

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

NEWS RELEASE

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Construction Groundbreaking to Improve Everglades Water Quality

Project helps clean water as part of the Governor's Restoration Strategies



(Click on the picture for a larger version.)

A-1 FEB Quick Facts

- 15,000-acre shallow storage
- Average depth of 4 feet
- Stores 60,000 acre-feet, or 20 billion gallons
- 21 miles of earthen levees and 15 water control structures
- Completion scheduled for 2016

West Palm Beach, FL — At an expanse that will help send clean water to America's Everglades, the South Florida Water Management District (SFWMD) today marked the beginning of construction on a key project in the State's Restoration Strategies plan.

The vast storage reservoir, known as the A-1 Flow Equalization Basin, will work in tandem with the District's stormwater treatment areas to clean water flowing into the Everglades.

"Engineers from the South Florida Water Management District were able to use ingenuity and hard work to design this project—the largest component of Governor Scott's Everglades Water Quality Restoration Plan," said Florida Department of Environmental Protection Secretary Herschel T. Vinyard Jr. "I want to thank Governor Scott for his support as well as the dedicated staff at DEP and the Water Management District for moving forward with projects that will improve water quality for the Everglades."

"Today is when project planning becomes construction progress — as we continue improving Everglades water quality," said SFWMD Governing Board Chairman Daniel O'Keefe. "The A-1 Flow Equalization Basin is a significant step toward meeting State water quality standards through the Restoration Strategies plan."

A-1: How it Works

With the capacity to hold 60,000 acre-feet of water at a site west of U.S. 27, the A-1 Flow Equalization Basin (FEB) will capture and store peak stormwater flows during the wet season or heavy rainfall events. Along with providing significant storage, vegetation such as bulrush and cattail within the site will help reduce the concentration of phosphorus in the water.

When complete, a system of 21 miles of earthen levees and 15 water control structures will hold water and allow managers to move it south for treatment. This provides the steady flow necessary to optimize the performance of Stormwater Treatment Areas (STAs) 2 and 3/4 located near the Palm Beach/Broward county line.

Stormwater Treatment Areas are constructed wetlands that serve as the water-cleaning workhorses of Everglades restoration, using both emergent and submerged aquatic vegetation such as hydrilla to naturally remove nutrients from the water that eventually flows to the Everglades.



(Click the map for a larger version.)

The District operates a network of five STAs south of Lake Okeechobee with an effective treatment area of 57,000 acres. Since 1994, the treatment areas have retained more than 1,707 metric tons of total phosphorus that would have otherwise entered the Everglades.

The A-1 FEB will incorporate work already completed at the site originally planned to provide deep water storage, known as the EAA Reservoir. All of the material excavated for the reservoir will be utilized to build new levees, and existing canals have been incorporated into the new plan.

Restoration Strategies

In June 2012, the State of Florida and the U.S. Environmental Protection Agency reached a consensus on new strategies for improving water quality in America's Everglades.

Based on months of scientific and technical discussions, these strategies will expand water quality improvement projects to achieve the phosphorus water quality standard established for the Everglades.

Key features of the plan include:

- Design and construction of 110,000 acre-feet of additional storage adjacent to existing Everglades STAs, better controlling water flow into the treatment wetlands and thereby improving their performance. These storage areas, known as Flow Equalization Basins, will be designed to assist all five Everglades STAs.
- Design and construction of the Stormwater Treatment Area 1 West expansion, increasing by 50 percent the treatment capacity of water quality facilities currently discharging into the Arthur R. Marshall Loxahatchee National Wildlife Refuge.
- Additional sub-regional source controls in areas of the eastern EAA where phosphorus levels in runoff have been historically higher, building on the District's existing Best Management Practices (BMPs) Regulatory Program.

For more information:

- Improving Water Quality
- Restoration Strategies for Clean Water for the Everglades
- BMPs and Source Controls

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About the South Florida Water Management District

The South Florida Water Management District is a regional, governmental agency that oversees the water resources in the southern half of the state – 16 counties from Orlando to the Keys. It is the oldest and largest of the state's five water management districts. The agency mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems and water supply. A key initiative is cleanup and restoration of the Everglades.