

# SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

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

Prepared By: Environmental Preservation Committee

BILL: SB 2586

INTRODUCER: Senator Bennett

SUBJECT: Caloosahatchee-St. Lucie Rivers Corridor Advisory Council

DATE: April 11, 2006

REVISED: 04/18/06

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Molloy	Kiger	EP	Fav/2 amendments
2.			AG	
3.			GO	
4.			GA	
5.				
6.				

## Please see last section for Summary of Amendments

- Technical amendments were recommended
- Amendments were recommended
- Significant amendments were recommended

### I. Summary:

This bill creates the 17-member Caloosahatchee-St. Lucie Rivers Advisory Council under the Department of Environmental Protection to review the operation and management of Lake Okeechobee and the associated discharges from the lake, and to make recommendations to address or mitigate the impacts of high level discharges from the lake on the receiving waters of the Caloosahatchee and St. Lucie Rivers and their respective estuaries.

This bill does not designate a specific statutory cite for the creation of the Advisory Council.

### II. Present Situation:

#### Lake Okeechobee<sup>1</sup>

Lake Okeechobee (Lake) and its watershed are major components of the South Florida Kissimmee-Okeechobee-Everglades ecosystem. The Lake is the second largest freshwater body of water located entirely within the continental United States. The Lake serves multiple purposes and functions including recreational and commercial fishing, a source of irrigation for the

<sup>1</sup> "About Lake Okeechobee" at [http://www.sfwmd.gov/org/wrp/wrp\\_okee/2\\_wrp\\_okee\\_info/2\\_wrp\\_okee\\_about.html](http://www.sfwmd.gov/org/wrp/wrp_okee/2_wrp_okee_info/2_wrp_okee_about.html)

regional agricultural community, a major supplier of water for the Everglades, and a drinking water source for cities and towns surrounding the Lake.

Throughout the 1900's, much of the land around the Lake was converted to agriculture use with dairy farms and cattle ranches as the primary users on the north side of the Lake, and sugar cane and vegetable farms as the primary users on the south side of the Lake. Farming activities on both sides of the Lake have rapidly increased the amount of nitrogen and phosphorus discharged to the Lake, and have resulted in a large amount of phosphorus settling over the bottom of the Lake in the form of soft organic mud.

Over the last few decades, numerous programs and projects have been implemented for the purpose of reducing nutrient loads in the Lake. However, due to the Lake's normally shallow depth (an average of 9 feet), the mud is mixed into the water every time strong winds blow across the surface of the Lake, keeping phosphorus levels high and allowing the internal phosphorus load to reach the same level as the external loads coming from the surrounding watershed into the Lake.

### **Conditions and Release of Water from Lake Okeechobee**

Section 373.4595(5), F.S., prohibits the South Florida Water Management District from diverting water from Lake Okeechobee to the St. Lucie River, the Indian River Estuary, the Caloosahatchee River and its estuary, or the Everglades National Park "in such a way that the state water quality standards are violated, that the nutrients in such diverted waters adversely affect indigenous vegetation communities or wildlife, or that fresh waters diverted to the St. Lucie River or the Caloosahatchee or Indian River estuaries adversely affect the estuarine vegetation or wildlife, unless the receiving waters will biologically benefit by the diversion. However, diversion of waters from the Lake is permitted when an emergency is declared by the South Florida Water Management District if the Secretary of Environmental Protection concurs."

The South Florida Water Management District, in collaboration with the U.S. Army Corps of Engineers, has developed a "regulation schedule" for the Lake designed to provide floodwater storage capacity during the wet season and to supplement water supply during the dry season. However, when water levels are extremely high, water discharges are sent through the canals to the St. Lucie and Caloosahatchee Rivers and estuaries in order to prevent a breach of the Hoover Dike surrounding the Lake.

During August-October 2004, Lake Okeechobee received a large volume of water from 4 hurricanes which crossed the state during a six-week period. Water levels in the lake increased by about 6 feet, and the lake received 83 percent of its annual total phosphorus load. To prevent a catastrophic failure of the Hoover dike, discharges to the St. Lucie and Caloosahatchee Rivers were authorized. Related windy conditions re-suspended and distributed large amounts of phosphorus-laden sediments throughout the Lake causing significant reductions in the amount of light available to submerged aquatic vegetation and increasing the amount of blue-green algae in the Lake.

### **St. Lucie River**

The St. Lucie River and estuary watershed are located on the central coast of Florida with the watershed covering about 780 square miles. The St. Lucie River's headwaters lie between the

lands west of Ft. Pierce in St. Lucie County to near the north boundary of Jonathan Dickinson State Park in Martin County. The south fork of the St. Lucie River connects with the cross state Okeechobee Waterway built by the U.S. Army Corps of Engineers and completed in 1937.

