

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 1053

Injection Wells

SPONSOR(S): Saunders

TIED BILLS: None

IDEN./SIM. BILLS: SB 1438

	REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1)	Agriculture & Natural Resources Policy Committee	16 Y, 0 N	Blalock	Reese
2)	General Government Policy Council		Blalock	Hamby
3)				
4)				
5)				

SUMMARY ANALYSIS

The bill provides requirements on the use of backup wells for disposal of treated domestic wastewater in the Florida Keys (Monroe County). It amends s. 6, ch.99-395, L.O.F., pertaining to sewage requirements in Monroe County. The bill specifies design and operation requirements for backup injection wells for larger domestic wastewater facilities with a design capacity of one million gallons per day or greater. A deep well (with casing set to depth of a least 2,000 feet) is currently required for these larger facilities. The bill allows construction of a shallow backup well (casing set to at least 60 feet deep with a total depth of at least 90 feet) to the primary well, provided the water injected into a backup well meets applicable treatment standards and use of the backup well is limited to no more than 500 hours in any 5-year period.

This bill does not appear to have a fiscal impact on state government. This bill appears to have a positive fiscal impact on Monroe County.

This bill has an effective date of upon becoming a law.

## HOUSE PRINCIPLES

Members are encouraged to evaluate proposed legislation in light of the following guiding principles of the House of Representatives

- Balance the state budget.
- Create a legal and regulatory environment that fosters economic growth and job creation.
- Lower the tax burden on families and businesses.
- Reverse or restrain the growth of government.
- Promote public safety.
- Promote educational accountability, excellence, and choice.
- Foster respect for the family and for innocent human life.
- Protect Florida's natural beauty.

## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. EFFECT OF PROPOSED CHANGES:

##### 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 via underground injection wells. A USDW is defined as an aquifer that contains a total dissolved solids concentration of less than 10,000 milligrams per liter of water. 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 a variety of wastewater disposal or reuse methods used in Florida.<sup>1</sup>

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 prohibited. There are five classes of injection wells. Four of those well classes mainly deal with injecting 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 as determined by 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 (ASR) wells. There are more than 8,000 Class V wells in Florida.<sup>2</sup>

Injection wells do not have a set depth specified in state law or rule. 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 Monroe County, wastewater facilities have few disposal options. Water discharges are prohibited by law in Monroe County. Further, reuse and other land disposal possibilities are limited. Consequently, injection wells are the only practical option in most cases.

Chapter 99-395, L.O.F., exclusively applies to Monroe County. The law requires that facilities discharging at least 1 million gallons per day of highly treated wastewater have an injection well cased to at least 2,000 feet deep to isolate the injected water from surface waters. Smaller facilities, with a design capacity of less than one million gallons per day, are authorized to use shallow disposal wells

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<sup>1</sup> [www.dep.state.fl.us/water/uic/](http://www.dep.state.fl.us/water/uic/) (March 6, 2009)

<sup>2</sup> Ibid.

(casing set of 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 design treatment capacity of the domestic wastewater treatment facility.

#### Effect of bill

This bill amends s. 6, ch.99-395, L.O.F., to define the circumstances, applicable to Monroe County only, when a backup injection well can be used. This change allows back-up wells for the largest facilities in Monroe County only to comply with the smaller facility requirements of at least 90 feet deep, cased to 60 feet. The water injected into a backup well must meet applicable treatment standards and use of the backup well is limited to no more than 500 hours in any 5 year period. According to DEP, this adjustment is sufficient given the limited use.

#### B. SECTION DIRECTORY:

Section 1. Amends s. 6, ch.99-395, L.O.F., relating to sewage requirements in Monroe County.

Section 2. Provides an effective date of upon becoming a law.

### **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:

None.

2. Expenditures:

According to DEP's estimates, local governments that own domestic wastewater facilities in the Keys could see savings of more than \$4 million when constructing a backup disposal well. Further, local governments that are owners of domestic wastewater facilities in the Keys could see savings of approximately \$5,000 per year because of reduced testing requirements for a shallow well compared to a deep well.

#### C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

According to DEP's estimates, the utility will not incur the additional construction costs to build a deep backup well, and utility customers may have a reduction in their rates.

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 installs or takes ownership of such a system, the utility will 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 >2000 feet deep). The private utility also will benefit from the reduced testing requirements for a shallow well compared to a deep well.

#### D. FISCAL COMMENTS:

None.

### 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 an action requiring the expenditure of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with counties or municipalities.

##### 2. Other:

None.

#### B. RULE-MAKING AUTHORITY:

None.

#### C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

### IV. AMENDMENTS/COUNCIL OR COMMITTEE SUBSTITUTE CHANGES

None.