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.)

	Prepar	ed By: The I	Professional St	aff of the Committe	e on Appropria	ations
BILL:	CS/CS/SB	552				
INTRODUCER:	Appropriations Committee; Environmental Preservation and Conservation Committee; and Senator Dean					
SUBJECT:	Environmental Resources					
DATE: November 23, 2015 REVISED:						
ANALYST		STAFF DIRECTOR		REFERENCE		ACTION
. Hinton		Rogers		EP	Fav/CS	
2. Howard		Kynoch		AP	Fav/CS	

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/CS/SB 552:

- Creates the Florida Springs and Aquifer Protection Act to provide for the protection and restoration of Outstanding Florida Springs (OFSs);
- Codifies the Central Florida Water Initiative (CFWI) and ensures that the appropriate governmental entities continue to develop and implement uniform water supply planning, consumptive use permitting, and resource protection programs for the Central Florida Water Initiative:
- Updates and restructures the Northern Everglades and Estuaries Protection Program
 (NEEPP) to reflect and build upon the Department of Environmental Protection's (DEP)
 completion of basin management action plans (BMAPs) for Lake Okeechobee, the
 Caloosahatchee River and Estuary, and the St. Lucie River and Estuary, and the Department
 of Agriculture and Consumer Services' (DACS) implementation of best management
 practices (BMPs);
- Modifies water supply and resource planning and processes to make them more stringent;
- Requires the Office of Economic and Demographic Research to conduct an annual assessment of water resources and conservation lands;
- Requires the DEP to publish an online, publicly accessible database of conservation lands on which public access is compatible with conservation and recreation purposes;
- Requires the DEP to conduct a feasibility study for creating and maintaining a web-based, interactive map of the state's waterbodies as well as regulatory information about each waterbody;

• Creates a pilot program for alternative water supply in restricted allocation areas and a pilot program for innovative nutrient and sediment reduction and conservation; and

• Revises certain considerations for water resource permits.

The bill requires a number of activities that will result in significant long-term costs for several government entities, including the DEP, the DACS, and the water management districts (WMDs). The total fiscal impact is indeterminate (see Section V. Fiscal Impact Statement). Resources to support the costs associated with this bill may be included each fiscal year in the General Appropriation Act.

The bill provides an effective date of July 1, 2016.

II. Present Situation:

State Lands Database

The Department of Environmental Protection (DEP) maintains a comprehensive system and automated inventory of all state lands and real property leased, owned, rented, occupied, or maintained by a state agency, judicial branch, or water management district (WMD). In order to meet the requirement, the DEP created the Florida State Owned Lands and Records Information System (FL-SOLARIS). The database includes all state owned lands in which the state has a fee interest, including conservation easements acquired through a formal acquisition process for conservation.

The FL-SOLARIS system has been implemented by the DEP and the Department of Management Services (DMS) and includes two main components: the Facility Information Tracking System, which includes 332 users and 65 different agencies, and the Lands Information Tracking System, which includes 140 users and 50 different agencies.²

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. Springs are major sources of stream flow in a number of rivers such as the Rainbow, Chassahowitzka, Homosassa, and Ichetucknee.³ Additionally, Florida's springs provide a "window" into the Floridan aquifer system, which provides most of the state's drinking water.

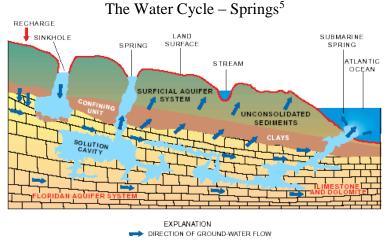
The Floridan aquifer system is a limestone aquifer that has enormous freshwater storage and transmission capacity. The upper portion of the aquifer consists of thick carbonate rocks that have been heavily eroded and covered with unconsolidated sand and clay. The surficial aquifer is located within the sand deposits and forms the land surface that is present today. In portions of

¹ Section 216.0153, F.S.

² State of Florida Lands and Facilities Inventory Search, http://webapps.dep.state.fl.us/DslPi/splash?Create=new (last visited Oct. 18, 2015).

³ 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 Oct. 18, 2015).

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.⁴



Florida has more than 700 recognized springs, categorized by flow in cubic feet per second. 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 groundwater quality and the degree of human impact on a spring's recharge area. Rainfall, surface conditions, soil type, mineralogy, the composition and porous nature of the aquifer system, flow, and length of time in the aquifer all contribute to groundwater chemistry. ⁶

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 negatively impact 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 regulations adopted by county or municipal government;
- Adoption of best management practices (BMPs);
- Educating the public concerning environmental sensitivity; and
- Regulatory action, if necessary.

⁴ *Id*. at 3-1 to 3-2.

⁵ EPA, The Water Cycle: Springs, http://water.usgs.gov/edu/watercyclesprings.html (last visited Oct. 18, 2015).

⁶ Florida Geological Survey, Springs of Florida Bulletin No. 66, available at

http://www.dep.state.fl.us/geology/geologictopics/springs/bulletin66.htm (last visited Oct. 18, 2015).

⁷ 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 Oct. 18, 2015). *See also* chs. 373 and 403, F.S.

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 and plant growth, and deplete oxygen levels.

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 nutrient loads may result in harmful algal blooms, nuisance aquatic weeds, and the 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.

While springs are valuable recreational and tourist attractions, they are also an indicator of reduced quality of the water in the aquifer. 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.⁸

Water Pollution Control Programs

Water Quality Standards (WQSs)

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. ⁹ 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 a waterbody can contain without impairment of the designated beneficial uses; and
- Anti-degradation requirements. 10

⁸ Department of Community Affairs, *Protecting Florida's Springs: An Implementation Guidebook*, 3-4 (Feb. 2008), *available at* http://www.dep.state.fl.us/springs/reports/files/springsimplementguide.pdf (last visited Oct. 18, 2015).

⁹ 33 U.S.C. s. 1313(b)(1) and (c)(4). If states do not submit water quality standards within a certain time, or if the standards are not consistent with certain requirements, the EPA may step in and establish water quality standards.

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

The CWA requires that the surface waters of each state be classified according to their designated uses. ¹¹ Florida has six classes that are arranged in order of the degree of protection required:

- Class I Potable Water Supply
- Class II Shellfish propagation or harvesting;
- Class III Fish consumption, recreation, propagation and maintenance of a healthy, well-balanced population of fish and wildlife;
- Class III Limited Fish consumption, recreation or limited recreation, and/or propagation and maintenance of a limited population of fish and wildlife;
- Class IV Agricultural water supplies; and
- Class V Navigation, utility, and industrial use. 12

Each class has specific water quality criteria that must be met to maintain that classification. ¹³ Criteria applicable to a classification are designed to maintain the minimum conditions necessary to assure the suitability of water for the designated use of the classification. Activities allowed under a lower classification are allowable when withdrawing water from higher class waters. So, for example, a Class II surface water may also be used for any other use except for Class I purposes. ¹⁴

Reclassification

Reclassification of a waterbody's designated beneficial use can be initiated by the DEP or by petition from another entity. A designation may be upgraded, but there must be credible information showing the existence or attainability of the beneficial use. For example, a waterbody designated as Class III may be upgraded to Class II if there is credible information showing that shellfish harvesting and consumption are routinely conducted in the waterbody and that the water quality criteria for Class II is attainable.¹⁵

For a waterbody to be considered for reclassification as a drinking water source, a petitioner must demonstrate that the water quality meets Class I water quality criteria or can meet those criteria after conventional treatment. Potential influences of reclassification on other users of the waterbody must be evaluated and permitting requirements must also be considered.¹⁶

Petitions to add a waterbody's designated use as drinking water source should determine if it is an existing use (now or since 1975) or an attainable use. Factors to consider when determining whether the use is an existing use can include the presence of drinking water withdrawals and permits authorizing withdrawal for consumptive use. Factors to consider when determining whether the designation is an attainable use can include proximity to wastewater sources and effects on water quality.¹⁷

¹¹ 33 U.S.C. s. 1313(c).

¹² Fla. Admin. Code R. 62-302.400.

¹³ See Fla. Admin. Code R. 62-302.500 and 62-302.530.

¹⁴ Fla. Admin. Code R. 62-302.400(6).

¹⁵ DEP, *Process for reclassifying the Designated Uses of Florida Surface Waters* 7, (June, 2010), *available at* http://www.dep.state.fl.us/water/wqssp/docs/reclass/process_document_080510.pdf (last visited Oct. 27, 2015). ¹⁶ *Id.* at 7-8.

¹⁷ *Id.* at 6-7.

Total Maximum Daily Load (TMDLs)

A TMDL, which must be adopted by rule, is a scientific determination of the maximum amount of a given pollutant that can be absorbed by a waterbody and still meet WQSs. ¹⁸ Waterbodies, or sections of waterbodies, that do not meet the established WQSs are deemed impaired and, pursuant to the CWA, the DEP must establish a TMDL for the waterbody or section of the waterbody that is impaired. ¹⁹ 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. ²⁰ Waste load allocations are pollutant loads attributable to existing and future point sources. Load allocations are pollutant loads attributable to existing and future nonpoint sources. Point sources are discernible, confined, and discrete conveyances including pipes, ditches, and tunnels. Nonpoint sources are unconfined sources that include runoff from agricultural lands or residential areas. ²¹

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 an 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 is applied.

Basin Management Action Plans (BMAPs) and Best Management Practices (BMPs)

The DEP is the lead agency in coordinating the development and implementation of TMDLs. BMAPs are one of the primary mechanisms the DEP uses to achieve TMDLs. BMAPS are plans that use existing planning tools to address the entire pollution load, including point and nonpoint discharges, for a watershed. BMAPs generally include:

- Permitting and other existing regulatory programs, including water quality based effluent limitations;
- Non-regulatory and incentive-based programs, including best management practices (BMPs), cost sharing, waste minimization, pollution prevention, agreements established pursuant to s. 403.061(21), F.S., and public education;²²

¹⁸ Section 403.067, F.S.

¹⁹ *Id*.

²⁰ Section 403.031(21), F.S.

²¹ Fla. Admin. Code R. 62-620.200(37). 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.

²² 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.

- Public works projects, including capital facilities; and
- Land acquisition.²³

The DEP may establish a BMAP as part of the development and implementation of a TMDL for a specific waterbody. 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 sources. 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. 25

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.²⁶

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.²⁷ A nonpoint source discharger may be subject to enforcement action by the DEP or a water management district (WMD) based on a failure to implement these requirements.²⁸ BMPs are developed for agricultural operations as well as for other activities, such as nutrient management on golf courses, silviculture (forestry) operations, and stormwater management.²⁹

BMPs are designed to 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 the public and ecosystems.³⁰

The DEP, in cooperation with the WMDs, establishes BMPs for nonagricultural nonpoint sources. The Department of Agriculture and Consumer Services (DACS) establishes BMPs for agricultural nonpoint sources.³¹ The DACS has created two types of BMPs: management and structural BMPs. Management BMPs involve nutrient, pesticide, and irrigation management,

²³ Section 403.067(7)(b), F.S.

²⁴ Section 403.067(7), F.S.

²⁵ DEP, Basin Management Action Plans (BMAPs), available at

http://www.dep.state.fl.us/central/Home/Watershed/BMAP.htm (last visited Oct. 18, 2015).

²⁶ Section 403.067(7)(a)5., F.S.

²⁷ Section 403.067(7)(b)2.g., F.S. BMPs for agriculture, for example, include activities such as managing irrigation water to minimize losses, limiting the use of fertilizers, and waste management.

²⁸ Section 403.067(7)(b)2.h., F.S.

²⁹ DEP, Best Management Practices, Public Information, and Environmental Education Resources, available at http://www.dep.state.fl.us/water/nonpoint/pubs.htm#SILVICULTURE BMP (last visited Oct. 27, 2015).
³⁰ Id

³¹ Section 403.067(7)(c), F.S.

such as when and how long to irrigate and how to use fertilizers and pesticides.³² Structural BMPs involve changes to the land or installation of structures. Structural BMPs can include water control structures, fencing, and tailwater recovery systems.³³ The DACS works cooperatively with agricultural producers, industry groups, the DEP, the state university system, the WMDs, and other interested parties to develop and implement BMP programs that are economically and technically feasible.³⁴

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 an NPDES permit until the permit expires, the discharge is modified, or the permit is reopened pursuant to an adopted BMAP.³⁵ 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.³⁶

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 options 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.³⁷

³² University of Florida Institute of Food and Agricultural Sciences, *Best Management Practices*, *available at* http://solutionsforyourlife.ufl.edu/hot_topics/agriculture/bmps.shtml (last visited Oct. 18, 2015).

³³ DACS, Agriculture and Water Quality, available at

http://www.freshfromflorida.com/content/download/33106/813038/BMP_Backgrounder.pdf (last visited Oct. 27, 2015).

