

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 640

INTRODUCER: Senator Harrell

SUBJECT: Indian River Lagoon State Matching Grant Program

DATE: December 6, 2019

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Schreiber	Rogers	EN	Favorable
2.	_____	_____	AEG	_____
3.	_____	_____	AP	_____

I. Summary:

SB 640 creates a grant program for state funding of certain projects that improve water quality and wastewater infrastructure in the Indian River Lagoon. The bill requires the Department of Environmental Protection (DEP) to coordinate with the appropriate water management districts to identify eligible projects. Each grant must require at least a 50 percent local match.

The bill requires DEP to submit an annual report on the proposed projects and projects receiving state funding. Counties or municipalities must submit annual status reports to DEP and the appropriate water management district on each project receiving funding through the program.

II. Present Situation:

The Indian River Lagoon

The Indian River Lagoon system (IRL) is a 156-mile-long estuary spanning approximately 40 percent of Florida's east coast.¹ There are six coastal counties in the IRL watershed: Volusia, Brevard, Indian River, St. Lucie, Martin, and Palm Beach.² The IRL extends from Ponce de Leon Inlet near New Smyrna Beach in Volusia County to the southern border of Jupiter Inlet in Martin County.³ There are three interconnected lagoons in the IRL basin: Mosquito Lagoon, Banana River Lagoon, and Indian River Lagoon.⁴ Seventy-one percent of its area and nearly half

¹ DEP, Basin Management Action Plan, *Indian River Lagoon Basin Central Indian River Lagoon*, xi (2013), available at <https://floridadep.gov/sites/default/files/central-irl-bmap.pdf>; IRLNEP, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Dec. 4, 2019).

² DEP, Basin Management Action Plan, *Indian River Lagoon Basin Central Indian River Lagoon*, xi (2013).

³ IRLNEP, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Dec. 4, 2019).

⁴ DEP, TMDL Report, *Nutrient and Dissolved Oxygen TMDLs for the Indian River Lagoon and Banana River Lagoon*, 1 (Mar. 2009), available at <https://floridadep.gov/sites/default/files/indian-banana-nutrient-do-tmdl.pdf>.

its length is within Brevard County.⁵ The IRL is considered the most biologically diverse estuary in North America.⁶

The IRL is home to more than 2,000 species of plants, 600 species of fish, 300 species of birds, and 53 threatened or endangered species.⁷ In 2014, the estimated annual economic value received from the IRL was approximately \$7.6 billion, around \$1.57 billion of which is attributable to recreation and visitor-related activity.⁸ Industry groups that are directly influenced by the IRL support nearly 72,000 jobs.⁹

The IRL ecosystem has been harmed by human activities in the region. Stormwater runoff from urban and agricultural areas, wastewater treatment facility discharges, canal discharges, septic systems, animal waste, and fertilizer applications have led to harmful levels of nutrients and sediments entering the lagoon.¹⁰ These pollutants create cloudy conditions, feed algal blooms, and lead to muck accumulation, all of which negatively impact the seagrass that provides habitat for much of the IRL's marine life.¹¹ During the 2011 "Superbloom," intense algal blooms of phytoplankton occurred throughout most of the IRL, lasting for seven months and resulting in massive losses of seagrass that has yet to fully recover.¹² There have also been recurring brown tides; unusual mortalities of dolphins, manatees, and shorebirds; and large fish kills due to low dissolved oxygen from decomposing algae.¹³ Brown tide is a type of algal bloom dominated by a brown, microscopic marine algae, which can be harmful to ecosystems in high concentrations, and was first documented in state waters in 2012.¹⁴ The St. Lucie Estuary is a major tributary to

⁵ Tetra Tech, Inc. & Closewaters, LLC, *Save Our Indian River Lagoon Project Plan 2019 Update*, xii (Mar. 2019)[hereinafter *Save Our Lagoon*], available at

<https://www.dropbox.com/s/j9pxd59mt1baf7q/Revised%202019%20Save%20Our%20Indian%20River%20Lagoon%20Project%20Plan%20Update%20032519.pdf?dl=0>.

