

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Environmental Preservation and Conservation

BILL: SB 1576

INTRODUCER: Senator Dean and others

SUBJECT: Springs

DATE: March 17, 2014

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Hinton	Uchino	EP	Pre-meeting
2.			AG	
3.			AP	

I. Summary:

SB 1576 provides for the protection of springs in Florida. Specifically, the bill:

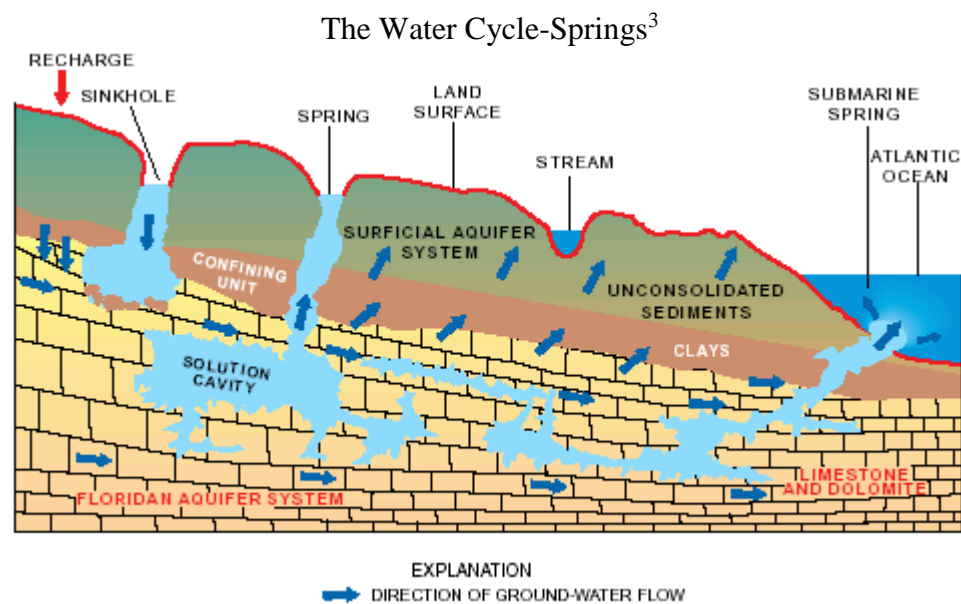
- Provides for funding from documentary stamp revenues to pay for the provisions of the bill;
- Makes changes to the makeup and mission of the Acquisition and Restoration Council (ARC);
- Requires the establishment of minimum flows and levels (MFLs) in Outstanding Florida Springs (OFSs);
- Creates Part VIII of ch. 373, F.S.
- Provides definitions;
- Directs the Department of Environmental Protection (DEP) and the Water Management Districts (WMDs) to delineate spring protection and management zones;
- Directs the WMDs to establish MFLs for any OFS within its jurisdiction by July 1, 2015;
- Directs the DEP to make determinations of impairment for OFS;
- Prohibits the issuance of consumptive use permits (CUPs) under certain conditions;
- Assigns duties to several agencies to carry out the provisions of Part VIII of ch. 373, F.S.
- Provides for variances and exceptions;
- Defines “responsible management entities”;
- Allows the creation of basin management action plans (BMAPs) to address potential violations of water quality standards (WQSs);
- Repeals s. 381.00651, F.S.; and
- Requires a study of nutrient reduction improvements for row crops and the beneficial use of reclaimed water, stormwater, and excess surface water.

II. Present Situation:

Florida's Springs

Florida's springs are unique and beautiful resources. The historically crystal clear waters provide not only a variety of recreational opportunities and habitats, but also great economic value for recreation and tourism. The springs are major sources of stream flow in a number of rivers such as the Rainbow, Chassahowitzka, Homosassa, and Ichetucknee.¹ Additionally, Florida's springs provide a "window" into the Floridan Aquifer system, which provides most of the state's drinking water.

The Floridan Aquifer System is a limestone aquifer that has enormous freshwater storage and transmission capacity. The upper portion of the aquifer consists of thick carbonate rocks that have been heavily eroded and covered with unconsolidated sand and clay. The surficial aquifer is located within the sand deposits and forms the land surface that is present today. In portions of Florida, the surficial aquifer lies on top of deep layers of clay sediments that prevent the downward movement of water. Springs form when groundwater is forced out through natural openings in the ground.²



Florida has more than 700 recognized springs. First magnitude springs are those that discharge 100 cubic feet of water per second or greater. Florida has 33 first magnitude springs in 18 counties that discharge more than 64 million gallons of water per day. Spring discharges, primarily from the Floridan Aquifer, are used to determine ground water quality and the degree of human impact on a spring's recharge area. Rainfall, surface conditions, soil type, mineralogy,

¹ Department of Community Affairs, *Protecting Florida's Springs: An Implementation Guidebook*, 3-1 (Feb. 2008), available at <http://www.dep.state.fl.us/springs/reports/files/springsimplementguide.pdf> (last visited Mar. 7, 2014).

² *Id.* at 3-1 to 3-2.

³ U.S. Environmental Protection Agency, *The Water Cycle: Springs*, <http://water.usgs.gov/edu/watercyclesprings.html> (last visited Mar. 10, 2014).

the composition and porous nature of the aquifer system, flow, and length of time in the aquifer all contribute to ground water chemistry.⁴

The springshed is the area within the groundwater and surface water basins that contributes to the discharge of the spring. The spring recharge basin consists of all areas where water can be shown to contribute to groundwater flow discharging from the spring.

Spring protection zones are sub-areas of the groundwater and surface water basins of each spring or spring system that supply water to the spring and within which human activities, such as waste disposal or water use, are most likely to have negative impacts on the water discharging from the spring. When adverse conditions occur within a spring protection zone, the conditions can be minimized by:

- Land-use management and zoning by county or municipal government;
- Adoption of best management practices (BMPs);
- Educating the public concerning environmental sensitivity; and
- If necessary, regulatory action.⁵

Nutrients

Phosphorus and nitrogen are essential nutrients for plants and animals and are the limiting nutrients in aquatic environments. The correct balance of both nutrients is necessary for a healthy ecosystem; however, excessive nitrogen and phosphorus can cause significant water quality problems. Typically, nitrogen is the limiting nutrient in spring systems. Therefore, even modest increases in nitrogen above optimum levels can accelerate algae growth, plant growth, and deplete oxygen levels.⁶

Phosphorus and nitrogen are derived from natural and anthropogenic sources. Natural inputs include the atmosphere, soils, and the decay of plants and animals. Anthropogenic sources include sewage disposal systems (wastewater treatment facilities and septic tanks), overflows of storm and sanitary sewers (untreated sewage), agricultural production and irrigation practices, and stormwater runoff.

Excessive nutrients may result in harmful algal blooms, nuisance aquatic weeds, and alteration of the natural community of plants and animals. Dense, harmful algal blooms can also cause human health problems, fish kills, problems for water treatment plants, and generally impair the aesthetics and tastes of waters. Growth of nuisance aquatic weeds tends to increase in nutrient-enriched waters, which can impact recreational activities. Increased algae production, as a result of increased nutrients, can alter plant communities and affect natural systems.

⁴ Florida Geological Survey, *Springs of Florida Bulletin No. 66*, available at <http://www.dep.state.fl.us/geology/geologictopics/springs/bulletin66.htm> (last visited Mar. 11, 2014).

⁵ Upchurch, S.B. and Champion, K.M., *Delineation of Spring Protection Areas at Five, First-Magnitude Springs in North-Central Florida (Draft)*, 1 (Apr. 28, 2004), available at www.waterinstitute.ufl.edu/suwannee-hydro-observ/pdf/delineation-of-spring-protection-zones.pdf (last visited Mar. 9, 2014).

⁶ EPA, *Health and Environmental Effects Research*, http://www.epa.gov/nheerl/research/aquatic_stressors/nutrient_loading.html#decreased_o2 (last visited Mar. 10, 2014).

In pristine conditions, spring water is high quality and lacks contaminants. It can be used directly for public water supplies or for irrigation. When pollutants are introduced to the land surface, some will be retained, but some will travel into the aquifer and later appear in spring flow. Often, nutrients introduced close to a spring will quickly reach the spring, especially in unconfined areas of the aquifer. While springs are valuable recreational and tourist attractions, they are also an indicator of reduced quality of the water in the aquifer.⁷

Urban Fertilizer Usage and Florida's Model Ordinance

Application of fertilizer in urban areas impacts springsheds when it runs off lawns and impervious surfaces into stormwater collection systems or directly into the surface water. The DEP has provided guidelines to minimize the impact of urban fertilizer use and adopted the "Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes." The model ordinance provides counties and municipalities with a range of ordinances to help minimize fertilizer inputs from urban applications. Some of the suggestions contained in the model ordinance are:

- Restricting the times fertilizer may be applied, such as restricting its application during the rainy season;
- Creating fertilizer free zones around sensitive waterbodies such as ponds, streams, watercourses, lakes, canals, or wetlands;
- Controlling application practices by, for example, restricting fertilizer application on impervious surfaces and requiring prompt cleanup of any fertilizer that is spilled on impervious surfaces; and
- Managing grass clipping and vegetative matter by disposing of such materials properly rather than simply blowing them into the street, ditches, stormwater drains, or waterbodies.⁸

Water Pollution Control Programs

Total Maximum Daily Loads and Water Quality Standards

Under s. 303 of the federal Clean Water Act (CWA), states are incentivized to adopt WQSs for their navigable waters and must review and update those standards at least once every three years. These standards include:

- Designation of a waterbody's beneficial uses, such as water supply, recreation, fish propagation, and navigation;
- Water quality criteria that define the amounts of pollutants, in either numeric or narrative standards, that the waterbody can contain without impairment of the designated beneficial uses; and
- Anti-degradation requirements.⁹

In 1999, the Legislature passed the Florida Watershed Restoration Act (WRA),¹⁰ which codified the establishment of total maximum daily loads (TMDLs) for pollutants of waterbodies as

⁷ *Supra* note 1, at 3-4.

⁸ DEP, *Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes*, 6-9 (2010), available at <http://www.dep.state.fl.us/water/nonpoint/docs/nonpoint/dep-fert-modelord.pdf> (last visited Mar. 9, 2014).

⁹ 33 U.S.C. s. 1313(c)(2)(A) (2014); 40 C.F.R. ss. 131.6 and 131.10-131.12.

¹⁰ Chapter 99-223, Laws of Fla.

required by the CWA.¹¹ Each TMDL, which must be adopted by rule, is a scientific determination of the maximum amount of a given pollutant that can be absorbed by the waterbody while still meeting WQSs. Waterbodies that do not meet the established WQSs are deemed impaired and, pursuant to the CWA, the DEP establishes a TMDL for the waterbody or section of the waterbody that is impaired.¹² A TMDL for an impaired waterbody is defined as the sum of the individual waste load allocations for point sources and the load allocations for nonpoint sources and natural background. Waste load allocations are pollutant loads attributable to existing and future point sources, such as discharges from industry and sewage facilities. Load allocations are pollutant loads attributable to existing and future nonpoint sources such as the runoff from farms, forests, and urban areas.¹³

The U.S. Environmental Protection Agency (EPA) and the DEP enforce WQSs through the implementation and enforcement of the National Pollutant Discharge Elimination System (NPDES) permitting program. Every point source that discharges a pollutant into waters of the United States must obtain an NPDES permit establishing the amount of a particular pollutant that an individual point source can discharge into a specific waterbody. The amount of the pollutant that a point source can discharge under a NPDES permit is determined through the establishment of a technology-based effluent limitation. If a waterbody fails to meet the applicable WQS through the application of a technology-based effluent limitation, a more stringent pollution control program called the water quality based effluent limitation (WQBEL) is applied.

Basin Management Action Plans

The DEP is the lead agency in coordinating the implementation of TMDLs and BMAPs through existing water quality protection programs. Such programs include:

- Permitting and other existing regulatory programs, including WQBELs;
- Non-regulatory and incentive-based programs, including BMPs, cost sharing, waste minimization, pollution prevention, agreements established pursuant to s. 403.061(21), F.S., and public education;¹⁴
- Public works, including capital facilities; and
- Land acquisition.¹⁵

The DEP may establish a BMAP as part of the development and implementation of a TMDL for a specific water body. First, the BMAP equitably allocates pollutant reductions to individual basins, as a whole to all basins, or to each identified point source or category of nonpoint

¹¹ Section 403.067, F.S.

¹² *Id.*

¹³ Chapter 62-620.200(37), F.A.C. Point source means any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. Nonpoint sources of pollution are essentially sources of pollution that are not point sources. They can include runoff from agricultural lands or residential areas; oil, grease and toxic materials from urban runoff; and sediment from improperly managed construction sites.

¹⁴ Section 403.061, F.S., grants the DEP the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it. Furthermore, s. 403.061(21), F.S., allows the DEP to advise, consult, cooperate, and enter into agreements with other state agencies, the federal government, other states, interstate agencies, etc.

¹⁵ Section 403.067(7)(b), F.S.

sources.¹⁶ Then the BMAP establishes the schedule for implementing projects and activities to meet the pollution reduction allocations. The BMAP process has the flexibility to allow for adaptive changes if necessary. The BMAP development process provides an opportunity for local stakeholders, local government and community leaders, and the general public to collectively determine and share water quality clean-up responsibilities. The DEP works with stakeholders to develop effective BMAPs.¹⁷

BMAPs must include milestones for implementation and water quality improvement. They must also include an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time. An assessment of progress toward these milestones must be conducted every five years and revisions to the plan must be made as appropriate.¹⁸

Producers of nonpoint source pollution included in a BMAP must comply with the established pollutant reductions by either implementing the appropriate BMPs or by conducting water quality monitoring.¹⁹ A nonpoint source discharger may be subject to enforcement action by the DEP or a water management district based upon a failure to implement these responsibilities.²⁰

Provisions of a BMAP must be included in subsequent NPDES permits. The DEP is prohibited from imposing limits or conditions associated with an adopted TMDL in a NPDES permit until the permit expires, the discharge is modified, or the permit is reopened pursuant to an adopted BMAP.²¹

NPDES permits issued between the time a TMDL is established and a BMAP is adopted contain a compliance schedule allowing time for the BMAP to be developed. Once the BMAP is developed, a permit will be reopened and individual allocations consistent with the BMAP will be established in the permit. The timeframe for this to occur cannot exceed five years. NPDES permittees may request an individual allocation during the interim, and the DEP may include an individual allocation in the permit.²²

For an individual point source, reducing pollutant loads established under the TMDL and WQBEL regulatory programs can be difficult to accomplish. It may require investment in expensive technology or other costly measures to reduce pollutant loads.²³

Best Management Practices on Agricultural Lands

¹⁶ Section 403.067(7), F.S.

