SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

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

SPONSOR: Natural Resources Committee and Senator Laurent

SUBJECT: Lake Okeechobee

DATE:	March 21, 2000	REVISED:			
1. Gee 2.	ANALYST	STAFF DIRECTOR Voigt	REFERENCE NR AG FP	ACTION Favorable/CS	
4. 5.					

I. Summary:

This bill provides for management of the Lake Okeechobee watershed through the phased implementation of phosphorus load reductions; construction of stormwater treatment areas, reservoir-assisted stormwater treatment areas, and other detention/treatment facilities within priority basins; comprehensive evaluation and monitoring of the water quality in the Lake Okeechobee Watershed; development of "best management practices" (BMPs) for non-point agricultural and non-agricultural sources within the watershed; identification of invasive exotic species and implementation of measures to protect the native flora and fauna; and an internal phosphorus load removal feasibility study and subsequent implementation of measures to reduce the internal phosphorus loads. It also provides for permitting of structures discharging to Lake Okeechobee, as well as for water quality treatment/detention facilities included in the Lake Okeechobee Watershed.

The bill creates an exemption from regulation under Part IV of Chapter 373, F.S., for environmental restoration or water quality improvement measures on agricultural lands if such measures have minimal or insignificant individual or cumulative adverse impacts on the water resources of the state. The same exemption is created for interim measures or BMPs adopted pursuant to ss. 403.067, F.S., that are by rule designated as having minimal individual or cumulative adverse impacts on the water resources of the state.

This bill amends ss. 403.067, 373.4595, and 373.406 of the Florida Statutes.

II. Present Situation:

Overview

The Lake Okeechobee Action Plan, published December 6, 1999, and developed by the Lake Okeechobee Issue Team of the South Florida Ecosystem Restoration Working Group, provides an overview of the problems facing Lake Okeechobee, as well as strategies and specific

recommendations for addressing each of the major problems identified in the report. Current conditions within the lake are attributed to three major issues:

- Watershed phosphorus loading;
- Internal phosphorus loading; and
- Littoral vegetation and high water levels.

Despite past and continuing efforts to reduce phosphorus loading in the watershed, the current loading to the lake is considered in excess of the amount of phosphorus that even a healthy, functioning Lake Okeechobee could be expected to assimilate without adverse impacts. Although the relative contributions of individual sources have not been allocated, agricultural activities are believed to be the major contributor of phosphorus to the lake. In 1987, the Department of Environmental Protection (Department) adopted the "Dairy Rule" in order to reduce the discharge of phosphorus from dairy farms and, in 1989, the District adopted the "Works of the District Rule" to regulate phosphorus discharges from all land uses except dairies. Implementation of these rules, as well as the "Dairy Buy-Out Program," resulted in a period of declining phosphorus loads. However, in recent years this trend has reversed and loads have increased through most of the 1990's.

The problem of excessive watershed phosphorus loading is compounded by excessive amounts of phosphorus within the lake itself. As a result it is generally acknowledged that controlling external phosphorus loading alone will not result in the recovery of the lake unless steps are taken to reduce the lake's internal load. One potential means of addressing the internal load is by sediment dredging, though considerable research will be needed to determine if such dredging is even feasible.

Due to both expansion of exotic and nuisance vegetation, as well as water level changes, the native littoral vegetation community of Lake Okeechobee has been adversely impacted. District scientists believe that the water quality and water level problems serve to compound the adverse effects that either would cause in the absence of the other. Thus, an overall strategy for restoring and protecting the littoral vegetation community should include eradication and control of exotic and nuisance species, as well as water level and water quality changes.

Lake Okeechobee Discharge Structure Permits

In May 1999, it became widely known that a number of District structures discharging to Lake Okeechobee had been operating without a valid permit since 1988, when the permit in effect at that time expired. Although the structures continued to be subject to the conditions of the expired permit, there was some concern that they were "unpermitted." The Department and District have been attempting to resolve this permitting issue, but to date the status of the permit remains largely unchanged.

Total Maximum Daily Loads (TMDLs)

Chapter 99-23, L.O.F., the Florida Watershed Restoration Act, provided for the restoration of Florida's water through the establishment and implementation of TMDLs. The Department is required to assess the water quality of surface waters, identify surface waters or segments that do not meet water quality standards, and establish TMDLs for these "impaired" surface waters or

segments. Subsequent to the establishment of the TMDL, the total load is to be allocated to the various point and non-point sources within the applicable watershed.

Pursuant to the settlement of a lawsuit regarding TMDLs (Florida Wildlife Federation et al v. Carol Browner et al., Case No. 98-356-CIV-Stafford), the Environmental Protection Agency (EPA) was required by December 31, 1999, to approve a state established TMDL for Lake Okeechobee; otherwise, EPA was required to propose the TMDL. The Department did not meet the court-imposed deadline and EPA has proposed the TMDL, which is currently subject to a public comment period. Meanwhile, the Department has initiated its own process for establishing the TMDLs. As these developments have occurred, a number of issues regarding the establishment and implementation of TMDLs have arisen, including the definition of "assimilate," the Department's authority to allocate loads to broad categories of point and non-point sources, the role of the water management districts, authorization for the use of basin plans to implement TMDLs, and to what degree the Department has discretion regarding the development of basin plans.

