HOUSE OF REPRESENTATIVES STAFF FINAL BILL ANALYSIS

BILL #: SB 2516 Water Storage North of Lake Okeechobee
SPONSOR(S): Appropriations
TIED BILLS: **IDEN./SIM. BILLS:**

FINAL HOUSE FLOOR ACTION: 118 **Y's** 0 **N's** **GOVERNOR'S ACTION:** Approved

SUMMARY ANALYSIS

SB 2516 passed the House on April 30, 2021.

The bill requires the South Florida Water Management District (SFWMD), in partnership with the U.S. Army Corps of Engineers (corps), to expedite the implementation of the Lake Okeechobee Watershed Restoration Project (LOWRP). Specifically, the bill requires the SFWMD to:

- Request the corps to seek expedited congressional approval of the LOWRP.
- Execute a project partnership agreement with the corps immediately following approval.
- Expedite implementation of the aquifer storage and recovery (ASR) science plan developed by the SFWMD and the corps.
- Expedite implementation of the watershed ASR features of the LOWRP by the following dates:
    - By August 1, 2021, construct or contract for exploratory and monitoring wells to evaluate site suitability for ASR in the Kissimmee River and Taylor Creek/Nubbin Slough Basins.
    - By January 30, 2022, reactivate the existing ASR system in the Kissimmee River Basin.
    - By December 31, 2022, contract for exploratory and monitoring wells to evaluate site suitability for ASR on all other feasible LOWRP watershed ASR sites.
    - By March 30, 2027, ensure that all feasible ASR systems are operational on all currently or subsequently proposed sites that are determined to be suitable for the LOWRP ASR.
- Pursue expeditious implementation of the LOWRP wetland restoration features.
- Submit a report to the Legislature describing the SFWMD's compliance with the bill, including steps taken, plans for ongoing compliance, and specified updates related to the LOWRP implementation, by November 1, 2021.

The bill appropriates $50 million from the Land Acquisition Trust Fund to the SFWMD for the LOWRP.

The bill was approved by the Governor on June 2, 2021, ch. 2021-40, L.O.F., and became effective on that date.

I. SUBSTANTIVE INFORMATION

A. EFFECT OF CHANGES:

Background

Lake Okeechobee (lake) is the largest lake in the southeastern United States with a surface area of 730 square miles and is at the center of a much larger watershed, known as the Greater Everglades.[1] The Everglades once covered almost 11,000 square miles.[2] Just a century ago, water flowed down the Kissimmee River into the lake, then south through the vast Everglades to Florida Bay, the ultimate destination of uninterrupted sheetflow.[3] Because of efforts to drain the marshland for agriculture, development and flood control, the Everglades today is half the size it was a century ago.[4]

Central and Southern Florida Project

The Central and Southern Florida (C&SF) Project was first authorized by Congress in 1948. The CS&F Project extends from south of Orlando to the Florida Keys and is composed of a regional network of canals, levees, storage areas, and water control structures.[5] The purposes of the project include flood control, regional water supply, prevention of saltwater intrusion, water supply to Everglades National Park, fish and wildlife preservation, recreation, and navigation.[6]

The C&SF Project achieved its purposes by straightening 103 miles of the meandering Kissimmee River, expanding the Herbert Hoover Dike, constructing a levee along the eastern boundary of the Everglades to prevent flows into the southeastern urban areas, establishing the 700,000-acre Everglades Agricultural Area (EAA) south of the lake, and creating a series of Water Conservation Areas in the remaining space between the lake and Everglades National Park.[7] Decades of related water management projects followed. The U.S. Army Corps of Engineers (corps) and the South Florida Water Management District (SFWMD) are responsible for operating the C&SF Project today.

Comprehensive Everglades Restoration Plan

The impacts from the C&SF Project dramatically altered the Everglades ecosystem and created unintended adverse effects on the natural environment. In 2000, the U.S. Congress authorized the Comprehensive Everglades Restoration Plan (CERP) as a 50-50 cost-share partnership of the state and federal government for restoring, protecting, and preserving the greater Everglades ecosystem. The corps is the federal sponsor and the SFWMD is the sponsor for the state.

