HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 7003 PCB SAC 15-01 Water Resources
SPONSOR(S): State Affairs Committee, Caldwell
TIED BILLS: **IDEN./SIM. BILLS:**

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Orig. Comm.: State Affairs Committee	13 Y, 5 N	Moore	Camechis
1) Appropriations Committee		Lolley	Leznoff

SUMMARY ANALYSIS

The bill contains various revisions to Florida's water policy including, but not limited to:

- Designating all first magnitude springs in the state and all second magnitude springs within state or federally owned lands as Priority Florida Springs (PFS).
- Requiring water management districts (WMDs) to develop new or revise existing recovery or prevention strategies concurrently with the establishment or re-evaluation of minimum flows and levels (MFLs) for all PFS.
- Requiring the Department of Environmental Protection (DEP) by December 1, 2018, to complete an assessment of water quality for each PFS for which an impairment determination has not been made, establish total maximum daily loads (TMDLs) for all PFS deemed to be impaired, and establish basin management action plans (BMAP) for impaired PFS.
- Requiring persons engaged in agriculture within the geographic area encompassed by a BMAP for a PFS to implement best management practices (BMP) or conduct water quality monitoring.
- Requiring the DEP to establish an interagency agreement with the St. Johns River Water Management District (SJRWMD), the South Florida water Management District (SFWMD), the Southwest Florida Water Management District (SWFWMD), and the Department of Agriculture and Consumer Services (DACS) to develop and implement uniform water supply planning, consumptive water use permitting, and resource protection programs for the area encompassed by the Central Florida Water Initiative (CFWI).
- Requiring the WMDs to include in their 5-year water resource development work program an annual funding plan for each of the 5-years for water resource and water supply development projects contained in each approved regional water supply plan. Requiring RWSPs to be amended to include any water supply development and water resource development project identified in a recovery or prevention strategy and for the amended RWSP to be approved concurrently with the recovery or prevention strategy.
- Requiring the SFWMD to continue exercising the state's authority to allocate water and assign priorities among other water uses served by the Central and Southern Florida Project (Project) and to provide recommendations to the U.S. Army Corp of Engineers that are consistent with all SFWMD programs and plans when developing or implementing joint water control plans or regulation schedules required for the Project.
- Updating and restructuring the Northern Everglades and Estuaries Act to reflect and build upon DEP's completion of BMAPs for Lake Okeechobee, the Caloosahatchee Estuary, and the St. Lucie River and Estuary; DEP's continuing development of a BMAP for the inland portion of the Caloosahatchee River watershed; and DACS' implementation of BMPs in the three basins.
- Designating the Lake Okeechobee BMAP as the phosphorus control element of the Lake Okeechobee Watershed Protection Program, designating BMAPs adopted for the Caloosahatchee River and the St. Lucie River watersheds as the pollutant control programs for those watersheds, and requiring the BMAPs to contain an implementation schedule for pollutant load reductions consistent with adopted TMDLs.
- Requiring periodic updates of BMAPs and projects within the Northern Everglades to ensure consistency, and identifying further phosphorus load reductions necessary to achieve compliance with TMDLs.
- Directing the SFWMD to revise its Works of the District Rule to be consistent with the Lake Okeechobee BMAP and report to the coordinating agencies the results of water quality monitoring conducted by landowners outside of the Everglades Agricultural Area who do not choose to participate in the DACS' BMP program.
- Eliminating duplicative permits by relying on the BMAPs as the basis for water quality regulation in the Lake Okeechobee, the Caloosahatchee River, and the St. Lucie River watersheds.
- Authorizes DEP to adopt by rule a specific surface water classification for certain waterbodies used as a source of drinking water.

The bill appears to have a fiscal impact on state and local government and the private sector. (See Fiscal Analysis section.)

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Water Quantity

Consumptive Use Permitting

A person must apply for and obtain a consumptive use permit (CUP) from the applicable water management district (WMD) before using surface or groundwater of the state, unless the person is solely using the water for domestic use.[1] To obtain a CUP, an applicant must satisfy three requirements, commonly referred to as the "the three-prong test." To satisfy the test, an applicant must establish that the proposed use of the water:

- Is for a "reasonable-beneficial use," meaning 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;[2]
- Will not interfere with any presently existing legal use of water; and
- Is consistent with the public interest.[3]

If two or more applications that otherwise comply with the three-prong test are pending for a quantity of water that is inadequate for both or all, or that for any other reason are in conflict, and the WMD or DEP has deemed the applications complete, the WMD or DEP has the right to approve or modify the application that best serves the public interest.[4] In the event that two or more competing applications qualify equally, the WMD governing board or DEP will give preference to a renewal application over an initial application.[5]

Minimum Flows and Levels

A minimum flow of a surface water is the limit at which further water withdrawals would be significantly harmful to the water resource or ecology of the area.[6] A minimum level is the level of groundwater in an aquifer and the surface water at which further water withdrawals would be significantly harmful to the water resources of the area.[7] Minimum flows and levels (collectively referred to as "MFLs") are calculated by DEP and the WMDs.[8] WMDs are required to develop, and annually update, a priority listing of waterbodies within their boundaries for the establishment of MFLs.[9] MFLs are set using the best available information, considering natural seasonal fluctuations, and the protection of non-consumptive uses.[10]

Recovery and Prevention Strategies

For a waterbody that is below an MFL or is projected to fall below it within 20 years, the WMD is required to implement a recovery or prevention strategy. A recovery or prevention strategy may include implementing conservation measures, developing additional water supplies, and reducing permitted

[1] Section 373.219, F.S.
[2] Section 373.019(16), F.S.
[3] Section 373.223(1), F.S.
[4] Id.
[5] Section 373.233(2), F.S.
[6] Section 373.042(1), F.S.
[7] Id.
[8] Id.
[9] Section 373.042(2), F.S.
[10] Section 373.042(1), F.S.

allocations to achieve recovery of a waterbody to the established MFL or prevent a waterbody from falling below the established MFL.[11]

Water Quality

Nutrient Pollution and Sources of Pollution

Nutrient pollution is a primary cause of water quality problems in the United States. It occurs when there are too many nutrients, mainly nitrogen and phosphorus, in a waterbody. Excess nutrients cause algae in the water to grow and can result in an algal bloom. Algal blooms are thick, floating mats of algae that can be toxic to humans, deplete oxygen levels necessary for fish and shellfish survival, and reduce water clarity. Algal blooms affect the quality of life for Floridians by causing human health issues, reductions in property values, and lost tourism. Contributors of nutrient pollution are septic systems, stormwater runoff, industrial and domestic wastewater discharges, livestock manure, commercial and residential fertilization application, and car and power plant air emissions.[12]

Clean Water Act and Water Quality Standards

The Clean Water Act (CWA) was enacted by Congress in 1972 to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[13] The CWA requires states to adopt water quality standards (WQS) for their navigable waters, and to review and update those standards at least every three years. WQS must include:

- Designation of a waterbody's beneficial uses, such as public water supply, recreation, fish propagation, and navigation;
- Water quality criteria that define the amounts of pollutants, in either numeric or narrative form, that the waterbody can contain without impairment of the designated beneficial uses; and
- Anti-degradation requirements.[14]

The Environmental Protection Agency (EPA) reviews state WQS to ensure compliance with the requirements of the CWA. If the EPA determines that a WQS, either revised or new, is inconsistent with the CWA, then the EPA will notify the state of the changes needed to meet the requirements of the CWA. If the state does not make the changes, EPA will set the WQS.[15]

Numeric Nutrient Criteria

To protect the beneficial uses of a waterbody, water quality criteria are created. Water quality criteria are based on data and scientific judgments about pollutant concentrations and their effects on a waterbody. There are two types of water quality criteria: numeric and narrative. Numeric criteria establish the maximum allowable concentration of a pollutant in a waterbody. Narrative criteria describe the types of organisms expected to be found in a healthy waterbody and the desired conditions for a waterbody, such as being free from excessive algal blooms.[16] Until recently, Florida employed a narrative criteria for nutrient pollution.

In July 2008, the Florida Wildlife Federation and other environmental groups sued EPA in an attempt to compel EPA to adopt numeric nutrient criteria for Florida's waterbodies. In January 2009, EPA determined that numeric nutrient water quality criteria for Florida's waterbodies are necessary to meet the requirements of the CWA. EPA determined that Florida's narrative nutrient criteria alone were insufficient to ensure protection of applicable designated uses, but also recognized the ongoing efforts

[11] Section 373.0421(2), F.S.
[12] *The Facts about Nutrient Pollution*, available at http://water.epa.gov/polwaste/upload/nutrient_pollution_factsheet.pdf.
[13] 33 U.S.C. §1251
[14] 33 U.S.C. § 1313(c)(2)(A)-(B); 40 C.F.R. §§ 131.6, 131.10-12.
[15] 33 U.S.C. §1313(c) (3)-(4).
[16] EPA Factsheet, W*ater Quality Standards: Protecting Human Health and Aquatic Life* (Feb. 2011), available at *http://water.epa.gov/scitech/swguidance/standards/upload/WQS_basic_factsheet.pdf*.

by the Department of Environmental Protection (DEP) in developing a numeric nutrient criteria for Florida's waterbodies. EPA noted that, "in the event that Florida adopts and EPA approves new or revised water quality standards that sufficiently address this determination before EPA promulgates federal water quality standards, EPA would no longer be obligated to promulgate federal water quality standards."

In August 2009, EPA settled the lawsuit and entered into a consent decree that required EPA to adopt numeric nutrient criteria for Florida's lakes, flowing waters, estuaries, and coastal waters. DEP suspended its rulemaking proceedings while EPA developed its rules to impose numeric nutrient criteria in Florida. In December 2010, EPA adopted final numeric nutrient criteria rules for all lakes and springs in the state and flowing waters outside of the southern Florida region in accordance with the Consent Decree and subsequent revisions.

Also in December 2010, Florida filed a lawsuit in federal district court against EPA over the agency's intrusion into Florida's previously approved clean water program.[17] The lawsuit alleged that EPA's action was inconsistent with the intent of Congress when it based the CWA on the idea of cooperative federalism whereby the states would be responsible for the control of water quality with oversight by EPA. Control of nutrient loading from predominantly nonpoint sources involves traditional states' rights and responsibilities for water and land resource management which Congress expressly intended to preserve in the CWA. The lawsuit specifically alleged that EPA's rules and January 2009 necessity determination for promulgating numeric nutrient criteria for Florida's waters are arbitrary, capricious, and an abuse of discretion, and requested the court to enjoin EPA's Administrator from implementing its numeric nutrient criteria rules in Florida.

On February 18, 2012, the United Stated District Court for the Northern District of Florida found against the state, holding that EPA's determination that Florida's narrative nutrient criteria are inadequate and that numeric criteria are necessary was not arbitrary and capricious.[18] The court also held, however, that EPA's rule setting numeric nutrient criteria for Florida was not arbitrary and capricious save for two exceptions: EPA's stream criteria were found to be arbitrary and capricious (at least without further explanation, according to the court), as were the default downstream protection values for unimpaired lakes. In accordance with the court's ruling, the 2009 Consent Decree was to remain in effect, with the modification that EPA was required to remedy the numeric nutrient criteria for streams and downstream protection values by May 21, 2012.

In response to EPA promulgating rules to establish federal numeric nutrient criteria for Florida's waterways, DEP began rulemaking and adopted state numeric nutrient criteria for streams, rivers, lakes, and south Florida estuaries, which it then submitted to EPA for approval pursuant to the CWA. However, several environmental groups filed a petition with the Division of Administrative Hearings challenging DEP's rules, but an Administrative Law Judge upheld the rules in June of 2012, finding that DEP acted within its authority in promulgating numeric nutrient criteria for the state. The decision was affirmed by the First District Court of Appeal in February of 2013.[19]

On June 27, 2013, the EPA formally approved the Department's document titled "Implementation of Florida's Numeric Nutrient Standards," dated April, 2013. On June 28, 2013, EPA made a revised determination regarding Florida numeric nutrient standards that removed all fresh waters from the previous determination and filed a motion to modify the Consent Decree. On January 7, 2014, EPA's motion was granted.[20] The ruling on the motion was appealed and is set for oral argument on January 29, 2015.

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[17] *State of Florida v. Jackson,* Case 3:10-cv-00503-RV-MD (N.D. Fla. 2010).
[18] *State of Florida v. Jackson*, 853 F.Supp.2d 1138 (N.D. Fla. 2012).
[19] *Florida Wildlife Federation, et. al. v. Department of Environmental Protection,* Case No. ID12-320 (Feb. 2013).
[20] *Order Modifying the Consent Decree*, available at http://www.dep.state.fl.us/secretary/news/2014/01/Order_Modifying_Consent_Decree.pdf

Today, the vast majority of Florida's freshwater streams, lakes, springs, and estuaries are covered by numeric interpretations of the nutrient criterion.