³⁴ DACS, Office of Agricultural Water Policy, *Home Page* (Jan. 8, 2014), *available at*

http://www.freshfromflorida.com/Divisions-Offices/Agricultural-Water-Policy (last visited Oct. 18, 2015).

³⁵ Section 403.067(7)(b)2., F.S.

³⁶ Section 403.067(7)(b)2.a., F.S.

³⁷ Section 403.9337, F.S. *See also* DEP, *Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes*, 6-9 (2015), *available at* http://www.dep.state.fl.us/water/nonpoint/docs/nonpoint/dep-fert-modelord.pdf (last visited Oct. 18, 2015).

Onsite Sewage Treatment and Disposal Systems (OSTDs)

In Florida, septic systems are referred to as onsite sewage treatment and disposal systems. 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. OSTDSs 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. 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.

The Department of Health (DOH) administers onsite sewage programs, develops statewide rules, and provides training and standardization for county health department employees responsible for issuing permits for the installation and repair of OSTDSs within the state. ⁴¹ The DOH also licenses over 700 septic tank contractors and oversees 2.6 million onsite wastewater systems in Florida. ⁴² OSTDSs serve approximately 31 percent of Florida's population ⁴³ and approximately 25 percent of homes nationwide. ⁴⁴

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 systems. In rural areas and low-density developments, central sewer systems are not cost effective. Less than one percent of OSTDSs in Florida are actively managed. The remainder are generally serviced only when they fail, often leading to costly repairs that could have been avoided with routine

³⁸ DEP, *Wastewater: Septic Systems*, *available at* http://www.dep.state.fl.us/water/wastewater/dom/septic.htm (last visited Oct. 18, 2015).

³⁹ 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 Oct. 18, 2015). ⁴⁰ See Fla. Admin. Code R. 64E-6.004.

⁴¹ Section 381.0056, F.S. 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.

⁴² 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 Oct. 18, 2015).

⁴³ DOH, *Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program*, 1 (Oct. 2008), *available at* http://www.floridahealth.gov/environmental-health/onsite-sewage/research/_documents/rrac/2008-11-06.pdf (last visited Oct. 23, 2015).

⁴⁴ EPA, Water: Septic (Onsite/Decentralized) Systems, Frequently Asked Questions, (Mar. 8, 2013), available at http://water.epa.gov/infrastructure/septic/FAQs.cfm (last visited Oct. 23, 2015).

⁴⁵ EPA, *Handbook for Managing Onsite and Clustered (Decentralized) Wastewater Treatment Systems*, 1 (Dec. 2005), *available at* http://water.epa.gov/infrastructure/septic/upload/onsite_handbook.pdf (last visited Mar. 26, 2015).

maintenance.⁴⁶ In Florida, approximately 30-40 percent of effluent nitrogen is typically removed in the septic tank and drain field.⁴⁷ This still leaves significant amounts to percolate through the ground into the groundwater. Further, several studies have found that OSTDS drain field effluent is a significant contributor of nitrogen to groundwater.⁴⁸

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 systems differ in three respects from conventional treatment systems that consist of a septic tank with a drainfield. First, the design of advanced systems is more variable than that of conventional systems. Second, they need more frequent checkups and maintenance and they require operating permits. Third, the performance expectations are more specific, while failures for advanced systems are less defined. 50

Biosolids

Biosolids are the solid, semisolid, or liquid residue generated during the biological wastewater treatment process. Florida generates approximately 320,000 dry tons of biosolids annually. Biosolids are normally high in organic content and contain moderate amounts of nutrients such as nitrogen and phosphorus, making them valuable as a fertilizer or soil amendment.⁵¹ They may be used beneficially or disposed of in landfills.⁵²

Biosolids are classified as AA, A, or B. AA biosolids are considered the highest quality biosolids. They must be treated to a level that essentially eliminates pathogens and meets strict concentration limits for heavy metals. They may be used as fertilizer through commercial distribution.⁵³ Class A biosolids are biosolids that meet the same pathogen reduction

⁴⁶ DOH, Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program, 1 (Oct. 2008), available at http://www.floridahealth.gov/environmental-health/onsite-sewage/research/_documents/rrac/2008-11-06.pdf (last visited Oct. 23, 2015).

⁴⁷ University of Florida Institute of Food and Agricultural Sciences, *Onsite Sewage Treatment and Disposal Systems: Nitrogen* 2, *available at* https://edis.ifas.ufl.edu/pdffiles/SS/SS55000.pdf (last visited Oct. 19, 2015).

⁴⁸ See MACTEC, Final Report Wekiva River Basin Nitrate Sourcing Study (March 2010), available at http://www.dep.state.fl.us/water/wekiva/docs/wekiva-basin-nitrate-sourcing-fr0310.pdf (last visited Oct. 19, 2015); DOH, Revised Estimates of Nitrogen Inputs and Nitrogen Loads in the Wekiva Study Area, (May 19, 2008), available at http://www.dep.state.fl.us/water/wekiva/docs/doh-wekiva-estimate-final2008.pdf (last visited Oct. 19, 2015); University of Florida Institute of Food and Agricultural Sciences, Onsite Sewage Treatment and Disposal Systems: Nitrogen, available at http://edis.ifas.ufl.edu/ss550 (last visited Oct. 19, 2015); EPA, Onsite Wastewater Treatment Systems Manual, (Feb. 2002), available at http://water.epa.gov/aboutow/owm/upload/2004_07_07_septics_septic_2002_osdm_all.pdf (last visited Oct. 19, 2015).

⁴⁹ 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/environmental-health/onsite-sewage/research/advancedostdsfinalreportdraft.pdf (last visited Oct. 23, 2015).

⁵⁰ 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 Oct. 18, 2015).

⁵¹ DEP, *Biosolids in Florida: 2013 Summary*, 3 (Dec. 2014), *available at* https://www.dep.state.fl.us/water/wastewater/dom/docs/BiosolidsFlorida-2013-Summary.pdf (last accessed Oct. 23, 2015). ⁵² *Id*.

⁵³ *Id*.

requirements as Class AA biosolids, meet the same vector attraction (meaning the attraction of disease spreading animals) requirements as Class B biosolids, and meet a series of concentration limits for nine different elements.⁵⁴ Class B biosolids must be treated to significantly reduce pathogens and must meet certain concentration limits for heavy metals. Application rates are limited to crop nutrient needs. They are subject to site application restrictions and restrictions on harvesting, grazing, and public access. Also, cumulative heavy metals must be tracked for Class A and B biosolids; however, in Florida, land applied biosolids are almost exclusively Class B. In 2013, approximately 102,534 dry tons of Class B biosolids were land applied.⁵⁵

Minimum Flows and Levels (MFLs)

MFLs are established for waterbodies in order to prevent significant harm to the water resources or ecology of an area as a result of water withdrawals. MFLs are typically determined based on evaluations of natural seasonal fluctuations in water flows or levels, nonconsumptive uses, and environmental values associated with coastal, estuarine, riverine, spring, aquatic, wetlands ecology, 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 shift the hydrologic conditions below levels defined by MFLs, significant ecological harm can occur. The goal of establishing an MFL is to ensure that there is enough water to satisfy the consumptive use of the water resource without causing significant harm to the resource. Consumptive uses of water draw down water levels and reduce pressure in the aquifer. 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 new or renewal consumptive use permit (CUP) applications.

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 calculated using the best information available⁶² and are considered rules by the WMDs and are subject to ch. 120, F.S., challenges.⁶³ MFLs are subject to independent scientific peer review at the election of the DEP, a WMD, or, if requested, by a third party.⁶⁴

⁵⁴ Fla. Admin. Code R. 62-640.200(9).

⁵⁵ DEP, Biosolids in Florida: 2013 Summary, 13 (Dec. 2014), available at

https://www.dep.state.fl.us/water/wastewater/dom/docs/BiosolidsFlorida-2013-Summary.pdf (last accessed Oct. 23, 2015). ⁵⁶ Section 373.042, F.S.

⁵⁷ Fla. Admin. Code R. 62-40.473(1).

⁵⁸ SJRWMD, *Water Supply: An Overview of Minimum Flows and Levels*, http://www.sjrwmd.com/minimumflowsandlevels/ (last visited Oct. 18, 2015).

⁵⁹ DEP, *Minimum Flows and Levels*, *available at* http://www.dep.state.fl.us/water/waterpolicy/mfl.htm (last visited Oct. 18, 2015).

⁶⁰ Department of Community Affairs, *Protecting Florida's Springs: An Implementation Guidebook*, 3-5 (Feb. 2008), *available at* http://www.dep.state.fl.us/springs/reports/files/springsimplementguide.pdf (last visited Oct. 18, 2015).

⁶¹ SJRWMD, *Water Supply, available at* http://floridaswater.com/minimumflowsandlevels/FAQs.html (last visited Oct. 28, 2015).

⁶² Section 373.042(1), F.S.

⁶³ Section 373.042(6), F.S.

⁶⁴ Section 373.042(5)(a), F.S.

MFLs inform 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 proposed consumptive uses and the likelihood they might cause significant harm. The WMD governing boards are required to expeditiously implement recovery or prevention strategies in those cases where a waterbody or watercourse currently does not or is anticipated to not meet an adopted MFL.⁶⁵

Consumptive Use Permits (CUPs)

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";66
- Not interfere with any presently existing legal use of water; and
- Be consistent with the public interest.⁶⁷

If two or more competing applications qualify equally, the applicable WMD or the DEP must give preference to a renewal application over an initial application.⁶⁸

Alternative Water Supply Development

One of the ways water demands can be met is through the development of alternative water supplies (AWSs).⁶⁹ Alternative water supplies include:

- Salt water:
- Brackish surface water and groundwater;
- Sources made available through the addition of new storage capacity for surface or groundwater, water that has been reclaimed after one or more public supply, municipal, industrial, commercial, or agricultural uses;
- The downstream augmentation of waterbodies with reclaimed water;
- Stormwater: and
- Any other water supply source that is designated as a nontraditional source for a water supply planning region in a regional water supply plan.⁷⁰

⁶⁵ Section 373.0421(2), F.S.

⁶⁶ Section 373.019(16), F.S., defines reasonable-beneficial use as, "the use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner which is both reasonable and consistent with the public interest." *See also* Fla. Admin. Code R. 62-40.410(2) for additional factors to help determine if a water use is a reasonable-beneficial use.

⁶⁷ Fla. Admin. Code R. 62-40.410(1).

⁶⁸ Section 373.233(2), F.S.

⁶⁹ Sections 373.707(1)(a)-(b) and 373.1961(2)(a), F.S.

⁷⁰ Section 373.019(1), F.S.

Funding for the development of AWSs is a shared responsibility between water suppliers and users, the state, and the WMDs.⁷¹ Water suppliers and users have the primary responsibility for providing funding, while the state and WMDs have the responsibility to provide funding assistance.⁷²

AWS development projects may receive state funding through specific appropriation or through the Water Protection and Sustainability Program (WPSP) if funded by the Legislature. Applicants for projects that receive funding through the WPSP are required to pay at least 60 percent of the project's construction costs. A WMD may waive this requirement for projects developed by financially disadvantaged small local governments. Additionally, a WMD may, at its discretion, use ad valorem or federal revenues to assist a project applicant in meeting the match requirement. In meeting the match requirement.

Consolidated Water Management District Annual Reports

Each WMD must prepare and submit to the DEP, the Governor, and the Legislature a consolidated water management district annual report on the management of water resources. Copies of the report are available to the public.⁷⁶

Each report must contain:

- A district water management plan annual report or the annual work plan report, 77 which details the implementation of the strategic plan for the previous fiscal year, addressing success indicators, deliverables, and milestones; 78
- The DEP approved MFLs annual priority list and schedule;
- The annual 5-year capital improvements plan;
- The alternative water supplies annual report;
- The final annual 5-year water resource development work program;
- The Florida Forever Water Management District Work Plan annual report;
- The mitigation donation annual report; and
- Any additional information the WMD deems appropriate.⁷⁹

Additionally, the South Florida Water Management District's (SFWMD's) report must include the:

- Lake Okeechobee Protection Program annual progress report;
- Everglades annual progress reports;
- Everglades restoration annual report; and
- Everglades Trust Fund annual expenditure report. 80

⁷¹ Section 373.707(2)(c), F.S.

⁷² Id.

⁷³ Section 373.707(1)(d), and (6), F.S.

⁷⁴ Section 373.707(8)(e), F.S.

⁷⁵ *Id*.

⁷⁶ Section 373.036(7)(a), F.S.

⁷⁷ Section 373.036(7)(b)1., F.S.

⁷⁸ Section 373.036(2)(e)4., F.S.

