SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: Community Affairs Committee

BILL:	CS/SB 1874
INTRODUCER:	Community Affairs Committee and Senator Argenziano
SUBJECT:	Sewage Treatment and Disposal Systems
DATE:	March 28, 2006 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Herrin	Yeatman	CA	**Fav/CS**
2.			HE	
3.				
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5.				
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I. Summary:

The committee substitute (CS) requires each county water and sewer district and municipality proposing to extend or build new central sewerage facilities to prepare a detailed feasibility study that includes certain information. It allows local governments to satisfy growth management concurrency requirements for sanitary sewer facilities for new development with onsite sewage treatment and disposal systems approved by the Department of Health (DOH).

This CS also exempts the owner of an onsite sewage treatment and disposal system in certain areas from mandatory connection to a publicly-owned or investor-owned sewerage system. The onsite system must be permitted by DOH, meet advanced secondary treatment standards, function properly, and satisfy the conditions of the operating permit. The CS also provides an exception for specified areas to the exemption from mandatory hookup to a sewerage system.

This CS substantially amends the following sections of the Florida Statutes: 153.54, 153.73, 163.3180, 180.03, and 381.00655.

II. Present Situation:

Federal Clean Water Act - The federal Water Pollution Control Act of 1972, commonly referred to as the Clean Water Act (CWA)[1], established the foundation for wastewater discharge control in the United States. According to the Environmental Protection Agency (EPA), the CWA's primary objective is to "restore and maintain the chemical, physical and biological integrity of the nation's waters."[2] The CWA created a control program for ensuring that

[1] *See* Public Law 92-500.
[2] *See* http://www.epa.gov/owm/primer.pdf.

communities have clean water by regulating the release of contaminants into our country's waterways. Permits that limit the amount of pollutants discharged are required of all municipal and industrial wastewater dischargers under the National Pollutant Discharge Elimination System (NPDES) permit program. In addition, a construction grants program was set up to assist publicly owned wastewater treatment works build the improvements required to meet these new limits.

Approximately 16,000 municipal wastewater treatment facilities are in operation nationwide. The term "centralized wastewater collection and treatment" refers to a system of pipes that carry the wastewater to a centralized treatment plant for treatment and disposal. The CWA requires that municipal wastewater treatment plant discharges meet a minimum of 'secondary treatment'. Over 30 percent of the wastewater treatment facilities today produce cleaner discharges by providing even greater levels of treatment than secondary.

According to the 1999 census, approximately 23 percent of an estimated 115 million occupied homes in the United States are served by onsite systems. This percentage has changed little since 1970.[3] The typical onsite system has consisted "primarily of a septic tank and a soil absorption field, also known as a subsurface wastewater infiltration system."[4] The newer or "alternative" onsite treatment technologies use pumps, recirculation piping, aeration, and other features that require routine monitoring and maintenance.[5]

State Regulation of Sewage Systems - Chapter 153, F.S., authorizes local governments to:

- Construct water supply systems and sewage disposal systems.
- Operate, manage, control, and make improvements to the systems.
- Issue bonds to pay for the costs associated with the construction of the systems, and
- Levy rates and fees to pay for the management of the systems.

Part II of Chapter 153, F.S., provides for the creation of special taxing districts, county water and sewer districts, in order to reach and provide services to unincorporated areas in need of sewer and water services.

Municipalities are authorized to provide similar services under ch. 180, F.S. The construction and expansion of central sewerage systems are typically financed through bonds that are issued based on a guarantee of a given capacity over time. Knowing how many citizens will be hooking into a central system allows local governments to predict revenue which, in turn, assists local governments in securing funding for projects from lending institutions.

[3] *See* http://www.epa.gov/ORD/NRMRL/Pubs/625R00008/html/600R00008chap1.htm, Background and Use of Onsite Wastewater Treatment Systems, U.S. Environmental Protection Agency, EPA600/R-00/008 at 1.4.
[4] *See id.* at 1.1
[5] Section 381.0065(2)(j), F.S., defines an "onsite sewage treatment and disposal system" as a system that contains a standard subsurface, filled, or mound drainfield system; an aerobic treatment unit; a graywater system tank; a laundry wastewater system tank; a septic tank; a grease interceptor; a pump tank; a solids or effluent pump; a waterless, incinerating, or organic waste-composting toilet; or a sanitary pit privy that is installed or proposed to be installed beyond the building sewer on land of the owner or on other land to which the owner has the legal right to install a system."