Total Maximum Daily Loads

Pursuant to the CWA, states are required to develop lists of waterbodies that do not meet WQS (impaired waters). For impaired waters, the state is charged with developing a total maximum daily load (TMDL) for the waterbody. A TMDL calculates the maximum allowable amount of a pollutant that the waterbody can receive, while implementing the WQS.[21] A waterbody may have several TMDLs, one for each pollutant that exceeds the waterbody's capacity to absorb it safely.

Basin Management Action Plans

When a TMDL has been established for an impaired water, a Basin Management Action Plan (BMAP) may be developed by DEP.[22] BMAPs implement comprehensive regulatory, non-regulatory, and incentive based strategies to reduce pollutant loadings.[23] Regulatory actions may include the issuance or revision of permits for environmental resources, wastewater, and stormwater.[24] Non-regulatory and incentive based actions may include habitat preservation or restoration, and the development and implementation of Best Management Practices (BMPs).[25]

BMAP development involves collaboration with local stakeholders, local government agencies, and state agencies, including the applicable WMD and the Department of Agriculture and Consumer Services (DACS).[26] The BMAP is adopted by order of the Secretary of the DEP.[27]

Best Management Practices

Nutrient pollution may enter a waterbody through nonpoint sources, such as septic tanks, stormwater runoff, and golf courses (nonagricultural nonpoint sources), from agricultural operations (agricultural nonpoint sources), and from point sources, such as a pipe or culvert discharge from a facility. Point sources of pollution are controlled by National Pollution Discharge Elimination System (NPDES) permits issued for the operation involved. Nonpoint sources of pollution are controlled through the implementation of BMPs.[28] DEP, in cooperation with the WMDs, establishes BMPs for nonagricultural nonpoint sources and DACS establishes BMPs for agricultural nonpoint sources.[29]

DACS has created two types of BMPs: management and structural. Management BMPs involve nutrient and irrigation management. Structural BMPs involve changes to the land or installation of structures, for example tailwater recovery ponds and fences.[30]

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[21] 33 U.S.C. §1313 (d) (1)(A).
[22] Section 403.067(7), F.S.
[23] Section 403.067(7)(b)1., F.S.
[24] Id.
[25] Id.
[26] Section 403.067(7)(a)3., F.S.
[27] Section 403.067(7)(a)4., F.S.
[28] Section 403.067(7)(c), F.S.
[29] Id.
[30] *Agricultural and Water Quality*, available at http://www.freshfromflorida.com/content/download/33106/813038/BMP_Backgrounder.pdf.

Water Supply Planning and Development

Present Situation

Role of WMDs in Water Supply and Water Resource Development

Current law states that it is the intent of the Legislature that sufficient water be available for all existing and future reasonable-beneficial uses and the natural systems, and that the adverse effects of competition for water supplies be avoided.[31] The Legislature has divided the responsibility for water resource development and water supply development between the WMDs and local governments, regional water supply authorities, and publically and privately owned water utilities.[32] Water resource development is the formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage water resources; the development of regional water resource implementation programs; the construction, operation, and maintenance of major public works facilities to provide for flood control, surface and underground water storage, and groundwater recharge augmentation; and related technical assistance to local governments and to government-owned and privately owned water utilities.[33] Water supply development is the planning, design, construction, operation, and maintenance of public or private facilities for water collection, production, treatment, transmission, or distribution for sale, resale, or end use.[34]

WMDs are to be lead in water supply planning and in identifying and implementing water resource development projects, and to secure the necessary funding for regionally significant water resource development projects.[35] Local governments, regional water supply authorities, and water utilities, both private and public, are to take the lead in securing funding for and implementing water supply development projects.[36]

WMDs are required to fund and expeditiously implement water resource development projects in areas subject to regional water supply plans (RWSP).[37] Water supply development projects that are consistent with RWSPs are to receive priority funding assistance, from the state or WMD, if the project:

- Supports a dependable, sustainable supply of water that is not financially feasible;
- Provides substantial environmental benefits, but requires assistance to be economically competitive; or
- Significantly implements reuse, storage, recharge, or conservation of water that contributes to the sustainability of regional water sources.[38]

Additionally, if a water supply development project meets one of the above criteria and either brings about replacement of existing sources aiding in the implementation of an MFL, or implements reuse assisting in the elimination of a domestic wastewater ocean outfall, the project will be given first consideration for state or WMD funding assistance.[39]

As part of the water supply planning role, each WMD is charged with developing a water management plan for the water resources within its district.[40] This plan assesses existing and future water supply needs, evaluates the adequacy of existing and potential water sources to meet future needs, and ensures the sustainability of water resources and the related natural systems.[41] The plan is based on a

[31] Section 373.705(2)(a), F.S.
[32] Sections 373.705(1)(a)-(b), F.S.
[33] Section 373.019(24), F.S.
[34] Section 373.019(26), F.S.
[35] Sections 373.705(2)(b) and (3), F.S.
[36] Section 373.705(2)(c), F.S.
[37] Section 373.705(3), F.S.
[38] Section 373.705(4)(a), F.S.
[39] Section 373.705(4)(b), F.S.
[40] Section 373.036(2)(a), F.S.
[41] Section 373.036(2)(b)4., F.S.

20 year projection and is updated at least every five years.[42] The plan must include scientific methodologies for establishing MFLs and any established MFL, identification of water supply planning regions that encompass the entire district, a districtwide water supply assessment, and any completed RWSP.[43]

WMD Water Supply Assessments

As part of the WMDs' water management plan, a districtwide water supply assessment is conducted to determine whether water supplies will be adequate to satisfy water demands and maintain healthy conditions of the natural systems.[44] If a water supply assessment reveals that existing sources of water are inadequate to supply water for all existing and future reasonable beneficial uses and to sustain the water resources and related natural systems for the 20 year planning period, the WMD must develop a RWSP.[45]

Development of Regional Water Supply Plans

A RWSP is based on at least a 20-year projection.[46] The plan must include:

- A water supply development component;
- A water resource development component;
- A recovery and prevention strategy;
- A funding strategy for water resource development projects;
- Consideration of how water supply development projects serve the public interest or save costs by preventing the loss of natural resources or avoid greater future costs for water resource or development;
- Technical data and information necessary to support the RWSP;
- MFLs established within each planning region;
- Reservations of water adopted within each planning region;
- Identification of surface waters or aquifers for which MFLs are scheduled for adoption; and
- An analysis of areas where variances may be used to create water supply or resource development projects.[47]

The water supply development component of the RWSP must include:

- A quantification of water supply needs for all existing and future reasonable beneficial uses projected through the 20 year planning period based on best available data;
- A list of water supply development project options for local governments, utilities, regional water supply authorities, self-suppliers, and others to choose from for water supply development; and
- For each water supply development project listed there must be:
    - An estimated amount of water to be made available through the project;
    - The timeframe for implementation of the project, and the estimated costs for the project, including operation and maintenance;
    - An analysis of funding needs and sources of possible funding options; and
    - Identification of who should implement the project, as well as the current status of implementation.[48]

[42] Section 373.036(2)(a),F.S.
[43] Section 373.036(2)(b), F.S.
[44] Section 373.036(2)(b)4., F.S.
[45] Section 373.709(1), F.S.
[46] Section 373.709(2), F.S.
[47] Section 373.709(2)(a)-(j), F.S.
[48] Section 373.709(2)(a), F.S.

The water resource development component of the RWSP must include:

- A list of water resource development projects that support water supply development; and
- For each water resource development project listed there must be:
  - An estimated amount of water to be made available through the project;
  - The timeframe for implementation of the project, and the estimated costs for the project, including operation and maintenance;
  - An analysis of funding needs and possible sources of funding; and
  - Identification of who should implement the project, as well as the current status of implementation.[49]

WMDs are required to annually report the status of water resource and water supply development projects identified in their RWSPs.[50] The annual report must include estimated costs and potential sources of funding for the projects, percentage and amount of WMD funds for the development of alternative water supplies, a description of the WMDs' progress in achieving water resource development objectives, including implementation of its five year water resource development work program, and an overall assessment of progress on water supply development.[51]

Water Resource Development Work Program

WMDs are required to furnish a 5-year water resource development work program within 30 days after adoption of their final budget. The work program must describe the WMDs implementation strategy and funding plan for water resource, water supply, and alternative water supply development in each approved RWSP. The work program must address all elements of the water resource development component of a RWSP and must:

- Identify projects in the work program which will provide water;
- Explain how each water resource, water supply, and alternative water supply development project will produce additional water for consumptive uses;
- Estimate the quantity of water to be produced by each project; and
- Provide an assessment of the contribution of the WMD's RWSPs in providing sufficient water needed to timely meet water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought.[52]

Alternative Water Supply Development

One of the ways water demands can be met is through the development of alternative water supplies.[53] Alternative water supplies means:

- Salt water;
- Brackish surface and groundwater;
- Surface water captured predominately during wet-weather flows;
- 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 water bodies with reclaimed water;
- Stormwater; and
- Any other water supply source that is designated as nontraditional for a water supply planning region in the applicable regional water supply plan.[54]

[49] Section 373.709(2)(b), F.S.
[50] Section 373.709(6), F.S.
[51] Id.
[52] Section 373.536(6)(a)4., F.S.
[53] Sections 373.707(1)(a)-(b), and 373.016(4)(a), F.S.
[54] Section 373.019(1), F.S.

Funding for the development of alternative water supplies is a shared responsibility between water suppliers and users, the state, and WMDs.[55] Water suppliers and users have the primary responsibility for providing funding, while the state and WMDs have the responsibility to provide funding assistance.[56]

Alternative water supply development projects may receive state funding through specific appropriation and the Water Protection and Sustainability Program (WPSP).[57] Applicants for projects that receive funding through the WPSP are required to pay at least 60% of the project's construction costs.[58] 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. [59]

Funding from the WPSP must be used for construction costs of alternative water supply projects, and should not result in a reduction of existing funding assistance from a WMD or basin board. Therefore, each WMD is required to include in its annual tentative and adopted budget submittals the amount of funds allocated for water resource development that supports alternative water supply development and the funds allocated for alternative water supply projects selected for inclusion in the WPSP. The goal of each WMD and basin board must be that the combined funds allocated annually for these purposes be, at a minimum, the equivalent of 100% of the state funding provided to the WMD for alternative water supply development. If this goal is not achieved, the WMD must provide in its budget submittal an explanation of the reasons or constraints that prevent this goal from being met and an explanation of how the goal will be met in future years. The St. Johns River Water Management District and the Northwest Florida Water Management District are not required to meet the match requirements, but they must try to achieve the match requirement to the greatest extent practicable.[60]

The Legislature has not provided funding for alternative water supply projects through the WPSP since fiscal year 2008-2009.

Improvements on Private Agricultural Lands

An additional mechanism to promote water resource development, as well as improve water quality, is the public-private partnership.[61] A public-private partnership is a collaborative effort between a WMD, DEP, or DACS and a private landowner.[62] The public-private partnership is formalized in an agreement between the parties.[63] If the public-private partnership agreement is between a private landowner and a WMD or DEP, the agreement must contain a baseline condition.[64] A baseline condition determines the extent of wetlands and other surface waters on the property, and will be used for the regulation of such water, even after expiration of the agreement.[65] Establishing a baseline condition is optional for a public-private partnership agreement between a private landowner and DACS, when used to implement BMPs.[66]

Public-private partnerships that facilitate nutrient reductions, consistent with TMDLs, within the Lake Okeechobee watershed, the Caloosahatchee River watershed, and the St. Lucie River watershed are

[55] Section 373.707(2)(c), F.S.
[56] Id.
[57] Sections 373.707(1)(d), and (6), F.S.
[58] Section 373.707(8)(e), F.S.
[59] Id.
[60] Section 373.707(6), F.S.
[61] Section 373.085(1)(a), F.S.
[62] Section 373.4591, F.S.
[63] Id.
[64] Id.
[65] Id.
[66] Id.

highly encouraged.[67] Public-private partnerships within the Lake Okeechobee watershed are eligible for state grants and otherwise receive special funding priority.[68]

Effect of Proposed Changes

The bill amends the definition of "water resource development" in s. 373.019(24), F.S., to include self-suppliers as a type of entity that may receive technical assistance related to water resource development.

