The Florida Senate

BILL ANALYSIS AND FISCAL IMPACT STATEMENT

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

Prepared By: The Professional Staff of the Committee on Appropriations

BILL:	CS/SB 754
INTRODUCER:	Environmental Preservation and Conservation Committee and Senator Grimsley
SUBJECT:	Water Quality Credit Trading
DATE:	April 16, 2013 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Hinton	Uchino	EP	**Fav/CS**
2.	Anderson	Yeatman	CA	**Favorable**
3.	Howard	Hansen	AP	**Pre-meeting**
4.				
5.				
6.				

Please see Section VIII. for Additional Information:

A. COMMITTEE SUBSTITUTE.....	X	Statement of Substantial Changes
B. AMENDMENTS.....		Technical amendments were recommended
		Amendments were recommended
		Significant amendments were recommended

I. Summary:

CS/SB 754 expands statewide the water quality credit trading pilot program currently authorized for the Lower St. Johns River Basin. The bill authorizes the Department of Environmental Protection (DEP) to approve water quality credit trading in adopted basin management action plans (BMAPs). Entities that participate in water quality credit trades must timely report to the DEP the prices for credits, how the prices were determined, and any state funding received for the facilities or activities that generated the credits. The DEP cannot participate in the establishment of credit prices.

The bill clarifies that participation in water quality credit trading is voluntary. The bill authorizes water quality credit trading to occur in pollution control programs under local, state, or federal authority. The bill also deletes obsolete language and makes conforming changes.

The DEP would incur nominal costs amending the existing rule to reflect a statewide trading program and to expand the trading registry. These costs can be absorbed within existing staff and resources.

This bill substantially amends the following sections of the Florida Statutes: 373.4595, 403.067, and 403.088.

II. Present Situation:

Water Pollution Regulation

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

- Designation of a waterbody's beneficial uses, such as water supply, recreation, fish propagation, or 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.[1]

States must submit their WQSs to the U.S. Environmental Protection Agency (EPA) for review and approval.[2] If the EPA finds that a state's proposal for one or more criteria are inadequate, it must notify the state, which then has 90 days to revise its standards in response to the EPA's concerns.[3] If the state does not do so, the EPA is required to "promptly" propose a federal standard that will apply to that state. Similarly, if the EPA, independent of any state proposal, determines that a state needs a new or revised standard and the state fails to act, then the CWA directs the EPA to propose the new or revised standard for that state.[4] If the state proceeds to develop its own standard while the EPA is engaged in the rulemaking process and the state standard is acceptable to the EPA, the CWA allows the EPA to approve the state standard and abandon its own effort.[5] In most instances, Florida has adopted an approved WQS and has subsequently been granted the authority to enforce the provisions of the CWA.

The EPA and the DEP enforce WQSs through the implementation and enforcement of the National Pollutant Discharge Elimination System (NPDES) permitting program. Every point source that discharges a pollutant into waters of the United States must obtain an NPDES permit establishing the amount of a particular pollutant that an individual point source can discharge into a specific waterbody.[6] The amount of the pollutant that a point source can discharge under a NPDES permit is determined through the establishment of a technology-based effluent limitation (TBEL). If a waterbody fails to meet the applicable WQS through the application of a TBEL, a water quality-based effluent limitation (WQBEL), which is a more stringent standard, is used.

[1] 33 U.S.C. s. 1313(c)(2)(A); 40 C.F.R. ss. 131.6, 131.10-12.
[2] 33 U.S.C. s. 1313(c)(2)(A).
[3] 33 U.S.C. s. 1313(c)(3).
[4] 33 U.S.C. s. 1313(c)(4).
[5] *Id*.
[6] Point source pollution, at its most basic level, is water pollution that comes from a single, discreet place, like a discharge pipe.

