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 Environment and Natural Resources

BILL:	SB 1382
INTRODUCER:	Senator Albritton
SUBJECT:	Environmental Resource Management
DATE:	January 18, 2020
REVISED:	

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Rogers	Rogers	EN	**Pre-meeting**
2.			AEG	
3.			AP	

I. Summary:

SB 1382 authorizes basin management action plans (plans that address water quality on a basin-wide level) to include cooperative agricultural regional water quality improvements (agricultural element) and cooperative urban, suburban, commercial, or regional water quality improvements (nonagricultural element), in addition to existing strategies such as best management practices and interim measures. These agricultural and nonagricultural elements shall be implemented through a cost-sharing program and may be included in a basin management action plan during the 5-year update.

The bill directs the Department of Environmental Protection (DEP), the Department of Agriculture and Consumer Services (DACS), and the Institute of Food and Agricultural Sciences (IFAS) of the University of Florida to address certain issues related to best management practices and the agricultural element.

The bill creates a nutrient reduction cost-share program. Subject to appropriation, DEP may provide funding for nutrient reduction projects in a basin management action plan or alternative restoration plan. Eligible projects include: retrofitting septic systems; constructing, upgrading, or expanding wastewater facilities to provide advanced waste treatment; projects to connect septic to sewer; projects in the nonagricultural element; projects in the agricultural element; and data collection and research activities. The bill specifies prioritization and cost-share requirements for project funding. In allocating funding, DEP must coordinate with DACS, IFAS, and the water management districts. The bill requires an annual report to the Governor and Legislature regarding the projects funded by this program.

The bill prohibits local governments from providing legal rights to any plant, animal, body of water, or other part of the natural environment unless otherwise specifically authorized by state law or the State Constitution.

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]

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.[3] 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.[4] 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.[5] 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.[6]

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[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).
[3] 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).
[4] Section 403.067(1), F.S.
[5] Section 403.031(21), F.S.
[6] 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.

Basin Management Action Plans and Best Management Practices

DEP is the lead agency in coordinating the development and implementation of TMDLs.[7] 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;
- 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.[8]

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.[9] 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.[10] BMAPs are adopted by secretarial order.[11]

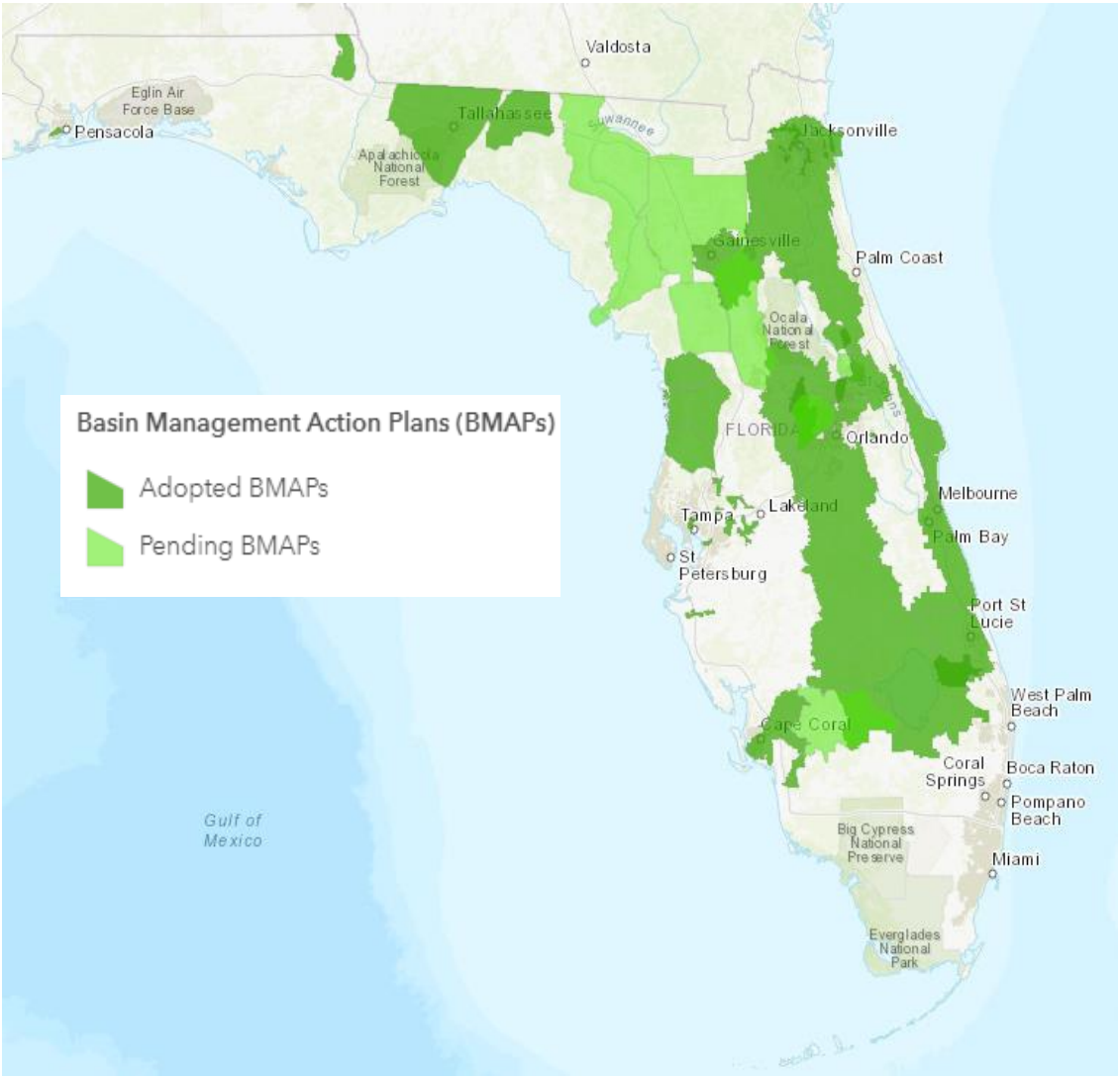
BMAPs must include milestones for implementation and water quality improvement. They must also include an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time. An assessment of progress toward these milestones must be conducted every five years and revisions to the BMAP must be made as appropriate.[12]

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.[13] 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.[14] 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

[7] 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.
[8] Section 403.067(7), F.S.
[9] *Id*.
[10] DEP, *Basin Management Action Plans (BMAPs)*, https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps (last visited Dec. 4, 2019).
[11] Section 403.067(7)(a)5., F.S.
[12] Section 403.067(7)(a)6., F.S.
[13] 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.
[14] Section 403.067(7)(b)2.h., F.S.

operations as well as for other activities, such as nutrient management on golf courses, forestry operations, and stormwater management.[15]

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.[16]



Agricultural BMPs

Agricultural best management practices (BMPs) are practical measures that agricultural producers undertake to reduce the impacts of fertilizer and water use and otherwise manage the landscape to further protect water resources. BMPs are developed using the best available

[15] DEP, *NPDES Stormwater Program*, https://floridadep.gov/Water/Stormwater (last visited Dec. 2, 2019).
[16] 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).

science with economic and technical consideration and, in certain circumstances, can maintain or enhance agricultural productivity.[17] BMPs are implemented by the Department of Agriculture and Consumer Services (DACS). Since the BMP program was implemented in 1999, DACS has adopted nine BMP manuals and is currently developing two more that cover nearly all major agricultural commodities in Florida.[18] According to the annual report on BMPs prepared by DACS, approximately 54 percent of agricultural acreage is enrolled in the DACS BMP program statewide.[19] Producers implementing BMPs receive a presumption of compliance with state water quality standards for the pollutants addressed by the BMPs[20] and those who enroll in the BMP program become eligible for technical assistance and cost-share funding for BMP implementation. To enroll in the BMP program, producers must meet with the Office of Agricultural Water Policy (OAWP) to determine the BMPs that are applicable to their operation and submit a Notice of Intent to Implement the BMPs, along with the BMP checklist from the applicable BMP manual.[21] Within a BMAP, management strategies, including best management practices and water quality monitoring, are enforceable.[22]

