

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Community Affairs

BILL: SB 712

INTRODUCER: Senator Mayfield

SUBJECT: Water Quality Improvements

DATE: December 5, 2019 REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Paglialonga/Rogers	Yeatman	CA	Pre-meeting
2.	_____	_____	AEG	_____
3.	_____	_____	AP	_____

I. Summary:

SB 712:

- Requires the Department of Environmental Protection (DEP) and the Department of Health (DOH) to submit a report on a type two transfer of DOH’s onsite sewage program to DEP.
- Requires DEP and the water management districts to update their stormwater environmental resource permitting (ERP) rules and handbook.
- Requires local governments with impaired waterbodies/springs to adopt, implement, notify residents of, educate residents on, and enforce Florida-Friendly Fertilizer Ordinances. Local governments must submit a report to DEP for publication on its website. Failure to adopt the Florida-Friendly Fertilizer Ordinances can result in penalties.
- Requires certain agricultural operations that fail to adopt a basin management action plan (BMAP) or an alternative restoration plan within a specified timeframe to sign a notice of intent to implement best management practices (BMPs), other Department of Agriculture (DACS) approved measures, or water quality monitoring.
- Requires DEP, subject to appropriation, to establish a real-time water quality monitoring program and encourages the formation of public-private partnerships.
- Expands the septic remediation plan, currently in effect for springs, to be applied to all BMAPs. The bill authorizes DEP to impose the additional restrictions within priority focus areas. Failure to comply with the plan can result in penalties. There is an exception for good cause, and penalties may be reduced based on expenditures to achieve compliance.
- Makes agricultural BMPs enforceable in alternative restoration plan areas.
- Establishes a wastewater grant program within DEP for:
 - Septic system retrofits/nutrient-reducing septic systems;
 - Advanced waste treatment; and
 - Septic to sewer hookups (prioritized).
- Requires an annual report to the Governor and the Legislature on the projects funded by the grant program.

- Requires wastewater treatment facilities to notify customers within a specified timeframe of unlawful discharges of raw or partially treated sewage into any waterway or aquifer (sanitary sewer overflows or SSOs). Violations can result in penalties. Penalties may be reduced based on expenditures for assessment and maintenance relating to issues that cause SSOs. DEP must maintain a publicly accessible website that contains consent orders relating to wastewater treatment facilities.
- Provides that wastewater treatment facilities may not discharge into Indian River Lagoon or its tributaries unless they meet advanced waste treatment standards.
- Doubles the maximum administrative penalty for violations of DEP regulations/permits/statutes.
- Removes the cap on administrative penalties for violations of a BMAP or for illegal wastewater discharges.
- Prohibits self-certification for stormwater permits within a BMAP or alternative restoration plan.
- Requires DEP to revise BMAPs to include the provisions in the bill by a specified date with a “good cause” exception.
- Provides a declaration of important state interest.

II. Present Situation:

Water Quality and Nutrients

Phosphorus and nitrogen are naturally present in water and are essential nutrients for the healthy growth of plant and animal life. The correct balance of both nutrients is necessary for a healthy ecosystem; however, excessive nitrogen and phosphorus can cause significant water quality problems.

Phosphorus and nitrogen are derived from natural and human-made sources. Natural inputs include the atmosphere, soils, and the decay of plants and animals. Human-made sources include sewage disposal systems (wastewater treatment facilities and septic systems), overflows of storm and sanitary sewers (untreated sewage), agricultural production and irrigation practices, and stormwater runoff.¹

Excessive nutrient loads may result in harmful algal blooms, nuisance aquatic weeds, and the alteration of the natural community of plants and animals. Dense, harmful algal blooms can also cause human health problems, fish kills, problems for water treatment plants, and impairment of the aesthetics and taste of waters. Growth of nuisance aquatic weeds tends to increase in nutrient-enriched waters, which can impact recreational activities.²

¹ U.S. Environmental Protection Agency (EPA), *Sources and Solutions*, <https://www.epa.gov/nutrientpollution/sources-and-solutions> (last visited Dec. 2, 2019).

² EPA, *The Problem*, <https://www.epa.gov/nutrientpollution/problem> (last visited Dec. 2, 2019).

Blue-Green Algae Task Force

In January of 2019, Governor DeSantis issued the comprehensive Executive Order Number 19-12.³ The order directed the Department of Environmental Protection (DEP) to establish a Blue-Green Algae Task Force charged with expediting progress towards reducing nutrient pollution and the impacts of blue-green algae (cyanobacteria) blooms in the state.⁴ The task force's responsibilities include identifying priority projects for funding and making recommendations for regulatory changes. The five-person task force issued a consensus document on October 11, 2019.⁵ To the extent that the task force has issued recommendations on topics addressed in this Present Situation, those recommendations are included in the relevant section.

Total Maximum Daily Loads

A total maximum daily load (TMDL), which must be adopted by rule, is a scientific determination of the maximum amount of a given pollutant that can be absorbed by a waterbody and still meet water quality standards.⁶ Waterbodies or sections of waterbodies that do not meet the established water quality standards are deemed impaired. Pursuant to the federal Clean Water Act, DEP is required to establish a TMDL for impaired waterbodies.⁷ A TMDL for an impaired waterbody is defined as the sum of the individual waste load allocations for point sources and the load allocations for nonpoint sources and natural background.⁸ Point sources are discernible, confined, and discrete conveyances including pipes, ditches, and tunnels. Nonpoint sources are unconfined sources that include runoff from agricultural lands or residential areas.⁹

Basin Management Action Plans and Best Management Practices

DEP is the lead agency in coordinating the development and implementation of TMDLs.¹⁰ Basin management action plans (BMAPs) are one of the primary mechanisms DEP uses to achieve TMDLs. BMAPs are plans that address the entire pollution load, including point and nonpoint discharges, for a watershed. BMAPs generally include:

- Permitting and other existing regulatory programs, including water quality based effluent limitations;

³ State of Florida, Office of the Governor, *Executive Order Number 19-12* (2019), available at https://www.flgov.com/wp-content/uploads/orders/2019/EO_19-12.pdf.

⁴ *Id.* at 2; DEP, *Blue-Green Algae Task Force*, <https://protectingfloridatogether.gov/state-action/blue-green-algae-task-force> (last visited Dec. 2, 2019).

⁵ DEP, *Blue-Green Algae Task Force Consensus Document #1* (Dec. 2, 2019), available at https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.

⁶ DEP, *Total Maximum Daily Loads Program*, <https://floridadep.gov/dear/water-quality-evaluation-tmdl/content/total-maximum-daily-loads-tmdl-program> (last visited Dec. 2, 2019).

⁷ Section 403.067(1), F.S.

⁸ Section 403.031(21), F.S.

⁹ Fla. Admin. Code R. 62-620.200(37). "Point source" is defined as "any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged." Nonpoint sources of pollution are sources of pollution that are not point sources. Nonpoint sources can include runoff from agricultural lands or residential areas; oil, grease and toxic materials from urban runoff; and sediment from improperly managed construction sites.

¹⁰ Section 403.061, F.S. DEP has the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it. Furthermore, s. 403.061(21), F.S., allows DEP to advise, consult, cooperate, and enter into agreements with other state agencies, the federal government, other states, interstate agencies, etc.

- Best management practices (BMPs) and non-regulatory and incentive-based programs, including: cost sharing, waste minimization, pollution prevention, agreements, and public education;
- Public works projects, including capital facilities; and
- Land acquisition.¹¹

DEP may establish a BMAP as part of the development and implementation of a TMDL for a specific waterbody. First, the BMAP equitably allocates pollutant reductions to individual basins, to all basins as a whole, or to each identified point source or category of nonpoint sources.¹² Then, the BMAP establishes the schedule for implementing projects and activities to meet the pollution reduction allocations. The BMAP development process provides an opportunity for local stakeholders, local government and community leaders, and the public to collectively determine and share water quality cleanup responsibilities.¹³ BMAPs are adopted by secretarial order.¹⁴

BMAPs must include milestones for implementation and water quality improvement. They must also include an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time. An assessment of progress toward these milestones must be conducted every five years and revisions to the BMAP must be made as appropriate.¹⁵

Producers of nonpoint source pollution included in a BMAP must comply with the established pollutant reductions by either implementing the appropriate BMPs or by conducting water quality monitoring.¹⁶ A nonpoint source discharger may be subject to enforcement action by DEP or a water management district (WMD) based on a failure to implement these requirements.¹⁷ BMPs are designed to reduce the amount of nutrients, sediments, and pesticides that enter the water system and to help reduce water use. BMPs are developed for agricultural operations as well as for other activities, such as nutrient management on golf courses, forestry operations, and stormwater management.¹⁸

Currently, BMAPs are adopted or pending for a significant portion of the state and will continue to be developed as necessary to address water quality impairments. The graphic below shows the state's adopted and pending BMAPs.¹⁹

¹¹ Section 403.067(7), F.S.

¹² *Id.*

¹³ DEP, *Basin Management Action Plans (BMAPs)*, <https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps> (last visited Dec. 4, 2019).

¹⁴ Section 403.067(7)(a)5., F.S.