¹⁷ DEP, *Basin Management Action Plans (BMAPs)*, <http://www.dep.state.fl.us/central/Home/Watershed/BMAP.htm> (last visited Mar. 10, 2014).

¹⁸ Section 403.067(7)(a)5., F.S.

¹⁹ BMPs for agriculture, for example, include activities such as managing irrigation water to minimize losses, limiting the use of fertilizers, and waste management.

²⁰ Section 403.067(7)(b)1.h., F.S.

²¹ Florida Senate Committee on Environmental Preservation and Conservation, *CS/SB 754 Analysis* (Mar. 14, 2013), available at http://flsenate.gov/Session/Bill/2013/0754/Analyses/2013s0754_pre.ep.PDF (last visited Mar. 10, 2014).

²² *Id.*

²³ *Id.*

Agricultural BMPs are guidelines advising producers how to manage the water, nutrients, and pesticides they use to minimize agricultural impacts on Florida's natural resources. Agricultural activity is dependent on the application of fertilizer and pesticides and is linked to the contamination of watersheds with nutrients such as nitrogen and phosphorus. BMPs tend to cover four major areas, which overlap: nutrient management, or how producers use fertilizers; pest management, or how they use pesticides; water management, or how they use and discard water; and sediment management, or how they affect the sediments on and around their properties.²⁴

BMPs reduce the amount of nutrients, sediments, and pesticides that enter the water system, and help reduce water use. Because much of the state is built on limestone, which allows water to return relatively unfiltered to the aquifer, pollutants can enter the water supply quickly, endangering humans and ecosystems.²⁵

The Office of Agricultural Water Policy, a division of the Department of Agriculture and Consumer Services (DACS), is actively involved in developing BMPs. The DACS works cooperatively with agricultural producers, industry groups, the DEP, the university system, the WMDs, and other interested parties to develop and implement BMP programs that are economically and technically feasible.²⁶

Onsite Sewage Treatment and Disposal Systems

In Florida, septic systems are referred to as onsite sewage treatment and disposal systems (OSTDSs). An OSTDS can contain any one of the following components: a septic tank; a subsurface drainfield; an aerobic treatment unit (ATU); a graywater tank; a laundry wastewater tank; a grease interceptor; a pump tank; a waterless, incinerating or organic waste-composting toilet; and a sanitary pit privy.²⁷ Septic systems are located underground and treat sewage without the presence of oxygen. Sewage flows from a home or business through a pipe into the first chamber, where solids settle out. The liquid then flows into the second chamber where anaerobic bacteria in the sewage break down the organic matter, allowing cleaner water to flow out of the second chamber into a drainfield.²⁸ Engineers licensed in Florida may specially design OSTDSs to meet the needs of individual property owners. Engineer-designed OSTDS plans are subject to review by the local county health department and must be certified by the engineer as complying with all requirements pertaining to such system.²⁹

Onsite Sewage Programs, part of the Department of Health (DOH), develops statewide rules and provides training and standardization for county health department employees responsible for

²⁴ University of Florida Institute of Food and Agricultural Sciences, *Best Management Practices*, http://solutionsforyourlife.ufl.edu/hot_topics/agriculture/bmps.html (last visited Mar. 7, 2013).

²⁵ *Id.* IFAS - BMPS

²⁶ Florida Department of Agriculture and Consumer Services: Office of Agricultural Water Policy, *Home Page* (Jan. 8, 2014), <http://www.freshfromflorida.com/Divisions-Offices/Agricultural-Water-Policy> (last visited Mar. 9, 2014).

²⁷ DEP, *Wastewater: Septic Systems*, <http://www.dep.state.fl.us/water/wastewater/dom/septic.htm> (last visited Mar. 9, 2014).

²⁸ EPA, *Primer for Municipal Wastewater Treatment Systems*, 22 (2004), available at http://water.epa.gov/aboutow/owm/upload/2005_08_19_primer.pdf (last visited Mar. 9, 2014).

²⁹ See Rules 64E-6.003 and 6.004, F.A.C.

issuing permits for the installation and repair of OSTDSs within the state.³⁰ The Bureau also licenses over 700 septic tank contractors and oversees 2.6 million onsite wastewater systems in Florida.³¹

The EPA concluded in its 1997 Report to Congress that “adequately managed decentralized wastewater systems are a cost-effective and long-term option for meeting public health and water quality goals, particularly in less densely populated areas.” In Florida, development is dependent on OSTDSs due to the cost and time it takes to install central sewer. In rural areas and low-density developments, central sewer is not cost effective. Less than one percent of Florida systems are actively managed. The remainder generally only receive maintenance when they fail, often leading to costly repairs that could have been avoided with routine tank pump outs and service.³²

Advanced Treatment

While most of Florida’s OSTDSs are conventional OSTDSs, or passive septic systems, there are other advanced systems capable of providing additional or advanced treatment of wastewater prior to disposal in the drainfield. Advanced OSTDSs can utilize various approaches to improve treatment before discharge to a drainfield, or the drainfield itself can be modified. On occasion, engineers have included the drainfield as part of the treatment process, usually as a means to achieve fecal coliform reduction.³³

Advanced systems differ in three respects from conventional treatment systems that consist of a septic tank with drainfield. First, the design of advanced systems is more variable than the approach for conventional systems. Second, they need more frequent checkups and maintenance, which is the reason they require operating permits. Third, the performance expectations are more specific, while failures for advanced systems are less defined.³⁴ Advanced systems are significantly more expensive to purchase, install, and operate.

Aerobic Treatment Units (ATUs) offer advanced treatment for wastewater. ATUs force compressed air through the liquid effluent in the tank to create a highly oxygenated (aerobic)

³⁰ The DOH does not permit the use of onsite sewage treatment and disposal systems where the estimated domestic sewage flow from the establishment is over 10,000 gallons per day (gpd) or the commercial sewage flow is over 5,000 gpd; where there is a likelihood that the system will receive toxic, hazardous or industrial wastes; where a sewer system is available; or of any system or flow from the establishment is currently regulated by the DEP. The DEP issues the permits for systems that discharge more than 10,000 gpd.

³¹ Hall, P. and Clancy, S.J., *Statewide Inventory of Onsite Sewage Treatment and Disposal Systems in Florida, Final Report*, 6 (June 29, 2009), available at <http://www.floridahealth.gov/healthy-environments/onsite-sewage/research/documents/research-reports/documents/inventory-report.pdf> (last visited Mar. 9, 2014).

³² DOH, *Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program*, 1 (Oct. 1, 2008), available at <http://www.noticeandcomment.com/Report-on-Range-of-Costs-to-Implement-a-Mandatory-Statewide-5-Year-Septic-Tank-Inspection-Program-October-fn-14050.aspx> (last visited Mar. 7, 2014).

³³ DOH, *Assessment of Water Quality Protection, Advanced Onsite Sewage Treatment and Disposal Systems: Performance, Management, Monitoring, Draft Final Report*, 14 (August 19, 2013), available at <http://www.floridahealth.gov/healthy-environments/onsite-sewage/research/advancedostdsfinalreportdraft.pdf> (last visited Mar. 7, 2014).

