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 General Government Appropriations Committee

BILL:	CS/CS/SB 1302
INTRODUCER:	General Government Appropriations Committee, Environmental Preservation and Conservation Committee, and Senator Saunders
SUBJECT:	Maintenance Dredging/Division of Beaches & Shores
DATE:	April 2, 2008 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Bascom	Kiger	EP	**Fav/CS**
2.	Kynoch	DeLoach	GA	**Fav/CS**
3.				
4.				
5.				
6.				

I. Summary:

The bill directs the South Florida Water Management District (SFWMD) to include water resource and water supply development projects that promote the elimination of wastewater ocean outfalls within its regional water supply plan. It also provides that such projects should be given first consideration for state or water management district funding assistance. The SFWMD must require of the use of reclaimed water made available by the elimination of the wastewater ocean outfalls as part of their consumptive use permitting process.

The bill prohibits the new construction or expansion of wastewater ocean outfalls and limits the discharge of wastewater through ocean outfalls to the permitted capacity in effect on July 1, 2008. It requires that discharge of domestic wastewater through ocean outfalls meet advanced wastewater treatment and management requirements pursuant to section 403.086 (4), Florida Statutes, or a reduction in baseline loadings of total nitrogen and total phosphorus, equivalent to advanced wastewater treatment requirements, as determined by the Department of Environmental Protection (department) by December 31, 2018. It provides an exemption to treatment standards for those facilities who meet 100 percent reuse for domestic wastewater discharge by the same date.

The bill requires all facilities that discharge domestic wastewater through ocean outfalls to achieve, at a minimum, 60 percent reuse of the facilities actual annual flow by December 31, 2025, and prohibits discharge through ocean outfalls beyond that date, unless as a backup to the functioning reuse system.

Finally, the bill creates a reporting schedule for permit holders who discharge domestic wastewater through ocean outfalls, to detail the plan to meet the requirements of the act and a summary of actions accomplished to date. The bill provides a reporting schedule for the department, to summarize the progress to date, to be submitted to the Legislature.

The bill amends the following sections of the Florida Statutes: 373.0361, 373.0831, 373.1961, 373.250, 403.085, 403.086, and 403.1835.

II. Present Situation:

There are six existing facilities in Palm Beach, Broward, and Miami-Dade Counties discharging approximately 300 million gallons of treated domestic wastewater directly into the Atlantic Ocean every day through ocean outfalls. At the same time, the demand for public water supply in these three counties is projected to grow by that same amount over the next 20 years, to a total of almost 1.15 billion gallons per day by 2028. The traditional sources of water supply in Southeast Florida, including groundwater and the "regional system" of the Everglades and Lake Okeechobee, are being used beyond sustainable levels. Continuing water restrictions associated with the current drought highlight the need to develop "drought-proof" alternative water supplies.

Reuse of reclaimed water is a proven, safe, and economically feasible substitute for potable water for urban and agricultural landscapes, industrial and commercial uses, and augmenting or recharging surface and groundwater supplies. Currently, approximately six percent of the wastewater at the six facilities is reused rather than discharged. Excluding the three counties using ocean outfalls, 61 percent of Florida's domestic wastewater is reused every day. By contrast, the three counties discharging through ocean outfalls use ten percent of their domestic wastewater for beneficial reuse activities.

A growing line of evidence suggests that land-based sources of pollutants, especially nutrients, are affecting the health of the coral reefs off the Southeast coast of Florida. These reef habitats contribute significantly to tourism and the overall economy in South Florida. While ocean outfalls represent only one of many land-based sources of pollution contributing to the decline of our coastal environment, this wastewater can be effectively captured, treated, and reused to meet growing water supply demands.[1]

III. Effect of Proposed Changes:

Section 1 amends s. 373.0361, F.S., to direct the South Florida Water Management District to include water resource and water supply development projects that promote the elimination of wastewater ocean outfalls in its regional water supply plan.

Section 2 amends s. 373.0831, F.S., to require that water supply development projects that meet one of the following criteria be given priority for state or water management district funding assistance.

[1] Information provided by the Department of Environmental Protection bill analysis.