The University of Florida's Institute of Food and Agricultural Sciences (IFAS) is heavily involved in the adoption and implementation of BMPs. IFAS provides expertise to both DACS and agriculture producers and has extension offices throughout Florida. IFAS puts on summits and workshops on BMPs,[23] conducts research to issue recommendations for improving BMPs,[24] and issues training certificates for BMPs that require licenses such as Green Industry BMPs.[25]

The Blue-Green Algae Task Force, a state task force addressing water pollution in Florida, recently recommended the following with respect to agricultural nutrient reduction:

- Increasing BMP enrollment;
- Improving records and additional data collection; and
- Accelerating updates to BMP manuals.[26]

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[17] Florida Department of Agriculture and Consumer Services Office of Agricultural Water Policy, *Status of Implementation of Agricultural Nonpoint Source Best Management Practices*, 3, (Jul. 1, 2019), *available at* https://www.fdacs.gov/ezs3download/download/84080/2481615/Media/Files/Agricultural-Water-Policy-Files/Status-of-Implementation-of-BMPs-Report-2019.pdf (last visited Dec. 5, 2019).

[18] FDACS, *Agricultural Best Management Practices*, https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices (last visited Jan. 22, 2020).

[19] Florida Department of Agriculture and Consumer Services Office of Agricultural Water Policy, *Status of Implementation of Agricultural Nonpoint Source Best Management Practices*, 2, (Jul. 1, 2019), *available at* https://www.fdacs.gov/ezs3download/download/84080/2481615/Media/Files/Agricultural-Water-Policy-Files/Status-of-Implementation-of-BMPs-Report-2019.pdf (last visited Dec. 5, 2019).

[20] Section 403.067(7), F.S.

[21] Florida Department of Agriculture and Consumer Services Office of Agricultural Water Policy, *Status of Implementation of Agricultural Nonpoint Source Best Management Practices*, 3, (Jul. 1, 2019), *available at* https://www.fdacs.gov/ezs3download/download/84080/2481615/Media/Files/Agricultural-Water-Policy-Files/Status-of-Implementation-of-BMPs-Report-2019.pdf (last visited Dec. 5, 2019).

[22] Section 403.067(7)(d), F.S.

[23] UF/IFAS, *BMP Resource*, *available at* https://bmp.ifas.ufl.edu/ (last visited Dec. 5, 2019).

[24] UF/IFAS Everglades Research & Education Center, *Best Management Practices & Water Resources*, *available at* https://erec.ifas.ufl.edu/featured-3-menus/research-/best-management-practices--water-resources/ (last visited Dec. 5, 2019).

[25] UF/IFAS Florida-Friendly Landscaping, *GI-BMP Training Program Overview*, *available at* https://ffl.ifas.ufl.edu/professionals/BMP_overview.htm (last visited Dec. 5, 2019).

[26] 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.

Restoration Plans as Alternatives to TMDLS

Under the Florida Watershed Restoration Act,[27] 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.[28] 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.[29] Similar to the adoption of a BMAP, a finalized restoration plan is adopted by secretarial order.[30]

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.[31]

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.[32]

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.[33] 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.[34]

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

[27] Chapter 99-223, Laws of Fla.
[28] 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.
[29] *Id*.
[30] 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).
[31] 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.
[32] 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).
[33] Section 403.087, F.S.
[34] DEP, *Wastewater Permitting*, https://floridadep.gov/water/domestic-wastewater/content/wastewater-permitting (last visited Dec. 2, 2019).

Pollution Discharge Elimination System (NPDES) permit.[35] 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.[36] 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.[37]

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.[38] 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.[39]

