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

Contact Information: Janet Starnes	**Date of Submittal:** 1/7/2013
Name of Project: C-43 West Basin Storage Reservoir	**Org and Rank**:

Background: The Caloosahatchee River runs from Lake Okeechobee through a series of locks to San Carlos Bay. It has both fresh and marine segments: the freshwater segment extends for over 40 miles from Lake Okeechobee to the Franklin Lock and Dam (S-79). The marine segment, which is referred to as the Caloosahatchee Estuary or Tidal Caloosahatchee, extends for about 25 miles from the Franklin Lock and Dam (Control Structure S-79) to Shell Point, adjacent to San Carlos Bay, with Pine Island Sound to the northwest and Estero Bay to the southeast. The Caloosahatchee Estuary receives freshwater input from S-79 and from various tributaries and canal systems that discharge directly to the estuary downstream of S-79. The land uses in this watershed are predominantly agriculture and low to medium density residential with aging septic tanks.

Project Description: Currently, the South Florida regional system stores water in Lake Okeechobee. Based on a variety of complex flood control and ecologic factors, excess water is sometimes discharged from the lake via the C-43 canal. The resulting surges of freshwater down the river reduce estuarine salinity levels. Alternately, during drought periods when irrigation demands are high, little or no water is released to the river, allowing estuarine salinity levels to rise. This project will help ensure a more natural, consistent flow of freshwater to the estuary. Excess basin stormwater runoff, along with regulatory releases from Lake Okeechobee, will be captured and stored in a reservoir (170,000 acre-feet capacity) and released slowly, as needed, to restore and maintain the estuary. All needed land has been acquired.

The C-43 West Basin Storage Reservoir project site is located south of the Caloosahatchee River Estuary and west of the Ortona Lock (S-78). The reservoir will comprise a significant portion of total water storage requirement for the C-43 Basin providing nutrient load reductions and decreases in damaging local discharges to the estuary. In April 2011, a Record of Decision was issued by the USACE and an approved Project Implementation Report was submitted to the U.S. Congress for authorization.

Planning, design, land acquisition, and construction costs are estimated at $201 million. The state and federal governments will share costs equally. The state designated local sponsor of this project is the South Florida Water Management District. Construction is scheduled to begin in 2007 and to be completed in the spring of 2011. The environmental benefits of restoration cannot be expressed solely in monetary terms; so alternative cost benefit studies are conducted. This project is vital to restoration of the Caloosahatchee River estuary. It also provides some new flexibility for managing and restoring Lake Okeechobee, which often is referred to as the "liquid heart" of the greater Everglades ecosystem.

Project Location: Caloosahatchee Watershed, Hendry County	
Responsible Party: SFWMD	**Partners**: Lee County, Hendry County

NEP: CHNEP		**Project Cost**: $ 595,000,000			**Dollars Needed**: $ 395,000,000		
Start:				**Completion**:			
Status of Project Design and Permitting: Permits secured.							
What Date or Year could Construction Feasibly Begin: 2013							
Your Proposed Timing of Funding (given permits, phasing, staging, etc.)							
FY	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**Total**
		19,000,000					
Quantify Environmental Results and How to Measure Them: Water quality improvement by nutrient load reduction. Can be evaluated through the BMAP water quality monitoring program.							
Economic Benefits (including ecosystem services): Improved water quality, improved fisheries and rookery habitats.							
Estimated number of Jobs Created or Preserved: 6611							
How much Habitat will be restored and conserved?: 2,000 acres of wetlands							
Quantify pollutant reductions: Preliminary load reduction estimates for this project are 97 mt/yr TN and 8 mt/yr TP.							
What living coastal/marine resources will be improved and by how much?: Tidal Caloosahatchee, San Carlos Bay, Pine Island Sound and Matlacha Pass.							
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: The FDEP has adopted a TMDL for total nitrogen—the main pollutant in the Tidal Caloosahatchee. Lee County has entered into a Basin Management Action Plan (BMAP) with the Florida Department of Environmental Protection in 2012. 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.							

Add any photos or maps that explain project: