HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 613 Domestic Wastewater Discharged through Ocean Outfalls
SPONSOR(S): Agriculture & Natural Resources Subcommittee, Trujillo and others
TIED BILLS: None **IDEN./SIM. BILLS:** SB 796

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Agriculture & Natural Resources Subcommittee	14 Y, 1 N, As CS	Deslatte	Blalock
2) Agriculture & Natural Resources Appropriations Subcommittee			
3) State Affairs Committee			

SUMMARY ANALYSIS

In 2008, SB 1302 was passed by the Legislature and signed into law. The intent of the bill was to protect Florida's coastal waters, including coral reefs, by decreasing the amount of nutrients discharged into coastal waters. The bill required that by 2018, existing outfall discharges must meet advanced wastewater treatment and management requirements. By 2025, 60% of the facility flows were to be reused for beneficial purposes. The bill also authorized the Department of Environmental Protection (DEP) to establish enforceable compliance schedules for treatment upgrades and ultimate outfall elimination. In addition, the bill prohibited 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 required that discharge of domestic wastewater through ocean outfalls meet advanced wastewater treatment and management requirements no later than December 31, 2018.

The current bill postpones the date by which domestic wastewater facilities must meet more stringent treatment and management requirements from December 31, 2018, to December 31, 2023. The bill provides that each utility that had a permit for a domestic wastewater facility that discharged through an ocean outfall on July 1, 2008, must install a functioning reuse system by December 31, 2025. The bill provides that for utilities operating more than one facility, a "functioning reuse system" means a system that provides a minimum of 60% of a facility's baseline flow or, for utilities operating more than one facility, 60% of the utility's entire wastewater system flow on an annual basis on December 31, 2025. The bill also provides that reuse may be used to recharge the Biscayne or Upper Floridian Aquifers, and the bill defines "baseline flow" to mean the annual average flow of domestic wastewater discharging through the facility's ocean outfall, using monitoring data available from 2003 through 2007. The bill provides for utilities operating more than one outfall, the reuse requirement may be apportioned between the facilities served by the outfalls. Utilities that shared a common ocean outfall on July 1, 2008, are individually responsible for meeting the reuse requirement and may enter into binding agreements to share or transfer the responsibility among the utilities.

The discharge of wastewater through an oceans outfall is prohibited after December 31, 2025, except as a backup discharge that is part of a functioning reuse system or other wastewater management system. Unless otherwise provided in this statute, backup discharges may only occur during periods of reduced demand for reclaimed water, such as periods of wet weather, or as the result of peak flows from other wastewater management systems and must comply with the advanced wastewater treatment and management requirements. The bill provides that peak flow discharges from other wastewater management systems may not cumulatively exceed 5% of a facility's baseline flow, measured as a 5-year rolling average; are subject to applicable secondary waste treatment and water-quality-based effluent limitations specified in DEP rules; and, when in compliance with the effluent limitations, are deemed to meet the advanced wastewater treatment requirements.

The bill requires a detailed reporting schedule for permit holders to be submitted by October 1, 2014, with an updated report by July 1, 2018. The bill also requires the DEP, South Florida Water Management District (WMD), and affected utilities to provide a report to the Legislature by February 15, 2015.

The bill does not appear to have a fiscal impact on state government. The bill does appear to have a significant positive fiscal impact on local governments by extending the deadline for implementation of upgrading treatment plants and developing alternative disposal options including reuse of reclaimed water. By revising the reuse requirements and extending the deadline for meeting these requirements, the bill also has a positive fiscal impact on facilities that would not treat or manage peak flows. See the Fiscal Comments Section for more detail.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Current Situation

In 2008, SB 1302 was passed by the Legislature and signed by the governor. The intent of the bill was to protect Florida's coastal waters, including coral reefs, by decreasing the amount of nutrients discharged into coastal waters.

