**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 Health Regulation Committee

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| BILL: | SB 1438 |
| INTRODUCER: | Senator Bullard |
| SUBJECT: | Injection Wells |
| DATE: | April 11, 2009 |
| REVISED: | |

| | ANALYST | STAFF DIRECTOR | REFERENCE | ACTION |
|---|---|---|---|---|
| 1. | Wiggins | Kiger | EP | **Favorable** |
| 2. | Bell | Wilson | HR | **Favorable** |
| 3. | | | GA | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |

## I. Summary:

The bill authorizes the use of backup injection wells, on a limited basis for larger domestic wastewater facilities, for the disposal of treated domestic wastewater in Monroe County. The bill specifies the design, usage limits, and sewage treatment requirements for the backup injection well. For instance, the backup injection well may only be used when the primary injection well is out of service and not used for more than 500 hours in any 5-year period.

This bill substantially amends s. 6, Chapter 99-395, Laws of Florida.

## II. Present Situation:

The Department of Environmental Protection's (DEP) Underground Injection Control (UIC) program protects the State of Florida's underground sources of drinking water (USDW) while disposing of appropriately treated fluids in underground injection wells.[1] A USDW is defined as an aquifer that contains a total dissolved solids concentration of less than 10,000 milligrams per liter of water.[2] The UIC program is charged with preventing degradation of the quality of other aquifers adjacent to the injection zone. Subsurface injection, the practice of emplacing fluids through an injection well, is one of many wastewater disposal methods used in Florida.[3]

The injection wells are required to be constructed, maintained, and operated so that the injected fluid remains in the injection zone, and the unapproved interchange of water between aquifers is

[1] Chapter 62-528, Florida Administrative Code.
[2] 62-528.200, Florida Administrative Code.
[3] See <www.dep.state.fl.us/water/uic/> (Last visited April 11, 2009).

prohibited. There are five classes of injection wells. Four of the well classes address the injection of hazardous and nonhazardous waste and fluids associated with the production of oil and natural gas. Class V injection wells generally inject nonhazardous fluid into or above a USDW. The fluid injected must meet appropriate criteria based on the classification of the receiving aquifer. Common types of Class V wells include air conditioning return flow wells, swimming pool drainage wells, storm water drainage wells, lake level control wells, domestic waste wells, and aquifer storage and recovery wells.[4] There are more than 8,000 Class V wells in Florida.[5]

Injection wells are not required to be constructed to a certain depth by state law or administrative rules. Injection wells are characterized by how they relate to the underground geology, how they are constructed in order to protect ground water, what they may discharge, and other defining criteria. With little land surface area in most of Monroe County, particularly the Florida Keys, wastewater facilities have few disposal options.[6] Water discharges are prohibited by law in Monroe County. Further, reuse and other land disposal possibilities are limited. Consequently, injection wells are one of the only disposal options.

Chapter 99-395, Laws of Florida, applies exclusively to Monroe County. The law requires facilities discharging at least 1 million gallons per day of highly treated wastewater to have an injection well cased to at least 2,000 feet deep to isolate the injected water from the surface waters. Smaller facilities, with a design capacity of less than one million gallons per day, are authorized to use shallow disposal wells with a casing set at least 60 feet deep, with a total well depth of at least 90 feet. These wells have reduced requirements because they discharge a smaller volume of treated wastewater. The different requirements are based on the treatment capacity of the domestic wastewater treatment facility.

## III. Effect of Proposed Changes:

The bill amends Chapter 99-395, Laws of Florida, to authorize the use of shallower injection wells to back up high volume injection wells in Monroe county. The backup injection well must meet the following conditions:

- The backup well may be used only when the primary injection well is out of service because of equipment failure, power failure, or the need for mechanical integrity testing or repair;
- The backup well may not be used for a total of more than 500 hours during any 5-year period, unless specifically authorized in writing by the DEP;
- The backup well must be at least 90 feet deep and cased to a minimum depth of 60 feet, or to such greater cased depth and total well depth as may be required by the DEP rule; and
- The fluid injected into the backup well meets the sewage discharge requirements in subsections (5) and (6), Chapter 99-395, Laws of Florida.

The effective date of the bill is upon becoming a law.

[4] 62-528.300, Florida Administrative Code.
[5] See <www.dep.state.fl.us/water/uic/> (Last visited April 11, 2009).
[6] Monroe County includes the Florida Keys. See <http://quickfacts.census.gov/qfd/maps/florida_map.html> (Last visited April 11, 2009).

## IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The provisions of this bill have no impact on municipalities and the counties under the requirements of Article VII, Section 18 of the Florida Constitution.

B. Public Records/Open Meetings Issues:

The provisions of this bill have no impact on public records or open meetings issues under the requirements of Article I, Section 24(a) and (b) of the Florida Constitution.

C. Trust Funds Restrictions:

The provisions of this bill have no impact on the trust fund restrictions under the requirements of Article III, Subsection 19(f) of the Florida Constitution.

## V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

There are currently no private utilities in the Florida Keys operating disposal wells associated with a wastewater treatment facility with a design capacity of greater than one million gallons per day. However, if a private utility installed or took ownership of such a system, they would benefit from the reduced construction costs. A backup disposal well that is significantly shallower (at 90 feet deep) is much less expensive to construct than deep wells (at greater than 2000 feet deep). The private utility would also benefit from the reduced testing requirements for a shallow well compared to a deep well.[7]

The DEP estimates that the bill will not impact adjacent ground or surface water because the use of the shallower backup wells is limited.

C. Government Sector Impact:

The DEP estimates that local governments that own domestic wastewater facilities in Monroe County, specifically the Florida Keys, could save more than $4 million in backup injection well construction costs.

Local governments that own domestic wastewater facilities in the Keys that build backup wells under the new specifications in the bill would save approximately $5,000 per year in reduced well testing costs.

[7] Department of Environmental Protection, SB 1438 Bill Analysis, on file with the Senate Health Regulation Committee.

The DEP estimates that utilities may pass savings to utility customers through reduced utility rates.

## 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.)

None.

B. Amendments:

None.