

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 216

INTRODUCER: Senators Gruters and Harrell

SUBJECT: Water Quality Improvements

DATE: March 12, 2019

REVISED: _____

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

I. Summary:

SB 216 adds a required annual appropriation from the Land Acquisition Trust Fund for projects dedicated to the conservation and management of the Indian River Lagoon. The annual appropriation is, at minimum, the lesser of 7.6 percent of the funds remaining after debt service or \$50 million. The Department of Environmental Protection must use the funds to provide grants for the following categories of projects that implement the Indian River Lagoon Comprehensive Conservation and Management Plan:

- The construction of facilities or the upgrade of existing facilities that provide advanced waste treatment.
- The expansion of existing wastewater treatment facilities to bring services to homes and businesses that are not connected to an existing wastewater treatment facility.
- The connection of onsite sewage treatment and disposal systems to central sewer systems.

The bill requires a wastewater treatment facility to notify its customers within 24 hours if it unlawfully discharges raw or partially treated sewage into any waterway or aquifer.

The bill creates penalties for wastewater treatment facilities that unlawfully discharge raw or partially treated sewage into any aquifer or waterway. The facility is required to either:

- Remit to the Department of Environmental Protection an amount equal to \$1 for each gallon of sewage discharged; or
- Calculate the number of gallons of sewage discharged, and, with the Department of Environmental Protection's approval, spend \$2 for each gallon discharged to upgrade or remediate the problems that gave rise to the unlawful discharge.

II. Present Situation:

The Indian River Lagoon

The Indian River Lagoon (IRL) system is an estuary¹ that runs along 156 miles of Florida's east coast, and connects Volusia, Brevard, Indian River, St. Lucie, and Martin counties.² The IRL system is composed of three main waterbodies: Mosquito Lagoon, Banana River, and the Indian River Lagoon.³ More than 71 percent of its area and nearly half its length is within Brevard County.⁴

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 threatened species.⁵ The estimated economic value received from the IRL in 2014 was approximately \$7.6 billion.⁶ Industry groups that are directly influenced by the IRL support nearly 72,000 jobs, collecting wages totaling more than \$1.2 billion annually.⁷

Major Pollution Sources in the IRL

The balance of the IRL's delicate ecosystem has been disturbed by increased development in the area. Development has led to harmful levels of nutrients and sediments entering the lagoon as a result of stormwater runoff from urban and agricultural areas, wastewater treatment facility discharges, septic systems, and excess fertilizer applications.⁸ In the last decade, there have been algae blooms; unusual mortalities of dolphins, manatees, and shorebirds; and large fish kills due to low dissolved oxygen from decomposing algae.⁹

Onsite Sewage and Disposal Systems

Onsite sewage treatment and disposal systems (OSTDS) (commonly referred to as "septic systems") can contain any one or more of the following components: a septic tank; a subsurface

¹ An estuary is a partially enclosed, coastal waterbody where freshwater from rivers and streams mixes with salt water 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: fresh water mixed with salt water. U.S. EPA, *What Is An Estuary?*, <https://www.epa.gov/nep/basic-information-about-estuaries> (last visited Mar. 5, 2019); NOAA, *What Is An Estuary?*, <https://oceanservice.noaa.gov/facts/estuary.html> (last visited Mar. 5, 2019).

² IRL National Estuary Program, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Mar. 4, 2019).

³ *Id.*

⁴ Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida*, xii (Jan. 2019), available at <https://www.dropbox.com/sh/59riiyz9eevvdq0/AACc4Rq3SJqiO-ZOYUA3TJMsa?dl=0&preview=Draft+2019+Save+Our+Indian+River+Lagoon+Project+Plan+Update+012919.pdf> (last visited Mar. 4, 2019).

⁵ IRL National Estuary Program, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Mar. 4, 2019).

⁶ 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 (last visited Mar. 4, 2019).

⁷ *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.

⁸ Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida*, xii (Jan. 2019), available at <https://www.dropbox.com/sh/59riiyz9eevvdq0/AACc4Rq3SJqiO-ZOYUA3TJMsa?dl=0&preview=Draft+2019+Save+Our+Indian+River+Lagoon+Project+Plan+Update+012919.pdf> (last visited Mar. 4, 2019).

⁹ *Id.* at 1.

drainfield; an aerobic treatment unit; a graywater tank; a laundry wastewater tank; a grease interceptor; a pump tank; a waterless incinerating or organic waste-composting toilet; and a sanitary pit privy.¹⁰ OSTDSs generally consist of two basic parts: the septic tank and the drainfield.¹¹ 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 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.¹²

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 septic systems within the state.¹³ There are an estimated 2.6 million OSTDSs in Florida, providing wastewater disposal for 30 percent of the state's population.¹⁴

