

## HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** HB 1839 CS PCB WNR 05-01 Total Maximum Daily Loads (TMDLs)  
**SPONSOR(S):** Water & Natural Resources Committee  
**TIED BILLS:** **IDEN./SIM. BILLS:** SB 2322

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REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
Orig. Comm.: Water & Natural Resources Committee	10 Y, 0 N	Winker	Lotspeich
1) Agriculture & Environment Appropriations Committee	8 Y, 0 N	Dixon	Dixon
2) State Resources Council	9 Y, 0 N, w/CS	Lotspeich	Hamby
3) _____	_____	_____	_____
4) _____	_____	_____	_____
5) _____	_____	_____	_____

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### SUMMARY ANALYSIS

The bill addresses several issues relating to the state's program for total maximum daily loads. The total maximum daily load (TMDL) program is a federally required water quality program administered by the Department of Environmental Protection (DEP). Through the program, DEP works closely with affected stakeholders to determine how to reduce pollutant loadings to certain polluted surface waterbodies in order to restore the legally designated uses of the waterbody.

Specifically the bill:

- clarifies the allocation of pollutant loadings associated with a TMDL;
- institutionalizes the development of basin management action plans as a guide for surface water restoration;
- clarifies the relationship between TMDLs and regulatory actions;
- creates a structure for promoting the implementation of basin management action plans by unregulated sources of pollution and allows for alternatives to this structure;
- provides for improved verification of best management practices and similar pollution reduction measures; and
- promotes an expert evaluation of pollutant trading opportunities as another tool for implementing TMDLs.

The bill has no fiscal impact.

The bill will take effect upon becoming law.

## FULL ANALYSIS

### I. SUBSTANTIVE ANALYSIS

#### A. HOUSE PRINCIPLES ANALYSIS:

The bill does not appear to implicate any of the House Principles.

#### B. EFFECT OF PROPOSED CHANGES:

##### Current Situation

The federal Water Pollution Control Act of 1972, commonly referred to as the Clean Water Act (CWA), 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 CWA was intended to restore and protect the health of the nation's water bodies.

Section 305(b) of the CWA 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 uses) must be submitted to the U.S. Environmental Protection Agency (EPA) under section 303(d) of the CWA. States are required to develop total maximum daily loads (TMDL) for each pollutant that exceeds the legal limits for that water body. Section 303(d) and the development of TMDLs were generally ignored by the states until numerous lawsuits were filed by environmental groups.

As discussed above, section 303(d) of the CWA requires states to submit a list of impaired (and the pollutants that violate water quality standards) water bodies and to prioritize TMDL development and implementation for those water bodies. The 303(d) list is updated every two years. The list sets a prioritized schedule for TMDL development for all water bodies on the list. 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.

The Florida Department of Environmental Protection (DEP) submitted its first 303(d) list in 1992 which was later refined in subsequent submissions. In 1998, the EPA first approved DEP's 303(d) list.

In 1999, the Florida Legislature passed the Florida Watershed Restoration Act (WRA) which codified (chapter 99-223, Laws of Florida) the establishment of TMDLs for pollutants of water bodies as required by the federal CWA. The WRA required DEP to promulgate rules relating to the methodology for assessing, calculating, allocating, and implementing the TMDL process. The WRA also directed that the TMDL process be integrated with existing protection and restoration programs, and coordinated with all state agencies and affected parties.

TMDLs describe 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 *nonpoint 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 not meet quality water standards.

DEP reports that primary pollutants causing the impairment of Florida's surface waters include nutrients (e.g., nitrogen and phosphorus), bacteria, metals (e.g., iron, silver, copper, cadmium, and zinc), and mercury.

Currently, DEP develops and implements TMDLs through a watershed-based management approach that addresses the state's 52 major hydrologic basins into five groups. Each basin group is subject to a five phase TMDL cycle on a rotating basis. Phase 1 is a preliminary evaluation of the quality of a water body, phase two is monitoring and assessing to verify water quality impairments, phase 3 is the development and adoption of TMDLs for waters verified as impaired, phase 4 is the development of basin management action plans to achieve the TMDL, and phase 5 is the implementation of the plan and monitoring of results.

Throughout this process, DEP coordinates and collaborates with all the stakeholders, including other state agencies which are contributors to or are affected by the quality of the state's water bodies. Government agencies, businesses, organizations, and individuals who contribute to the discharge of pollutants into the state's water bodies are requested to share in the responsibility of attaining TMDLs through only discharging an allotted specified pollutant based upon an established TMDL. Possible actions to achieve TMDLs include:

- The reduction and treatment of non-point source urban and agricultural storm water runoff;
- The reduction of pollutant loadings from permitted discharges;
- The improvement of development design and best management practices; and
- The implementation of water body restoration projects.

