



Florida city to divert highway water runoff to neighborhood lawns

ORLANDO, FLA. | BY BARBARA LISTON

Enough dirty storm water runs off a two-mile stretch of Interstate 4 in Central Florida to fill seven Olympic swimming pools a day, so officials devised an innovative scheme to siphon it into the local water treatment system, and ultimately into residents' lawn sprinklers.

The highway water engineering system, which officially launches on Friday, was designed by the city of Altamonte Springs and is a first in the country, according to the U.S. Department of Transportation.

It is expected to reclaim 1.6 billion gallons of water a year to be used for a residential irrigation network.

Runoff traditionally is contained in large roadside retention basins that cost millions of dollars in land condemnation, construction and maintenance.

City manager Frank Martz said the Altamonte Springs solution is cheaper, easily replicable for any urban development and environmentally smarter in an era of water shortages and tightening rules under the Clean Water Act.

"Today reclaimed water is on the tip of everyone's tongue. As legislation pushes people toward alternative water, this is a successful system that cities can look at," Martz said.

A grand opening is scheduled Friday for the A-FIRST integrated reuse and stormwater treatment system, although it has been operating successfully for a month.

Martz said the engineering and technology was simple compared to getting government road builders to think in a different way.

Almost 10 years ago while planning was underway for the current \$2 billion revamp of I-4, a major central Florida corridor, the Florida Department of Transportation rejected Altamonte Springs' idea in favor of the traditional model, Martz said.

The state condemned and destroyed an entire Altamonte Springs subdivision to make way for a planned retention pond.

New FDOT leaders approved the A-FIRST project, saving more than \$15 million in construction costs on a pond that was no longer needed, according to the project fact sheet. The system also eliminated the annual discharge of 31 tons of nitrogen and 14 tons of phosphorus into the Little Wekiva River, a state aquatic preserve.

Martz said the same system can be used to reclaim runoff from any large paved surface such as arenas and city streets through underground storm pipes connected to treatment plants rather than discharging polluted runoff into nearby water bodies.