In Florida, development in some areas is dependent on OSTDSs due to the cost and time it takes to install central sewer systems. For example, in rural areas and low-density developments, central sewer systems are not cost effective. Less than one percent of septic systems in Florida are actively managed.¹⁵ The remainder of systems are generally serviced only when they fail, often leading to costly repairs that could have been avoided with routine maintenance.¹⁶ In Florida, approximately 30-40 percent of the nitrogen levels are reduced in a system that is installed 24 inches or more from groundwater.¹⁷ This still leaves a significant amount of nitrogen to percolate into the groundwater, which makes nitrogen from OSTDSs a potential contaminant in groundwater.¹⁸ Nitrogen sensitivity of Florida watersheds varies greatly, and includes areas of extremely high sensitivity to nitrogen loading and other areas where nitrogen loading from OSTDSs may be less critical.¹⁹

¹⁰ DEP, *Septic Systems*, <https://floridadep.gov/water/domestic-wastewater/content/septic-systems> (last visited Mar. 6, 2019); *See s. 381.0065(2)(k), F.S.* “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 regulated under chapter 403.”

¹¹ 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 Mar. 6, 2019).

¹² *Id.*

¹³ Section 381.0065(3), F.S.

¹⁴ DOH, *Onsite Sewage*, <http://www.floridahealth.gov/environmental-health/onsite-sewage/index.html> (last visited Mar. 6, 2019).

¹⁵ 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> (last visited Mar. 11, 2019). The report begins on page 58 of the PDF.

¹⁶ *Id.*

¹⁷ 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> (last visited Mar. 6, 2019).

¹⁸ 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> (last visited Mar. 6, 2019).

¹⁹ DOH, *Florida Onsite Sewage Nitrogen Reduction Strategies Study, Final Report 2008-2015*, 13–14 (December 31, 2015).

In 1990, the Legislature enacted the Indian River Lagoon System and Basin Act, in part, to protect the IRL system from the improper use of OSTDS.²⁰ The law required the St. Johns River Water Management District and the South Florida Water Management District to identify areas where improper septic tank use poses a threat to the water quality of the IRL system.²¹ Each local government was required to develop and implement plans to provide centralized sewage collection and treatment facilities to the identified problem areas.²² There are six counties that have septic systems that contribute to the health of the IRL: Volusia, Brevard, Indian River, St. Lucie, Martin, and Palm Beach counties. In Brevard County alone, there are approximately 82,000 permitted septic systems, of which nearly 59,500 pollute groundwater that migrates to the IRL.²³ The estimated total cost to convert all septic tanks in the county to central sewage treatment is \$1.19 billion.²⁴

Muck Accumulation

Muck is a fine-grained organic rich sediment that is made up primarily of clay, sand, and decaying plant material. Thick layers of muck build up at the bottom of waterbodies and increase turbidity, inhibit seagrass growth, promote oxygen depletion in sediments and the water above, store and release nutrients, cover the natural bottom, and destroy healthy communities of benthic organisms.²⁵ Additionally, when muck is suspended within the water column due to wind or human activities, such as boating, these suspended solids limit light availability and further suppress seagrass growth.²⁶

Muck is not natural to the bottom of the lagoon, but it now covers an estimated 15,900 acres of the lagoon bottom in Brevard County, and tends to accumulate in deeper waters, sometimes in layers more than 6 feet thick.²⁷ Muck is transported into the lagoon through freshwater runoff, which carries with it soil from erosion and organic debris from sod, grass clippings, leaves, and other vegetation.²⁸ Muck also accumulates potential pollutants and stores and releases nutrients into the water, which can feed algae blooms.²⁹ The annual release of nutrients from decaying muck is almost as much as the annual external loading delivered by stormwater and groundwater baseflow combined.³⁰

²⁰ Chapter 90-262, Laws of Fla.

²¹ Chapter 90-262, s. 4, Laws of Fla.

²² *Id.*

²³ Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida*, 5 (Jan. 2019), available at <https://www.dropbox.com/sh/59riiyz9eevvdq0/AACc4Rq3SJqiO-ZOYUA3TJMsa?dl=0&preview=Draft+2019+Save+Our+Indian+River+Lagoon+Project+Plan+Update+012919.pdf> (last visited Mar. 4, 2019).

²⁴ *Id.* at 5.

²⁵ *Id.* at 52.

²⁶ *Id.*

²⁷ Florida SeaGrant, *Muck Removal in the Save Our Indian River Lagoon Project Plan, Brevard County*, <http://www.brevardfl.gov/docs/default-source/natural-resources-documents/muck-fact-sheet.pdf?sfvrsn=1> (last visited Mar. 7, 2019).

²⁸ *Id.*

²⁹ *Id.*

³⁰ Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida*, 52 (Jan. 2019), available at <https://www.dropbox.com/sh/59riiyz9eevvdq0/AACc4Rq3SJqiO-ZOYUA3TJMsa?dl=0&preview=Draft+2019+Save+Our+Indian+River+Lagoon+Project+Plan+Update+012919.pdf> (last visited Mar. 4, 2019).