³⁴ Prepared for DEP by DOH, Bureau of Onsite Sewage Programs, *Revised Quality Assurance Project Plan Assessment of Water Quality Protection by Advanced Onsite Sewage Treatment and Disposal Systems (OSTDS): Performance, Management, Monitoring*, 8 (Aug. 22, 2011) available at <http://www.floridahealth.gov/healthy-environments/onsite-sewage/research/documents/final319qapp.pdf> (last visited Mar. 7, 2014).

environment for bacteria. Bacteria that thrive in oxygen-rich environments work to break down and digest the wastewater inside the aerobic treatment unit. Aerobic units come in a variety of sizes and shapes and can be made of concrete, fiberglass or polyurethane. They are designed to collect and treat all the water from a home, including water from toilets, showers, bathtubs, sinks, and laundry. There are as many as three stages that ATUS take wastewater through before the effluent is dispersed into the drainfield.³⁵

Responsible Management Entities

Responsible Management Entities (RMEs) are entities that have responsibilities for local OSTDS operation and maintenance, typically in environmentally sensitive areas or areas with dense clusters of OSTDSs. The EPA has described two types of RME models. In Model 4, referred to as the Operation and Maintenance Model, the RME is responsible for the operation and maintenance of the OSTDSs within its jurisdiction. The RME, instead of the owner, receives the permit for the OSTDS with the intent of providing greater assurance of control over performance compliance. The owner of the OSTDS pays a fee for the RME to regularly inspect and maintain the owner's OSTDS.³⁶

In Model 5, referred to as the Ownership Model, the RME owns, operates, and manages the OSTDSs in a manner similar to central sewer. One advantage of this model is that it allows the RME to more easily replace existing systems with higher-performance units or clustered systems when necessary.³⁷ The RME Ownership Model relieves the property owner of responsibility for the system and it provides the greatest assurance of system performance in sensitive environments.³⁸ This model is more expensive for the property owner.

Water Pollution Management

Urban Stormwater Management

Unmanaged urban stormwater creates a wide variety of effects on Florida's surface waters and groundwaters. Factors that exacerbate unmanaged runoff include:

- Compaction of soil;
- Addition of impervious surfaces such as roads and parking lots;
- Alteration of natural landscape features such as natural depression areas that hold water, floodplains, and wetlands;
- Construction of highly efficient drainage systems that alter the ability of the land to assimilate precipitation; and
- Pollutant loading of receiving water bodies from stormwater discharge.³⁹

³⁵ Florida Health, Lee County, *Aerobic Treatment Unit Homeowner Education*, <http://www.floridahealth.gov/chdlee/EH/OSTDSatu.html> (last visited Mar. 7, 2014).

³⁶ EPA, *Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems*, Report No. 832-B-03-001, 20 (Mar. 2003), available at http://water.epa.gov/scitech/wastetech/upload/septic_guidelines.pdf (last visited Mar. 9, 2014).

³⁷ *Id.*

³⁸ *Id.* at 5.

³⁹ DEP, *State Stormwater Treatment Rule Development Background*, <http://www.dep.state.fl.us/water/wetlands/erp/rules/stormwater/background.htm> (last visited Mar. 8, 2014).

Urbanization within a watershed decreases the amount of rainwater that seeps into the soil. Rainwater is critical for recharging aquifers, maintaining water levels in lakes and wetlands, and maintaining spring and stream flows. The increased volume, speed, and pollutant loading in stormwater discharged from developed areas leads to flooding, water quality problems, and loss of habitat.⁴⁰

In 1982, to manage urban stormwater and minimize impacts to natural systems, Florida adopted a technology-based rule requiring the treatment of stormwater to a specified level of pollutant load reduction for new development. The rule included a performance standard for the minimum level of treatment and design criteria for BMPs to achieve the performance standard. It also included a rebuttable presumption that discharges from a stormwater management system designed in accordance with the BMP design criteria would meet WQSs.⁴¹ The performance standard was to reduce post-development stormwater pollutant loading of total suspended solids⁴² by 80 percent, or by 95 percent for Outstanding Florida Waters.⁴³

In 1990, the DEP developed and implemented the State Water Resource Implementation Rule (originally known as the State Water Policy rule).⁴⁴ This rule sets forth the broad guidelines for the implementation of Florida's stormwater program and describes the roles of the DEP, the WMDs, and local governments. One of the primary goals of the program is to maintain the predevelopment stormwater characteristics of a site. The rule sets a minimum performance standard for stormwater treatment systems to remove 80 percent of the post-development stormwater pollutants "that cause or contribute to violations of WQSs."⁴⁵

The DEP and the WMDs jointly administer the Environmental Resource Permitting (ERP) program for activities that alter surface water flows.⁴⁶ Alteration or construction of new stormwater management systems in urban redevelopment areas is regulated by the ERP program pursuant to s. 373.413, F.S., and must comply with all other relevant sections of ch. 373, Part IV, F.S.

Wastewater Treatment Plants

Wastewater treatment is one of the most common forms of pollution control in the United States. Sewerage system components include collection sewers, pumping stations, and treatment plants. Sewage is collected and sent to a treatment plant to remove solids and biological contaminants. Once sewage has been treated, it is typically discharged into streams and other receiving waters, or reused.⁴⁷

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² Total Suspended Solids is listed as a conventional pollutant under s. 304(a)(4) of the CWA. A conventional pollutant is a water pollutant that is amenable to treatment by a municipal sewage treatment plant.

⁴³ Rule 62-302.700, F.A.C., provides that an Outstanding Florida Water is a designated water body worthy of special protection because of its natural attributes. This special designation is applied to certain water bodies, and is intended to protect and preserve their existing states.

⁴⁴ *Supra* note 39. See also Rule. 62-40, F.A.C.

⁴⁵ *Supra* note 39.

⁴⁶ Chapter 373, Part IV, F.S. See also Florida Dep't of Environmental Protection, *Environmental Resource Permitting (ERP) Program*, <http://www.dep.state.fl.us/water/wetlands/erp/index.htm> (last visited Mar. 8, 2014).

⁴⁷ U.S. Environmental Protection Agency, Office of Water, *How Wastewater Treatment Works: The Basics*, Report no. 833-F-98-002, 1 (May 1998), available at <http://www.epa.gov/npdes/pubs/bastre.pdf> (last visited Mar. 9, 2014).

The basic function of wastewater treatment is to speed up natural processes by which water is purified. Typically, sewage is treated by primary and secondary processes. In the primary stage, solids are allowed to settle and are removed from the wastewater. The secondary stage uses biological processes to further purify wastewater.⁴⁸

Limits in Florida for effluent to surface water from wastewater treatment plants are required to contain no more than 20 mg/L CBOD5⁴⁹ and 20 mg/L TSS⁵⁰, or 90 percent removal of each from the wastewater influent, whichever is more stringent.⁵¹ There are other limits depending on where the effluent is being sent.

Advanced Wastewater Treatment

Advanced wastewater treatment (AWT) systems perform additional treatment beyond secondary treatment. AWT can remove more than 99 percent of all impurities from sewage, producing an effluent that may be drinking-water quality. The related technology can be expensive, requiring a high level of technical expertise and well trained treatment plant operators, a steady energy supply, chemicals, and specific equipment that may not be readily available. An example of an AWT process is the modification of a conventional secondary treatment plant to remove additional phosphorus and nitrogen. The effluent standards for AWT on an annual average basis are:

- CBOD5 – 5 mg/L;
- Suspended solids – 5 mg/L;
- Total Nitrogen – 3 mg/L;
- Total Phosphorus – 1 mg/L; and
- High levels of disinfection.⁵²

Minimum Flows and Levels

MFLs are established for water bodies in order to prevent significant harm as a result of withdrawals. MFLs are typically determined based on evaluations of topography, soils, and vegetation data collected within plant communities and other pertinent information associated with the water resource. MFLs take into account the ability of wetlands and aquatic communities to adjust to changes in hydrologic conditions and allow for an acceptable level of hydrologic change to occur. When uses of water resources shifts the hydrologic conditions below levels defined by MFLs, significant ecological harm can occur.⁵³ The goal of establishing an MFL is to ensure there is enough water to satisfy the consumptive use of the water resource without

⁴⁸ *Id.*

⁴⁹ Rule 62-601.200(6), F.A.C. The rule defines carbonaceous biochemical oxygen demand (CBOD5) as the quantity of oxygen utilized in the carbonaceous biochemical oxidation of organic matter present in water or wastewater, reported as a five-day value determined using approved methods.

