

# 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.)

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Prepared By: Community Affairs Committee

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BILL: CS/SB 2368

SPONSOR: Environmental Preservation Committee and Senator Argenziano

SUBJECT: Minimum Flows and Levels of Surface Watercourses

DATE: April 22, 2005

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Branning</u>	<u>Kiger</u>	<u>EP</u>	<u>Fav/CS</u>
2.	<u>Herrin</u>	<u>Yeatman</u>	<u>CA</u>	<u>Pre-meeting</u>
3.	_____	_____	<u>GA</u>	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

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## I. Summary:

The committee substitute (CS) deletes a provision that the springs within the Suwannee River Water Management District and second magnitude springs in other areas of the state need not be included on the water management district's minimum flows and levels priority list under certain conditions.

Provides that by January 1, 2008, the Suwannee River Water Management District and the Southwest Florida Water Management District must establish minimum flows and levels for all first and second magnitude springs remaining on their respective priority lists on the effective date of this bill. Such minimum flows and levels are not subject to independent peer review. A minimum flow or level shall take effect even if a substantially affected person files a petition for an administrative hearing under ch. 120, F.S., challenging the establishment of the minimum flow or level.

In FY 2005-2006 and FY 2006-2007, the Suwannee River Water Management District and the Southwest Florida Water Management District may each use not more than \$4 million per year of moneys allocated to the respective districts from the Water Management Lands Trust Fund, including any unused portion and interest earnings on those moneys, for the purposes of establishing minimum flows or levels for first and second magnitude springs.

This bill substantially amends ss. 373.042 and 373.59, F.S.

## II. Present Situation:

Spring water is a natural discharge that comes primarily from the Floridan aquifer system, the state's primary aquifer. The springs provide a "window" into the aquifer, allowing for a measure

of the health of the aquifer. Chemical and biological constituents that enter the aquifer through recharge processes may affect the water quality, flora, and fauna of springs and spring runs. As water quality in the aquifer has declined, the flora and fauna associated with the springs and cave systems have been negatively affected. The change in water quality is a direct result of Florida’s increased population and changed land-use patterns. The state’s population has increased from approximately two million in 1940 to more than 17 million in 2004 and is projected to exceed 24 million by 2030. These changes and the subsequent degradation of our springs have led to the efforts to protect and restore Florida’s treasured springs.<sup>1</sup>

In 1999, the Secretary of the Department of Environmental Protection formed a multi-agency Florida Springs Task Force to recommend strategies to protect and restore Florida’s springs. The task force consisted of 16 members who represented federal and state agencies, water management districts, a state university, a regional planning council, the business community, and private citizens. The task force produced a report entitled “Florida’s Springs, Strategies for Protection and Restoration.” Subsequently, the Governor sought and received legislative funding for his Florida Springs Initiative.

There are two general types of springs in Florida – seeps (water-table springs) and karst springs (artesian springs). Rainwater moving laterally in a low-lying area forms a seep. Karst springs form when groundwater discharges to the surface through a karst opening. Seeps may form in karst areas when water flow from the aquifer is more diffuse. The vast majority of Florida’s more than 700 identified springs and all of the first magnitude springs are karst springs.<sup>2</sup>

Springs are generally classified based upon the average discharge of water. However, springs have dynamic flows. A spring can be classified as a first magnitude at one point in time and a second magnitude at another. The Florida Geological Survey has suggested that the historical median of flow measurements be used in classifying spring magnitude.<sup>3</sup> The following is a description of the various spring magnitudes.\*

<b>Magnitude</b>	<b>Average Flow (Discharge)</b>
1	100 cfs or more (64.6 mgd or more)
2	10 to 100 cfs (6.46 to 64.6 mgd)
3	1 to 10 cfs (0.646 to 6.46 mgd)
4	100 gpm to 1 cfs (448 gpm)
5	10 to 100 gpm
6	1 to 10 gpm
7	1 pint to 1 gpm
8	Less than 1 pint/min

\*cfs=cubic feet per second  
 mgd=million gallons per day  
 gpm=gallons per minute  
 pint/min=pints per minute

<sup>1</sup> *Springs of Florida*, Florida Geological Survey Bulletin No. 66, page 3.

<sup>2</sup> Id. at page 8.

<sup>3</sup> Id.

The Florida Geological Survey lists 720 springs including 33 first magnitude springs, 191 second magnitude springs, and 151 third magnitude springs. The Florida spring classification system is based on an assumption that karst activities have influenced almost all springs in Florida.<sup>4</sup>

There has been an increased emphasis in the last few years on protecting and identifying the drainage basins that supply water to Florida springs. Pollution in these springsheds has been identified as contributing to the degradation of many of Florida's springs.

Section 373.042, F.S., requires each water management district to establish minimum flows and levels for surface watercourses, aquifers, and surface waters within the district. By January 1, 2003, each water management district's priority list and schedule for the establishment of minimum flows and levels was to include all first magnitude springs, and all second magnitude springs within state or federally owned lands purchased for conservation purposes. The specific schedule for establishment of spring minimum flows and levels shall be commensurate with the existing or potential threat to spring flow from consumptive uses. Springs within the Suwannee River Water Management District, or second magnitude springs in other areas of the state, need not be included on the priority list if the water management district submits a report to the Department of Environmental Protection demonstrating that adverse impacts are not now occurring nor are reasonably expected to occur from consumptive uses during the next 20 years. The priority list and schedule is not subject to any proceeding pursuant to ch. 120, F.S.

### **III. Effect of Proposed Changes:**

The CS amends s. 373.042, F.S., to delete the provision that the springs within the Suwannee River Water Management District and second magnitude springs in other areas of the state need not be included on the water management district's minimum flows and levels priority list under certain conditions.

The CS also provides that by January 1, 2008, the Suwannee River Water Management District and the Southwest Florida Water Management District must establish minimum flows and levels for all first and second magnitude springs remaining on their respective priority lists on the effective date of this bill. Such minimum flows and levels are not subject to independent peer review. A minimum flow or level shall take effect even if a substantially affected person files a petition for an administrative hearing under ch. 120, F.S., challenging the establishment of the minimum flow or level.

Further, s. 373.59, F.S., is amended to provide that in FY 2005-2006 and FY 2006-2007 the Suwannee River Water Management District and the Southwest Florida Water Management District may each use not more than \$4 million per year of moneys allocated to the respective districts from the Water Management Lands Trust Fund, including any unused portion and interest earnings on those moneys, for the purposes of establishing minimum flows or levels for first and second magnitude springs.

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<sup>4</sup> Id. at page 9.

**IV. Constitutional Issues:**

## A. Municipality/County Mandates Restrictions:

None.

## 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:

The establishment of minimum flows and levels for many of the first and second magnitude springs in this state would help preserve the springs water quality and quantity and provide long-term benefits to the residents of and visitors to Florida.

## C. Government Sector Impact:

The Suwannee River Water Management District and the Southwest Florida Water Management District would be required to expedite the establishment of minimum flows and levels for the first and second magnitude springs in their respective districts. However, the amount of moneys that can be used for this purpose is limited to not more than \$4 million in the next 2 fiscal years. The expedited minimum flows and levels would become effective without the delay associated with peer review and would also become effective even if a challenge were filed pursuant to ch. 120, F.S.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

## **VIII. Summary of Amendments:**

None.

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This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.

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