⁶ DEP, Basin Management Action Plan, *Indian River Lagoon Basin Central Indian River Lagoon*, 18 (2013), available at <https://floridadep.gov/sites/default/files/central-irl-bmap.pdf>; An estuary is a partially enclosed, coastal waterbody where freshwater from rivers and streams mixes with saltwater from the ocean. Estuaries are among the most productive ecosystems on earth, home to unique plant and animal communities that have adapted to brackish water: freshwater mixed with saltwater. U.S. EPA, *What Is An Estuary?*, <https://www.epa.gov/nep/basic-information-about-estuaries> (last visited Dec. 2, 2019); NOAA, *What Is An Estuary?*, <https://oceanservice.noaa.gov/facts/estuary.html> (last visited Dec. 2, 2019).

⁷ IRLNEP, *About the Indian River Lagoon*, <http://www.irlcouncil.com/> (last visited Dec. 4, 2019).

⁸ East Central Florida Regional Planning Council and Treasure Coast Regional Planning Council, *Indian River Lagoon Economic Valuation Update*, vi, ix (Aug. 26, 2016), available at http://tcrpc.org/special_projects/IRL_Econ_Valu/FinalReportIRL08_26_2016.pdf.

⁹ *Id.* at ix.

¹⁰ *Save Our Lagoon* at xii; Marine Resources Council, *Indian River Lagoon Health Update*, 4-7 (2018), available at <https://savetheirl.org/wp-content/uploads/mrc-report-card-2018-min.pdf>.

¹¹ *Save Our Lagoon* at xii.

¹² IRL 2011 Consortium, *Indian River Lagoon 2011 Superbloom - Plan of Investigation*, 2-3 (2012), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/23_2011superbloom_investigationplan_june_2012.pdf; IRLNEP, *Annual Report - 2018*, 9 (2018), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/2018annualrept_medred.pdf.

¹³ *Save Our Lagoon* at xii.

¹⁴ SJRWMD, *Renewing the Lagoon - Frequently Asked Questions*, <https://www.sjrwmd.com/waterways/renew-lagoon/#faq-01> (last visited Nov. 25, 2019); FWC, *Effects of Brown Tide in the Indian River Lagoon (2012)*, <https://myfwc.com/research/redtide/monitoring/historical-events/brown-tide/> (last visited Nov. 25, 2019).

the southern IRL, so freshwater discharges from Lake Okeechobee, which can include toxic cyanobacteria (“blue-green algae”), also impact the IRL.¹⁵

The St. John’s River Water Management District, South Florida Water Management District, and local governments implement projects that address water quality issues in the IRL.¹⁶ Brevard County established the Save Our Indian River Lagoon Project Plan, which outlines local projects to meet water quality targets and improve the health, productivity, aesthetic appeal, and economic value of the IRL.¹⁷ In 2016, Brevard County passed a referendum, approved by 62.4 percent of voters, to authorize the issuance of a half-cent infrastructure sales tax to pay for a portion of the plan.¹⁸ The sales tax will generate an estimated annual average of \$48.6 million from 2017 through 2026.¹⁹

The Indian River Lagoon National Estuary Program

The U.S. Environmental Protection Agency’s (EPA) National Estuary Program is a community-based program to protect and restore the water quality and ecological integrity of estuaries of national significance.²⁰ Currently, 28 estuaries located along the Atlantic, Gulf, and Pacific coasts and in Puerto Rico are designated as estuaries of national significance. Each National Estuary Program focuses within a study area that includes the estuary and surrounding watershed. Through a process of involving community stakeholders, the 28 National Estuary Programs develop and implement Comprehensive Conservation and Management Plans, which are long-term plans that contain actions to address water quality and living resource challenges and priorities. The NEP challenges and priorities are defined by local, city, state, federal, private, and non-profit stakeholders.²¹

The IRL National Estuary Program was established in 1990 under the sponsorship of the St. Johns River and South Florida Water Management Districts.²² The program developed the Indian River Lagoon Comprehensive Conservation and Management Plan Update, first

¹⁵ DEP, Basin Management Action Plan, *St. Lucie River and Estuary Basin*, xi (2013), available at <https://floridadep.gov/sites/default/files/stlucie-estuary-nutr-bmap.pdf>; IRLNEP, *Annual Report - 2018*, 9 (2018); Marine Resources Council, *Indian River Lagoon Health Update*, 11 (2018).