The bill also includes the following revisions to s. 373.0421, F.S., regarding the establishment and implementation of MFLs:

- Requires DEP or the WMD to adopt recovery or prevention strategies concurrent with the adoption of an MFL.
- Provides that a recovery or prevention strategy may not solely depend on water shortage restrictions declared pursuant to s. 373.175, F.S., or s. 373.246, F.S.[69]
- Requires a RWSP prepared pursuant to s. 373.709, F.S.,[70] to be amended to include any water supply development projects and water resource development projects identified in a recovery or prevention strategy. The amended RWSP must be approved concurrently with the relevant portions of the recovery or prevention strategy.
- Requires a WMD to notify DEP when an application for a CUP, which otherwise meets the requirement of s. 373.223, F.S.,[71] is denied based upon the impact that the use will have on an established MFL. Upon receiving such notice, and in cooperation with the WMD, DEP must review the applicable RWSP. The review must include an assessment by DEP of the adequacy of the plan in meeting the intent of the Legislature that there be sufficient water available for all existing and future reasonable-beneficial uses and the natural systems, and the adverse effects of competition for water supplies be avoided. Based on this review, if DEP determines the RWSP does not adequately address this legislative intent, then the WMD must immediately initiate an update of the plan.

Section 373.2234, F.S., regarding preferred water supply sources,[72] is amended to require a WMD to give consideration to the identification of preferred water supply sources for water users for which access to or development of new water supplies is not technically or financially feasible.

Section 373.233, F.S., regarding competing CUP applications, is amended to require that if two or more competing applications qualify equally, and are not renewal applications, then the WMD or DEP must give preference to the use for which an alternative water supply is not technically and financially feasible.

Section 373.4591, F.S., regarding improvements on private agricultural lands, is amended to reflect that the Legislature encourages public-private partnerships for groundwater recharge on private agricultural lands. In addition to DEP and WMDs, the bill authorizes DACS to enter into an agreement with a private landowner to establish a public-private partnership that may create or impact wetlands or other surface waters. The bill also requires priority consideration to be given to public-private partnerships that:

- Store or treat water on private lands for hydrologic improvement, water quality, or water supply;
- Provide critical ground water recharge; or

[67] Section 373.4595(1)(n), F.S.
[68] Sections 373.4595(3)(c)5. and (g), F.S.
[69] Sections 373.175, F.S., and 373.246, F.S., provide for the declaration of a water shortage.
[70] Section 373.709, F.S. establishes the requirements to be included in a RWSP.
[71] Section 373.223, F.S., establishes the requirements for issuance of a CUP.
[72] Section 373.2234, F.S., provides that a "preferred water source" is a water supply source identified by a WMD for consumptive uses for which there is sufficient data to establish that a preferred source will provide a substantial new water supply to meet the existing and projected reasonable-beneficial uses of a water supply planning region while sustaining existing water resources and natural systems.

- Provide for changes in land use to activities that minimize nutrient loads and maximize water conservation.

The bill amends s. 373.536(6), F.S., regarding the 5-year water resource development work program, to require WMDs to include an annual funding plan for each of the five years for the water resource and water supply development components of each approved RWSP. The bill also requires the work program to address water supply projects proposed for WMD funding and assistance. In addition, the bill requires the annual funding plan to identify anticipated district funding and additional funding needs for the second through fifth years of the funding plan. The bill requires the work program to provide an assessment of the RWSPs in supporting the implementation of MFLs and reservations, and ensure sufficient water is available to avoid adverse effects of competition for water supplies. Lastly, the bill requires DEP to post the work program on its website.

The bill also amends s. 373.703(9), 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 and contract with to finance acquisitions, construction, operation, and maintenance if it is in the public interest.

In addition, the bill amends the legislative intent contained in s. 373.705(2), F.S., regarding water resource development and water supply development, to specify that regionally significant water resource development projects that a WMD should secure funding for include projects that:

- Prevent or limit adverse water resource impacts;
- Avoid competition among water users; or
- Support new water supplies to help implement an MFL or water reservation.

The bill also amends ss. 373.705(3) and (4), F.S., to:

- Require each WMD to include in its annual budget submittals the amount of funds needed for each water resource development project as prioritized in its RWSPs, along with the total amount needed to implement the projects; and
- Include water supply development projects that reduce or eliminate adverse effects of competition between legal users and the natural system on the list of projects that receive first consideration for state or WMD funding assistance.

The bill amends s. 373.707, F.S., regarding alternative water supply development, to:

- Include self-suppliers as a type of entity that may receive technical and financial assistance from a WMD for alternative water supply projects.
- Specify that state funding made available to a WMD through a specific appropriation should not result in a reduction in WMD or basin board funding for alternative water supply development assistance.
- Require that for each alternative water supply project identified in a WMD's RWSP, the WMD must include in its annual budget submittals the amount of funds allocated for water resource development that supports alternative water supply development and the funds allocated for alternative water supply projects.
- Authorize a WMD to totally or partially waive the requirement that 60% of the construction costs of an alternative water supply project be paid by an applicant for projects sponsored by water users that are determined by the WMD to be in the public interest and are not otherwise financially feasible.

Section 373.709, F.S., regarding regional water supply planning, is amended to:

- Require that water supply development project options in a WMD's RWSP be technically and financially feasible.
- Require DEP to include in its annual status report to the Governor and Legislature an analysis of the sufficiency of potential funding from all sources for water resource development and water supply development projects identified in each of the WMD's RWSPs, and 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.

Central Florida Water Initiative

Present Situation

Introduction

Historically, the Floridan aquifer system has supplied the vast majority of the water used in the central Florida area.[73] Three WMDs that serve the central Florida area are the St. Johns River Water Management District (SJRWMD), the South Florida Water Management District (SFWMD), and the Southwest Florida Water Management District (SWFWMD).

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. Today, the WMDs are working collaboratively with other agencies and stakeholders to implement effective and consistent water resource planning, development and management through the Central Florida Water Initiative (CFWI). However, each WMD currently relies on their own existing criteria to review CUP applications, which leads to inconsistencies and confusion as it relates to permit applicants whose property or projects overlaps multiple WMD boundaries.[74]

The CFWI builds on the prior work of the Central Florida Coordination Area (CFCA). Both efforts focus on an area that includes all of Orange, Osceola, Seminole, and Polk counties, and southern Lake county. The three WMDs, along with DEP, 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.

History

The three WMDs agreed in 2006 to a CFCA Action Plan to address the short-term and long-term development of water supplies in the central Florida area. The CFCA Action Plan consisted of two phases. In Phase I, a framework was established to address short-term water resource issues. Phase I concluded in 2008, with interim water use regulations limiting groundwater withdrawals to projected 2013 demands and requiring development of alternative water supplies to meet future needs. Because the SWFWMD had already adopted rules for its Southern Water Use Caution Area (SWUCA) that were as restrictive, if not more restrictive, than the CFCA rules, and Polk County has portions in both areas, only the portion of Polk County that is outside the SWUCA was subject to the CFCA rules. The interim CFCA rules sunsetted on December 31, 2012.[75]

Phase II of the CFCA Action Plan began in 2009 with the primary objectives of establishing new rules prior to the sunset date and implementing a long-term approach to water resource management in central Florida. This phase involved coordinated activities on a variety of issues including regional water supply planning; investigation 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. The CFWI was created, in part, to incorporate the CFCA Phase II process and broaden membership to include local government, agriculture, and commercial interests and further emphasize public input.

A primary focus of the CFCA Phase II process was the development and calibration of a hydrologic groundwater flow model to determine the sustainability of groundwater supplies. Because of the

[73] Central Florida Water Initiative, *Regional Water Supply Plan* (April 2014).
[74] CENTRAL FLORIDA WATER INITIATIVE (2014), *available at* http://cfwiwater.com/pdfs/CFWI_Guiding_Document_06-27-2014.pdf.
[75] Id.

complexity of the water resources assessment in the area, the need for additional data, and the desire to build a consensus among the three WMDs, DEP, DACS, utility companies, local governments, and agricultural industry representatives from the area, the analysis was not completed prior to the sunsetting of the interim CFCA rule.

To address the limitations of the 2006 CFCA Action Plan schedule and fulfill the overarching objectives outlined in that plan, the CFWI was created in 2011. The CFWI is a collaborative effort among the WMDs, along with other agencies and stakeholders, to implement effective and consistent water resource planning, development, and management. The CFWI Planning Area is located in central Florida and consists of all of Orange, Osceola, Seminole, and Polk counties and southern Lake County (Figure 1), covering approximately 5,300 square miles. The CFWI Planning Area was based on the utility service areas in the central Florida region where the boundaries of the three WMDs converge.[76] The area is characterized by 43 local and county governments with a growing population and substantial urban sector. The City of Orlando has the largest population in the CFWI Planning Area. However, the residential areas with the largest growth rates are north and south of Orlando along the I-4 corridor and other major transportation routes. This area supports a large tourist industry and a growing industrial and commercial sector. Agricultural acreage is decreasing in the CFWI urban area. However, agricultural industry trends indicate a shift toward crop intensification on fewer acres, which could result in similar water demands rather than reductions.[77]

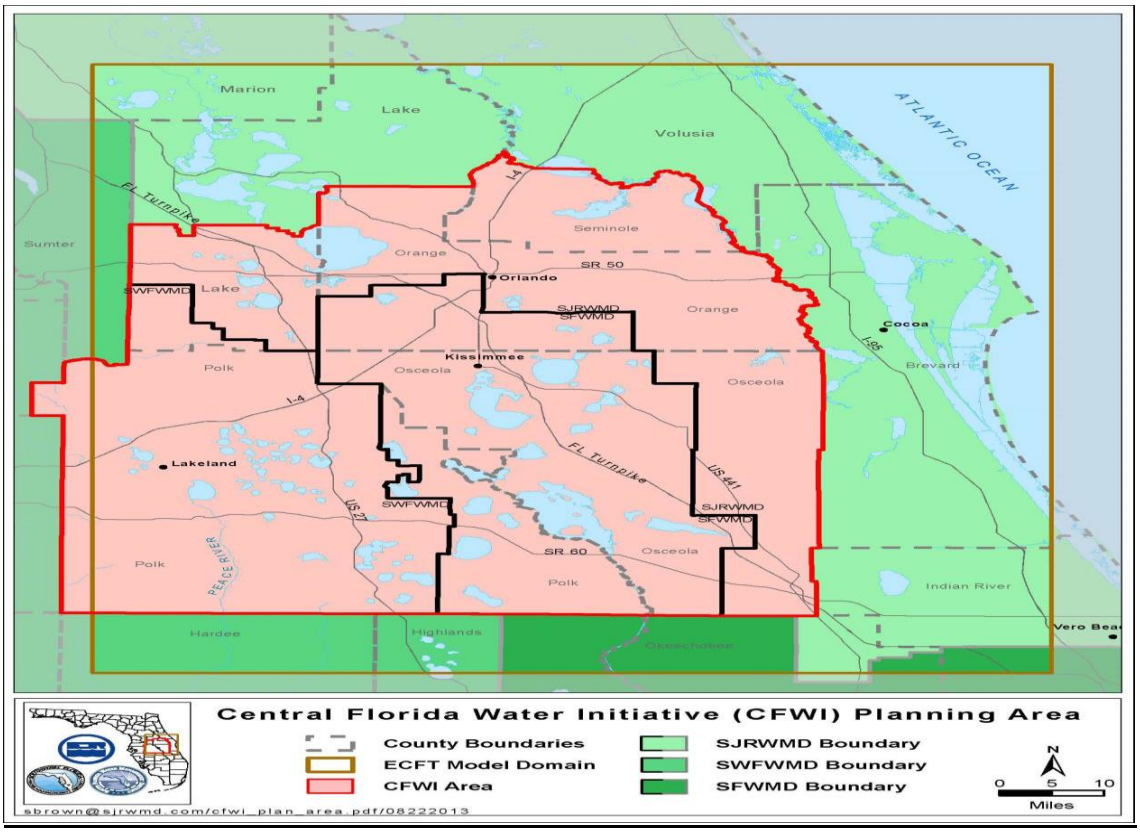
Overall, the water demand for all use categories in the CFWI Planning Area is expected to increase by approximately 40% from 800 million gallons per day (mgd) in 2010 to 1,100 mgd in 2035 for average rainfall conditions. The total population in CFWI Planning Area is projected to increase by approximately 49% from 2.7 million in 2010 to more than 4.1 million in 2035.[78]

The CFWI builds on the previous work of the CFCA. As a result of the CFWI, the previous CFCA implementation schedule and goals were revised to accommodate additional investigative and collaborative efforts. An executive level Steering Committee was formed to direct the coordinated efforts of the CFWI.[79] The Steering Committee is comprised of the following:

- One DACS representative;
- One DEP representative;
- One representative from the public water utilities; and
- One designated governing board member from each of the three WMDs.

Figure 1: CFWI Planning Area

[76] Id.
[77] Id.
[78] Id.
[79] Id.