As of December 2004, DEP has adopted, by rule, 52 TMDLs with another 61 TMDLs in the proposal or drafting stages.

### **Effect of Proposed Changes**

The bill: (1) clarifies the allocation of pollutant loadings associated with a TMDL; (2) institutionalizes the development of basin management action plans as a road map for surface water restoration; (3) clarifies the relationship between TMDLs and regulatory actions; (4) creates a structure for promoting the implementation of basin management action plans by unregulated sources of pollution and allows for alternatives to this structure; (5) provides for improved verification of best management practices and similar pollution reduction measures; and (6) promotes an expert evaluation of pollutant trading opportunities as another tool for implementing TMDLs.

### **Clarification of the Allocation Process**

The bill provides for the development of a preliminary allocation of allowable pollutant levels as part of a total maximum daily load (TMDL) with a final allocation to be established in basin management action plans. The bill authorizes the Department of Environmental Regulation (DEP) to adopt phased TMDLs that establish incremental TMDLs until DEP acquires additional data which increases the scientific precision and accuracy of the TMDL. Where phased TMDLs are proposed, the DEP must provide a detailed statement of facts and circumstances explaining why the data are inadequate so as to justify a phased TMDL.

### **Basin Management Action Plans**

The bill authorizes DEP to develop basin management action plans (BMAP) as part of the development and implementation of a TMDL for a water body. The bill requires plans to integrate appropriate management strategies available to the state through existing water quality protection programs to achieve the TMDL, restore designated uses of the water body, provide for phased implementation of strategies, establish a schedule for implementing strategies, establish a basis for evaluating the plan's effectiveness, identify feasible funding strategies, and equitably allocate pollutant reductions to basins as a whole or to each point or nonpoint source. The bill provides that plans may provide pollutant load reduction credits to pollution dischargers that have implemented strategies to reduce pollutant loads.

The bill requires DEP to involve the broadest range of interested parties and hold public meetings on the development of basin management action plans. The bill requires DEP to evaluate plans and revise the plan if needed. DEP is required to adopt a plan by order of the Secretary. Should a plan alter the calculation or preliminary allocation of a TMDL, the revised calculation or final allocation must be adopted by a DEP rule.

The bill provides that a basin management action plan 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 bill creates incentives to participate in the BMAP process and establishes a more direct linkage between the actions specified in the BMAP and activities regulated by DEP. In creating this more direct link between actions required in the BMAP and potentially identical actions required through a permit, the bill provides for chapter 120 challenges to only one of the two identical actions (either when it is required in the BMAP or in the permit, but not both). This provision covers only those issues that are identical in the BMAP and the permit and does not apply to other pollutants of concern or other regulatory requirements.

Consistent with the existing provisions in s. 403.067, F. S., non-point sources are still managed through a non-regulatory, incentive-based program. However, in order to promote the same predictable pollution reduction performance among non-regulated entities as exists for permitted entities, the bill establishes the following:

- Non-regulated activities are not eligible for the incentives associated with the presumption of compliance with state water quality standards and the waiver of liability for pollution if adopted best management practices are not properly and timely implemented.
- Non-regulated activities that choose not to implement adopted best management practices must demonstrate compliance with applicable water quality standards.
- DEP is authorized to take enforcement actions where a party fails to properly implement best management practices or provide data demonstrating compliance with water quality standards.

The bill also requires state, regional, or local governments that regulate urban nonpoint sources of pollution to adopt the requirements of any BMAP into their regulatory programs.

The bill provides that a nonpoint pollutant source discharger included in a basin management action plan must demonstrate compliance with the established pollutant reductions by either implementing the appropriate best management practices or by conducting water quality monitoring. A nonpoint source discharger may be subject to enforcement action by DEP or a water management district based upon a failure to implement these responsibilities.

The bill requires that provisions of a basin management action plan must be included in subsequent National Pollutant Discharge Elimination System (NPDES) permits, and prohibits DEP from imposing limits or conditions 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 basin management action plan.

NPDES permits issued between the time a TMDL is established and a BMAP is adopted will contain a compliance schedule allowing time for the BMAP to be developed. Once the BMAP is developed, the permits 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 DEP may include an individual allocation in the permit.

The bill clarifies that DEP is to coordinate the implementation of the TMDLs through existing water quality protection programs.

#### BMP Verification Process

The bill requires DEP to use best professional judgment in verifying the effectiveness of best management practices in achieving desired levels of pollution reduction. Should water quality problems persist in spite of implementing provisions of a basin management action plan, DEP, a water management district, or the Department of Agricultural and Consumer Services must re-evaluate the best management practice or other measure and revise the plan if necessary.