⁵⁰ Rule 62-601.200(54), F.A.C. The rule defines total suspended solids (TSS) as solids that either float on the surface of, or are suspended in, water or wastewater. It is measured by quantity of material removed from a sample in a laboratory test, referred to as nonfilterable residue.

⁵¹ Rule 62-600.420, F.A.C.

⁵² Section 403.086(4), F.S.

⁵³ St. Johns River Water Management District, *Water Supply: An Overview of Minimum Flows and Levels*, <http://www.sjrwmd.com/minimumflowsandlevels/> (last visited Mar. 8, 2014).

causing significant harm to the resource.⁵⁴ Consumptive uses of water draw down water levels and reduce pressure in the aquifer.⁵⁵ By establishing MFLs for non-consumptive uses, the WMDs are able to determine how much water is available for consumptive use. This is useful when evaluating a new CUP application.⁵⁶

Section 373.042, F.S., requires the DEP or WMDs to establish MFLs for priority water bodies to prevent significant harm from water withdrawals. While the DEP has the authority to adopt MFLs under ch. 373, F.S., the WMDs have the primary responsibility for MFL adoption. The WMDs submit annual MFL priority lists and schedules to the DEP for review and approval. MFLs are considered rules by the WMDs and are subject to ch. 120, F.S., challenges. MFLs are established using the best available data and are subject to independent scientific peer review at the election of the WMD, or, if requested, by a third party.⁵⁷

MFLs apply to decisions affecting permit applications, declarations of water shortages and assessments of water supply sources. Computer water budget models for surface waters and groundwater are used to evaluate the effects of existing and/or proposed consumptive uses and the likelihood they might cause significant harm. The WMD Governing Boards are required to develop recovery or prevention strategies in those cases where a water body or watercourse currently does not or is anticipated to not meet an established MFL. Water uses cannot be permitted that cause any MFL to be violated.⁵⁸

Consumptive Use Permits

A CUP establishes the duration and type of water use as well as the maximum amount of water that may be withdrawn daily. Pursuant to s. 373.219, F.S., each CUP must be consistent with the objectives of the issuing WMD or the DEP and may not be harmful to the water resources of the area. To obtain a CUP, an applicant must establish that the proposed use of water satisfies the statutory test, commonly referred to as “the three-prong test.” Specifically, the proposed water use must:

- Be a “reasonable-beneficial use” as defined in s. 373.019(16), F.S.;
- Not interfere with any presently existing legal use of water; and
- Be consistent with the public interest.

Documentary Stamp Tax

Florida’s documentary stamp tax was first enacted in 1931, at the rate of \$0.10 per \$100 of consideration.⁵⁹ The tax is now levied at the rate of \$0.70 per \$100 (or portion thereof) on documents that transfer interest in Florida real property, such as warranty deeds and quit claim

⁵⁴ DEP, *Minimum Flows and Levels*, <http://www.dep.state.fl.us/water/waterpolicy/mfl.htm> (last visited Mar. 6, 2014).

⁵⁵ *Supra* note 1, 3-5.

⁵⁶ Florida Senate Committee on Environmental Preservation and Conservation, *SB 244 Analysis*, 2 (Feb. 22, 2013), available at <http://flsenate.gov/Session/Bill/2013/0244/Analyses/2013s0244.ep.PDF> (last visited Mar. 7, 2014).

⁵⁷ *Id.*

⁵⁸ *Supra* note 53.

⁵⁹ Office of Economic and Demographic Research, The Florida Legislature et al., *Florida Tax Handbook, Including Fiscal Impact of Potential Changes*, 73 (2013), available at <http://edr.state.fl.us/Content/revenues/reports/tax-handbook/taxhandbook2013.pdf> (last visited Mar. 6, 2014).

deeds. However, the Miami-Dade County rate is \$0.60 on all documents plus \$0.45 surtax on documents transferring anything other than a single-family residence. This tax is usually paid to the Clerk of Court when the document is recorded. The Clerks of Court send the funds to the Department of Revenue, which distributes the funds according to law.⁶⁰

The documentary stamp tax is also levied at the rate of \$0.35 per \$100 on documents that are executed or delivered in Florida including notes and other written obligations to pay mortgages and liens.⁶¹

The latest Florida Tax Handbook estimates that revenue from the documentary stamp tax for the 2013-14 fiscal year is estimated to be approximately \$1,627,700,000.⁶² Before the funds may be distributed, eight percent of total collections are deducted as a service charge, the costs of collection and enforcement of the tax are deducted, and debt service for Preservation 2000, Florida Forever, and Everglades Restoration must be paid. The remainder is distributed pursuant to s. 201.15, F.S.

Land Acquisition Process and Goals

Acquisition and Restoration Council

The ARC is responsible for evaluation, selection, and ranking of state land acquisition projects on the Florida Forever priority list. ARC also reviews management plans and land uses for all state-owned conservation land.⁶³

The ARC is a 10-member group with representatives made up of:

- Four appointees by the Governor;
- The Secretary of Environmental Protection;
- The director of the Florida Forest Service of the Department of Agriculture and Consumer Services;
- The executive director of the Fish and Wildlife Conservation;
- The executive director of the Division of Historical Resources of the Department of State;
- One appointee by the FWC;
- One appointed by the Commissioner of Agriculture and Consumer Services.⁶⁴

The DEP and the Florida Natural Areas Inventory assist the ARC in carrying out its duties.⁶⁵

The ARC has several responsibilities including:

- Acquisition Responsibilities:
 - Reviewing Florida Forever project proposals and deciding evaluation needs;

⁶⁰ Florida Department of Revenue, *Documentary Stamp Tax*, http://dor.myflorida.com/dor/taxes/doc_stamp.html (last visited Mar. 6, 2014).

⁶¹ *Id.*

⁶² *Supra* note 60, at 71.

⁶³ DEP, *Acquisition and Restoration Council Responsibilities*, <http://www.dep.state.fl.us/lands/arc.htm> (last visited Mar. 8, 2014).

⁶⁴ Section 259.035, F.S.

⁶⁵ *Supra* note 63.

- Determining final project boundaries; and
- Establishing priority ranking of projects and adopting annual land acquisition work plans.
- Management Responsibilities:
 - Reviewing all management plans for state-owned lands; and
 - Reviewing land use requests on state conservation lands, including easements, subleases and others.

Ecosystem Management and Restoration Trust Fund

The Ecosystem Management and Restoration Trust Fund was created to fund:

- Detailed planning for implementation of programs for the management and restoration of ecosystems;
- The development and implementation of surface water improvement and management plans and programs;
- Activities to restore polluted areas of the state, as defined by the DEP, to their condition before pollution occurred or to otherwise enhance pollution control activities;
- Activities to restore or rehabilitate injured or destroyed coral reefs;
- Activities by the DEP to recover funds as a result of actions against any person for a violation of ch. 373, F.S.;
- Activities authorized for the implementation of the Leah Schad Memorial Ocean Outfall Program; and
- Activities to preserve and repair the state's beaches.⁶⁶

Yearly, the trust fund receives the lesser of 2.12 percent or \$30 million of remaining documentary stamp revenues.