Advanced Waste Treatment

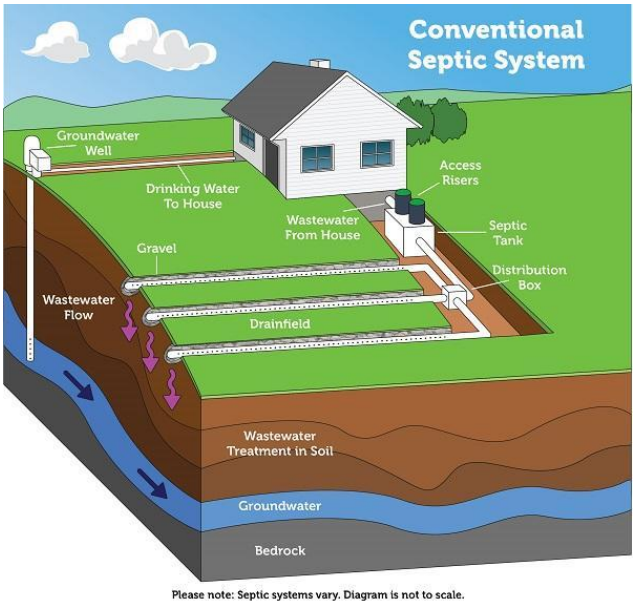
Under Florida law, facilities for sanitary sewage disposal are required to provide for advanced waste treatment, as deemed necessary by DEP.[40] The standard for advanced waste treatment is defined in statute using the maximum concentrations of nutrients or contaminants that a reclaimed water product may contain.[41] The standard also requires a high-level disinfection.[42]

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

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.[43] Waste from 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

[35] 33 U.S.C s. 1342.
[36] Sections 403.061 and 403.087, F.S.
[37] Section 403.087(3), F.S.
[38] 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).
[39] *Id*.
[40] Section 403.086(2), F.S.
[41] Section 403.086(4), F.S.
[42] Section 403.086(4)(b), F.S.; Fla. Admin. Code R. 62-600.440(6).
[43] 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).



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.[44]

The Department of Health (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.[45] DOH regulations focus on construction standards and setback distances. The regulations are primarily designed to protect the public from waterborne illnesses.[46] 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.[47]

There are an estimated 2.6 million OSTDSs in Florida, providing wastewater disposal for 30 percent of the state's population.[48] In Florida, development in some areas is dependent on OSTDSs due to the cost and time it takes to install central sewer systems.[49] 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.[50] The remainder of systems are generally serviced only when they fail, often leading to costly repairs that could have been avoided with routine maintenance.[51]

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.[52] This still leaves a significant

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[44] *Id.*; Conventional Septic System graphic: See EPA, *Types of Septic Systems*, https://www.epa.gov/septic/types-septic-systems (last visited Dec. 2, 2019).
[45] Section 381.0065(3), F.S.
[46] 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).
[47] Section 381.0065(3), F.S.
[48] DOH, *Onsite Sewage*, http://www.floridahealth.gov/environmental-health/onsite-sewage/index.html (last visited Dec. 2, 2019).
[49] 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.
[50] *Id*.
[51] *Id*.
[52] 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/finalnitrogenlegislativereportsmall.pdf; *see* Fla. Admin. Code R. 64E-6.006(2).

amount of nitrogen to percolate into the groundwater, which makes nitrogen from OSTDSs a potential contaminant in groundwater.[53]

Different types of advanced OSTDSs exist that can remove greater amounts of nitrogen than a typical septic system (often referred to as "advanced" or "enhanced nutrient-reducing" septic systems).[54] DOH publishes on its website approved products and resources on advanced systems.[55] Determining which advanced system is the best option can depend on site-specific conditions.

Stormwater Management

Stormwater is the flow of water resulting from, and immediately following, a rainfall event.[56] 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.[57] Stormwater pollution is a major source of water pollution in Florida.[58]

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 States[59] and the state Environmental Resource Permitting (ERP) Program that regulates activities involving the alteration of surface water flows.[60] The federal NPDES Stormwater Program regulates the following types of stormwater pollution:[61]

- Certain municipal storm sewer systems;
- Runoff from certain construction activities; and
- Runoff from industrial activities.[62]

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[53] 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/pdffiles/SS/SS55000.pdf.
[54] 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.
[55] 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).
[56] 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/Appliicant_Hanbook_I_-_Combined.pd_0.pdf.
[57] 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.
[58] 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.
[59] National Pollutant Discharge Elimination System (NPDES), 33 U.S.C. s. 1342(p) (2019) 40 C.F.R. pt. 122.
[60] Chapter 373, pt. IV, F.S.; Fla. Admin. Code Ch. 62-330.
[61] 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.
[62] *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.[63] ERPs are designed to prevent flooding, protect wetlands and other surface waters, and protect Florida's water quality from stormwater pollution.[64] 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.[65]