CFWI Guiding Document

The CFWI Guiding Document is intended to describe the collaborative process being implemented in Central Florida, and contains the following goals of the CFWI:

- One model;
- One uniform definition of harm;
- One reference condition;
- One process for permit reviews;
- One consistent process, where appropriate, to set MFLs and reservations; and
- One coordinated RWSP, including any needed recovery and prevention strategies.[80]

The CFWI Guiding Document also contains the following guiding principles:

- 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. Strategies should include optimizing the use of existing groundwater sources, implementing demand management, and identifying alternative water supplies that can be permitted and will be implemented as demands approach the sustainable yield of existing sources.
- Establish consistent rules and regulations for the three WMDs that meet the goals and implement the results of the CFWI. Adoption of some rules and regulations are expected to require coordination with DEP's statewide Consumptive Use Permitting Consistency initiative and the state's five WMDs.[81]

CFWI Regional Water Supply Plan

[80] Id.
[81] Id.

The three WMDs, with input from stakeholders and state agencies, developed a draft RWSP in 2014.[82] The final draft RWSP found that, fresh groundwater resources alone cannot meet future water demands in the CFWI Planning Area without resulting in unacceptable impacts to water resources and related natural systems. Overall, the results of the modeling estimate that the sustainable groundwater withdrawal limit is 850 mgd. This results in a deficit of 250 mgd by the end of the planning horizon. Because existing sources are insufficient to meet projected demands, WMDs need to "optimize ground withdrawals, and identify and implement a combination of water conservation and alternative water supply project options to adequately address the projected 2035 water demands."[83]

Effect of Proposed Changes

The bill creates s. 373.0465, F.S., to codify in statute the CFWI.

Section 373.0465(1), F.S., contains the following legislative findings:

- The Floridan aquifer has historically supplied the majority of water for southern Lake County, and all of Orange, Osceola, Polk, and Seminole Counties.
- The Floridan aquifer in this area is reaching sustainable limits, and, because the boundaries of the SJRWMD, the SFWMD and the SWFWMD converge in this area, the three WMDs and DEP have worked collectively to determine the sustainability of the aquifer and explore other sources of water to meet projected needs.
- DEP, the three WMDs, DACS, utilities, and stakeholders have formed the CFWI and developed a framework for a unified process to address the current and long-term water supply needs of the area, as set forth in the CFWI's Guiding Document, dated June 27, 2014.
- An interagency agreement between DEP, the three WMDs, and DACS is needed to ensure the CFWI participants continue to develop and implement an effective and consistent long-term water resource planning, development, and management strategy for the central Florida area.
- The development of water sources in lieu of continued reliance on the Floridan aquifer will benefit human and natural systems beyond the boundaries of the CFWI.

Section 373.0465(2), F.S., defines the term "Central Florida Water Initiative Area," to mean the area designated by the three WMDs that encompass all of Orange, Osceola, Polk and Seminole Counties, and southern Lake County, and requires DEP to complete, by December 31, 2015, a CFWI interagency agreement with the three WMDs and DACS. The interagency agreement only applies to the CFWI area and must be adopted in the same manner as a rule, pursuant to chapter 120, F.S. The interagency agreement must:

- Provide for continued collaboration between DEP, the three WMDs, DACS, regional public water supply utilities, and other stakeholders.
- Include the guiding principles and goals established in the CFWI Guidance Document and build upon the accomplishments of the CFWI in addressing these principles and goals.
- Require the development and implementation of a single multi-district RWSP by the three WMDs, including any needed recovery and prevention strategies and the approved list of water resource or water supply development projects.
- Require uniform rules for regulatory programs that include:
    - A single hydrologic model to assess groundwater availability.
    - A single definition of "harmful to the water resources" consistent with the term's usage in s. 373.219, F.S.[84]
    - A single reference condition.
    - A single permit review process.
    - A single process for setting MFLs and reservations.
    - A single method for calculating residential per capita water use.

[82] See CFWI final draft RWSP.
[83] Id.
[84] Section 373.219, F.S., authorizes WMDs or DEP to require CUPs and impose reasonable conditions to assure that the use is not harmful to the water resources of the area.

In addition, the parties to the interagency agreement must, in developing the water supply planning program and the regulatory program:

- Consider limitations on groundwater use together with opportunities for new, increased, or redistributed groundwater uses that are based on environmental constraints.
- Establish a coordinated process to identify new or revised environmental constraints.
- Consider existing prevention and recovery strategies.
- Include a list of water supply options to meet the needs of all existing and future reasonable-beneficial uses which avoid environmental harm and are consistent with public interest.
- Identify preferred water supply sources pursuant to s. 373.2234, F.S.[85]
- Provide for partnership agreements among DEP, DACS, WMDs, and water users.

Lastly, the planning and regulatory programs developed pursuant to the interagency agreement must be approved or adopted pursuant to chapter 373, F.S. However, planning and regulatory programs developed pursuant to the interagency agreement cannot modify planning and regulatory programs in areas of the WMDs that are not within the CFWI area, but may include interregional projects located outside of the CFWI area if they are consistent with the planning and regulatory programs in the areas in which they are located.

Central and Southern Florida Project

Present Situation

The Central and Southern Florida Project (Project), which was first authorized by Congress in 1948, is a multi-purpose project that provides flood control, water supply for municipal, industrial, and agricultural uses, prevention of saltwater intrusion, water supply for Everglades National Park, and protection of fish and wildlife resources. The primary system includes about 1,000 miles of levees, 720 miles of canals, and almost 200 water control structures.

The Project provides for an east coast protective levee extending from the Homestead area north to the eastern shore of Lake Okeechobee near St. Lucie Canal. There are three conservation areas for water impoundment in the Everglades area, west of the east coast protective levee, with control structures to transfer water as necessary. There are also local protective works along the lower east coast with an encirclement of the Lake Okeechobee agricultural area by levees and canals. Enlargement of portions of the Miami, North New River, Hillsboro, and West Palm Beach Canals and existing Lake Okeechobee levees are part of the Project. Also included are construction of new levees on the northeast and northwest shores of the Lake; increased outlet capacity for improved control of Lake Okeechobee; floodway channels in the Kissimmee River Basin, with suitable control structures to prevent over drainage; and facilities for regulation of floods in the Upper St. Johns River Basin.

The Project provides water control and protection from the recurrence of flood waters for the highly developed urban area along the lower east coast of Florida and for the agricultural areas around Lake Okeechobee (including the towns around the lake), in the Upper St. Johns and Kissimmee River Basin, and in south Dade County. Another project function is the conservation of floodwaters for beneficial uses during dry seasons. The Project also delivers water to Everglades National Park according to a set schedule.

The U.S. Army Corps of Engineers operates and maintains project works on the St. Lucie Canal; Caloosahatchee River; Lake Okeechobee levees, channels, and major spillways; and the main outlets for Water Conservation Areas 1, 2A, and 3A. The SFWMD operates the remainder of the Project in accordance with regulations prescribed by the U.S. Army Corps of Engineers. As the local sponsor, the SFWMD has an essential role with the U.S. Army Corps of Engineers in developing water management criteria for the Project. Section 373.1501(4), F.S., specifies that the SFWMD is authorized to act as

[85]Section 373.2234, F.S., provides requirements for identifying preferred water supply sources.

local sponsor of the Project for those project features located within the district. The local sponsor is responsible for allocation of water from project storage, except where mandated by Federal law.

Effect of Proposed Changes

The bill amends s. 373.1501, F.S., to require the SFWMD, as local sponsor of the Project, to:

- Continue to exercise the authority to allocate water quantities within its jurisdiction, including water supply in relation to the Project, and to be responsible for allocating water and assigning priorities among other water users served by the Project.
- Provide recommendations to the U. S. Army Corps of Engineers that are consistent with all of the SFWMD's programs and plans, when developing or implementing water control plans or regulation schedules required for operation of the Project.

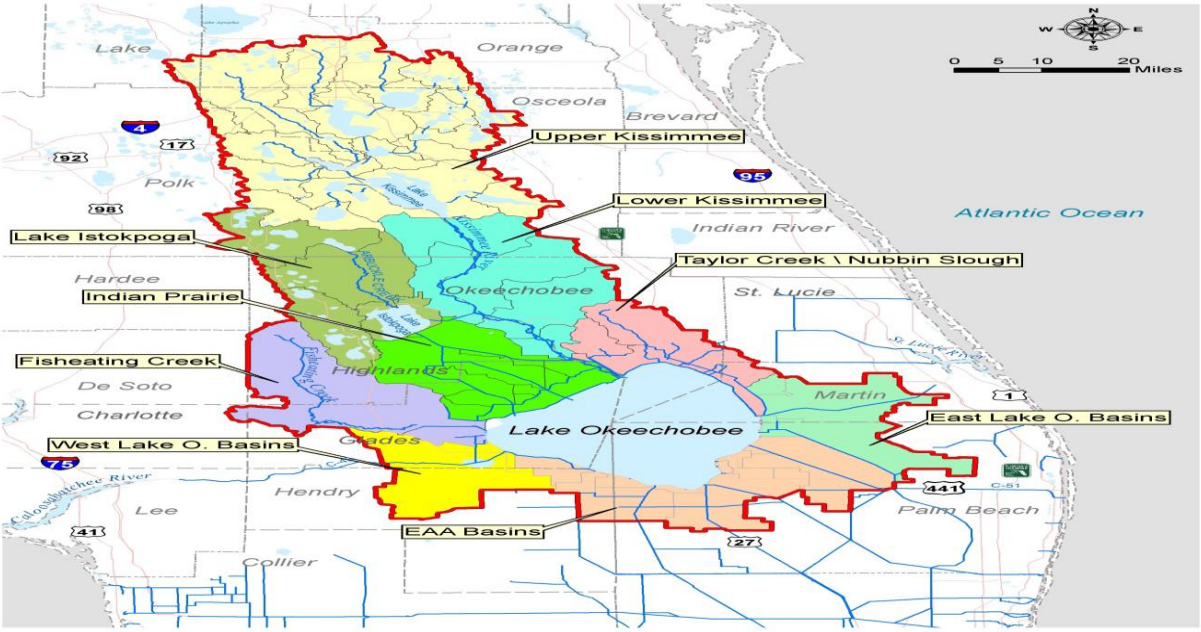
Lake Okeechobee Watershed and the Northern Everglades and Estuaries Protection Program

Present Situation

Lake Okeechobee Watershed Protection Program

Lake Okeechobee is Florida's largest freshwater lake and the second largest in the continental United States.[86] It provides drinking water, irrigation for agricultural land, and freshwater for the Everglades.[87] The Lake Okeechobee watershed, the area of land which drains or otherwise contributes to the flow of water into the lake, is approximately 1,800 square miles, actually larger than Rhode Island (Figure 2).[88]

Figure 2: Lake Okeechobee Boundary and Sub-Watersheds



The Lake Okeechobee Watershed Protection Program is designed to reduce phosphorus loading to the lake, thereby improving water quality in the lake, and in the downstream receiving waters.[89] The initial phase for achieving phosphorous reductions was through the use of the SFWMD's Works of the District (WOD) program with subsequent phasing of reductions through the establishment of a TMDL for

[86] *DEP Adopts Restoration Plan for Lake Okeechobee*, available at http://content.govdelivery.com/accounts/FLDEP/bulletins/e1e723
[87] Id.
[88] Section 373.403(12), F.S. and *DEP Adopts Restoration Plan for Lake Okeechobee*, available at http://content.govdelivery.com/accounts/FLDEP/bulletins/e1e723 and *Executive Summary Lake Okeechobee Protection Plan Update (March 2011)*, available at http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/ne_crwpp_main_123108.pdf
[89] Sections 373.4595(1)(e) and (3), F.S.

phosphorous.[90] The phosphorous TMDL was established in 2001.[91] In December 2014, DEP adopted the Lake Okeechobee BMAP, which implements phosphorus reductions established by the TMDL.[92] The BMAP identifies strategies and projects to reduce phosphorus entering the lake by 33% over the next 10 years and for the continued planning and development of longer-term projects.[93]

The Lake Okeechobee Watershed Protection Program consists of several components: the Lake Okeechobee Watershed Protection Plan, the Lake Okeechobee Watershed Construction Project, the Lake Okeechobee Watershed Phosphorus Control Program, the Lake Okeechobee Watershed Research and Water Quality Monitoring Program, the Lake Okeechobee Exotic Species Control Program, and the Lake Okeechobee Internal Phosphorus Management Program.[94] The Lake Okeechobee Watershed Protection Plan identifies the geographic extent of the watershed, contains the implementation schedule for phosphorus load reductions consistent with the TMDL, and serves as the framework for the other components of the program.[95] The Lake Okeechobee Watershed Construction Project serves to improve the hydrology and water quality of Lake Okeechobee and of downstream waterbodies through the construction of stormwater treatment areas, water storage reservoirs, and other projects.[96] The Lake Okeechobee Watershed Protection Phosphorus Control Program is designed to reduce phosphorous loads through the implementation of BMPs, and other technologies for nutrient reduction.[97] The Lake Okeechobee Watershed Research and Water Quality Monitoring Program component assesses sources of phosphorus, evaluates the feasibility of alternative nutrient reduction technologies, and evaluates water quality data.[98] The Lake Okeechobee Internal Phosphorus Management Program deals with historical phosphorus loading in Lake Okeechobee's sediments.[99]

