SLWSD - Lake Harvey Project Narrative

The Lake Harvey project is 12.45 acres in size and is located at the Northwest corner of St Lucie West Boulevard and NW Cashmere Boulevard. The project site was purchased from Martin Memorial by the St Lucie West Services District with the expressed objective of creating a wetland/surface water storage facility that would provide both water quality and water quantity enhancements to the overall St Lucie West surface water management system.

The project is fully permitted and a contract for construction of the improvements was issued by the Board of Supervisors in April 2017. The earthwork portion of the project has been completed and planting of the newly created wetland areas is underway and expected to be completed near the end of November 2017.

A small adjustment to the plans for the project was requested by the City of Port St Lucie to allow for the construction of a walkway through the center of the wetland area at some time in the future. The adjusted plans provide a 2.25 acre open water surface along the frontage of St Lucie West Boulevard and N.W. Cashmere Boulevard with a 4.09 acre planted wetland area located to the north and west of the open water. The remainder of the property is made up of lake banks, perimeter, and upland buffers. Both the open water and wetland areas will provide additional storm water storage for the surface water management system and will enhance flood protection, while the wetland component of the project will provide nutrient uptake for stormwater runoff within that area of the St Lucie West system.

Drainage that currently flows west from the Martin Memorial site, as well as portions of St Lucie West Boulevard and N.W. Cashmere Boulevard, will be allowed to flow into the new facility prior to being discharged to the east through the N.W. Cashmere Boulevard drainage system.

The St Lucie West Services District recently completed a canal project along Florida's Turnpike to increase surface water storage and enhance hydraulic connectivity in the NE quadrant of the St. Lucie West water management system.

It is expected that peak stages from high intensity storms in the NE quadrant of the St Lucie West system will be reduced by over 5 inches when this project, combined with the completed canal project, are operational. No estimates of nutrient uptake have been prepared to date but it is expected that the water quality benefits realized by this project will be significant.