Damaging Discharges from Lake Okeechobee to Estuaries

The Herbert Hoover Dike (Dike) is a 143-mile earthen dam surrounding Lake Okeechobee. The corps is responsible for operating and maintaining the Dike. Internal erosion of the Dike can occur when seepage forces through an earthen embankment become strong enough to begin eroding the soil particles used to construct the embankment and/or foundation of the Dike.[8] The likelihood of this

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[1] SFWMD, *Lake Okeechobee*, available at https://www.sfwmd.gov/our-work/lake-okeechobee (last visited April 22, 2021).
[2] SFWMD, *Everglades*, available at https://www.sfwmd.gov/our-work/everglades (last visited April 22, 2021).
[3] *Id.*
[4] *Id.*
[5] Corps and SFWMD, *Central and Southern Florida Project Comprehensive Review Study, Final Integrated Feasibility Report and Programmatic Environmental Impact Statement*, 1-1 (April 1999), available at https://www.sfwmd.gov/sites/default/files/documents/CENTRAL_AND_SOUTHERN_FLORIDA_PROJECT_COMPREHENSIVE_REVIEW_STUDY.pdf (last visited April 22, 2021).
[6] *Id.*
[7] National Academies of Sciences, Engineering, and Medicine, *Progress Toward Restoring the Everglades: The Eighth Biennial Review - 2020*, available at https://www.nap.edu/catalog/25853/progress-toward-restoring-the-everglades-the-eighth-biennial-review-2020 (last visited April 22, 2021).
[8] Corps, *Herbert Hoover Dike Dam Safety Modification Study, Environmental Impact Study (June 2016)* available at https://www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnvironmentalDocs/Multiple%20Counties/

erosion happening and causing a Dike failure is dependent upon lake elevations.[9] To lessen the likelihood of a Dike failure, the corps monitors the water levels in the lake and release discharges of water from the lake east where it impacts the St. Lucie Estuary and west where it impacts the Caloosatchee Estuary. Freshwater discharges from the lake disturb the natural salinity levels in the estuaries and hurt sea grass and oyster beds. Discharges can also cause harmful algal blooms.

Aquifer Storage and Recovery

Aquifer storage and recovery (ASR) refers to the process of recharge, storage, and recovery of water in an aquifer.[10] Surface water is collected during times when water is plentiful, treated to meet applicable water standards, and then pumped into an aquifer through a well.[11] Water is stored in the well until needed for water supply, restoration, or other purposes.

Lake Okeechobee Watershed Restoration Project

The Lake Okeechobee Watershed Restoration Project (LOWRP) is part of CERP and is a planning effort being conducted by the corps and SFWMD to identify opportunities to improve the quantity, timing, and distribution of flows into the lake.[12] Key projects include:

- Increasing water storage capacity in the watershed, resulting in improved lake water levels;
- Restoring wetlands; and
- Improving water supply for existing water users.[13]

The LOWRP contains three CERP components:

- North of Lake Okeechobee Storage Reservoir to detain water during wet periods for later use during dry periods;
- Lake Okeechobee Aquifer Storage and Recovery to:
    - Provide additional regional storage while reducing both evaporation losses and the amount of land removed from current land use that would normally be associated with aboveground storage features;
    - Increase the lake's water storage capacity to better meet regional water supply demands;
    - Manage a portion of flows from the lake primarily to improve Everglades hydropatterns, and to meet supplemental water supply demands of the lower east coast;
    - Reduce flows from the lake to the St. Lucie and Caloosahatchee estuaries;
    - Maintain and enhance the existing levels of flood protection; and
- Lake Okeechobee Watershed Water Quality Treatment Facilities to attenuate peak flows before flowing into the lake and restore wetlands in the Lake Okeechobee watershed that have been ditched and drained for agricultural water supply and flood control.[14]

Land Acquisition Trust Fund

In 2014, Florida voters approved a constitutional amendment (Amendment One) to provide a dedicated funding source for water and land conservation and restoration. Article X, section 28 of the Florida Constitution requires that beginning July 1, 2015, for 20 years, 33 percent of the net revenues derived from the excise tax on documents must be deposited into the Land Acquisition Trust Fund (LATF).

Herbert_Hoover_Dike_Dam_Safety_Modification%20Study_FEIS_Main_Report.pdf?ver=2016-05-31-131919-377 (last visited April 26, 2021).

[9] *Id.*

[10] SFWMD, *Aquifer Storage and Recovery*, available at https://www.sfwmd.gov/our-work/alternative-water-supply/asr (last visited April 26, 2021).

[11] *Id.*

[12] SFWMD, *Lake Okeechobee Watershed Restoration Project*, available at https://www.sfwmd.gov/our-work/cerp-project-planning/lowrp (last visited April 26, 2021).

[13] *Id.*

[14] Corps, *Comprehensive Everglades Restoration Plan, Lake Okeechobee Watershed Restoration Project, Final Integrated Project Implementation Report and Environmental Impact Statement, August 2020* available at https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll7/id/15175 (last visited April 26, 2021).