⁷⁹ Section 373.036(7)(b) and (d), F.S.

⁸⁰ Section 373.036(7)(e), F.S.

Rural Areas of Opportunity

Rural areas of opportunity are rural communities and regions composed of rural communities designated by the Governor that have been adversely affected by an extraordinary economic event, severe or chronic distress, or a natural disaster, or that present a unique economic development opportunity of regional impact.⁸¹

Rural communities are defined as:

- Counties with a population of 75,000 or fewer;
- Counties with a population of 125,000 or fewer that are contiguous to a county with a population of 75,000 or fewer;
- Designated municipalities within a county that meet the thresholds of the two previous criteria; or
- An unincorporated federal enterprise community or an incorporated rural city with a
 population of 25,000 or less, and an employment base focused on traditional agricultural or
 resource-based industries, located in a county not defined as rural, which has at least three or
 more specified economic distress factors.⁸²

Central and Southern Florida Project for Flood Control and Other Purposes (C&SF)

After a major hurricane caused extensive flooding in 1947, Congress passed the Flood Control Act of 1948, authorizing the first phase of the comprehensive water resource project known as the Central and Southern Florida Project for Flood Control and Other Purposes (C&SF). The C&SF Project was authorized to provide flood control and water supply for municipal, industrial, and agricultural uses; to prevent salt water intrusion; and to protect fish and wildlife in the Everglades. The project included 1,000 miles of levees, 720 miles of canals, and approximately 200 water control structures. The C&SF Project also authorized the channelization of the Kissimmee River in order to provide flood protection for the surrounding agricultural areas. A portion of the area drained was designated the Everglades Agricultural Area, which spans approximately 700,000 acres south of Lake Okeechobee. The C&SF Project also included extending and raising the Herbert Hoover Dike to its present day elevation of 32 to 46 feet, which was accomplished in the 1960s. Most of these structures were constructed by the Army Corps of Engineers and are operated and maintained by the SFWMD. The SFWMD continues to make infrastructure improvements to the area, and the levees are inspected by the Army Corps of Engineers.

⁸¹ Section 288.0656(2)(d), F.S.

⁸² Section 288.0656(2)(e), F.S.

⁸³ South Florida Water Management District, Canal Structure and Operations, *available at* http://www.sfwmd.gov/portal/page/portal/xweb%20drought%20%20and%20%20flood/canal%20and%20structure%20operat ions (last visited Nov. 3, 2015).

⁸⁴ South Florida Water Management District, Maintenance of South Florida's Levee System *available at* http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/jtf_levee_maintenance.pdf (last visited Nov. 3, 2015).

Northern Everglades and Estuaries Protection Program



In 2000, the Legislature passed the Lake Okeechobee Protection Act (LOPA), which established a restoration and protection program for the lake. The Legislature amended the LOPA in 2007, which expanded restoration efforts to include the St. Lucie and Caloosahatchee River Watersheds. It is now known as the Northern Everglades and Estuaries Protection Program (NEEPP). The NEEPP promotes a comprehensive, interconnected watershed approach to protect Lake Okeechobee and the Caloosahatchee and St. Lucie River watersheds. It includes the Lake Okeechobee Watershed Protection Program and the Caloosahatchee and St. Lucie Watershed Protection Program.

⁸⁵ Chapter 2007-253, Laws of Fla.

⁸⁶ SFWMD, 2014 South Florida Environmental Report: Lake Okeechobee Watershed Protection Program Annual and Three-Year Update, 8-2 (2014), available at

 $http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2014_sfer/v1/chapters/v1_ch8.pdf \ (last visited Oct. 18, 2015).$

The plans developed under the NEEPP for each of the three Northern Everglades watersheds identify actions to help achieve water quality and water quantity objectives for the watersheds and to restore habitat. Water quality objectives are based on TMDLs developed by the DEP. The TMDL for Lake Okeechobee is 140 metric tons of total phosphorus per year, of which 105 metric tons can come from the watershed tributaries and 35 metric tons can come from atmospheric deposition.⁸⁷

The SFWMD, in cooperation with the DACS and the DEP, collectively known as the coordinating agencies, developed the Lake Okeechobee Watershed Protection Program (LOWPP), which is reevaluated every three years pursuant to NEEPP. The LOWPP's components are:

Lake Okeechobee Watershed Protection Program

- Lake Okeechobee Protection Plan;
- Lake Okeechobee Watershed Construction Project, including the Phase I and II Technical Plans;
- Lake Okeechobee Watershed Phosphorus Control Program;
- Lake Okeechobee Watershed Research and Water Quality Monitoring Program;
- Lake Okeechobee Exotic Species Control Program; and
- Lake Okeechobee Internal Phosphorus Management Program.

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Section 373.4595, F.S., describes the purposes of the six programs. The Lake Okeechobee Protection Plan describes the geographic extent of the watershed and contains an implementation schedule for phosphorus reduction. The Lake Okeechobee Watershed Construction Project improves the hydrology and water quality of Lake Okeechobee and downstream receiving waters, including the Caloosahatchee and St. Lucie Rivers and Estuaries. The Lake Okeechobee Watershed Phosphorus Control Program is designed to be a multifaceted approach to reducing phosphorus loads by improving the management of phosphorus sources within the Lake Okeechobee Watershed. The Lake Okeechobee Watershed Research and Water Quality Monitoring Program assesses sources of phosphorus, evaluates the feasibility of alternative nutrient reduction technologies, and evaluates water quality data. The Lake Okeechobee Exotic Species Control Program identifies the exotic species that threaten the native flora and fauna within the Lake Okeechobee watershed and develops and implements measures to protect the native flora and fauna. Lastly, The Lake Okeechobee Internal Phosphorus Management Program addresses phosphorus removal.

The Caloosahatchee and St. Lucie River Watershed Protection Program

The Caloosahatchee and St. Lucie River Watershed Protection Program is designed to protect and restore surface water resources by addressing the reduction of pollutant loadings, restoration of natural hydrology, and compliance with applicable state water quality standards through a

⁸⁷ *Id.* at 8-10.

⁸⁸ Section 373.4595, F.S.

phased program. ⁸⁹ The program's objectives are to reduce pollutant loads based upon adopted TMDLs. Both the Caloosahatchee and St. Lucie River Watershed Protection Plans, developed under the program, consist of a river watershed construction project, a watershed pollutant control program, and watershed research and water quality monitoring program. ⁹⁰ To address nutrient pollution in the Caloosahatchee and St. Lucie Watersheds, the DEP adopted the Caloosahatchee Estuary BMAP in November 2012, and the St. Lucie River and Estuary BMAP in May 2013. ⁹¹

Works of the District Permits

The Works of the District rule⁹² was implemented in 1989. The scope of the original rule was to implement the Surface Water Improvement and Management Plan for Lake Okeechobee, which was designed to reduce loading to Lake Okeechobee to 397 tons of phosphorus per year. In 2000, the passage of the Lake Okeechobee Protection Act required landowners in the Lake Okeechobee watershed to either implement BMPs or monitor to demonstrate compliance with the Works of the District program.⁹³

In Lake Okeechobee, a Works of the District permit is required if an entity owns a parcel of land half an acre or greater within a Lake Okeechobee Drainage Basin that connects to or makes use of the Works of the District within the Lake Okeechobee Drainage Basin. The Works of the District are those projects and works including structures, remnant oxbows and sloughs, floodways and all tributaries, lakes, canals, channels, levees, structures, impoundments, reservoirs, wells, streams, and other water courses, together with associated facilities, lands, and wetlands. He land areas and uses subject to the permits are described in Florida Administrative Code Rules 40E-61.041 and 40E-61.042, both of which relate to permits required in the Lake Okeechobee Drainage Basin. Works of the District Permits are also required for activities in the Everglades Agricultural Area and the C-139 Basin. Rules concerning permits in both areas may be found in Florida Administrative Code Rule 40E-63.

Pumping by the 298 Water Control Districts and Closter Farms:

Chapter 298, F.S., governs water control districts. Districts created under that chapter are called "298 districts." Prior to 1986, four 298 districts and Closter Farms, along the southern and eastern shore of Lake Okeechobee, discharged into the lake by back pumping into the lake to drain excess stormwater from the northern half of the Everglades Agricultural Area. Back pumping was performed without a permit issued by the Department of Environmental Preservation. Back pumping was accomplished by sending water through three pump stations,

⁹⁰ SFWMD, 2014 South Florida Environmental Report: Lake Okeechobee Watershed Protection Program Annual and Three-Year Update, App. 10-2-3 (2012), available at

⁸⁹ See s. 373.4595, F.S.

http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/crwpp_2012update_sfer_voli_app10_2.pdf (last visited Oct. 18, 2015).

⁹¹ DEP, *Basin Management Action Plans*, *available at* http://www.dep.state.fl.us/water/watersheds/bmap.htm (last visited Oct. 5, 2015).

⁹² Fla. Admin. Code R. 40E-61.

⁹³ Section 373.4595(3)(c)1.b., F.S.

⁹⁴ Fla. Admin. Code R. 40E-61.021; Works of the District within the Lake Okeechobee Basin are detailed in Fla. Admin. Code R. 40E-61.024.

designated S-2, S-3, and S-4. In 1985, the Governor of Florida issued Executive Order Number 86-150, which directed the DEP to regulate back pumping into Lake Okeechobee. He water control districts and Closter Farms agreed to new pumping practices which went into effect following the construction of structures necessary to accommodate sending water south rather than north into the lake. The consent orders for the 298 districts provided the following conditions:

- Discharge pumping may only be performed after significant rainfall events and/or when farm canal water levels reach excessively high levels;
- Initiation of pumping must be delayed after a rainfall event;
- The duration of pumping events is limited; and
- The minimum water level each associated SFWMD canal can be lowered is limited.⁹⁷

Closter Farms was limited by a different set of criteria that had the effect of limiting backpumping water into Lake Okeechobee based on canal levels, growing seasons, and potential harm to crops.

The 298 districts' and Closter Farms' pumping operations are controlled by the terms of the consent orders. ⁹⁸ Except in emergency situations, the 298 districts and Closter Farms now send discharged water south into the stormwater treatment areas. Additionally, the areas controlled by the consent orders fall within an area that is permitted under two overlapping regulatory schemes, the SFWMD Works of the District under s. 373.4595, F.S., and Everglades Program under s. 373.4592, F.S. Consequently, entities in the four 298 districts and Closter Farms are statutorily required to have a NEEPP permit and may also be required to be permitted under the Everglades Program.

Central Florida Water Initiative (CFWI)

The areas encompassed by the CFWI Planning Area, which consists of all of Orange, Osceola, Seminole, and Polk counties and southern Lake County, have traditionally relied on groundwater from the Floridan aquifer system as the primary source of water. The three WMDs serving the area are the SFWMD, the Southwest Florida Water Management District (SWFWMD), and the St. Johns River Water Management District (SJRWMD).

⁹⁵ SFWMD, Assessing the Capability to Discharge Excess Lake Okeechobee Water South: Review of Systems Operations (January through mid-June 2013) 4, available at

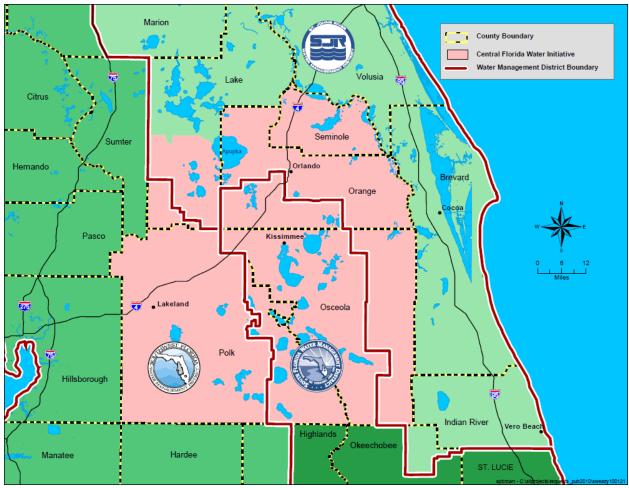
http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/final_lake_okeechobee_jan_jun_operations_report_2013.pdf (last visited Oct. 22, 2015).

⁹⁶ 91-0695 South Shore Drainage District Consent Agreement 2 (on file with senate committee on Environmental Preservation and Conservation).

⁹⁷ *Id.* at 22 (Appendix A).

⁹⁸ See consent orders 91-0694-South Shore Drainage Dist Consent Agreement, 91-0705-East Beach Water Control Consent Agreement, 91-0706-East Shore Water Control Consent Agreement, 91-0707-South Florida Conservancy Consent Agreement, and RT50-205564-Closter Farms Consent Agreement (on file with the Senate Committee on Environmental Preservation and Conservation).

