

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 Community Affairs Committee

BILL: CS/SB 2394

INTRODUCER: Environmental Preservation and Conservation Committee and Senators Saunders and Jones

SUBJECT: Protection of Springs

DATE: April 15, 2008 REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Bascom	Kiger	EP	Fav/CS
2.	Molloy	Yeatman	CA	Favorable
3.			HR	
4.			GA	
5.				
6.				

Please see Section VIII. for Additional Information:

- | | | |
|------------------------------|-------------------------------------|---|
| A. COMMITTEE SUBSTITUTE..... | <input checked="" type="checkbox"/> | Statement of Substantial Changes |
| B. AMENDMENTS..... | <input type="checkbox"/> | Technical amendments were recommended |
| | <input type="checkbox"/> | Amendments were recommended |
| | <input type="checkbox"/> | Significant amendments were recommended |

I. Summary:

The committee substitute (CS) creates the Florida Springs Protection Act, provides legislative intent on the importance of springs in the state, and establishes definitions. A pilot program for the delineation of the springsheds for Silver Springs and Rainbow Springs in Marion County is established. As part of the pilot program, the Department of Environmental Protection (department) is directed to adopt spring protection zones, and propose total maximum daily loads (TMDLs), and basin management action plans (BMAP) for the delineated springsheds by dates certain. The CS establishes treatment levels for wastewater discharge and disposal within the adopted spring protection zones, creates new requirements for connecting to a wastewater utility, and directs the Department of Agriculture and Consumer Services to implement best management practices to reduce nitrogen impacts to surface and groundwater.

In areas where the department adopts a springs protection zone, local governments must develop and adopt a springs protection element as part of the local comprehensive plan. Future plan amendments are prohibited until the springs element is adopted.

The CS requires that within each adopted spring protection zone, the department, the Department of Agriculture and Consumer Services, the St. Johns River Water Management District, and the Southwest Florida Water Management District must assess nitrogen loading on lands owned or managed by each respective agency. By December 31, 2010, the agencies must develop and begin implementing management plans to reduce nutrient impacts to the springs.

Finally, the CS creates the Florida Springs Stewardship Task Force within the department, provides for the appointment of task force members, and provides task force responsibilities and reporting requirements.

The CS amends sections 163.3177 and 403.1835, Florida Statutes.

The CS creates sections 369.401, 369.402, 369.403, 369.404, 369.405, 369.406, and 369.407, Florida Statutes, and creates unnumbered sections in Florida law.

II. Present Situation:

Florida has more than 700 recognized springs; 33 first magnitude springs with a flow of more than 100 cubic feet per second that discharge more than 64 million gallons of water per day; 191 second magnitude springs with an average flow of 10 to 100 cubic feet per second that discharge from 6.46 to more than 64 million gallons of water per day; 151 third magnitude springs with a flow of 1 to 10 cubic feet per second that discharge 600,000 to 6.46 million gallons of water per day.¹ Spring discharges, primarily from the Floridan Aquifer, are used to determine ground water quality and the degree of human impact on the spring's watershed. Rainfall, surface conditions, soil type, mineralogy, the composition and porous nature of the aquifer system, flow, and length of time in the aquifer all contribute to ground water chemistry.

The Florida Springs Task Force was created in 1999 to recommend strategies for protecting and restoring Florida's springs. The multi-agency task force produced a report in November of 2000 entitled "*Florida's Springs, Strategies for Protection and Restoration*" which was the basis of the Florida Springs Initiative within the Department of Environmental Protection. The report identified management strategies such as coordinated land use planning and ordinances that protect spring recharge basins, funding and implementing best management practices, and the acquisition of spring recharge basins to protect springs from land use practices that reduce water quality and quantity. The report also identified regulation strategies to protect spring flow, and a funding mechanism for implementing the strategies contained in the report. The report suggested the creation of a Springs Protection and Restoration Trust Fund funded by a 25-cent increase in automobile tags.

Under the Florida Springs Initiative, the Legislature has provided at least \$2.5 million each year since 2001 to support projects for springs restoration, research and protection.

