

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: 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></u>	<u>Palmer</u>	<u>Hamby</u>
3) <u>Policy & Budget Council</u>	<u></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

The bill creates the Florida Springs Protection Act and the Florida Springs Commission (Commission). It defines the Commission structure, function and membership criteria, and requires the Commission, with assistance from the Department of Environmental Protection (DEP) and the water management districts, to perform an assessment and mapping of all first and second magnitude springs within each water management district. The bill further requires the Commission to develop an overall planning model for the purpose of identifying protection, restoration and preservation strategies for Florida's springs. The model plan shall contain components that can be utilized by state agencies, local governments, and citizens to develop individual spring protection plans. The bill provides for the Commission to expire in 2011.

The bill does not provide funding. State agencies directed to assist the Commission will have to provide for required commitments from existing resources. The cost to local government is indeterminate. The bill may restrict use or development of privately held lands.

There is an amendment traveling with the bill. The amendment is described in "Section IV. Amendment/Council Substitute Changes" of the analysis.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

Provide Limited Government: The bill may result in additional regulatory requirements and may result in additional staffing needs for state government agencies, water management districts, and local governments.

Safeguard Individual Liberty: The bill may create additional regulatory requirements and land use restrictions related to springs protection.

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 spring shed or spring recharge basin. A spring shed is that area within the groundwater basin or surface water basin that contributes to the discharge of the spring. The boundaries of a spring shed 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, spring sheds 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 spring shed 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 spring sheds 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 spring shed maps have been generated for most of the state's first magnitude springs.

Effect of Proposed Change

The bill amends chapter 369, F.S., creating the *Florida Springs Protection Act* relating to protection and restoration of Florida's springs, establishes the *Florida Springs Commission* (Commission), and specifies the Commission's duties.

By way of this bill, the Legislature recognizes that, whether found in urban or rural settings, public parks, or private lands, Florida's springs: are threatened by actual and potential flow reductions and declining water quality; have begun to exhibit signs of distress, including increasing nutrient loading and lowered discharge; and that springs and groundwater once damaged by overuse can be restored through good stewardship, including effective planning strategies and best management practices. It is recognized that growth and development in Florida will continue, thus adding to the pressures already affecting the surface and ground water resources that contribute to spring flow and quality. Consequently, there is a need for land use decision making that ensures the long-term viability of

springs in Florida while recognizing protected property rights. The bill encourages cooperative and coordinated efforts, such as the *Suwannee River Partnership* and the *Wekiva River Basin Coordinating Committee*, which would be implemented by state and regional agencies, local governments and affected interests to best develop procedures to protect Florida's springs.

The *Florida Springs Commission* would be created on July 1, 2007, for the purpose of identifying protection, restoration and preservation strategies for Florida's springs. The bill establishes a twenty-one member Commission. The Governor, the President of the Senate, and the Speaker of the House of Representatives shall each appoint three members of the Commission with the other twelve identified by the bill. The Secretary of the Department of Environmental Protection (DEP) shall serve as the chair of the Commission. The Commission membership structure shall be:

As identified in bill language –

- Secretary of the Department of Environmental Protection, Chair;
- Commissioner of Agriculture;
- Secretary of the Department of Community Affairs;
- Secretary of the Department of Transportation;
- Secretary of the Department of Health;
- Executive Director of the Florida Fish and Wildlife Conservation Commission;
- a representative from a water management district governing board;
- a representative from a regional planning council;
- a representative from the Florida Chamber of Commerce;
- a representative from the Florida Association of Community Developers;
- a representative from the American Water Works Association;
- a representative from the Florida Home Builders Association;

Governor's appointment –

- a member from an environmental organization;
- a property owner interested in spring protection;
- a member from the business community;

Senate President's appointment –

- a legislative member from the Senate;
- a member from a conservation organization;
- a locally elected county or municipal official;

Speaker of the House of Representatives' appointment –

- a legislative member from the House of Representatives;
- a member from the agricultural community;
- a locally elected county or municipal official.

The bill provides that all members of the Commission will serve without compensation; however they will be reimbursed for per diem and travel expenses according to section 112.061, F.S. The bill authorizes state and regional governmental commission members to designate a senior staff person to represent them at Commission meetings and grants the designee full voting authority. The Commission may appoint technical subcommittees as needed to assist in the completion of the work of the Commission. The bill directs all state agencies, and requests all other agencies and local governments to assist and cooperate with the Commission. The Commission is to solicit and consider public comment throughout the execution of its duties.

The bill instructs the Commission to perform an assessment and mapping of first-magnitude and second-magnitude springs. The DEP and the water management districts are required by this bill to assist the Commission in identifying, assessing and mapping all first-magnitude and second-magnitude springs, and to cooperatively create a uniform geographic information system standard for collecting and reporting springs data. The bill requires spring assessment data to include at a minimum the following information:

- current land owner;
- latitude and longitude;
- water quality, water quantity, and water use;
- wetlands;
- geology and soils;
- vegetation;
- floodplain area;
- infrastructure;
- fish and wildlife;
- cultural resources and archaeology;
- public access and use;
- land use;
- hazardous materials;
- public health and safety;
- aesthetics and scenic resources; and
- socioeconomics.

