HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 693 Florida Springs Protection Act
SPONSOR(S): Stansel
TIED BILLS: **IDEN./SIM. BILLS:** SB 2538

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1) Environmental Regulation Committee		Perkins	Kliner
2) Governmental Operations Committee			
3) Agriculture & Environment Appropriations Committee			
4) State Resources Council			
5)			

SUMMARY ANALYSIS

The bill relates to springs protection and provides the following:

- Legislative intent, definitions, and a time line to establish procedures.
- Within three years after the effective date of this bill, the Department of Environmental Protection (DEP) is required to delineate and map all first and second magnitude springsheds. The mapping of these springsheds will establish "primary protection zones" for these springs, of which certain activities would be prohibited or limited.
- Within two years after the effective date of this bill, DEP is required to establish criteria for determining whether first and second magnitude springs are "impaired" under the Act and to add "impaired springs" to the agency's list of "impaired surface waters" established by statute.
- The bill sets forth procedural criteria for DEP and water management districts to determine springs impairment and requires the adoption of "total maximum daily loads" for impaired first and second magnitude springs. The DEP and water management districts are required to develop a watershed or basin management plan to address the protection of springshed water quantity and quality.
- Within one year after DEP's completion of springshed and protection zone delineation, each local government is required to review and, as necessary, modify their comprehensive plans and adopt measures to improve the protection of first and second magnitude springs flow quantity and quality. The bill requires DEP, the Department of Community Affairs and water management districts to provide guidance during the review period. Within one year after completion of the review, each local government is required to consider the recommended amendments and to adopt measures to ensure that land use activities within its jurisdiction do not diminish the quality of groundwater or recharge capability within the springshed.
- The bill prohibits certain activities in "primary protection zones" and limits other activities.
- An effective date of July 1, 2006.

The fiscal impact is indeterminate. The DEP is unable to provide an accurate fiscal estimate for the various requirements identified in the bill; however, DEP estimates that the rulemaking will cost between $10,000 and $50,000.[1]

[1] 2006 DEP HB 693 Analysis

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

Provide Limited Government: The bill creates additional regulatory requirements and increases in workload for individuals in state government, water management districts, and local governments relating to enhancing spring protection through an expansive mapping requirement.

Safeguard Individual Liberty: The bill prohibits certain activities in "primary protection zones" which may limit development in certain areas. The bill requires local governments to ensure their comprehensive plan reflects these limited uses and is implemented through passage of a local ordinance.

B. EFFECT OF PROPOSED CHANGES:

Present Situation

DEP estimates that Florida has more than 700 springs which provide natural, recreational and economic values for Floridians and tourists. A spring is a point from which groundwater steadily discharges from a single large vent or from several small vents. The groundwater that flows from most of Florida's springs originates from the same Floridan Aquifer that is tapped for most municipal supplies and private wells in the state. Springs vary in size from the largest "first magnitude" springs with a flow of 100 cubic feet per second or more (64.6 million gallons per day), to the smallest "eighth magnitude" springs at less than one pint per minute. Florida has 33 first magnitude springs; more than any other state.[2]

Florida's springs are protected by a variety of state regulatory programs, including the state's surface and groundwater standards; the wastewater, stormwater, and other regulatory programs governing discharges to groundwater; acquisition of conservation lands; and a variety of local protection measures.[3] Local governments have the primary responsibility to determine land use activities within their jurisdiction. Therefore, local government's comprehensive plans include goals, objectives, and policies that address land use, natural resource protection, and other common considerations. A local government comprehensive plan that is effectively implemented can aid in the protection and restoration of springs.

