

Project Name: C&SF: CERP Site 1 Impoundment (M P1)
Site 1 Impoundment (Fran Reich Preserve)
Project ID: 1107 (CERP Project WBS # 40)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000 (*Initially Authorized Project*); WRDA 2007
Funding Source: Federal/State

Strategic Plan Goal(s) Addressed: Primary: 1-A.1 Secondary: 2-A.3

Measurable Output(s):

- 13,280 acre-feet reservoir storage
- 114 acres of restored wetland and upland habitat

April 1999 Project Synopsis: The purpose of this project is to supplement water deliveries to the Hillsboro Canal by capturing and storing excess water currently discharged to the Intra-coastal Waterway. These supplemental deliveries will reduce demands on Lake Okeechobee and Loxahatchee National Wildlife Refuge. The impoundment pool will also provide groundwater recharge, reduce seepage from adjacent natural areas, and prevent saltwater intrusion by releasing impounded water back to the Hillsboro Canal when conditions dictate. Some measure of flood protection may also be provided along with water quality improvement.

The project contained in the Restudy was titled *Site 1 Impoundment and Aquifer Storage and Recovery (M)* and included an above-ground reservoir and a series of aquifer storage and recovery wells. The reservoir was estimated with a total storage capacity of approximately 15,000 acre-feet located in the Hillsboro Canal Basin in southern Palm Beach County. The initial design of the reservoir assumed 2,460 acres (water levels fluctuating up to 6 feet above grade). Water from the Hillsboro Canal will be pumped into the reservoir during the wet season or periods when excess water is available and released back to help maintain canal stages during the dry-season.

Associated aquifer storage and recovery wells (separate project) include a total capacity of approximately 150 million gallons per day and associated pre- and post- water quality treatment. An initial design of the aquifer storage and recovery facility assumed 30 well clusters, each with a capacity of five million gallons per day with chlorination for pre-treatment and aeration for post-treatment; sourcing water from the surficial ground water adjacent to the reservoir.

Current Project Synopsis: The original Restudy project has since been divided into two parts. The first part is known as *Site 1 Impoundment (M P1)* (a/k/a *Fran Reich Preserve*) (CERP Project WBS #40), this project, relates to the reservoir portion. The second part, known as the *Hillsboro ASR (M P2)* (CERP Project WBS #22) relates to the aquifer storage and recovery wells portion, and is reported separately.

The reservoir, located adjacent to the Arthur R. Marshall Loxahatchee National Wildlife Refuge in southwestern Palm Beach County will provide water storage considered essential to restoring Everglades historic health and viability. A Tentatively Selected Plan (TSP) for this project (the reservoir) was identified and the Alternative Formulation Briefing (AFB) held in August 2004. The TSP includes a 1,800-acre project footprint with a 1,600-acre 8 foot deep, above-ground impoundment (13,280 acre-feet capacity) and includes an inflow pump station, discharge gated culvert, emergency overflow spillway, and seepage control canal with associated structures.

A revised final PIR received a signed Chief of Engineer's Report in December 2006. The reservoir project was authorized for construction in WRDA 2007 for \$80,840,000, subject to appropriations. The project has been sub-divided further into two phases:

- 1) Phase 1 - D-525N (L-40 modifications) and miscellaneous features; and
- 2) Phase 2 - the impoundment features.

Current Status: The Water Reservation and allocation were verified by the USACE in January 2010. The USACE released a Supplemental Environmental Assessment (SEA) and Draft Finding of No Significant Impact (FONSI) for phased implementation of the Site 1 Impoundment project in Palm Beach County May 20, 2010 for comment until June 18, 2010. The USACE will construct the reservoir through two separate construction contracts. The Corps awarded the contract for Phase 1 in August 2010 for the amount of \$44.1M using funding from the American Recovery and Reinvestment Act. The Corps issued a notice to proceed on October 20, 2010 and the construction is scheduled to complete February 2013.

Design is complete on Phase 2 features. Construction for the Phase 2 features is currently on hold.

Est. Cost: \$104,524,000

Project Schedule:

- 2010 Construction began on Phase 1
- 2013 Construction physically complete on Phase 1
- TBD Construction began on Phase 2
- TBD Construction physically complete on Phase 2.

Detailed Project Budget Information (rounded):

Site 1 Impoundment	Expenditures Thru FY 2011
USACE	\$29,054,405
SFWMD	\$7,780,843
Total	\$36,835,248

Hyperlinks: http://www.evergladesplan.org/pm/projects/proj_40_site_1_impoundment.cfm
https://my.sfwmd.gov/portal/page?_pageid=1855,2831038,1855_2831245&_dad=portal&_schema=PORTAL&navpage=prjwpa.

Contact: Stephen A. Baisden, PE, PMP, Project Manager, Everglades Division, USACE
Stephen.A.Baisden@usace.army.mil

Jeff Needle, Project Manager, Everglades Restoration, SFWMD
jneedle@sfwmd.gov

Greg Coffelt, Project Liaison, Design PM, Everglades Restoration, SFWMD
gcoffelt@sfwmd.gov

Source: Original project description summarized from the *Central and Southern Florida Project Comprehensive Review Study (Restudy) (1999)*. Cost estimate information is updated to reflect current price levels in October 2009 dollars. Actual expenditures include all federal expenditures through FY11 (Sept, 2011) and sponsor verified and recorded in kind credit through 4th quarter FY11. Current project status includes information summarized from Final PIR/EA (rev. 2006) and authorization in WRDA 2007.

Additional Information:



