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just the FACTs

This fact sheet is provided as a reference to encourage a greater understanding of the various issues related to managing water in south Florida.

Stormwater Treatment Area 3/4

Located in western Palm Beach County, Stormwater Treatment Area 3/4 is the largest constructed wetland in the world. This enormous, 26-square-mile project can treat several hundred thousand acre-feet of water each year, removing significant amounts of phosphorus before it enters the Everglades. STA-3/4 also provides massive water storage capabilities, reducing the need for Lake Okeechobee discharges into South Florida's fragile estuaries.

- Construction on STA-3/4 began in November 2000, with a total capital cost of \$197 million dollars. Two years into the project, the prime contractor for three of the construction contracts filed for bankruptcy; in May 2002 the Shaw Group assumed management of these contracts. Challenged by estimated delays of up to a full year, the District worked diligently with the new contractor to begin initial flow-through operation of STA-3/4, achieving this milestone just a few months beyond the originally targeted start date.
- To build this wetland, more than 11 million cubic yards of dirt and rock were moved, excavating 29 miles of canals and constructing 31 miles of levees.
- When fully operational, STA-3/4 will receive about 350,000 acre-feet of water from upstream runoff in an average year and another 250,000 acre-feet of Lake Okeechobee releases.
- With innovative construction management, the District was able to develop the vegetation community within the STA even before construction was complete. As a result, phosphorus levels are already dropping within STA-3/4. Flow-through operations for about 65% of the STA should begin soon.
- In its present configuration, STA-3/4 should perform even better than originally expected, removing more than 40 tons of phosphorus each year and reducing phosphorus concentrations to approximately 36 parts per billion.
- The District is also preparing to enhance the performance of STA-3/4. During 2004, vegetation management activities will occur in parallel with initial operations. In conjunction with other enhancements already under way, STA-3/4 should eventually remove an average of 55 tons of phosphorus per year, with discharges between 10-20 parts per billion.
- To further evaluate the "green" technologies used in these stormwater treatment areas, a full-scale, side-by-side demonstration of periphyton and submerged aquatic vegetation is being built within STA-3/4. Continuing refinement and application of these technologies will help to improve performance in all STAs.
- In addition to improving water quality, STA-3/4 also provides water storage capabilities—on the order of 24,750 acre-feet at an average operating depth of 1.5 feet. The option of storing water in this large wetland vastly improves operational flexibility in watershed management, consistent with Everglades restoration goals.