The bill directed the South Florida WMD 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 provided that such projects should be given first consideration for state or water management district (WMD) funding assistance. Subject to specified conditions, the South Florida WMD 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 bill prohibited 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 required that discharge of domestic wastewater through ocean outfalls meet advanced wastewater treatment and management requirements no later than December 31, 2018. Such requirements are defined to include:

- Meeting the standards in s. 403.086 (4), F.S.[1];or
- A reduction in baseline loadings of total nitrogen and total phosphorus, equivalent to advanced wastewater treatment requirements in s. 403.086 (4), F.S., or a reduction in cumulative outfall loadings of total nitrogen and total phosphorus occurring between December 31, 2008 and December 31, 2025 which is equivalent to that which would be achieved if the requirements of s. 403.086 (4), F.S., were fully implemented December 31, 2018 and continued through December 31, 2025, as determined by the Department of Environmental Protection (DEP) pursuant to specified criteria, by December 31, 2018.

Facilities that meet 100 percent reuse for domestic wastewater discharge by December 31, 2018 are exempt from the treatment standards.

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

The bill created a reporting schedule for permit holders who discharge domestic wastewater through ocean outfalls. Permit holders are required to detail the plan to meet the requirements of the act and provide a summary of actions accomplished to date. The bill provided a reporting schedule for the DEP to summarize the progress to date, to be submitted to the Legislature.

Effect of Proposed Changes

The bill postpones the date by which domestic wastewater facilities must meet more stringent treatment and management requirements from December 31, 2018, to December 31, 2023.

Each utility that had a permit for a domestic wastewater facility that discharged through an ocean outfall on July 1, 2008, must install a functioning reuse system by December 31, 2025. The bill provides that a

[1] Section 403.086(4), F.S., sets the standards for the following concentrations:
1. Biochemical Oxygen Demand-5mg/l;
2. Suspended Solids-5 mg/l;
3. Total Nitrogen-3 mg/l;
4. Total Phosphorus-1 mg/l.

"functioning reuse system" means a system that provides a minimum of 60% of a facility's baseline flow or, for utilities operating more than one facility, 60% of the utility's entire wastewater system flow on an annual basis on December 31, 2025. The bill also provides that reuse may be used to recharge the Biscayne or Upper Floridian Aquifers, and the bill defines "baseline flow" to mean the annual average flow of domestic wastewater discharging through the facility's ocean outfall, using monitoring data available from 2003 through 2007. In addition, utilities that shared an ocean outfall on July 1, 2008, are individually responsible for meeting the reuse requirement and may enter into binding agreements to share or transfer the responsibility among the utilities.

The discharge of wastewater through an oceans outfall is prohibited after December 31, 2025, except as a backup discharge that is part of a functioning reuse system or other wastewater management system. Unless otherwise provided in this statute, backup discharges may only occur during periods of reduced demand for reclaimed water, such as periods of wet weather, or as the result of peak flows from other wastewater management systems and must comply with the advanced wastewater treatment and management requirements. Those peak flows:

- Must not exceed 5% of a facility's baseline flow;
- Are subject to applicable secondary waste treatment and water-quality-based effluent limitations specified in DEP rules; and
- When in compliance with the effluent limitations, are deemed to meet the advanced wastewater treatment requirements.

The bill requires that each permit holder submit to the DEP a detailed plan to meet the outfalls and reuse requirements that includes:

- The identification of the technical, environmental, and economic feasibility of various reuse options; and
- A cost analysis that includes the level of treatment necessary to satisfy state water quality requirements and local water quality considerations and a comparative cost of reuse using flows from ocean outfalls and flows from other domestic wastewater sources.

The plan must also evaluate reuse for future regional water supply demands, the need for alternative water supplies, and other factors considered in the South Florida Water Management District's Lower East Coast Regional Water Supply Plan. The plan must include a detailed schedule for the completion of all actions and must be submitted by October 1, 2014. An updated plan must be submitted by July 1, 2018.

The DEP, South Florida WMD, and affected utilities must consider the information in the detailed plan for the purposes of adjusting, as necessary, the reuse requirements. The DEP must submit a report to the Legislature by February 15, 2015, containing recommendations for any changes necessary to the requirements.

B. SECTION DIRECTORY:

Section 1. Amends s. 403.086, F.S., postponing the dates by which domestic wastewater facilities must meet more stringent treatment and management requirements; providing exceptions; revising the definition of the term "functioning reuse system"; changing the term "facility's actual flow on an annual basis" to "baseline flow"; revising plan requirements for the elimination of ocean outfalls; authorizing certain utilities to enter into binding agreements to share or transfer responsibility for meeting reuse requirements; requiring the DEP, the South Florida Water Management District; and affected utilities to consider certain information for the purpose of adjusting reuse requirements; requiring the DEP to submit a report to the Legislature.