Northern Everglades and Estuaries Protection Program

In 2007, the Lake Okeechobee Protection Program was expanded to include the Caloosahatchee River, the St. Lucie River, and their estuaries (Northern Everglades and Estuaries Protection Program or NEEPP).[100] The NEEPP consists of the Lake Okeechobee watershed, the Caloosahatchee River watershed, and the St. Lucie River watershed, recognizing the connectivity of the Everglades, north and south of Lake Okeechobee (Figure 3).[101] Improvements to the hydrology, water quality and aquatic habitats within these watersheds are essential to the protection of the Everglades.[102] Implementation of the Lake Okeechobee Watershed Protection Plan, discussed above, as well as the watershed protection programs developed for the St. Lucie River and Caloosahatchee River are necessary to achieve and maintain compliance with state WQS and re-establish salinity regimes for a well-balanced ecosystem.[103]

Figure 3: Lake Okeechobee, Caloosahatchee River, and St. Lucie River watersheds

[90] Sections 373.4595(1)(f) and (3), F.S.
[91] *Total Maximum Daily Load for Total Phosphorous Lake Okeechobee, Florida*, available at http://www.dep.state.fl.us/water/tmdl/docs/tmdls/final/gp1/Lake_O_TMDL_Final.pdf
[92] *DEP Adopts Restoration Plan for Lake Okeechobee*, available at http://content.govdelivery.com/accounts/FLDEP/bulletins/e1e723
[93] Id.
[94] Section 373.4595(3)(a)-(f), F.S.
[95] Section 373.4595(3)(a), F.S.
[96] Section 373.4595(3)(b), F.S.
[97] Section 373.4595(3)(c), F.S.
[98] Section 373.4595(3)(d), F.S.
[99] Section 373.4595(3)(f), F.S.
[100] *Quick Facts: Northern Everglades & Estuaries Protection Program*, available at http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/spl_northern_everglades.pdf
[101] Section 373.4595(2)(l), F.S. and *Quick Facts: Northern Everglades & Estuaries Protection Program*, available at http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/spl_northern_everglades.pdf
[102] Section 373.4595(1)(c), F.S.
[103] Sections 373.4595(1)(h) and (4), F.S.

The Caloosahatchee River and St. Lucie River Watershed Protection Programs are three pronged approaches.[104] Each has a construction project component, a pollutant control program, and a research and water quality monitoring program.[105]

The construction project component works to improve the hydrology, water quality, and aquatic habitat within the respective watershed.[106] The pollutant control programs are multifaceted approaches to pollutant load reductions through the implementation of BMPs and other innovative nutrient control technologies.[107] The water quality research and water quality monitoring programs are required to build upon the SFWMD's existing program and include an assessment of water volumes and timing from Lake Okeechobee and the respective river watershed and their relative contributions to the timing and volume of water delivered to the respective estuary.[108]

In November 2012, DEP adopted the Caloosahatchee Estuary BMAP, identifying and implementing strategies necessary to achieve the total nitrogen TMDL set for the watershed. In May 2013, DEP adopted the St. Lucie River and Estuary BMAP, to achieve phosphorus, nitrogen, and dissolved oxygen TMDLs set in that watershed.

<u>Effect of Proposed Changes</u>

Section 373.4595, F.S., establishing the NEEPP, is amended as follows:

- Subsection (2) is amended to include definitions for the terms "biosolids" and "soil amendment." These terms are used in s. 373.4595, F.S., but were not defined. The definitions of "District's WOD program" and "Lake Okeechobee Watershed Phosphorous Control Program" are removed since these terms are no longer used in the section. The definition of "Lake Okeechobee Watershed Protection Plan" is amended to conform to other changes in the bill.

[104] Section 373.4595(4)(a) and (b), F.S.
[105] Id.
[106] Sections 373.4595(4)(a)1. and (b)1., F.S.
[107] Sections 373.4595(4)(a)2. and (b)2., F.S.
[108] Sections 373.4595(4)(a)3., and (b)3., F.S.

- Subsection (3) is amended to reflect that the Lake Okeechobee Watershed Protection Program (LOWPP) consists of the Lake Okeechobee Watershed Protection Plan, the Lake Okeechobee BMAP, the Lake Okeechobee Exotic Species Control Program, and the Lake Okeechobee Internal Phosphorous Management Program. Additionally, new language is added to specify that the component of the LOWPP responsible for achieving phosphorus reductions in Lake Okeechobee is the Lake Okeechobee BMAP.
    - Paragraph (3)(a) is amended to:
        - Require the SFWMD, beginning March 1, 2020, and every 5 years thereafter, to update the Lake Okeechobee Watershed Protection Plan to ensure its consistency with the Lake Okeechobee BMAP.
        - Require the Lake Okeechobee Watershed Protection Plan to include the Lake Okeechobee Watershed Construction Project and the Lake Okeechobee Watershed Research and Water Quality Monitoring Program.
        - Require the SFWMD to cooperate with the other coordinating agencies when designing and constructing the Lake Okeechobee Watershed Construction Project.
        - Specify that the Phase II technical plan of the Lake Okeechobee Watershed Construction Project is to provide the basis for the Lake Okeechobee BMAP.
        - Direct DEP, within 5 years after adoption of the Lake Okeechobee BMAP and every 5 years thereafter, to evaluate the Lake Okeechobee Watershed Construction Project to identify any further load reductions needed to achieve compliance with the Lake Okeechobee TMDL. Any modifications to the Lake Okeechobee Watershed Construction Project resulting from the evaluation must be incorporated into the Lake Okeechobee BMAP.
        - Require the coordinating agencies to implement the Lake Okeechobee Watershed Research and Water Quality Monitoring Program, and for DEP to use the results, in cooperation with the coordinating agencies, to modify the Lake Okeechobee BMAP, as appropriate.
        - Require DEP, beginning March 1, 2020, and every 5 years thereafter, to reevaluate water quality and quantity data to ensure that the appropriate projects are being designated and incorporated into the Lake Okeechobee BMAP.
        - Require results of the phosphorous assessment from the Upper Kissimmee Chain-of-Lakes and Lake Istokpoga to be used as part of the Lake Okeechobee BMAP to develop interim measures, BMPs, or regulations, as applicable.
    - Paragraph (3)(b) is amended to specify that the Lake Okeechobee BMAP is the watershed phosphorus control component for Lake Okeechobee. The plan must contain an implementation schedule for pollutant load reductions consistent with the adopted TMDL. The coordinating agencies must develop an interagency agreement that is consistent with DEP taking the lead on water quality protection measures through the Lake Okeechobee BMAP, the SFWMD taking the lead on hydrologic improvements pursuant to the Lake Okeechobee Watershed Protection Plan, and DACS taking the lead on agricultural interim measures, BMPs, and other measures. The interagency agreement must specify how BMPs for nonagricultural nonpoint sources are developed and how all BMPs are implemented and verified. The interagency agreement must also address measures to be taken by the coordinating agencies during any BMP reevaluation that is performed. DEP is required to use best professional judgment in making the initial determination of a BMP's effectiveness. The coordinating agencies are authorized 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 additional revisions to paragraph (3)(b):
        - Requires agricultural nonpoint source BMPs developed and designed to achieve the objectives of the LOWPP as part of a phased approach of management strategies within the Lake Okeechobee BMAP to be implemented on an expedited basis.
        - Requires an owner or operator of an agricultural nonpoint source who chooses to conduct monitoring instead of implementing BMPs or interim measures to

demonstrate compliance with WQS addressed by the Lake Okeechobee BMAP rather than demonstrating compliance with the district's WOD program.
    - Requires nonagricultural nonpoint source BMPs developed and designed to achieve the objectives of the LOWPP as part of a phased approach of management strategies within the Lake Okeechobee BMAP to be implemented on an expedited basis.
    - Requires reevaluation of BMPs to be conducted, pursuant to s. 403.067(7)(c)4, F.S., where water quality problems are detected for agricultural nonpoint sources or nonagricultural nonpoint sources despite the appropriate implementation of adopted BMPs.
    - Provides that the requirements of the Lake Okeechobee BMAP and s. 403.067(7), F.S. for the Lake Okeechobee watershed are met through the implementation of agricultural BMPs set forth in a permit issued pursuant to chapter 40E-63, F.A.C.[109] Accordingly, an entity in compliance with agricultural BMPs as set forth in chapter 40E-63, F.A.C., may elect to use the permit issued under chapter 40E-63, F.A.C., in lieu of the requirements of the Lake Okeechobee BMAP. The agricultural BMPs implemented through a permit issued under chapter 40E-63, F.A.C. are subject to reevaluation as provided for in s. 373.4595(3)(b)5, F.S.
    - Replaces all references to the term "residuals" with the term "biosolids." The term is synonymous, but biosolids is the more accurate term used in practice today.
    - Requires the Department of Health to require all entities disposing of septage within the Lake Okeechobee watershed to develop and submit to the agency an agricultural use plan that limits applications based upon phosphorous loading consistent with the Lake Okeechobee BMAP, instead of the phosphorous limits established in the district's WOD program.
    - Requires the SFWMD to revise chapter 40E-61, F.A.C.,[110] to be consistent with NEEPP, as amended by this bill, to provide for a monitoring program for nonpoint source dischargers required to monitor water quality, and to provide for the results of such monitoring to be reported to the coordinating agencies.
    - Requires the SFWMD, in cooperation with the other coordinating agencies, to evaluate the feasibility of Lake Okeechobee internal phosphorous load removal projects. The evaluation must consider all reasonable methods of phosphorous removal.
- Subsection (4) is amended to include the following revisions to the Caloosahatchee and St. Lucie River Watershed Protection Programs:
    - Specifies that the Caloosahatchee River Watershed Protection Plan includes the Caloosahatchee River Watershed Construction Project and the Caloosahatchee River Watershed Research and Water Quality Monitoring Program.
    - Provides that the BMAPs adopted for the Caloosahatchee River watershed are the Caloosahatchee River Watershed Pollutant Control Program.
    - Requires limits on the application of septage within the Caloosahatchee River and St. Lucie River watersheds to be based on nutrient loading consistent with any BMAP, and deletes the requirement that nutrient concentrations not exceed limits established in the district's WOD program.
    - Specifies that the St. Lucie River Watershed Protection Plan includes the St. Lucie River Watershed Construction Project and the St. Lucie River Watershed Research and Water Quality Monitoring Program.
    - Specifies that the BMAPs adopted for the St. Lucie River are the St. Lucie River Watershed Pollutant Control Program.

[109] Chapter 40E-63, Fla. Admin. Code, establishes the Everglades Regulatory Program, which requires certain permits and BMPs for entities within the Everglades Agricultural Area.
[110] Chapter 40E-61, Fla. Admin. Code, sets forth the rule criteria for the Works of the District.

    - Requires BMAPs for the Caloosahatchee River and St. Lucie River watersheds to contain an implementation schedule for pollutant load reductions consistent with their adopted TMDL.
    - Requires that beginning March 1, 2020, and every 5 years thereafter, concurrent with updates to the BMAPs, the SFWMD must conduct an evaluation of pollutant load reduction goals of the Caloosahatchee River and St. Lucie River Watershed Protection Programs.
- Subsection (5) is amended to require DEP to initiate development of BMAPs for the Lake Okeechobee watershed, the Caloosahatchee River watershed and estuary, and the St. Lucie River watershed and estuary. In addition, the bill:
    - Requires management strategies and pollution reduction requirements set forth in a BMAP to be completed pursuant to the schedule set forth in the BMAP, and specifies that the implementation schedule may extend beyond the 5-year permit term.
    - Provides that management strategies and pollution reduction requirements set forth in a BMAP are not subject to challenge under chapter 120, F.S., when they are incorporated into a DEP or SFWMD issued permit or permit modification.
- Subsection (6) is amended to require DEP to report on the status of the Lake Okeechobee BMAP, the Caloosahatchee Estuary BMAP, and the St. Lucie River and Estuary BMAP, and for DACS to report on the status of implementation of agricultural nonpoint source BMPs in the consolidated WMD annual report required pursuant to s. 373.036(7), F.S.[111]
- Subsection (7) is amended to include the following revisions to the permitting requirements in s. 373.4595, F.S.:
    - Provides that owners and operators of existing structures that discharge into or from Lake Okeechobee that were subject to certain DEP consent orders and are subject to s. 373.4592(4)(a), F.S.,[112] do not require a permit under this section and must be governed by permits issued under ss. 373.413[113] and 373.416, F.S.,[114] and the Lake Okeechobee BMAP.
    - Requires the SFWMD to obtain from DEP a permit modification to the Lake Okeechobee structure permits to incorporate proposed changes necessary to ensure that discharges through the structures covered by the permit are consistent with the BMAP. The bill deletes the provision that these changes must be designed to achieve compliance with WQS by January 1, 2015.
    - Directs DEP to require permits for SFWMD regional projects that are part of the Lake Okeechobee Watershed Construction Project. The bill requires the SFWMD to demonstrate reasonable assurances that the regional projects will achieve the design objectives for phosphorous.