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;[66] and
- For the maintenance or operation of such structures.[67]

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.[68] 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.[69]

The Rights of Nature Movement

The Rights of Nature Movement is the concept of recognizing that nature has legal rights and legal standing in a court of law.[70] "It is the recognition that our ecosystems – including trees, oceans, animals, mountains – have rights just as human beings have rights."[71]

Standing is a party's right to make a legal claim or seek judicial enforcement of a duty or right.[72] To have standing in federal court, a plaintiff must show that the challenged conduct has caused

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[63] DEP, *DEP 101: Environmental Resource Permitting*, https://floridadep.gov/comm/press-office/content/dep-101-environmental-resource-permitting (last visited Dec 2, 2019).
[64] 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).
[65] 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/Appliicant_Hanbook_I_-_Combined.pd_0.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).
[66] Section 373.413, F.S.; *see* s. 403.814(12), F.S.
[67] Section 373.416, F.S.
[68] Section 288.0656(2)(d), F.S.
[69] Section 288.0656(7), F.S.
[70] Global Alliance for the Rights of Nature, *What is Rights of Nature?*, https://therightsofnature.org/what-is-rights-of-nature/ (last visited Jan. 18, 2020); Community Environmental Defense Fund, *Champion the Rights of Nature*, https://celdf.org/advancing-community-rights/rights-of-nature/ (last visited Jan. 18, 2020).
[71] *Id*.
[72] BLACK'S LAW DICTIONARY, 1536 (9th ed. 2009).

the plaintiff actual injury and that the interest sought to be protected is within the zone of interests meant to be regulated by the statutory or constitutional guarantee.[73] Under the Rights of Nature concept, an ecosystem could be named as an injured party in a court of law, with its own legal standing rights. Proponents of the Rights of Nature see legal personhood as a promising tool for protecting nature and analogous to corporate personhood and the protection of corporate rights.[74]

Ecuador includes a Rights of Nature provision in its constitution.[75] Under the Ecuadorian constitution, nature has rights "to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution."[76] Bolivia, New Zealand, India,[77] and Colombia[78] have also taken steps toward recognizing rights of nature.

The Pennsylvania Constitution contains a provision stating "the people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people."[79] Based on this constitutional provision a court overturned a Pennsylvania law protecting extractive interests from local ordinances undertaking to limit environmentally harmful activities.[80] Local governments in Pennsylvania,[81] Maine,[82] New Hampshire,[83] and California,[84]among others, have enacted rights of nature provisions in their local ordinances. The idea is being discussed in various Florida communities, but no local ordinances have been adopted at this time.[85]

The Florida Environmental Protection Act

The Environmental Protection Act of 1971 authorizes the bringing of an action for injunctive relief to compel a governmental authority to enforce laws, rules, and regulations for the protection of the air, water, and other natural resources of the state of Florida or to enjoin a person or governmental agency or authority from violating any laws, rules, or regulations for the

[73] *Id*.
[74] Gwendolyn J. Gordon, *Environmental Personhood*, 50, 43 COLUM. J. ENVTL. L. 49 (Jan. 11, 2019) (citing *Burwell v. Hobby Lobby Stores, Inc*., 134 S.Ct. 2751 (2014); *Citzens United v. Fed. Election Comm'n*, 558 U.S. 310 (2010)).
[75] Constitutión Politica de la República del Ecuador, art. 10, 71-74 (Ecuador), English translation *available at* http://pdba.georgetown.edu/Constitutions/Ecuador/english08.html.
[76] *Id*.
[77] *See generally*, Gwendolyn J. Gordon, *Environmental Personhood*, 50, 43 COLUM. J. ENVTL. L. 49 (Jan. 11, 2019).
[78] *See*, Patrick Parenteau, *Green Justice Revisited: Dick Brooks on the Laws of Nature and the Nature of Law*, 20 VT. J. ENVTL. L. 183, 186 (2019); Global Alliance for the Rights of Nature, *Columbia Constitutional Court Finds Atrato River Possesses Rights*, https://therightsofnature.org/colombia-constitutional-court-finds-atrato-river-possesses-rights/ (last visited Jan. 19, 2020).
[79] PA. CONST. art. 1, § 27
[80] *Robinson v. Commonwealth*, 83 A.3d 901 (2013).
[81] *See* City of Pittsburgh Code of Ordinances, § 618.03.
[82] Town of Shapleigh Code, §99-16.
[83] Barrington, NH, Community Bill of Rights §2(e), *available at* https://www.barrington.nh.gov/sites/barringtonnh/files/uploads/bill_of_rights.pdf.
[84] Santa Monica Municipal Code, Ch. 12.02.030.
[85] SAFEBOR, *Welcome to the Santa Fe River Bill of Rights Campaign*, https://safebor.org/ (last visited Jan. 23, 2020); Global Alliance for the Rights of Nature, *The Rights of Nature Movement has Arrived to Florida*, https://therightsofnature.org/the-rights-of-nature-movement-has-arrived-to-florida/ (last visited Jan. 23, 2020).