Article X, section 28 of the Florida Constitution also requires that funds in the LATF be expended only for the following purposes:

- As provided by law, to finance or refinance: the acquisition and improvement of land, water areas, and related property interests, including conservation easements, and resources for conservation lands including wetlands, forests, and fish and wildlife habitat; wildlife management areas; lands that protect water resources and drinking water sources, including lands protecting the water quality and quantity of rivers, lakes, streams, springsheds, and lands providing recharge for groundwater and aquifer systems; lands in the Everglades Agricultural Area (EAA) and the Everglades Protection Area, as defined in article II, section 7(b); beaches and shores; outdoor recreation lands, including recreational trails, parks, and urban open space; rural landscapes; working farms and ranches; historic or geologic sites; together with management, restoration of natural systems, and the enhancement of public access or recreational enjoyment of conservation lands.
- To pay the debt service on bonds issued pursuant to article VII, section 11(e).

Section 375.041, F.S., designated the LATF within the Department of Environmental Protection (DEP) as the trust fund to receive the mandated distributions from documentary stamp tax revenues, and requires these funds to be applied:

- First, to pay debt service on Florida Forever and Everglades restoration bonds.
- Then, before funds are appropriated for other uses:
  - A minimum of the lesser of 25% or $200 million shall be appropriated annually for Everglades projects that implement CERP; the Long-Term Plan pursuant to s. 373.4592, F.S.; and the Northern Everglades and Estuaries Protection Program.
  - A minimum of the lesser of 7.6% or $50 million shall be appropriated annually for springs restoration, protection, and management projects.
  - $5 million shall be appropriated annually through the 2025-2026 fiscal year to the St. Johns River Water Management District for Lake Apopka restoration.
  - $64 million shall be appropriated annually and transferred to the Everglades Trust Fund for the Everglades Agricultural Area Reservoir.
- Any remaining funds in the LATF may be appropriated for the purposes set forth in Article X, s. 28 of the Florida Constitution.

Effect of the Bill

The bill creates s. 373.4599, F.S., entitled “Water storage north of Lake Okeechobee.” The bill creates the following definitions:

- “Corps” means the United State Army Corps of Engineers.
- “District” means the South Florida Water Management District.
- “Lake Okeechobee Watershed Restoration Project” or “LOWRP” means the recommended plan contained within the Lake Okeechobee Watershed Restoration Project Final Integrated Project Implementation Report and Environmental Impact Statement dated August 2020 or as amended by the district and corps.

The bill requires the SFWMD to request that the corps seek congressional approval of a project implementation report for the LOWRP before passage of the Water Resources Development Act of 2022. Immediately following congressional approval of the LOWRP, the SFWMD must seek to execute with the corps a project partnership agreement for the LOWRP.

The bill requires the SFWMD, in partnership with the corps, to expedite the development and implementation of the LOWRP aquifer storage and recovery wells according to the following schedule:

- By August 1, 2021, the SFWMD must construct or execute contracts for any necessary exploratory and monitoring wells on the Kissimmee River Basin and the Taylor Creek/Nubbin Slough Basin to evaluate or confirm site suitability for well clusters.

- By January 30, 2022, the SFWMD must reactivate the existing Kissimmee River ASR Pilot Project system on the Kissimmee River Basin site, including any necessary testing.
- By December 31, 2022, the SFWMD must execute contracts for the construction of any necessary exploratory and monitoring wells for all other feasible currently or subsequently proposed LOWRP watershed ASR cluster sites not colocated with the wetland attenuation feature to evaluate site suitability for well clusters.
- By March 30, 2027, the SFWMD must ensure that all other feasible ASR wells on the Kissimmee River Basin and Taylor Creek/Nubbin Slough Basin sites are operational.

By November 1, 2021, the SFWMD must submit to the Legislature a report describing the district's compliance with the bill, including steps taken and any plans necessary for ongoing compliance. The report must also include updates on congressional approval of the LOWRP project implementation report; the ASR science plan; any scientific investigations; and designs, construction, and operations.

The bill requires the SFWMD to perform any necessary scientific investigation and monitoring concurrently with the implementation of LOWRP ASR wells. Implementation of the LOWRP ASR wells must use a phased approach that confirms feasibility and site suitability and addresses uncertainties identified in the ASR science plan to ensure public health and safety, technical feasibility, and achievement of environmental benefits. The SWFWMD must expedite the ASR science plan developed by the district and the corps. The SFWMD, in partnership with the corps, must purse expeditious implementation of the Paradise Run wetland restoration project and the Kissimmee River Center wetland restoration project.

The bill requires $50 million from the LATF be appropriated annually to the SFWMD for the LOWRP. This distribution must be reduced by an amount equal to the debt service paid on Florida Forever or Everglades bonds issued after July 1, 2021.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   The bill will reduce the amount of unallocated LATF by $50 million annually.

2. Expenditures:

   The bill requires the SFWMD to expedite several projects, including scientific investigation, monitoring, reporting, planning, design, and construction. The bill appropriates $50 million annually from the LATF to the SFWMD for the LOWRP.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   None.

2. Expenditures:

   None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

None.