III. Effect of Proposed Changes:

Section 1. Section 373.4595, F.S., is substantially reworded to provide a series of Legislative findings regarding the importance of Lake Okeechobee to the state, the adverse consequences of manmade changes to its watershed, and the need to improve the hydrology and water quality of the lake to protect the Everglades. Among others, the Legislature specifically finds that phosphorus loads from the Lake Okeechobee watershed have contributed to excessive phosphorus levels in Lake Okeechobee and downstream receiving waters and that a reduction in levels of phosphorus will benefit the ecology of these systems. The excessive levels of phosphorus have also resulted in an accumulation of phosphorus in the sediments of Lake Okeechobee. If not removed, internal phosphorus loads from the sediments are expected to delay responses of the lake to external phosphorus reductions.

The Legislature further finds that the Lake Okeechobee phosphorus loads set forth in the South Florida Water Management District's Technical Publication 81-2 represent an appropriate basis for the initial phase of phosphorus load reductions to Lake Okeechobee and that subsequent phases of phosphorus load reductions shall be determined by the TMDLs established in accordance with s. 403.067, F.S.

Further findings indicate that sufficient research has been conducted and sufficient plans developed to immediately initiate the first phase of a program to address the hydrology and water quality problems in Lake Okeechobee and downstream receiving waters. It is the intent of the Legislature to achieve and maintain compliance with water quality standards in Lake Okeechobee and downstream receiving waters in Lake Okeechobee and downstream receiving waters in Lake Okeechobee and downstream receiving waters through a phased, comprehensive, and innovative protection program to reduce both internal and external phosphorus loads to Lake Okeechobee through immediate actions to achieve the phosphorus load reductions set forth in Technical Publication 81-2 and long term solutions based upon the TMDLs established in accordance with s. 403.067, F.S. This program shall be watershed based, shall provide for consideration of all potential phosphorus sources, and shall include research and monitoring, development and implementation of best management practices, refinement of existing regulations, and structural and nonstructural projects, including public works.

This section provides definitions for the following terms:

- Best management practice
- Coordinating agencies
- Corps of Engineers
- Department
- District
- District's WOD program
- Lake Okeechobee Construction Project
- Lake Okeechobee Protection Plan
- Lake Okeechobee Watershed
- Lake Okeechobee Watershed Phosphorus Control Program
- Project component
- Restudy
- Total maximum daily load

The bill provides for immediate implementation of the Lake Okeechobee Protection Program, the purpose of which is twofold. First, the program will serve to coordinate and expedite existing programs and projects to achieve initial phosphorus load reductions. Second, the program provides for planning, research, and monitoring that will serve to create a long-term framework for achieving subsequent phosphorus load reductions.

The Lake Okeechobee Protection Program will be implemented through a number of components, each of which requires that specific actions be accomplished by dates established in the bill. A summary of these components follows:

- <u>The Lake Okeechobee Protection Plan</u> is required to be completed by January 1, 2004, and will provide an implementation plan for subsequent phosphorus load reductions beyond those achieved through initial implementation of the program. The plan is to be based upon relevant information resulting from the other components of the program and completed in accordance with ss. 373.451-373.459, F.S., (Surface Water Improvement and Management SWIM provisions).
- <u>The Lake Okeechobee Construction Program</u> shall consist of stormwater treatment areas, reservoir-assisted stormwater treatment areas, and other detention/treatment facilities within the Lake Okeechobee watershed. Phase I will consist of projects within the priority basins identified in the Lake Okeechobee Action Plan. By January 1, 2004, a plan will be completed for Phase II of the construction program. Based upon an evaluation of any further phosphorus reductions necessary to achieve the program's objectives, additional facilities would potentially be constructed within both the priority basins and other basins.
- <u>The Lake Okeechobee Watershed Phosphorus Control Program</u> will provide a comprehensive approach to reducing phosphorus loads. BMPs shall be developed for agricultural non-point sources and non-agricultural non-point sources of phosphorus within the watershed. The BMPs are to be implemented in accordance s. 403.067, F.S., (the TMDL provisions), on an expedited basis. The program will also address domestic wastewater

disposal, land application of domestic waste residuals, and alternative nutrient reduction technologies.

- <u>The Lake Okeechobee Research and Water Quality Monitoring Program</u> will comprehensively evaluate the water quality in the Lake Okeechobee Watershed and provide ongoing monitoring.
- <u>The Lake Okeechobee Exotic Species Control Program</u> will identify invasive exotic species and implement measures to protect the native flora and fauna.
- <u>The Lake Okeechobee Internal Phosphorus Management Program</u> will conduct an internal phosphorus load removal feasibility study and subsequently implement measures to reduce the internal phosphorus loads.