Springs Protection and Restoration

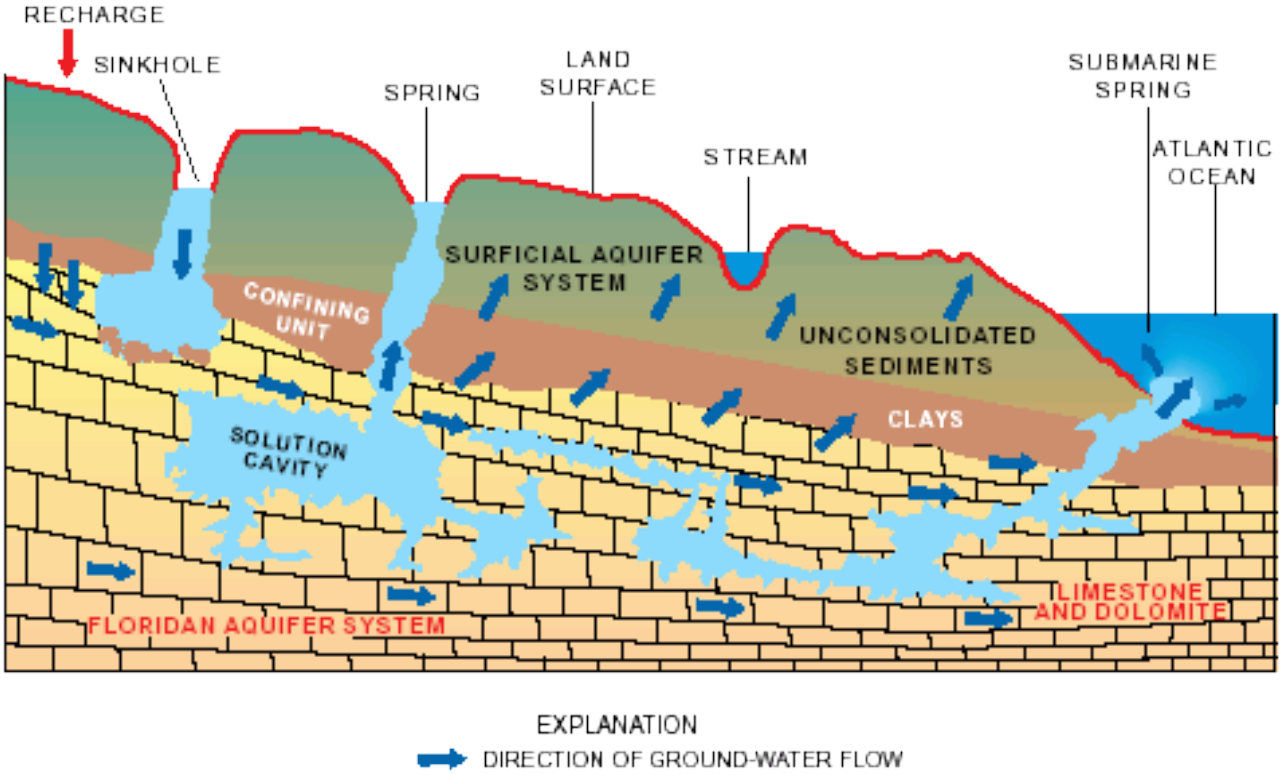
Present Situation

What are Springs?

A spring is a point where groundwater emerges onto the Earth's surface (Figure 4). It is estimated that Florida has more than 900 springs, possibly the largest concentration in the world.[115] Florida has two types of springs, seeps and karst springs.[116]

[111] Section 373.036(7), F.S., sets forth the requirements for the consolidated WMD annual report.
[112] Section 373.4592(4)(a), F.S., sets forth the requirements for the Everglades Construction Project.
[113] Section 373.413, F.S., establishes the requirements for environmental resource permits.
[114] Section 373.416, F.S., establishes the requirements for environmental resource permits for maintenance purposes.
[115] This information can be found on DEP's website at http://www.dep.state.fl.us/springs/.
[116] *Springs of Florida, Florida Geological Survey Bulletin No. 66*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf

Figure 4: How are springs formed?[117]



Seeps form when rainwater percolates down through permeable sediments to a much less permeable or impermeable formation, which forces the water to move laterally to the surface.[118] Seeps may also form in karst areas where water flow from the Floridan aquifer is more diffuse.[119] An example of a seep spring in Florida is Ray Hill Seep Spring.[120] It is one of a collection of springs surfacing from the base of an 80-foot high bluff outside of Ponce de Leon, Florida.[121] It joins with other, smaller seep springs to form Camp Branch.[122]

The majority of Florida's springs are karst springs.[123] Florida is one of the few places in the world with karst springs.[124] Karst springs occur when groundwater flows to the surface through the highly porous and permeable karst limestone formations of the Floridan aquifer.[125]

The Floridan aquifer is an extensive limestone aquifer underlying all of Florida, and portions of southern Georgia, Alabama, and South Carolina (Figure 5).[126]

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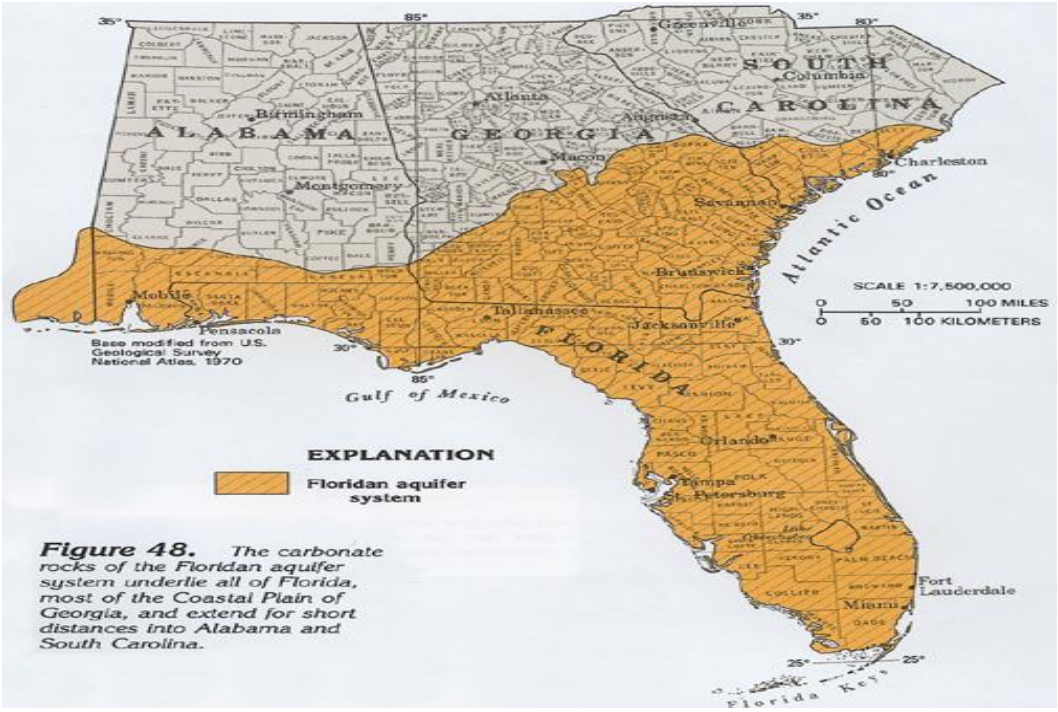
[117] Available at http://water.usgs.gov/edu/watercyclesprings.html.
[118] Id.
[119] *Florida Spring Classification System and Spring Glossary*, available at http://www.dep.state.fl.us/geology/geologictopics/springs/sp_52.pdf
[120] Information available at NWFWMD's website at *http://ftp.nwfwmd.state.fl.us/rmd/springs/choctawhatchee/docs/rayhill.html*
[121] Id.
[122] Id.
[123] *Florida Spring Classification System and Spring Glossary*, available at http://www.dep.state.fl.us/geology/geologictopics/springs/sp_52.pdf
[124] *Florida Springs Initiative Monitoring Network Report and Recognized Sources of Nitrate*, available at http://www.dep.state.fl.us/springs/reports/files/springs_report_102110.pdf
[125] *Springs of Florida, Florida Geological Survey Bulletin No. 66*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf
[126] *Protecting Florida's Springs: An Implementation Guidebook*, available at http://www.dep.state.fl.us/springs/reports/files/springsimplementguide.pdf

Figure 5: The Floridan aquifer[127]



Springs have dynamic water flows.[128] Accordingly, the magnitude, or size, of a spring is based on the median value of all discharge measurements for a period of record.[129] There are eight magnitude classifications:

Magnitude	Average flow of water
1	100 cubic feet per second (cfs) or more (64.6 million gallons per day (mgd) or more)
2	10 to 100 cfs (6.46 to 64.6 mgd)
3	1 to 10 cfs (0.0646 to 6.46 mgd)
4	100 gallons per minute (gpm) to 1 cfs (448 gpm)
5	10 to 100 gpm
6	1 to 10 gpm
7	1 pint to 1 gpm
8	Less than 1 pint per minute[130]

Florida has 33 first magnitude springs, more than any other state or country.[131] Many springs in Florida have kept a first magnitude category even though the flows have changed considerably from when the spring was first considered a first magnitude spring.[132] These springs are known as historical first magnitude springs.[133] The term "historical" refers to the period of time prior to the adoption of the Florida Springs Classification System in 2003.[134] Florida has also identified 191 second magnitude and 151 third magnitude springs.[135]

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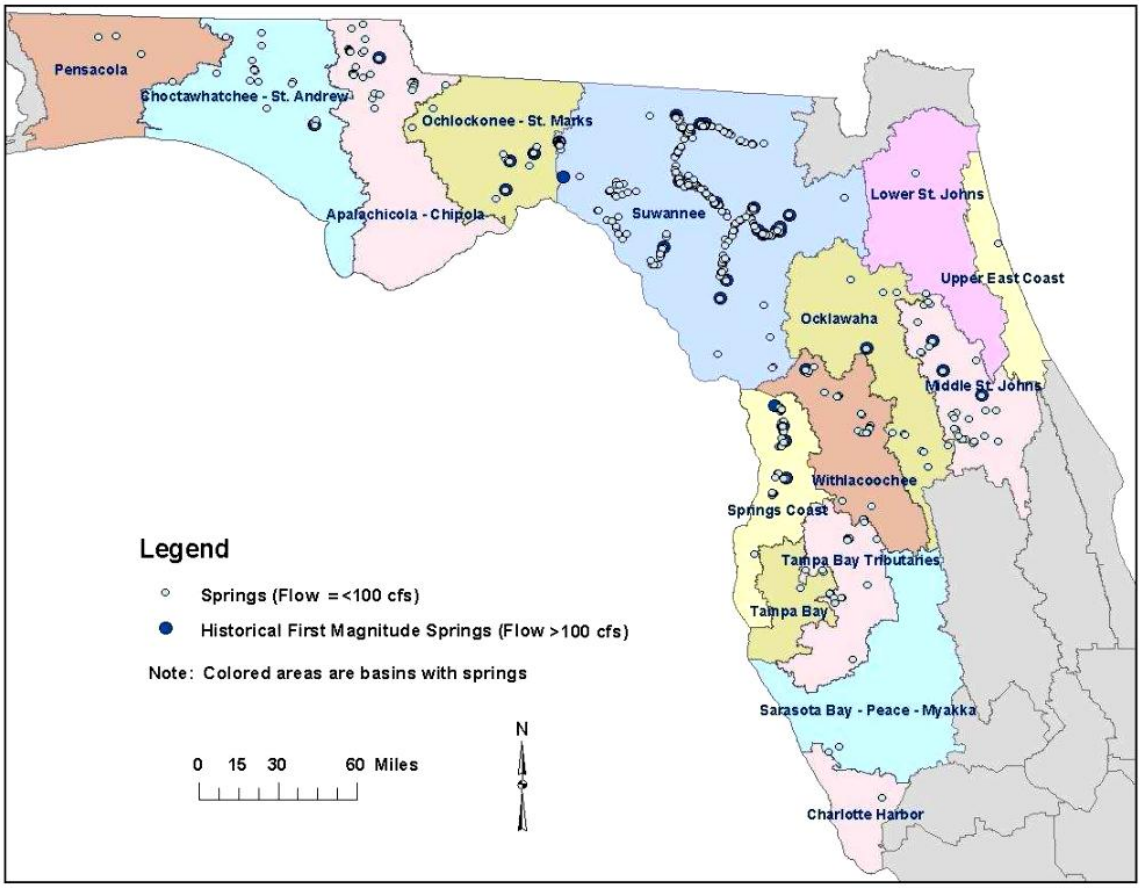
[127] Image is from the U.S. Geological Survey http://pubs.usgs.gov/ha/ha730/ch_g/G-Floridan1.html.
[128] *Florida Spring Classification System and Spring Glossary*, available at http://www.dep.state.fl.us/geology/geologictopics/springs/sp_52.pdf
[129] Id.
[130] Id.
[131] *First Magnitude Springs of Florida*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/listpubs/OFR-85.pdf
[132] *Florida Spring Classification System and Spring Glossary*, available at http://www.dep.state.fl.us/geology/geologictopics/springs/sp_52.pdf
[133] Id.
[134] Id.
[135] *Springs of Florida, Florida Geological Survey Bulletin No. 66*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf

Florida's springs occur primarily in the northern two-thirds of the peninsula and the central panhandle (Figure 6).[136] Thirty-nine of Florida's 67 counties either contain springs or include land areas that contribute water to springs.[137]

Figure 6: Distribution of Springs



Florida's springs maintain abundant wildlife, provide water flow to rivers and estuaries, and provide for swimming, fishing, kayaking, and other recreational opportunities for residents and visitors.[138]

Historically dated artifacts indicate humans have been drawn to Florida's springs for thousands of years.[139] Tools and weapons have been recovered from Wakulla and Little Salt Springs, and spear points have been recovered from the spring-fed riverbeds of north and central Florida.[140] Florida's springs were locations of Spanish missions, steamboat landings, and gristmills.[141] In the mid to late 1800s, Florida's springs served as sites for development, including Silver Springs, Green Cove Springs and De Leon Springs.[142] Some springs were valued for their perceived therapeutic qualities.[143]

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[136] Id.; Figure 6 – *Florida Springs Initiative Program Summary and Recommendations, 2007*, available at http://www.dep.state.fl.us/springs/reports/files/2007springs_report.pdf
[137] *Florida Springs Initiative Program Summary and Recommendations, 2007*, available at http://www.dep.state.fl.us/springs/reports/files/2007springs_report.pdf
[138] *Florida's Springs Strategies for Protection and Restoration*, available at http://www.dep.state.fl.us/springs/reports/files/SpringsTaskForceReport.pdf
[139] Id.
[140] Id.
[141] Id.
[142] Id.; Figure 7 - *Springs of Florida, Florida Geological Survey Bulletin No. 66*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf
[143] *Springs of Florida, Florida Geological Survey Bulletin No. 66*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf

Florida's springs were the state's first tourist attraction and have continually provided contributions to its economy.[144] In 1999, Florida's 12 spring state parks attracted over 2 million visitors.[145] In 2002, more than $65 million was generated from 4 of the spring state parks alone -- Ichetucknee, Wakulla, Homosassa and Volusia Blue Springs.[146] Additionally, privately owned and operated parks featuring springs contribute millions of dollars to Florida's economy each year.[147]

Florida's springs are also a source for bottled water. Zephyrhills® Brand 100% Natural Spring Water comes from Crystal Springs, located near Zephyrhills, Florida, and from other springs around the state.[148] Ginnie Springs, in High Springs, Florida, is a source of bottled water for Danone International Brands, Inc.[149]

Spring Flows

A spring's flow rate or discharge rate changes in response to fluctuations in the water level of the Floridan aquifer. Discharge rate is measured in cubic feet per second or gallons per day. The discharge rate of a spring generally remains stable over extended periods of time. However, because discharge rates are driven by the rate of recharge, climatic fluctuations often have a major effect on spring flow.[150] In addition to climatic conditions, anthropogenic factors, such as over pumping of the aquifer, can also have an impact on spring flows and discharge rates.

During 1998 - 2002, Florida suffered a major drought with a rainfall deficit totaling more than 50 inches (127 cm). The resulting reduction in recharge from the drought and normal withdrawals caused a lowering of the aquifer. Many first magnitude springs experienced a significant flow reduction. Some springs, such as Hornsby Spring, ceased flowing completely.[151] To prevent reductions in discharge rates that could adversely impact a spring's surrounding ecosystem and to restore already reduced discharge rates, DEP and the WMDs establish MFLs and implement prevention and recovery strategies.

Nutrient Pollution and Sources Specific to Groundwater and Springs

The health of Florida's spring water is an indication of the water quality within the aquifer.[152] There has been a documented increase in nitrate concentrations over the past several decades in Florida's springs.[153]

In 2008, DEP proposed a nitrogen threshold of 0.35 mg/L for springs, applicable to nitrate and nitrate+nitrite.[154] Thirty-six of the 49 springs studied exceeded DEP's proposed threshold. As of

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[144] *Florida's Springs Strategies for Protection and Restoration*, available at http://www.dep.state.fl.us/springs/reports/files/SpringsTaskForceReport.pdf
[145] Id.
[146] *Springs of Florida, Florida Geological Survey Bulletin No. 66*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf; *Economic Impact Selected Florida Springs on Surrounding Local Areas*, available at http://www.dep.state.fl.us/springs/reports/files/EconomicImpactStudy.doc
[147] *Florida's Springs Strategies for Protection and Restoration*, available at http://www.dep.state.fl.us/springs/reports/files/SpringsTaskForceReport.pdf
[148] Zephyrhills® Brand 100% Natural Spring Water website, available at http://www.zephyrhillswater.com.
[149] *Florida's Springs Strategies for Protection and Restoration*, available at http://www.dep.state.fl.us/springs/reports/files/SpringsTaskForceReport.pdf
[150] *Springs of Florida, Florida Geological Survey Bulletin No. 66*, available at http://publicfiles.dep.state.fl.us/FGS/WEB/springs/bulletin_66.pdf
[151] Id.
[152] Id.
[153] Id.
[154] *Florida Springs Initiative Monitoring Network Report and Recognized Sources of Nitrate*, available at http://www.dep.state.fl.us/springs/reports/files/springs_report_102110.pdf

January 2010, 14 of the 49 springs and 10 waterbodies deriving their flow from springs were identified as impaired due to nitrate enrichment.[155]

As discussed in the background section above, the primary sources of nitrogen are from fertilizers, human wastewater, animal waste, and air emissions.[156] Consequently, springs found to have the highest concentrations of nitrogen are located in or near areas where there are agriculture, commercial, and residential developments.[157]

Effect of Proposed Changes

The bill creates a new Part VIII of chapter 373, F.S., entitled "Florida Springs and Aquifer Act," consisting of ss. 373.801 through 373.809, F.S.

Section 373.801(1), F.S., contains the following legislative findings:

- Springs are a unique part of Florida's scenic beauty. They provide critical habitat for plants and animals, and immeasurable recreational and economic value to the state.
- Springs provide recreational opportunities for swimming, canoeing, diving, and other activities, which, along with the accompanying tourism, benefit state and local economies.
- Springs are of great scientific importance in understanding the functions of aquatic systems. Water quality of springs is an indicator of local conditions of the Floridan aquifer, which is the source of drinking water for many residents. Water flows in springs reflect regional aquifer conditions.

Section 373.801(2), F.S., establishes that it is the Legislature's intent that:

- BMAPs for Priority Florida Springs are expeditiously developed and implemented.
- Recovery strategies for Priority Florida Springs that are not meeting MFLs are expeditiously developed and implemented.
- The development of MFLs for Priority Florida Springs and implementation of recovery or prevention strategies for Priority Florida Springs be prioritized.
- Assessment of all Priority Florida Springs for potential nutrient impairment through the TMDL program is prioritized.
- The adoption of TMDLs for impaired Priority Florida Springs is prioritized.
- Implementation of BMAPs to restore impaired Priority Florida Springs is prioritized.

Section 373.802, F.S., provides definitions for the following terms:

- "Best management practices" means a practice or combination of practices based on research, field-testing, and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges and improving efficiencies in the use and management of water.
- "Priority Florida Springs" includes all first magnitude springs in the state and all second magnitude springs within the state or federally owned lands purchased for conservation purposes.

Section 373.803(1), F.S., requires DEP, WMDs and DACS to work together to restore and maintain the water quality and quantity of Priority Florida Springs.

Section 373.803(2), F.S., provides that with respect to Florida springs:

- DEP has primary responsibility for water quality protection through establishment of BMAPs and other water quality regulations.

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[155] *Florida Springs Initiative Monitoring Network Report and Recognized Sources of Nitrate*, available at http://www.dep.state.fl.us/springs/reports/files/springs_report_102110.pdf
[156] Id.
[157] Id.

- WMDs have primary responsibility for the hydrologic recovery of spring flow through the establishment of MFLs and recovery plans.
- DACS has primary responsibility for developing and implementing BMPs for agricultural nonpoint sources.
- Local governments have primary responsibility for providing urban stormwater management and domestic wastewater management.

Section 373.803(3), F.S., requires DEP, WMDs, and DACS to prioritize the implementation of financial assistance and community outreach programs for springs protection that support actions to reduce nutrient loading to the environment and prevent or abate nutrient over-enrichment of springs. Such actions must include the implementation of agricultural BMPs and may include connecting centralized sewer systems to densely populated areas presently served by onsite treatment and disposal systems, stormwater management improvements, and supporting implementation of ordinances consistent with DEP's Model Ordinance for Florida-Friendly Fertilizer Use on Urban Landscapes.

Section 373.805(1), F.S., requires recovery or prevention strategies to be developed for Priority Florida Springs as follows:

- If a Priority Florida Spring does not have an adopted MFL by July 1, 2015, and when adopted shows the Priority Florida Spring is below the adopted MFL or is projected to fall below the adopted MFL within 20 years, the WMD must simultaneously approve the recovery or prevention strategy required by s. 373.0421(2), F.S.[158]
- In circumstances where an adopted MFL is revised and a Florida Priority Spring is below or is projected to fall below the revised MFL within 20 years, the WMD must simultaneously approve the recovery or prevention strategy or modify an existing recovery or prevention strategy.
- If a Priority Florida Spring has an adopted MFL, but does not have a prevention or recovery strategy as of July 1, 2015, the WMD must expeditiously implement a prevention or recovery strategy when it is determined that the Priority Florida Spring has fallen below the adopted MFL or is projected to fall below the adopted MFL within 20 years.

Section 373.805(2), F.S., requires a recovery or prevention strategy for a Priority Florida Spring to include, at a minimum:

- A prioritized list of specific projects to achieve the MFL.
- The capital cost, operating cost, and measures of cost-benefit for each project.
- The source and amount of financial assistance from the WMDs for each project.
- Any other provisions required by law.

Section 373.807(1), F.S., pertains to the protection of water quality in Priority Florida Springs, and requires, as expeditiously as practicable, but no later than December 1, 2018, DEP, or DEP in conjunction with a WMD, to:

- Complete an assessment of each Priority Florida Spring that has not had an impairment determination made under numeric nutrient criteria in effect for spring vents;
- Establish a TMDL for each Priority Florida Spring that DEP determines to be impaired; and
- Establish BMAPs that include Priority Florida Springs that are subject to a TMDL.

Section 373.807(2), F.S., provides that if a Priority Florida Spring is determined to be impaired after December 1, 2018, DEP must establish a BMAP to include the impaired spring within two years after the impairment determination.

Section 373.807(3), F.S., requires BMAPs for Priority Florida Springs to include, at a minimum:

- A prioritized listing of all specific projects identified for implementation of the BMAP.
- The capital cost, operating cost, and measures of cost-benefit for each project.

[158] Section 373.0421(2), F.S., provides requirements of a recovery or prevention strategy.

- The source and amount of financial assistance, if any, from the WMDs, DEP, and DACS for each project.
- Any other provisions required by law.

Section 373.809(1), F.S., provides that BMPs for agricultural discharges must reflect a balance between water quality improvements in Priority Florida Springs and agricultural productivity.

Section 373.809(2), F.S., requires DACS, in cooperation with DEP and the WMDs, to provide technical and financial assistance for implementation of BMPs, subject to availability of funds.