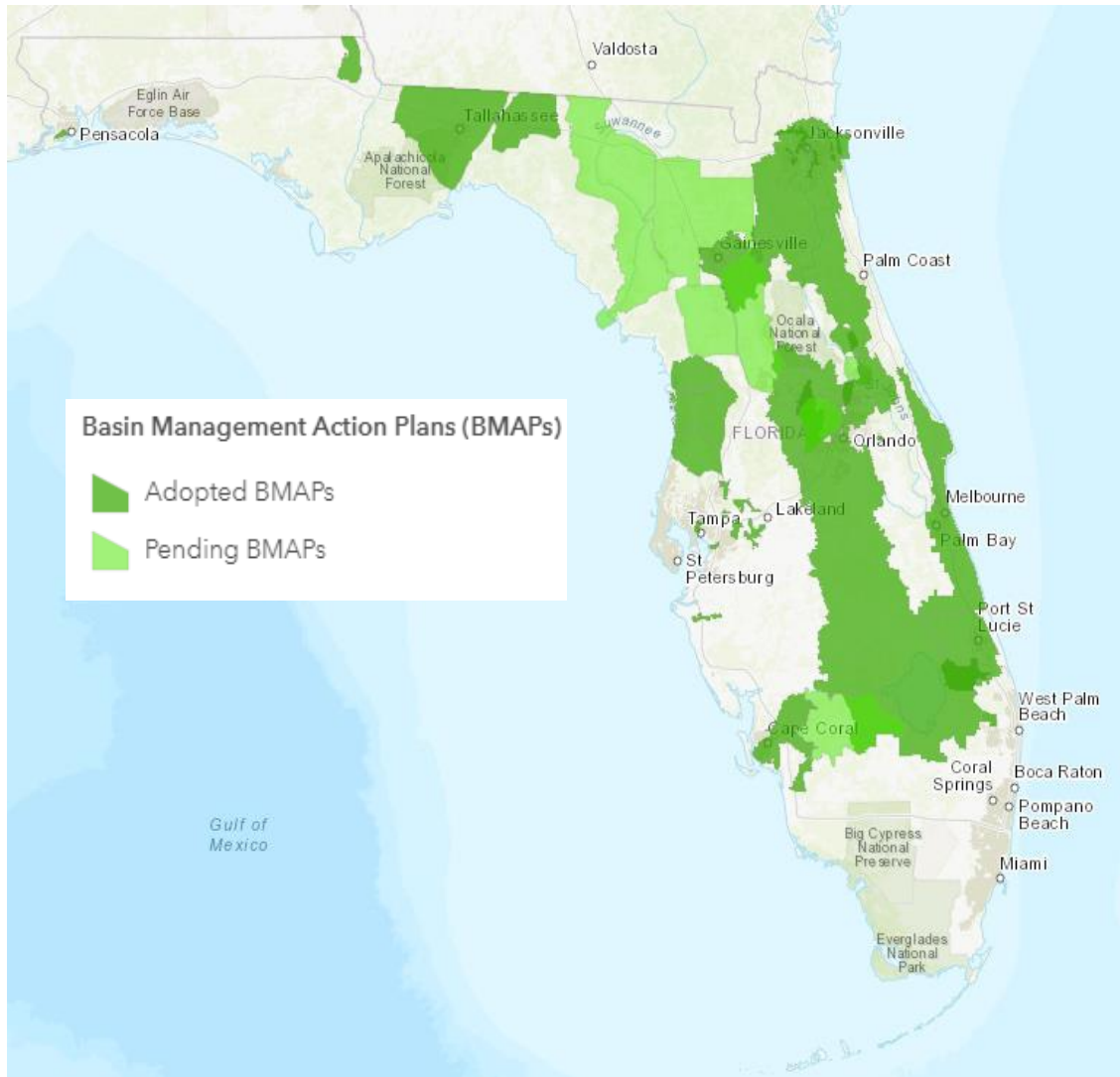
¹⁵ Section 403.067(7)(a)6., F.S.

¹⁶ Section 403.067(7)(b)2.g., F.S. For example, BMPs for agriculture include activities such as managing irrigation water to minimize losses, limiting the use of fertilizers, and waste management.

¹⁷ Section 403.067(7)(b)2.h., F.S.

¹⁸ DEP, *NPDES Stormwater Program*, <https://floridadep.gov/Water/Stormwater> (last visited Dec. 2, 2019).

¹⁹ DEP, *Impaired Waters, TMDLs, and Basin Management Action Plans Interactive Map*, <https://floridadep.gov/dear/water-quality-restoration/content/impaired-waters-tmdls-and-basin-management-action-plans> (last visited Dec. 5, 2019).



The Blue Green Algae Task Force made the following recommendations for BMAPs:

- Include regional storage and treatment infrastructure in South Florida watersheds.
- Consider land use changes, legacy nutrients, and the impact of the BMAP on downstream waterbodies.
- Develop a more targeted approach to project selection.
- Evaluate project effectiveness through monitoring.²⁰

For agriculture and BMPs, the Blue Green Algae Task Force recommended:

- Increasing BMP enrollment.
- Improving records and additional data collection.
- Accelerating updates to BMP manuals.²¹

²⁰ DEP, *Blue Green Algae Task Force Consensus Document #1* (Oct. 11, 2019), available at https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.

²¹ *Id.*

BMAPs for Outstanding Florida Springs

In 2016, the Legislature passed the Florida Springs and Aquifer Protection Act, which identified 30 "Outstanding Florida Springs" (OFS) that have additional statutory protections and requirements.²² Key aspects of the Springs and Aquifer Protection Act relating to water quality include:

- The designation of a priority focus area for each OFS. A priority focus area of an OFS means the area or areas of a basin where the Florida Aquifer is generally most vulnerable to pollutant inputs where there is a known connectivity between groundwater pathways and an Outstanding Florida Spring, as determined by DEP in consultation with the appropriate WMDs, and delineated in a BMAP;²³
- The development of an onsite sewage treatment and disposal system (OSTDS) remediation plan²⁴ if it has been determined that OSTDSs within a priority focus area contribute at least 20 percent of nonpoint source nitrogen pollution or that remediation is necessary to achieve the TMDL;
- A 20-year timeline for implementation of the TMDL, including 5-, 10-, and 15-year targets;²⁵ and
- The prohibition against new OSTDSs on parcels of less than 1 acre, unless the system complies with the OSTDS remediation plan.²⁶

DEP is the lead agency in coordinating the preparation and adoption of the OSTDS remediation plan. The OSTDS remediation plan must include options for repair, upgrade, replacement, drainfield modification, addition of effective nitrogen reducing features, connection to a central sewerage system, or other action for a sewage system or group of systems.²⁷ The options must be cost-effective and financially feasible projects necessary to reduce the nutrient impacts from OSTDSs within the area.²⁸

In June 2018, DEP adopted 13 BMAPs, addressing all 24 nitrogen-impaired OFS.²⁹ Eight of these plans are currently effective, while five others are pending the outcome of legal challenges on various alleged deficiencies in the BMAPs.³⁰ These alleged deficiencies include lack of specificity in the required list of projects and programs identified to implement a TMDL, lack of

²² Chapter 2016-1, Laws of Fla.; *see s. 373.802, F.S.*, Outstanding Florida Springs include all historic first magnitude springs, including their associated spring runs, as determined by DEP using the most recent Florida Geological Survey springs bulletin, and De Leon Springs, Peacock Springs, Poe Springs, Rock Springs, Wekiwa Springs, and Gemini Springs, and their associated spring runs.

²³ Section 373.802(5), F.S.

²⁴ Commonly called a "septic remediation plan."

²⁵ Section 373.807, F.S.

²⁶ Section 373.811, F.S.

²⁷ Section 373.807(3), F.S.

²⁸ *Id.*

²⁹ DEP, *Springs*, <https://floridadep.gov/springs> (last visited Nov. 26, 2019).

³⁰ *Our Santa Fe River, Inc., et. al. v. DEP*, No. 18-1601, DEP No. 18-2013; *Sierra Club v. DEP*, No. 17-1175, DEP No. 18-0204; *Friends of Wekiva River, Inc. v. DEP*, No. 18-1065, DEP No. 18-0217; *Thomas Greenhalgh v. DEP*, No. 17-1165, DEP No. 18-0204; *Paul Still v. DEP*, No. 18-1061; *Save the Manatee Club, Inc. v. DEP*, No. 17-1167, DEP No. 18-0206; *Silver Springs Alliance, Inc. and Rainbow River Conservation, Inc. v. DEP*, No. 18-1060, DEP No. 18-0211.

detail in cost estimates, incomplete or unclear strategies for nutrient reduction, and failure to account for population growth and agricultural activity.

