



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

## NEWS RELEASE

July 15, 2013

**CONTACT:**

**Randy Smith**

South Florida Water Management District

Office: (561) 682-2800 or Cellular: (561) 389-3386

[www.sfwmd.gov/news](http://www.sfwmd.gov/news)

follow us on 

### **Phosphorus Reductions Continue to Improve Everglades Water Quality** *Improved farming techniques help EAA, C-139 achieve phosphorus reduction goals*

**West Palm Beach, FL** – For the 18th consecutive year, water flowing from farmlands in the Everglades Agricultural Area (EAA) achieved phosphorus reductions that exceeded those required by law.

Implementation of improved farming techniques, known as Best Management Practices (BMPs), produced a 41-percent phosphorus reduction in the 470,000-acre EAA farming region south of Lake Okeechobee for the Water Year 2013 monitoring period (May 1, 2012 – April 30, 2013). Just west of the EAA, the 170,000-acre C-139 Basin also met its goal of reducing phosphorus discharges to historical levels.

“Reducing phosphorus through the technology of Best Management Practices consistently proves to be an effective strategy for improving Everglades water quality,” said Daniel O’Keefe, Chairman of the South Florida Water Management District (SFWMD) Governing Board. “These BMPs, working in concert with existing treatment wetlands and the state’s Restoration Strategies initiative, are moving us toward the goal of achieving water quality standards for the *River of Grass*.”

The most commonly used BMPs are more precise fertilizer application methods, refined stormwater management practices and erosion controls to reduce the amount of phosphorus transported in stormwater runoff to the Everglades and connected water bodies.

#### **Monitoring Documents Nutrient Reductions**

The BMP program continues to perform extremely well. Farmers in the EAA achieved phosphorus reductions well beyond their target despite challenges including the impact of heavy rainfall in the region from Tropical Storm Isaac.

To meet the requirements of Florida’s Everglades Forever Act, the amount of phosphorus leaving the EAA must be 25 percent less than the amount before phosphorus reduction efforts started. The overall average annual reduction from the implementation of BMPs over the program’s 18-year history is 55 percent, more than

twice the amount required by law. A science-based model is used to compute the reductions and make adjustments to account for the influences of rainfall.

When measured in actual mass, 109 metric tons of phosphorus were prevented from leaving the EAA and entering the regional canal system, which sends water into the Everglades, during the Water Year 2013 monitoring period. Over the past 18 years, the BMP program has prevented 2,673 metric tons of phosphorus from leaving the EAA.

In the C-139 Basin, a BMP program has been in place for the past 10 years. In November 2010, the program requirements were enhanced to better control nutrient runoff. For the Water Year 2013 monitoring period, the target load was 22 metric tons. Data show the actual mass of phosphorus discharged from the basin during that time was 10 metric tons, less than half the target load.

### **Stormwater Treatment Areas Provide Additional Improvements**

Water leaving the EAA and C-139 Basin receives additional treatment in one of several Stormwater Treatment Areas (STAs) before entering the Everglades. These constructed wetlands are filled with native vegetation and use “green” technology to further reduce phosphorus levels.

Since 1994, the network of five STAs south of Lake Okeechobee – currently with 57,000 acres of effective treatment area – have treated 13.4 million acre-feet of water and retained more than 1,707 metric tons of phosphorus that would have otherwise entered the Everglades. Last year, the STAs treated approximately 1.16 million acre-feet of water, retaining 84 percent of phosphorus from water flowing through the treatment cells.

Through the end of April 2013, more than 4,390 metric tons of phosphorus have been prevented from entering the Everglades through treatment wetlands and the BMP program combined. Overall, Florida has invested more than \$1.8 billion to improve Everglades water quality since 1994.

### **Water Quality Improvement Projects**

Last year, the District completed several water quality improvement projects to further enhance its water-cleaning efforts:

- Construction was completed on STA-2 to nearly double its size in western Palm Beach County to 15,500 acres. Known as Compartment B, the 6,817-acre expansion will help the STA achieve optimal performance.
- A 4,656-acre expansion of treatment wetlands in southeast Hendry County, known as Compartment C, was completed. Compartment C will further improve water quality flowing into the Everglades. This \$47.5 million investment connects two existing Stormwater Treatment Areas (STA-5 and STA-6) in the EAA and more than doubles water treatment capability at the site.

In addition, work has begun under an agreement with the Florida Department of Environmental Protection and the U.S. Environmental Protection Agency (EPA) to expand water quality treatment infrastructure that will lead to achievement of the ambient water quality standard for the Everglades. Key features 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 (FEBs), 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 BMP Regulatory Program.

**For more information:**

- [Improving Water Quality](#)
- [Restoration Strategies for Clean Water for the Everglades](#)
- [BMPs and Source Controls](#)

# # #

### **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.*