¹ See Bulletin No. 66, *Springs of Florida*, Florida Geological Survey, <http://www.dep.state.fl.us/geology/geologictopics/springs/bulletin66.htm>

III. Effect of Proposed Changes:

Section 1: Creates Part IV of Chapter 369, F.S., to be cited as the "Florida Springs Protection Act", as follows:

- Section 369.401, F.S., provides a short title.
- Section 369.402, F.S., establishes the following legislative findings:
 - Florida's springs are precious and fragile natural resources that provide recreational and tourism opportunities, and great financial benefit to local economies.
 - Florida's springs provide critical habitat for endangered or threatened species of plants and animals.
 - Springs serve as indicators of groundwater and surface water quality.
 - Many springs show signs of ecological imbalance, increased nutrient loading, and lowered water flow.
 - Groundwater is directly affected by land use practices due to seepage from upland runoff and through direct conduits such as sinkholes.
 - Groundwater and springs can be restored through good stewardship, effective planning strategies, best-management programs, and appropriate regulatory programs.
- Section 369.403, F.S., defines the following terms:
 - "Cooperating Entities" means the Department of Environmental Protection, the Department of Health, the Department of Agriculture and Consumer Services, the Department of Community Affairs, each water management district and each local government or municipality having jurisdiction in the springs protection zones adopted for Rainbow Springs and Silver Springs in Marion County.
 - "Estimated Sewage Flow" means the quantity of domestic and commercial wastewater in gallons per day which is expected to be produced by an establishment or single-family residence as determined by Department of Health rule.
 - "First Magnitude Spring" means a spring with a median discharge of greater than or equal to 100 cubic feet per second for the period of record, as determined by the department.
 - "Spring" means a point where groundwater is discharged onto the earth's surface, including under any surface water of the state, excluding seeps. The term includes a spring run.
 - "Spring Protection Zone" means the area within the springshed that is vulnerable to contamination and that comprises two zones based on travel time of groundwater and reduced natural attenuation of contaminants that affect the water quality surfacing at the spring and flowing as the spring run, as follows:
 - "Primary Protection Zone" – The area within the springshed that encompasses the 10-year travel time for water discharging from the spring; and
 - "Secondary Protection Zone" – The area within the springshed that encompasses the 100-year travel time for water discharging from the spring.
 - "Spring Run" means a body of flowing water that originates from a spring and whose primary source of water is from a spring or springs under average rainfall conditions.
 - "Springshed" means the areas within the groundwater and surface water basins which contribute to the discharge of a spring.

- "Travel Time" means the time required for groundwater to travel vertically from land surface to the aquifer, horizontally within the aquifer, or in a combination thereof, to the point at which it is discharged from the ground and contributes to the flow of a spring or spring run.
- "Usable Property" means property exclusive of all paved areas and prepared road beds within public or private rights-of-way or easements but excluding surface water bodies.
- Section 369.404, F.S., directs the department, in consultation with the cooperating entities, to delineate springsheds using accepted scientific methodologies, and identify spring protection zones for Rainbow Springs and Silver Springs. By July 1, 2009, the department must adopt spring protection zones for Rainbow Springs and Silver Springs pursuant to chapter 120. The cooperating entities and affected local governments must work in the development of springs protection zones, as well as measures and basin management action plans that are designed to minimize adverse impacts to the protection zone, the springs, and the spring run.
- Section 369.405, F.S., provides that by July 1, 2009, the department must propose for adoption TMDLs to address nitrogen concerns in the springs. By December 31, 2010, the department must propose for adoption BMAPs for Silver Springs and Rainbow Springs.
- Section 369.406, F.S., requires additional protection measures within the pilot program springs protection zones, as follows:
 - Domestic wastewater facilities regulated under Chapter 403, Florida Statutes, are subject to the following:
 - New or expanded surface water discharges are prohibited within a spring protection zone except as a backup to a wastewater reuse system. Such discharges are limited to no more than 30 percent of the permitted wastewater reuse capacity on an annual average basis and shall meet advanced wastewater treatment requirements pursuant to s. 403.086 (4), F.S.
 - Facilities having permitted capacities greater than or equal to 100,000 gallons per day shall meet an annual average effluent concentration that shall not exceed 3 milligrams per liter total nitrogen. However, facilities of this permitted capacity which are authorized to discharge prior to the adoption of the applicable spring protection zone shall meet the required effluent concentration no later than 4 years after adoption of the spring protection zone.
 - Facilities having permitted capacities less than 100,000 gallons per day shall meet an annual average effluent concentration that shall not exceed 10 milligrams per liter total nitrogen, and an annual average concentration that shall not exceed 3 milligrams per liter total nitrogen in groundwater monitoring compliance wells. However, facilities of this permitted capacity which are authorized to discharge prior to adoption of the applicable spring protection zone shall meet the required effluent and monitoring well concentrations no later than 4 years after adoption of the spring protection zone.
 - Land application of Class A or Class B wastewater residuals, as defined by department rule, within the primary protection zone is prohibited. This prohibition does not apply to Class AA residuals that are marketed and distributed as fertilizer products in accordance with department rule.

