

Dispersed Water Management Potential Site – Dupuis Reserve



Location:	Martin and Palm Beach Counties
Subwatershed:	East Lake Okeechobee
Basin:	C-44 and L-8
Purpose:	Restore pre-drainage and enhance hydrologic conditions (improve hydroperiods) for approximately 21,858 acres of flatwoods and wetlands.
Project Operation Start:	TBD
Considerations/Update:	<p>Distinct changes in vegetation communities have occurred at Dupuis due to disruption of regional sheet flow by the C-44, L-8, and FPL canals, as well as over-drainage of the existing water management system. The existing water management system consists of an extensive network of swales, ditches, and culverts that connect lower elevation isolated wetland areas to periphery conveyance features.</p> <p>Two project concepts have been proposed for the Dupuis Reserve. The original project concept evaluated by Brown and Caldwell (2006) included improving roughly 67,000 feet of the levees to account for greater surface water depths within the marsh areas; replacing structures, increasing structure control elevations, and modifying operational criteria and/or gate positions. In addition, the project-concept also involved backfilling of swales and ditches and installation of ditch blocks, culverts with flashboard risers, and/or low water crossings within the existing water management system that connects lower elevation isolated wetland areas to the L-8 Marsh.</p> <p>The second project concept was proposed in 2016 when the SFWMD sought to implement a dispersed water management (DWM) in this property. This concept involved backfilling of swales and ditches where appropriate and installation of ditch blocks, culverts with flashboard risers, and/or low water crossings. Initial design/permitting activities for the project-concept were performed. However, the U.S. Army Corps of Engineers (USACE) recommended the District, during the permitting process, to re-evaluate and reconfigured the proposed project concept in a manner that is compatible with the Dupuis General Management Plan or otherwise to support long-term habitat restoration objectives.</p> <p>The second project concept has been included into the DWM 5-Year Plan for District Lands. A topographic survey, a threatened and endangered species survey, as well as a hydrology and hydraulics study is being proposed to fully vet and refine the project concept.</p>

LOWCP MM#	Project Name	Project Area (ac)	2011 Estimated Annual Water Quality Benefits (mt/yr)	2011 Estimated Water Quantity Benefit (ac-ft/yr)	Total Cost
59	Dupuis Reserve	2,830	1.0	4,500	\$1,609,800 - \$2,006,400