

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 299 Florida Springs Protection Act
SPONSOR(S): Boyd and others
TIED BILLS: **IDEN./SIM. BILLS:** SB 1486

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR |
|---|-----------------|---------------|----------------|
| 1) <u>Committee on Conservation & State Lands</u> | <u>7 Y, 0 N</u> | <u>Palmer</u> | <u>Zeiler</u> |
| 2) <u>Environment & Natural Resources Council</u> | <u>9 Y, 0 N</u> | <u>Palmer</u> | <u>Hamby</u> |
| 3) <u>Policy & Budget Council</u> | <u>(W/D)</u> | <u></u> | <u></u> |
| 4) <u></u> | <u></u> | <u></u> | <u></u> |
| 5) <u></u> | <u></u> | <u></u> | <u></u> |

SUMMARY ANALYSIS

CS/HB 299 creates the Florida Springs Stewardship Act and an eight member task force consisting of three state agency representatives and five stakeholders appointed by the president of the Senate (two), Speaker of the House of Representatives (two), and the Commissioner of Agriculture and Consumer Services (one). The task force is directed to: identify zones of influence and land uses within those zones for all thirty-three of Florida's first magnitude springs; develop a list of best management practices (BMPs) available for those land uses and identify land uses for which BMPs need to be developed; identify funding sources to assist landowners to implement BMPs; develop education and outreach programs regarding implementation of BMPs; solicit public comment; and submit a report to the President of the Senate and the Speaker of the House of Representatives.

The bill does not provide funding and there are no fiscal impacts.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

Provide Limited Government: The bill creates the Florida Springs Stewardship Task Force to evaluate Florida's thirty-three first magnitude springs and identify best management practices for land uses within the zones of influence. The bill also establishes the Legislature's recognition that springs are a valuable resource that must be protected and that a non-regulatory approach to springs protection is the best and most cost effective strategy.

B. EFFECT OF PROPOSED CHANGES:

Present Situation

The term spring is generally understood to mean a place on the Earth's surface where underground water emerges onto the surface – including the ground beneath surface water features. Although this is accurate in general, there is some ambiguity in this definition for specific usage since it does not differentiate among the different types of springs. In Florida, most springs are one of two general types, seeps (water-table springs) or karst (artesian) springs. Water-table springs occur when rainwater percolates downward through permeable sediments to a much less permeable or impermeable formation which forces the water to move laterally. Eventually, the water may intersect the surface in a low area and form a seep. Karst springs form when confined groundwater discharges to the surface through an opening or vent in the confining layer. Seeps may also form in karst areas when water discharging through a breach in the confining layer does not reach the surface but diffuses into the unconfined surficial or water-table aquifer.

Independent of their type, springs are most often classified based upon their median flow. Median flow is used since spring flow is a dynamic process with individual springs exhibiting variable discharge depending upon rainfall, recharge and groundwater withdrawals within their recharge areas. However, one discharge measurement is enough to place a spring into one of eight flow ranges or magnitude categories. This can result in a spring being initially observed as a certain magnitude spring and later as another magnitude spring. Historically, a spring assigned a magnitude when it was first described continued with that magnitude designation even though the discharge may have changed considerably over time. If a spring had been previously classified as a higher magnitude spring than the magnitude class it would have been assigned in the 2003 Florida Springs Classification System, it retains the higher classification but with the leading descriptor "historical".

There are more than 700 identified springs in Florida. Of particular interest to this bill are the larger discharge springs: first-magnitude springs which have a flow greater than or equal to 100 cubic feet per second (64.6 million gallons per day); and second-magnitude springs which have a discharge greater than or equal to 10 cubic feet per second (6.46 million gallons per day) but less than 100 cubic feet per second. The majority of Florida's springs and all of the 33 first-magnitude springs are karst springs.

In Florida, karst springs originate in the Floridian aquifer. The Floridian is one of the most prolific aquifers in the world and extends throughout an area that includes all of the Florida Peninsula, and parts of the Florida Panhandle, Alabama, Georgia and South Carolina, as well as parts of the Gulf of Mexico and Atlantic Ocean. The surface of this area is underlain by permeable, unconsolidated deposits of clay, sand, gravel and shell beds. Beneath these permeable surface materials are layers of semi-consolidated and consolidated carbonate rock (limestone and dolostone). Beneath the surface

layer a low permeability layer of clastic limestone, known as the Hawthorn Formation, overlays and confines the thick, more permeable layer of limestone which contains the Floridian Aquifer. The Floridian is confined below by a layer of low permeability anhydrate beds referred to as the Cedar Keys Formation. Within the Floridian Aquifer is a discontinuous, low permeability layer that, in places, divides the Floridian into the sub-layers known as the Upper Floridian and the Lower Floridian. The Upper Floridian contains high quality fresh water while the Lower Floridian may contain more saline water. The Floridian is not flat but tilts and has a variable thickness. In certain places the Floridian formation reaches the surface and precipitation and run-off can be in direct contact with the aquifer. In other places the Hawthorn Formation is thin and may be fractured or breached by sinkholes. In all of these places, the Floridian may either discharge as a spring, diffuse into the surficial aquifer, or be recharged from the water-table aquifer depending on the elevation of the land surface, elevation of the Floridian's potentiometric surface, and the elevation of the water-table surface. The potentiometric surface is the elevation to which the water in a confined aquifer would rise if it were unconfined.