⁹⁹ Central Florida Water Initiative, *An Overview*, http://cfwiwater.com/pdfs/2012/06-28/CFWI_Overview_fact_sheet.pdf (last accessed Oct. 18, 2015).



Map of the CFWI area.

In the past, the three WMDs worked independently to resolve water resource issues, but the decisions of one district can affect the water resources of another. Currently, the WMDs are working collaboratively with other agencies and stakeholders to implement consistent water resource planning, development, and management through the CFWI. However, each WMD currently relies on its own existing criteria to review CUP applications, which leads to inconsistencies and confusion as it relates to permit applications for projects that overlap multiple WMD boundaries. ¹⁰⁰

In 2006, the three WMDs agreed to a Central Florida Coordination Area Action Plan to address the near-term and long-term development of water supplies in the central Florida region. ¹⁰¹ Phase I of the action plan created a framework to deal with the short-term water resource issues and concluded with interim water use regulations limiting groundwater withdrawals to projected 2013 demands and required development of alternative water supplies for future needs. The

¹⁰⁰ Id.

¹⁰¹ Central Florida Water Initiative, *Central Florida Water Initiative Guiding Document*, 2 (Jan. 30, 2015), *available at* http://cfwiwater.com/pdfs/CFWI_Guiding_Document_2015-01-30.pdf (last visited Oct. 18, 2015).

interim Central Florida Coordination Area rules expired on December 31, 2013, and additional rules specific to the Central Florida Coordination Area have not been promulgated. ¹⁰²

Phase II of the action plan began in 2009. The initial objective was to establish new rules prior to the December 31, 2013, sunset date and to implement a long-term approach to water resource management in central Florida. Phase II of the action plan involved coordinated activities on a variety of issues including:

- Regional water supply planning;
- Investigations and development of traditional and alternative water supply projects;
- Assessment of environmental impacts and groundwater sustainability; and
- Development of water use rules and permitting criteria. 103

The main planning tool for the Phase II process was the development and calibration of the necessary hydrologic models to determine the sustainability of the groundwater supplies. The Phase II process was suspended, however, because of the complexity of the effort and the desire for consensus among stakeholders. Because of those problems, the Phase II effort did not meet the rulemaking deadlines prior to expiration of the interim rule. Additionally, because of the economic downturn in central Florida, the need for and use of permitted water demands in 2013 was lower than expected. ¹⁰⁴

To address the limitations of the 2006 Central Florida Coordination Area Action Plan schedule and still fulfill the overarching objectives outlined in the plan, the CFWI was created in 2011. The CFWI builds on the work of the Central Florida Coordination Area. Both efforts focus on an area that includes all of Orange, Osceola, Seminole, and Polk Counties, and southern Lake County. The three affected WMDs, along with the DEP, the DACS, regional public water supply utilities, and other stakeholders are collaborating to develop a unified process to address central Florida's current and long-term water supply needs. ¹⁰⁵ The CFWI is led by a steering committee comprised of:

- A public water supply utility representative;
- A designated governing board member from each of the WMDs;
- A representative from the DEP; and
- A representative from the DACS. 106

The guiding principles of the CFWI are:

- Identify the sustainable quantities of traditional groundwater sources available for water supply that can be used without causing unacceptable harm to the water resources and associated natural systems;
- Develop strategies to meet water demands that are in excess of the sustainable yield of
 existing traditional groundwater sources, implement demand management, and identify
 alternative water supplies that can be permitted and will be implemented as demands
 approach the sustainable yield of existing sources; and

¹⁰² *Id*.

¹⁰³ Id.

 $^{^{104}}$ *Id.* at 3.

¹⁰⁵ *Id.* at 3.

¹⁰⁶ *Id.* at 5.

• Establish consistent rules and regulations for the three WMDs which meet the goals of the CFWI. 107

The goals of the CFWI are:

- One hydrologic model;
- A uniform definition of "harm", as it relates to water resources and associated natural systems;
- One reference condition;
- A process for permit reviews;
- A consistent process, where appropriate, to set MFLs and reservations; and
- A coordinated regional water supply plan, including any needed recovery and prevention strategies. 108

The entities that make up the CFWI are in the process of developing a memorandum of understanding that codifies many of the principles of the initiative and duties of the entities, among other things, though it has not yet been finalized.

The Harris Chain of Lakes Restoration Council

The Harris Chain of Lakes is located north and west of the Orlando metropolitan area and is in Lake and Orange counties. ¹⁰⁹ It contains tens of thousands of acres of lakes and wetlands and is at the headwaters of the Ocklawaha River. ¹¹⁰ The Harris Chain of Lakes Council was created to:

- Review audits and all data related to lake restoration techniques and sport fish population recovery strategies;
- Evaluate whether additional studies are needed;
- Explore all possible sources of funding to conduct the restoration activities; and
- Report to the President of the Senate and the Speaker of the House of Representatives yearly before November 25 on the progress of the Harris Chain of Lakes restoration program and provide any recommendations for the next fiscal year.¹¹¹

The council consists of nine voting members who are:

- A representative of waterfront property owners;
- A representative of the sport fishing industry;
- An environmental engineer;
- A person with training in biology or another scientific discipline;
- A person with training as an attorney;
- A physician;
- A person with training as an engineer; and

¹⁰⁷ *Id.* at 5

¹⁰⁸ *Id*. at 5

¹⁰⁹ Harris Chain of Lakes Restoration Council, *Where is the Harris Chain of Lakes and What Does the Restoration Council Do?*, http://harrischainoflakescouncil.com/ (last visited Oct. 18, 2015).

¹¹⁰ *Id*.

¹¹¹ *Id*.

• Two residents of Lake County appointed by the Lake County legislative delegation who do not meet any of the other qualifications for membership on the council. 112

The council works with an advisory group composed of regional, state, and federal entities. 113

Office of Economic and Demographic Research (EDR)

The Office of Economic and Demographic Research performs research for the Florida Legislature, principally focused on forecasting economic and social trends that affect policy making, revenues, and appropriations.¹¹⁴ The EDR also researches projects for legislative committees, and works with agencies, statewide commissions, and task forces that have legislators among their membership to assess the impact of proposals they are considering submitting to the Legislature.¹¹⁵ The EDR provides information related to:

- Economics;
- Demographics;
- Revenues:
- Education;
- Criminal Justice:
- Social Services:
- Workforce;
- Early Learning Programs;
- Self-Insurance; and
- The Florida Retirement System. 116

III. Effect of Proposed Changes:

Section 1 amends s. 259.032, F.S., to require the Department of Environmental Protection (DEP) to develop, publish, update, and maintain a database of state conservation lands where public access is compatible with conservation and recreation. The bill requires the database to be available online by July 1, 2017. The database must include, at a minimum:

- The location of the lands:
- The types of allowable recreational opportunities;
- The points of public access;
- Facilities or other amenities: and
- Land use restrictions.

The DEP is to include any additional information that is appropriate to increase the public awareness of recreational opportunities on conservation lands. The database must be electronically accessible, searchable, and downloadable in a generally acceptable format.

¹¹² Section 373.467, F.S.

¹¹³ *Id*.

¹¹⁴ EDR, Welcome, http://edr.state.fl.us/Content/ (last visited Oct. 18, 2016).

¹¹⁵ EDR, Function s of EDR, http://edr.state.fl.us/Content/about/functions.cfm (last visited Oct. 26, 2015).

¹¹⁶ Section 216.136, F.S.

The bill directs the DEP, through its own efforts or in partnership with a third party, to create a downloadable mobile application to locate state lands available for public access using the user's current location or activity of interest. The database and application must include information for all publicly accessible state conservation lands that serve a recreational purpose.

The bill requires that beginning January 1, 2018, to the greatest extent practicable, the database must include similar information for recreational lands with public access that are owned by the federal and local governments.

The bill requires the DEP to submit a report by January 1 of each year to the Governor, the President of the Senate, and the Speaker of the House of Representatives, describing the percentage of public lands with public access purchased by the Board of Trustees of the Internal Improvement Trust Fund for conservation and recreational purposes, and efforts taken by the DEP to increase public access to such lands.

Section 2 amends s. 373.019, F.S., to amend the definition of "water resource development" to add "self-suppliers" to the list of entities that may receive technical assistance as long as such assistance is consistent with specific legislative policy goals.

Section 3 amends s. 373.036, F.S., to require additional information related to all water quality or water quantity projects as part of a 5-year work program. The following must be included in the Consolidated Water Management District Annual Report:

- All projects identified to implement a Basin Management Action Plan (BMAP) or recovery or prevention strategy;
- Priority ranking of each listed project, for which state funding through the water resources
 development work program is requested, which must be available for public comment at least
 30 days before submission of the consolidated annual report;
- Estimated cost of each project;
- Estimated completion date for each project;
- Source and amount of financial assistance that will be made available by the DEP, a water management district (WMD), or some other entity for each project;
- A quantitative estimate of each project's benefit to the watershed, waterbody, or water segment in which it is located; and
- A grade for each watershed, waterbody, or water segment where a project is located representing the level of impairment and violations of adopted or interim minimum flow or minimum water level. The grading system must reflect the severity of the impairment.

Section 4 creates s. 373.037, F.S., to provide for a pilot program for alternative water supply development in restricted allocation areas.

The bill defines:

- Central Florida Water Initiative Area;
- Lower East Coast Regional Water Supply Planning Authority;
- Southern Water Use Caution Area; and
- Upper East Coast Regional Water Supply Planning Area.

The bill also defines "restricted allocation area" to mean an area within a specified water supply planning region where a WMD has determined that existing sources of water are not adequate to supply water for all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems and where the WMD has applied allocation restrictions with regard to the use of specific sources of water.

The bill provides the following legislative findings:

- There are significant challenges to securing funds for implementing large-scale alternative water supply projects in certain restricted allocation areas due to a variety of factors including:
 - o The magnitude of the water resource challenges;
 - o The large number of water users;
 - The difficulty of developing multijurisdictional solutions across district, county, or municipal boundaries; and
 - The expense of developing large-scale alternative water supply projects identified in the regional water supply plans.
- These factors make it necessary to provide other options for the South Florida Water Management District (SFWMD), the Southwest Florida Water Management District (SWFWMD), and the St. Johns River Water Management District (SJRWMD) to be able to take the lead in developing and implementing one alternative water supply project within a restricted allocation area as a pilot alternative water supply development project;
- Each pilot project must provide water supply and environmental benefits; and
- Consideration should be given to projects that provide reductions in damaging discharges to tide or that are part of a recovery or prevention strategy for Minimum Flows and Levels (MFLs).

The bill allows the SFWMD, SWFWMD, and the SJRWMD, at their sole discretion, to each designate and implement an existing alternative water supply project that is identified in each WMD's regional water supply plan or amend its regional water supply plan to add a new alternative water supply project as its one pilot project.

The bill provides a deadline of July 1, 2017, to designate a pilot project and provides that it is not subject to rulemaking requirements under ch. 120, F.S., or subject to legal challenge pursuant to ss. 120.569 and 120.57, F.S.

The bill allows a WMD to designate an alternative water supply project located in another WMD if the project is located in a restricted allocation area designated by the other WMD and a substantial quantity of water provided by the alternative water supply project will be used within the boundaries of the water management district that designated the alternative water supply project.

The bill details powers and restrictions for the SFWMD, SWFWMD, and SJRWMD in implementing a pilot project under this section:

• The WMDs may not develop and implement a pilot project on privately owned land without the voluntary consent of the landowner as evidenced by deed, easement, license, contract, or other written legal instrument executed by the landowner after July 1, 2016.

• The WMDs may not engage in local water supply distribution or sell water to the pilot project participants.

- For the purpose of carrying out their powers, the WMDs may join with other entities;
- The WMDs may also contract with any of those entities to finance or otherwise implement acquisitions, construction, and operation and maintenance, if the contracts are consistent with the public interest and based upon independent cost estimates, including comparisons with other alternative water supply projects. The contracts may provide for contributions to be made by each party to the contract for the division and apportionment of resulting costs.

The bill allows a WMD to provide up to 50 percent funding assistance for a pilot project.

The bill provides that if the SFWMD, SWFWMD, or the SJRWMD elects to implement a pilot project, it must submit a report to the Governor and Legislature by July 1, 2020, on the effectiveness of its pilot project. The report must include:

- A description of the alternative water supply project selected as a pilot project, including the
 quantity of water the project has produced or is expected to produce and the consumptive
 users who are expected to use the water produced by the pilot project to meet their existing
 and future reasonable-beneficial uses;
- Progress made in developing and implementing the pilot project in comparison to development and implementation of other alternative water supply projects in the restricted allocation area;
- The capital and operating costs to be expended by the WMD in implementing the pilot project in comparison to other alternative water supply projects being developed and implemented in the restricted allocation area;
- The source of funds to be used by the WMD in developing and implementing the pilot project;
- The benefits to the WMD's water resources and natural systems from implementation of the pilot project; and
- A recommendation as to whether the traditional role of WMDs regarding the development and implementation of alternative water supply projects should be revised and, if so, identification of the statutory changes necessary to expand the scope of the pilot program.