Restoration Plans as Alternatives to TMDLS

Under the Florida Watershed Restoration Act,³¹ DEP can forgo establishing a TMDL for a waterbody if DEP can document that there is reasonable assurance existing or proposed pollution control mechanisms or programs will effectively address the impairment.³² These restoration plans depend on local stakeholders to gather necessary documentation to demonstrate reasonable assurance that the proposed control mechanisms will restore the particular waterbody.³³ Similar to the adoption of a BMAP, a finalized restoration plan is adopted by secretarial order.³⁴

The following information must be documented in a restoration plan:

- Description of the impaired waterbody;
- Description of water quality or aquatic ecological goals;
- Description of proposed management actions to be undertaken;
- Description of procedures for monitoring and reporting results; and
- Description of and commitment to proposed corrective actions.³⁵

Wastewater Treatment Facilities

The proper treatment and disposal or reuse of domestic wastewater is an important part of protecting Florida's water resources. The majority of Florida's domestic wastewater is controlled and treated by centralized treatment facilities regulated by DEP. Florida has approximately 2,000 permitted domestic wastewater treatment facilities.³⁶

Chapter 403, F.S., requires that any facility or activity which discharges wastes into waters of the state or which will reasonably be expected to be a source of water pollution must obtain a permit from DEP.³⁷ Generally, persons who intend to collect, transmit, treat, dispose, or reuse wastewater are required to obtain a wastewater permit. A wastewater permit issued by DEP is required for both operation and certain construction activities associated with domestic or industrial wastewater facilities or activities. A DEP permit must also be obtained prior to construction of a domestic wastewater collection and transmission system.³⁸

³¹ Chapter 99-223, Laws of Fla.

³² DEP, *Guidance on Developing Restoration Plans as Alternatives to TMDLs – Assessment Category 4b and 4e Plans*, 2 (June 2015), available at <https://floridadep.gov/sites/default/files/4b4ePlansGuidance.pdf>.

³³ *Id.*

³⁴ DEP, *Reasonable Assurance Plans (RAPs) Category 4b Assessments and Documentation*, <https://floridadep.gov/dear/alternative-restoration-plans/content/reasonable-assurance-plans-raps-category-4b-assessments> (last visited Dec. 2, 2019).

³⁵ DEP, *Guidance on Developing Restoration Plans as Alternatives to TMDLs – Assessment Category 4b and 4e Plans*, 6-7 (June 2015), available at <https://floridadep.gov/sites/default/files/4b4ePlansGuidance.pdf>.

³⁶ DEP, *General Facts and Statistics About Wastewater in Florida*, <https://floridadep.gov/water/domestic-wastewater/content/general-facts-and-statistics-about-wastewater-florida> (last visited Dec. 2, 2019).

³⁷ Section 403.087, F.S.

³⁸ DEP, *Wastewater Permitting*, <https://floridadep.gov/water/domestic-wastewater/content/wastewater-permitting> (last visited Dec. 2, 2019).

Under section 402 of the Clean Water Act, any discharge of a pollutant from a point source to surface waters (i.e., the navigable waters of the United States or beyond) must obtain a National Pollution Discharge Elimination System (NPDES) permit.³⁹ NPDES permit requirements for most wastewater facilities or activities (domestic or industrial) that discharge to surface waters are incorporated into a state-issued permit, thus giving the permittee one set of permitting requirements rather than one state and one federal permit.⁴⁰ DEP issues operation permits for a period of 5 years for facilities regulated under the NPDES program and up to 10 years for other domestic wastewater treatment facilities meeting certain statutory requirements.⁴¹

In its 2016 Report Card for Florida’s Infrastructure, the American Society of Civil Engineers reported that the state’s wastewater system is increasing in age and the condition of installed treatment and conveyance systems is declining.⁴² As existing infrastructure ages, Florida utilities are placing greater emphasis on asset management systems to maintain service to customers. Population growth, aging infrastructure, and sensitive ecological environments are increasing the need to invest in Florida’s wastewater infrastructure.⁴³

Advanced Waste Treatment

Under Florida law, facilities for sanitary sewage disposal are required to provide for advanced waste treatment, as deemed necessary by DEP.⁴⁴ The standard for advanced waste treatment is defined in statute using the maximum concentrations of nutrients or contaminants that a reclaimed water product may contain.⁴⁵ The standard also requires a high-level disinfection.⁴⁶

Nutrient or Contaminant	Maximum Concentration Annually
Biochemical Oxygen Demand	5 mg/L
Suspended Solids	5 mg/L
Total Nitrogen	3 mg/L
Total Phosphorus	1 mg/L

Facilities for sanitary sewage disposal are prohibited from disposing of waste into certain waters in the state without providing advanced waste treatment approved by DEP.⁴⁷ Specifically, Tampa Bay is viewed as a success story for this type of prohibition.

³⁹ 33 U.S.C s. 1342.

⁴⁰ Sections 403.061 and 403.087, F.S.

⁴¹ Section 403.087(3), F.S.

⁴² American Society of Civil Engineers, *Report Card for Florida’s Infrastructure* (2016), available at https://www.infrastructurereportcard.org/wp-content/uploads/2017/01/2016_RC_Final_screen.pdf (last visited Dec. 4, 2019).

⁴³ *Id.*

⁴⁴ Section 403.086(2), F.S.

⁴⁵ Section 403.086(4), F.S.

⁴⁶ Section 403.086(4)(b), F.S.; Fla. Admin. Code R. 62-600.440(6).

⁴⁷ Section 403.086(1)(c), F.S. Facilities for sanitary sewage disposal may not dispose of any wastes into Old Tampa Bay, Tampa Bay, Hillsborough Bay, Boca Ciega Bay, St. Joseph Sound, Clearwater Bay, Sarasota Bay, Little Sarasota Bay, Roberts Bay, Lemon Bay, or Charlotte Harbor Bay, or into any river, stream, channel, canal, bay, bayou, sound, or other water tributary thereto, without providing advanced waste treatment approved by DEP. This prohibition does not apply to facilities permitted by February 1, 1987, and which discharge secondary treated effluent, followed by water hyacinth treatment, to tributaries of the named waters; or to facilities permitted to discharge to the nontidally influenced portions of the Peace River.

[Tampa Bay is] one of the few estuaries in the U.S. that has shown evidence of improving environmental conditions. These water-quality improvements have been due, in large part, to upgrades in wastewater treatment practices at municipal wastewater-treatment plants in the region. Since 1980, all wastewater treatment plants that discharge to the bay or its tributaries have been required by state legislation to meet advanced wastewater treatment standards, a step that has reduced the annual nutrient loads from these sources by about 90 percent.⁴⁸

Sanitary Sewer Overflows

Although domestic wastewater treatment facilities are permitted and designed to safely and properly collect and manage a specified wastewater capacity, obstructions or extreme conditions can cause a sanitary sewer overflow (SSO). Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system is a SSO.⁴⁹ A SSO may subject the owner or operator of a facility to civil penalties of not more than \$10,000 for each offense, a criminal conviction or fines, and additional administrative penalties.⁵⁰ Each day during the period in which a violation occurs constitutes a separate offense.⁵¹ However, administrative penalties are capped at \$10,000.⁵²

A key concern with SSOs entering rivers, lakes, or streams is their negative effect on water quality. In addition, because SSOs contain partially treated or potentially untreated domestic wastewater, ingestion or similar contact may cause illness. People can be exposed through direct contact in areas of high public access, food that has been contaminated, inhalation, and skin absorption. The Department of Health (DOH) issues health advisories when bacteria levels present a risk to human health and may post warning signs when bacteria affect public beaches or other areas where there is a risk of human exposure.⁵³

Reduction of SSOs can be achieved through:

- Cleaning and maintaining the sewer system;
- Reducing infiltration and inflow through rehabilitation and repairing broken or leaking lines;
- Enlarging or upgrading sewer, pump station, or sewage treatment plant capacity and/or reliability; and
- Constructing wet weather storage and treatment facilities to treat excess flows.⁵⁴

The Blue Green Algae Task Force made the following recommendations relating to SSOs:

- Emergency back-up capabilities should be required for all lift stations constructed prior to 2003.

⁴⁸ U.S. Department of the Interior and U.S. Geological Survey, *Integrating Science and Resource Management in Tampa Bay, Florida*, 110 (2011), available at https://pubs.usgs.gov/circ/1348/pdf/Chapter%205_105-156.pdf.

⁴⁹ DEP, *Sanitary Sewer Overflows (SSOs)*, available at <https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf> (last visited Dec. 4, 2019).

⁵⁰ Sections 403.121 and 403.141, F.S.

⁵¹ *Id.*

⁵² Section 403.121(2)(b),(8), and (9), F.S.

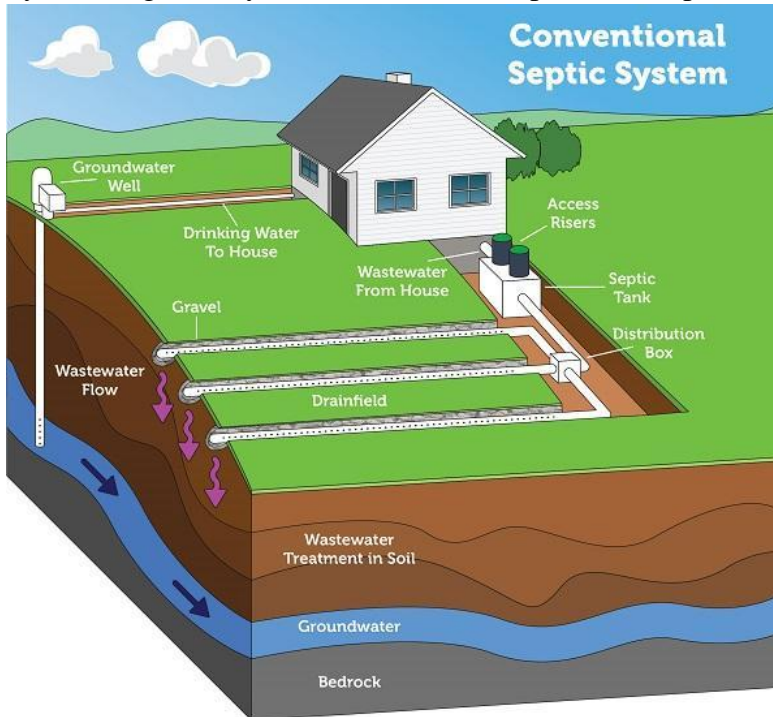
⁵³ DEP, *SSOs*, available at <https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf>.