The bill requires an annual progress report. Each January 1, beginning in 2001, the district must submit to the Governor, the President of the Senate, and the Speaker of the House of Representatives annual progress reports regarding implementation of s. 373.4595, F.S. The annual report will include a summary of water quality conditions in Lake Okeechobee and the Lake Okeechobee watershed and the status of the Lake Okeechobee Construction Project. The district will prepare the report in cooperation with the other coordinating agencies.

This bill also provides for permitting of structures discharging to Lake Okeechobee as well as for facilities included in the Lake Okeechobee Construction Project. Such permits are to be required in lieu of all other permits under Chapters 373 and 403, F.S., except for National Pollutant Discharge Elimination System (NPDES) permits. The intent is to streamline and consolidate permit requirements and to minimize any delays in the construction of detention/treatment facilities in the Lake Okeechobee watershed.

Finally, the section provides that nothing in this section may be construed to modify any existing state water quality standard.

In addition, nothing in this section is to be construed to restrict the authority otherwise granted to agencies pursuant to chapters 373 and 403, F.S., and provisions of this section shall be deemed supplemental to the authority granted to agencies pursuant to chapters 373 and 403, F.S.

Section 2. Section 373.406, F.S., is amended to create an exemption from regulation under Part IV of Chapter 373, F.S., for environmental restoration or water quality improvement measures on agricultural lands if such measures have minimal or insignificant individual or cumulative adverse impacts on the water resources of the state. The same exemption is created for interim measures or BMPs adopted pursuant to s. 403.067, F.S., that are by rule designated as having minimal individual or cumulative adverse impacts on the water resources of the state.

Section 3. Section 403.067, F.S., is amended to make a number of technical and clarifying changes that are consistent with the process the Department has implemented for establishing the TMDL for Lake Okeechobee. These provisions include:

• Clarification of the process for calculating and allocating TMDLs;

- Extending the deadline on the Department's report to the Legislature on TMDL allocation until February 1, 2002 (1 year extension); and
- Technical and clarifying changes to the process for implementing TMDL allocations.

Section 4. This section authorizes the District to manage lands it acquires for the Kissimmee River Headwaters Revitalization Project in a manner consistent with surrounding parks and preserves owned by the state. In addition, the District is encouraged to acquire less-than-fee title for such lands, provided that the overall project objectives are met and that Everglades restoration objectives are advanced. In determining the fair market value of lands to be acquired from willing sellers in the upper Kissimmee Basin for such purposes, all appraisals of such lands may consider income from the use of the property for permanent plantings. The derived value may be deemed attributable to the real estate.

Section 5. The act will take effect upon becoming a law.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

There is no specific direct impact on the private sector.

C. Government Sector Impact:

The Department of Agriculture and Consumer Services estimates that it will need \$440,262 in FY 2000-2001 and \$345,396 in subsequent years to implement this bill. There is no appropriation in the bill for this purpose.

The District reports that it would need \$4,250,000 in FY 2001 to carry out its responsibilities under the program; \$19,600,000 would be needed for such purposes in FY 2002 and

thereafter. The District also reports that it would need 30 FTEs to implement the program in FY 2001 and an additional 34 thereafter. The District would attempt to implement the program by reassigning existing positions; if that were not entirely possible, the District would have to contract for some services. This bill does not provide funding for these needs.

This bill requires a number of significant actions to be accomplished in the near future. These include:

- 1. By January 1, 2001, SFWMD shall obtain permits and complete construction of two isolated wetland restoration projects.
- 2. By March 1, 2001, the coordinating agencies shall develop an interagency agreement that assures the development of best management practices to complement existing regulatory programs.
- 3. By October 1, 2000, the DACS shall initiate rule development for interim measures, best management practices and other measures necessary for Lake Okeechobee phosphorus load reductions.
- 4. By March 1, 2001, the coordinating agencies shall develop an interagency agreement that assures the development of best management practices for nonpoint nonagricultural sources that complement existing regulatory programs.
- 5. By January 1, 2001, the DEP and SFWMD are to work with IFAS to develop appropriate nutrient application rates for nonagricultural soil amendments.
- 6. DEP by July 1, 2001, shall require all entities disposing of domestic wastewater residuals within the Lake Okeechobee watershed to develop a plan to limit applications.
- 7 By July 1, 2001, DACS shall initiate rulemaking requiring entities within the Lake Okeechobee watershed which apply to land animal manure to develop nutrient management plans that limit phosphorus.
- 8. By January 1, 2001, the district shall establish a Lake Okeechobee Research and Water Quality Monitor Program.

It's not clear whether any provision has been made for funding any of the above activities in the Senate version of the General Appropriation Act proposed for FY 2000-2001.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Amendments:

None.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.