Chapter 381, F.S., governs the regulation of public water systems and onsite sewage treatment systems. The responsibilities of DOH under chapter 380 include adopting and administering rules relating to onsite sewage treatment and disposal systems and:[6]

- Decreases to setback requirements where no health hazard exists;
- Increases for the lot-flow allowance for performance-based systems;
- Requirements for separation from water table elevation during the wettest season;
- Requirements for the design and construction of any component part of an onsite sewage treatment and disposal system;
- Application and permit requirements for persons who maintain an onsite sewage treatment and disposal system;
- Requirements for maintenance and service agreements for aerobic treatment units and performance-based treatment systems; and
- Recommended standards, including disclosure requirements, for voluntary system inspections to be performed by individuals who are authorized by law to perform such inspections and who shall inform a person having ownership, control, or use of an onsite sewage treatment and disposal system of the inspection standards and of that person's authority to request an inspection based on all or part of the standards.

Section 381.0065, F.S., provides for onsite sewage treatment permitting for the construction, installation, modification, abandonment, or repair of onsite sewage treatment and disposal systems in areas where publicly-owned or investor-owned sewerage systems are not available. The Legislature intends that these onsite systems should "not adversely affect the public health or significantly degrade the groundwater or surface water."[7] When central systems are made available, local governments have the authority to require connection of onsite systems to central sewerage systems within 365 days after written notice of the central system's availability.[8]

Use of Decentralized Wastewater Treatment Systems – In 1997, the U.S. Environmental Protection Agency (EPA) issued a report on the use of decentralized wastewater treatment systems in response to a request from the House Appropriations Committee.[9] This report discussed some of the benefits of decentralized (or onsite) systems, including:

- Protection of public health and the environment because advanced treatment units are available for additional nutrient removal and disinfection and also large transfers of water between watersheds are avoided with decentralized treatment.
- Suitability for low-density communities where it is the most cost effective option.
- Suitability for varying site conditions such as shallow water tables or bedrock, low-permeability soils, and small lot sizes.
- Suitability for ecologically sensitive areas where advanced nutrient removal or disinfection is necessary.[10]

[6] Section 381.0065(3), F.S.
[7] Section 381.0065(1), F.S.
[8] Section 381.00655(1)(a), F.S
[9] *See* Response to Congress on Use of Decentralized Wastewater Treatment Systems, U.S. Environmental Protection Agency, Officer of Water, April 1997.
[10] *See id.* at ii.

In addition to discussing the benefits of decentralized wastewater systems, the EPA report identified regulatory and fiscal constraints on using these systems. The report noted the lack of knowledge regarding decentralized systems, the absence of technical training on such systems, and the perception that centralized systems improve property values. Another consideration for decentralized systems is the complexity of the permitting process for such a system and the confusion that may occur when the state and local governments attempt to regulate these systems. The report also notes the lack of management programs in most communities that is necessary to effectively manage decentralized systems and avoid the unintended result of inadequate treatment of wastewater. The fiscal constraints discussed in the report include the liability concerns of homeowners and developers. Also, engineers who base their fees on a percentage of the project cost have no incentive to consider the lower costs of a decentralized system. Finally, state and federal grant and loan programs for wastewater treatment typically favor public entities and are not available for decentralized systems.

Sanitary Sewer Facilities and Concurrency - As part of the comprehensive planning process, a local government must address the provision of public facilities and services as they relate to future land use projections, including sanitary sewer, solid waste, stormwater management, potable water and natural groundwater aquifer recharge element. The required information is included in the potable water element of a local comprehensive plan.[11] Sanitary facilities must be available to serve new development no later than the issuance of a certificate of occupancy or its functional equivalent.[12] For existing and sanitary sewer water facilities, the needs of the local government's jurisdiction shall be based on:

- A facility capacity analysis, by geographic service area, indicating capacity surpluses and deficiencies;
- The general performance of existing facilities, based on best available data, evaluating the adequacy of the facilities' current level of service, the condition and expected life of the facilities, and the impact of the facilities on adjacent natural resources;
- An analysis of the problems and opportunities for sanitary sewer facilities replacement, expansion, and new facility siting; and
- An analysis of soil surveys for areas served by septic tanks and an explanation of suitability of those soils for such facilities based on the best available data from the United States Department of Agriculture's Soil Conservation Service.[13]

III. Effect of Proposed Changes:

Section 1 amends s. 153.54, F.S., relating to the creation and establishment of certain county water and sewer districts, to require a county water and sewer district to prepare a detailed feasibility study that must include:

- Evaluate the age, condition, and maintenance history of onsite systems in the area;

[11] Section 163.3177(6)(c), F.S.
[12] Section 163.3180(2)(a), F.S.
[13] Rule 9J-5.011(1)(f), Florida Administrative Code.

- Compare the projected cost of connecting to and using the proposed system versus installing, operating, and maintaining an onsite system approved by DOH that provides a comparable level of environmental and health protection;
- Evaluate whether the density required to accommodate the system is consistent with densities for the area under the local comprehensive plan and is sufficient for environmental protection of the area's surface and groundwater; and
- Consider the local government's obligations or reasonably anticipated obligations for water body cleanup and protection under state or federal law.