Muck removal projects are very expensive and entail dredging muck from the bottom of the waterbody.³¹ Muck removal projects have more immediate effects on water quality than external reduction projects, because the nutrient load is reduced as soon as the muck is dredged or flushed from the system.³² The dredged material is then usually stored temporarily at the site to dry out and can be used for beneficial purposes, if deemed safe and cost-effective, or is transported to a landfill property for disposal.³³

In 2016, the Legislature appropriated \$21.5 million to Brevard County for the removal of muck from the IRL.³⁴ Of the appropriation, \$1.5 million was required to be given to the Indian River Lagoon Research Institute for the purpose of a scientific assessment to determine the environmental benefits of the project.³⁵ The long-term success of muck removal is dependent upon continued reductions in land-based sources of pollutants to prevent the continued build-up of muck in the lagoon.

Stormwater Runoff

Stormwater runoff contributes a significant portion of total nitrogen and total phosphorus to the lagoon each year.³⁶ Furthermore, the drainage basin for the IRL is more than 2,000 square miles, and discharges can substantially impact the balance of salinity in the estuarine ecosystem.³⁷ In Brevard County, there are more than 1,500 stormwater outfalls to the IRL.³⁸ Brevard County in 1990 implemented a stormwater utility assessment, which established an annual assessment rate of \$36 per year per equivalent residential unit (ERU), which increased to \$64/ERU in 2016.³⁹ The collections raised in 2016 from this assessment are estimated to be \$6 million.⁴⁰ Large-scale

³¹ *Id.* at 52-57.

³² *Id.* at 52.

³³ IFAS, *Muck Removal in the Save Our Lagoon Indian River Lagoon Project Plan, Brevard County*, <http://www.brevardfl.gov/docs/default-source/natural-resources-documents/muck-fact-sheet.pdf?sfvrsn=1> (last visited Mar. 7, 2019).

³⁴ Chapter 2016-66, Laws of Fla.

³⁵ *Id.*

³⁶ Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida*, 11 (Jan. 2019), available at <https://www.dropbox.com/sh/59riiyz9eevvdq0/AACc4Rq3SJqiO-ZOYUA3TJMsa?dl=0&preview=Draft+2019+Save+Our+Indian+River+Lagoon+Project+Plan+Update+012919.pdf> (last visited Mar. 4, 2019). Table 3-1 shows nutrient loadings from different sources in each sub-lagoon.

³⁷ IRL National Estuary Program, *Indian River Lagoon Comprehensive Conservation and Management Plan, Update 2008*, 19 (2008), available at https://www.epa.gov/sites/production/files/2015-09/documents/ccmp_update_2008_final.pdf (last visited Mar. 7, 2019).

³⁸ Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida*, 45 (Jan. 2019), available at <https://www.dropbox.com/sh/59riiyz9eevvdq0/AACc4Rq3SJqiO-ZOYUA3TJMsa?dl=0&preview=Draft+2019+Save+Our+Indian+River+Lagoon+Project+Plan+Update+012919.pdf> (last visited Mar. 4, 2019).

³⁹ *Id.* at 2.

⁴⁰ *Id.*

stormwater capture and treatment projects are intended to store and treat stormwater runoff before it enters the IRL.

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.⁴¹

Factors contributing to SSOs may include:

- Build-up of solids, fats, oils, and greases in the wastewater collection system impeding flow;
- Too much rainfall infiltrating through the ground into leaky sanitary sewers, which are not intended to hold rainfall. Excess water can also flow through roof drains connected to sewers or poorly connected sewer lines;
- Blocked, broken, or cracked pipes and other equipment or power failures that keep the system from properly functioning. Tree roots can grow into the sewer. Sections of pipe can settle or shift so that pipe joints no longer match. Sediment and other material can build up and cause pipes to break or collapse; and
- A deteriorating or aging sewer system that can be expensive to repair. Some municipalities have found severe problems, necessitating costly correction programs.⁴²

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. 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.⁴³

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.⁴⁴

After an SSO event, DEP reviews the data from utilities to assess the overall impact to the environment in deciding whether to take additional action. In its review, DEP considers how serious the violation was; whether this was a first-time violation or a repeated violation; whether

⁴¹ DEP, *Sanitary Sewer Overflows (SSOs)*, available at <https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf> (last visited Mar. 10, 2019).

⁴² DEP, *Preventing SSOs*, available at <https://floridadep.gov/sites/default/files/preventing-sanitary-sewer-overflows.pdf> (last visited Mar. 10, 2019); DEP, *SSOs*, available at <https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf> (last visited Mar. 10, 2019).

⁴³ DEP, *SSOs*, available at <https://floridadep.gov/sites/default/files/sanitary-sewer-overflows.pdf> (last visited Mar. 10, 2019).