Recent studies of Florida's springs have concluded that many have begun to exhibit signs of distress, including increasing nutrient loading and lowered discharge. This distress is attributed to changes occurring in the springshed or spring recharge basin. A springshed is that area within the groundwater basin or surface water basin that contributes to the discharge of the spring. The boundaries of a springshed are very dynamic and vary as a result of changes in the potentiometric surface of the Floridian aquifer relative to changes in the elevation of the water-table. Thus, springsheds are composed of three different basins: the surface basin which contributes direct runoff; the water-table flow basin which may be into or out-of the spring flow; and the Floridian discharge source basin. It is very difficult to identify the specific springshed since the three basins typically do not cover the same area. The surface runoff basin can be defined with reasonable precision and remains fairly constant unless artificially modified. However, the flow and water quality in the other two basins vary depending on recharge situations and are likely affected by conditions and events that may be remote from the spring and which occur in different places. Furthermore, the surface area recharging the water-table basin may include a greater area than the surface runoff basin. Consequently, more than one spring may be affected by conditions in one of the spring's runoff basin. Springs may also be directly connected to one another by subsurface conduits.

In 1999, in response to the perceived decline in spring water flows and quality, the Department of Environmental Protection (DEP) convened the *Florida Springs Task Force* to assess the condition of Florida's springs. The findings of the task force then led the Florida Legislature to authorize the *Florida Springs Initiative* in 2001 with a funding appropriation of 2.5 million dollars. This program was designed to investigate the sources of spring-flow, determine, to the extent possible, the springsheds that affect the water quantity and quality of springs, monitor spring water quality, assist landowners in implementing spring protection actions, and promote the value of springs through extensive public education. DEP reports that springshed maps have been generated for most of the state's first magnitude springs.

Effect of Proposed Change

The council substitute creates the Florida Springs Stewardship Act and establishes the Legislature's recognition that springs are a valuable resource that must be protected, that the citizens of Florida desire to protect the state's resources, and that a non-regulatory approach to springs protection is the best and most cost effective strategy.

The amended bill defines "zone of influence", "seep", and "spring" and an eight member taskforce is created consisting of:

- one representative from the Department of Environmental Protection (DEP);
- one representative from the water management district with the greatest number of first magnitude springs within its jurisdiction;

- one representative from the Department of Agriculture and Consumer Services (DACs);
- one representative from the development community and one representative of a local chamber of commerce to be appointed by the president of the Senate;
- one representative from the environmental community and one representative that is a locally elected county or municipal official to be appointed by the Speaker of the House of Representatives ; and
- one representative from the agricultural community to be appointed by the Commissioner of Agriculture and Consumer Services.

The members will elect a chair and a vice chair from their membership by .

The task force is directed to:

- identify zones of influence and land uses within those zones for all thirty-three of Florida's first magnitude springs;
- develop a list of best management practices (BMPs) available for those land uses and identify land uses for which BMPs need to be developed;
- identify funding sources to assist landowners to implement BMPs;
- develop education and outreach programs regarding implementation of BMPs;
- take public comment; and
- submit a report to the President of the Senate and the Speaker of the House of Representatives by January 31, 2008.

The taskforce shall expire on January 31, 2008. The bill takes effect July 1, 2007.

C. SECTION DIRECTORY:

Section 1: Creates Part IV of chapter 369, F.S., consisting of: section 369.401, creating a short title; section 369.403, establishing Legislative intent and findings; and section 369.405, creating the Florida Springs Stewardship Task Force and specifying duties of the task force.

Section 2: Creates an effective date.

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:

None

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None

D. FISCAL COMMENTS:

The bill does not provide funding. Agencies directed to assist the Commission will have to provide for required commitments from existing resources.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable because this bill does not appear to require cities or counties to spend funds or take actions requiring the expenditure of funds, nor does it appear to reduce the authority that cities or counties have to raise revenues in the aggregate, nor does it appear to reduce the percentage of a state tax shared with cities or counties.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

No rulemaking authority is granted to implement the provisions of this bill.

C. DRAFTING ISSUES OR OTHER COMMENTS:

The bill specifies that the task force membership will include one member from DEP, one member from DACS and one member from a water management district, but it doesn't identify who will make the appointments.

D. STATEMENT OF THE SPONSOR

No statement submitted.

IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES

On April 11, 2007, the Environment and Natural Resources Council considered and passed HB 299 with amendments. The bill was reported favorably with council substitute. The council substitute replaces everything after the enacting clause. The substitute creates the Florida Springs Stewardship Act and an eight member taskforce consisting of three state agency representatives and five stakeholders appointed by the president of the Senate (two), Speaker of the House of Representatives (two), and the Commissioner of Agriculture and Consumer Services (one). The task force is directed to: identify zones of influence and land uses within those zones for all thirty-three of Florida's first magnitude springs; develop a list of best management practices (BMPs) available for those land uses and identify land uses for which BMPs need to be developed; identify funding sources to assist landowners to implement BMPs; develop education and outreach programs regarding implementation of BMPs; solicit public comment; and submit a report to the President of the Senate and the Speaker of the House of Representatives.

On March 21, 2007, the Committee on Conservation and State Lands adopted a strike-all amendment which substantially lowers the fiscal impact of the original bill. The amendment removes everything from the bill after the enacting clause and inserts new language. The amended bill creates the *Florida Springs Protection Act*. The Department of Environmental Protection, Water Management Districts, and Department of Agriculture and Consumer Services are directed to create a priority list and schedule for delineation of springsheds and high vulnerability zones within those springsheds for all thirty-three of Florida's first magnitude springs. The agencies are further directed to develop criteria for the delineation of high vulnerability zones within a springshed. By January 30, 2008, the Department of Environmental Protection shall submit a report to the Governor, the President of the Senate, and the Speaker of the House of Representatives.