

Program Name: Restoration Program: Water Quality
Project Name: C-43 Water Quality Treatment Area and Test Facility
Project ID: 1519
Lead Agency: South Florida Water Management District
Authority: Chapter 373, Florida Statutes
Funding Source: State Funds

Strategic Plan Goal(s) Addressed: 1.B.1

Measurable Output(s): 1,200-acre Water Quality Treatment Area (WQTA) and Test Facility

Project Synopsis: In 2007, the Florida legislature enacted the Northern Everglades Initiative, which expands the Lake Okeechobee Protection Act to the entire Northern Everglades system, including the Lake Okeechobee watershed as well as the Caloosahatchee and St. Lucie rivers and estuaries. The SFWMD and Lee County agreed to develop a Water Quality Treatment Area project near the Caloosahatchee River in the C-43 Basin to address total nitrogen treatment, with a focus on organic nitrogen removal, as well as other incidental nutrient treatment of the Caloosahatchee River Basin water upstream of structure S-79. The goal of the project is to investigate and test wetland-based strategies for reducing concentrations of total nitrogen (TN) and other constituents including TP and total suspended solids. It is anticipated that the project will generate strategies that can be applied to estuaries throughout the SFWMD. The District will review and design nitrogen treatment technologies in the C-43 area in FY2011.

Current Status: The full Project will include a 1,345-acre water quality treatment area (WQTA) and a 200-acre Test Facility. The Test Facility, Phase I, will be designed in 2011, incorporating comments from an independent technical expert review panel and constructed in 2012. This facility will test different combinations and characteristics of constructed wetlands for treating TN, including different types of vegetation in the treatment cells, hydraulic loading rates, and treatment processes with regard to their efficacy at reducing TN and/or its constituents. Phase I will provide the opportunity to develop construction, start-up, and operational procedures. The purpose of the Test Facility is to develop wetland-based strategies for nitrogen removal to protect/improve water quality in the downstream estuarine ecosystems. It is anticipated that the project will generate strategies that can be applied to estuaries throughout the SFWMD.

Total Estimated Project Cost: \$7.3M (Test Facility)

Project Schedule: Start Date: September 2007
 Finish Date: December 2012 (Test Facility)

	2007	2008	2009	2010	2011	2012	2013
Project Design							
Construction and Installation							
Operations and Monitoring							

Detailed Project Budget Information

	2007	2008	2009	2010	2011	Total
SFWMD	0	\$817	\$746,000	\$720,000	\$2,215,000	\$3,681,817

Contact: Jennifer Leeds, SFWMD, 561-681-2563, Ext. 3713