The purpose of the Okeechobee Waterway is to provide a means for releasing water from the Lake when it reaches flood stage. As water is released, the accumulated pollutants in the discharged water, along with sediment from the banks of the waterway, all have negative effects on the water quality of the St. Lucie River. The estuarine environment is sensitive to freshwater releases, and these alterations have placed severe stress on the entire ecosystem. Extreme salinity fluctuations and ever-increasing inflows have contributed to major changes in the structure of the communities within the estuary, as seen by seagrass and oyster losses.<sup>2</sup>

### **Caloosahatchee River**

The Caloosahatchee River and Estuary are located on the southwest coast of Florida. The Caloosahatchee River connects Lake Okeechobee to the Caloosahatchee Estuary. The river, which was originally a shallow meandering stream, has gone through numerous dredging and re-channeling projects over a long period of time which have drastically altered the hydrology of the river. In the early 1930s, locks and water control structures were constructed on the river. Some of the locks act as salinity barriers since the river is composed of fresh water, entering from Lake Okeechobee, and salt water as it empties into the Gulf of Mexico.

### **Comprehensive Everglades Restoration Plan (CERP)**

The CERP is a plan which provides a framework to restore, protect, and preserve the water resources in central and south Florida, including the Everglades, through the capture, storage, and redistribution of water lost to tide, and the regulation of water quality, water quantity, timing and distribution. The CERP includes 16 counties, covers more than 18,000 square miles, and has at least 60 elements, and is expected to cost at least \$10 billion over the next 35 to 40 years. Major project components include surface water storage reservoirs, water preserve areas, underground water storage, treatment wetlands, wastewater reuse, and improved water conservation.

In the “2006 South Florida Environmental Report” prepared by the South Florida Water Management District, the District reported that more than 50 percent of the land necessary for CERP projects has been acquired, that 2005 expenditures for CERP projects were at \$260 million, and that 2006 anticipated expenditures for CERP are about \$442 million. The additional expenditures include the District’s Acceler8 initiative which was launched in October 2004 to expedite the construction and operation of 8 ecosystem restoration projects at a total cost of approximately \$1.5 billion.

### **Lake Okeechobee Protection Program**

The Lake Okeechobee Protection Program was created in 2000 to require that the South Florida Water Management District, the Department of Agriculture and Consumer Services, and the Department of Environmental Protection implement programs and projects that will restore the Lake and its watershed. The Program, established in s. 373.4595, F.S., consists of eight program components:

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<sup>2</sup> <http://www.sfwmd.gov/org/exo/mslsc/slr/index.html>

- The Lake Okeechobee Protection Plan, completed by the South Florida Water Management District in 2004, to implement phosphorus load reductions.
- The Lake Okeechobee Construction Project to improve the hydrology and water quality of Lake Okeechobee and the downstream receiving waters.
- The Lake Okeechobee Watershed Phosphorus Control Program to reduce phosphorus loading through improved management of phosphorus sources within the watershed.
- The Lake Okeechobee Water Research and Water Quality Monitoring Program.
- The Lake Okeechobee Exotic Species Control Program.
- The Lake Okeechobee Internal Phosphorus Management Program.
- Implementation of the Lake Okeechobee Protection Plan with joint establishment of funding priorities for projects and programs addressing the highest sources of phosphorous loading with the greatest potential for phosphorus load reductions.

### III. Effect of Proposed Changes:

**Section 1.** Designates the hydrologic basins of the Caloosahatchee River and its estuary, and the St. Lucie River and its estuary, including Lake Okeechobee, as the “Caloosahatchee-St. Lucie Rivers Corridor.”

Creates the 17-member Caloosahatchee-St. Lucie Rivers Corridor Advisory Council under the Department of Environmental Protection. Provides for appointment of members as follows:

- The Governor appoints the following five members and the chair of the Advisory Council:
  - A consumer.
  - A member with hydrologic experience within the Corridor and expertise in environmental engineering.
  - A member of the agriculture industry.
  - A member from an environmental group.
  - A member of the business or tourism community in Okeechobee, Martin, or Palm Beach counties.
- The President of the Senate appoints the following six members:
  - A local government representative in Lee County.
  - A member with hydrologic experience in the Corridor and expertise in hydrology.
  - A member of the agriculture industry.
  - A member from an environmental group.
  - A member from the business or tourism community in Lee or Charlotte counties.
  - A member of the Senate.
- The Speaker of the House of Representatives appoints the following six members:
  - A local government representative in Martin County.
  - A member with hydrologic experience in the Corridor and expertise in biology.
  - A member from the agriculture industry.
  - A member from an environmental group.
  - A member from the business or tourism community in Hendry or Glades counties.
  - A member of the House of Representatives.