III. Effect of Proposed Changes:

Section 1 amends s. 201.15, F.S., providing that the provisions of the bill will be paid for by a portion of documentary stamp revenues distributed to the Ecosystem Management and Restoration Fund.

The bill directs 36.9 percent of the remainder of the collected documentary stamp funds be distributed to the Ecosystem Management and Restoration Trust Fund, after the service charge and costs of collection have been paid from total revenues and after the debt service has been paid out of the 63.31 percent of the remainder of documentary stamp revenues. The revenues distributed to the Ecosystem Management and Restoration Trust Fund will be used for restoration and protection of OFSs, and for the acquisition of lands that protect essential parcels necessary for projects designed to improve water quality or conserve water in spring protection and management zones of OFSs. Projects are chosen from the most current Board of Trustees Florida Forever Priority List or projects requested by WMDs. The 36.9 percent distributed for Florida springs protection is approximately 20 percent of net documentary stamp revenues per fiscal year. In FY 2014-2015, this will be approximately \$378.8 million. While existing distributions in s. 201.15, F.S., will not be affected, the remainder that would have gone to the general revenue fund will be nearly eliminated.

⁶⁶ Section 403.1651, F.S.

Section 2 amends s. 259.035, F.S. to make changes to the ARC. The bill:

- Expands the number of voting members from 10 to 11. The additional member is appointed by the Secretary of Environmental Protection and must represent a discipline related to water quality management, including the study of dissolved oxygen levels and nutrient pollution of groundwater and surface water.
- Directs the ARC to develop and recommend rules by December 31, 2014, to fund pilot projects to test innovative or existing nutrient reduction technologies. The ARC is directed to fund at least two pilot projects if there are at least two projects to choose from provided they are not harmful to the ecological resources in the study area.
- Directs the ARC to develop and recommend rules to competitively evaluate, select, and rank projects eligible for funding under s. 373.807, F.S. (s. 373.807, F.S., is a section created under this bill and is detailed in “Section 10” of this section of the bill analysis). The council is directed to give preference to water quantity and quality projects that result in the greatest improvement. The minimum criteria for the ARC to use in selecting projects are:
 - Whether the project is within a spring protection zone of an OFS impaired by nutrients;
 - The level of nutrient impairment of the OFS where the project is located;
 - The quantity of pollutants, particularly Total Nitrogen, the project is estimated to remove in the spring protection and management zone;
 - Whether the projects is within a spring protection and management zone of an OFS that is not meeting its adopted minimum flow or level;
 - The flow necessary to restore the OFS to its adopted minimum flow or level;
 - The anticipated impact the project will have on restoring or increasing water flow or level;
 - Whether the project aids or improves an existing BMAP adopted by the DEP to address pollutant loadings;
 - Whether the project is identified and prioritized in an adopted regional water supply plan;
 - The percentage by which the amount of matching funds provided by the applicant exceeds the statutory minimum required under s. 373.805, F.S., (s. 373.805, F.S., is also created in this bill and is detailed in “Section 9” of this section of the bill analysis), or under s. 373.807 F.S.;
 - For multiple-year projects, whether the project has funding sources that are identified and assured through the expected completion date of the project;
 - The cost of the projects and the length of time it will take to complete relative to its expected benefits; and
 - Whether the applicant, since July 1, 2009, has used its own funds for projects to improve water quality or conserve water use within a springshed or spring protection and management zone of an OFS, with preference given to those applicants that have expended such funds.

This bill also changes the necessary number of affirmative votes by voting members of the ARC from five to six in order to change a project boundary or to place a proposed project on the list of projects eligible for the Conservation and Recreation Lands list and for lands acquired under the Florida Forever program.

Sections 3 and 4 amend ss. 373.042 and 373.0421, F.S., respectively, requiring the standard of “harm” to be applied when determining the minimum flow and water level of an OFS, and makes a conforming change.

Section 5 creates Part VIII of ch. 373, F.S., consisting of ss. 373.801, 373.802, 373.803, 373.805, 373.807, 373.809, 373.811, and 373.813, F.S., and provides the title, “Florida Springs and Aquifer Act.” The requirements of this act are discussed in Sections 6 – 13 of this section of the analysis.

Section 6 creates s. 373.801, F.S., providing legislative intent:

- Detailing the importance of Florida’s springs, and various benefits they provide to the state including providing critical habitat for plants and animals. They provide immeasurable natural, recreational, economic, and inherent value. They are indicators of the health of the Floridan aquifer. They also provide recreational opportunities for Floridians and visitors to the state;
- Stating that water quantity and water quality in springs are directly related. It also specifies the roles of the DEP, WMDs, DACS, and local governments;
- Recognizing that springs are only as healthy as their springsheds and identifies several of the problems affecting springs, including pollution runoff from urban and agricultural lands, stormwater runoff, and reduced water levels of the Floridan Aquifer, which have led to the degradation of many of Florida’s springs;
- Recognizing that without significant action, the quality of Florida’s springs will continue to degrade;
- Stating that springshed boundaries need to be delineated using the best available data;
- Recognizing that springsheds often cross local government jurisdictional boundaries, which requires a coordinated response;
- Stating that the DEP and WMDs should take a precautionary approach to spring protection. However, in exigent circumstances, even with a lack of scientific certainty, the DEP or the WMDs should take common-sense actions to protect springs; and
- Recognizing that while comprehensive research is still needed in many of the springs and springsheds, there is enough information to proceed with protective actions that can be adjusted as new information is gathered.

Section 7 creates s. 373.802, F.S., providing definitions for “bedroom,” “department,” “local government,” “onsite sewage and treatment disposal system,” “spring run,” “springshed,” and “spring vent.”

The bill also defines:

- “Outstanding Florida Spring,” meaning all historic first magnitude springs, as determined by the department using the most recent version of the Florida Geological Survey’s springs bulletin. The following springs are also considered OFSs: Deleon Spring, Peacock Spring, Rock Spring, Wekiwa Spring, and Gemini Spring;
- “Responsible Management Entity,” meaning a legal entity established for the purpose of providing localized management services with the requisite managerial, financial, and technical capacity to ensure long-term management of OSTDSs within its jurisdiction; and

- “Spring protection and management zone,” meaning the areas of a springshed where the Floridan Aquifer is vulnerable to surface sources of contamination or reduced levels, as determined by the DEP in consultation with the appropriate WMD.

Section 8 creates s. 373.803, F.S., directing the DEP, in consultation with the WMDs, to delineate the spring protection and management zone for each OFS, using the best available data. The bill requires the delineation of the zones to be completed by July 1, 2015. It provides a one-year extension if the WMD provides sufficient assurance to the DEP that it is in the best interest of the public to justify extending the deadline for one year.

It directs each WMD to adopt by rule, maps that delineate spring protection and management zones for each OFS within its jurisdiction.

Section 9 creates s. 373.805, F.S., directing each WMD to establish a minimum flow and level for each OFS located partially or fully within its jurisdiction by July 1, 2015. The bill provides for yearly extensions if the WMD provides sufficient evidence to the DEP that it is in the best interest of the public.