Water can carry contaminants from the land surface into springs. Since the 1970's, scientists have documented a decline in water quality in most of Florida's springs, particularly with regards to nutrients, such as nitrogen and phosphorus found in plant fertilizers. Elevated nutrient levels may lead to increase in algae growth that decrease water clarity and change both the aesthetic qualities and the natural ecology of springs. The groundwater that feeds springs is recharged by seepage from the surface and through direct conduits such as sinkholes. The nature and magnitude of the threats to springs varies according to land use practices and geology within each spring recharge basin. Contaminants that reach the groundwater and flow to springs include nutrients from fertilizers, septic tanks, wastewater sprayfields, and farm animal wastes.[4]

The Total Maximum Daily Load (TMDL) Program is a federally mandated water quality program administered by DEP under the Florida Watershed Restoration Act. A TMDL is the maximum amount of a pollutant that a water body can assimilate without exceeding water quality standards. Under

[2] http://www.dep.state.fl.us/springs/overview.htm
[3] 2006 DEP HB 693 Analysis
[4] November 2000, Florida's Springs Strategies for Protection & Restoration Report

section 403.067, F.S., TMDLs must be developed for all impaired waters. A fundamental issue associated with determining spring impairment is an appropriate delineation of the relevant springshed and an assessment of the relationship between pollution sources in the springshed, groundwater quality, and the interaction between groundwater and surface water quality. TMDLs are developed, allocated, and implemented through a watershed management approach.[5]

In order to educate the public and further study Florida springs, the DEP developed the Florida Springs Initiative. This program investigates the sources of spring-flow, determines the springsheds that affect the water quantity and quality of springs, monitors water quality, assists landowners in implementing springs protection actions, and promotes 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 discharging from the Floridan aquifer system. The quality of Florida spring water is directly related to discharge rates, residence time of water within the aquifer, and land-use practices within the spring recharge basin.

Effect of Proposed Change

Florida Springs Protection Act:
The bill creates Part IV of chapter 369, F.S., relating to springs protection. Legislative intent is addressed in section 369.401, F.S., to include that the Legislature recognize the following:

- Florida's springs are a precious and fragile resource that must be protected, flow and water quality at springs depict water quality in the Floridan Aquifer, and springs provide many recreational opportunities while providing critical habitat for plants and animals.
- A spring's hydrological and environmental condition is directly influenced by activities and land uses within the springshed.
- A number of the state's springs currently have elevated nutrient concentrations which may lead to increases in algae growth that decrease water clarity and change both the aesthetic and the natural ecology of springs.
- State regulating standards for nutrient concentrations in ground water are intended to protect human health and are not based on the protection of complex biological and ecological systems that contribute to the integrity of the state's springs.
- There is a lack of identification of springshed boundaries and in order to adequately protect springs the springshed areas should be delineated and characterized using the best available data.
- A coordinated statewide springs protection plan is required due to springsheds crossing local jurisdictional boundaries.
- Local governments whose jurisdiction are within springsheds emphasize the importance of this state resource in their planning and regulation efforts.
- Future amendments to comprehensive plans adopted by local governments whose jurisdiction are within the springsheds of first and second magnitude and other locally significant springs include land development regulations that protect the water quality of those springs.
- Urgent action needed to provide data necessary to delineate springsheds, protection zones, comprehensive plans and land development regulations to protect state springs. The state agencies and water management districts should work together with local governments to develop this data.

The bill provides definitions for the following terms:

[5] Florida House of Representatives, Environmental Regulation Committee, Water & Natural Resources Briefing Book 2005

- Department
- First and second magnitude springs
- Karast
- Karast terrain
- Local comprehensive plan
- Local government
- Primary protection zone
- Reclaimed water
- Reuse
- Secondary protection zone
- Spring
- Springshed
- Travel time

Springshed Delineation Map:
The bill requires DEP to delineate springsheds and primary protection zones for all first and second magnitude springs utilizing best available data from water management districts, the Florida Geological Survey and other credible sources. The delineation of protection zones are based on the following criteria:

- Proximity or connectivity to the spring
- Travel time
- Proximity to karast features
- Hydrogeologic characteristics of the springshed
- Areas that contribute surface water drainage or overland flow to the spring and its springshed
- Data from the Florida Geological Survey's Florida Aquifer Vulnerability Assessment
- Other objective and credible data

The bill provides that DEP shall prepare and propose for adoption a statewide springshed delineation map within three years after the effective date of this bill. The bill authorizes DEP during the interim to adopt primary protection zones using simple distance criteria from a spring, spring run, sinkhole, conduit, or other feature significant to spring discharge along with the authorization to adopt rules to implement this chapter. The bill provides for the rules adopted, springsheds and primary zones delineated to be periodically reviewed and amended as necessary.