⁵⁴ *Id.*

- DEP and wastewater facilities should take a more proactive approach to infiltration and inflow issues.⁵⁵

Onsite Sewage Treatment and Disposal Systems

Onsite sewage treatment and disposal systems (OSTDS), commonly referred to as “septic systems,” generally consist of two basic parts: the septic tank and the drainfield.⁵⁶ Waste from



Please note: Septic systems vary. Diagram is not to scale.

toilets, sinks, washing machines and showers flows through a pipe into the septic tank, where anaerobic bacteria break the solids into a liquid form. The liquid portion of the wastewater flows into the drainfield, which is generally a series of perforated pipes or panels surrounded by lightweight materials such as gravel or Styrofoam. The drainfield provides a secondary treatment where aerobic bacteria continue deactivating the germs. The drainfield also provides filtration of the wastewater, as gravity draws the water down through the soil layers.^{57,58}

DOH administers OSTDS programs, develops statewide

rules, and provides training and standardization for county health department employees responsible for issuing permits for the installation and repair of OSTDSs within the state.⁵⁹ DOH regulations focus on construction standards and setback distances. The regulations are primarily designed to protect the public from waterborne illnesses.⁶⁰ DOH also conducts research to evaluate performance, environmental health, and public health effects of OSTDSs. Innovative OSTDS products and technologies must be approved by DOH.⁶¹

⁵⁵ DEP, *Blue Green Algae Task Force Consensus Document #1*, 7 (Oct. 11, 2019), available at https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.

⁵⁶ DOH, *Septic System Information and Care*, <http://columbia.floridahealth.gov/programs-and-services/environmental-health/onsite-sewage-disposal/septic-information-and-care.html> (last visited Dec. 2, 2019).

⁵⁷ *Id.*

⁵⁸ Conventional Septic System graphic: See EPA, *Types of Septic Systems*, <https://www.epa.gov/septic/types-septic-systems> (last visited Dec. 2, 2019).

⁵⁹ Section 381.0065(3), F.S.

⁶⁰ DOH, *Overview of Onsite Sewage Treatment and Disposal Systems*, 5 (Aug. 1, 2019), <http://floridadep.gov/file/19018/download?token=6r94Bi2B> (last visited Nov. 26, 2019).

⁶¹ Section 381.0065(3), F.S.

DOH and DEP have an interagency agreement that standardizes procedures and clarifies responsibilities between them regarding the regulation of OSTDSs.⁶² DEP has jurisdiction over OSTDS when: domestic sewage flow exceeds 10,000 gallons per day; commercial sewage flow exceeds 5,000 gallons per day; there is a likelihood of hazardous or industrial wastes; a sewer system is available; or if any system or flow from the establishment is currently regulated by DEP (unless DOH grants a variance).⁶³ In all other circumstances, DOH regulates OSTDS.

There are an estimated 2.6 million OSTDSs in Florida, providing wastewater disposal for 30 percent of the state's population.⁶⁴ In Florida, development in some areas is dependent on OSTDSs due to the cost and time it takes to install central sewer systems.⁶⁵ For example, in rural areas and low-density developments, central sewer systems are not cost effective. Less than one percent of OSTDSs in Florida are actively managed under operating permits and maintenance agreements.⁶⁶ The remainder of systems are generally serviced only when they fail, often leading to costly repairs that could have been avoided with routine maintenance.⁶⁷

In a conventional OSTDS, a septic tank does not reduce nitrogen from the raw sewage. In Florida, approximately 30-40 percent of the nitrogen levels are reduced in the drainfield of a system that is installed 24 inches or more from groundwater.⁶⁸ This still leaves a significant amount of nitrogen to percolate into the groundwater, which makes nitrogen from OSTDSs a potential contaminant in groundwater.⁶⁹

Different types of advanced OSTDSs exist that can remove greater amounts of nitrogen than a typical septic system (often referred to as "advanced" or "nutrient-reducing" septic systems).⁷⁰ DOH publishes on its website approved products and resources on advanced systems.⁷¹ Determining which advanced system is the best option can depend on site-specific conditions.

⁶² *Interagency Agreement Between the Department of Environmental Protection and the Department of Health for Onsite Sewage Treatment and Disposal Systems* (Sept. 30, 2015), available at https://floridadep.gov/sites/default/files/HOHOSTDS_9_30_15.pdf.

⁶³ *Id.* at 6-13; s. 381.0065(3)(b), F.S.; DEP, *Septic Systems*, <https://floridadep.gov/water/domestic-wastewater/content/septic-systems> (last visited Dec. 2, 2019).

⁶⁴ DOH, *Onsite Sewage*, <http://www.floridahealth.gov/environmental-health/onsite-sewage/index.html> (last visited Dec. 2, 2019).

⁶⁵ DOH, *Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program*, Executive Summary (Oct. 1, 2008), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/research/documents/rrac/2008-11-06.pdf>. The report begins on page 56 of the PDF.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ DOH, *Florida Onsite Sewage Nitrogen Reduction Strategies Study, Final Report 2008-2015*, 21 (Dec. 2015), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/research/draftlegreportsm.pdf>; see Fla. Admin. Code R. 64E-6.006(2).

⁶⁹ University of Florida Institute of Food and Agricultural Sciences (IFAS), *Onsite Sewage Treatment and Disposal Systems: Nitrogen*, 3 (Feb. 2014), available at <http://edis.ifas.ufl.edu/pdf/SS/SS55000.pdf>.

⁷⁰ DOH, *Nitrogen-Reducing Systems for Areas Affected by the Florida Springs and Aquifer Protection Act* (2019), available at <http://www.floridahealth.gov/environmental-health/onsite-sewage/products/documents/bmap-n-reducing-tech-18-10-29.pdf>.

⁷¹ DOH, *Onsite Sewage Programs, Product Listings and Approval Requirements*, <http://www.floridahealth.gov/environmental-health/onsite-sewage/products/index.html> (last visited Dec. 2, 2019).

The owner of a properly functioning OSTDS must connect to a sewer system within one year of receiving notification that a sewer system is available for connection.⁷² Owners of an OSTDS in need of repair or modification must connect within 90 days of notification from DOH.⁷³

The Blue Green Algae Task Force made the following recommendations relating to OSTDSs:

- DEP should develop a more comprehensive regulatory program to ensure that OSTDSs are sized, designed, constructed, installed, operated, and maintained to prevent nutrient pollution, reduce environmental impact, and preserve human health.
- More post-permitting septic tank inspections should take place.
- Protections for vulnerable areas in the state should be expanded.
- Additional funding to accelerate septic to sewer conversions.⁷⁴

Stormwater Management

Stormwater is the flow of water resulting from, and immediately following, a rainfall event.⁷⁵ When stormwater falls on pavement, buildings, and other impermeable surfaces the runoff flows quickly and can pick up sediment, nutrients (such as nitrogen and phosphorous), chemicals, and other pollutants.⁷⁶ Stormwater pollution is a major source of water pollution in Florida.⁷⁷

There are two main regulatory programs to address water quality from stormwater: the federal program that regulates discharges of pollutants into waters of the United States⁷⁸ and the state Environmental Resource Permitting (ERP) Program that regulates activities involving the alteration of surface water flows.⁷⁹ The federal NPDES Stormwater Program regulates the following types of stormwater pollution:⁸⁰

- Certain municipal storm sewer systems;
- Runoff from certain construction activities; and
- Runoff from industrial activities.⁸¹

⁷² Section 381.00655, F.S.

⁷³ *Id.*

⁷⁴ DEP, *Blue Green Algae Task Force Consensus Document #1*, 6-7 (Oct. 11, 2019), available at https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.

⁷⁵ DEP and Water Management Districts, *Environmental Resource Permit Applicant's Handbook Volume I (General and Environmental)*, 2-10 (June 1, 2018), available at

https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Applicant_Hanbook_I_-_Combined.pdf.

⁷⁶ DEP, *Stormwater Management*, 1 (2016), available at https://floridadep.gov/sites/default/files/stormwater-management_0.pdf. When rain falls on fields, forests, and other areas with naturally permeable surfaces the water not absorbed by plants filters through the soil and replenishes Florida's groundwater supply.

⁷⁷ DEP, *Stormwater Support*, <https://floridadep.gov/water/engineering-hydrology-geology/content/stormwater-support> (last visited Dec. 2, 2019); DEP, *Nonpoint Source Program Update*, 10 (2015), available at <https://floridadep.gov/sites/default/files/NPS-ManagementPlan2015.pdf>.

⁷⁸ National Pollutant Discharge Elimination System (NPDES), 33 U.S.C. s. 1342(p) (2019) 40 C.F.R. pt. 122.

⁷⁹ Chapter 373, pt. IV, F.S.; Fla. Admin. Code Ch. 62-330.