⁴⁴ *Id.*

the violation was inadvertent or beyond reasonable control; and whether the damage to the environment can be undone or remediated quickly.⁴⁵ DEP also takes into account the severity of the rain event (e.g., if it was a hurricane or a storm, or if the area had received an unusually large amount of rainfall beyond historical averages). If the discharge was caused by operator error or lack of a certified operator on-site at the time, then DEP may consider additional training for operators to prevent similar errors from occurring in the future. In some circumstances, DEP will meet with utilities to discuss infrastructure repairs and process improvements the utility is making and planning to implement in order to avoid further SSOs.⁴⁶

Programs for Environmental Protection in the IRL

The St. Johns River Water Management District, the South Florida Water Management District, and local governments have been proactive in implementing projects to address water quality issues in the IRL. Brevard County established the Save Our Indian River Lagoon Project Plan.⁴⁷ The plan outlines local projects planned to meet water quality targets and improve the health, productivity, aesthetic appeal, and economic value of the lagoon.⁴⁸ In 2016, the county passed a referendum, approved by 62.4 percent of the voting population, to authorize the issuance of a half-cent infrastructure sales tax to pay for a portion of the plan.⁴⁹ The sales tax will generate approximately \$34 million per year.⁵⁰

There are four Basin Management Action Plans (BMAP) that have been adopted for the IRL.⁵¹ It is estimated that accomplishing the required nutrient load reductions in all four BMAPs that cover the IRL region would cost \$4.6 billion.⁵² With efforts extended over a 20-year period, it would require an annual investment of \$230 million to sustain an IRL-based economy.⁵³ The annual cost compared to the IRL's estimated total economic output of \$7.6 billion provides a

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Brevard County, *Brevard County Save Our Lagoon*, <https://www.brevardfl.gov/SaveOurLagoon/Home> (last visited Mar. 7, 2019).

⁴⁸ See Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida* (Jan. 2019), available at <https://www.dropbox.com/sh/59riiyz9eevvdq0/AACc4Rq3SJqiO-ZOYUA3TJMsa?dl=0&preview=Draft+2019+Save+Our+Indian+River+Lagoon+Project+Plan+Update+012919.pdf> (last visited Mar. 4, 2019).

⁴⁹ Brevard County Supervisor of Elections, *2016 General Election Official Results*, <http://enr.electionsfl.org/BRE/1616/Summary/> (last visited Mar. 9, 2019); see Brevard County Ordinance 2016-15, *1/2 Sales Tax: IRL Only*, (Aug. 23, 2016), available at <http://www.brevardfl.gov/docs/default-source/countymanager/save-our-lagoon-referendum-election-2016-ordinance-august-23-2016.pdf?sfvrsn=2> (last visited Mar. 7, 2019).

⁵⁰ Tetra Tech, Inc. & Closewaters, LLC, *Draft Save Our Indian River Lagoon Project Plan 2019 Update for Brevard County, Florida*, 149 (Jan. 2019) available at <https://www.brevardfl.gov/SaveOurLagoon/Home> (last visited Mar. 8, 2019).

⁵¹ 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 (last visited Mar. 4, 2019); DEP, *Basin Management Action Plans (BMAPs)*, <https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps> (last visited Mar. 7, 2019). A BMAP is a blueprint for restoring impaired waters to meet Total Maximum Daily Load (TMDL) standards under the federal Clean Water Act.

⁵² East Central Florida Regional Planning Council and the Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update*, x (Aug. 26, 2016).

⁵³ *Id.*

return on investment of 33:1, which can be expected to increase as the IRL improves in health and productivity.⁵⁴

The Indian River Lagoon National Estuary Program

In 1987, amendments to the federal Clean Water Act established the United States Environmental Protection Agency's (EPA) National Estuary Program.⁵⁵ The National Estuary Program is a non-regulatory, community-based program with the goals of restoring and maintaining the water quality and ecological integrity of estuaries of national significance.⁵⁶

The IRL National Estuary Program was established in 1990 when the EPA designated the IRL an "estuary of national significance."⁵⁷ In 1996, the IRL National Estuary Program used the local stakeholder process to develop the IRL Comprehensive Conservation and Management Plan (Management Plan).⁵⁸ The updated Management Plan was published in 2008.⁵⁹

In 2015, the IRL Council was established to govern and sponsor the IRL National Estuary Program.⁶⁰ The IRL Council includes DEP, the St. Johns River Water Management District, the South Florida Water Management District, Volusia County, Brevard County, St. Lucie County, Martin County, and a collection of local governments known as the IRL Lagoon Coalition.⁶¹ The goals of the parties to the interlocal agreement are the goals set forth in the Management Plan.⁶² The interlocal agreement established minimum annual funding contributions from each party to the IRL Council.⁶³ These contributions supplement annual funding from the EPA.⁶⁴

⁵⁴ *Id.*

⁵⁵ 33 U.S.C. § 1330; U.S. EPA, National Estuary Program (NEP), *Overview of the National Estuary Program*, <https://www.epa.gov/nep/overview-national-estuary-program> (last visited Mar. 7, 2019); U.S. EPA, *National Estuary Program Booklet*, available at https://www.epa.gov/sites/production/files/2015-09/documents/2009_12_23_estuaries_pdf_nep_brochure_timeless_new.pdf (last visited Mar. 5, 2019).

