

East Fork Creek Stormwater Treatment Area Revised 7/20/2022

Category Non-Concurrency
Project Number 124906/ ARPSW5
Location South County
District 3

Project Limits Located on the west and north side of Heritage Ridge, east of Federal Highway and on the south side of Mariner's Sand

Related Projects
Lead Dept/Division Public Works/Ecosystem Restoration



DESCRIPTION

The East Fork Creek basin upstream of the project contains portions of Heritage Ridge, Seabranche and Poinciana Gardens. There are several project components including a 700 foot long STA/1500 foot long lake within an unopened right-of-way, a 20-acre STA/ stormwater pond on the east side of US1 and modifications to an existing STA in Poinciana Gardens. The primary objective of the project is to reduce nutrient loads of Total Phosphorus (TP) by an estimated 57% , Total Nitrogen (TN) by 28% and Total Suspended Solids by 80% to the St. Lucie Estuary, and assists the County in meeting the Total Maximum Daily Load (TMDL) requirements.

BACKGROUND

One of the project components will be to retrofit a weir structure in the Poinciana Gardens STA. The control elevation of the weir is too high and is causing some issues with water quality in the STA.

PROJECT ORIGINATION

Mandates-TMDL/BMAP

JUSTIFICATION

The primary objective is to treat runoff and reduce nutrient loads to the South St Lucie Estuary to meet the St. Lucie Watershed Basin Management Action Plan (BMAP) requirements and assist the County in meeting the Total Maximum Daily Load (TMDL) mandate.

Expenditures	Total	To Date	Carryover	Funded					Unfunded
				FY22	FY23	FY24	FY25	FY26	FY27-31
Design	502,577	200,000		302,577					
Land	100,000	100,000							
Construction	4,400,000			4,400,000					
Monitoring	100,000			100,000					
Expenditure Total	5,102,577	300,000		4,802,577	0	0	0	0	0
Revenues	Total	To Date	Carryover	FY22	FY23	FY24	FY25	FY26	FY27-31
Ad Valorem	747,006	300,000	447,006						
ARPA Infrastructure	2,000,000			2,000,000					
Grants	1,200,000		1,200,000						
Stormwater MSTU	1,155,571		1,055,571	100,000					
Revenue Total	5,102,577	300,000	2,702,577	2,100,000	0	0	0	0	0
Total Unfunded									0

OPERATING BUDGET IMPACT

Typically, annual maintenance costs for a Stormwater Treatment Area are approximately \$1000 - \$1200 / year / acre. The estimated operating and maintenance costs associated with this Lake / STA system would be roughly \$25,000/year.