⁸⁰ A point source is discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container. See The Clean Water Act, 33 U.S.C. s. 1362(14) and 40 C.F.R. 122.2; Stormwater can be either a pointsource or a nonpoint source of pollution. EPA, *Monitoring and Evaluating Nonpoint Source Watershed Projects*, 1-1, available at https://www.epa.gov/sites/production/files/2016-02/documents/chapter_1_draft_aug_2014.pdf; DEP, *Nonpoint Source Program Update*, 9 (2015), available at <https://floridadep.gov/sites/default/files/NPS-ManagementPlan2015.pdf>.

⁸¹ See generally EPA, *NPDES Stormwater Program*, <https://www.epa.gov/npdes/npdes-stormwater-program> (last visited Dec. 2, 2019).

Florida's ERP Program includes regulation of activities that create stormwater runoff, as well as dredging and filling in wetlands and other surface waters.⁸² ERPs are designed to prevent flooding, protect wetlands and other surface waters, and protect Florida's water quality from stormwater pollution.⁸³ The statewide ERP Program is implemented by DEP, the WMDs, and certain local governments. The ERP Applicant Handbook, incorporated by reference into DEP rules, provides guidance on DEP's ERP Program including stormwater topics such as the design of stormwater management systems.⁸⁴

DEP and the WMDs are authorized to require permits and impose reasonable conditions:

- To ensure that construction or alteration of stormwater management systems and related structures are consistent with applicable law and not harmful to water resources;⁸⁵ and
- For the maintenance or operation of such structures.⁸⁶

DEP's stormwater rules are technology-based effluent limitations rather than water quality-based effluent limitations.⁸⁷ This means that stormwater rules rely on design criteria for BMPs to achieve a performance standard for pollution reduction rather than specifying the amount of a specific pollutant that may be discharged to a waterbody and still ensure that the waterbody attains water quality standards.⁸⁸ The rules contain minimum stormwater treatment performance standards, which require design and performance criteria for new stormwater management systems to achieve at least 80 percent reduction of the average annual load of pollutants that would cause or contribute to violations of state water quality standards.⁸⁹ The standard is 95 percent reduction when applied to Outstanding Florida Waters. In 2007, an evaluation performed for DEP generally concluded that Florida's stormwater design criteria failed to consistently meet either the 80 percent or 95 percent target goals in DEP's rules.⁹⁰ The images below depict six major types of surface water management systems:⁹¹

⁸² DEP, *DEP 101: Environmental Resource Permitting*, <https://floridadep.gov/comm/press-office/content/dep-101-environmental-resource-permitting> (last visited Dec 2, 2019).

⁸³ South Florida Water Management District, *Environmental Resource Permits*, <https://www.sfwmd.gov/doing-business-with-us/permits/environmental-resource-permits> (last visited Dec. 2, 2019).

⁸⁴ Fla. Admin. Code R. 62-330.010(4); DEP and WMDs, *Environmental Resource Permit Applicant's Handbook Volume I (General and Environmental)*, 2-10 (June 1, 2018), available at https://www.swfwmd.state.fl.us/sites/default/files/medias/documents/Applicant_Hanbook_I_-_Combined.pdf; *Environmental Resource Permit Applicant's Handbook Volume II*, available at <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/erp-stormwater> (last visited Dec. 2, 2019).

⁸⁵ Section 373.413, F.S.; see s. 403.814(12), F.S.

⁸⁶ Section 373.416, F.S.

⁸⁷ DEP, *ERP Stormwater*, <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/erp-stormwater> (last visited Nov. 8, 2019).

⁸⁸ See generally, EPA, National Pollutant Discharge Elimination System (NPDES), www.epa.gov/npdes/npdes-permit-limits (last visited Dec. 2, 2019).

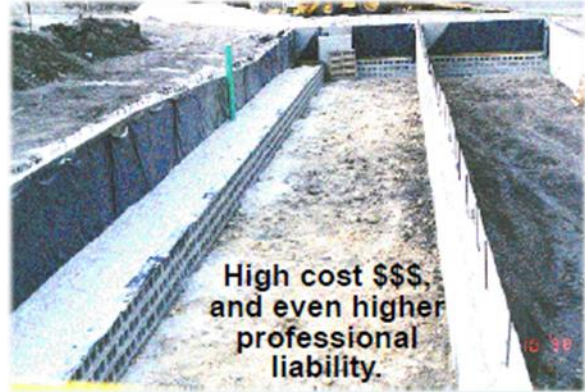
⁸⁹ Fla. Admin. Code R. 62-40.432(2).

⁹⁰ Environmental Research & Design, Inc., *Evaluation of Current Stormwater Design Criteria Within the State of Florida*, 6-1 (2007), available at <https://www.sfwmd.gov/sites/default/files/documents/sw%20treatment%20report-final71907.pdf>. The report makes an exception for the St. John's River Water Management District's standards for on-line dry retention.

⁹¹ Presentation to the Blue Green Algae Task Force by Benjamin Melnik, Deputy Director of the Division of Water Resource Management, Stormwater, available at



“Filtered” Ponds



Underground Vaults



“Dry” Retention Ponds



“Wet” Detention Ponds



Underground Exfiltration Trenches



Pervious Pavement

DEP and the WMDs must require applicants to provide reasonable assurance that state water quality standards will not be violated.⁹² If a stormwater management system is designed in accordance with the stormwater treatment requirements and criteria adopted by DEP or the WMDs, then the system design is presumed not to cause or contribute to violations of applicable

⁹² Section 373.414(1), F.S.; see s. 373.403(11), F.S.; see Fla. Admin. Code Ch. 62-4, 62-302, 62-520, and 62-550.

state water quality standards.⁹³ If a stormwater management system is constructed, operated, and maintained for stormwater treatment in accordance with a valid permit or exemption then the stormwater discharged from the system is presumed not to cause or contribute to violations of applicable state water quality standards.⁹⁴ If an applicant is unable to meet water quality standards because existing ambient water quality does not meet standards, DEP or a WMD must consider mitigation measures that cause net improvement of the water quality in the water body that does not meet the standards.⁹⁵

2010 Stormwater Rulemaking

From 2008 to 2010, DEP and the WMDs worked together on developing a statewide unified stormwater rule to protect Florida's surface waters from the effects of excessive nutrients in stormwater runoff.⁹⁶ A technical advisory committee was established. In 2010, DEP announced a series of workshops to present for public comment the statewide stormwater quality draft rule Chapter 62-347 of the Florida Administrative Code and an Applicant's Handbook.⁹⁷ The notice stated the goal of the rule was to "increase the level of nutrient treatment in stormwater discharges and provide statewide consistency by establishing revised stormwater quality treatment performance standards and best management practices design criteria."⁹⁸

These rulemaking efforts produced a draft document called the "Environmental Resource Permit Stormwater Quality Applicant's Handbook: Design Requirements for Stormwater Treatment in Florida."⁹⁹ The 2010 draft handbook's stormwater quality permitting requirements:

- Provided for different stormwater treatment performance standards based on various classifications of water quality.¹⁰⁰
- Included instructions for calculating a project's required nutrient load reduction based on comparing the predevelopment and post-development loadings.¹⁰¹
- Provided required criteria for stormwater BMPs.
- Listed fifteen different types of stormwater treatment systems, including low impact design, pervious pavements, and stormwater harvesting.¹⁰²

⁹³ Section 373.4131(3)(b), F.S. Fla. Admin. Code R. 62-40.432(2); *see also* DEP, *ERP Stormwater*, <https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/erp-stormwater> (last visited Dec. 2, 2019) (stating that a key component of the stormwater rule is a "rebuttable presumption that discharges from a stormwater management system designed in accordance with the BMP design criteria will not cause harm to water resources").

⁹⁴ Section 373.4131(3)(c), F.S.

⁹⁵ Section 373.414(1)(b)3., F.S.

⁹⁶ South Florida Water Management District, *Quick Facts on the Statewide Unified Stormwater Rule*, available at https://www.sfwmd.gov/sites/default/files/documents/spl_stormwater_rule.pdf.

⁹⁷ Florida Administrative Register, Notices of Meetings, Workshops, and Public Hearings, *Notice of Rescheduling*, pg. 1885 (Apr. 23, 2010), available at <https://www.flrules.org/Faw/FAWDocuments/FAWVOLUMEFOLDERS2010/3616/3616doc.pdf>.

⁹⁸ *Id.*

⁹⁹ DEP and Water Management Districts, *March 2010 Draft, Environmental Resource Permit Stormwater Quality Applicant's Handbook, Design Requirements for Stormwater Treatment Systems in Florida* (2010), available at https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/content2/roadway/drainage/files/stormwaterqualityapphb-draft.pdf?sfvrsn=579bf184_0.

¹⁰⁰ *Id.* at 6-7.

¹⁰¹ *Id.* at 8-11.

¹⁰² *Id.* at 3.

The new rule and revised handbook were expected to be adopted in 2011.¹⁰³ However, no such rules or revised handbook were ever adopted. While the draft Stormwater Quality Applicant's Handbook never went into effect, it can provide context for understanding what new rules on these topics may look like.

