

**Program Name:** Northern Everglades and Estuaries Protection Program  
**Project Name:** Hybrid Wetland Treatment Technology  
**Project ID:** 1723  
**Lead Agency:** FDACS, State of Florida  
**Funding Source:** State General Revenue

**Strategic Plan Goal(s) Addressed:** 1-B-2, Other Related Water Quality Projects

**Measurable Output(s):** Estimated annual phosphorus load reduction is 4 metric tons for six Hybrid Wetland Treatment Technology (HWTT) systems.

**Project Synopsis:** In 2007, the Florida legislature enacted the Northern Everglades and Estuaries Protection Program (NEEPP) (*Section 373.4595, F.S., 2007*), 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. This project was initiated by the State of Florida under NEEPP. It combines the use of both wetland and chemical treatment components to remove nutrients from surface waters. This project was jointly initiated in 2007 by the SFWMD and FDACS to demonstrate the technical feasibility and cost effectiveness of this technology.

In 2008, four HWTT systems were constructed (Nubbin Slough, Mosquito Creek, Ideal Grove 2, Larson Lagoon) and optimization efforts were initiated. Three of the facilities are continuous flow systems while the fourth (Larson Lagoon) was used for batch treatment of waters with high nutrient levels but is no longer operational. In 2009, two additional systems were constructed on Wolff Ditch and Lemkin Creek on a District-owned parcel, with operations beginning in late 2009. During 2010 and 2011, a 10 cfs HWTT facility was constructed at the District's Taylor Creek/Grassy Island property with the optimization monitoring period beginning in late 2011. In 2012, Phase II of the Grassy Island HWTT facility increased the treatment capacity of the facility from 10 to 20 cfs. A third and final expansion to increase the treatment capacity of the facility from 20 to 30 cfs was completed by June 2013. In 2014 a seventh HWTT facility is under permit review for construction in the Bessey Creek watershed located in Martin County.

**Current Status:**

Operations continue on the six current sites (Nubbin Slough, Mosquito Creek, Ideal Grove 2, Wolff Ditch, Lemkin Creek and Grassy Island) providing phosphorus concentration reductions ranging from 60 to 90 percent. The Phase II operations permit was issued by FDEP on November 29, 2012, which authorized operations up 20 cfs. Construction of Phase III was completed on June 14, 2013. The newly expanded Taylor Creek/Grassy Island facility will commence operation at 30 cfs in 2014.

**Total Estimated Project Cost for Project:** \$24.484M to date

**Project Schedule:**

**Start Date:** October 2007  
**Finish Date:** On going

	2008	2009	2010	2011	2012	2013	2014	Total to Date
FDACS	\$3M	\$3M	\$3M	\$1.484M	\$3M	\$5M	\$6M	\$24.484M

Project sheet updated in 2014

**Contact:** FDACS



HWTT Facilities in the Northern Everglades Watershed