- The project provides replacement of existing sources to help implement a minimum flow or level.
- The project implements reuse that assists in the elimination of domestic wastewater ocean outfalls.

Section 3 amends s. 373.1961, F.S., to require water management district governing boards to give significant weight to projects that implement reuse as a means to eliminate ocean outfalls when determining which projects receive financial assistance.

Section 4 amends s. 373.250, F.S., to direct the SFWMD to require the use of reclaimed water made available through the elimination of ocean outfalls during its consumptive use permitting process.

Section 5 amends s. 403.085, F.S., to eliminate ocean outfalls as a means of advanced or secondary sewage treatment disposal.

Section 6 amends s. 403.086, F.S., to provide legislative intent and to prohibit the new construction or expansion of existing ocean outfalls for domestic wastewater discharge. The change also limits the discharge capacity of existing ocean outfalls to the permitted capacity that exists on July 1, 2008.

The discharge of domestic wastewater through ocean outfalls must meet one of the following standards by December 31, 2018.

- Advanced wastewater standards pursuant to s. 403.086 (4), F.S.
- An equivalent reduction in baseline loadings of total nitrogen and total phosphorus.
- An equivalent reduction in cumulative outfall loadings of total nitrogren and total phosphorus over a specified period.

The department shall establish the baseline loadings for each outfall based on the average total nitrogen and total phosphorus loading rates for calendar years 2003 through 2007. These standards shall be deemed to be met for facilities that install, no later than December 31, 2018, a fully functional and operational reuse system that comprises 100 percent of the facilities annual average daily load.

Each domestic wastewater facility that discharges through an ocean outfall must install a functioning reuse system no later than December 31, 2025. Such reuse systems shall be environmentally, economically, and technically feasible and provide a minimum 60 percent reuse of a facility's actual flow. Utilities that operate more than one outfall may combine the actual flows of each facility to determine the 60 percent reuse requirement. Any additional treatment required to support a functioning reuse system must be fully operational no later than December 31, 2025.

Discharge of domestic wastewater through an ocean outfall is prohibited after December 31, 2025, unless it is as a backup to a functioning reuse system during periods of low demand or wet weather. Those discharges shall meet the treatment requirements established in this act.

Facilities that hold a department permit authorizing the discharge of domestic wastewater through ocean outfalls as of July 1, 2008, shall submit to the secretary of the department the following.

- A detailed plan to meet the requirements of this act, which includes:
  - Identification of all land acquisition needs to provide for reuse.
  - An analysis of the costs associated in meeting the requirements of this act.
  - A financing plan to meet the requirements of this act.
  - A detailed schedule for the completion of all actions required under this act.
- The plan must be submitted no later than July 1, 2013.
- By July 1, 2016, all facilities shall submit an update of the above required plan documenting any refinements or changes to the original plan or a written statement that the plan is current and accurate.
- By December 31, 2009, and by each December 31 every five years thereafter, the permittee, as identified above, shall submit a report summarizing the actions accomplished to date and the actions remaining to meet the requirements of this act. These reports shall include:
  - The detailed schedule for and status of the evaluation of reuse and disposal options.
  - The preparation of preliminary design reports.
  - The preparation and submittal of permit applications.
  - Construction initiation, progress, and completion milestones.
  - The initiation and continuation of operation and maintenance

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By July 1, 2010, and by each July 1 ever five years thereafter, the department shall submit a report to the Governor, President of the Senate, and Speaker of the House of Representatives on the implementation of this act. The report shall include:

- Progress to date.
- The amount of increased reclaimed water provided and potable water offsets achieved.
- Any obstacles to continued progress.

The renewal of any permit that authorizes the discharge of domestic wastewater through ocean outfalls as of July 1, 2008, must be accompanied by an order in accordance with water pollution operation permit conditions, pursuant to s. 403.088, F.S., establishing an enforceable compliance schedule.

Section 7 amends s. 403.1835, F.S., to establish that projects meeting the requirements for the elimination of ocean outfalls are eligible for water pollution control financial assistance.

