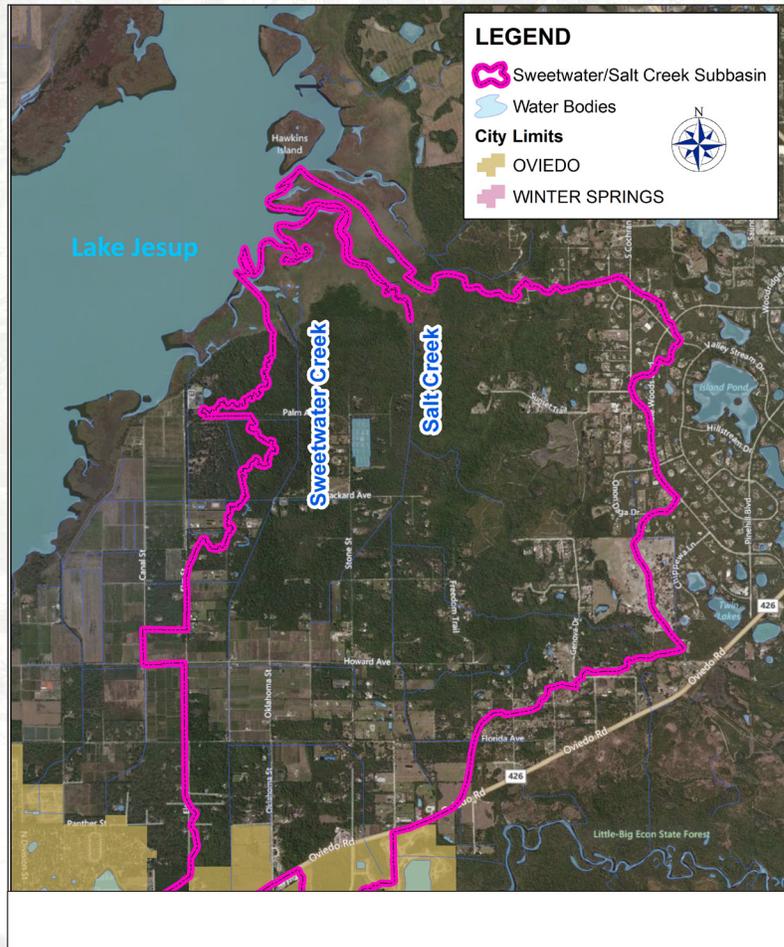


Black Hammock Floodplain Restoration Project

Public Information Fact Sheet

Background



In 2013, Seminole County received a grant from the Florida Department of Environmental Protection (FDEP) to design and construct a floodplain restoration project within the Black Hammock area. The purpose of this project is to improve water quality downstream in Lake Jesup. Lake Jesup is an impaired water body and does not meet the State's water quality standards for nutrients. In 2008, the St. Johns River Water Management District (District), the FDEP, and Florida Fish and Wildlife Conservation Commission (FWC) developed an interagency restoration strategy to identify potential projects to improve the lake's water quality. The Black Hammock area was identified in the interagency plan as an area with potential sources of high nutrient concentrations in stormwater runoff. In early 2013, the County received a grant from FDEP to evaluate and implement (design and construction of) restoration activities in the Black Hammock area with a focus on Salt and Sweetwater Creeks (Figure 1).

Alternatives Evaluation

Seminole County retained CDM Smith, Inc. to analyze and develop a preliminary design of potential restoration alternatives in the Black Hammock area. CDM Smith worked with the County to perform detailed evaluations, conduct field visits and collect survey data along Salt and

Sweetwater Creeks. The Salt Creek and Sweetwater Creek systems were analyzed using modeling software to further develop potential alternatives to divert flow to historical floodplain areas on County and District-owned lands.

Preliminary Design

Salt Creek

Based on field reconnaissance system and detailed survey information, it was evident that there were several opportunities along Salt Creek to restore flow from the main channel into the floodplain meander areas in order to promote attenuation and water quality treatment of flows. The County and CDM Smith held several technical meetings with the District and Black Hammock representatives to present and discuss possible alternatives. In order to promote flows into the historic floodplain meanders (Figure 2), the following alternative was selected:

Remove a portion of the canal spoil berm to re-establish the historical connection of Salt Creek to four identified meander areas and include a 1-foot-high (low flow) diversion weir in Salt Creek at the entrances to the South and North meanders.