Waterbodies that do not meet the established WQSs are deemed impaired and, pursuant to the CWA, the DEP must then establish a total maximum daily load (TMDL) for the waterbody or section of the waterbody that is impaired. In 1999, the Legislature passed the Florida Watershed Restoration Act (WRA), which codified the establishment of TMDLs for pollutants of water bodies as required by the federal CWA.[7] TMDLs establish the amount of each pollutant a water body can receive without violating state WQSs. A TMDL for an impaired waterbody is defined as the sum of the individual waste load allocations for point sources and the load allocations for nonpoint sources and natural background.[8] Waste load allocations are pollutant loads attributable to existing and future point sources, such as discharges from industry and sewage facilities. Load allocations are pollutant loads attributable to existing and future nonpoint sources such as the runoff from farms, forests, and urban areas.

The DEP may also establish a BMAP as part of the development and implementation of a TMDL for a specific water body. First the BMAP equitably allocates pollutant reductions to individual basins, as a whole to all basins, or to each identified point source or category of nonpoint sources.[9] Then the BMAP establishes the schedule for implementing projects and activities to meet the pollution reduction allocations, the basis for evaluating the plan's effectiveness and making adaptive changes, and funding strategies. The BMAP development process provides an opportunity for local stakeholders, including affected pollution sources, local government and community leaders, and the general public to collectively determine and share water quality clean-up responsibilities. The DEP works with stakeholders to develop effective BMAPs, which then must be adopted by Secretarial order pursuant to s. 403.067(7), F.S.

BMAPs must include milestones for implementation and water quality improvement. They must also include an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time. An assessment of progress toward these milestones must be conducted every five years and revisions to the plan must be made as appropriate.[10]

In some cases, local, state, and federal entities are able to establish their own effective pollution reduction requirements in lieu of a TMDL.[11] Pursuant to s. 403.067(4), F.S., these "pollution control programs" must demonstrate that they can restore the waterbody as effectively as a TMDL. Most pollution reduction requirements are established as TMDLs, although there are a few alternative pollution control programs that have been successfully established.[12]

A nonpoint source pollutant discharger included in a BMAP must demonstrate compliance with the established pollutant reductions by either implementing the appropriate best management

[7] Section 403.067, F.S.
[8] Chapter 62-302, F.A.C. (Surface Water Quality Standards). Nonpoint sources of pollution are essentially sources of pollution that are not point sources. Non-point sources of pollution can include runoff from agricultural lands or residential areas; oil, grease and toxic materials from urban runoff; and sediment from improperly managed construction sites.
[9] Section 403.067(7)(a), F.S.
[10] *Id.*
[11] DEP, *Senate Bill 754 Legislative Analysis* (2013) (on file with the Senate Committee on Environmental Preservation and Conservation).
[12] *Id.*

practices (BMPs) or by conducting water quality monitoring.[13] A nonpoint source discharger may be subject to enforcement action by the DEP or a water management district based upon a failure to implement these responsibilities.[14]

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

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

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

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

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

Water Quality Credit Trading

A potentially less costly option for meeting the pollution limits established under a TMDL for an impaired waterbody is through the adoption of a water quality credit trading program, which is a voluntary, market-based approach for reducing pollution to Florida's impaired rivers, lakes, streams, and estuaries.

The underlying economic theory is that achieving pollution abatement at the lowest incremental cost at each additional increment reduced is the most cost effective means to achieve abatement. Trading is based on the premise that different sources of a pollutant in a watershed can face

[13] BMPs for agriculture, for example, include activities such as managing irrigation water to minimize losses, limiting the use of fertilizers, and waste management.
[14] Section 403.067, F.S.
[15] Section 403.061, F.S., grants the DEP the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it. Furthermore, s. 403.061(21), F.S., allows the DEP to advise, consult, cooperate, and enter into agreements with other state agencies, the federal government, other states, interstate agencies, etc.

substantially different costs to control that pollutant. Trading allows pollutant reduction activities to be environmentally valued in the form of "credits" that can then be traded on a local "market" to promote cost-effective water quality improvements.[16] Water quality credits are generated when a source reduces its loading of a given pollutant below the load allowable for the source under the TMDL or BMAP.[17] Financial savings accrue to parties that buy trading credits (pollutant reductions) from others for less than the cost of implementing the reductions themselves. Those that sell credits will do so only if the value of the trade is equal to or higher than their investment in the facilities or activities necessary to achieve the pollutant reductions.