Provides for the following:

- Appointments to the Advisory Council must be made no later than 30 days after the effective date of the bill.
- Members of the Advisory Council may receive per diem and travel expenses while carrying out the business of the Council.
- The first meeting of the Advisory Council must be held no later than 60 days after the effective date of the bill.
- The records and meetings of the Advisory Council are subject to the public records and public meetings provisions of chapter 112 and s. 286.011, F.S.
- The Advisory Council may be staffed by an executive director and other personnel selected and hired by the Department of Environmental Protection outside of the Career Service System provisions of chapter 110, F.S.
- The Department of Environmental Protection may employ staff and consultants as necessary to assist the Advisory Council in fulfilling its responsibilities.
- Requires the South Florida Water Management District and the Department of Environmental Protection to appoint a liaison to the Advisory Council.

Establishes the duties of the Advisory Council as follows:

- The Advisory Council must meet at least 5 times after August 1, 2006.
- The Advisory Council must hold a minimum of 5 public hearings within the Corridor to receive public comments and information.
- The Advisory Council must review the operation and management of Lake Okeechobee and associated discharges from the lake to formulate specific recommendations on:
  - Scientifically viable, economically feasible projects, programs and regulations to address or mitigate the impacts of high level discharges from Lake Okeechobee upon the receiving waters of the Caloosahatchee and St. Lucie Rivers, and their respective estuaries.
  - Ongoing projects and plans authorized under the Lake Okeechobee Protection Program and the Comprehensive Everglades Restoration Plan.
  - Environmentally and economically feasible projects to remove accumulated sedimentation from Lake Okeechobee.
  - Alternative treatment strategies, projects, best management practices, and funding sources to more effectively manage the Corridor's hydrology for the purpose of reducing adverse ecological impacts from lake discharges upon the receiving waters.
  - Long-term funding for implementation of the projects and programs identified in a report.
- The Advisory Council must prepare and submit a report to the Legislature prior to the 2007 Regular Session with recommendations for implementation of projects and strategies to mitigate the effects of high discharges from Lake Okeechobee upon the described basins.
- The Advisory Council must prepare and submit an additional report to the Legislature no later than March 1, 2007, containing recommendations to be implemented by the Legislature and the Governor which will mitigate the ecological effects on the Corridor and stabilize the effect of high discharges from Lake Okeechobee upon the tourist economies of all of South Florida.

Provides that the Advisory Council shall expire on April 1, 2007.

**Section 2.** Provides that the bill shall take effect upon becoming a law.

**IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

This bill 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. Economic Impact and Fiscal Note:**

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

Advisory Council recommendations implemented by the Legislature and the Governor relating to the mitigation of ecological effects of high discharges from Lake Okeechobee upon the tourist economy of all of South Florida may result in positive financial benefits to those areas affected by lake discharges to the Caloosahatchee and St. Lucie Rivers and their respective estuaries.

C. Government Sector Impact:

The fiscal impact of the bill on the Department of Environmental Protection is indeterminate. The bill directs the department to provide resources and staff for the Advisory Council but does not appropriate funds or positions. It is expected that the Advisory Council's responsibilities will require both administrative assistance and environmental expertise making it necessary for the department to assign one administrative assistant and one environmental specialist to staff the Advisory Council.

Based on department estimates, the non-salary costs of staging a minimum of five public hearings will range between \$60,000 - \$70,000, and includes staff travel to and from meetings, lodging, contractor and consultant fees, and facility rental.

**VI. Technical Deficiencies:**

The bill requires the Advisory Council to formulate specific recommendations for ongoing projects and plans authorized pursuant to the Lake Okeechobee Protection Plan and the Comprehensive Everglades Restoration Plan under s. 373.4592, F.S.

The Lake Okeechobee Protection Plan is established under s. 373.4595, F.S., and the Comprehensive Everglades Restoration Plan is established under ss. 373.1501 and 373.1052, F.S. The Everglades Construction Project is authorized under s. 373.4592, F.S.

**VII. Related Issues:**

None.

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

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## VIII. Summary of Amendments:

**Barcode #050898 by Environmental Preservation Committee:**

Technical amendment to correct references to the Lake Okeechobee Protection Program and the Comprehensive Everglades Restoration Plan.

**Barcode #863706 by Environmental Preservation Committee:**

Requires the Caloosahatchee-St. Lucie Rivers Advisory Council to include recommendations on the feasibility of an above ground reservoir to be constructed, operated, and maintained for the storage of high level discharges from Lake Okeechobee to the Caloosahatchee River in a report due to the Legislature prior to the 2007 Regular Session.

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