⁵⁶ U.S. EPA, *National Estuary Program Booklet*.

⁵⁷ IRL National Estuary Program, *Home*, <http://www.irlcouncil.com/> (last visited Mar. 7, 2019); IRL National Estuary Program, *Indian River Lagoon Comprehensive Conservation and Management Plan, Update 2008*, 2 (2008), available at https://www.epa.gov/sites/production/files/2015-09/documents/ccmp_update_2008_final.pdf (last visited Mar. 5, 2019). The IRL National Estuary Program is one of 28 National Estuary Program sites.

⁵⁸ IRL National Estuary Program, *Indian River Lagoon Comprehensive Conservation and Management Plan* (1996), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/irl_ccmp.pdf (last visited Mar. 7, 2019).

⁵⁹ IRL National Estuary Program, *Indian River Lagoon Comprehensive Conservation and Management Plan, Update 2008* (2008), available at https://www.epa.gov/sites/production/files/2015-09/documents/ccmp_update_2008_final.pdf (last visited Mar. 7, 2019).

⁶⁰ IRL National Estuary Program, *IRL Council*, <http://www.irlcouncil.com/irl-council.html> (last visited Mar. 7, 2019).

⁶¹ *Indian River Lagoon National Estuary Program Interlocal Agreement*, (Feb. 2015), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/irlnep_interlocal_agreement.pdf (last visited Mar. 7, 2019); *First Amended and Restated Indian River Lagoon National Estuary Program Interlocal Agreement*, (Sept. 2015), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/irlnep_amended_interlocal_agreement_2015.pdf (last visited Mar. 7, 2019).

⁶² *First Amended and Restated Indian River Lagoon National Estuary Program Interlocal Agreement*, 4 (Sept. 2015).

⁶³ *Id.* at 10.

⁶⁴ IRL National Estuary Program, *EPA 5-Year Program Evaluation*, <http://www.irlcouncil.com/5-year-program-evaluation.html> (last visited Mar. 7, 2019).

The 2008 Indian River Lagoon Comprehensive Conservation and Management Plan

The goals of the Management Plan are to:

- Attain and maintain water and sediment of sufficient quality to support a healthy estuarine lagoon system;
- Attain and maintain a functioning, healthy ecosystem which supports endangered and threatened species, fisheries, commerce and recreation;
- Achieve heightened public awareness and coordinated interagency management of the Indian River Lagoon ecosystem; and
- Identify and develop long-term funding sources for prioritized projects and programs to preserve, protect, restore and enhance the Indian River Lagoon.⁶⁵

The 2008 update to the Management Plan is organized into 23 action plans under four separate categories. For each action plan, the Management Plan states an objective, provides background on the problem, and lists specific action items and shows their progress and responsible parties.⁶⁶

The action plans are as follows:

- Water and Sediment Quality Controls:
 - Point Source Discharge Action Plan
 - On-site Sewage Treatment Action Plan
 - Fresh and Stormwater Discharges Action Plan
 - Marina and Boat Impacts Action Plan
 - Atmospheric Deposition Action Plan
 - Total Maximum Daily Load Action Plan
- Living Resources:
 - Biodiversity Action Plan
 - Seagrass Protection, Restoration, and Management Action Plan
 - Wetland Action Plan
 - Impounded Marsh Restoration and Management Action Plan
 - Land Acquisition and Protection Action Plan
 - Endangered and Threatened Species Action Plan
 - Fisheries Action Plan
 - Biotoxins and Aquatic Animal Health Action Plan
 - Climate Change Action Plan
 - Invasive Fauna and Flora Action Plan
- Public and Government Support and Involvement
 - Public Involvement and Education Action Plan
 - IRL CCMP Implementation Action Plan
 - Data Information and Management Strategy Action Plan
 - Monitoring Action Plan
 - IRL Scientific Research Action Plan
 - Environmental Incident Assessment and Response Action Plan

⁶⁵ IRL National Estuary Program, *Indian River Lagoon Comprehensive Conservation and Management Plan, Update 2008*, 3, 109 (2008), available at https://www.epa.gov/sites/production/files/2015-09/documents/ccmp_update_2008_final.pdf (last visited Mar. 7, 2019).

⁶⁶ *Id.* at 10–108, 109.

- Financing IRL Management Plan Implementation
 - Economic Analysis Action Plan⁶⁷

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.⁶⁸

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.⁶⁹ 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.⁷⁰

Under Florida law, facilities for sanitary sewage disposal are required to provide for "advanced waste treatment," as deemed necessary by DEP.⁷¹ 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.⁷² The specified concentrations pertain to the following: biochemical oxygen demand; suspended solid; total nitrogen; and total phosphorous.⁷³ The reclaimed water product must also have received high level disinfection, which is a standard of disinfection defined in DEP's regulations.⁷⁴

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.⁷⁵ As existing infrastructure ages, Florida utilities are placing greater emphasis on asset management systems to maintain service to customers. Florida is a national leader in reclaimed water use, which helps offset the state's potable water needs and is a vital component of water resource and ecosystem management. Nonetheless, population growth, aging infrastructure, and sensitive ecological environments are increasing the need to invest in Florida's wastewater infrastructure.