The Blue Green Algae Task Force recommended that DEP revise and update stormwater design criteria and implement an effective inspection and monitoring program.¹⁰⁴

Water Quality Monitoring

One of DEP's goals is to determine the quality of the state's surface and ground water resources. This goal is primarily accomplished through several water quality monitoring strategies that are administered through the Water Quality Assessment Program. Responsibilities of the program include: monitoring and assessing how water quality is changing over time; the overall water quality and impairment status of the state's water resources; and the effectiveness of water resource management, protection, and restoration programs.¹⁰⁵

Within the Water Quality Assessment Program, DEP administers the Watershed Monitoring Program. This program is responsible for collecting reliable data through water samples from rivers, streams, lakes, canals, and wells around the state.¹⁰⁶ This information is used by DEP to determine which waters are impaired and what restoration efforts are needed.

The Blue Green Algae Task Force recommended that science-based decision making and monitoring programs be enhanced, including the development of an expanded and more comprehensive statewide water quality monitoring strategy. Monitoring programs should focus on informing restoration project selection, implementation, and evaluation.¹⁰⁷

Urban Fertilizer Usage and Florida's Model Ordinance

The Protection of Urban and Residential Environments and Water Act¹⁰⁸ encourages county and municipal governments to adopt and enforce the Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes or an equivalent requirement to protect local surface and groundwater quality.¹⁰⁹ The law requires each local government located within the watershed of a water body or water segment that is listed as impaired by nutrients to adopt, at minimum, the ordinance, unless the county or municipal government already had a fertilizer use ordinance before July 1,

¹⁰³ Nicole C. Kibert, *Status of Low Impact Development in Florida and Legal Considerations for Operation and Maintenance of LID Systems*, FLORIDA BAR JOURNAL Vol. 85, No. 1 (2011), <https://www.floridabar.org/the-florida-bar-journal/status-of-low-impact-development-in-florida-and-legal-considerations-for-operation-and-maintenance-of-lid-systems/> (last visited Nov. 14, 2019).

¹⁰⁴ DEP, *Blue Green Algae Task Force Consensus Document #1* (Dec. 2, 2019), available at https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.

¹⁰⁵ DEP, *Water Quality Assessment Program*, <https://floridadep.gov/dear/water-quality-assessment> (last visited Dec. 2, 2019).

¹⁰⁶ DEP, *Watershed Monitoring*, <https://floridadep.gov/dear/watershed-monitoring-section> (last visited Dec. 2, 2019).

¹⁰⁷ DEP, *Blue Green Algae Task Force Consensus Document #1* (Oct. 11, 2019), available at https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.

¹⁰⁸ Chapter 2009, ss. 2-5, Laws of Fla.

¹⁰⁹ Section 403.9337(1), F.S.

2009.¹¹⁰ As part of the Florida Springs and Aquifer Protection Act, the Legislature required each local government that includes an OFS or any part of a springshed or OFS priority focus area and had not adopted a fertilizer ordinance, to develop, enact, and implement an ordinance by July 1, 2017.¹¹¹ Currently, 32 counties have adopted a fertilizer ordinance.¹¹²

Application of fertilizer in urban areas can impact watersheds when it runs off lawns and impervious surfaces into stormwater collection systems or directly into the surface water. DEP has provided guidelines to minimize the impact of urban fertilizer use and adopted the Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes.¹¹³ The model ordinance provides counties and municipalities with a range of options to help minimize fertilizer inputs from urban applications. Some of the suggestions contained in the model ordinance are:

- Restricting the times fertilizer may be applied, such as restricting its application during the rainy season;
- Creating fertilizer free zones around sensitive waterbodies such as ponds, streams, watercourses, lakes, canals, or wetlands;
- Controlling application practices by, for example, restricting fertilizer application on impervious surfaces and requiring prompt cleanup of any fertilizer that is spilled on impervious surfaces; and
- Managing grass clipping and vegetative matter by disposing of such materials properly rather than simply blowing them into the street, ditches, stormwater drains, or waterbodies.¹¹⁴

Indian River Lagoon

The Indian River Lagoon (IRL) system is an estuary¹¹⁵ that runs along 156 miles of Florida's east coast and connects Volusia, Brevard, Indian River, St. Lucie, and Martin counties.¹¹⁶ The IRL system is composed of three main waterbodies: Mosquito Lagoon, Banana River, and the Indian River Lagoon.¹¹⁷ There are four BMAPs that have been adopted for the IRL region.¹¹⁸

The IRL is one of the most biologically diverse estuaries in North America and is home to more than 2,000 species of plants, 600 species of fish, 300 species of birds, and 53 endangered or

¹¹⁰ Section 403.9337(2)-(3), F.S.

¹¹¹ Section 373.807(2), F.S.

¹¹² UF/IFAS Florida-Friendly Landscaping Program, *Florida Fertilizer Ordinances* (updated Jan. 10, 2019), available at <https://ffl.ifas.ufl.edu/pdf/FloridaFertilizerOrdinances.pdf?v=20190219> (last visited Dec. 2, 2019).

¹¹³ DEP, *Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes* (2015), available at <https://ffl.ifas.ufl.edu/pdf/dep-fert-modelord.pdf> (last visited Dec. 2, 2019).

¹¹⁴ *Id.* at 6-9.

¹¹⁵ An estuary is a partially enclosed, coastal waterbody where freshwater from rivers and streams mixes with saltwater from the ocean. Estuaries are among the most productive ecosystems on earth, home to unique plant and animal communities that have adapted to brackish water: freshwater mixed with saltwater. U.S. EPA, *What Is An Estuary?*, <https://www.epa.gov/nep/basic-information-about-estuaries> (last visited Dec. 2, 2019); NOAA, *What Is An Estuary?*, <https://oceanservice.noaa.gov/facts/estuary.html> (last visited Dec. 2, 2019).

¹¹⁶ IRL National Estuary Program, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Dec. 2, 2019).

¹¹⁷ *Id.*

¹¹⁸ East Central Florida Regional Planning Council and the Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update*, x (Aug. 26, 2016), available at http://tcrpc.org/special_projects/IRL_Econ_Valu/FinalReportIRL08_26_2016.pdf; DEP, *Basin Management Action Plans (BMAPs)*, <https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps> (last visited Dec. 2, 2019).

threatened species.¹¹⁹ The estimated economic value received from the IRL in 2014 was approximately \$7.6 billion.¹²⁰ Industry groups that are directly influenced by the IRL support nearly 72,000 jobs.¹²¹

The IRL ecosystem has been harmed by human activities in the region. Stormwater runoff from urban and agricultural areas, wastewater treatment facility discharges, canal discharges, septic systems, animal waste, and fertilizer applications have led to harmful levels of nutrients and sediments entering the lagoon.¹²² These pollutants create cloudy conditions, feed algal blooms, and lead to muck accumulation, all of which negatively impact the seagrass that provides habitat for much of the IRL's marine life.¹²³

Type Two Transfer

Section 20.06(2), F.S., defines a type two transfer as the merging of an existing department, program, or activity into another department. Any program or activity transferred by a type two transfer retains all the statutory powers, duties, and functions it held previous to the transfer. The program or activity also retains its records, personnel, property, and unexpended balances of appropriations, allocations, or other funds, unless otherwise provided by law. The transfer of segregated funds must be made in such a manner that the relation between the program and the revenue source is retained.¹²⁴

Rural Areas of Opportunity

A rural area of opportunity (RAO) is a rural community, or region of rural communities, that has been adversely affected by an extraordinary economic event, severe or chronic distress, or a natural disaster or that presents a unique economic development opportunity of regional impact.¹²⁵ By executive order, the Governor may designate up to three RAOs, establishing each region as a priority assignment for Rural Economic Development Initiative (REDI) agencies. The Governor can waive the criteria, requirements, or any similar provisions of any state economic development incentive for projects in a RAO.¹²⁶

¹¹⁹ IRL National Estuary Program, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Dec. 2, 2019).

¹²⁰ East Central Florida Regional Planning Council and the Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update*, vi (Aug. 26, 2016), available at http://tcrpc.org/special_projects/IRL_Econ_Valu/FinalReportIRL08_26_2016.pdf.

¹²¹ *Id.* at ix. The main IRL-related industry groups are categorized as: Living Resources; Marine Industries; Recreation and Visitor-related; Resource Management; and Defense & Aerospace.

¹²² S Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida, XII* (Mar. 2019), available at <https://www.dropbox.com/s/i9pxd59mt1baf7q/Revised%202019%20Save%20Our%20Indian%20River%20Lagoon%20Project%20Plan%20Update%20032519.pdf?dl=0>.

¹²³ *Id.*

¹²⁴ Section 20.06(2), F.S.

¹²⁵ Section 288.0656(2)(d), F.S.

¹²⁶ Section 288.0656(7), F.S.

The currently designated RAOs are:¹²⁷

- Northwestern RAO: Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Liberty, Wakulla, and Washington counties, and part of Walton County.
- South Central RAO: DeSoto, Glades, Hardee, Hendry, Highlands, and Okeechobee counties, and the cities of Pahokee, Belle Glade, South Bay (Palm Beach County), and Immokalee (Collier County).
- North Central RAO: Baker, Bradford, Columbia, Dixie, Gilchrist, Hamilton, Jefferson, Lafayette, Levy, Madison, Putnam, Suwannee, Taylor, and Union counties.

