**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 Environmental Preservation and Conservation Committee

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| BILL: | SB 1540 |
| INTRODUCER: | Senator Hays |
| SUBJECT: | Restoration of Lake Apopka |
| DATE: | February 10, 2012 REVISED: |

| | ANALYST | STAFF DIRECTOR | REFERENCE | ACTION |
|---|---|---|---|---|
| 1. | Uchino | Yeatman | EP | **Pre-meeting** |
| 2. | | | CA | |
| 3. | | | BC | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |

## I. Summary:

The bill requires numerous state agencies, special districts and councils, and local governments to collaborate on a report for the Legislature on the Lake Apopka restoration.

This bill creates an unnumbered section of law.

## II. Present Situation:

Lake Apopka is the state's fourth largest lake and is located 15 miles northwest of Orlando. The lake is the headwaters of the Harris Chain of Lakes and is fed by a natural spring, rainfall and stormwater runoff. Water from Lake Apopka flows through the Harris Chain of Lakes into the Ocklawaha River and eventually into the St. Johns River. The lake was once a world-class bass fishery, but years of abuse caused the lake to be named Florida's most polluted large lake. The St. Johns River Water Management District (SJRWMD) is overseeing the restoration of Lake Apopka.[1]

### The Degradation of Lake Apopka

The beginning of the lake's decline began with the completion of the Apopka-Beauclair Canal, which lowered lake levels by one-third. During the 1940s, 20,000 acres of the lake's northern marshlands were drained to expose rich soil for farming. The phosphorus-laden agricultural runoff continued until the late 1990s.[2] Over time, as the area was further developed, pollutants

[1] St. Johns River Water Management District, *Lake Apopka*, http://www.sjrwmd.com/lakeapopka/ (last visited Feb. 10, 2012).
[2] *Id*.

entered the lake's ecosystem from various sources. In addition to phosphorus runoff, pesticide usage, treated wastewater discharges from shoreline communities prior to the 1980s, discharges from citrus processing plants prior to the 1980s,[3] and two pesticide Superfund sites continued to pollute Lake Apopka.[4] However, by the 1960s, Lake Apopka was already known as Florida's most polluted large lake.[5]

The continual discharge of large quantities of nutrients into the lake led to a chronic algal bloom, and turned the water a pea green color. The cloudy water prevented sunlight from reaching underwater vegetation critical to fish and wildlife habitat and native plants and animals died off in large numbers. The bass population in the lake has significantly been reduced and is replaced by gizzard shad.[6]

**Restoration Activities for Lake Apopka**

The Lake Apopka Restoration Act of 1985[7] and the Surface Water Improvement and Management Act, known as SWIM,[8] set in motion restoration activities for the lake. Then, in 1996, the Legislature enacted the Lake Apopka Improvement and Management Act which specifically provides for restoration of the Lake Apopka Basin through acquisition of the land and facilities in agricultural production to reduce phosphorus pollution to the lake.[9] The intent of the Legislature was to provide for a fair and equitable program of acquisition of the lands and facilities, with the SJRWMD tasked with buying the land.

There are four primary goals for the Lake Apopka restoration:[10]

- Reduce phosphorus loading;
- Remove phosphorus and other suspended sediments;
- Restore biological processes, including removing gizzard shad; and
- Create more natural lake shorelines, habitats and water level fluctuations.

Historically, more than 85 percent of the phosphorus loading to the lake was from farms along the northern rim. As of 2001, the SJRWMD and the U.S. Department of Agriculture purchased almost all of the farms to allow for restoration.

The Lake Apopka Improvement and Management Act authorized the SJRWMD to limit phosphorus loading to the lake. Pursuant to this authorization, the SJRWMD set an annual limit of 15.9 metric tons, which represents a 75 percent reduction from 1989–1994 levels. This goal was later expressed as a total maximum daily load for the lake, which has a goal of attaining an

[3] *Id*.
[4] Environmental Justice Resource Center at Clark Atlanta Univ., *Poisoned Communities Tell EPA to Address Legacy of Unequal Protection*, http://kyenvironmentalfoundation.org/ejrc10_27_09.html (last visited Feb 10, 2012) (The Tower Chemical Company Superfund site and the Drum Chemical Company Superfund site are only partially remediated).
[5] Mary Jane Angelo, *Stumbling Toward Success: A Story of Adaptive Law and Ecological Resilience*, 87 Neb. L. Rev. 967 (2008), *available at* http://digitalcommons.unl.edu/nlr/vol87/iss4/3 (last visited Feb, 10, 2012).
[6] *Supra* note 1.
[7] *See* ch. 85-147, Laws of Fla.
[8] *See* ch. 87-97, ss. 1-6, Laws of Fla.
[9] *See* ch. 96-207, Laws of Fla.
[10] *Supra* note 1.

in-lake total phosphorus concentration of 55 parts per billion.[11] Restoration of wetlands, lake habitat, soil inversion and remediation, and applying soil amendments will help trap and limit release of phosphorus once these former farmlands are flooded. In addition, the SJRWMD is harvesting gizzard shad, which accumulates phosphorus and nitrogen in their bodies. Through the fall of 2011, 18.5 million pounds of gizzard shad have been removed. This equates to removing 129,000 pounds of phosphorus and 387,000 pounds of nitrogen from the lake.[12]

**Lake Apopka Summit – 2011**

On December 14, 2011, Senator Alan Hays, Representative Bryan Nelson and Lake County Commission Sean Parks sponsored the first Lake Apopka Restoration Summit. Other members of the Legislature, representatives from local governments and many other stakeholders attended to focus ongoing restoration efforts.[13] Presentations were made by the SJRWMD, Department of Environmental Protection (DEP), Florida Fish and Wildlife Conservation Commission (FWC), Lake County Water Authority, the University of Florida and the Harris Chain of Lakes Restoration Council.

## III. Effect of Proposed Changes:

The bill directs the DEP, SJRWMD, FWC, Zellwood Drainage and Water Control District, Lake County Water Authority, Harris Chain of Lakes Restoration Council, and other local governmental entities within certain jurisdictional boundaries state to collaborate to create a report for the Legislature.

The bill requires the report to:

- Provide the status of the improvement and management of Lake Apopka, as required by s. 373.461, F.S.;
- Make recommendations for future restoration efforts; and
- Specify and account for all funds received for the restoration of Lake Apopka.

It is due to the President of the Senate, Speaker of the House of Representatives and the Governor by January 1, 2013.

The bill specifies the act is effective upon becoming a law.

## IV. Constitutional Issues:

### A. Municipality/County Mandates Restrictions:

None.

[11] *Id*.
[12] *Id*.
[13] SJRWMD, *Stakeholders brought together at Lake Apopka Summit*, http://blog.floridaswater.com/2011/12/stakeholders-brought-together-at-lake.html (last visited Feb. 10, 2012).

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:

None.

C. Government Sector Impact:

The entities required to collaborate to create the report should all be able to absorb any costs with 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.)

None.

B. Amendments:

None.