The Commission is further required to evaluate the present condition of Florida's springs and to recommend strategies for protecting and ensuring their long-term viability. These strategies shall, at a minimum, consider: protection of property rights; effectiveness and application of innovative land use planning strategies; effectiveness and sufficiency of existing regulations; use of regional partnerships; best management practices; and other incentive based non-regulatory programs. The bill recognizes that many existing policies and programs are directed for springs protection and that the findings of these policies and programs can serve as a baseline in the development of the Commission's recommendations.

Based upon the findings of the assessments and the Commission's recommendations, the Commission is to develop a generalized *Model Springs Protection Plan*. The model plan will contain components or modules that that can be utilized by state agencies, local governments, and citizens for development of detailed protection plans for individual springs. The bill requires the model plan to provide a five-year strategy horizon for the use and management of a spring. The modules shall encompass, at a minimum, procedures and strategies for:

- analysis of environmental conditions;
- analysis of present use patterns;
- analysis of ability of spring to support increased public use;
- discussion of the economic potential of spring use by the public;
- discussion of actions needed to promote increased public use;
- discussion of infrastructure requirements;
- discussion of personnel requirements;
- discussion of security needs;
- discussion of limits on spring use to avoid permanent detrimental impacts to the spring;
- discussion of strategy for leveraging resources for springs protection; and
- discussion of a long-term management partnership among the state, regional, and local governments and citizens within the area.

The bill provides for the Commission to expire July 1, 2011.

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 Commission and specifying duties of the Commission.

Section 2: Creates an effective date.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

The DEP and the water management districts are required by this bill to assist the Commission in identifying, assessing and mapping all first-magnitude and second-magnitude springs, to cooperatively create a uniform geographic information system standard for collecting and reporting springs data, and in developing an overall model springs protection plan utilizing the Commission's recommended strategies. The bill does not provide funding. Agencies directed to assist the Commission will have to provide for required commitments from existing resources.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

The cost to local government due to participation with the Commission and its duties is indeterminate. Local governments are requested to assist the Commission, not directed to assist.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill requires the Commission to develop an overall model springs protection plan utilizing its recommended strategies. The model plan shall contain components that that may be utilized by state agencies, local governments, and citizens for individual spring protection plans. Local government adoption of measures that would preclude certain land use activities in springsheds may restrict use or development of privately held lands.

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:

DEP Comments:

The following comments were provided by DEP concerning HB 693 (2006 Legislative Session) which is similar to the bill:

There is no plan for the implementation of the bill's scope. The model protection plan does not translate into clear tasks. To do the work, DEP would require more staff. To determine how many staff would require more time to determine. Outsourcing the work would be even more expensive because there is no clear organization of tasks or resources. While the water management districts are also named in the bill, the financial burden would likely fall heaviest on the DEP and the bill makes no funding or staffing provisions for the scientific or other determinations necessary in the case of all the springs encompassed by the legislation. DEP staff estimate that, at current funding and staffing levels, it would take 60 years to accomplish these tasks, well beyond the time allotted to DEP in the bill.

DEP estimates that in order to meet a portion of the bill requirements relating to the mapping components of all first and second magnitude springs, DEP would need approximately 56 additional staff members and associated resources, at an estimated cost of \$25 million per year, to complete a basic mapping of approximately 120 springs. DEP reports current funding of \$2.5 million and two staff members for the springs program.

Other Comments:

1. Chapter 20, F.S., authorizes the creation of a number of different entities within the executive branch to assist agencies in performing their duties more efficiently and effectively. One such entity is the "commission," which is defined as "a body created by specific statutory enactment within a department, the office of the Governor, or the Executive Office of the Governor and exercising limited quasi-legislative or quasi-judicial powers, or both, independently of the head of the department or the Governor." This bill does not specify the location of the Commission within any department, the office of the Governor, nor the Executive Office of the Governor.
2. This bill is similar to HB 693 (2006 Legislative Session) which died in the Agriculture and Environment Appropriations Committee.

D. STATEMENT OF THE SPONSOR

No statement submitted.

IV. AMENDMENTS/COUNCIL SUBSTITUTE CHANGES

The amendment removes everything from the bill after the enacting clause and inserts new language.

The amended bill creates the *Florida Springs Protection Act* and establishes the Legislature's recognition that:

- springs are a precious and fragile natural resource that must be protected;
- springs provide recreational and tourism opportunities, are a financial benefit to local economies, are critical to the habitat of endangered or threatened species, and serve as indicators of groundwater quality;
- springs are only as healthy as their spring sheds;
- spring sheds and areas of high vulnerability are not clearly identified; and
- work has begun on delineating spring sheds for Florida's thirty-three first magnitude springs.

Definitions are provided for: Department; spring; and spring shed.

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 spring sheds and high vulnerability zones within those spring sheds for all thirty-three of Florida's first magnitude springs. The list and schedule is to consider:

- work already completed;
- degree of threat to each spring;
- projected development patterns; and
- existing and reasonably expected funding and resources to complete the work.

The Department of Environmental Protection, Water Management Districts, and Department of Agriculture and Consumer Services are directed to develop criteria for the delineation of high vulnerability zones within a spring shed.

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 which is to include:

- The status of the delineation of the spring sheds and high vulnerability zones for the first magnitude springs;
- The priority list and schedule;
- The criteria developed to identify and high vulnerability zones; and
- Identified funding and resource sources.

The bill is to take effect on July 1, 2007.