Section 373.809(3), F.S., requires DEP to monitor sites to verify the effectiveness of agricultural BMPs in accordance with TMDLs.

Section 373.809(4), F.S., requires a reevaluation of agricultural BMPs where water quality problems are detected in Priority Florida Springs despite the appropriate implementation of adopted agricultural BMPs, to be conducted pursuant to s. 403.067(7)(c)4., F.S.

Section 373.809(5), F.S., requires any person engaged in agriculture within the geographic area encompassed by a BMAP that includes a Priority Florida Spring must implement agricultural BMPs in accordance with DACS' rules or conduct water quality monitoring prescribed by DEP or WMD according to the following schedule:

- If a BMAP that includes a Priority Florida Spring was established before July 1, 2015, each person engaged in the occupation of agriculture within the geographic area encompassed by the BMAP must, by December 31, 2015, notify DACS of his/her intent to implement agricultural BMPs or conduct water quality monitoring.
- If a BMAP that includes a Priority Florida Spring is established after July 1, 2015, each person engaged in the occupation of agriculture within the geographic area encompassed by the BMAP must, within 180 days after establishment of the BMAP, notify DACS of his/her intent to implement agricultural BMPs or conduct water quality monitoring.

Surface Water Use Classification

Present Situation

As discussed in the background section above, the federal CWA requires states to adopt WQS for their navigable waters, and to review and update those standards at least every three years. WQS must include:

- Designation of a waterbody's beneficial uses, such as public water supply, recreation, fish propagation, and navigation;
- Water quality criteria that define the amounts of pollutants, in either numeric or narrative form, that the waterbody can contain without impairment of the designated beneficial uses; and
- Anti-degradation requirements.[159]

Florida has developed the following classifications for a waterbody's designated beneficial uses:

- Class I: potable water supplies; recreation; fish consumption; propagation and maintenance of a healthy, well-balanced population of fish and wildlife;
- Class II: shellfish prorogation or harvesting; fish consumption; propagation and maintenance of a healthy, well-balanced population of fish and wildlife;
- Class III: fish consumption; propagation and maintenance of a healthy, well-balanced population of fish and wildlife;
- Class III-Limited: fish consumption; recreation or limited recreation; propagation and maintenance of a limited population of fish and wildlife;

[159] 33 U.S.C. § 1313(c)(2)(A)-(B); 40 C.F.R. §§ 131.6, 131.10-12.

- Class IV: agricultural water supplies; and
- Class V: navigation, utility, and industrial use.[160]

Reclassification of a waterbody's designated beneficial use can be initiated by DEP or by petition from another entity. A designated beneficial use 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 a Class II if there is credible information showing that shellfish harvesting and consumption are routinely conducted in the waterbody and that water quality criteria for Class II is attainable.[161]

For a waterbody to be considered for reclassification as a drinking water source (Class I), the petitioner must demonstrate that the water quality meets the Class I water quality criteria[162] or can meet those criteria after conventional treatment. Potential influences of reclassification on other users of the waterbody must be evaluated. Permitting requirements must also be considered. Petitions to add or remove the designated use of 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.[163]

The water quality criteria discussed in this section of the bill analysis pertain only to the use classification of a waterbody, and are different from the drinking water criteria established under the Florida Safe Drinking Water Act. Florida's drinking water criteria do not change regardless of any changes to the classification of a waterbody.

Effect of Proposed Changes

The bill amends s. 403.061(29), F.S., authorizing DEP to adopt by rule a specific surface water classification to protect surface water used for treated potable water supply. The bill requires these designated water sources to have the same water quality criteria protections as surface waters designated for fish consumption, recreation, and the propagation and maintenance of a healthy, well-balanced population of fish and wildlife. The bill also requires the designated water sources be free from discharged substances at a concentration that, alone or in combination with other discharged substances, would require significant alteration of permitted treatment processes at the permitted treatment facility, or which would otherwise prevent compliance with applicable state drinking water standards. Notwithstanding this classification, a surface water used for treated potable water supply may be reclassified as waters designated for potable water supply.

In addition, the bill creates s. 403.861(21), F.S., authorizing DEP to establish rules for the use of surface waters for public water supply.
The bill also requires an applicant who is applying to construct a public water system that will provide potable public water supply using surface water that does not include potable water supply as a designated use to, at the time of permit application, either:

- Petition to reclassify the surface water to include potable water supplies as a designated use; or
- Certify in its permit application that the public water supply utility will provide potable water that meets primary drinking water standards. An existing permittee can elect to file a certification.

[160] *Process for Reclassifying the Designated Uses of Florida Surface Waters*, available at http://www.dep.state.fl.us/water/wqssp/docs/reclass/process_document_080510.pdf.
[161] Id.
[162] Water quality criteria are contained in rule 62-302.530, Florida Administrative Code.
[163] *Process for Reclassifying the Designated Uses of Florida Surface Waters*, available at http://www.dep.state.fl.us/water/wqssp/docs/reclass/process_document_080510.pdf.

Lastly, the bill directs DEP, upon receipt of the certification from an existing permittee or, in the case of a new permittee for surface water that does not include potable use at the time of application, upon issuance of the permit, to add treated potable water supplies as a designated use of the surface water.

B. SECTION DIRECTORY:

Section 1 amends s. 373.019, F.S., regarding the definition of "water resource development."

Section 2 amends s. 373.0421, F.S., regarding the establishment and implementation of minimum flows and levels.

Section 3 creates s. 373.0465, F.S., regarding the Central Florida Water Initiative.

Section 4 amends s. 373.1501, F.S., regarding the South Florida Water Management District as local sponsor.

Section 5 amends s. 373.2234, F.S., regarding preferred water supply sources.

Section 6 amends s. 373.233, F.S., regarding competing consumptive use applications.

Section 7 amends s. 373.4591, F.S., regarding improvements on private agricultural lands.

Section 8 amends s. 373.4595, F.S., regarding the Northern Everglades and Estuaries Protection Program.

Section 9 amends s. 373.536, F.S., regarding the water resource development work program.

Section 10 amends s. 373.703, F.S., regarding water production.

Section 11 amends s. 373.705, F.S., regarding water resource and water supply development.

Section 12 amends s. 373.707, F.S., regarding alternative water supply development.

Section 13 amends s. 373.709, F.S., regarding regional water supply planning.

Section 14 creates Part VIII of chapter 373, F.S., regarding the Florida Springs and Aquifer Act.

Section 15 amends s. 403.061, F.S., regarding the adoption, by rule, of a specific surface water classification for treated potable water supply.

Section 16 amends s. 403.861, F.S., regarding the use of surface waters for public water supply.

Section 17 provides an effective date of July 1, 2015.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   None.

2. Expenditures:

   Actions required in the bill relating to Northern Everglades and Estuaries Protection and Priority Florida Springs are nominally the same as those already required under s. 403.067, F.S., including

water quality assessment; TMDL, BMP and BMAP development; and adoption and implementation. Any significant additional expenditures would not be required. According to DEP, successful implementation would require continued funding of DEP's watershed management program and technical and financial assistance for implementation of agricultural and nonagricultural best management practices.

DACS is requesting $232,323 in recurring funds and $67,306 in nonrecurring funds for 3 positions and $10 million for BMPs in the Northern Everglades and estuaries and the Priority Florida Springs to implement the provisions of the bill. DACS has also suggested $15 million for large scale nutrient reduction and water retention projects in the Lake Okeechobee watershed. However, the department can work with funds in other amounts as provided by the Legislature.

Since costs for rulemaking, rule revisions and interagency agreements are minimal, DEP and DACS will use existing resources.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

According to the SFWMD, a fiscal impact for monitoring nonpoint source dischargers required to monitor water quality and providing the results of such monitoring to be reported to the coordinating agencies is unknown until the interagency agreement is completed with the coordinating agencies.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill appears to have a positive economic impact on the private sector by amending the definition of "water resource development" to include self-suppliers on the list of entities that can receive technical assistance from a WMD for water resource development projects.

The bill appears to have a negative economic impact on the private sector by requiring each person engaged in the occupation of agriculture within the geographic area encompassed by a BMAP for a Priority Florida Spring to either implement BMPs or conduct water quality monitoring. BMPs are cost-shared typically with 75 percent of the funding from the state and/or federal government and 25 percent of the funding from the landowner. Water quality monitoring is not cost-shared and more than likely would be a substantial cost to the landowner.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

The bill does not appear to require counties or municipalities to take an action requiring the expenditure of funds, reduce the authority that counties or municipalities have to raise revenue in the aggregate, nor reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill authorizes DEP to adopt by rule a specific surface water classification to protect surface waters used for treated potable water supply, and to establish rules concerning the use of surface waters for public water supply.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On February 11, 2015, the State Affairs Committee adopted a strike-all amendment that included the following revisions:

Central Florida Water Initiative

Replaces the requirement that the interagency agreement include a single uniform definition of "harm" with the requirement that the agreement include a single uniform definition of "harmful to the water resources" that is consistent with the term's usage in s. 373.219, F.S.

This revision clarifies the original intent of the PCB by specifying that the reference to the term "harm" in the PCB pertains to harm to the water resources as it relates to the issuance of a CUP.

Florida Springs and Aquifer Act

1. Adds intent language that recovery strategies for Priority Florida Springs that are not meeting MFLs are expeditiously developed and implemented.

2. Expands the definition of "Priority Florida Springs" to include, in addition to all first magnitude springs in the state, all second magnitude springs within state or federally owned lands purchased for conservation purposes.

3. Removes the requirement that DEP delineate spring protection zones for each Priority Florida Spring, but requires DEP, no later than December 1, 2018, for all Priority Florida Springs, to:
    a. Complete a water quality assessment;
    b. Establish TMDLs for nutrients For Priority Florida Springs determined by DEP to be impaired; and
    c. Establish BMAPs that include impaired Priority Florida Springs subject to a TMDL for nutrients.

4. For Priority Florida Springs determined to be impaired after December 1, 2018, DEP is required to establish a BMAP within two years after the impairment determination.

5. Specifies that DEP, the WMDs, or DACS can reevaluate BMPs associated with a BMAP where water quality problems are demonstrated despite implementation of BMPs. The original PCB only authorized DACS to conduct this reevaluation.

6. Requires each person engaged in agriculture within a BMAP area that includes a Priority Florida Spring to either implement agricultural BMPs or conduct water quality monitoring and notify DACS within 180 days of his or her intent to implement BMPs or monitor.

Water Supply Planning and Development

1. Provides that the recovery or prevention strategy cannot depend solely on water shortage restrictions.

2. Removes the requirement that RWSPs be revised concurrent with the adoption of an MFL and implementation of the recovery and prevention strategy, and replaces it with the requirement that RWSPs be amended to include any water supply development and water resource development projects identified in a recovery or prevention strategy, and requires such RWSP amendment to be approved concurrently with relevant portions of the recovery or prevention strategy.

3. Requires priority consideration be given to public-private partnerships that treat water on private lands for certain environmental purposes.

4. Removes the requirement that each WMD's RWSP include an annual funding plan that identifies the WMD's funding contributions needed for certain water supply and water resource development projects, and replaces it with the requirement that each WMD submit, as part of their 5-year water resource development work program, an annual funding plan for the water resource and water supply development components of its RWSP. The amendment also requires the work program to address the water supply projects proposed for WMD funding assistance, and requires the annual funding plan to identify both anticipated available WMD funding and additional funding needs for the 2nd through 5th years of the funding plan. In addition, the amendment requires the work program to include an assessment of each RWSP in supporting the implementation of MFLs and reservations, and ensure sufficient water is available to avoid the adverse effects of competition for water supplies.

5. Requires DEP to post the 5-year water resource development work program on its website.

Northern Everglades and Estuaries Protection Program

1. Authorizes DEP, DACS, or a WMD to reevaluate BMPs where water quality problems are detected for agricultural and nonagricultural nonpoint sources despite appropriate implementation of adopted BMPs. The original draft PCB only authorized DACS to perform the reevaluations of BMPs for agricultural nonpoint sources and authorized DEP and the WMDs to perform a reevaluation of nonagricultural nonpoint sources.

2. Clarifies the intent of the PCB that entities in compliance with BMP permits issued to agricultural operators within the Everglades Agricultural Area are in compliance with the Lake Okeechobee BMAP, and is authorized to use a special BMP permit in lieu of the requirements of the Lake Okeechobee BMAP. The bill also specifies that the agricultural BMP reevaluation process applies to those entities

3. Removes references to the Caloosahatchee River Watershed Construction Project and the St. Lucie River Watershed Construction Project from permitting section of NEEPP. This change corrects an unintended and unnecessary duplication of permitting requirements for these projects.