First and Second Magnitude Springs Impairment Determination:
The bill requires within two years after the act becomes law, DEP to establish criteria for the impairment of first and second magnitude springs. The bill directs DEP in establishing impairment, to consider the following:

- Existing water quality and water quality trends
- Presence of algae that diminish clarity and may affect contact recreation
- Imbalance in flora and fauna
- Aesthetics as they affect economic value of a particular spring

The bill provides DEP upon the establishment of such criteria, to create a list of impaired first and second magnitude springs to be added to the existing list of impaired waters. DEP may designate a spring impaired if in the judgment of the department the spring is likely to become impaired.

TMDL Establishment For Springs:
The bill requires DEP to establish and implement TMDLs for all impaired first and second magnitude springs in conjunction with the appropriate water management districts along with developing a watershed or basin management plan to address the protection of springshed water quantity and quality. DEP is responsible for developing the schedule to implement the TMDLs for springs.

Spring Consideration With Local Government Comprehensive Plans:
The bill requires within one year after DEP's completion of springshed and protection zone delineation, each local government to review its local comprehensive plan and recommend amendments to ensure that it contains measures to protect the quantity and quality of water discharged from any first or second magnitude spring whose springhead is located wholly or partly within the jurisdiction of the local

government. The bill provides DEP, the Department of Community Affairs and water management districts to provide guidance during the review period. Within one year after completion of the review, each local government will consider the recommended amendments and adopt measures to ensure that land use activities within its jurisdiction do not diminish the quality of groundwater or recharge capability within the springhead.

Prohibited and Limited Uses Within Primary Protection Zones:
The bill prohibits new industrial wastewater disposal systems, new landfills (including lined landfills), and new rapid infiltration basins within primary protection zones. The bill provides that only by a special use permit in accordance with local ordinances the following limited uses:

- New slow-rate land application systems, excluding the reuse of reclaimed water
- New onsite sewage disposal systems at a density of greater than one per five acres, except those that make use of advanced, low nutrient output designs approved by the Department of Health
- New facilities for the transfer, storage, or disposal of hazardous materials or waste
- Other land uses may be prohibited in the local comprehensive plan at the discretion of a local government, after considering existing land use patterns and the potential damage to a particular spring.

The bill provides that local governments will ensure their comprehensive plan reflects these limited uses and is implemented through passage of a local ordinance.

C. SECTION DIRECTORY:

Section 1 Creates Part IV of chapter 369, F.S., relating to springs protection.

Section 2 The act will take effect July 1, 2006.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues: None.

2. Expenditures:

The fiscal impact is indeterminate. The DEP is unable to provide an accurate fiscal estimate for the various requirements identified in the bill; however, DEP estimates that the rulemaking will cost between $10,000 and $50,000.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues: None.

2. Expenditures:

The cost associated with local government comprehensive plan review and amendment is indeterminate.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Local government adoption of measures that would preclude any land use activity that diminishes groundwater quality and recharge capability would likely have a negative impact on the private sector.[6]

D. FISCAL COMMENTS:

DEP reports that the bill's requirements, including implementation of complicated and expensive springs delineations, would have to be accomplished without any additional resources allocated to DEP.

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; reduce the authority that cities or counties have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with cities or counties.

2. Other: None.

B. RULE-MAKING AUTHORITY:

DEP is required to create additional rules for the implementation of this act. The rulemaking required would cost between $10,000 and $50,000, assuming rule adoption were not challenged.

C. DRAFTING ISSUES OR OTHER COMMENTS:

Staff has been advised by the sponsor of this bill that a strike-all amendment is forthcoming.

DEP Comments:

The bill as filed contains too many critical elements of proposed legislation which are unclear or undefined, making it impossible to implement and rendering its potential fiscal and workload impacts indeterminate but, potentially enormous.

The legislation is intended to improve the quality of Florida's springs, an objective the department shares completely. For that reason, the department has approached the sponsor and believes it can work out an agreeable compromise on the bill that accomplishes the goals in this legislation while keeping this effort within the established framework of the department's springs initiative.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES

[6] 2006 DEP HB 693 Analysis