



The Florida Senate

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Committee on Environmental Preservation and Conservation

SPRINGS PROTECTION: AN OVERVIEW OF RECENT ACTIVITIES

Statement of the Issue

Geologists estimate that there are more than 700 springs in Florida, representing the largest concentration of freshwater springs on Earth¹.

During the past three legislative sessions, bills have been filed concerning the protection of Florida's Springs. The bills have taken two distinctive tracts. Some sought to implement an actual set of protection guidelines to be used for governing future impacts to the springs. Others sought to create a task force. To date none have been passed.

Discussion

Spring discharge comes primarily from the Floridan Aquifer, the State's largest aquifer system, which provides nearly 90 percent of north Florida's drinking water². The springs provide a "window" to the aquifer system, allowing for a measure of the health of the aquifer. As spring water quality declines, so too does the quality of the Floridan Aquifer system. Over the past two decades, increased anthropogenic³ pressure has caused a decline in overall spring health. The two main factors potentially causing such declines are the reduction of groundwater supply caused by consumptive withdrawals, and the simultaneous pollution of groundwater, with nitrate-nitrogen, resulting from land-use changes⁴.

Recognizing the need to address declines in spring health, the Department of Environment Protection (department), at the behest of the Governor, formed the Florida Springs Task Force in 1999. The task force, made up of state, federal, and local government representatives, environmental advocates, and private interests, was asked to provide recommendations to the department that outlined protective strategies for springs. In November 2000, the task force provided its recommendations, in the form of a report, that outlined the following⁵:

- The potential causes for the decline of spring health;
- Strategies for information gathering, outreach and education, land use planning and management, regulation, and funding; and,
- Action steps that provided a path for government and land managers to achieve springs protection.

Following the release of the task force recommendations, the department requested funding from the Legislature to create a program to implement actions contained in the task force report. In 2001, the Legislature provided \$2.5 million for the creation of the Florida Springs Initiative (initiative) program within the department. Since 2001, the initiative has received annual appropriations from the Legislature, totaling \$17,725,721⁶, to fund scientific research, water quality and biological monitoring, education and outreach, landowner assistance projects, and springs restoration⁷.

¹ <http://dep.state.fl.us/springs/>

² www.dep.state.fl.us

³ Defined as, "of, relating to, or resulting from the influence of human beings on nature". Merriam-Webster, 2008.

⁴ Brown, Knight, Reiss, et al, 2008, *Summary and Synthesis of the Available Literature on the Effects of Nutrients on Spring Organisms and Systems*. University of Florida Water Institute.

⁵ Florida Springs Task Force, November 2000, *Florida Springs; Strategies for Protection and Restoration*. Prepared for the Department of Environmental Protection.

⁶ Provided by the department.

⁷ www.dep.state.fl.us/springs/initiative.htm

During the 2004 legislative session, the first regulatory step to protect springs in Florida was taken with the passage of the Wekiva Parkway and Protection Act (Act)⁸. The Act stated that “the Wekiva River System and its associated springshed areas are of irreplaceable value to the quality of life and well-being of the people of the State of Florida” and that the “protection of the surface and groundwater resources, including recharge within the springshed that provides for the Wekiva River System, is crucial to the long-term viability of the Wekiva River and springs and the central Florida Region’s water supply”. The Legislature found that:

- In general, Florida springs whether found in urban or rural settings, public parks, or private lands, are threatened by actual and potential flow reductions and declining water quality. As a result of climate patterns and population changes, over the past 30 years, many of Florida’s springs have begun to exhibit signals of distress, including increasing nutrient loading and lowered water flow. The groundwater that feeds springs is recharged by seepage from the surface and through direct conduits such as sinkholes.
- Springs and groundwater once damaged by overuse can be restored through good stewardship, including effective planning strategies and best management practices to preserve and protect the spring and its springshed. Prudent land use planning decisions can protect and improve quality and quantity, as well as upland resources of a springshed. Managing land use types and their allowable densities and intensities of development, followed by specific site planning to further minimize impacts, rank as important goals.

During the 2006 legislative session, the Florida Springs Protection Act⁹ was introduced in an effort to amend ch. 369, F.S., and create a statewide springs protection plan. The bill sought to recreate the Florida Springs Task Force for the purpose of:

- Assessing the conditions at first and second magnitude springs;
- Recommending strategies for protecting the springs; and,
- Developing a model springs protection plan.

The bill unanimously passed both the Senate Committees on Environmental Preservation and Conservation and Community Affairs before ultimately dying on the calendar on second reading.

During the 2007 legislative session, the Florida Springs Protection Act¹⁰ was introduced again in an effort to amend ch. 369, F.S. This version of the bill differed dramatically from its predecessor, as it provided specific regulatory measures such as:

- The delineation of springsheds and primary protection zones for Wakulla, Ichetucknee, Rainbow and Volusia springs;
- The review and amendment of local comprehensive plans to protect spring water quality and quantity;
- The establishment and implementation of total maximum daily loads for the four delineated springs; and,
- The prohibition of certain activities within the delineated protection zones.

The bill was referred to the Committees on Environmental Preservation and Conservation, Community Affairs and General Government Appropriations but was never heard.

During the 2008 legislative session, two bills were filed, the Florida Springs Stewardship Act¹¹ and Protection of Springs¹². The two bills mirrored efforts from previous years but took two distinct paths. The Florida Springs Stewardship Act attempted to create the Florida Springs Stewardship Task Force to collect and inventory all existing data on Florida’s 33 known first magnitude springs. Additionally, the task force would have been required to identify all existing land uses in the area of the springs. The other bill, Protection of Springs, attempted to create a pilot program that would implement total maximum daily loads for Silver Springs and Rainbow Spring as well as create basin management action plans in designated protection zones around those springs. Both bills unanimously passed the Committees on Environmental Preservation and Conservation and Community Affairs but died in the Committee on General Government Appropriations.

⁸ Chapter 2004-384, Laws of Florida.

⁹ Senate Bill 2538.

¹⁰ Senate Bill 2636.

¹¹ Senate Bill 2078.

¹² Senate Bill 2394.

Since the release of the 2000 Springs Task Force report, very few regulatory measures protecting springs have been adopted, yet several studies have indicated that nutrient pollution in spring discharge continues to rise. In addition, the 2007 Florida Springs Initiative Program Summary and Recommendations Report¹³ identifies recommended actions for the next five years, some of which will require legislation. At issue is the need to reach a consensus on a statewide spring's protection policy.

¹³ <http://dep.state.fl.us/springs/reports/files/FSIreport2007FINAL.PDF>