Section 2 amends s. 153.73, F.S., to require each county water and sewer district that proposes to expand or build new central sewerage facilities to prepare a detailed feasibility study as discussed above in section 1.

Section 3 amends s. 163.3180, F.S., to allow local governments to satisfy growth management concurrency requirements for sanitary sewer facilities for new development with onsite sewage treatment and disposal systems approved by DOH.

Section 4 amends s. 180.03, F.S., to require each municipality that proposes to expand or build a new central sewerage facility to prepare a detailed feasibility study as described above in section 1 before adopting a resolution or ordinance under s. 180.03(1), F.S. The results of the study must be included in the resolution or ordinance.

Section 5 amends s. 381.00655, F.S., to exempt the owner of an onsite sewage treatment and disposal system permitted by DOH and which meets advanced secondary treatment standards from mandatory connection to a publicly-owned or investor-owned sewerage system. In order to maintain the exemption, the onsite system must function properly and satisfy the conditions of the operating permit.

The CS also provides exceptions to the exemption from mandatory hookup to a sewerage system. Those areas that may not be exempted from hookup are:

- Areas requiring hookup to a central system because of the sewer utility or authority bond covenant in effect on July 1, 2006;
- Areas required to hookup under state or federal regulations or under court order;
- Areas in Monroe County;
- Areas in a basin containing an impaired water body listed under the federal Clean Water Act;
- Areas designated in a local comprehensive plan as an urban service area; and
- Areas in the South Florida Water Management District west C-11 basin that discharges through the S-9 pump into the Everglades.

Section 6 provides the act shall take effect July 1, 2006.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

This CS requires each county water and sewer district and municipality proposing to extend or build new central sewerage facilities to prepare a detailed feasibility study. In some instances, a district or municipality may have to extend or construct a central sewerage facility to achieve federal or state standards for cleanup of a water body or to comply with other environmental regulations. In that circumstance, the feasibility study required under this CS may be a Type A mandate because counties and cities would be required to expend funds and is subject to analysis under Article VII, Section 18 of the Florida Constitution. There are several exemptions and exceptions in Article VII, Section 18.

One of the exemptions under Article VII, Section 18 covers a bill that has an insignificant fiscal impact.[14] The fiscal impact of this CS has not been determined. If it is estimated that the cost of the required feasibility study in this CS would exceed $1.9 million to local governments in the aggregate, the Legislature must find an important state interest and the CS must pass by a two-thirds vote of each house to effectively bind the local governments.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

This CS exempts the owner of an onsite sewage treatment and disposal system in certain areas from mandatory connection to a publicly-owned or investor-owned sewerage system. The onsite system must be permitted by DOH, meet advanced secondary treatment standards, function properly, and satisfy the conditions of the operating permit.

Decentralized or onsite systems are typically less expensive and this CS would allow some individuals to enjoy those cost savings. Conversely, a decrease in the number of customers for a treatment facility may result in higher costs for those individuals that must use the centralized sewer system.

[14] The term “insignificant fiscal impact” means an amount no greater than the average statewide population for the applicable fiscal year times ten cents. The applicable threshold for this bill is $1.9 million.

C. Government Sector Impact:

This CS requires each county water and sewer district and municipality proposing to extend or build new central sewerage facilities to prepare a detailed feasibility study that includes certain information. An approximate cost of this detailed feasibility study is not available at this time.

This CS exempts the owner of an onsite sewage treatment and disposal system that meets certain criteria in some areas from mandatory connection to a publicly-owned or investor-owned sewerage system. This would affect the number of customers that a local government may reasonably rely on when determining the cost effectiveness of a new facility or expansion of an existing facility.

VI. Technical Deficiencies:

None.

VII. Related Issues:

The Department of Environmental Protection (DEP) has raised several concerns regarding the proliferation of onsite systems. The DEP estimates there are 2.5 million onsite systems in Florida, the majority of which do not meet existing design or siting requirements.[15] One concern is that an increase in the number of onsite systems, combined with the 2.5 million systems in existence, may exacerbate the costs to clean up surface and ground waters, springs, Outstanding Florida Waters, and other unique water bodies.[16] Another concern is the inability to use septic tank effluent for purposes of reuse.[17] An estimated 630 million gallons of reclaimed wastewater from central sewerage facilities is reused each day for urban and agricultural irrigation, ground water recharge, industrial cooling water, wetland hydration, and other uses.[18] An increase in the number of onsite systems may reduce the opportunity for reuse.[19]

[15] *See* Draft Bill Analysis for SB 1874, Department of Environmental Protection, section II.A.
[16] *See id.* at section III.A.3.
[17] *See id.* at section II.B.
[18] *See id.*
[19] *See id.*

VIII. Summary of Amendments:

None.