- By December 31, 2009, the Department of Health, with the assistance of the affected local government, shall complete an inventory of all onsite treatment and disposal systems (septic tanks) that are located within the spring protection zones.
- Onsite sewage treatment and disposal systems in the areas defined in the pilot program shall meet the following requirements:
 - Systems installed after the date of adoption of the springs protection zones shall meet a targeted annual average groundwater concentration at the owner's property line of:
 - 3 milligrams per liter of total nitrogen in the primary protection zone; or
 - 10 milligrams per liter of total nitrogen in the secondary protection zone.
- The Department of Health shall develop and adopt by rule design standards for achieving the target annual average groundwater concentrations. The standards shall take into account the relationship between treatment level achieved by the onsite system and the area of usable property available for dilution.
- Prior to the adoption of the design standards by the Department of Health, compliance is presumed if one of the following conditions are met:
 - The lot associated with the establishment or a single family home is served by an onsite treatment and disposal system meeting the baseline system standards as set forth in Department of Health rule, and:
 - The lot is located wholly or partly within the secondary protection zone and the ratio of estimated sewage flow in gallons per day to usable property in acres is 400 to 1 or less; or
 - Any part of the lot is located within the primary protection zone and the ratio of estimated sewage flow in gallons per day to usable property in acres is 100 to 1 or less.
 - The lot associated with the establishment or a single family home is served by an onsite treatment and disposal system that is a performance-based treatment system meeting at least the advanced secondary treatment standards set forth in Department of Health rule, combined with a drip irrigation system.
- All lots, regardless of plat or record date, are subject to the onsite system requirements established in the bill.
- Every 5 years, all onsite systems identified within the adopted spring protection zones shall be evaluated and, if necessary, pumped out at the owner's expense, by a state-licensed septic tank contractor or plumber. The contractor or plumber shall submit an application for approval to the Department of Health on a form and for a fee prescribed by rule, and the Department of Health shall approve the system for continued use or notify the owner of the requirement for repair or modification.
- Onsite systems that require repair or modification shall meet a 24-inch separation from the wet season water table and the surface water setback requirements of s. 381.0065 (4), F.S.
- Owners of a publicly-owned or investor-owned sewerage system are required to notify all owners of onsite systems of the availability of central sewer facilities, for the purpose of connection to such facilities pursuant to s. 381.00655 (1), F.S., within 60 days following clearance from the department that the central sewer facilities are ready for use.
- A publicly owned or investor-owned system may not waive the mandatory hookup to central sewer facilities except for the use of performance based treatment technologies, including drip irrigation when it is determined that such a connection is not required in

- the public interest due to water quality or public health considerations. The Department of Health must approve the waiver.
- All land application of septage in the primary or secondary protection zones is prohibited.
 - Agricultural operations must implement best-management practices adopted by rule of the Department of Agriculture and Consumer Services, for equine, cow and calf, and forage grass, to reduce nitrogen impacts on surface and groundwater.
- Section 369.407, F.S., provides rule making authority to the department, the Department of Health, and the Department of Agriculture and Consumer Services to administer the provisions of the bill.

Section 2: Amends s. 163.3177, F.S., to require that in areas where a springs protection zone has been adopted by the department, by December 31, 2009 or within 18 months after adoption of the protection zone, a local comprehensive plan must be amended to include a springs protection element. The spring protection element must:

- Ensure the protection of, and where necessary, restoration of water quality in springs;
- Address minimizing human impacts on springs through karst protection models during and after the development process;
- Ensure that future development follows low-impact design principles;
- Ensure that landscaping and fertilizer use are consistent with the Florida Friendly Landscaping Program;
- Ensure adequate open space; and
- Provide for proper management of stormwater and wastewater to minimize impacts on the water quality of springs.

The department and the Department of Community Affairs shall make all information concerning best-management and use practices and principles available on their respective websites. Landscape design and irrigation systems must meet the standards established pursuant to s. 373.228 (4), F.S. Any future comprehensive plan amendments are prohibited when a local fails to adopt a springs protection element in the specified time period.