Water quality credit trading can accelerate cleanup because potentially unaffordable costs for individual dischargers can be reduced and cooperative relationships built through trading agreements that foster shared responsibility and commitment. Trading can also accommodate new growth, including new pollutant loadings from urban stormwater, and domestic and industrial wastewater discharges. It offers the possibility for the owners of potential new or increased discharges to purchase credits from existing dischargers so that overall pollutant loadings to a watershed are not increased and water quality is preserved.[18]

Water Quality Credit Trading Program in Florida

In 2008, the Legislature created a pilot water quality credit trading program for the Lower St. Johns River Basin and authorized the DEP to provide requirements for trading in the BMAP established for that basin.[19]

Section 403.067(8), F.S., provides the following statutory requirements for establishing a water quality credit trading program in Florida:

- Water quality credit trading must be consistent with federal law and regulation.
- Water quality credit trading must be implemented through permits, including water quality credit trading permits, other authorizations, or other legally binding agreements as established by the DEP rule.
- The DEP must establish the pollutant load reduction value of water quality credits and is responsible for authorizing their use.
- A person who acquires water quality credits ("buyer") must timely submit to the DEP an affidavit, signed by the buyer and the credit generator ("seller"), disclosing the terms of acquisition, number of credits, price paid per unit credit, and any state funding received for the facilities or activities that generate the credits. The DEP cannot participate in the establishment of credit prices.

[16] DEP, *The Pilot Water Quality Credit Trading Program for the Lower St. Johns River: A Report to the Governor and Legislature* (October 2010), *available at* http://www.dep.state.fl.us/water/wqssp/docs/WaterQualityCreditReport-101410.pdf (last visited Mar. 12, 2013).
[17] Lower St. Johns River TMDL Executive Committee, *Basin Management Action Plan: For the Implementation of Total Maximum Daily Loads for Nutrients Adopted by the Florida Department of Environmental Protection for the Lower St. Johns River Basin Main Stem* (October 2008), *available at* http://www.dep.state.fl.us/water/watersheds/docs/bmap/adopted-lsjr-bmap.pdf (last visited Mar. 12, 2013).
[18] *Supra* note 16, at 2.
[19] Chapter 2008-189, Laws of Fla.

- Sellers of water quality credits are responsible for achieving the load reductions on which the credits are based and for complying with the terms of the DEP authorization and any trading agreements into which they may have entered.
- Buyers of water quality credits are responsible for complying with the terms of the DEP water discharge permit.
- The DEP must take appropriate action to address the failure of a credit seller to fulfill its obligations, including, as necessary, deeming the seller's credits invalid if the seller cannot achieve the load reductions, on which the credits were based, in a reasonable time. If the DEP determines duly acquired water quality credits to be invalid, in whole or in part, thereby causing the credit buyer to be unable to timely meet its pollutant reduction obligations, then the DEP must issue an order establishing the actions required of the buyer to meet its obligations by alternative means and a reasonable schedule for completing the actions. The invalidation of credits shall not itself constitute a violation of the buyer's water discharge permit.

Section 403.067(9), F.S., directs the DEP to establish water quality credit trading rules that provide for the following:

- The process for determining how credits are generated, quantified, and validated;
- A publicly accessible trading registry to track credits, trading activities, and prices;
- Limitations on the availability and use of credits, including a list of pollutants eligible for trading and adjustment factors to account for uncertainties and site-specific considerations;
- The timing, duration, and transferability of credits; and
- Mechanisms to assure compliance with trading procedures, including record-keeping, monitoring, reporting, and inspections.