Statement of Estimated Regulatory Cost

If a proposed agency rule will have an adverse impact on small business or is likely to increase directly or indirectly regulatory costs in excess of \$200,000 aggregated within one year after implementation, an agency must prepare a statement of estimated regulatory cost (SERC).¹²⁸ The SERC must include an economic analysis projecting a proposed rule's adverse effect on specified aspects of the state's economy or increase in regulatory costs. If the SERC shows that the adverse impact or regulatory costs of the proposed rule exceeds \$1 million in the aggregate within five years after implementation, then the proposed rule must be submitted to the Legislature for ratification and may not take effect until it is ratified by the Legislature.¹²⁹

III. Effect of Proposed Changes:

Section 1 titles the bill the "Clean Waterways Act."

Section 2 requires the Department of Environmental Protection (DEP), in coordination with the Department of Health (DOH), to develop a report for presentation to the Legislature by July 1, 2021, which addresses the impacts of a type two transfer of DOH's onsite sewage program to DEP for the regulation of onsite sewage and treatment disposal systems (OSTDSs). The report must include suggested revisions to state law including budgetary changes and recommendations to reduce nutrient pollution.

Section 3 amends s. 373.4131, F.S., relating to statewide environmental resource permitting (ERPs). In addition to clarifying changes, the bill revises provisions relating to stormwater ERPs. The bill:

- Requires, rather than authorizes, the water management districts (WMDs) to adopt rules governing the design and performance standards that increase the removal of nutrients from stormwater discharges for all new development and redevelopment projects.
- Requires, rather than authorizes, DEP to incorporate the design and performance standards by reference for use within the geographic jurisdiction of each district to ensure that new pollutant loadings are not discharged into impaired waterbodies.

¹²⁷ Department of Economic Opportunity, *Rural Areas of Opportunity*, <http://www.floridajobs.org/community-planning-and-development/rural-community-programs/rural-areas-of-opportunity> (last visited Dec. 2, 2019).

¹²⁸ Section 120.541, F.S.

¹²⁹ *Id.*

- Requires, by December 1, 2020, that DEP and the WMDs amend the ERP Applicant’s Handbook to include:
 - Revised best management practices (BMPs) design criteria and low-impact design BMPs and criteria that increase the removal of nutrients from stormwater discharges emanating from all new development and redevelopment projects, and
 - Measures for consistent application of the net improvement performance standard to ensure that new pollutant loadings are not discharged into impaired water bodies.
- Clarifies that compliance with BMP design and operation criteria are required to achieve the rebuttable presumption that the stormwater management system does not cause or contribute to violations of applicable water quality standards.

Note: More stringent stormwater rules would likely exceed the regulatory cost threshold of \$1 million in the aggregate within five years after implementation; therefore, the proposed rule may have to be submitted to the Legislature for ratification and may not take effect until it is ratified by the Legislature.¹³⁰

Section 4 amends s. 373.807, F.S., relating to the protection of water quality in Outstanding Florida Springs. The bill:

- Makes the provisions for OSTDS remediation plans applicable to “nutrients” rather than “nitrogen.”
- Moves the requirements for the OSTDS remediation plan¹³¹ from the springs-specific section of law to s. 403.067(7), F.S., relating to basin management action plans (BMAPs).
- Specifies the priority rank for listed projects within the OSTDS remediation plan must be based on: the estimated reduction in nutrient load per project, project readiness, cost effectiveness, overall environmental benefit, location within the plan area, local matching funds, and water savings or quantity improvements.
- Provides that a local government with an Outstanding Florida Spring that fails to adopt, enact, and implement a Florida Friendly Fertilizer Ordinance by July 1, 2021 is subject to the statutory penalties applicable to violations of ch. 403, F.S., which include criminal, civil, and administrative penalties, and may not participate in the wastewater grant program established by the bill. In implementing the ordinance, a local government must conduct educational campaigns, enforcement programs, and mandatory notification of property owners subject to the ordinance. The local government must submit a report on its implementation efforts to DEP for publication on DEP’s website.
- Specifies that if a BMAP or an alternative restoration plan has not been adopted within 90 days after the adoption of a nutrient total maximum daily load (TMDL) for an Outstanding Florida Spring, agricultural operations located within the associated Water Body Identification Number shall sign a notice of intent to implement the applicable agricultural BMPs or other measures adopted by the Department of Agriculture and Consumer Services (DACS) or conduct water quality monitoring. Such agricultural operations may be subject to enforcement action by DEP or a WMD based on a failure to comply.

Section 5 amends s. 373.811, F.S., to revise a conforming cross reference.

¹³⁰ *Id.*

¹³¹ Often called the “septic remediation plan.”

Section 6 creates s. 403.0616, F.S., to establish a real-time water quality monitoring program, subject to appropriation. The program's purpose is to assist in the restoration, preservation, and enhancement of impaired waterbodies and coastal resources. DEP is encouraged to form public-private partnerships with established scientific entities with existing, proven real-time water quality monitoring equipment and experience in deploying such equipment.

Section 7 amends s. 403.067, F.S., relating to TMDLs. The bill specifies that if a BMAP or an alternative restoration plan has not been adopted within 90 days after the adoption of a nutrient TMDL for an Outstanding Florida Spring, agricultural operations located within the associated Water Body Identification Number shall sign a notice of intent to implement the applicable agricultural BMPs or other measures adopted by DACS or conduct water quality monitoring. Such agricultural operations may be subject to enforcement action by DEP or a WMD based on a failure to comply.

The bill specifies that BMAPs must provide detailed information for improvement projects, including descriptions and timelines for completion. The priority rank for listed projects in a BMAP must be based on: the estimated reduction in nutrient load per project, project readiness, cost effectiveness, overall environmental benefit, location within the plan area, local matching funds, and water savings or quantity improvements.

“Onsite sewage treatment and disposal system” is defined as a system that contains a standard subsurface, filled, or mound drainfield system; an aerobic treatment unit; a graywater system tank; a laundry wastewater system tank; a septic tank; a grease interceptor; a pump tank; a solids or effluent pump; a waterless, incinerating, or organic waste-composting toilet; or a sanitary pit privy that is installed or proposed to be installed beyond the building sewer on land of the owner or on other land to which the owner has the legal right to install a system. The term includes any item placed within, or intended to be used as a part of or in conjunction with, the system. This term does not include package sewage treatment facilities and other treatment works.

DEP, DOH, relevant local governments, and relevant local public and private wastewater utilities must develop an OSTDS remediation plan¹³² if DEP identifies OSTDSs as contributors of at least 20 percent of nonpoint source nutrient pollution or if DEP determines that remediation is necessary to achieve a TMDL.

DEP may identify one or more OSTDS priority focus areas. DEP must identify these areas by considering soil conditions; groundwater or surface water travel time; proximity to surface waters, including predominantly marine waters as defined by department rule; hydrogeology; onsite system density; nutrient load; and other factors that may lead to water quality degradation.

For non-springs BMAPs, an OSTDS priority focus area means the area or areas of a basin where the groundwater or surface water is generally most vulnerable to pollutant inputs where there is a known connectivity between groundwater pathways and an impaired waterbody, as determined by DEP in consultation with the appropriate WMDs and delineated in a BMAP.

¹³² Sometimes referred to as a “septic remediation plan.”

The remediation plan must identify cost-effective and financially feasible projects necessary to reduce the nutrient impacts from OSTDSs. The plan shall be completed and adopted as part of the BMAP no later than the first 5-year milestone assessment. Before adopting the plan, DEP shall hold one or more publicly noticed meetings to receive input on the plan from the general public. The plan shall include options for repair, upgrade, replacement, drainfield modification, addition of effective nitrogen reducing features, connection to a central sewerage system, or other action for an OSTDS or group of systems. DEP is the lead agency in coordinating the preparation and adoption of the plan. DEP shall:

- Collect and evaluate credible scientific information on the effect of nutrients, particularly forms of nitrogen, on springs and springs systems; and
- Develop a public education plan to provide area residents with reliable, understandable information about OSTDSs and springs.

The bill authorizes DEP to prohibit any of the following within any OSTDS priority focus area:

- New domestic wastewater disposal facilities, including rapid infiltration basins, with permitted capacities of 100,000 gallons per day or more, except for those facilities that meet an advanced wastewater treatment standard of no more than 3 mg/l total nitrogen, expressed as N, on an annual permitted basis, or a more stringent treatment standard if DEP determines the more stringent standard is necessary to attain a TMDL.
- New OSTDSs on lots of less than 1 acre, if the addition of the specific systems conflicts with an OSTDS remediation plan incorporated into a BMAP.
- New facilities for the disposal of hazardous waste.
- The land application of Class A or Class B domestic wastewater biosolids not in accordance with a DEP approved nutrient management plan establishing the rate at which all biosolids, soil amendments, and sources of nutrients at the land application site can be applied to the land for crop production while minimizing the amount of pollutants and nutrients discharged to groundwater or waters of the state.
- New agriculture operations that do not implement BMPs, measures necessary to achieve pollution reduction levels established by DEP, or groundwater monitoring plans.

If a local government fails to meet the timelines or comply with the requirements of the OSTDS remediation plan, the local government may not participate in the wastewater grant program established by the bill until the actions in the remediation plan have been completed. In addition, DEP must, unless good cause is shown, assess penalties for violations of ch. 403, F.S., until the actions in the remediation plan have been completed. Such penalties include criminal, civil, and administrative penalties. DEP may reduce penalties based on expenditures designed to achieve compliance with the remediation plan.