Section 2. Provides an effective date of July 1, 2011.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   None

2. Expenditures:

   None

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   See Fiscal Comments

2. Expenditures:

   See Fiscal Comments

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

DEP provided the following fiscal comments:

Direct Private Sector Costs:
The five year delay may have an impact on tourism and recreational uses of the coastal environment. The coral reefs off Southeast Florida contribute significantly to the tourist business in South Florida and are estimated to provide more than 61,000 jobs and $1.9 billion in yearly income for residents of Southeast Florida. There would also be a corresponding delay in providing reclaimed water as an alternative water supply for the region, which could result in the need to develop more expensive alternative water supplies depending on future water supply demands.

Direct Private Section Benefits:
Any cost savings for the local government utilities would be passed on to individuals or businesses that are served by the utility and would be reflected in the rates charged for such services

D. FISCAL COMMENTS:

DEP provided the following fiscal comments on local governments:

Non-recurring Effects:
The bill includes two provisions with fiscal impacts: A five year delay in meeting the 2018 advanced wastewater management and treatment, outfall elimination and reuse requirements, along with a provision that would allow five percent of peak flows from the wastewater treatment facilities to continue to be discharged through the outfalls.

There are significant local government costs for the treatment plant upgrades and development of alternative disposal options including reuse of reclaimed water. To account for these costs utilities will have to increase their utility rates. The revisions to the reuse requirement provided for in the bill could result in cost savings to local governments operating the Ocean Outfall wastewater treatment plants through the interest earned on monies put aside in prior years for these upgrades.

The peak flow exclusion would result in the construction of smaller sized facilities that would not treat or manage these peak flows. The City of Hollywood Utility Department has estimated that exclusion of peak flows from the treatment and reuse requirements would result in a cost savings of $174 million in

capital costs for peak flows of 10% of annual flows, $162 million in capital costs for peak flows of 5% of annual flows, and $142 million in capital costs for peak flows of 3% of annual flows. Broward County has estimated that exclusion of peak flows from the treatment and reuse requirements would result in a cost savings of $620 million in capital costs for peak flows of 10% of annual flows, $600 million in capital costs for peak flows of 5% of annual flows, and $560 million in capital costs for peak flows of 3% of annual flows. The Miami Dade Water and Sewer Department estimated cost savings for their Central, North, and South wastewater treatment plan of $867 million in capital costs for peak flows of 5% of annual flows. The cost curves for the three county utilities shows the majority of the costs savings occur in the 1-3% peak flow range with significantly diminishing cost savings above 5% or peak flows.

Recurring Effects:
Any reduction in size of wastewater treatment plant upgrades associated with the peak flow exclusion would have corresponding decreases in long term operation and maintenance of the associated wastewater treatment systems for the local governments.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not Applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditures of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None

B. RULE-MAKING AUTHORITY:

None

C. DRAFTING ISSUES OR OTHER COMMENTS:

None

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On March 28, 2011, the Agriculture & Natural Resources Subcommittee amended and adopted HB 613 as a Committee Substitute (CS). The CS revises the definition of “functioning reuse system” and provides that reuse may be used to recharge the Biscayne or Upper Floridian Aquifers. The CS also defines “baseline flow” to mean the annual average flow of domestic wastewater discharging through the facility’s ocean outfall, using monitoring data available from 2003 through 2007.

The CS provides that utilities that shared an ocean outfall on July 1, 2008, are individually responsible for meeting the reuse requirement and may enter into binding agreements to share or transfer the responsibility among the utilities. Any treatment in addition to the advanced wastewater treatment and management requirements must be fully operational by December 31, 2025.

The CS provides requirements and guidelines for when backup discharges may occur.

The CS provides requirements for what must be included in detailed plans that must be submitted to the DEP by permit holders. Finally, the CS provides that the DEP, South Florida WMD, and affected utilities must consider the information in the detailed plan for the purposes of adjusting, as necessary, the reuse requirements. The DEP must submit a report to the Legislature by February 15, 2015, containing recommendations for any changes necessary to the requirements.