

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

NEWS RELEASE

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Earth Moving Effort Improving Everglades Water Quality Field data prompts Stormwater Treatment Area renovation



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West Palm Beach, FL — In an ongoing effort to improve Everglades water quality, the South Florida Water Management District (SFWMD) is renovating Stormwater Treatment Area 5 (STA-5) in Hendry County to enhance its water-cleansing capabilities. The renovation will smooth contours on the wetland bottom, reducing areas where water depths have prevented wetland plants — vital to STA performance — from growing in abundance.

"Stormwater Treatment Areas have proven to be our best tool for cleaning Evergladesbound water, yet we continually find ways to make them better," said SFWMD Governing Board Chair Eric Buermann. "With renovations in STA-5, we will learn even more about optimizing treatment performance, benefiting not only America's Everglades but all restoration activities."

Stormwater Treatment Areas are designed so that water flows slowly and uniformly through wetlands abundant with phosphorus-hungry vegetation. A closer look at field data collected in STA-5, including detailed contour maps of the wetland bottom, revealed an area in the northwest section that was much deeper than the rest of the STA. This phenomenon caused some water to bypass the shallow, more heavily vegetated sections of the STA and therefore receive less treatment.

The dry weather of early 2009 presented an opportunity to refine the bottom contours by moving soil from nearby higher areas to the deeper areas. Filling these sections of STA-5 will allow more vegetation to take root, enhancing the treatment characteristics of the STA.

District crews are handling the renovation at substantial cost savings compared to contracting the work. In 32 days, the crews moved nearly 170,000 cubic yards, or 8,500 truckloads, of soil in STA-5.

Since it began operation in 1999, the 8,000-acre STA-5 wetland has a multi-year record of removing nearly 60 percent of in-flowing total phosphorus. The District team in charge of improving Everglades water quality expects STA-5 can now achieve closer to an 80-percent removal rate, which is on par with other STAs.

Stormwater Treatment Areas are the water-cleansing workhorses of Everglades restoration, utilizing plants to reduce phosphorus levels in water flowing into the remnant Everglades. Since 1994, six STAs — with a combined area of more than 52,000 acres — have retained more than 1,000 metric tons of total phosphorus that would have otherwise entered into the Everglades. Overall, Florida has invested more than \$1.8 billion to improve water quality in the Everglades and has made significant and well-documented progress.

The District will continue collecting data from STA-5 and other treatment wetlands to advance the science and utilize the lessons learned to better restore and revive the Everglades.

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About the South Florida Water Management District — <u>Celebrating 60 Years (1949-2009)</u> 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.