# HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** HB 989 Domestic Wastewater Discharged Through Ocean Outfalls
**SPONSOR(S):** Gonzalez
**TIED BILLS:** None **IDEN./SIM. BILLS:** SB 724

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR or BUDGET/POLICY CHIEF |
|---|---|---|---|
| 1) Agriculture & Natural Resources Subcommittee | 13 Y, 0 N | Deslatte | Blalock |
| 2) State Affairs Committee | 15 Y, 0 N | Deslatte | Hamby |

## 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 limited 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 advanced treatment and management requirements from December 31, 2018, to December 31, 2020. 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 a "functioning reuse system" means an environmentally, economically, and technically feasible 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 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 that 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, regardless of which utility operates the ocean outfall, are individually responsible for meeting the reuse requirement and can 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 can only occur during periods of reduced demand for reclaimed water in the reuse system, such as periods of wet weather, or as the result of peak flows from other wastewater management systems. The bill provides that peak flow discharges from other wastewater management systems cannot cumulatively exceed 5% of a facility's baseline flow, measured as a 5-year rolling average, and are subject to applicable secondary waste treatment and water-quality-based effluent limitations specified in DEP's rules. When in compliance with the effluent limitations, the peak flow backup discharges must be deemed to meet the advanced wastewater treatment requirements.

The bill revises current planning requirements to require permit holders to submit to the Secretary of the DEP by October 1, 2014, rather than July 1, 2013, a detailed plan to meet the outfalls and reuse requirements. The plan must include the identification of the technical, environmental, and economic feasibility of various reuse options; a cost analysis to meet the discharge and reuse requirements, which includes the level of treatment necessary to satisfy state water quality requirements and local water quality considerations; and a cost comparison of reuse using flows from ocean outfalls and flows from other domestic wastewater sources. An updated plan must be submitted by July 1, 2018, rather than July 1, 2016. The bill also requires the DEP, the South Florida Water Management District, and affected utilities to provide a report to the Legislature by February 15, 2015, containing recommendations for any changes necessary to the reuse and discharge requirements.

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 advanced treatment and management requirements from December 31, 2018, to December 31, 2020.

[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.

Each utility that had a permit for a domestic wastewater facility that discharged through an ocean outfall on July 1, 2008, must still install a functioning reuse system by December 31, 2025. The bill provides that 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 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. For utilities operating more than one outfall, the reuse requirement can be apportioned between the facilities served by the outfalls. In addition, utilities that shared a common ocean outfall for the discharge of domestic wastewater on July 1, 2008, regardless of which utility operates the ocean outfall, 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 continues to be prohibited after December 31, 2025, except as a backup discharge that is part of a functioning reuse system or other wastewater management system authorized by the DEP. Unless otherwise provided in this statute, backup discharges can only occur during periods of reduced demand for reclaimed water in the reuse system, such as periods of wet weather, or as the result of peak flows from other wastewater management systems. Peak flow backup discharges from other wastewater management systems cannot cumulatively exceed 5% of a facility's baseline flow, measured as a 5-year rolling average, and are subject to applicable secondary waste treatment and water-quality-based effluent limitations specified in DEP rules. When in compliance with the effluent limitations, the peak flow backup discharges must be deemed to meet the advanced wastewater treatment and management requires.

The bill revises current planning requirements to delay submission from July 1, 2013, to October 1, 2014, and to require each ocean outfalls discharge 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 to meet the discharge and reuse requirements, which includes the level of treatment necessary to satisfy state water quality requirements and local water quality considerations and a cost comparison of reuse using flows from ocean outfalls and flows from other domestic wastewater sources.

The plan must also evaluate reuse demand in the context of future regional water supply demands, the availability of traditional water supplies, the need for development of alternative water supplies, the degree to which various reuse options offset potable 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, rather than July 1, 2016.

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 reuse and discharge 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; providing that certain utilities that shared a common ocean outfall on a specified date are individually responsible for meeting the reuse requirement; authorizing those utilities to enter into binding agreements to share or transfer responsibility for meeting reuse requirements; revising provisions authorizing the backup

discharge of domestic wastewater through ocean outfalls; requiring a holder of a DEP permit authorizing the discharge of domestic wastewater through an ocean outfall to submit certain information; 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, 2012.

## 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:

**Direct Private Sector Costs:**
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. The cost savings would also benefit utility ratepayers.

**Private Section Benefits:**
According to the DEP, the bill would delay certain treatment upgrades, allow for construction of smaller sized facilities that would not treat or manage peak flows, and provide additional flexibility in meeting reuse requirements. Expected cost savings from these new provisions would be passed on to individuals or businesses served by the utilities through their utility rates.

D. FISCAL COMMENTS:

DEP provided the following fiscal comments on local governments:

**Non-recurring Effects:**
The bill includes two provisions with fiscal impacts: A two 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 needed to comply with the advanced wastewater management and treatment requirements. To account for these costs, utilities will have to increase their utility rates. A two-year deferral of these upgrades would allow the affected local governments to take advantage of interest earnings on funds already reserved for the

upgrades and implement more gradual rate increases to reduce customer impact. The risk to the local governments is the potential that increases in the future costs of materials, labor, fuels, etc., from inflation or other factors would exceed the value the accrued savings.

Another potential benefit of the two-year delay is that the economic circumstances of the affected local governments and the overall cost of the bonding may be more favorable as economic conditions improve. Whether the potential for higher bond yields in a better economy, and thus more expensive borrowing, outweighs the overall benefits of an improved economy is another risk.

The allowance for the discharging limited peak flows after 2025 would allow the construction of smaller, less expensive wastewater management facilities:

- Hollywood estimates the cost savings at $174 million in capital costs for peak flows of 10 percent of annual flows, $162 million for peak flows of 5 percent, and $142 million for peak flows of 3 percent.
- Broward County estimates cost savings of $620 million in capital costs for peak flows of 10 percent of annual flows, $600 million for peak flows of 5 percent, and $560 million for peak flows of 3 percent.
- Miami Dade estimates cost savings for their central, north, and south wastewater treatment plans of $867 million in capital costs for peak flows of 5 percent of annual flows.

The cost curves for the three county utilities shows the majority of the costs savings occur in the 1-3 percent peak flow range with significantly diminishing cost savings above 5 percent of peak flows, lending support for the 5 percent figures used in the bill.

**Recurring Effects:**
Any reduction in size of wastewater treatment plant upgrades associated with the peak flow allowance would also decrease long-term operation and maintenance costs of the associated wastewater treatment systems. These savings would likely be passed on to utility customers.

## III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

   Not applicable. The bill does not appear to require counties or municipalities to take an action requiring the expenditure of funds, reduce the authority that counties or municipalities have to raise revenue in the aggregate, nor 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

None.