The pilot program established by the DEP pursuant to s. 403.067, F.S., contains the following elements:

- Credits are only generated when a source's pollutant load is reduced below the baseline established for the entity. For a trade involving credits generated by a "nonpoint" source (typically related to stormwater), the pollutant loading must be less than that expected following the implementation of BMPs and any other reductions required in the BMAP.
- For trades where the seller and buyer discharge to different locations, the amount of credits proposed for trading must be adjusted by location factors to provide reasonable assurance that the trade will not result in localized adverse impacts to the waterbody or water segment.
- Credits generated by a point source, such as a wastewater facility, must be confirmed by effluent monitoring throughout the life of the trade for the pollutant in question.
- For trades involving estimated credits generated by nonpoint sources, uncertainty factors are applied and the applicant must provide reasonable assurance that the estimate is scientifically defensible.
- Credits must be used in the same calendar year in which they are generated.
- Credits generated cannot be used to offset violations of a discharge permit or to comply with TBELs.

- Water quality credit trades cannot result in an increased nutrient load above the Lower St. Johns River TMDLs.[20]

Section 403.067(10), F.S., directs the DEP to submit a report to the Legislature on the status of the trading no later than 24 months after the adoption of the BMAP for the Lower St. Johns River. The report was issued in October 2010. The DEP concluded that there was little formal trading done under the pilot program mainly because pre-BMAP trades of pollutant load allocations were incorporated into the BMAP when it was adopted. Another factor was that the EPA's proposed numeric nutrient criteria raised uncertainty about nutrient limits that facilities would have to meet. The DEP recommended extending the pilot program for another two years to allow for further evaluation of the EPA's numeric nutrient criteria for fresh and estuarine waters.[21]

Since the report was submitted to the Legislature in 2010, only one trade has occurred within the Lower St. Johns River Basin. According to the DEP, the lack of interest in trading is due mainly to an uncertainty in clearly defining credits for trading between the nonpoint and point sources.[22] In addition, because the program only encompasses the Lower St. Johns River, the number of regulated entities, the number of available credits, and thus, the potential to trade was very limited. However, now that some of the regulatory uncertainty surrounding the adoption of numeric nutrient criteria in Florida is being resolved, these hindrances to trading under the pilot program may not apply to a statewide water quality credit trading program, especially as it pertains to meeting the new numeric nutrient criteria.

III. Effect of Proposed Changes:

Section 1 reenacts s. 373.4595(1)(n), F.S., which references s. 403.067, F.S., to incorporate the changes made by the bill to s. 403.067, F.S.

Section 2 removes language from statute that limits water quality credit trading to the Lower St. Johns River Basin, thus allowing it to be used statewide. The bill allows local, state, or federal pollution control programs, other than BMAPs, to engage in water quality credit trading.

The bill allows the DEP to authorize water quality credit trading in BMAPs. It requires entities that trade credits to timely report the prices for credits, how the prices were determined, and any state funding received for the facilities or activities that generated the credits. It prohibits the DEP from participating in the establishment of credit prices.

The bill eliminates language establishing the Lower St. Johns River Basin water quality credit trading pilot program. The eliminated language includes a report on the effectiveness of the pilot project which was produced by the DEP in October 2010.

The bill clarifies that participation in water quality credit trading is voluntary. The bill also makes conforming changes.

[20] Rule 62-306.300, F.A.C.
[21] *Id.*
[22] Department of Environmental Preservation, *Senate Bill 754 Legislative Analysis* (2013) (on file with the Senate Committee on Environmental Preservation and Conservation).

Section 3 reenacts s. 403.088(2)(e), F.S., which references s. 403.067, F.S., to incorporate the amendments made by the bill to s. 403.067, F.S.

Section 4 provides an effective date of July 1, 2013.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Private entities who participate in the program could see a positive financial impact as either a seller or purchaser of water quality credits.

C. Government Sector Impact:

The DEP would incur nominal costs in amending the existing rule to reflect a statewide trading program and expanding the trading registry. These costs would be absorbed within existing staff and resources.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Additional Information:

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

CS by Environmental Preservation and Conservation on March 14, 2013:
The committee substitute clarifies that participation in water quality credit trading is voluntary.

B. Amendments:

None.