

**RESTORE Act Ecosystem Restoration Project Proposals
for consideration in the Gulf Coast Ecosystem Restoration Council's Comprehensive Plan
2012**

Contact Information: Roland Ottolini	Date of Submittal: 1/7/2013
Name of Project: Nalle Grade Stormwater Park	Org and Rank: 2
Background: The proposed project is located within the Bay Shore Creek drainage basin that originates within Charlotte County. The contributing area for Bayshore Creek watershed is approximately 3.1 square miles in Lee County and 12 square miles in Charlotte County. The drainage within this part of the county is somewhat complex. Bayshore Creek drainage interacts with Popash Creek drainage depending on water levels and rainfall. The landuse in the basin is low-density single family residential, agriculture and mining. The watershed has been significantly altered over the past 50 years by road construction, farming and river dredging activities. Over time, development in this basin has cut off natural wetland sheet-flows and creek beds creating drainage impediments and water quality degradation. Project Description: The proposed Nalle Grade Stormwater Park project will serve as a regional stormwater retention system designed to reduce pollutants in the Popash Creek, a verified impaired water body that is a tributary to the Tidal Caloosahatchee River. The Tidal Caloosahatchee River currently has a TMDL and will be under an FDEP adopted, five year Basin Management Action Plan starting in December 2012. The Park will also provide water conservation and habitat improvements in the watershed and serve as flood protection for the surrounding community. The project site includes a pond which consists of 30 acres at top of bank in a County owned parcel as shown in Figure 1 below. The proposed pond site ("BAY-100-1") is located just south of Nalle Grade Road and east of D & L Ranch Drive. Based on available information, the wet season water table elevation at this site was assumed at 17.5 feet NAVD. The average existing ground elevation within the vicinity of the pond site was assumed as 21.5 feet NAVD. The pond is proposed as a wet retention system. The assumed top of bank elevation is 27.0 feet NAVD, which is higher than the existing ground to minimize flows into the pond from adjacent properties, and 3 to 1 side slopes to the bottom of the pond are proposed. The approximate total depth of the pond is 3.5 feet as shown in table 2 below.	

Project Location: North Fort Myers, Lee County, FL; Latitude 26.752 N, Longitude -81.818 W							
Responsible Party: Lee County				Partners: SFWMD, FDEP			
NEP: CHNEP		Project Cost: \$3,400,000			Dollars Needed: \$1,500,000		
Start: June 2012				Completion: September 2015			
Status of Project Design and Permitting: Project is in design phase.							
What Date or Year could Construction Feasibly Begin: 2014							
Your Proposed Timing of Funding (given permits, phasing, staging, etc.)							
FY	12/13	13/14	14/15	15/16	16/17	17/18	Total
	400,000		3,000,000				
Quantify Environmental Results and How to Measure Them: Decreased nutrient loading to the Tidal Caloosahatchee.							
Economic Benefits (including ecosystem services): Improved fisheries, improved water quality, improved freshwater wetland habitat.							
Estimated number of Jobs Created or Preserved: 5.6							
How much Habitat will be restored and conserved?: 76 acres							
Quantify pollutant reductions:							
What living coastal/marine resources will be improved and by how much?:							
How will community resilience be enhanced? Improved freshwater wetland habitat in the current landscape will prolong the period of habitability in the tributaries of the Caloosahatchee as climate change and sea level rise occur. Habitat improvements due to restored historical flows will also mitigate the current effects of degradation on fisheries and improve the period of time these fisheries can be sustained during the onset of sea level rise.							
Additional Justification: Lee County has entered into a Basin Management Action Plan (BMAP) with the Florida Department of Environmental Protection in 2012. The BMAP was promulgated due to TMDLs for total nitrogen in the Tidal Caloosahatchee. The County is required to restore and protect water quality under this watershed restoration plan. In addition, the Tidal Caloosahatchee is part of a system that has been designated an Estuary of National Significance as well as discharging into State Aquatic Preserve and National Wildlife Refuges.							

Table 2. Nalle Grade Stormwater Park

Structure Type	Dry Retention Pond
Location	South of Nalle Grade Road
From Node	BAY-100
To Node	BAY-100-1
Average Exist. Ground Elev. (AEGE)	21.5 feet NAVD
Pond TOB Elev.	27.0 feet NAVD
Pond SHWL Elev. (SHWLE)	17.5 feet NAVD
Approximate Pond Bottom Elev. (APBE)	17 feet NAVD
Pond TOB Elev. Storage Area (ac)	30 acre
Approximate Total Pond Depth (ft)	3.5 feet

Add any photos or maps that explain project: