	Prepared By:	The Professional St	aff of the Commur	nity Affairs Cor	nmittee
3ILL:	CS/CS/SB 120	8			
NTRODUCER:	Community Af Committee; an	fairs Committee; En d Senator Gaetz	vironmental Pres	servation and	Conservation
SUBJECT:	Water Pollutio	n Control			
DATE:	April 9, 2008	REVISED:			
ANALYST		STAFF DIRECTOR	REFERENCE		ACTION
Bascom		Kiger	EP	Fav/CS	
Molloy		Yeatman	CA	Fav/CS	
•			GA		

Please see Section VIII. for Additional Information:						
A. COMMITTEE SUBSTITUTE	х	Statement of Substantial Changes				
B. AMENDMENTS		Technical amendments were recommended				
		Amendments were recommended				
		Significant amendments were recommended				

# I. Summary:

The committee substitute (CS) establishes procedures for the trading of water quality credits in the Total Maximum Daily Load (TMDL) program in the Lower St. Johns River Basin.

This CS substantially amends sections 403.067 and 403.088, Florida Statutes.

# II. Present Situation:

#### **Clean Water Act**

The federal Water Pollution Control Act of 1972, commonly referred to as the Clean Water Act established the basic framework for pollution control in the nation's water bodies. Its primary goal was to have the nation's water bodies clean and useful. By setting national standards and regulations for the discharge of pollution, the act was intended to restore and protect the health of the nation's water bodies. Section 305(b) of the act requires states to submit to Congress a biennial report on the water quality of their lakes, streams, and rivers. A partial list of water bodies that qualify as "impaired" (i.e., do not meet specific pollutant limits for their designated

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uses) must be submitted to the U.S. Environmental Protection Agency under section 303(d) of the act. States are required to develop TMDLs for each pollutant that exceeds the legal limits for that water body. The list submitted under 303(d) sets a prioritized schedule for TMDL development for all water bodies on the list and is updated every two years. The scope of this process is enormous since Florida has about 52,000 miles of rivers and streams, nearly 800 lakes, 4,500 square miles of estuaries, and more than 700 springs.

# **Total Maximum Daily Loads**

In 1999, the Florida Legislature passed the Florida Watershed Restoration Act which codified the establishment of TMDLs for pollutants of water bodies as required by federal law. The Department of Environmental Protection (department) was required to promulgate rules relating to the methodology for assessing, calculating, allocating, and implementing the TMDL process. The Legislature directed that the TMDL process be integrated with existing protection and restoration programs, and coordinated with all state agencies and affected parties.

TMDLs establish the amount of each pollutant a water body can receive without violating state water quality standards. TMDLs are characterized as the sum of waste load allocations, load allocations, and a margin of safety to account for uncertain conditions. *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 non-point sources such as the runoff from farms, forests, and urban areas. Even though an individual discharge into a water body may meet established standards, the cumulative and multiplier effect of discharges from numerous sources can cause a water body to fail to meet quality water standards.

#### **Basin Management Action Plan (BMAP)**

The department develops BMAPs as part of the development and implementation of a TMDL for a water body. First, the BMAP establishes a pollution allocation. 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 represents the opportunity for local stakeholders, including affected dischargers, local government and community leaders, and the general public to collectively determine and share water quality clean-up responsibilities. The department works with stakeholders to develop effective BMAPs which then must be adopted by Secretarial order pursuant to s. 403.067(7), F.S.

When one pollutant source determines that there may be a lower cost alternative for achieving its required reductions and the alternative requires the assistance of another pollutant source or sources, a potential market is created. It is the BMAP process and the adoption of formal, interrelated pollution reduction requirements that create the conditions where market exchanges become more likely.

BMAPs must include milestones for implementation and water quality improvement, and an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load 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.

# **TMDL Implementation and Permitting**

The department is the lead agency in coordinating the implementation of the TMDLs through existing water quality protection programs. Applications of a TMDL by a water management district must be consistent with s. 403.067, F.S., and may not require the issuance of an order or a separate action pursuant to chapter 120, F.S., for the adoption of the calculation and allocation previously established by the department. Such programs include:

- Permitting and other existing regulatory programs, including water-quality-based effluent limitations;
- Nonregulatory and incentive-based programs, including best management practices (BMPs) cost sharing, waste minimization, pollution prevention, agreements established pursuant to s. 403.061(21), F.S., and public education;
- Other water quality management and restoration activities;
- Public works including capital facilities; or
- Land acquisition.

A non-point pollutant source discharger included in a BMAP must demonstrate compliance with the established pollutant reductions by either implementing the appropriate BMPs or by conducting water quality monitoring. A non-point source discharger may be subject to enforcement action by the department or a water management district based upon a failure to implement these responsibilities.

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

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 5 years. NPDES permittees may request an individual allocation during the interim and the department may include an individual allocation in the permit.

# Water Quality Credit Trading

Water quality credit trading is a voluntary, market-based approach to promote protection and restoration of Florida's rivers, lakes, streams and estuaries that would supplement and enhance the other voluntary, regulatory and financial assistance programs already in place. Trading is based on the fact that businesses and industries, wastewater treatment facilities, urban stormwater systems, and agricultural sites that discharge the same pollutants to a waterbody (basin, watershed or other defined area) may face substantially different costs to control those pollutants. 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.

The purpose of water quality credit trading is to promote more effective, lower cost reductions of pollutants in order to restore Florida's surface waters. Financial savings will 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. Credits are not in any sense a right to pollute; they are solely an accounting mechanism to establish and verify the market exchange of effective pollutant reduction actions. The 2005 Florida Legislature directed the department, no later than November 30, 2006, to report to the Governor, the President of the Senate, and the Speaker of the House of Representatives with recommendations on water quality credit trading.

Pursuant to the rulemaking requirements of s. 403.087(8)(c), the department consulted extensively with a Pollutant Trading Policy Advisory Committee, comprising expertise from regulated interests, environmental organizations, water management districts, and local governments, and submitted a required report in December 2006. Within this report, the department provided recommendations for the statutory and rule changes necessary to promote an effective trading program, including:

- Basic foundational authority to create and implement a trading program that can effectively account for the environmental value of trading pollutant reduction actions and assure their enforceability (statutory).
- Formal trading should take place only where BMAPs—detailed water quality clean-up plans, including implementation schedules and financing options—have been publicly adopted (statutory).
- Trades should be incorporated into permits, BMAPs, certifications, or other binding mechanisms that assure the enforceability required by the Watershed Restoration Act (statutory).
- An existing, outmoded form of public interest test (also called "equitable abatement") should be limited to areas where a BMAP has not yet been adopted and a new, more effective public interest test should be established for areas where a BMAP has been adopted (statutory).
- The limitation that administrative orders, a legal compliance mechanism, may only be issued with permits and permit renewals should be expanded so that these orders may also be issued with permit revisions and modifications, which would be used to sanction trades and the reasonable implementation schedules necessary for reducing pollutants (statutory).
- Mechanisms for and limitations on credit generation (rule).
- Credit adjustment factors, including location and uncertainty factors, to reflect that some technologies and activities are more effective at reducing pollutants than others, but that trading may still take place when this fact is appropriately accounted (rule).
- Establishment of a credit tracking registry to account for the environmental value of credits and their exchanges in the trading market (or markets), without assessing the shifting

monetary value of credits and, thus, leaving proprietary and privacy issues to be addressed between trading parties (rule).<sup>1</sup>

# III. Effect of Proposed Changes:

Section 1: Amends s. 403.067, F.S., to provide the following:

Subsection (7) is amended to provide that in the Lower St. Johns River Basin where a BMAP has been adopted, the voluntary trading of water quality credits may be included as a management strategy.