Section 8 provides that this act shall take effect July 1, 2008.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

This bill requires all utilities, including those owned and operated by cities and counties, that operate facilities that discharge through ocean outfalls to expend funds to upgrade such facilities, in order to meet the requirements of the act.

Section 18(a), Art. VII of the State Constitution provides that a city or county is not bound by any general law requiring the city or county to spend funds or to take an action to expend funds unless the Legislature has determined that the law fulfills an important state interest and unless, for purposes relevant to this bill, the expenditure is required to comply with a law that applies to all persons similarly situated or the law requiring the expenditure is approved by two-thirds of the membership of each house of the Legislature.

The bill applies to all similarly situated persons and fulfills an important state interest.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Individuals or businesses that are supplied by utilities effected by the legislation would likely see an increase in water rates as a result of costs incurred by the utility. A 2006 University of Florida study[2] indicated that the increased water costs of eliminating ocean outfalls, including treatment and reuse, would range from $1.85 per 1000 gallons to $3.33 per 1000 gallons for an average of $2.64 per 1000 gallons. The report also indicates that a household using an average of 7500 gallons of water per month would have an additional average cost of $19.80 per month. Precise costs are not likely to be known until the detailed plans are submitted in 2013.

C. Government Sector Impact:

There is no fiscal impact to the state. According to the department, the provisions of the bill could be implemented within existing resources.

There would be significant local government costs for the treatment, upgrade, and development of alternative disposal options, including reuse of reclaimed water. These would be reflected in increases to utility rates.

[2] *Ocean Outfall Study, University of Florida Department of Environmental Engineering Sciences, Koopman/Heaney et al, April 18, 2006;* report available at http://dep.state.fl.us/water/reuse/docs/OceanOutfallStudy.pdf

There would also be substantial costs associated with operation and maintenance of the upgraded wastewater treatment systems that would also be reflected in changes to utility rates. The costs to a specific facility would depend on a variety of circumstances, including the specific suite of reuse alternatives selected, existing treatment processes, local physical circumstances, individual engineering choices, method of financing, and other potentially unique situations.

There are also savings associated with use of reclaimed water to offset the increasing water supply demands. Savings would be realized from reusing reclaimed water in lieu of developing other costly water resource alternatives, such as desalination.

Precise cost are not likely to be known until detailed plans are submitted in 2013.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS/CS by General Government Appropriations on April 2, 2008:

The committee substitute allows counties to meet advanced wastewater treatment requirements by 2018 by reducing the volume of outflows.

CS by Environmental Preservation and Conservation Committee on March 19, 2008:

The committee substitute directs the South Florida Water Management District to include water resource and water supply development projects that promote the elimination of wastewater ocean outfalls within its regional water supply plan. It also provides that such projects should be given first consideration for state or water management district funding assistance. The South Florida Water Management District must require the use of reclaimed water made available by the elimination of the wastewater ocean outfalls as part of their consumptive use permitting process.

The committee substitute prohibits the new construction or expansion of wastewater ocean outfalls and limits the discharge of wastewater through ocean outfalls to the permitted capacity in effect on July 1, 2008. It requires that discharge of domestic wastewater through ocean outfalls meet advanced wastewater treatment and management requirements pursuant to s. 403.086(4), F.S., or a reduction in baseline loadings of total nitrogen and total phosphorus, equivalent to advanced wastewater treatment

requirements, as determined by the department by December 31, 2018. It provides an exemption to treatment standards for those facilities who meet 100 percent reuse for domestic wastewater discharge by the same date.

The committee substitute requires that all facilities that discharge domestic wastewater through ocean outfalls achieve, at a minimum, 60 percent reuse of the facility's actual annual flow by December 31, 2025, and prohibits discharge through ocean outfalls beyond that date, unless as a backup to the functioning reuse system.

The committee substitute creates a reporting schedule, for holders of department permits to discharge domestic wastewater through ocean outfalls, detailing the plan to meet the requirements of the act as well as a summary of the actions accomplished to date. It also provides a reporting schedule for the department, summarizing the progress to date, to be submitted to the Legislature.

B. Amendments:

None.