¹⁶ SJRWMD, *The Indian River Lagoon*, <https://www.sjrwmd.com/waterways/indian-river-lagoon/> (last visited Nov. 25, 2019); SFWMD, *Indian River Lagoon - C-44 Reservoir and Stormwater Treatment Area (STA) (STA Component Only)*, <https://sfwmd.maps.arcgis.com/apps/Shortlist/index.html?appid=dbe8d2d61be74986bf081c2a0f0a4108> (last visited Nov. 25, 2019).

¹⁷ *Save Our Lagoon* at xii, available at <https://www.dropbox.com/s/j9pxd59mt1baf7q/Revised%202019%20Save%20Our%20Indian%20River%20Lagoon%20Project%20Plan%20Update%20032519.pdf?dl=0>.

¹⁸ Brevard County Supervisor of Elections, *2016 General Election Official Results*, <https://enr.electionsfl.org/BRE/1616/Summary/> (last visited Nov. 25, 2019); Brevard County Ordinance 2016-15, *Placing a Referendum on November 8, 2016 Ballot for One-Half Cent Infrastructure Sales Tax to Fund Implementation of the Save Our Lagoon Project Plan* (Aug. 23, 2016), available at <https://www.brevardfl.gov/docs/default-source/countymanager/save-our-lagoon-referendum-election-2016-ordinance-august-23-2016.pdf?sfvrsn=2&sfvrsn=2>.

¹⁹ *Save Our Lagoon* at 96.

²⁰ 33 U.S.C. s. 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 Nov. 22, 2019).

²¹ EPA, *Overview of the National Estuary Program*.

²² IRLNEP, *Program History*, <http://www.irlcouncil.com/> (last visited Nov. 22, 2019).

published in 1997 and updated in 2008.²³ The 2008 plan contains 23 action plans, including the Point Source Discharges Action Plan and the On-site Sewage Treatment and Disposal Systems Action Plan.²⁴

In 2015, the IRL Council was established to carry out the IRL National Estuary Program.²⁵ The 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 Indian River County Lagoon Coalition.²⁶ The goals of the parties to the IRL Council's interlocal agreement are the goals set forth in the amended Comprehensive Conservation and Management Plan.²⁷ The interlocal agreement established minimum annual funding contributions from each party to the IRL Council.²⁸ These contributions supplement annual funding from the EPA.²⁹

DEP has designated both the Indian River Lagoon and Banana River Lagoon as impaired water bodies. In 2009, DEP adopted total maximum daily load (TMDL) water quality restoration targets for these two lagoons.³⁰ In 2013, DEP adopted three Basin Management Action Plans to achieve these TMDLs.³¹ In 2019, the Legislature appropriated recurring funds from the General Revenue Fund to the IRL National Estuary Program for activities necessary to achieve the TMDLs for the Indian River and Banana River Lagoons.³²

Consolidated Annual Reports

By March 1 of each year, each water management district must submit a consolidated annual report to the Governor, the Legislature, and DEP.³³ The districts must also provide copies of the report to the chairs of the legislative committees having substantive or fiscal jurisdiction over the districts, and the governing boards of each county in the district having jurisdiction or deriving any funds for operations of the district.³⁴ The report must also be made available to the public in

²³ IRLNEP, *Indian River Lagoon Comprehensive Conservation and Management Plan Update* (2008), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/ccmp_update_2008_final.pdf.

²⁴ *Id.* at 10-18, 109-111.

²⁵ IRLNEP, *Program History*, <http://www.irlcouncil.com/> (last visited Nov. 22, 2019).

²⁶ *First Amended and Restated Indian River Lagoon National Estuary Program Interlocal Agreement*, 1-3 (Sept. 2015), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/irlnep_amended_interlocal_agreement_2015.pdf.

²⁷ *Id.* at 4.

²⁸ *Id.* at 10.

²⁹ IRLNEP, *EPA 5-Year Program Evaluation*, <http://www.irlcouncil.com/5-year-program-evaluation.html> (last visited Nov. 11, 2019); IRLNEP, *Annual Report - 2018*, 13 (2018), available at http://www.irlcouncil.com/uploads/7/9/2/7/79276172/2018annualrept_medred.pdf.

