

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 Environmental Preservation and Conservation Committee

BILL: CS/SB 1302

INTRODUCER: Environmental Preservation and Conservation Committee and Senator Saunders

SUBJECT: Ocean Outfalls

DATE: March 21, 2008 REVISED: _____

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

I. Summary:

The committee substitute (CS) 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 CS 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 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 CS requires all facilities that discharge domestic wastewater through ocean outfalls 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 CS creates a reporting schedule, for holders of department permits who 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.

The CS amends sections 373.0361, 373.0831, 373.1961, 373.250, 403.085, 403.086, and 403.1835, Florida Statutes.

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, approximately 300 million gallons per day, 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 utilized beyond sustainability. Continuing water restrictions associated with the current drought highlight the need to develop “drought proof” alternative water supplies.

Only a small fraction, approximately 6%, of the wastewater at the six facilities is being beneficially reused rather than discharged. 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. Outside of the three counties using ocean outfalls, 61% of Florida’s domestic wastewater is reused every day. The three counties discharging through ocean outfalls only utilize 10% 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. 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., directing SFWMD 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., requiring that water supply development projects that meet the following criteria be given priority for state or water management district funding assistance:

- The project provides replacement of existing sources to help implement a minimum flow or level; or

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

- The project implements reuse that assists in the elimination of domestic wastewater ocean outfalls.

Section 3: Amends s. 373.1961, F.S., requiring 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., directing 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., eliminating ocean outfalls as a means of advanced or secondary sewage treatment disposal.

Section 6: Amends s. 403.086, F.S., providing legislative intent and prohibiting 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 the following standards by December 31, 2018:

- Advanced wastewater standards pursuant to s. 403.086 (4), F.S.; or
- An equivalent reduction in baseline loadings of total nitrogen and total phosphorus.

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 the facilities 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 that is 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; and
- 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 that 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; and
- The initiation and continuation of operation and maintenance.

By July 1, 2010, and by each July 1 every 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; and
- 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., establishing 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:

The CS triggers a local mandate analysis as it would require municipalities or counties that operate facilities, discharging through ocean outfalls, to spend money to upgrade such facilities, in order to meet the requirements of the act. However, the CS provides an exception to the mandate as the Legislature has determined that the timely elimination of the ocean outfalls, as a primary means of domestic wastewater discharge, is in the public interest pursuant to s. 403.086 (9), F.S.

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 study² 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 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.

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.

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>*

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 by Environmental Preservation and Conservation Committee on March 19, 2008.

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B. Amendments:

None.