STORMWATER & NUTRIENT LOADING

UNDERSTANDING CAUSES OF WATER QUALITY IMPAIRMENTS

35% of impaired waters are nutrient related.

82% of adopted basin management action plans (BMAPs) are for nutrient impaired waters.

87% of Florida counties (i.e. 58 out of 67) have nutrient impaired waterbodies.

Stormwater runoff or nonpoint pollution, impacts water quality:

- Stormwater management systems were historically believed to achieve at least an 80% reduction of pollutants, including nutrients such as nitrogen and phosphorous, but new science has shown that this is not the case.
- Addressing stormwater-related nutrient impacts is an important step to protect Florida's waterways.



FLORIDA'S STORMWATER RULES

HISTORY

- 1978:** Chapter 62-40, F.A.C. – First attempt at stormwater discharge “exemptions”.
 - 1981:** Chapter 62-40, F.A.C. – Water Resource Implementation Rule.
 - 1982:** Chapter 62-25, F.A.C.– First Stormwater Rule – “Regulations of Stormwater Discharge.”
 - 1995:** Repealed Dredge and Fill; combined with Management and Storage of Surface Water.
 - 2013:** Chapter 62-330, F.A.C. – Environmental Resource Permitting (ERP).
- **Studies, including the “Evaluation of Current Stormwater Design Criteria within the State of Florida” found:**
 - The presumptive minimum design criteria relied upon for ERP, do not achieve, “at least 80 percent reduction of the average annual load of pollutants that cause or contribute to violations of State Water Quality Standards,” particularly with respect to excess nutrients in the form Total Nitrogen & Total Phosphorus.



STORMWATER RULEMAKING

STATUS: PENDING LEGISLATIVE RATIFICATION

Over the last three years, DEP has undertaken extensive rulemaking efforts:

- Held two public outreach meetings (July 30, 2020, and Aug. 24, 2020).
- Established a Technical Advisory Committee (TAC) in November 2020:
 - TAC met 13 times from December 2020 to November 2021.
 - A summary report of the TAC's recommendations was finalized and published in March 2022.
- Held four rule development workshops between May and December 2022.





STORMWATER RULEMAKING



- The Notice of Proposed Rule was published in the Florida Administrative Register Feb. 24, 2023.
- DEP held a rule adoption hearing March 22, 2023.
- The Notice of Change, incorporating stakeholder feedback and comments, as well as four Lower Cost Regulatory Alternatives (LCRAs), was published March 24, 2023.
- The final rule was filed with the Department of State in April of 2023.
- These rules still require ratification by the Florida Legislature before they can become effective.



STORMWATER RULEMAKING

ADOPTED AMENDMENTS

Minimum Performance Standards

Maintenance and Operations Requirements

Stormwater Management System Design Flexibilities

Grandfathering ERP Applications





PROTECTING FLORIDA'S WATER RESOURCES

WATER QUALITY REQUIREMENTS

Two-pronged Approach:

- First:
 - Compare expected post-development nutrient loading with pre-development nutrient loading to ensure no increase in nutrient loading.
 - Evaluate minimum treatment performance standards for nitrogen and phosphorus, which vary based on the category and condition of receiving water body.
- Second:
 - Evaluate which of the prongs of the approach is more protective.

The more protective of the two prongs becomes the basis for design of the stormwater treatment system.



STORMWATER RULEMAKING

MINIMUM PERFORMANCE STANDARDS

All Sites Not Impaired	Outstanding FL Waters	Impaired Waters	Impaired OFWs	Redevelopment (Limited Sites)
Post ≤ Pre, OR TP: 80% & TN 55%	Post ≤ Pre, OR TP: 90% & TN 80%	Post ≤ Pre, OR TP: 80% & TN 80% and Post < Pre for Impaired Parameters	Post ≤ Pre, OR TP: 95% & TN 95% and Post < Pre for Impaired Parameters	TP: 80% & TN 45% and TP: 90% & TN 60% for OFWs
Total Suspended Solids (TSS): 80%	TSS: 95%	TSS: 80%	TSS: 95%	TSS: 80% or 95% (OFW)



STORMWATER RULEMAKING

MAINTENANCE AND OPERATION REQUIREMENTS



- Establishment of routine maintenance cost estimate requirements.
- Certification of financial capability.
- Establishment of consistent inspection requirements for the permittee based on the design of the stormwater treatment system.



STORMWATER RULEMAKING

STORMWATER MANAGEMENT DESIGN FLEXIBILITIES



- Flexibility to use existing, or apply new, site- or regional-specific Event Mean Concentrations.
- Choose from innovative BMPs – both listed and not listed in the Applicant’s Handbook.
- Use off-site compensation to meet treatment performance standards.



STORMWATER RULEMAKING

GRANDFATHERING ERP APPLICATIONS



- ERP applications deemed complete within the 12 months after the rule is ratified and effective.
- Florida Department of Transportation projects that have completed their Project Development and Environment Study before rule implementation will also be honored and will not need to redesign their system to meet new performance criteria.



STORMWATER RULEMAKING

FISCAL IMPACTS

- Adopted revisions are estimated to affect up to ~14,030 individual ERP projects over the first five years of rule implementation.
- The current cost of stormwater treatment for the next five years is estimated to be about \$12.6 billion under the current rule.
- Proposed rule revisions will increase the project costs of stormwater treatment by approximately \$1.21 billion over the first five years (or ~ \$242 million/year).
- Average cost increase for stormwater treatment is approximately \$2,600 per acre developed over current treatment costs.
- The Lower Cost Regulatory Alternatives (LCRAs) incorporated in the adopted rule lowered the cost of the stormwater treatment for the projected scenarios by approximately 16% from the original proposed estimated cost, or a cost decrease of ~\$231 million.



WATER QUALITY INVESTMENTS



Nearly **\$2.4 billion** in state funds have been appropriated for targeted water quality improvements since 2019, including:

- Total Maximum Daily Load Funding.
- Springs Coast Funding.
- Biscayne Bay.
- Wastewater grants.

\$8.6 billion in funds have been expended for completed and ongoing restoration projects in nutrient BMAPs as of Dec. 31, 2021.

Total cost rises to **\$17.5 billion** when planned projects and projects underway are included.

Compare this to the cost of preemptively treating stormwater of less than **\$250 million/year**



THANK YOU

John Coates

Director, Division of Water Resource Management
Florida Department of Environmental Protection

Contact Information:

850-245-8709

John.Coates@FloridaDEP.gov