³⁰ DEP, TMDL Report, *Nutrient and Dissolved Oxygen TMDLs for the Indian River Lagoon and Banana River Lagoon*, 49-64 (Mar. 2009), available at <https://floridadep.gov/sites/default/files/indian-banana-nutrient-do-tmdl.pdf>; see also DEP, TMDL Report, *Dissolved Oxygen and Nutrient TMDLs for Eight Tributary Segments of the Indian River Lagoon* (2013), available at http://publicfiles.dep.state.fl.us/DEAR/DEARweb/TMDL/Final_TMDL/gp5/irltrib_donut_tmdl_mainreport.pdf.

³¹ DEP, *Basin Management Action Plans (BMAPs)*, <https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps> (last visited Nov. 22, 2019). Links to the three plans are located under "adopted BMAPS."

³² Chapter 2019-115, Laws of Fla., Specific Appropriation 1678.

³³ Section 373.036(7), F.S.

³⁴ *Id.*

either a printed or an electronic format.³⁵ The consolidated annual reports must include various plans and reports regarding the status of each district's respective water resource programs.³⁶

III. Effect of Proposed Changes:

Section 1 creates s. 373.4594, F.S., entitled "Indian River Lagoon State Matching Grant Program." The program makes projects dedicated to the conservation and management of the Indian River Lagoon eligible for state funding consideration.

The bill requires the Department of Environmental Protection (DEP) to use program funds to provide grants for the following projects identified in the Indian River Lagoon Comprehensive Conservation and Management Plan, as updated in 2008:

- Upgrading existing facilities that provide "advanced waste treatment," as specifically defined in s. 403.086(4), F.S.³⁷
- Expanding existing wastewater treatment facilities to bring services to existing homes and business that are not connected to an existing wastewater treatment facility.
- The connection of onsite sewage treatment and disposal systems to a central sewer system.

The bill requires DEP to coordinate with the South Florida Water Management District and the St. Johns River Water Management District to identify eligible projects and grant recipients for state funding consideration. Each grant must require a minimum of a 50 percent local match.

The bill requires DEP to create an annual report on the projects proposed for state funding consideration and the projects receiving state funding through the grant program. DEP must submit the report by January 1, 2021, and each January 1 thereafter, to the Governor, the President of the Senate, the Speaker of the House of Representatives, and each state senator and state representative for the areas in the Indian River Lagoon Comprehensive Conservation and Management Plan. The report must include:

- The projects identified for state funding consideration, including, at a minimum:
 - A priority ranking based on the most cost-effective pollutant reduction projects for each listed project that will be ready to proceed in the upcoming fiscal year.
 - The estimated cost of each listed project.
 - The estimated completion date of each listed project.
 - The source and amount of financial assistance to be provided by county or municipal governments, water management districts, or other entities for each listed project.
- The implementation status of each projects receiving state funding through the grant program.

³⁵ *Id.*

³⁶ *Id.*

³⁷ Section 403.086(4), F.S. The statute defines "advanced waste treatment" as treatment which will provide a reclaimed water product that: (a) Contains not more, on a permitted annual average basis, than the following concentrations: 1. Biochemical Oxygen Demand (CBOD5) - 5mg/l, 2. Suspended Solids - 5mg/l, 3. Total Nitrogen, expressed as N - 3mg/l, and 4. Total Phosphorus, expressed as P - 1mg/l; and (b) Has received high level disinfection, as defined by rule of the department (see Fla. Admin. Code R. 62-600.440(6)). In those waters where the concentrations of phosphorus have been shown not to be a limiting nutrient or a contaminant, the department may waive or alter the compliance levels for phosphorus until there is a demonstration that phosphorus is a limiting nutrient or a contaminant.

The bill requires a county or municipality that has had a project funded through the grant program to submit a status report annually on each project receiving state funding through the grant program. The status report must be submitted to DEP and the appropriate water management district for inclusion in the consolidated water management district annual report.

Section 2 states that the act shall take effect on 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:

None.

C. Government Sector Impact:

The bill requires DEP to administer a new grant program and produce additional annual reports, which may cause DEP to incur additional costs.

The bill would provide grant funding opportunities to local governments for certain water quality and wastewater infrastructure projects. This funding may pay up to 50 percent of the project costs, where local governments may otherwise be paying the entire cost of such projects. Therefore, this bill may have an indeterminate, positive fiscal impact on local governments.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill creates section 373.4594 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.