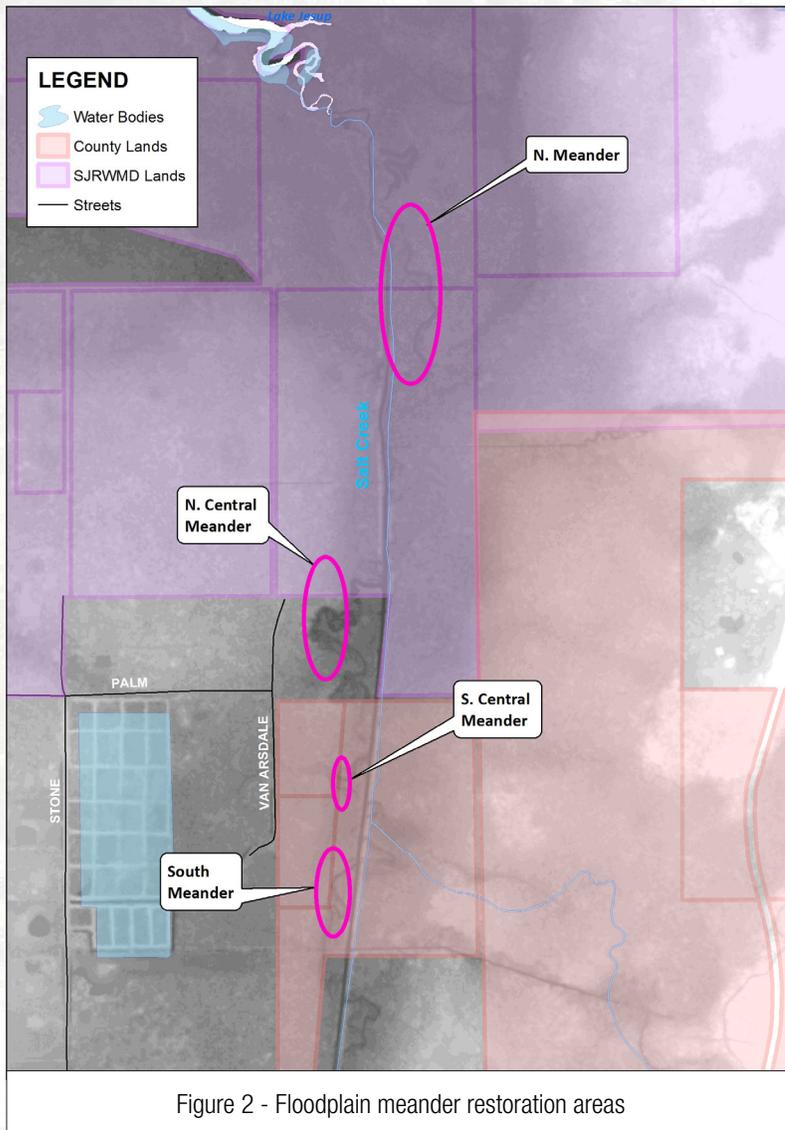


Figure 2 - Floodplain meander restoration areas

Under the selected alternative, the following activities are proposed:

- Removing a portion of the spoil berm at each meander entrance
- Grading from Salt Creek (at the creek bottom elevation at each meander) to 40 to 100 feet into the meander
- Grading within the meander to achieve a stable channel into the meander using rip-rap or other stabilization measures creek/meander connections
- Installing 1-foot-high diversion weirs within the main channel of Salt Creek near the entrances to the South and North meanders.

Additionally, the County is proposing to replace several road culvert crossings along Salt Creek within the County's existing right-of-way to reduce debris blockages. Culverts at the following locations will be upsized and replaced with concrete box culverts (CBCs):

- Florida Avenue
- Howard Avenue
- Van Arsdale Street
- Independence Avenue (two locations)
- Freedom Trail
- Packard Avenue.

At the Packard Avenue crossing, the County will also install a pollution control box (also known as a baffle box) that will collect and remove sediments and pollutants from the creek before flowing into the lake.

Sweetwater Creek

Sweetwater Creek was also evaluated and does not afford as many readily available opportunities for stream restoration as Salt Creek. This is mainly due to property ownership and topographic constraints. However, the County will continue to investigate potential opportunities in subsequent phases of the project.

Next Steps

The County will initiate final design and permitting of the project in late 2013. It is anticipated that construction will start in late 2014/early 2015.

For questions about the project please contact:

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Black Hammock Floodplain Restoration Project Partners

Florida Department of Environmental Protection
 St. Johns River Water Management District
 Seminole County
 Black Hammock Association