⁶⁷ *Id.* at 109. The table on 109 summarizes the Management Plan and shows the status of the action items.

⁶⁸ 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 Mar. 6, 2019).

⁶⁹ Section 403.087, F.S.

⁷⁰ DEP, *Wastewater Permitting*, <https://floridadep.gov/water/domestic-wastewater/content/wastewater-permitting> (last visited Mar. 6, 2019).

⁷¹ Section 403.086, F.S.

⁷² Section 403.086(4), F.S.

⁷³ Section 403.086(4)(a), F.S.

⁷⁴ Section 403.086(4)(b), F.S.; Fla. Admin. Code R. 62-600.440(6).

⁷⁵ American Society of Civil Engineers, *2016 Florida Infrastructure Report Card*, available at <https://www.infrastructurereportcard.org/state-item/florida/> (last visited Mar. 10, 2019).

Public Notice of Pollution Act

In 2017, the state passed the Public Notice of Pollution Act (Act).⁷⁶ The Act applies to any “reportable pollution release,” defined as the release or discharge of a substance from an installation to the air, land, or waters of the state which is: discovered by the owner or operator of the installation; not authorized by law; and reportable to the State Watch Office within the Division of Emergency Management pursuant to any department rule, permit, order, or variance.⁷⁷

Pursuant to DEP rules, the State Watch Office, within the Division of Emergency Management, must be notified of events such as the release of hazardous substances, wastewater discharges, petroleum discharges, and the discharge of dry-cleaning solvents.⁷⁸ The Act requires that an owner or operator of the installation at which the reportable pollution release occurs, within 24 hours of discovery by the owner or operator, must notify DEP of the release.⁷⁹ The Act requires DEP to publish on a publically accessible website, within 24 hours of reception, all notices received pursuant to the statute.⁸⁰ The Act also requires DEP to create an electronic mailing list for announcements of such notices, and establish an online form for receiving the pollution notices.⁸¹

The owner or operator of an installation is subject to civil penalties of up to \$10,000 per day for each day the owner or operator is in violation of the requirement to provide notification of a reportable pollution release.⁸² A person violating the Act is also liable to the state for “any damage caused to the air, waters, or property, including animal, plant, or aquatic life, of the state and for reasonable costs and expenses of the state in tracing the source of the discharge, in controlling and abating the source and the pollutants, and in restoring the air, waters, and property, including animal, plant, and aquatic life, of the state to their former condition.”⁸³

Pursuant to the Act, DEP provides a page on its website enabling the public to: submit or update pollution notices to DEP; subscribe to receive notifications whenever a pollution notice is submitted to DEP; and view a continuously updated page of information showing all notices of pollution DEP has received.⁸⁴

⁷⁶ Sections 403.076–403.078, F.S.

⁷⁷ Section 403.077(1), F.S.

⁷⁸ Section 376.3078(9)(c), F.S.; Fla. Admin. Code R. 62-780.210; Fla. Admin. Code R. 62S-6.022; Fla. Admin. Code R. 62-620.610; Fla. Admin. Code R. 62-604.550; and Fla. Admin. Code R. 62-150.300; DEP, *Emergency Response*, <https://floridadep.gov/water/water-compliance-assurance/content/emergency-response> (last visited Mar. 6, 2019).

⁷⁹ Section 403.077(2), F.S.

⁸⁰ Section 403.077(3), F.S.

⁸¹ *Id.*

⁸² Section 403.121(1), F.S.

⁸³ Sections 403.141(1) and 403.161(1)(e), (2), F.S. Section 403.141, F.S. states that the civil penalty for each offense shall not be more than \$10,000 per offense.

⁸⁴ Florida Department of Environmental Protection, *Public Notice of Pollution*, <https://floridadep.gov/pollutionnotice> (last visited Mar. 6, 2019).

Land Acquisition Trust Fund

Documentary stamp tax revenues are collected under ch. 201, F.S., which requires an excise tax to be levied on two classes of documents: deeds and other documents related to real property, which are taxed at the rate of 70 cents per \$100; and certificates of indebtedness, promissory notes, wage assignments, and retail charge account agreements, which are taxed at 35 cents per \$100.⁸⁵

In 2014, Florida voters approved Amendment One, a constitutional amendment to provide a dedicated funding source for land and water conservation and restoration. The amendment required that starting on July 1, 2015, and for 20 years thereafter, no less than 33 percent of net revenues derived from documentary stamp taxes be deposited into the Land Acquisition Trust Fund (LATF).⁸⁶ Article X, s. 28 of the State Constitution requires that funds in the LATF be expended only for the following purposes:

As provided by law, to finance or refinance: the acquisition and improvement of land, water areas, and related property interests, including conservation easements, and resources for conservation lands including wetlands, forests, and fish and wildlife habitat; wildlife management areas; lands that protect water resources and drinking water sources, including lands protecting the water quality and quantity of rivers, lakes, streams, springsheds, and lands providing recharge for groundwater and aquifer systems; lands in the Everglades Agricultural Area and the Everglades Protection Area, as defined in Article II, Section 7(b); beaches and shores; outdoor recreation lands, including recreational trails, parks, and urban open space; rural landscapes; working farms and ranches; historic or geologic sites; together with management, restoration of natural systems, and the enhancement of public access or recreational enjoyment of conservation lands.⁸⁷

To implement Art. X, s. 28 of the State Constitution, the Legislature passed ch. 2015-229, Laws of Florida. This act, in part, amended the following sections of law:

- Section 201.15, F.S., to conform to the constitutional requirement that the LATF receive at least 33 percent of net revenues derived from documentary stamp taxes; and
- Section 375.041, F.S., to designate the LATF within DEP as the trust fund to serve as the constitutionally mandated depository for the percentage of documentary stamp tax revenues.⁸⁸

Under s. 375.041, F.S., funds deposited into the LATF must be distributed in the following order and amounts:

- First, obligations relating to debt service, specifically:

⁸⁵ Sections 201.02 and 201.08, F.S.

⁸⁶ FLA. CONST. art. X, s. 28(a).

⁸⁷ FLA. CONST. art. X, s. 28(b)(1).

⁸⁸ Ch. 2015-229, sections 9 and 50, Laws of Fla.

- Payments relating to debt service on Florida Forever bonds and Everglades restoration bonds.
- Then, before funds are authorized to be appropriated for other uses:
 - A minimum of the lesser of 25 percent of the funds remaining after the payment of debt service or \$200 million annually for Everglades projects that implement the Comprehensive Everglades Restoration Plan (CERP), the Long-Term Plan, or the Northern Everglades and Estuaries Protection Program (NEEPP), with priority given to Everglades restoration projects that reduce harmful discharges of water from Lake Okeechobee to the St. Lucie or Caloosahatchee estuaries in a timely manner. From these funds, the following specified distributions are required:
 - \$32 million annually through the 2023-2024 Fiscal Year for the Long-Term Plan;
 - After deducting the \$32 million, the minimum of the lesser of 76.5 percent of the remainder or \$100 million annually through the 2025-2026 Fiscal Year for the CERP; and
 - Any remaining funds for Everglades projects under the CERP, the Long-Term Plan, or the NEEPP.
 - A minimum of the lesser of 7.6 percent of the funds remaining after the payment of debt service or \$50 million annually for spring restoration, protection, and management projects;
 - \$5 million annually through the 2025-2026 Fiscal Year to the St. Johns River Water Management District for projects dedicated to the restoration of Lake Apopka; and
 - \$64 million to the Everglades Trust Fund in the 2018-2019 Fiscal Year and each fiscal year thereafter, for the Everglades Agricultural Area reservoir project, and any funds remaining in any fiscal year shall be made available only for Phase II of the C-51 Reservoir Project or projects that implement CERP, the Long Term Plan, or NEEPP.
- Then, any remaining moneys are authorized to be appropriated for the purposes set forth in Art. X, s. 28 of the State Constitution.⁸⁹

The General Revenue Estimating Conference in December of 2018 estimated that for the 2019-2020 Fiscal Year a total of \$2.76 billion would be collected in documentary stamp taxes.⁹⁰ Thirty-three percent of the net revenues collected, or approximately \$906.6 million, must be deposited into the LATF in accordance with Art. X, s. 28 of the State Constitution.⁹¹

In 2015, two lawsuits were filed challenging the constitutionality of appropriations from the LATF and expenditures by state agencies.⁹² The cases were consolidated and a hearing was held in June of 2018.⁹³ The plaintiffs argued that funds from the LATF were appropriated and expended for general state expenses in ways that were inconsistent with the constitutional language. The court held for the plaintiffs, stating the amendment requires the funds be used for acquiring conservation lands, and for improving, managing, restoring, and enhancing public

⁸⁹ Section 375.041(3), (4), F.S.

⁹⁰ Office of Economic & Demographic Research, Revenue Estimating Conference, *Documentary Stamp Tax, Executive Summary*, 3 (2018), available at <http://edr.state.fl.us/Content/conferences/docstamp/docstampexecsummary.pdf> (last visited Mar. 6, 2019).

⁹¹ *Id.*

⁹² *Florida Wildlife Federation, Inc. v. Negron*, No. 2015-CA-001423 (Fla. 2nd Cir. Ct.); *Florida Defenders of the Environment, Inc., v. Detzner*, No. 2015-CA-002682 (Fla. 2nd Cir. Ct.).

