



## Florida Spring Initiative

### What Producers and Agricultural Business Owners Should Know

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The Florida Spring Initiative (FSI) is a comprehensive and coordinated program of the state of Florida established by the Florida Department of Environmental Protection (FDEP) to protect more than 700 freshwater springs in the state. The FSI provides funding for research, monitoring, education, and landowner assistance to improve spring water quality and flow.

#### Some things to know about the Florida Spring Initiative:

##### Florida Spring Initiative Monitoring Network

The statewide Springs Monitoring Network (SMN) began in 2001 when the Florida Legislature first provided funding for the Florida Springs Initiative. The SMN currently includes quarterly water quality monitoring (at 49 spring vents and 9 underwater conduits that feed springs) and discharge monitoring (at 35 stations near springs). This is the most comprehensive spring water quality monitoring and measurement network in the state and provides information for all of Florida's first magnitude springs and many other springs that are located in state parks. This assessment provides baseline data on general chemistry and discharge that can be used to evaluate influences due to salinity, interaction with surface water, recharge, and discharge. Analysis of these data showed results related to the impact of human activities on the springs.

Currently, nitrate enrichment stands out as the most pressing issue because of the ecological impacts to spring systems. As of January 2010, 14 springs/spring groups and 10 waterbodies deriving their flow from springs have been identified by FDEP as impaired because of nitrate enrichment. According to the SMN report of 2010, the springs with the highest nitrate concentrations are in agricultural areas or areas with a mixture of agricultural and residential development.

Detailed SMN report with information about the impacts of nutrients on spring water quality can be found at:

[http://www.dep.state.fl.us/springs/reports/files/springs\\_report\\_102110.pdf](http://www.dep.state.fl.us/springs/reports/files/springs_report_102110.pdf)



## The Department of Agriculture and Consumer Services

The Florida Department of Agriculture and Consumer Services (DACCS) is the lead agency in the development and implementation of agricultural best management practices (BMPs) to manage irrigation water and reduce nutrient discharges to surface water and ground water. DACCS has also been a key participant in the Suwannee River Partnership in cooperation with the Suwannee River Water Management District.

### Best Management Practices (BMPs)

BMPs are a set of recommended, voluntary, standardized actions to reduce nonpoint source pollution in surface and ground water. Agricultural BMPs to reduce nutrient input to ground water are the most commonly applied approach to address the impacts of agricultural practices in springsheds.

The FSI has supported agricultural BMPs and landowner assistance activities to implement those BMPs under the Suwannee River Partnership. The Suwannee River Partnership is an agricultural BMP program being implemented by dairy and poultry farmers in the Suwannee River and Santa Fe Basins to reduce nutrient loads to ground water, springs, and rivers. This partnership between farmers, the water management district, and state and federal agencies provides a model for other areas of the state where agricultural activities affect springs. Although there are no data yet to link the BMPs implemented under the Suwannee River Partnership to reduced nitrate concentrations in ground water or springs, this local stakeholder cooperation and action is critical and must continue to be encouraged.

The FSI has also supported the development of silviculture and golf course management BMPs to reduce nutrient inputs and provided funding for the distribution of BMP manuals and materials. As BMP implementation expands to include turfgrass and hay and row crops, it will be important to monitor changes in ground water and spring chemistry to assess and improve BMP effectiveness.

For more information visit [www.pieceter.com/pep](http://www.pieceter.com/pep).

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