The bill requires that for an alternative restoration plan for a waterbody, the local stakeholders proposing the plan must consider:

- The implementation of agricultural BMPs or monitoring for nonpoint sources of pollution;
- The implementation of an OSTDS remediation plan where such remediation is necessary to restore the water body; and
- The adoption of advanced waste treatment levels or higher water quality effluent standards for wastewater treatment plants.

The restoration plan must include any other pollution control mechanisms that are being implemented to demonstrate a reasonable assurance that existing or proposed pollution control mechanisms or programs will effectively address the impairment. Upon adoption of such a restoration plan, the requirement that BMPs or monitoring be conducted within the watershed impacting the waterbody is enforceable pursuant to this section and ss. 403.121, 403.141, and 403.161, F.S., which established criminal, civil, and administrative penalties for violations of ch. 403, F.S.

Section 8 creates s. 403.0673, F.S., a wastewater grant program within DEP. Subject to appropriation, DEP may provide grants for projects that will reduce excess nutrient pollution within a BMAP or an alternative restoration plan adopted by final order for:

- Projects to retrofit OSTDSs to upgrade them to nutrient-reducing OSTDSs.
- Projects to construct, upgrade, or expand facilities to provide advanced waste treatment.
- Projects to connect OSTDSs to central sewer facilities.

In allocating such funds, priority must be given to projects that subsidize the connection of OSTDSs to a wastewater treatment plant. In determining priorities, DEP must consider:

- The estimated reduction in nutrient load per project;
- Project readiness;
- Cost-effectiveness of the project;
- Overall environmental benefit of a project;
- The location of a project within the plan area;
- The availability of local matching funds; and
- Projected water savings or quantity improvements associated with a project.

Each grant must require a minimum of a 50 percent local match of funds. However, DEP may waive, in whole or in part, this consideration of the local contribution for proposed projects within an area designated as a rural area of opportunity. DEP and the WMDs will coordinate to identify grant recipients in each district.

Beginning January 1, 2021, and each January 1 thereafter, DEP must submit a report regarding the projects funded pursuant to this section to the Governor and Legislature.

Section 9 creates s. 403.0771, F.S., to create additional notification requirements for wastewater facilities that have sewage spills.

A wastewater treatment facility that unlawfully discharges raw or partially treated sewage into any waterway or aquifer must, within 24 hours after discovering the discharge, notify its customers that the discharge has occurred.

If a wastewater treatment facility owned by a local government unlawfully discharges raw or partially treated sewage into any waterway or aquifer, the local government may not participate in the wastewater grant program established by the bill until any required maintenance, repair, or improvement has been implemented to reduce or eliminate sanitary sewage overflows, as determined by the DEP. In addition, the department shall assess a penalty pursuant to ss. 403.121, 403.141, and 403.161, F.S., (penalties for violation of ch. 403, F.S., including criminal,

civil, and administrative penalties) daily against a public or private wastewater facility that unlawfully discharges raw or partially treated sewage into any waterway or aquifer until the required maintenance, repair, or improvement has been implemented. DEP may reduce a penalty based on the wastewater treatment facility's investment in assessment and maintenance activities to identify and address conditions that may cause sanitary sewage overflows.

DEP must maintain a publicly accessible website that includes any current consent orders applicable to a wastewater treatment facility entered into as a result of sanitary sewer overflows, as well as any reports filed by the facility in accordance with open consent orders.

Section 10 amends s. 403.086, F.S., effective July 1, 2025, to restrict facilities for sanitary sewage disposal from disposing of waste into Indian River Lagoon or its tributaries without providing for advanced waste treatment.

Section 11 amends s. 403.121, F.S., to double the cap on DEP's administrative remedies for violations of ch. 403, F.S., from \$10,000 to \$20,000. The restrictions imposed on the amount of administrative penalties DEP may assess are removed for violations of a BMAP or any unauthorized or unpermitted wastewater discharge or effluent-limitation exceedance that results in a surface or groundwater quality violation.

Section 12 amends s. 403.814, F.S., to disallow self-certification for stormwater permits serving areas of up to 10 acres with less than 2 acres of impervious surface if the project is within a BMAP or an alternative restoration plan.

Section 13 amends s. 403.9337, F.S., to require that local governments with impaired waterbodies that fail to adopt, enact, and implement a Florida-Friendly Fertilizer Ordinance by January 1, 2021, are subject to the penalties for violation of ch. 403, F.S., including criminal, civil, and administrative penalties daily and may not participate in the wastewater grant program established by the bill until the ordinance has been adopted, enacted, and implemented. In implementing the ordinance, a local government must conduct educational campaigns, enforcement programs, and mandatory notification of property owners subject to the ordinance, and must submit a report on its efforts to DEP for publication on the DEP's website.

Section 14 requires DEP to revise all BMAPs that were adopted before July 1, 2020, to conform existing plans to changes made by this act. Revisions to these BMAPs must be completed by the next required 5-year milestone assessment for those revisions scheduled for on or after July 1, 2022. DEP may grant a 6-month extension, upon a showing of good cause.

Section 15 provides a statement that this act fulfills an important state interest.

Section 16 provides that except as otherwise expressly provided in the act, the act takes effect July 1, 2020.

IV. Constitutional Issues:**A. Municipality/County Mandates Restrictions:**

The county/municipality mandates provision of Art. VII, section 18, of the Florida Constitution may apply because this bill requires certain local governments to conduct educational campaigns, enforcement programs, and mandatory notification of property owners relating to Florida-Friendly Fertilizer ordinances. It also requires these local governments to submit a report on their implementation efforts to DEP. Note that fines relating to enforcement and reduced cleanup costs could offset the cost of these programs. If the bill does qualify as a mandate, the law must fulfill an important state interest and final passage must be approved by two-thirds of the membership of each house of the Legislature.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:**A. Tax/Fee Issues:**

None.

B. Private Sector Impact:

The following discussion identifies aspects of the bill that may cause a negative fiscal impact because they implement more stringent environmental requirements. However, it is worth noting that there are costs associated with failing to address pollution issues. Cleanup costs, human health impacts, ecosystem deterioration, loss of tourism, and decreased real estate values are some key examples of possible costs associated with pollution.

More stringent stormwater rules would cause a negative fiscal impact to the private sector. However, if that impact exceeds \$1 million over 5 years, the rules will require legislative ratification, which means they will not go into effect without additional legislation.

The additional requirements of OSTDS remediation plans may cause a negative fiscal impact to the private sector entities within BMAPs that must address OSTDS pollution to meet the TMDL.

Enforcement by local governments of Florida-Friendly Fertilizer ordinances may result in fines. However, education regarding Florida-Friendly Fertilizer ordinances may assist local residents in understanding how to more effectively utilize fertilizer; thereby resulting in less wasted fertilizer.

There may be some costs associated with implementing agricultural best management practices or monitoring in more locations or earlier in the process once a waterbody is deemed impaired.

Private wastewater utilities that:

- Discharge into Indian River Lagoon will may have costs associated to conversion to advanced waste treatment.
- Have a sewage spill may have costs associated with notifying their customers (note that there are already notification requirements in law related to sewage spills, so this additional cost may be nominal).

Increases on the limitation for administrative fines for pollution would cause a negative fiscal impact to private entities that violate the law.

C. Government Sector Impact:

DEP will incur additional costs in the development of OSTDS remediation plans and updating BMAPs.

The additional requirements of OSTDS remediation plans may cause a negative fiscal impact to local governments that must address OSTDS pollution to meet their TMDL. However, there is flexibility in how the OSTDS remediation plans are developed, which makes these costs speculative and subject to the development of the OSTDS remediation plan.

This bill requires certain local governments to conduct educational campaigns, enforcement programs, and mandatory notification of property owners relating to Florida-Friendly Fertilizer ordinances. It also requires these local governments to submit a report on their implementation efforts to DEP. This may be a cost to local governments. However, fines relating to enforcement and reduced cleanup costs may offset the cost.

DEP will incur costs associated with publishing Florida-Friendly Fertilizer ordinance information and wastewater consent orders on its website.

The implementation of a real-time water quality monitoring program will have a negative fiscal impact on DEP, but this provision is subject to appropriation.

The wastewater grant program would have a positive fiscal impact on local governments, but this provision is subject to appropriation. DEP will likely incur some costs associated with the development of this grant program and the report to the Governor and Legislature.

Public utilities that experience a sewage spill may have costs associated with notifying their customers (note that there are already notification requirements in law related to sewage spills, so this additional cost may be nominal).

Public wastewater utilities that discharge into Indian River Lagoon may have costs associated to conversion to advanced waste treatment. However, the local governments in the region are spending substantial amounts on pollution cleanup. Lessening the pollutants in this waterbody may have a positive fiscal impact in the long term.

Increases on the limitation for administrative fines for pollution would cause a positive fiscal impact to the state. There may be a cost savings associated with less cases requiring civil proceedings, which are currently required to assess penalties exceeding \$10,000.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 373.4131, 373.807, 373.811, 403.067, 403.086, 403.121, 403.814, and 403.9337.

This bill creates the following sections of the Florida Statutes: 403.0616, 403.0673, and 403.0771.

IX. Additional Information:

A. Committee Substitute – Statement of Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.