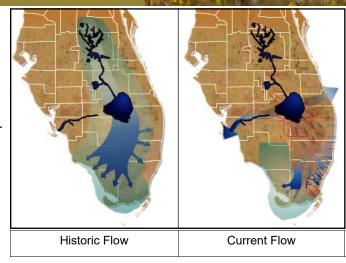


The Everglades Agricultural Area Reservoir Project: An Urgent Call to Action

Florida's coastal waters are experiencing an unprecedented ecological collapse. During the 2015-16 dry season, South Florida experienced record rainfall causing wetlands, lakes, and other water storage areas to fill to capacity. Absent other storage options, billions of gallons of freshwater per day have been discharged from Lake Okeechobee to the St. Lucie and Caloosahatchee estuaries to protect the aging Herbert Hoover Dike and Lake Okeechobee's ecology. When too much freshwater reaches the estuaries, changes in the balance of fresh and saltwater causes algae blooms, which harm submerged vegetation, fish, and water birds. The estuaries' famously-clear waters have turned cloudy brown and green driving away tourists, harming local businesses, and reducing home values. Harmful bacteria has made the water in some places dangerous for human contact.



At the same time that the estuaries in the northern part of the Everglades are being impacted by too much freshwater, a massive seagrass die-off in Florida Bay is occurring because of *insufficient* freshwater. Without a source of freshwater from the upstream Everglades, Florida Bay has not been able to recover from dry conditions that altered the delicate balance of fresh and saltwater over a year ago. The prediction for the Bay is a deeper collapse, including algae blooms and fish die-offs within a few years.

Storing water south of Lake Okeechobee in the Everglades Agricultural Area (EAA) will provide an outlet for water being discharged to fragile coastal estuaries while concurrently holding water that can be sent south to Florida Bay. State and federal agencies have been urged to move ahead with planning the long-anticipated and desperately needed EAA Reservoir project.

The Role of the EAA in Everglades Restoration

Storing water in the EAA is one of the central components of the Comprehensive Everglades Restoration Plan (CERP). The EAA Reservoir project in CERP sought to hold water from Lake Okeechobee and farm runoff in the wet season and release this water south in the dry season. After leaving the reservoir, freshwater would move through the network of man-made filter marshes called Stormwater Treatment Areas to remove phosphorus and other nutrients that are harmful to the plants and wildlife before continuing its path through the Central Everglades, Everglades National Park, and Florida Bay.

Although an initial plan for the EAA Reservoir project was developed, the project was not constructed. The original location for the project is now being used for two shallow water storage structures known as Flow Equalization Basins (FEB). One FEB is part of the Central Everglades Planning Project (CEPP) project while another is part of the State of Florida's Restoration Strategies plan required to meet water quality standards.

These are important projects, but as recognized in the CEPP plan, the EAA Reservoir project is still necessary to achieve the goals of restoration. There is an urgent need for state and federal agencies to come together to plan for water storage in the EAA.

1. Central Everglades Planning Process final PIR and EIS; 3-9

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Planning Must Be Accelerated

In October, the U.S. Army Corps of Engineers and the South Florida Water Management District (SFWMD) agreed to an Everglades restoration Integrated Delivery Schedule that determines the order and priority of future restoration. Planning for projects north of Lake Okeechobee and in the Western Everglades are scheduled to begin in the summer of 2016. But for reasons that are not at all clear, planning for the urgently needed EAA Reservoir project was postponed until 2020.

To address the recent crises in Florida's coastal waters, planning for the EAA Reservoir project must be accelerated to begin in 2016. If the Corps and SFWMD continue to delay this project, the St. Lucie and Caloosahatchee estuaries will remain the only outlets for Lake Okeechobee discharges. Meanwhile, Florida Bay will continue to suffer the ecological impacts of being cut off from its natural upstream freshwater source.

Benefits to planning the EAA Reservoir project now:

- ⇒ **Efficient project planning:** Concurrently planning the Lake Okeechobee Watershed project and the EAA Reservoir project would create a more efficient process and enable a big picture analysis of water storage options around Lake Okeechobee.
- ⇒ A cost-effective option: A draft Project Implementation Report (PIR) completed for the EAA Reservoir project in February 2006 showed it was cheaper per ac/ft to store water in the EAA than north of Lake Okeechobee or by using Aquifer Storage and Recovery (ASR). Storage south of Lake Okeechobee in the EAA was shown to cost less than half per ac/ft than storing water north of Lake Okeechobee.
- ⇒ **Legacy Florida directive:** The Legacy Florida Act, passed by the Florida Legislature in 2016, requires the Florida Department of Environmental Protection and the SFWMD to "give preference to those Everglades restoration projects that reduce harmful discharges of water from Lake Okeechobee to the St. Lucie or Caloosahatchee estuaries in a timely manner." Modeling conducted by Everglades Foundation scientists demonstrates that the EAA Reservoir project is more effective than a reservoir north of the Lake at reducing the Lake discharges.
- ⇒ **Established feasibility:** Previously developed plans for the EAA Reservoir project can easily be updated to provide relief to the Caloosahatchee and St. Lucie estuaries and Florida Bay. In contrast, the feasibility of benefiting Florida Bay through a "Western Basin" storage solution or the feasibility of holding enough water north of the Lake to significantly reduce Lake Okeechobee discharges are unknown.
- ⇒ Fewer habitat concerns: Most of the land in the EAA has been intensively farmed for decades and does not provide valuable habitat for birds and other wildlife. Wading birds and species like the threatened Audubon's Crested Caracara use much of the land north of Lake Okeechobee. Large surface water storage projects north of the Lake would likely be a detriment to existing habitat.
- ⇒ Enhancing other restoration projects: CEPP, bridging Tamiami Trail and the C-111 projects are all critical to improving the health of Florida Bay. But these projects need an upstream source of freshwater to achieve their maximum benefits. The sooner the EAA Reservoir project is constructed, the sooner these other projects can work to their full potential.

Florida's coastal waters continue to suffer from a lack of water storage. A solution is needed now. Only storing water south of Lake Okeechobee in the EAA will provide an outlet for water being discharged to fragile coastal estuaries while providing a freshwater source for Florida Bay.

- 2. See Laws of Florida, Ch. 2016-201
- 3. Everglades Foundation. Water Storage Benefits of CERP Surface Reservoirs (May, 2016)