Section 5 amends s. 373.042, F.S., to amend the definition of "minimum water level" to add the phrase "or ecology." This changes the definition to: "the minimum water level is the level of groundwater in an aquifer and the level of surface water at which further withdrawals would be significantly harmful to the water resources or ecology of the area."

The bill provides that if a minimum flow and level (MFL) has not been adopted for an Outstanding Florida Springs (OFS), a WMD or the DEP must use emergency rulemaking authority to adopt an MFL no later than July 1, 2017, except for the Northwest Florida Water Management District (NWFWMD), which must use emergency rulemaking authority to adopt MFLs for OFSs no later than July 1, 2026. The bill requires recovery or prevention strategies to be adopted concurrently with the MFLs authorized adoption using emergency rulemaking procedures.

For OFSs identified on a WMD's priority list, which have the potential to be affected by withdrawals in an adjacent district, the adjacent WMD or WMDs and the DEP must collaboratively develop and implement a recovery or prevention strategy for an OFS not meeting an adopted MFL. Priority lists and schedules for the establishment of MFLs are prepared by the WMDs and submitted to the DEP for review and approval.

The bill provides that rules adopted under this section (s. 373.042, F.S., which concerns the adoption of MFLs) are not subject to legislative ratification.

Section 6 amends s. 373.0421, F.S., to require the DEP or a WMD to adopt or modify a recovery or prevention strategy concurrently with the initial adoption or modification of an MFL if the existing flow or water level is below, or is projected to fall within 20 years below, the applicable MFL. For an existing MFL, the prevention or recovery strategy must be adopted expeditiously if the flow or water level falls below, or is projected to fall within 20 years below, the applicable MFL.

The bill requires applicable regional water supply plans developed by the WMDs to be amended to include any water supply and resource development projects identified in a recovery or prevention strategy. The amendment must be approved concurrently with the relevant portions of the recovery or prevention strategy.

The bill requires a WMD to notify the DEP if an application for a water use permit is denied based upon the impact that the use will have on an adopted MFL. If notified, the DEP, in cooperation with the WMD, must conduct a review of the regional water supply plan to determine the plan's adequacy to provide sufficient water for all current and future users and natural systems and to avoid competition. If the regional water supply plan does not adequately address the legislative intent regarding water resource and supply development found in s. 373.705, F.S., the WMD must immediately initiate an update of the plan.

Section 7 creates s. 373.0465, F.S., to codify the Central Florida Water Initiative (CFWI) in statute and provides legislative findings.

The bill defines the "Central Florida Water Initiative Area" as all of Orange, Osceola, Polk, and Seminole Counties, and southern Lake County, as designated by the CFWI Guiding Document of January 30, 2015.

It directs the DEP, the SFWMD, the SWFWMD, the SJRWMD, and the Department of Agriculture and Consumer Services (DACS) to:

- Provide for the continuation of the collaborative process in the CFWI area among the state agencies, affected WMDs, regional public water supply utilities, and other stakeholders;
- Build on the guiding principles and goals in the CFWI Guiding Document of January 30, 2015, and the work that has already been accomplished by the CFWI participants;
- Develop and implement a single multidistrict regional water supply plan, including any needed recovery or prevention strategies and a list of water resource or supply development projects; and
- Provide for a single hydrologic planning model to assess the availability of groundwater in the CFWI area.

The bill specifies that the development of the water supply planning program must:

 Consider limitations on groundwater use together with opportunities for new, increased, or redistributed groundwater uses based on conditions established through the consumptive use permit (CUP) process;

- Establish a coordinated process for identification of water resources requiring new or revised conditions through the CUP process;
- Consider existing recovery or prevention strategies;
- Include a list of water supply options sufficient to meet the water needs of all existing and future reasonable-beneficial uses which meet CUP conditions; and
- Identify which of the water supply sources are preferred water supply sources.

The bill directs the DEP, in consultation with the SFWMD, the SWFWMD, the SJRWMD, and the DACS, to adopt uniform rules for the CFWI Area that include:

- A single, uniform definition of "harmful to the water resources" consistent with its usage for CUPs;
- A single method for calculating residential per capita water use;
- A single process for permit reviews;
- A single, consistent process, as appropriate, to set MFLs and water reservations;
- A goal for residential per capita water use for each consumptive use permit; and
- An annual conservation goal for each CUP consistent with the regional water supply plan.

The uniform rules must include existing recovery strategies within the CFWI Area adopted before July 1, 2016, and the DEP may grant variances to the uniform rules if there are unique circumstances or hydrogeological factors that make application of the uniform rules unrealistic or impractical.

The DEP is required to initiate rulemaking for the uniform rules by December 31, 2016. Those rules will be applied by the WMDs only in the CFWI Area. The rules must be implemented by the WMDs without further rulemaking and will be considered WMD rules.

The planning programs developed under this section of the bill may not serve to modify planning programs in areas of the affected WMDs that are not within the CFWI Area, but may include interregional projects located outside the CFWI Area if they are consistent with the planning and regulatory programs in the area they are located.

Section 8 amends s. 373.1501, F.S., to provide that the SFWMD will exercise the authority of the state to allocate water within its jurisdiction, including water supply in relation to the Central and Southern Florida (C&SF) Project, and be responsible for allocating water and assigning priorities among the other water uses served by the C&SF Project.

The bill requires the SFWMD to provide recommendations to the U.S. Army Corps of Engineers when developing or implementing water control plans or regulation schedules required for the operation of the C&SF Project.

Section 9 amends s. 373.219, F.S., to require the DEP, for OFSs, to adopt uniform rules for issuing permits which prevent groundwater withdrawals that are harmful to the water resources and adopt by rule a uniform definition of the term "harmful to the water resources" for OFSs to provide WMDs with minimum standards necessary to be consistent with the overall water policy of the state. This does not prohibit a WMD from adopting a definition that is more protective of the water resources consistent with local or regional conditions or objectives.

Section 10 amends s. 373.223, F.S., to require a new, renewal of, or modification to a CUP authorizing withdrawal of 100,000 gallons or more per day from a well with an inside diameter of eight inches or more to be monitored by the permit holder for water usage at intervals and using methods determined by the applicable WMD and report the results to the WMD at least annually. The bill allows a WMD to continue to enforce rules in effect on July 1, 2016, and to adopt rules that are more stringent than those required in this section of the bill.

The bill provides rulemaking authority to the WMDs to implement this provision.

Section 11 amends s. 373.2234, F.S., to direct the governing boards of the WMDs to consider the identification of preferred water supply sources for water users for whom access to or development of new water supplies is not technically or financially feasible. The identification of preferred water supply sources for such water users must be consistent with s. 373.016, F.S., which concerns the policy of Florida with respect to water resources.

Section 12 amends s. 373.227, F.S., regarding water conservation, to:

- Prohibit modification of a CUP allocation during the permit term if documented conservation
 measures result in decreased water use, and requires WMDs to adopt rules providing water
 conservation incentives, which may include limited permit extension; and
- Prohibit the reduction of permitted water use authorized by a CUP for agricultural irrigation during the term of the CUP if actual water use is less than permitted use due to weather, crop disease, nursery stock availability, market conditions, or changes in crop type.

Section 13 amends s. 373.233, F.S., to require a WMD or the DEP to give preference to the use or application of water closest to the preferred water source when deciding between two new competing applications that qualify equally.

Section 14 amends s. 373.4591, F.S., to provide that public-private partnerships may be entered into for groundwater recharge on private agricultural lands. It also provides that priority consideration must be given to public-private partnerships for such lands that:

- Store or treat water on private lands for purposes of enhancing hydrologic improvement, improving water quality, or assisting in water supply;
- Provide critical groundwater recharge; or
- Provide for changes in land use to activities that minimize nutrient loads and maximize water conservation.

Currently, when a private landowner enters into an agreement with the DEP or a WMD, a baseline condition of wetlands on the property is established and documented. The bill adds the DACS to the list of entities that should document baseline wetlands in an agreement that the DACS makes with a private entity.

Section 15 amends s. 373.4595, F.S., to make changes to the Northern Everglades and Estuaries Protection Program. Revisions throughout this section are made to clarify that the BMAP is now the primary pollution control planning tool for Lake Okeechobee, the Caloosahatchee River, and the St. Lucie River Watersheds. Similarly, revisions are made in this section to provide that the DEP has the primary responsibility for these BMAPs. This is a substantive change from the current s. 373.4595, F.S., because under existing law the SFWMD is tasked with the responsibilities for administering the pollution control programs for these watersheds.

The bill amends legislative intent, providing that the Lake Okeechobee, the Caloosahatchee River, and the St. Lucie River Watershed Protection Programs should be expeditiously implemented.

The bill defines "biosolids" and "soil amendment" and removes the definitions of "District's Works of the District Program" and the "Lake Okeechobee Watershed Phosphorous Control Program," as all references to those programs are removed throughout this section of the bill.

The definition of "Lake Okeechobee Watershed Protection Plan" is amended to specify that the plan consists of the Lake Okeechobee Watershed Construction Project and the Lake Okeechobee Watershed Research and Water Quality Monitoring Program.

Revisions to the Lake Okeechobee and the Caloosahatchee and St. Lucie Watershed Protection Programs

The bill makes the following revisions to the provisions of the Lake Okeechobee and the Caloosahatchee and St. Lucie Watershed Protection Programs:

- Reorganizes the watershed protection plans to place the existing watershed construction
 projects and watershed research and water quality monitoring programs under the umbrella
 of the plans.
- Replaces the pollutant control programs with the BMAP process.
- Expressly sets forth the following requirements of the BMAP process, which are also included in existing law (s. 403.067(7), F.S.):
 - The BMAP must include milestones for implementation and water quality improvement and an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reduction is being achieved over time.
 - o An assessment of progress every five years is required.
 - o Revisions to the BMAP must be made as the result of each 5-year review as appropriate.
 - o Best management practices (BMPs) or other measures must be reviewed and revised if they are leading to water quality problems.
- Requires each five year progress assessment to be submitted to the Governor and the Legislature.
- The bill requires the DEP to develop 5, 10, and 15-year measurable milestones and targets designed to meet the Total Maximum Daily Load (TMDL) no more than 20 years after adoption of the plan. The initial implementation schedule is not subject to chapter 120, F.S., but will be incorporated into the BMAP as part of the 5-year update of the BMAP, which includes adoption by secretarial order through the chapter 120, F.S., process.
- If achieving the TMDL is not practicable within 20 years, the DEP must provide:

• An explanation in the implementation schedule of the constraints that prevent achievement of the TMDL within 20 years;

- o An estimate of the time needed to achieve the TMDL; and
- o Additional five year milestones, as necessary.
- Requires the DACS to include in its rules relating to entities that land-apply animal manure criteria and thresholds for the following requirements:
 - o To develop a conservation or nutrient management plan,
 - o For plan approval,
 - o Site inspection, and
 - o Recordkeeping.
- Deletes the deadlines for developing certain plans because those plans have already been developed.
- Requires the SFWMD to initiate rulemaking to provide for a monitoring program for nonpoint source dischargers required to monitor water quality pursuant to the BMAP process. The results of the monitoring must be reported to the coordinating agencies.

Beginning March 2020, and every five years thereafter, concurrent with BMAP revisions, the DEP, in cooperation with coordinating agencies, shall evaluate the pollutant reduction goals and other objectives of the River Watershed Protection Programs for dischargers in the Caloosahatchee and St. Lucie River watersheds.

Components of the Lake Okeechobee Watershed Protection Program (LOWPP) under existing law and under changes proposed in the bill:

Existing Law Proposed Changes in the Bill Lake Okeechobee Watershed Protection Lake Okeechobee Watershed Protection Plan: Plan, consisting of: • Lake Okeechobee Watershed Construction o Lake Okeechobee Watershed Construction Project; Project, which includes the Phase I and II o Lake Okeechobee Watershed Research Technical Plans; and Water Quality Monitoring Program; • Lake Okeechobee Watershed Phosphorus Lake Okeechobee Basin Management Control Program; Action Plan, which is based on the Phase II Lake Okeechobee Watershed Research and Technical Plan: Water Quality Monitoring Program; • Lake Okeechobee Exotic Species Control • Lake Okeechobee Exotic Species Control Program; and Program; and Lake Okeechobee Internal Phosphorous Lake Okeechobee Internal Phosphorus Management Program. Management Program.