protection of the air, water, and other natural resources of the state.[86] In any administrative, licensing, or other proceedings authorized by law for the protection of the air, water, or other natural resources of the state from pollution, impairment, or destruction, the government or a citizen of the state has standing to intervene as a party on the filing of a pleading asserting that the activity to be licensed or permitted has or will have the effect of impairing, polluting, or otherwise injuring the air, water, or other natural resources of the state.[87] A citizen's substantial interests are considered to be affected if the party demonstrates it may suffer an injury in fact which is of sufficient immediacy and is of the type and nature intended to be protected by law. No demonstration of special injury different in kind from the general public at large is required. A sufficient demonstration of a substantial interest may be made by a petitioner who establishes that the proposed activity, conduct, or product to be licensed or permitted affects the petitioner's use or enjoyment of air, water, or natural resources protected by law.[88]

In *Florida Wildlife Federation v. State Dept. of Environmental Regulation*, the Florida Supreme Court held that the Environmental Protection Act sets out substantive rights not previously possessed.[89] Private citizens of Florida may institute a suit under the Environmental Protection Act without showing of special injury required by traditional rules of standing.[90] The Act does not constitute an impermissible intrusion by the legislature into the Supreme Court's power over practice and procedure in state courts, but rather creates a new cause of action setting out substantive rights not previously possessed and enabling the citizens of Florida to institute suit for the protection of their environment without a showing of "special injury" as previously required.[91]

III. Effect of Proposed Changes:

Optional Basin Management Action Plan Elements (Section 1)

The bill amends s. 403.067(7), F.S., to authorize the creation of a cooperative agricultural regional water quality improvement element (agricultural element) or a cooperative urban, suburban, commercial, or institutional water quality improvement element (nonagricultural element) as part of a basin management action plan (BMAP). These elements may be included in the basin management action plan as a part of the 5-year assessment.

The Department of Environmental Protection (DEP) develops the agricultural element in coordination with the Department of Agriculture and Consumer Services (DACS) through a cost-sharing program. Projects in the agricultural element may include agricultural nutrient reduction projects that are:

- Cost-effective,
- Technically and financially practical,
- Cooperative, and
- Implemented on private properties.

[86] Section 403.412(2)(a), F.S.
[87] Section 403.412(5), F.S.
[88] *Id*.
[89] 390 So.2d 64 (Fla. 1980).
[90] *Id*.
[91] *Id*.

Inclusion of such projects is subject to available funding and must be carried out on lands of willing sellers or willing participants.

The projects may include:
- Land acquisition in fee or in conservation easements,
- Site-specific water quality improvement, or
- Dispersed water management projects.

To qualify for participation in the element, the participant must have already implemented the interim measures, best management practices (BMPs), or other measures adopted by the "department" (See Technical Issues Below).

DEP develops the nonagricultural element in coordination with the Department of Health or water management districts as a cost-sharing program. Projects in the nonagricultural element may include nutrient reduction projects that are:
- Cost-effective,
- Technically and financially practical,
- Cooperative,
- Urban, suburban, commercial, or institutional, and
- Regional.

Inclusion of such projects is subject to available funding. The projects may include those that reduce stormwater pollutant loading.