If a WMD has not set minimum flow and level for an OFS by July 1, 2015, the WMD may not issue new CUPs unless the entity requesting the CUP provides reasonable assurance that the withdrawal will not cause harm to the OFS.

If there is not enough water to meet an adopted minimum flow and level, the WMD shall implement a recovery or prevention strategy for the OFS by July 1, 2017. The strategy, at a minimum, must include:

- A listing of all specific projects identified for implementation to achieve the recovery or prevention strategy;
- A priority listing of each project;
- The estimated cost for each listed project; and
- The source and amount of financial assistance from the WMD for each project, which may not be less than 25 percent of the total cost of the project.

Lastly, it authorizes the WMDs to adopt rules to meet the objectives of this section.

Section 10 creates s. 373.807, F.S., providing a deadline of July 1, 2017, for the DEP to assess any OFS for which a determination of impairment has not been made and assess them under the numeric nutrient standards for spring vents. In addition, the bill addresses BMAPS, Requirements, Central Sewerage Systems and OSTDSs, and Funding.

Basin Management Action Plans

The bill provides a deadline of July 1, 2017, for the DEP to develop a BMAP for each OFS impaired by nutrients. For OFSs that had a BMAP prior to July 1, 2014, the BMAP must be updated to meet the requirements of the section by July 1, 2017.

Each BMAP required under this subsection must:

- Consider the spring protection and management zone delineations established under s. 373.803, F.S.
- Include a detailed allocation of the pollutant load to each identified point source or category of nonpoint sources, including at least:
 - Agricultural fertilizer;
 - OSTDSs;
 - Animal wastes;
 - Wastewater treatment facilities;
 - Stormwater; and
 - Residential lawn fertilizer.

Requirements

Each local government, wastewater treatment facility, and agricultural producer located partially or fully within a spring protection and management zone of an OFS impaired by nutrients is required to implement the following provisions, as applicable:

- Within six months of the delineation of a spring protection and management zone of an OFS within its jurisdiction, a local government must:
 - Implement an ordinance that meets the minimum requirements of the DEP's Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes. The ordinance must require that the nitrogen content of any fertilizer applied to turf or landscape plants contain at least 50 percent slow-release nitrogen and that annual application rates of Total Nitrogen may not exceed the lowest, basic maintenance rate recommended by the Institute of Food and Agricultural Sciences as of August 2013.
 - The DEP must adopt rules to implement this which set reasonable minimum standards that local governments must impose and that reflect advancements or improvements regarding BMPs.
 - A local government must create or revise its stormwater management plan to address nutrient pollution from point and nonpoint sources of stormwater. The local government must consult with the appropriate WMD, the Department of Transportation, and the DEP before adopting or updating its local government comprehensive plan or public facilities report.
- Each wastewater treatment facility must meet a standard of no more than 3 mg/L Total Nitrogen on an annual basis by July 2019 unless granted a variance or an exemption under s. 373.813, F.S.
- Each agricultural producer, within two years after the adoption of the BMAP, must implement the BMPs or other measures necessary to achieve pollution reduction levels established by the DEP or conduct water quality monitoring prescribed by the DEP or the applicable WMD.
- A local government or wastewater treatment facility must file a plan for achieving the goals listed under the "Requirements" subheading above by July 1, 2015, with the DEP for approval. An extension for two years may be granted by the DEP upon a showing of inordinate expense or that a delay is in the best interest of the public.

Central Sewerage Systems and OSTDSs

In developing the BMAP for an OFS, the DEP, in consultation with the DOH and local governments, are required to identify OSTDSs serving single-family residential properties of less

than one acre, as well as multi-family residential, commercial, and industrial properties located within a spring protection and management zone. After identification of the systems, the local governments will develop an OSTDS remediation plan in consultation with the DEP.

For each system, the plan must include whether the system requires:

- Upgrading;
- Connection to a central sewerage system; or
- No action.

Identified systems or groups of systems that require remediation must be ranked by priority. Each remediation plan must be submitted to the DEP for approval. When the plan has been approved, the local government will begin implementing the plan.

The bill specifies the costs of connection or upgrading the OSTDS may not be imposed on the owner.

Funding

In order to satisfy the requirements of the bill, project proposals may be submitted to the ARC by:

- State agencies;
- WMDs;
- Local governments;
- Special districts;
- Utilities;
- Regional management entities; and
- Any of the above entities in cooperation with agricultural producers and property owners.

Approved projects may be funded up to 75 percent of the total project cost, except in the case of a project for upgrading OSTDSs or connecting an OSTDS to a central sewerage system. Projects submitted by fiscally constrained counties or municipalities in fiscally constrained counties are eligible for funding of up to 100 percent of the total project cost.

The bill authorizes the DEP to distribute funds deposited into the Ecosystem Management and Restoration Trust Fund for projects approved by the ARC. The funds may be distributed for administrative costs associated with the act to state agencies and WMDs.

The bill specifies if there are any funds available after all obligations under this section have been met, they are deposited to the credit of the Ecosystem Management and Restoration Trust Fund. Funds may be invested and interest received shall be credited back to the fund for springs protection and restoration.

Section 11 creates s. 373.809, F.S., prohibiting the issuance of the following permits in spring protection and management zones of an OFS:

- Municipal or industrial wastewater disposal systems, including rapid infiltration basins,⁶⁷ except systems that meet an AWT standard of no more than 3 mg/L Total Nitrogen on an annual basis, or a higher treatment standard if the DEP determines a higher treatment standard is necessary to protect the resource;
- OSTDSs, except a system on a lot with a ratio of one bedroom per acre or greater or an active or passive performance-based OSTDS that can achieve 3 mg/L or less Total Nitrogen at the property boundary; or
- A facility for the transfer, storage, or disposal of hazardous waste.

The bill specifies affected local governments are responsible for ensuring that their comprehensive plans reflect these prohibitions and that they are implemented through passage of local ordinances.

Section 12 creates s. 373.811, F.S. allowing the DEP, DOH, DACS, WMDs, ARC, and RMEs to adopt rules to carry out the provisions of Part VIII of ch. 373, F.S.

The bill specifies the DACS is the lead agency for coordinating the reduction of agricultural nonpoint sources of pollution for the protection of OFSs. The DACS and the DEP will study and, if necessary, initiate rulemaking to implement new or revised BMPs, in cooperation with applicable county and municipal governments, and stakeholders. The purpose of the rules is to implement new or revised BMPs for improving and protecting OFSs and to require the implementation of such practices within a reasonable time, as specified by rule.

The bill directs the DEP, DACS, and IFAS to conduct research into improved or additional nutrient management tools, with a sensitivity to the necessary balance between water quality improvements and agricultural productivity. If necessary, the tools must be incorporated into revised BMPs adopted by rule by the DACS.

Section 13 creates s. 373.813, F.S., providing for variances and exceptions.

The bill specifies variances or exceptions may be granted by agencies or the DACS if the person applying for the variance can provide reasonable assurance that the person's proposed activity, either individually or as part of cumulative impacts, will not cause or contribute to violations of WQSs or MFLs.

The bill directs that without funding for the provisions of Part VIII of ch. 373, F.S., remedial actions under that part are not required unless they are required as part of the development, or to comply with a BMAP. This provision allows entities with responsibilities under this part to wait to expend resources to comply with this part until funding is made available, unless they are already required to take action by the development of a BMAP or to comply with the provisions of a BMAP.

⁶⁷ Rapid Infiltration Systems, or RIBs, are permeable earthen basins, designed and operated to treat and disperse municipal wastewater. RIBs are typically operated in conjunction with either a primary wastewater pond, or a primary and secondary wastewater pond system.