#### Pollutant Trading

Pollutant trading is a concept based on the fact that sources in a watershed may confront very different costs to control the same pollutant. A pollutant trading program allows entities facing higher pollution control costs to meet pollution reduction obligations by purchasing environmentally equivalent, or superior, reductions from other sources at lower costs, and thus achieving equal or better water quality protection at a lower overall cost. The bill requires DEP to submit a report to the Governor and the Legislature by November 30, 2006, containing recommendations for proposed rules on pollutant trading. The recommendations are to be developed in cooperation with a technical advisory committee.

The bill will take effect upon becoming law.

#### C. SECTION DIRECTORY:

Section 1. Amends paragraph (d) of subsection (2) and subsections (6) – (8) and (11) of s. 403.067, F.S., related to the establishment and implementation of total maximum daily loads; authorizes the Department of Environmental Regulation to adopt phased total maximum daily loads; provides for the development of basin management action plans; authorizes DEP to adopt rules for the permitting of such plans; requires DEP to submit a report to the Governor and the Legislature prior to adopting rules for pollutant trading.

Section 2. Amends s. 373.4595(3)(c), F.S., to conform a cross reference relating to the Lake Okeechobee Protection Program.

Section 3. Amends s. 570.085, F.S., to conform a cross reference relating to the Department of Agriculture and Consumer Services and agricultural water conservation.

Section 4. The bill will take effect upon becoming law.

## **II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

#### A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

See Fiscal Comments below.

#### B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

See Fiscal Comments below.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

See Fiscal Comments below.

D. FISCAL COMMENTS:

The bill itself has no fiscal impact. However, the Department of Environmental Protection (DEP) estimates that annual costs for administering the TMDL program which is already authorized in statute would be between \$2.5 and \$4 million. These costs would be for contracting with consultants, academic institutions, and other contractors on the TMDL program. DEP anticipates that expenditures for the TMDL program in the early years of the program would be at the lower end of the estimated cost range above and would increase each subsequent year as the geographical scope of the program expands.

In terms of a fiscal impact upon local governments and the private sector, DEP recognizes that estimating costs to local governments and the private sector is difficult. Using TMDL model and cost projections developed by consultants (Science Applications International Corporation), DEP estimates that the combined total costs to local governments and the private sectors for implementing the TMDL program over the next 20 years to be \$312 million. Others have estimated that the fiscal impacts on local governments alone will range from \$1 and \$5 billion to build stormwater treatment facilities to retrofit urbanized areas. These estimates do not include the costs of reducing discharges from other nonpoint sources such as agricultural runoff and septic tanks, and reducing discharges from point source such as domestic and industrial wastewater treatment facilities.

### III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable because the bill does not appear to: require cities or counties to spend funds or take actions requiring the expenditure of funds; reduce the authority that cities and counties have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with cities or counties.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill allows the Department of Environmental Protection to promulgate rules relating to interim measures for phased TMDLs and the administration of funds to implement basin management action plans.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None

#### IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES

On April 20, 2005, the State Resources Council adopted a strike-all amendment to HB 1839. The strike-all amendment makes the following changes to the bill:

- It provides that where phased TMDLs are proposed, the DEP must provide a detailed statement of facts and circumstances explaining why the data are inadequate so as to justify a phased TMDL.
- It provides that a basin management action plan must integrate the appropriate management strategies available to the state through existing water quality protection programs to achieve the TMDL.
- It provides that a basin management action plan 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.
- It clarifies that DEP is to coordinate the implementation of the TMDLs through existing water quality protection programs.
- It prohibits DEP from imposing limits or conditions 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 basin management action plan.
- It provides that a nonpoint pollutant source discharger included in a basin management action plan must demonstrate compliance with the established pollutant reductions by either implementing the appropriate best management practices or by conducting water quality monitoring. A nonpoint source discharger may be subject to enforcement action by DEP or a water management district based upon a failure to implement these responsibilities.

An amendment to the strike-all amendment was also adopted by the Council. This amendment resolves the issue of how to deal with individual NPDES permits in the interim period between the time a TMDL is adopted and the basin management action plan is adopted:

- The initial TMDL establishes general allocations between point sources and nonpoint sources, but detailed, individual allocations are not established until the basin management action plan is adopted.
- The amendment provides that NPDES permits issued in the interim will contain a compliance schedule allowing time for the plan to be developed. Once the plan is developed, such permits will be reopened and individual allocations consistent with the plan will be established in the permit. The timeframe for this to occur cannot exceed 5 years.
- The amendment also provides that NPDES permittees may request an individual allocation during the interim and authorizes DEP to include an individual allocation in the permit.

This analysis has been revised to reflect the strike-all amendment and the amendment to the strike-all amendment.