Data Collection and Research (Section 1)

The bill directs DEP to work with DACS to improve the accuracy of data used to estimate agricultural land uses in BMAPs. The departments must work with producers to identify agricultural technologies that could be implemented, subject to available funding, on properties where the technologies are deemed technically and financially practical.

The Institute of Food and Agricultural Sciences (IFAS) of the University of Florida, in cooperation with the DACS, must develop a research plan and a legislative budget request to:
- Evaluate and suggest cost-effective enhancements to the adopted BMPs.
- Develop new, cost-effective BMPs that, when proven, may be considered by the "department" (See Technical Issues Below) for rule adoption.
- Develop agricultural nutrient reduction projects that would be implemented with willing participants on a site-specific, cooperative basis in addition to BMPs, and that would be considered for inclusion in the agricultural element of a BMAP.

All such proposals must be technically and financially practical.

DEP, in cooperation with IFAS and the regulated entities, must consider the adoption by rule of BMPs for the management of nutrient impacts from golf courses and other recreational areas.

Nutrient Reduction Cost-Share Program (Section 1)

The bill creates a nutrient reduction cost-share program within DEP. Subject to legislative appropriation, DEP may provide funding for projects that will individually or collectively reduce nutrient pollution under a basin management action plan or an alternative restoration plan for the following:

- The following wastewater projects (wastewater projects require a 50 percent local match of funds which can be waived for a rural area of opportunity):
  - Projects to retrofit onsite sewage treatment and disposal systems.
  - Projects to construct, upgrade, or expand facilities to provide advanced waste treatment.
  - Projects to connect onsite sewage treatment and disposal systems to central sewer facilities.
- Projects in the nonagricultural element of a BMAP (created in the bill and described above).
- Projects in the agricultural element of a BMAP (created in the bill and described above).
- The data collection and research activities created in the bill (See Technical Issues Section).

Wastewater projects and projects in the nonagricultural element must be equally prioritized with projects in the agricultural element.

For wastewater projects or projects in the nonagricultural element, priority must be given to projects that subsidize the connection of onsite sewage treatment and disposal systems to a wastewater treatment plant or that subsidize inspections and assessments of onsite sewage treatment and disposal systems. In determining priorities, DEP must consider the estimated reduction in nutrient load per project, project readiness, the cost effectiveness of the project, the overall environmental benefit of a project, the location of a project within the plan area, the availability of local matching funds, and the projected water savings or quantity improvements associated with the project.

DEP must coordinate with DACS, IFAS, and each water management district, as necessary, in allocating funds pursuant to this subsection. Beginning January 1, 2021, DEP must submit an annual report regarding the projects funded pursuant to this program to the Governor and Legislature.

Rights of Nature (Section 2)

The bill amends the Florida Environmental Protection Act to prohibit local governments from recognizing, granting, conveying, or extending legal standing or legal rights to a plant, an animal, a body of water, or any other part of the natural environment unless otherwise specifically authorized by state law or the State Constitution.

The changes in the bill explicitly do not:

- Limit the ability of the Department of Legal Affairs, any political subdivision of the state, or a resident of the state to maintain an action for injunctive relief for existing pollution violations.
- Limit the ability of an aggrieved or adversely affected party to appeal and challenge the consistency of a development order with a comprehensive plan, or to file an action for

injunctive relief to enforce the terms of a development agreement or to challenge compliance of the agreement with the Florida Local Government Development Agreement Act.

Effective Date (Section 3)

The bill provides an effective date of July 1, 2020.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

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 private sector could see a positive fiscal impact from the cost-share program.

C. Government Sector Impact:

There would be a negative fiscal impact to the state associated with funding the bill's research and cost-share programs, but there may be a long-term positive fiscal impact associated with pollution prevention.

VI. Technical Deficiencies:

Line 264 should refer to (7)(g).

On line 189, the reference to "department" on this line should probably be changed to "Department of Agriculture and Consumer Services" as it is the entity responsible for BMPs, etc. under s. 403.067(7)(c)2. In ch. 403, use of the term "department" means DEP.

On line 230, the reference to "department" should probably also be "Department of Agriculture and Consumer Services."

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends sections 403.067 and 403.412 of the Florida Statutes.

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.