Section 14 amends s. 381.0065, defining “responsible management entity” for use in ss. 381.0065 to 381.0067, F.S., and requiring a study to be performed by the DOH and DEP.

The bill requires the DOH and DEP to perform a study of RMEs within spring protection and management zones of OFSs impaired by nutrients. The report is required to focus on the feasibility of different management models to prevent, reduce, and control nutrient pollution from OSTDSs. In addition, the report must examine the results of different management models and how they well they address mandatory OSTDS evaluation and assessment programs, or any other options that may accomplish similar nutrient pollution reductions, both in the short and long term. The report and recommendations must be provided to the Governor, the President of the Senate, and the Speaker of the House of Representatives by March 1, 2015.

The bill also allows a municipality, county, or appointed regional entity to establish an RME for the prevention, reduction, and control of nutrient pollution from OSTDSs while the study is being performed. It specifically allows RMEs to:

- Implement rules and maintenance programs in coordination with the DOH;
- Permit development of system performance standards;
- Develop the standards for construction, operation, and inspection of OSTDSs;
- Develop maintenance programs for OSTDSs;
- Coordinate planning with other local wastewater service providers for nutrient reduction; and
- Consolidate multiple, smaller individual projects into a single project proposal for submission to the ARC.

The bill directs the DEP to ensure that RMEs adopt rules and policies that are at least as restrictive as state law.

Section 15 amends s. 403.067, F.S., allowing the development of BMAPs for waterbodies to either achieve compliance with WQs or to prevent noncompliance with WQs. Additionally, if the waterbody is an OFS, the BMAP must allocate pollutant reductions, including loads to groundwater, to each point source or category of nonpoint sources within the delineation of a spring protection and management zone.

The bill changes the BMAP process from just a recovery process to both a recovery process and a preventative process. When a waterbody is degrading but has not yet violated WQs, this provision gives stakeholders the opportunity to address problems through a formal, coordinated process before WQs are violated.

Section 16 repeals s. 381.00651, F.S. The section of law being repealed mandated the creation of an OSTDS evaluation and assessment program in counties or municipalities that contain first magnitude springs. The section contained an opt-out provision that all affected counties and municipalities utilized. The repealed section also contains preemption language that will likely conflict with other requirements in the bill.

Section 17 creates an unnumbered section of Florida law that requires a comprehensive study on nutrient reduction improvement for row crops and the beneficial use of reclaimed water, stormwater, and excess surface water. The report must be submitted to the Governor, the

President of the Senate, and the Speaker of the House of Representatives by December 1, 2015.

The study must:

- Describe factors that currently prohibit or otherwise complicate the expansion of the beneficial use of reclaimed water and provide recommendations for mitigating those factors;
- Identify factors that affect potable and reclaimed water that includes:
 - Environmental;
 - Public health;
 - Public perception;
 - Engineering;
 - Fiscal issues; and
 - User fees.
- Identify areas where reclaimed water needs to be used to accommodate constraints on the use of traditional water supplies;
- Evaluate the costs to users of reclaimed water compared to traditional water sources, including an examination of the nutrient concentrations in reclaimed water and the necessity for additional fertilizer supplementation;
- Evaluate permitting incentives that encourage switching from traditional water supplies to reclaimed water, and to allow users to switch to traditional water supplies if reclaimed water becomes unavailable;
- Describe the basic feasibility, benefit, and cost to construct regional water features on public or private lands for reclaimed water, stormwater, or excess surface water. The study must also address delivery mechanisms for beneficial uses rather than discharge to tide;
- Describe any other alternative processes, systems, or technology that may be comparable or preferable to a regional storage system or that may complement or substitute for a regional storage system;
- Evaluate the impact of implementation of a comprehensive reclaimed water plan on traditional water sources and aquifer levels; and
- Evaluate strategies to reduce nutrient loading from row crops in areas sensitive to nutrient pollution, including the application of organic fertilizers, or provide incentives for agricultural producers to plant crops that require less fertilizing.

The bill requires DACS and DEP to hold a joint public meeting to get input on the design of the comprehensive study and to provide a chance for public comment before publishing the final report. The bill specifies this section expires on December 1, 2015.

Section 18 provides an effective date of July 1, 2014.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

Existing regulatory programs require local governments to expend funds to comply with MFLs, WQSs, and BMAPs. This bill requires additional expenditures but also provides significant funding for projects required under existing law; therefore, it is not clear whether this bill will constitute a mandate. A comprehensive fiscal analysis is required to determine the total impact.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

The bill would require the distribution of 36.9 percent of the remainder of documentary stamp tax revenues on a yearly basis for springs protection.

B. Private Sector Impact:

The exact impact of the bill on the private sector and individuals cannot be calculated because many of the costs are dependent on activities, such as delineation of spring protection and management zones that have not occurred. Below are some examples of potential private sector impacts.

The bill contains provisions that will require some property owners in spring protection zones to upgrade their OSTDSs or connect to a central sewerage system. This could result in higher rates for sewage disposal compared to the costs of using an OSTDS. ATUs are also more costly to operate than conventional OSTDSs.

Agricultural producers will pay 25 percent of costs for BMPs, but those costs may be offset by savings or increased productivity.

Rate payers may pay for ongoing operation and maintenance for AWT plants and 25 percent of upgrade costs, through rate increases.

Property owners may have to pay for more expensive OSTDSs to install in new developments with lots of less than one acre.

Urban fertilizer use may decrease because of ordinances causing a reduction in revenue for fertilizer companies.

Septic tank contractors may benefit due to increased scrutiny and required upgrades to OSTDSs.

C. Government Sector Impact:

The exact impact on the government sector cannot be calculated for the reasons noted above.

The bill requires significant financial outlays on the part of the state and local governments in order to carry out the provisions of the bill. The exact amount cannot be calculated at this time.

The DEP and WMDs will be subject to short timelines to complete work that may be difficult to accomplish within the timelines required in the bill. This could result in increased outlays for personnel and research.

VI. Technical Deficiencies:

Line 523 refers to "...sufficient and appropriate evidence..." Line 539 refers to "...sufficient evidence..." Appropriate was supposed to be removed in the current version of the bill.

Line 586 – the word "are" should be "is."

Line 643 provides an indeterminate timeline for the identification of OSTDSs within a spring protection and management zone. It should be clarified as to when the OSTDSs must be identified by.

Lines 661 and 662 both mention "agricultural producers" The phrase needs to be removed from line 661.

Line 666 contains a period that changes the meaning of the provision. As written, projects to upgrade or connect OSTDSs are not eligible for funding. The intent was to fully fund those projects.

Line 706 – the words "disposal" and "treatment" are transposed.

VII. Related Issues:

The bill defines Outstanding Florida Springs as all first magnitude springs in Florida, as defined in the most recent version of the Florida Geological Survey's springs bulletin. A future bulletin could remove one of the first magnitude springs from its list, creating problems for ongoing projects by removing the regulatory structure established in this bill.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 201.15, 259.035, 373.042, 373.0421, 381.0065, and 403.067.

This bill creates the following sections of the Florida Statutes: 373.801, 373.802, 373.803, 373.805, 373.807, 373.809, 373.811, and 373.813.

This bill repeals section 381.00651 of the Florida Statutes.

This bill creates an undesignated section of Florida law.

IX. Additional Information:

- A. **Committee Substitute – Statement of Changes:**
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

- B. **Amendments:**

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.