⁹³ *Florida Wildlife Federation, Inc. v. Negron*, Nos. 2015-CA-001423, 2015-CA-002682 (Fla. 2nd Cir. Ct. June 28, 2018).

access to conservation lands acquired after the effective date of the amendment.⁹⁴ The decision described how LATF funds may be used, and ruled numerous appropriations from 2015 and 2016 unconstitutional.⁹⁵ The case was appealed and is currently in the First District Court of Appeal.⁹⁶

III. Effect of Proposed Changes:

Section 1 amends s. 375.041, F.S., to create annual appropriation from the LATF for projects implementing the Indian River Lagoon Comprehensive Conservation and Management Plan (Management Plan). The bill requires an annual appropriation that is, at minimum, the lesser of 7.6 percent of the LATF funds remaining after the payments for debt service or \$50 million dollars.⁹⁷ The distribution must be reduced by the amount of the debt service payment if any bonds are issued by this subparagraph.

The bill requires the Department of Environmental Protection (DEP) to use the funds to provide grants for the following categories of projects that implement the updated Management Plan, including multiyear grants for construction of such projects:

- Constructing facilities or updating existing facilities that provide “advanced waste treatment,” which is treatment providing a reclaimed water product meeting the standards for high level disinfection and concentrations of contaminants or nutrients specified in s. 403.086(4), F.S.
- Expanding existing wastewater treatment facilities to bring services to homes and business that are not connected to an existing wastewater treatment facility.
- Connecting onsite sewage treatment and disposal systems to central sewer systems.

DEP must require that each grant receive, at minimum, a 50 percent local match. To identify grant recipients, DEP is authorized to coordinate with any of Florida’s water management districts, as necessary. DEP is required to submit annually to the Governor and the Legislature a report on the projects funded through the LATF appropriation. The report is due on January 1 of each year, beginning in 2020.

Section 2 creates s. 403.0771, F.S., on sewage spill notification. The bill requires that a wastewater treatment facility that illegally discharges raw or partially treated sewage into an aquifer or waterway must, within 24 hours after discovering the discharge, notify its customers that the discharge has occurred. This notification requirement is in addition to existing requirements for a “reportable pollution release,” which must be reported to DEP.

Section 3 amends s. 403.141, F.S., which establishes the civil liability and penalties for certain violations of ch. 403, F.S. The bill adds penalties for unlawful discharges from wastewater treatment facilities, which are not subject to the section’s existing civil penalty limitation of not

⁹⁴ *Id.* at 3.

⁹⁵ *Id.* at 7–8.

⁹⁶ *Oliva v. Florida Wildlife Federation, Inc.*, 1D18-3141 (Fla. 1st Dist. Ct. App.).

⁹⁷ 7.6 percent would amount to \$56.5 million based on estimates for Fiscal Year 2019-20. This amount can be calculated by taking the total amount of documentary stamp tax collections to LATF (906.61), subtracting the debt service (163.61), and then calculating 7.6 percent of the remainder (multiply 743 by .076).

more than \$10,000 per offense. The bill requires a wastewater treatment facility that illegally discharges raw or partially treated sewage into any waterway or aquifer to do one of two things:

- Pay DEP an amount equal to \$1 for every gallon of sewage discharged; or
- Spend, with DEP's approval, \$2 for every gallon of sewage discharged to upgrade or remediate the problems that caused the discharge.

Section 4 states that the act shall take effect on July 1, 2019.

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:

This bill would require annual appropriations from the LATF for projects that implement the Management Plan. The LATF has constitutionally restricted uses, which are discussed in the Present Situation section of this bill analysis.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The bill would provide grant funding for projects in the IRL area that would help residents and businesses connect to or gain access to advanced waste treatment, wastewater treatment facilities, or central sewer systems. Normally, such connections and services can require substantial costs from residents and businesses. Therefore, the bill may result in a positive, indeterminate fiscal impact on the private sector.

The bill would create new penalties, which may exceed existing civil penalty limitations, for wastewater treatment facilities that unlawfully discharge sewage. The bill also creates

new notification requirements for wastewater treatment facilities that unlawfully discharge sewage. Therefore, the bill may have a negative, indeterminate fiscal impact on private wastewater treatment facilities that unlawfully discharge sewage.

The bill would fund projects that implement the Management Plan. These projects could provide revenue for private businesses. Therefore, this bill may have a positive, indeterminate fiscal impact on the private sector.

C. Government Sector Impact:

The bill requires DEP to create a new grant funding program for projects implementing the Management Plan. This may cause DEP to incur additional costs.

The bill adds a potential penalty where DEP may receive a dollar for every gallon of sewage unlawfully discharged from a wastewater treatment facility. This may result in a positive, indeterminate fiscal impact for DEP.

VI. Technical Deficiencies:

Section 403.141, F.S. establishes civil penalties that are judicially imposed by a court. The bill amends this section to add penalties assessed directly by DEP, which may not involve a civil action. The bill also exempts these penalties from the section's civil penalty limitation, even though a limitation on civil penalties may not apply to administrative penalties. Adding the penalties instead to s. 403.121, F.S., which provides for administrative remedies, may resolve this issue.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 375.041 and 403.141.

This bill creates section 403.0771 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.