The bill amends s. 373.4595(3)(a), F.S., relating to the Lake Okeechobee Watershed Protection Plan, to:

• Require the SFWMD, beginning March 1, 2020, and every five years thereafter, to update the plan to ensure it is consistent with the Lake Okeechobee BMAP;

• Specify that the Phase II technical plan of the Lake Okeechobee Watershed Construction Project provides the basis for the Lake Okeechobee BMAP and remove a requirement that it be ratified by the Legislature;

- Require the DEP, within five years after adoption of the Lake Okeechobee BMAP, and every
 five years thereafter, to evaluate the Lake Okeechobee Watershed Construction Project to
 identify any further load reductions needed to achieve compliance with the Lake Okeechobee
 Total Maximum Daily Load (TMDL). Any modification to the Lake Okeechobee Watershed
 Construction Project resulting from the evaluation must be incorporated into the Lake
 Okeechobee BMAP; and
- Revise and reorganize the Lake Okeechobee Watershed Research and Water Quality
 Monitoring Program to reflect the role of that program in the BMAP process. Changes
 include:
 - Every five years, beginning March 1, 2020, the DEP will reevaluate water quality and quantity data to ensure the appropriate projects are being designated and incorporated into the Lake Okeechobee BMAP;
 - o Information on the sources of phosphorus from the Upper Kissimmee Chain of Lakes and Lake Istokpoga and their relative contribution to the water quality of Lake Okeechobee will be used as part of the Lake Okeechobee BMAP to develop interim measures, BMPs, or regulations; and
 - Any alternative nutrient reduction technologies determined to be feasible will be included in the Lake Okeechobee BMAP.

The bill revises the existing requirement for an interagency agreement to allow the coordinating agencies to develop an intergovernmental agreement with local governments to implement nonagricultural nonpoint source BMPs within their respective geographic boundaries.

The bill also makes the following revisions related to nonpoint sources of pollution:

- When water quality problems are detected despite the appropriate implementation of agricultural or nonagricultural BMPs, the BMPs must be reevaluated and revised if the reevaluation determines that the BMPs require modification. The bill provides that the revised BMPs must be implemented within a reasonable amount of time.
- The DACS, in consultation with the SFWMD, the DEP, and affected parties, shall develop agricultural nonpoint source interim measures, BMPs, or other measures necessary for Lake Okeechobee Watershed TMDL reduction. The DACS shall adopt such practices by rule.
- The DEP, in consultation with the SFWMD and affected parties, shall develop nonagricultural nonpoint source interim measures, BMPs, or other measures necessary for Lake Okeechobee Watershed TMDL reduction. It directs the DEP or the SFWMD to adopt new practices by rule.
- DACS, in cooperation with the DEP and the SFWMD, will provide technical and financial
 assistance for implementation of agricultural and nonagricultural nonpoint source BMPs,
 subject to the availability of funds.

The bill amends s. 373.4595(3)(b)12., F.S., to address the requirements of agricultural nonpoint source dischargers located south of Lake Okeechobee. These dischargers are currently subject to regulation under s. 373.4595, F.S. (implemented in rule 40E-61, F.A.C.), which regulates the Lake Okeechobee Watershed, and s. 373.4592, F.S. (implemented in rule 40E-63, F.A.C.), which regulates the Everglades. Agricultural nonpoint source dischargers may either implement BMPs

or monitoring to comply with these regulatory schemes. The revisions to s. 373.4595(3)(b)12., F.S., in the bill state that the BMPs for the Everglades Program meet the BMP requirements for Lake Okeechobee (including the BMP requirements in the BMAP). The Everglades Program permit can be used in lieu of the requirements of the Lake Okeechobee BMAP (which would be BMPs or monitoring for nonpoint source dischargers) if the permit holder is in compliance with the BMPs set forth in the Everglades Program. However, subparagraph five of the section is still intended to apply to those dischargers. That subparagraph states that where water quality problems are detected for agricultural nonpoint sources despite the implementation of BMPs, the BMPs must be reviewed and revised within a reasonable period as specified in rule. The regulatory requirements of the Everglades Program still apply to these dischargers.

The bill provides that management strategies and pollution reduction requirements set forth in a BMAP are not subject to challenge under ch. 120, F.S., at the time they are incorporated into a permit.

The bill requires the SFWMD to revise Florida Administrative Code Rule 40E-61, regarding the Works of the District (WOD) program, to:

- Be consistent with the revised provisions of the Lake Okeechobee Watershed Protection Program and the implementation of TMDLs through the BMAP process,
- Provide for a monitoring program for nonpoint source dischargers required to monitor water quality by s. 403.067, F.S., and
- Provide the results to be reported to the coordinating agencies.

The bill amends s. 373.4595(6), F.S., to require the DEP to report March 1 of every year on the status of the Lake Okeechobee, Caloosahatchee River Watershed, and St. Lucie River Watershed BMAPs. It also requires the DACS to report on the status of the implementation of agricultural nonpoint source BMPs, including an implementation assurance report summarizing survey responses and response rates, site inspections, and other methods used to verify implementation and compliance with BMPs in the Lake Okeechobee, Caloosahatchee, and St. Lucie watersheds.

The bill amends s. 373.4595(7)(c), F.S., to remove the requirement that owners or operators of existing structures that discharge into or from Lake Okeechobee that were subject to certain consent orders must get a permit under s. 373.4595(7), F.S. The holders of the consent orders are primarily water control districts regulated under ch. 298, F.S., that are responsible for canals and other structures that control water flow around the south and east portions of Lake Okeechobee. One consent order is for the holder of a state agricultural lease that operated a culvert that discharged into the Lake and Rim Canal. These structures will still be subject to the requirements of ss. 373.413 and 373.416, F.S., which govern the construction, alteration, maintenance, or operation of these structures. These structures are also subject to the requirements of the Lake Okeechobee BMAP. Owners and operators of existing structures will be deemed in compliance if they meet the conditions of permits under rule 40E-63, F.A.C., governing the Everglades Program.

Section 16 amends s. 373.467, F.S., to revise the membership requirements for the Harris Chain of Lakes Restoration Council. One member must be a person with experience in environmental science or regulation, rather than an environmental engineer. It requires an attorney and an engineer, rather than individuals that have training in either discipline. It also clarifies that the

two members, who are residents of the county, are not required to meet any of the other requirements of membership to be appointed to the council. As the statute is currently written, it appears those two members are prohibited from meeting any of the other requirements for membership. The bill provides that the Lake County legislative delegation may waive the qualifications for membership on a case-by-case basis for good cause. The bill provides that resignation by a council member or the failure of a member to attend three consecutive meetings without being excused by the chair of the committee results in a vacancy.

Section 17 amends s. 373.536, F.S., to require the WMDs to include an annual funding plan for each of the five years included in their plans for water resource and water supply development components of the plans.

The bill specifies that the funding plan must address the water supply projects proposed for funding and assistance. The plan must identify both anticipated available district funding and additional funding needs for the second through fifth years of the funding plan. Projects included in the work program must be shown to support the implementation of MFLs and water reservations and must avoid the adverse effects of competition for water supplies.

The bill requires the DEP to post the proposed work program on its website.

Section 18 amends s. 373.703, F.S., regarding water production, to include private landowners on the list of entities that a WMD is authorized to join with in carrying out its duties.

Section 19 amends s. 373.705, F.S., to specify that for regionally significant water resource development projects, the WMDs are responsible for securing necessary funding for regionally significant projects that: prevent or limit adverse water resource impacts, avoid competition among water users, or support the provision of new water supplies in order to meet an MFL or to implement a recovery or prevention strategy or water reservation.

It also requires the WMDs to include in their annual budget submittals the amount of funds for each project in the annual funding plan.

The bill adds projects that reduce or eliminate the adverse effects of competition between legal users and the natural system to the list of water supply development projects that will be given first consideration for state or WMD funding assistance.

The bill requires the WMDs to promote expanded cost-share criteria for additional conservation practices, such as soil and moisture sensors and other irrigation improvements, water-saving equipment, and water-saving household fixtures, and software technologies that can achieve verifiable water conservation by providing water use information to utility customers.

Section 20 amends s. 373.707, F.S., to include self-suppliers as entities that may receive technical and financial assistance from a WMD for alternative water supply projects if the projects help avoid the adverse effects of competition for limited water supplies.

In addition to the provision of funds via the Water Protection and Sustainability Program, the bill provides that when state funds are provided through specific appropriation, those funds serve to

supplement existing WMD or basin board funding for alternative water supply development assistance and should not result in a reduction of such funding.

WMDs are required to include the amount of funds allocated for water resource development that supports alternative water supply development and funds allocated for alternative water supply projects. The bill specifies that those funds relate to projects identified in the annual funding plans developed by the WMDs as part of a five year water resource development work program.

Under existing law, only fiscally disadvantaged small local governments are eligible for a waiver from the 60 percent cost-share requirement for funding that is set forth in this section. The bill authorizes the WMDs to waive the match requirement for any water user for projects determined by the WMD to be in the public interest and that are not otherwise financially feasible.

Section 21 amends s. 373.709, F.S., to limit water supply development project options in each regional water supply plan to options that are technically and financially feasible.

For the required list of water resource development projects that support water supply development, the bill requires the list to include all existing and future reasonable-beneficial uses and for the natural systems identified in recovery or prevention strategies for adopted MFLs or water reservations.

Each listed water resource development project must include an estimate of the amount of water to become available through the project. The bill requires the estimate to be for all existing and future reasonable-beneficial uses and for natural systems identified in recovery or prevention strategies for adopted MFLs or water reservations.

The bill requires the inclusion of an assessment of how the regional water supply plan, and projects in the funding plans, support the recovery or prevention strategies for implementation of adopted MFLs or water reservations, including MFLs for OFSs, while ensuring that sufficient water will be available for all existing and future reasonable-beneficial uses and for natural systems, and that the adverse effects of competition for water supplies will be avoided.

It also requires the DEP's report on the status of regional water supply planning in each WMD to include an analysis of the sufficiency of potential sources of funding from all sources for water resource development and water supply development projects. The report must also include an explanation of how each project identified in the 5-year water resource development work program will contribute to additional water for MFLs or water reservations

Section 22 creates Part VIII of ch. 373, F.S., to consist of ss. 373.801, 373.802, 373.803, 373.805, 373.807, 373.811, and 373.813, F.S., and provides the title, "Florida Springs and Aquifer Protection Act."

Section 23 creates s. 373.801, F.S., to provide legislative findings and intent:

• Detailing the importance of Florida's springs, and various benefits they provide to the state including providing critical habitat for plants and animals. Springs provide immeasurable natural, recreational, economic, and inherent value. Springs are of great scientific importance

in understanding the diverse functions aquatic ecosystems. Water quality in springs is an indicator of local conditions of the Floridan Aquifer. Water flows in springs reflect regional aquifer conditions. Springs also provide recreational opportunities for Floridians and visitors to the state and economically benefit local and state economies.

- Stating that water quantity and water quality in springs may be related. It also specifies the primary responsibilities of the DEP, WMDs, the DACS, and local governments.
- Recognizing that springs are only as healthy as their local aquifer systems and identifying 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 may 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 WMDs and local government jurisdictional boundaries, which requires a coordinated response.
- Recognizing that aquifers and springs are complex systems affected by many variables and influences.
- Recognizing that action is urgently needed, and action can be modified as additional data is acquired.

Section 24 creates s. 373.802, F.S., to provide definitions for "department," "local government," "onsite sewage and treatment disposal system," "spring run," "springshed," and "spring vent."

The bill also defines:

- "Outstanding Florida Springs," which includes all historic first magnitude springs, including
 their associated spring runs, as determined by the DEP using the most recent version of the
 Florida Geological Survey's springs bulletin. The following springs and their associated
 spring runs are also considered OFSs: DeLeon Springs, Peacock Springs, Poe Spring Rock
 Springs, Wekiwa Springs, and Gemini Springs. The term does not include submarine springs
 or river rises.
- "Priority Focus Area," meaning "the area or areas of a basin where the Floridan Aquifer is generally most vulnerable to pollutant inputs where there is a known connectivity between groundwater pathways and an Outstanding Florida Spring, as determined by the department in consultation with the appropriate water management districts, and delineated in a basin management action plan."

Section 25 creates s. 373.803, F.S., to direct the DEP, in consultation with the WMDs, to delineate priority focus areas for each OFS or group of springs that contain one or more OFS and is identified as impaired, using the best available data. The DEP must use understood and identifiable boundaries such as roads or political jurisdictions for ease of implementation. The bill requires the delineation of the priority focus areas to be completed by July 1, 2018, and provides that a priority focus area will be effective upon its incorporation in a BMAP. It directs the DEP to consider groundwater travel time, hydrogeology, nutrient load, and any other factors that may lead to degradation of an OFS when delineating the areas.