In accordance with rules of the department, all BMAPs may allow point or non-point sources that will achieve greater pollutant reductions than required by an adopted total maximum load or waste-load allocation to generate, register, and trade water quality credits for the excess reductions to enable other sources to achieve their allocation. The generation of water quality credits does not remove the obligation of a point or nonpoint source or activity to meet applicable technology requirements or adopted best-management practices. The plans must also allow trading between NPDES permittees, and must allow trading that may or may not involve NPDES permittees where the generation or use of the credits involves an entity or activity that is not subject to department water discharge permits and whose owner voluntarily elects to obtain department authorization for the generation and sale of credits.

Rules of the department relating to equitable abatement of surface water pollutants may not be applied to water bodies or water body segments for which an adopted BMAP takes into account future new or expanded activities or discharges. Pursuant to department rule, nonpoint source dischargers may supplement the implementation of best management practices with water quality credit trades in order to demonstrate compliance with pollutant reduction goals.

Subsection (8) is created to provide for water quality credit trading. Water quality credit trading must be consistent with all federal laws and regulations, and must be implemented through permits, including water quality trading permits, or other legally binding agreements established by department rule. The department must establish the pollutant load reduction value of water quality credits and is responsible for authorizing the use of the credits, but may not participate in the establishment of credit prices.

Persons that acquire water quality credits must timely submit to the department a signed affidavit signed by the buyer and the seller of the credits that discloses the term of acquisition, number of credits, amount paid per credit, and any state funding received for the facilities or activities that generate the credits.

Credit sellers are responsible for achieving the pollutant load reductions on which the credits are based, for complying with the terms of the department authorization for the sale of the credits, and for complying with any trade agreements into which they may have entered. Credit buyers are responsible for complying with the terms of the department water discharge permit.

<sup>&</sup>lt;sup>1</sup> Department Water Quality Credit Trading Report, December 2006,

http://www.department.state.fl.us/water/tmdl/docs/WQ\_CreditTradingReport\_final\_December2006.pdf

The department must take appropriate action to address the failure of a credit seller to fulfill its obligations, including, if necessary, deeming the seller's credits invalid if the load reductions on which the credits were based are not achieved in a reasonable time. If the department determines that acquired water quality credits are invalid and the credit buyer becomes unable to meet its pollutant-reduction obligations, the department must issue an order establishing actions required by the buyer to meet its obligations through alternative means and on a reasonable schedule. The invalidation of credits shall not constitute a violation of the buyer's water discharge permit.

Subsection (9) is amended to provide that by September 1, 2008, department rulemaking shall be initiated which provides for:

- The process to be used to determine how credits are generated, quantified, and validated.
- A publicly accessible water quality credit trading registry that tracks water quality credits, trading activities, and credit prices.
- Limitations on the availability and use of water quality credits, including a list of eligible pollutants or parameters and minimum water quality requirements and, where appropriate, adjustments to reflect best-management practice performance uncertainties and water-segment-specific location factors.
- The timing and duration of credits and allowance for credit transferability.
- Mechanisms for determining and ensuring compliance with trading procedures, including recordkeeping, monitoring, reporting, and inspections.
- At the time draft rules are published, the department must submit draft rules to the U.S. EPA for review.

Subsection (10) is created to provide for a water quality credit trading pilot program in the Lower St. Johns River Basin. The department may authorize water quality credit trading and establish specific requirements for trading in the adopted BMAP for the basin prior to the adoption of rules under subsection (9) so that the pilot project may be effectively implemented. Buyers and sellers participating in the water quality credit trades must timely report to the department the prices of the credits traded, how the prices were determined, and state funding received for facilities or activities that generated the credits.

Within 24 months after the adoption of the BMAP for the Lower St. Johns River Basin, the department shall submit a report to the Governor and the Legislature on the effectiveness of water quality credit trading pilot program. The report must include:

- A summary of how water quality credit trading was implemented, including the number of pounds of pollutants traded;
- A description of the individual trades and estimated pollutant load reductions that are expected to result from each trade;
- A description of any conditions placed on trades;
- Prices associated with the trades, as reported by the traders; and
- A recommendation as to whether other areas of the state would benefit from water quality credit trading and, if so, an identification of the statutory changes necessary to expand the scope of trading.

**Section 2:** Amends s. 403.088, F.S., to grant the department authority to revise, as well as issue, renew, or reissue a water pollution operation permit if a water quality credit trade meets the requirements of s. 403.067, F.S., authorizing the use of a credit to achieve greater pollutant reductions than those required under a TMDL.

**Section 3:** Provides that the act shall take effect July 1, 2008.

# IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The CS does not require cities and counties to expend funds or limit their authority to raise revenue or receive state-shared revenues as specified by s.18, Art. VII, State Constitution.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

## V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The cost to any private entity, such as a utility or agricultural operation, would depend on whether it chose to invest in a project or activity designed to generate water quality credits and additional pollution reduction benefits beyond minimum requirements for trading to other sources of pollution. Such an investment would certainly have a cost but presumably would not be made unless the long term economic benefit to be derived outweighed that cost.

Trading has the potential to reduce the costs of pollutant reduction activities to businesses, industries, agriculture, and all taxpayers. It is a market-based program under which participants will seek lower cost alternatives to solving the water quality problem that must be solved in any event. Because the costs of pollution reduction will grow over time, cost savings could be significant, many of which would accrue to the private sector.

## C. Government Sector Impact:

#### **Local Governments**

As TMDLs and BMAPs are developed, local governments will be identified as one of the sources contributing to the impaired nature of water bodies. The creation of a market based pollutant credit trading program will allow them to seek lower cost alternatives to solving water quality problems. Benefits to local governments will depend on whether they chose to invest in new projects that create credits that could be sold or if they trade with others and thus avoid having to make substantial infrastructure investments.

#### **State Government**

The department indicates that short-term effects would be relatively minimal. Standard rulemaking, assuming no challenges and resulting litigation, generally costs \$10,000 - \$20,000. Creation of the water quality credit trading registry, including database development, would likely cost less than \$220,000.

The long-term effects are unknown as the growth in trading is uncertain. As trading increases, especially if the law is amended to expand beyond the Lower St. Johns River Basin, the level of review, administrative process and documentation associated with assessing, verifying, tracking, and enforcing trades, all of which are required in the legislation, will increase. These costs will have to be considered as trading moves forward to assure that it can promote improved and more cost-effective water quality restoration and preservation in the state. The more popular trading becomes, the more it will cost the department to manage the program.

## 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 Community Affairs Committee on April 9, 2008:

The CS directs the Department of Environmental Protection to initiate rulemaking for water quality credit trading by September 1, 2008.

# CS by Environmental Preservation and Conservation Committee on March 27, 2008:

Water quality credit trading is limited to the Lower St. Johns River.

Water quality credit trading must be consistent with all federal laws and regulations and must be implemented through permits or other legally binding agreements established by

department rule. The department shall establish, by rule, pollutant load reduction values for water quality credits.

Persons that acquire water quality credits must submit a signed affidavit disclosing the terms of acquisition, number of credits, amount paid per credit, and any state funding received through the generation of credits to the department.

Sellers of water quality credits are responsible for achieving the pollutant load reductions, on which the credits are based, as well as complying with any terms or agreements to which they have entered. Buyers are responsible for complying with the terms of the department water discharge permit.

The department shall take all necessary action to address the failure of a credit seller to fulfill its obligations. In the event the department determines that acquired water quality credits are invalid, it shall issue an order establishing actions required by the buyer to meet pollutant load reductions through alternative means by a reasonable schedule. The invalidation of credits shall not constitute a violation of the buyer's water discharge permit.

Within 24 months following the adoption of the basin management action plan for the Lower St. Johns River, the department shall submit a report to the Governor and the Legislature of the effectiveness of the water quality credit trading pilot program that includes:

- A summary of how water quality credit trading was implemented, including the number of pounds of pollutants traded;
- A description of the individual trades and estimated pollutant load reductions that are expected to result from each trade;
- o A description of any conditions placed on trades;
- Prices associated with the trades, as reported by the traders; and
- A recommendation as to whether other areas of the state would benefit from water quality credit trading and, if so, an identification of the statutory changes necessary to expand the scope of trading.

#### B. Amendments:

None.

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