Section 3: Amends s. 403.1835, F.S., to provide that priority projects eligible for water pollution control financial assistance include the implementation of BMAPs and projects that eliminate environmental damage caused by failing onsite sewage systems with priority given to systems located within areas of critical state concern or systems located within an adopted spring protection zone.

Section 4: Creates an unnumbered section in Florida law directing the department, the Department of Agriculture and Consumer Services, the St. Johns River Water Management District, and the Southwest Florida Water Management District to assess nitrogen loading from lands owned or managed by each respective agency, located within a spring protection zone established under the pilot program. The agencies must develop and implement management plans designed to reduce the adverse impacts to the springs by December 31, 2010.

Section 5: Creates an unnumbered section in Florida law to establish the Florida Springs Stewardship Task Force in the Department of Environmental Protection. The task force consists of nine appointees as follows:

- One representative from the Department of Environmental Protection who will serve as chair.
- One representative from the Department of Agriculture and Consumer Services.
- One representative from the Department of Community Affairs.
- One representative from the water management district with the greatest number of first magnitude springs within its jurisdiction (Suwannee River Water Management District.)
- Two members appointed by the President of the Senate, one of whom shall be a representative of the development community, and one of whom shall be a representative of a local chamber of commerce.
- Two members appointed by the Speaker of the House of Representatives, one of whom shall be a locally elected county or municipal official, and one of whom shall be a representative of the environmental community.
- One member appointed by the Commissioner of Agriculture who shall be a representative of the agricultural community.

Task force members are to be appointed no later than August 1, 2008 and shall serve without compensation. Task force support and administration shall be supplied by the department.

The task force must:

- Collect and inventory all existing data identifying zones of influence for the remaining first magnitude springs and identifying land uses in these areas.
- Identify and compile a list of existing best management practices for identified land uses and other water pollutant controls.
- Identify all existing and reasonably expected funding sources available to implement best management practices that protect first magnitude springs.
- Propose a priority list of projects for funding.
- Take public input and testimony regarding issues related to springs protection and restoration.
- Propose a program of increased emphasis on education and outreach that encourages the implementation of best management practices for agricultural and nonagricultural land uses and other water pollutant controls, including specific provisions for cost-share assistance in implementing best management practices, as well as recognition of agricultural and nonagricultural landowners who participate in the best management practices program.
- Submit a report summarizing the data collected, public input and testimony, and the findings and proposals of the task force to the President of the Senate and the Speaker of the House of Representatives no later than January 31, 2009.

All state agencies are directed, and all other agencies and local governments are requested to render assistance to the task force. The task force shall expire on January 31, 2009.

Section 6: The act shall take effect upon becoming law.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

This CS does not require cities or counties to expend funds or limit their authority to raise revenues or receive state-shared revenues as specified by s. 18, Art. VII, of the State Constitution.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

It is likely that certain landowners would have a financial impact in order to meet the onsite wastewater standards required in the CS. Development interests would likely see increased costs associated with meeting the requirements of the CS but would most likely pass those costs off to the consumers.

The Department of Health estimates that property owners who are required to pay for pump-outs and system repairs, as well as the costs of performance-based treatment systems, where required, can expect to spend the following:

Pump-outs:	\$250-\$500
Repairs:	\$2,500-\$8,000
Performance-based systems	\$15,000-\$25,000

C. Government Sector Impact:

It is unknown what the overall impact to state agencies would be in implementing provisions in the CS. It is likely that rule making, TMDL, and BMAP efforts could be undertaken within current budgets. There will be some costs associated with the administration of the task force, but it is anticipated that the department would complete such tasks within current budget. Staff has requested an analysis from the department.

The Department of Health estimates that provisions of the bill requiring an inventory of all onsite systems within the spring protection zones, rule development, and implementation of the 5-year inspection and pump-out cycle for onsite systems will have an annualized impact of \$4 million a year which will be partially offset by an estimated

recurring revenue of \$2.3 million for fees assessed by the department for inspections and permitted repairs of onsite systems.

VI. Technical Deficiencies:

The CS contains a technical deficiency on line 303, relating to the adoption of rules, which references rulemaking pursuant to s. 210.54 rather than s. 120.54, F.S.

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.)

CS by Environmental Preservation and Conservation Committee March 27, 2008:

The CS creates the Florida Springs Stewardship Task Force, consisting of nine members to be appointed by August 1, 2008.

- B. **Amendments:**

None.