Section 26 creates s. 373.805, F.S., to direct either a WMD or the DEP to adopt a recovery or prevention strategy concurrently with the adoption of an MFL for an OFS, if it is below, or projected within 20 years to fall below, an MFL.

When an MFL for an OFS is revised, if the spring is below or projected within 20 years to fall below the MFL, a WMD or the DEP must concurrently adopt or modify a recovery or prevention strategy. The bill provides that a WMD or the DEP may adopt the revised MFL before the adoption of a recovery or prevention strategy if the revised MFL is less constraining on existing or projected future consumptive uses.

For any OFS without an adopted recovery or prevention strategy, a WMD or the DEP must expeditiously adopt a recovery or prevention strategy if the WMD or the DEP determines that the OFS has fallen below, or is projected within 20 years to fall below, the adopted MFL.

The bill provides the following minimum requirements for a recovery or prevention strategy for OFSs:

- A list of all specific projects identified for implementation of the plan;
- A priority listing of each project;
- For each project, the estimated cost and date of completion;
- 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 unless there are funding sources that provide
 more than 75 percent of the total cost of the project. The NWFWMD and the Suwannee
 River Water Management District (SRWMD) are not required to meet the minimum
 requirement to provide financial assistance;
- An estimate of each project's benefit to an OFS; and
- An implementation plan designed with a target to achieve the adopted MFL within 20 years or less after the adoption of a recovery or prevention strategy.

The WMD or the DEP must develop a schedule of 5, 10, and 15-year targets for achieving the adopted MFL. The schedule is not a rule but is intended to provide guidance for planning and funding purposes.

The bill also provides for a single extension of up to five years for local governments for any project in an adopted recovery or prevention strategy, which may be granted if the local government provides sufficient evidence that an extension is in the best interest of the public. If the local government is in a rural area of opportunity, the DEP may grant a single extension of up to 10 years.

Section 27 creates s. 373.807, F.S., to provide a deadline of July 1, 2016, for the DEP to initiate assessment of any OFSs or spring systems for which a determination of impairment has not been made and under the numeric nutrient standards for spring vents. The assessment must be complete by July 1, 2018. The bill requires that:

- When a TMDL is adopted, the DEP, or the DEP in coordination with a WMD, will concurrently initiate development of a BMAP;
- For an OFS that has an adopted nutrient TMDL before July 1, 2016, the DEP, or the DEP in coordination with a WMD, will initiate development of a BMAP by July 1, 2016; and

• As the BMAP is developed, if Onsite Sewage Treatment and Disposal Systems (OSTDSs) are identified as contributors of at least 20 percent of nonpoint source nitrogen pollution or if the DEP determines remediation is necessary to achieve the TMDL, the BMAP will include an OSTDS remediation plan for those systems identified as requiring remediation.

BMAPs for OFSs must be adopted within two years of their initiation and must include:

- A list of all projects and programs for implementing a nutrient TMDL;
- A list of all projects in any incorporated OSTDS remediation plan, if applicable;
- A priority ranking of all projects;
- A planning-level cost estimate and completion date of each project;
- The source and amount of any financial assistance from the DEP, the WMD, or other entity;
- The estimate of each project's nutrient load reduction;
- The identification of each point source or category of nonpoint sources with an estimated allocation of the pollutant load for each point source and category of nonpoint sources; and
- An implementation plan designed with a target to achieve the nutrient TMDL no more than 20 years after the adoption of a BMAP.

The bill requires the WMD or the DEP to develop a schedule of 5, 10, and 15-year targets for achieving the adopted nutrient TMDL. The schedule is not a rule but is intended to provide guidance for planning and funding purposes and is exempt from rulemaking.

The bill requires BMAPs adopted by July 1, 2016, that address an OFS to be revised by the DEP, or the DEP in conjunction with a WMD, if necessary to comply with this section by July 1, 2018. Additionally, a local government may apply for an extension of up to five years, or 10 years in the case of a local government within a rural area of opportunity, for any project in an adopted BMAP upon showing that an extension is in the best interest of the public.

By July 1, 2017, each local government that has not adopted an ordinance modeled after the Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes, must develop, enact, and implement an ordinance based on the model ordinance to control urban fertilizer use in springsheds or priority focus areas of an OFS. The bill also provides legislative intent that ordinances adopted under this subsection should reflect the latest scientific information, advancements, and technological improvements in the industry.

As part of a BMAP that includes an OFS, the DEP, the Department of Health (DOH) and relevant local governments and local public and private wastewater utilities, will develop an OSTDS remediation plan for a spring if the DEP determines OSTDSs within a priority focus area contribute at least 20 percent of nonpoint source nitrogen pollution, or if the DEP determines remediation is necessary to achieve the TMDL. The plan must identify cost-effective and financially feasible projects necessary to reduce the nutrient impacts from OSTDSs and it must be completed and adopted as part of the BMAP no later than the first five year milestone.

The DEP is the lead agency in coordinating the preparation of and adoption of the remediation plan. In preparing the plan, the DEP will:

• Collect and evaluate credible scientific information on the effect of nutrients, particularly forms of nitrogen, on springs and springs systems; and

• Develop a public education plan to provide area residents with reliable, understandable information about OSTDSs and springs.

In addition to requirements in s. 403.067, F.S., which details the establishment and implementation of the state's TMDL program, the remediation plan must include options for:

- Repair;
- Upgrade;
- Replacement;
- Drainfield modification;
- Addition of effective nitrogen reducing features;
- Connection to a central sewerage system; or
- Other action for an OSTDS or group of systems within a priority focus area that contribute at least 20 percent of nonpoint source nitrogen pollution, or are determined by the DEP to require remediation.

The DEP will include in the remediation plan a priority ranking for each system or group of systems that requires remediation and will award funds to implement the remediation projects contingent on an appropriation in the General Appropriations Act, which may include all or part of the costs necessary for repair, upgrade, replacement, drainfield modification, addition of effective nitrogen reducing features, initial connection to a central sewerage system, or other action.

In awarding funds, the DEP may consider expected nutrient reduction benefit per unit cost, size and scope of the project, relative local financial contribution to the project, and financial impact on property owners and the community. The DEP may waive matching funding requirements for proposed projects within an area designated as a rural area of opportunity.

The bill requires the DEP to provide notice to local governments that have any jurisdiction in a priority focus area of an OFS of any permit applicants under s. 403.814(12), F.S., which relates to general permits for the construction, alteration, and maintenance of a stormwater management system serving a total project area of up to 10 acres.

Section 28 creates s. 373.811, F.S., to detail prohibited activities in a priority focus area in effect for an Outstanding Florida Springs.

Activities prohibited within a priority focus area are:

- Construction of domestic wastewater disposal systems with permitted capacities of 100,000 gallons per day or greater unless the system meets a treatment standard of three mg/L total nitrogen on an annual permitted basis, unless the DEP determines a higher standard is necessary to attain a TMDL for the OFS;
- Construction of OSTDSs on lots less than one acre, if the addition of the specific systems conflicts with an onsite treatment and disposal system remediation plan incorporated into a BMAP:
- Construction of facilities for the disposal of hazardous waste;
- Land application of Class A or Class B domestic wastewater biosolids not in accordance with a DEP approved nutrient management plan establishing the rate at which all biosolids, soil

amendments, and sources of nutrients at the land application site can be applied to the land for crop production while minimizing the amount of pollutants and nutrients discharged to groundwater or waters of the state; and

New agriculture operations that do not implement BMPs, measures necessary to achieve
pollution reduction levels established by the DEP, or groundwater monitoring plans approved
by a WMD or the DEP.

Section 29 creates s. 373.813, F.S., to direct the DEP to adopt rules to improve water quantity and quality to administer Florida Springs and Aquifer Protection Act.

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 within a reasonable amount of time to implement new or revised agricultural BMPs, in cooperation with applicable local governments and stakeholders.

The bill directs the DEP, the DACS, and the University of Florida Institute of Food and Agriculture Sciences to conduct research into improved or additional nutrient management tools, with a sensitivity to the necessary balance between water quality improvements and agricultural productivity. As applicable, the tools must be incorporated into revised agricultural BMPs adopted by rule by the DACS.

Section 30 amends s. 403.061, F.S., to require the DEP to adopt by rule a specific surface water classification to protect surface waters used for treated potable water supply. Waters classified under this section must have the same water quality criteria as that for Class III waters. This new classification will allow utilities to withdraw water for potable use from a waterbody classified as Class II or III, so long as it does not require significant alteration of permitted treatment processes or prevent compliance with applicable state drinking water standards. Regardless, this classification or the inclusion of treated water supply as a designated use of a surface water does not prevent a surface water used for treated potable water supply from being reclassified as water designated for potable water supply (Class I).

Section 31 creates s. 403.0617, F.S., to implement an innovative nutrient and sediment reduction and conservation pilot project program. Project funding by the DEP is contingent upon a specific appropriation. The intent of the pilot projects are to test the effectiveness of innovative or existing nutrient reduction or water conservation technologies, programs or practices designed to minimize nutrient pollution or restore flows.

The bill directs the DEP to initiate rulemaking by October 1, 2016, to establish criteria to evaluate and rank pilot projects for funding. The projects may not be harmful to the ecological resources in the study area and the criteria must give preference to projects that will result in the greatest improvement to water quality and quantity for the funds expended.

The bill provides the following minimum considerations:

- Level of impairment of the waterbody, watershed, or water segment in which the project is located;
- Quantity of nutrients the project is estimated to remove;

• The potential for the project to provide a cost effective solution to pollution, including pollution caused by OSTDSs;

- The anticipated impact the project will have on restoring or increasing water flow or water level:
- The amount of matching funds for the project which will be provided by the entities responsible for implementing the project;
- Whether the project is located in a rural area of opportunity, with preference given to the local government responsible for implementing the project;
- For multiple-year projects, whether the project has funding sources that are identified and assured through the expected completion date;
- The cost of the project and length of time it will take to complete relative to its expected benefits; and
- Whether the entities responsible for implementing the project have used their own funds for projects to improve water quality or conserve water use, with preference given to those entities that have expended such funds.

Section 32 amends s. 403.0623, F.S., to direct the DEP, in coordination with the WMDs, regional water supply authorities, and the DACS, to establish statewide standards for the collection and analysis of water quantity, water quality, and related data to ensure quality, reliability, and validity of the data and testing results. The bill directs the DEP to coordinate with federal agencies, to the extent practicable, to ensure its collection and analysis of data is consistent with these data collection standards.

The bill requires state agencies and the WMDs to show that they followed the DEP's collection and analysis standards, if available, in order to request state funds for the acquisition of lands or the financing of a water resource project.

The bill provides rulemaking authority to the DEP and the WMDs to implement these standards.

Section 33 amends s. 403.067, F.S., to provide that each new or revised BMAP must include:

- The appropriate management strategies available through existing water quality protection programs to achieve TMDLs, which may provide for phased implementation to promote timely, cost-effective actions;
- A description of BMPs adopted by rule;
- A list of projects in priority ranking with a planning-level cost estimate and estimated date of completion for each listed project;
- The source and amount of financial assistance to be made available by the DEP, a WMD, or other entity for each listed project, if applicable; and
- A planning-level estimate of each listed project's expected load reduction, if applicable.

The bill provides that BMAPs are enforceable pursuant to ss. 403.067 (establishment and implementation of TMDLs), 403.121 (judicial and administrative remedies available to the DEP for violations of ch. 403, F.S.), 403.141 (concerning civil liability), and 403.161 (concerning prohibitions and penalties), F.S., and that management strategies, including BMPs and water quality monitoring, are enforceable under ch. 403, F.S. The bill also provides authority to the

DACS to include provisions for site inspections in its existing rulemaking authority to address agricultural pollution control.

The bill provides that no later than January 1, 2017:

- The DEP, in consultation with the WMDs and the DACS, will initiate rulemaking to adopt procedures to verify implementation of water quality monitoring required in lieu of implementation of BMPs or other measures;
- The DEP, in consultation with the WMDs and the DACS, will initiate rulemaking to adopt
 procedures to verify implementation of nonagricultural interim measures, BMPs, or other
 measures adopted by rule; and
- The DACS, in consultation with the WMDs and the DEP, will initiate rulemaking to adopt procedures to verify implementation of agricultural interim measures, BMPs, or other measures adopted by rule.

Those rules are required to include enforcement procedures applicable to the landowner, discharger, or other responsible person required to implement applicable management strategies, including BMPs, or water quality monitoring as a result of noncompliance.

Section 34 creates s. 403.0675, F.S., to require the DEP, in conjunction with the WMDs, to post on its website and submit electronically an annual progress report to the Governor and the Legislature on the status of each TMDL, BMAP, MFL, and recovery or prevention strategy adopted pursuant to s. 403.067, F.S., or parts I and VIII of ch. 373, F.S. The report must include the status of each project identified to achieve an adopted TMDL or an adopted minimum flow or minimum water level, as applicable. The report must be posted and submitted by July 1 of each year, beginning in 2018.

If a report indicates that any of the 5, 10, or 15-year milestones, or the 20-year target date, if applicable, for achieving a TMDL or MFL will not be met, the report must include an explanation of the possible causes and potential solutions.

If applicable, the report must include project descriptions, estimated costs, proposed priority ranking for project implementation, and funding needed to achieve the TMDL or the MFL by the target date. Each WMD must also post the DEP's report on its website.

The DACS will post on its website and submit electronically an annual progress report by July 1 of each year, beginning in 2018, to the Governor and the Legislature on the status of the implementation of the agricultural nonpoint source BMPs including an implementation assurance report summarizing survey responses and response rates, site inspections and other methods used to verify implementation of and compliance with BMPs pursuant to BMAPs.

Section 35 amends s. 403.861, F.S. to require the DEP to establish rules concerning the use of surface waters for treated potable public water supply.

The bill provides that when a construction permit is issued to construct a new public water system drinking water treatment facility to provide potable water using a surface water of the state that, at the time of the permit application, is not being used as a potable water supply, and

the classification of which does not include potable water supply as a designated use, the DEP must add treated potable water supply as a designated use of the surface water segment.

The bill provides that for existing public water system drinking water treatment facilities that use a surface water of the state as a treated potable water supply, and the surface water classification does not include potable water as a designated use, the DEP shall add treated potable water supply as a designated use of the surface water segment.

Section 36 creates s. 403.928, F.S. to require the Office of Economic and Demographic Research (EDR) to conduct an annual assessment of Florida's water resources and conservation lands.

Concerning water resources, the assessment must include:

- Historical and current expenditures and projections of future expenditures by federal, state, regional, and local governments and public and private utilities based upon historical trends and ongoing projects or initiatives associated with water supply and demand and water quality protection and restoration;
- An analysis and estimates of future expenditures by federal, state, regional, and local governments and public and private utilities necessary to comply with federal and state laws and regulations. The analysis and estimates must address future expenditures by federal, state, regional, and local governments and all public and private utilities necessary to achieve the legislature's intent that sufficient water be available for all existing and future reasonable-beneficial uses and the natural systems, and that adverse effects of competition for water supplies be avoided. The assessment must include a compilation of projected water supply and demand data developed by each WMD pursuant to s. 373.036, F.S., which relates to the Florida water plan, WMD water management plans, and the consolidated WMD annual reports, and 373.709, F.S., which relates to regional water supply planning. The EDR must note any significant differences between the methods used by the WMDs to calculate the data;
- Forecasts of federal, state, regional, and local government revenues dedicated in current law
 for the purposes of the water supply demand and water quality protection and restoration, or
 that have been historically allocated for these purposes, as well as public and private utility
 revenues; and
- An identification of gaps between projected revenues and projected and estimated expenditures.

Concerning conservation lands, the assessment must also include:

- Historical and current expenditures and projections of future expenditures by federal, state, regional, and local governments based upon historical trends and ongoing projects or initiatives associated with real property interests eligible for funding under the Florida Forever Act;
- An analysis and estimates of future expenditures by federal, state, regional, and local governments necessary to purchaser lands identified in plans produced by state agencies or WMDs;
- An analysis of the ad valorem tax impacts, by county, resulting from public ownership of conservation lands;

• Forecasts of federal, state, regional, and local government revenues dedicated in current law to maintain conservation lands and the gap between projected expenditures and revenues;

- The total percentage of Florida real property that is publicly owned for conservation purposes;
- A comparison of the cost of acquiring and maintaining conservation lands under fee simple or less than fee simple ownership.

The assessment must also include:

- Analyses on a statewide, regional, or geographic basis, as appropriate;
- Any analytical challenges in assessing information across the different regions; and
- Any overlap in expenditures for water resources and conservation lands.

Various agencies and local governmental entities are directed to aid the EDR with their respective areas of expertise, and any agency must provide access to the EDR with any information, confidential or otherwise, the EDR considers necessary.

The assessment must be submitted to the President of the Senate and the Speaker of the House of Representatives by January 1, 2017, and by January 1 each year thereafter.

Section 37 creates an undesignated section of law to require the DEP to evaluate the feasibility and cost of creating and maintaining a web-based, interactive map that includes, at a minimum:

- All watersheds and each waterbody within them;
- The county or counties in which the watershed or waterbody is located;
- The WMD or districts in which the watershed or waterbody is located;
- Whether, if applicable, an MFL has been adopted for the waterbody and, if it has not been adopted, when it is anticipated to be adopted;
- Whether, if applicable, a recovery or prevention strategy has been adopted for the watershed or waterbody and, if it has not been adopted, when it is anticipated to be adopted;
- The impairment status of each waterbody;
- Whether, if applicable, a TMDL has been adopted if the waterbody is listed as impaired and, if one has not been adopted, the anticipated adoption date;
- Whether, if applicable, a BMAP has been adopted and, if it has not been adopted, when it is anticipated to be adopted;
- Each project listed on the five year water resources work program;
- The agency or agencies and local sponsor, if any, responsible for overseeing the project;
- The total or estimated cost and completion date of each project and the financial contribution of each entity;
- The estimated quantitative benefit to the watershed or waterbody; and
- The water projects completed within the last five years within the watershed or waterbody.

The bill requires the DEP to submit a report on the feasibility study to the President of the Senate and the Speaker of the House of Representatives by January 1, 2017.

Section 38 creates an undesignated section of law to provide that the act fulfills an important state interest.

Section 39 provides an effective date of July 1, 2016.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The county/municipality mandates provision of Art. VII, section 18, of the Florida Constitution may apply because this bill may require local governments to expend funds to comply with planning schedules, adopt fertilizer ordinances, and expend funds for OSTDS remediation. If this bill rises to the level of a mandate, exceptions may apply due to the fact that similarly situated persons are required to comply with the provisions of the bill and funds are likely to be appropriated to cover the cost of the bill to the extent that those costs exceed those already required under current law.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The exact impact of CS/CS/SB 552 on the private sector and individuals cannot be calculated, as many of the costs are dependent on activities, such as delineation of priority focus areas, that have not occurred. Potential private sector impacts include:

- Provisions that will require some property owners in priority focus areas to upgrade their Onsite Sewage Treatment and Disposal Systems (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. Aerobic Treatment Units (ATUs) are also more costly to operate than conventional OSTDSs;
- Rate payers may pay for ongoing operation and maintenance for advanced wastewater treatment plants through rate increases;
- Property owners may have to pay more for passive nitrogen removing systems installed in OSTDSs in new developments with lots of less than one acre. They may also face more expensive pump out costs as a result of more expensive disposal options;
- 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; and

• Entities required to monitor water use could see a negative fiscal impact due to the costs of conducting monitoring.

C. Government Sector Impact:

The bill requires a number of activities that will result in significant increased costs for several government entities, including the Department of Environmental Protection (DEP), the Department of Agriculture and Consumer Services (DACS), the Water Management Districts (WMDs), and local governments. The estimated costs are listed below.

The bill requires the DEP to develop, publish, update, and maintain a database of state conservation lands where public access is compatible with conservation and recreation. In addition, DEP is required to evaluate the feasibility and cost of creating and maintaining a web-based, interactive map. The DEP will utilize existing staff to cover the majority of the workload for these requirements; however, additional funding support is needed and listed below.

Description	FTE	Recurring	Non-Recurring	Total
Conservation Lands	2.00	\$251,120	\$739,464	\$990,584
Public Access				
Database				
Web-based Interactive			\$135,700	\$135,700
Map Feasibility				
TOTAL	2.00	\$251,120	\$875,164	\$1,126,284
				117

The DACS has requested eight positions and \$22.9 million from the Land Acquisition Trust Fund and \$1.4 million from the General Inspection Trust Fund in the department's 2016-2017 Legislative Budget Request to assist with BMP development and implementation, and for nutrient reduction and water retention projects in the Lake Okeechobee watershed. In addition, the DACS has requested \$1.5 million in general revenue funding to provide water use data for inclusion in the water management districts' regional water supply plans. Total funding support is listed below.

¹¹⁷ See 2016 Department of Environmental Protection Bill Analysis for SB 552, November 9, 2015 (on file with the Senate Committee on Appropriations.)

¹¹⁸ See 2016 Department of Agriculture and Consumer Services' Legislative Bill Analysis for SB 552, in the Agency Bill Analysis Request (ABAR) system.

Description	FTE	Recurring	Non-Recurring	Total
BMP Development	8.00	\$7,655,149	\$1,657,115	\$9,312,264
and Implementation				
Nutrient Reduction &			\$15,000,000	\$15,000,000
Water Retention				
Projects				
Water Supply			\$1,500,000	\$1,500,000
Planning				
TOTAL	8.00	\$7,655,149	\$18,157,115	\$25,812,264

Additional costs that are indeterminate include:

- Minimum Flows and Levels (MFLs) The bill would require the WMDs and the DEP to adopt MFLs by certain deadlines for springs. According to the DEP, these costs range from \$280,000 to \$2.25 million per MFL, including agency costs for extensive data collection, analysis and modeling, stakeholder coordination, and rulemaking. Costs can vary widely depending on the complexity of the system and the amount and type of scientific and technical data that exists or must be collected.
- MFLs Recovery or Prevention Strategies The WMDs (excluding the Northwest Florida and Suwannee River WMDs) would be required to fund at least 25 percent of recovery or prevention strategies projects. However, the WMDs may provide less than a 25 percent match if another specific source(s) of funding will provide more than 75 percent of the project cost. Since the number of project applicants and project costs is unknown, the fiscal impact is indeterminate at this time.
- <u>Alternative Water Supply Projects</u> The water management districts that provide technical and financial assistance to self-suppliers for alternative water supply projects will result in increased costs. The actual cost is indeterminate.
- Alternative Water Supply Pilot Program The bill allows the South Florida Water Management District, Southwest Florida Water Management District, and the St. Johns River Water Management District to designate and implement alternative water supply projects. WMDs that choose to implement a new alternative water supply project as part of the program could incur additional costs to develop and administer the project. Since the WMDs have the option of developing and implementing an alternative water supply project, actual costs are indeterminate.
- Annual Assessment of Florida's Water Resources and Conservation Lands The bill requires the Office of Economic and Demographic Research (EDR) to conduct an annual assessment of Florida's water resources and conservation lands. Various agencies and local governmental entities are directed to aid EDR with their respective areas of expertise. The DEP estimates they would use existing staff to assist with the assessment. However, additional costs may be needed if new data systems have to be built in order to collect, organize, validate, and supply the information on an ongoing, annual basis. Some of the data does not exist in a single repository. These additional costs are indeterminate.

Potential costs to local governments related to springs and septic tank remediation plans are indeterminate. These costs are dependent on the nature and scale of remediation, the number of affected properties, and the difficulty of building collection and transmission

systems, availability of wastewater treatment facilities, and other factors. Existing grant and loan programs within the DEP, such as the Clean Water State Revolving Fund, may be available to provide financial resources for some costs.

The DEP, the WMDs, and the DACS have indicated that the costs associated with rulemaking and rule revisions should be minimal and will be addressed within existing resources.

Technical Deficiencies:

None.

VI. Related Issues:

"Self Suppliers" is not defined, which could lead to some confusion over its meaning.

VII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 259.032, 373.019, 373.036, 373.042, 373.0421, 373.1501, 373.219, 373.223, 373.2234, 373.227, 373.233, 373.4591, 373.4595, 373.467, 373.536, 373.703, 373.705, 373.707, 373.709, 403.061, 403.0623, 403.067, and 403.861.

This bill creates the following sections of the Florida Statutes: 373.037, 373.0465, 373.801, 373.802, 373.803, 373.805, 373.807, 373.811, 373.813, 403.0617, 403.0675, and 403.928.

This bill creates two undesignated sections of Florida law.

VIII. Additional Information:

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

CS/CS by Appropriations on November 19, 2015:

The committee substitute:

- Clarifies that the Water Management District (WMD) that designated the alternative water supply project is the district that is allowed to designate an alternative water supply project located in another WMD.
- Clarifies that if there is an existing minimum flow or level for a water body and the
 water body is below or projected to fall below the minimum flow level, prevention or
 recovery strategies will be established expeditiously, rather than concurrently, with
 the minimum flow or level.
- Provides an allowance for WMDs to enforce existing rules or adopt more stringent rules relating to consumptive use permits for certain types of groundwater withdrawals.

CS by Environmental Preservation and Conservation on November 4, 2015: The word "receive" on line 3016 was changed to "provide".

B. Amendments:

None.

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